2013

STATE OF THE PEOPLE

for the Pioneer Valley

Catalyst for Regional Progress
PVPC

Prepared by:
Pioneer Valley Planning Commission
January 2013
Reprinted - May 2013

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State of the People:
For The Pioneer Valley

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Partners for a Healthier Community, Inc.

United Way of Hampshire County

United Way of Pioneer Valley

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A wide range of individuals from these organizations repeatedly gave valuable time to an extensive process that reduced the list of possible indicators from more than 150 to those included herein. The following individuals, and the organizations they represent, deserve special mention for their time and commitment.

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Frank Robinson, Partners for a Healthier Community

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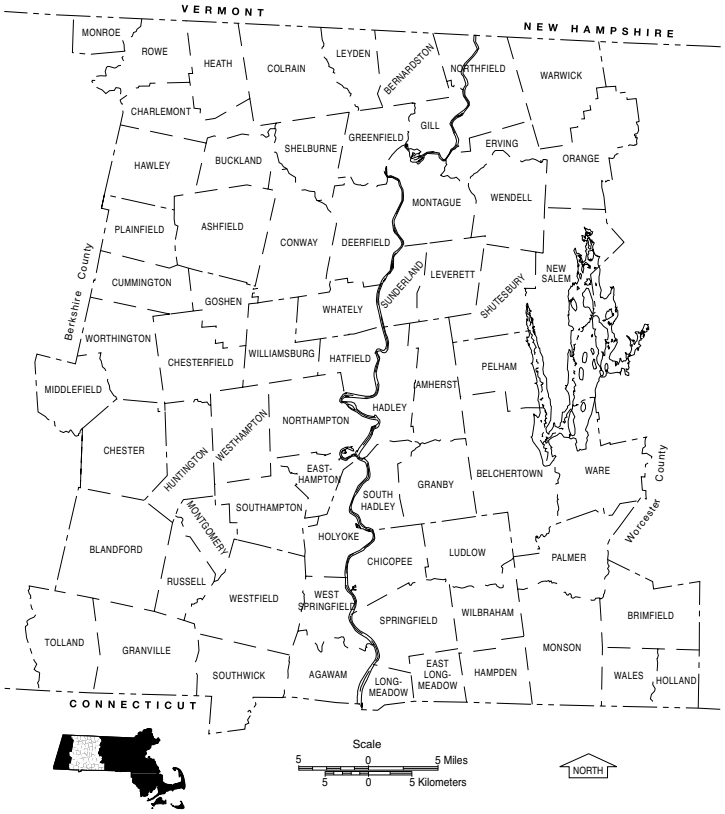
AN INTRODUCTION TO THE PIONEER VALLEY

The Pioneer Valley encompasses 69 cities and towns in the Connecticut River Valley of western Massachusetts, an area framed on the west by the Berkshires and on the east by the central uplands and the Quabbin Reservoir. In 2011, an estimated 693,000 people, or 10.5 percent of Massachusetts' population, lived in the 1,904-square-mile region, which includes the fourth largest metropolitan area in New England. With a diverse economic base, renowned academic institutions, and a wealth of natural resources, the Pioneer Valley is a unique and special place in which to live and work. The Connecticut River, its fertile agricultural valley, and the foothills of the Berkshire mountains wrap the region in scenic beauty and recreational opportunities. Residents live in downtown areas, suburban neighborhoods, quiet villages, historic communities, and rural homesteads. People work in downtown offices in Springfield, the region's cultural and economic center; in industrial plants and factories in Holyoke and Chicopee, the first planned industrial communities in the nation; in academic halls in Amherst, Northampton, and South Hadley, home to distinguished colleges and the state flagship university; in the corn, tobacco and vegetable fields of Hadley and throughout the region, where families have worked the land for generations, and whose harvest is processed into value-added products by local specialty food businesses; in distribution centers in Westfield, near the crossroads of two interstate highways; at outdoor recreation attractions in Franklin County, where over 75 percent of the land remains forested; and by a world renowned candle manufacturer and store, which attracts over a million visitors annually. The Pioneer Valley is a region of contrasts, a meeting ground for many cultures, and, above all, the place we call home.



AN INTRODUCTION TO THE STATE OF THE PEOPLE

WHY THE STATE OF THE PEOPLE?

In 2003, the first iteration of the State of the People report was developed through collaboration with a number of regional foundations of the Pioneer Valley. At the time, a number of groups were engaged, or shared an interest, in using data as a basis for informed decision making. Notably, the Irene E. and George A. Davis Foundation, the Community Foundation of Western Massachusetts, the Hampshire Community United Way, and the United Way of Pioneer Valley were, for a variety of purposes, exploring opportunities to use data to better inform their work as funders of a wide range of projects throughout the region. While much of the data reports and indicators at the time focused more heavily on the economy and infrastructure of the region, this report focused more directly on how we, the people of the Pioneer Valley, are faring.

Since the publication of this first report, the State of the People has been used widely, and interest in using data to drive strategy and funding decisions has only increased. In 2011, it became clear that an update of this report would be of great use to many, providing fresh data and evaluation as well as a re-examination of what needs to be measured. Many of the same partners, as well as some new ones, came together again to produce this new report.

WHAT'S THE POINT?

We have multiple goals for this report. First, we believe that it will provide valuable and accessible information for decision makers working to improve the quality of life in the Pioneer Valley. More broadly however, we expect that report will inspire citizens of the region, like you, to shape the future of our communities to benefit both current and future generations. Finally, we hope that this report serves as an opening, or a beginning, to additional dialogue, planning, information gathering, and action. All of our partners in this process conceive of this report as a first step towards the kind of knowledge they want to develop to inform their work, but they all realize that informed decision making and effective change making will require much more than the pages of a single report. While these are achievable goals, they are also long-term goals. As with our first State of the People report in 2003, we anticipate that this will become a catalyst for discussions throughout our Valley about what we can do to make the place we call home even better.

WHERE DO YOU COME IN?

In developing this report, we focused on specific issues that we believe are important to the lives of people in the Pioneer Valley. The list of indicators was developed in what can only be described as a subjective manner, and we realize that our indicators are not necessarily the same indicators you would choose. You may find yourself wanting to amend our indicators, striking those you consider comparatively unimportant, and writing in your own where you believe something important was overlooked. We value your opinions and encourage you to call or write with feedback, responses, and suggestions. We hope that your reactions will instigate a broad discussion among citizens articulating what they love most about the Pioneer Valley and what they wish for its future.

ABOUT THE REPORT

Any examination of quality of life is complex and imprecise, even more so when trying to use numbers to describe things that are valued differently by different people. There are a variety of approaches for measuring and categorizing indicators. Nevertheless, choosing a method is necessary to perform an analysis and to present findings. We have categorized the indicators in this report into eight major subject areas of related indicators. These subject areas reflect both groups of people and issues of importance to them.

CHILDREN AND YOUTH – examines issues affecting children including health, family status, and poverty.

ELDERLY – focuses on the quality of life and the quality of care for our elderly population.

EDUCATION – explores educational opportunities and outcomes across a range of educational levels, from early education through college.

HEALTH AND SAFETY – analyzes issues of physical and mental health as well as safety.

ECONOMIC SECURITY – reviews basic economic issues affecting Pioneer Valley residents.

HOUSING – investigates the true cost and availability of housing in the Pioneer Valley.

CIVICS, ARTS, AND RECREATION – examines the opportunity for and participation in civics, arts, and recreation activities.

ENVIRONMENT – assesses progress in pollution reduction and environmentally friendly transportation options.

Most indicators in this report are presented in two formats. First, a graph illustrates the regional and statewide trends over time. This provides an understanding of whether the region is doing better or worse than in the past and whether or not the region is doing better or worse than the state as a whole. Second, a map shows the most recent year's data for every municipality in the region. This map allows for comparisons from one community to another to identify areas of progress or concern. In the case of some indicators, the available data limited our ability to provide both a trend graph and a municipal map for an indicator.

Indicators included within each category – as well as the categories themselves – were selected through a collaborative and subjective process involving eight community organizations. From June 2011 through March 2012, individuals from our partner organizations gathered about six times in person and also as participated in many phone and email conversations to discuss the pros and cons of particular indicators and to elect which indicators to keep and which to eliminate. PVPC attempted, as much as possible, to abstain from the actual decision making, wanting a report that was designed by our partners rather than ourselves. PVPC's role in the selection process was to provide guidance, based on experience with past indicator projects, to direct the selection process. To this end, certain essential principles were observed:

1. We looked for indicators that spoke most directly to the present or future quality or condition of individuals' lives. In general, we left out indicators that highlight larger realities, such as the size of the region's labor force, even though they have an impact on individual circumstances.

2. We restricted the number of indicators to a number thought manageable both for those writing and those reading this report. In some cases, we reduced the number of indicators by eliminating a perfectly valid indicator that was partially or wholly represented by another.

3. We included those indicators that provided reliable data that would be updated in the future. For example, data that was developed through a survey or research study was generally excluded unless it was a survey or study that we felt sure would be repeated in the future.

RATING THE INDICATORS

Following methods from the State of the People report from 2003, we have used a detailed rating system to evaluate the condition of the region with respect to each indicator and category. Using letter ratings, each indicator is rated based on the following scale.

A Very positive trend

B Positive trend

C Neutral trend

D Negative trend

F Very negative trend

The **A** and **F** ratings are used sparingly in this report and only when an indicator reveals particularly dramatic information.

As with the selection of indicators, choosing how to assign ratings is a subjective process. When determining the rating, we weighted the following factors from most to least important:

1. The Pioneer Valley's trend over time.

2. The Pioneer Valley relative to the Commonwealth of Massachusetts as a whole.

3. The equity between communities measured by:

   A) The breadth of the gap between high- and low-rated communities within the Pioneer Valley.

   B) How closely most communities clustered to each other.

(i.e. Are most communities about the same with a few major outliers, or are there major gaps between large groups of communities?)

This ordering is based on the logic that, if we believe that our region is doing better now than in the recent past, that finding is more important than if we are doing better than Massachusetts as a whole. Finally, equity was weighted more heavily in this report than the 2003 edition, acknowledging that if we care about raising all boats in our community, then gaps in well-being between groups of people or communities must affect how we evaluate the well being of our region as a whole. The town-to-town comparisons are the least important for purposes of this report because we want to encourage residents of the Pioneer Valley to view themselves as residents of a region that thrives or declines together.

After ratings were assigned to each individual indicator, they were averaged within each category to produce an overall rating by taking an average of all of the grades for each category. The purpose of these ratings is neither to scold nor to applaud, but to provide an honest assessment of how the Pioneer Valley is doing in providing a high quality of life for all our residents. You will notice that exactly half of the trends measured fall within the neutral category, and while ten indicators show positive or very positive trends, there is much room to grow to ensure that our region is excelling in all of the areas we agree are important to a health community. Going forward, it is imperative that we be honest and build on our strengths while tackling our weaknesses. We hope that you will join us on this journey.

THE STATE OF THE PIONEER VALLEY'S PEOPLE – A SUMMARY

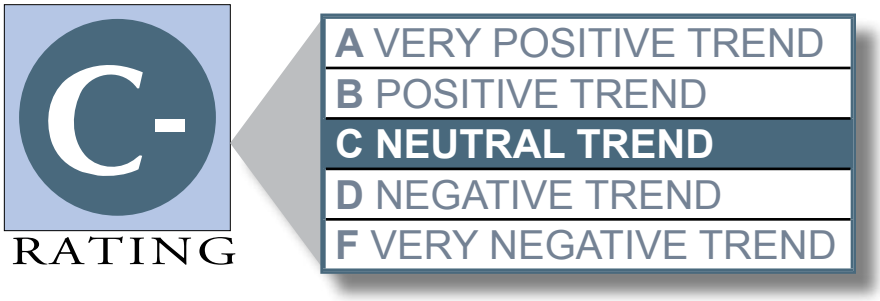
The State of the Pioneer Valley's People is good, but not perfect. Particularly positive are trends in the area of the Environment, as well as many components related to civics, arts, and recreation in the region. Furthermore, several education indicators are rapidly improving, as are some indicators related to our physical health and safety. Otherwise, many trends are neutral, not getting significantly worse, but not increasing the ways we would like to see. Of particular concern is the area of economic security, as well as a number of the health indicators which it seems compounding factors might have more influence over, including mental health, diabetes, HIV/AIDS cases, and obesity.

Of note, it is important to acknowledge that many poor grades are particularly reflective of inequities between communities within the region. Where trends are often positive or neutral for the region as a whole, there are large gaps between the highest and lowest performing communities. While a challenging image to accept, we felt it was important to acknowledge the inequities in our communities and evaluate our current success by accounting for these cases fully.

To find both good and bad is expected: a report claiming that the state of our region's people was all good or all bad would be, we believe, a poor and dishonest document. We have, in our region, both positives to build on and negatives to address. It is the purpose of this report to highlight both with an optimistic eye on the future.

The followimg table shows the ratings assigned to each indicator as a summary of our overall findings. There are both positive and negative trends, as well as a number of indicators that could go either way in the future

Positive	*Neutral*		*Negative*
• Bike Paths • Water Quality (CSOs) • Green Communities	• Access to Recreational Space and Open Space • Arts, Culture and Humanities Nonprofit Expenditures • Attainment of Higher Education • Average Commute Time • Child Abuse and Neglect • Children in Foster Care • Children in Single-Parent Families • Crime • English Proficiency in 10th Grade (MCAS) • Environmentally Friendly Transportation • Healthy Air Quality Days • Home Ownership • Housing Cost Burden • Income Equality	• Library Attendance • Math Proficiency in 8th Grade (MCAS) • Math Proficiency in 10th Grade (MCAS) • Nonprofit Support • Nutrition • Population 65+ With Access to a Car • Population 65+Who Live Alone • Poverty Rates For People 65+ • Premature Mortality • Reading Proficiency in 3rd Grade (MCAS) • Student Mobility • Subsidized Housing Availability • Substance Abuse • Teenage Mothers • Tobacco Use • Voter Registration	• Asthma • Childhood Asthma • Diabetes • Early Education Enrollment • Family Economic Self-Sufficiency • Food Deserts • Foreclosures • Free and Reduced-Price Lunch • Grandparents Responsible for Grandchildren • High School Graduation Rate • HIV/AIDS Cases • Homelessness • Household Income • Infant Mortality • Life Expectancy • Mental Health • Obesity • Population 65+ Who Remain Engaged in the Workforce • Poverty • Prenatal Care • Support for Artists • Unemployment • Very Low Birth Weight Babies
• Culture and Recreation Spending • Health Insurance Coverage • Housing Affordability • Juvenile Violent Crime • Ninth Grade Retention • Oral Health • Recycling Rate			• None



CHILDREN AND YOUTH

The importance of children and youth to our region—to any region— cannot be overstated. Attempting to capture the current state of the Pioneer Valley's children and youth is an effective way to assess the health and vitality of the region. Children's health, their family situations, and their economic circumstances are indicators that are valuable both for what they say in the present and for what they predict in the future. If our children are not healthy today, we cannot expect the life expectancy of our region's people to continue increasing tomorrow. Similarly, children growing up in difficult family or economic circumstances are less likely to be economically successful in adulthood, and run the risk of perpetuating the same obstacles they faced as a child with their own families. To stop this cycle and create a more positive future for the Pioneer Valley, indicators in the following areas have been crafted: prenatal care, very low birth weight babies, infant mortality, school prevalence of asthma, teenage mothers, children in foster care, children in single-parent families, child abuse and neglect, free and reduced-price school lunch enrollment, and juvenile violent crime.

Decreases have been made in the number of juvenile crime cases, teenage mothers, and child abuse and neglect cases; however other areas that measure youth health, including issues surrounding healthy births such as adequate prenatal care and the percent of births to very low birth weight babies, show neutral or negative trends. Also, while the data does show significant progress in the rates of juvenile crime, we know throughout the Valley there is extremely poor equity between individual communities in regards to this indicator.

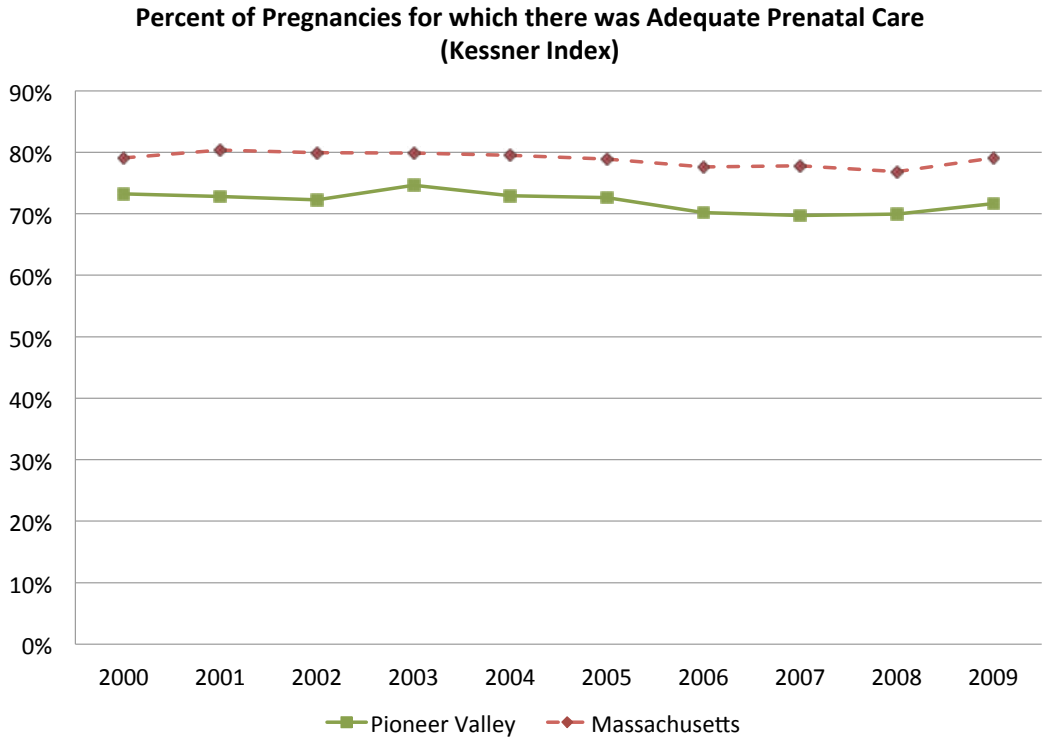
Indicator	Summary	Rating
Prenatal Care	The percentage of mothers using prenatal care adequately remains stable, but well below that of Statewide rates. Equity between communities is poor.	D+
Very Low Birth Weight Babies	The percent of babies born with very low birth weights has fluctuated, but increased in recent years to well above Massachusetts rates. Equity is good amongst most communities, but poor between highest and lowest performing communities.	D
Infant Mortality	Rates of infant mortality are higher than they were a decade ago, and have been higher than Massachusetts rates all but two of those years. Equity is poor between most communities and the gap between the highest and lowest performing communities is very large.	D-
Childhood Asthma	Rates of childhood asthma have increased slightly in recent years and remain well above those Statewide. Equity is good amongst most communities, but poor between highest and lowest performing communities.	D+
Teenage Mothers	The percent of all births to teenage mothers has improved in recent years. While rates remain higher than for Massachusetts, the gap is narrowing. Equity is good amongst most communities, but poor between highest and lowest performing communities.	C+
Children in Foster Care	The percent of children in foster care has been stable in the Pioneer Valley, but continues to be nearly twice as high as the rate statewide. Equity is generally good amongst most communities, but poor between highest and lowest performing communities.	C-
Children in Single-Parent Families	The percent of all children in single-parent families continues to be much higher than rates statewide and have been increasing slightly in the last decade. Equity is good amongst many communities, but poor between highest and lowest performing communities.	C-
Child Abuse and Neglect	The rate of childhood abuse and neglect cases has declined significantly in recent years, and begun to close the gap with state rates, but is still significantly higher. Equity is good amongst many communities, but poor between highest and lowest performing communities.	C+
Free and Reduced-Price Lunch	The percent of children enrolled in free and reduced price lunch is 10% higher in the region than statewide, and rates continue to rise. While equity is good amongst many communities, there is a huge gap between the highest and lowest performing communities.	D
Juvenile Violent Crime	The number of juvenile crime arrests continues to decrease and is below the rate statewide.	B-

PRENATAL CARE

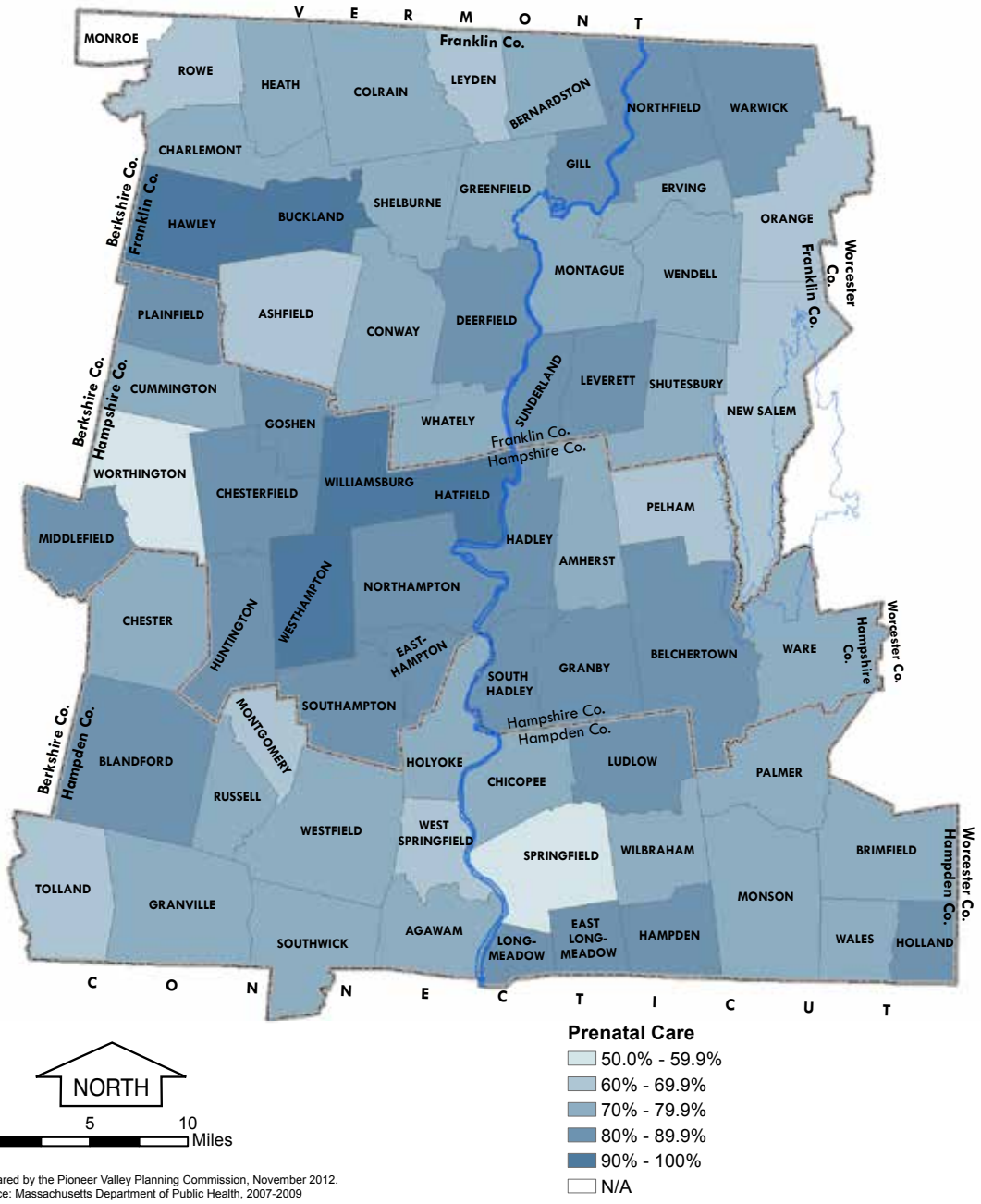
The use of prenatal care is a crucial indicator because it relates directly to the outcomes of pregnancy such as birth weight, labor complications, and overall infant health. In turn, these factors can have significant lifelong impacts for the baby. For example, preterm births and low birth weight are associated with some birth defects, and, since inadequate prenatal care can result in premature delivery and low birth weight, prenatal care relates to the presence or absence of birth defects. Based upon when a mother had her first prenatal care visit and how many visits she has during her pregnancy, the adequacy of prenatal care is rated in relation to the public health community's recommended schedule for prenatal care. The percent of pregnancies for which there was adequate prenatal care based on the Kessner index is measured in this indicator.

Over the past decade, the Pioneer Valley's trend in the use of prenatal care has only varied slightly. Starting in 2000 at 73.2% and ending in 2009 at 71.6%, prenatal care has stayed between the 70% and 75% range while only slipping just below to 69.7% in 2007. Generally, there has been a minor downward slope throughout the last 10 years that has followed statewide trends. Although, there has been a sharp increase from 2008 to 2009 and when more recent data becomes available it will be clear if this trend is likely to continue. Overall, the Pioneer Valley lags behind the rest of the state with this indicator as the state-wide rates were consistently between 6-8% higher than the region.

The use of adequate prenatal care was not shared equally across the Pioneer Valley. While the majority of communities in the region had rates of at least 70%, eleven communities fell below this level during the years of 2007 through 2009. Representing the lowest percentage, only 53.3% of expectant mothers used prenatal care adequately in Worthington. Springfield, with a rate of 58.8%, was only slightly higher. Other towns below 70% include New Salem, West Springfield, Leyden, Montgomery, Rowe, Orange, Pelham, Tolland, and Ashfield.



Percent of Pregnancies for which there was Adequate Prenatal Care (Kessner Index)



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: Massachusetts Department of Public Health, 2007-2009

Worthington	53.3%
Springfield	58.8%
New Salem	63.2%
West Springfield	65.8%
Leyden	66.7%
Montgomery	66.7%
Rowe	66.7%
Orange	68.4%
Pelham	69.0%
Tolland	69.2%
Ashfield	69.4%
Heath	70.0%
Pioneer Valley	***70.4%***
Colrain	70.7%
Southwick	70.9%
Erving	71.1%
Westfield	71.3%
Charlemont	71.8%
Wales	72.1%
Chicopee	72.2%
Greenfield	72.6%
Shutesbury	73.2%
Chester	73.3%
Shelburne	73.5%
Whately	74.3%
Montague	74.7%
Granville	75.0%
Russell	75.0%
Agawam	75.4%
Holyoke	75.9%
Amherst	75.9%
Monson	76.1%
Wendell	76.2%
Bernardston	76.5%
Cummington	76.5%
Palmer	77.0%
Wilbraham	77.3%
Ware	77.7%
Brimfield	78.7%
Conway	79.3%
East Longmeadow	80.0%
Warwick	80.0%
Granby	80.2%
Belchertown	80.3%
Longmeadow	80.9%
South Hadley	81.2%
Ludlow	81.2%
Sunderland	81.8%
Holland	82.8%
Huntington	82.9%
Middlefield	83.3%
Southampton	83.3%
Gill	83.9%
Hadley	84.0%
Northfield	84.3%
Northampton	84.3%
Chesterfield	84.6%
Deerfield	85.5%
Blandford	85.7%
Plainfield	85.7%
Easthampton	86.8%
Hampden	87.2%
Goshen	89.3%
Leverett	89.3%
Hatfield	90.9%
Williamsburg	91.7%
Buckland	95.2%
Westhampton	97.1%
Hawley	100.0%
Monroe	NA

*Three years of data are averaged because the numbers for some towns are very small.

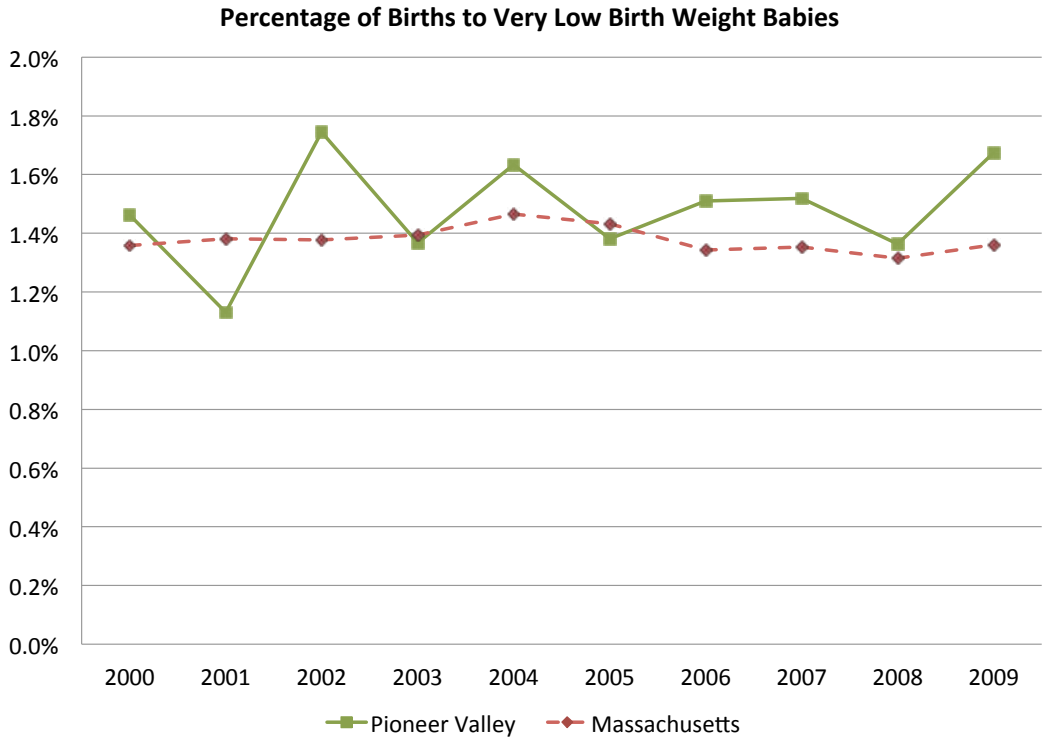
D
RATING

VERY LOW BIRTH WEIGHT BABIES

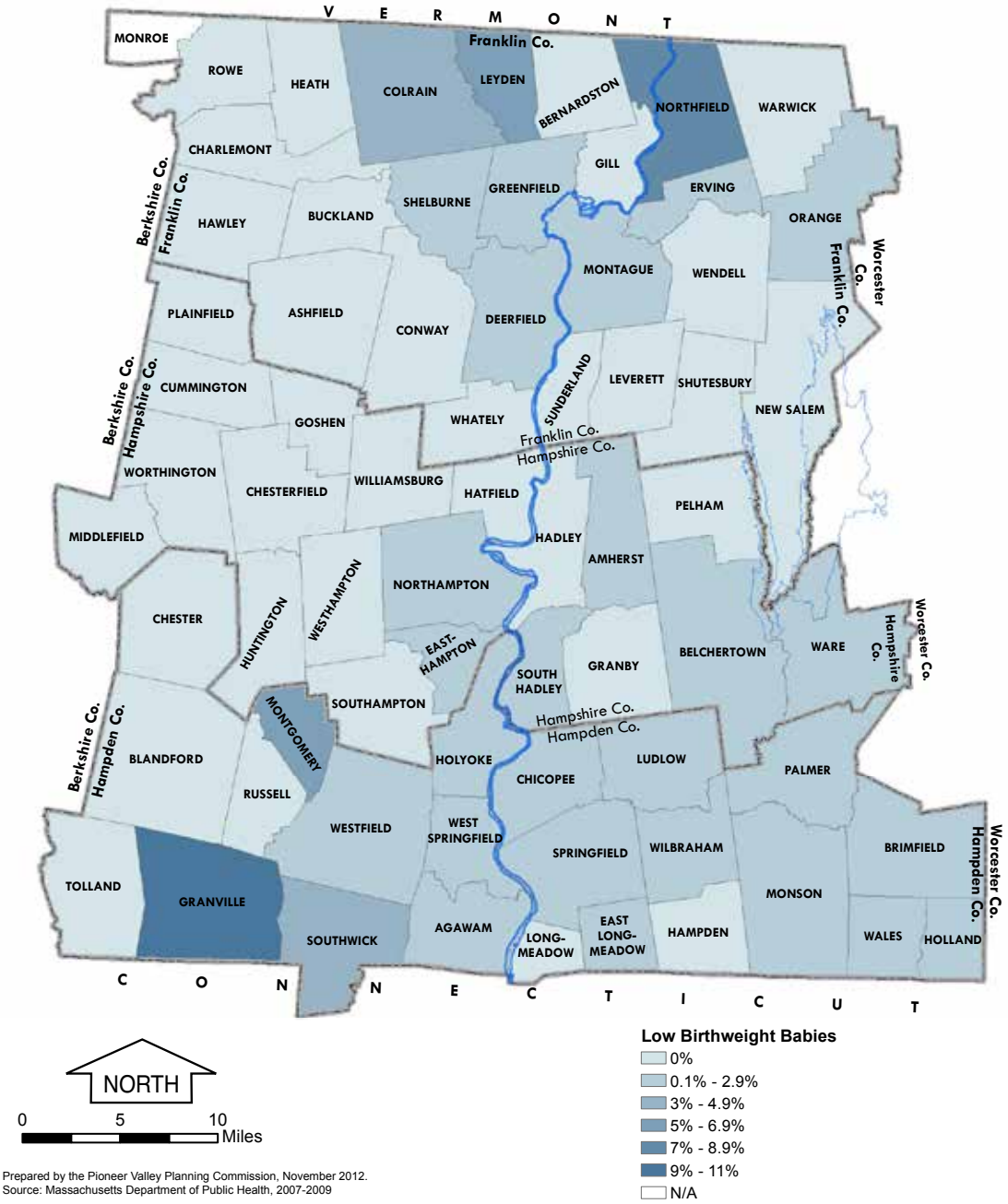
Very low birth weight is a complicated but significant public health indicator that often reflects a difficult pregnancy that ended prematurely. This can happen for many reasons such as poor nutrition, substance abuse, or inadequate prenatal care. Very low birth weight potentially leads to serious physical or mental health complications for a baby far into the future and, therefore, reflects both the present and future health of our region's population. However, increases in the percent of all births that are very low birth weight are not always negative, because an increase in very low birth weight babies can mean that more premature babies are surviving than in the past, as the birth weight indicator does not account for premature babies that did not survive. A newborn weighing less than 1,500 grams is considered to have "very low birth weight" and the percentage of all births that fall into this category is represented in this indicator. The percent of babies of very low birth weight is determined by dividing the number of very low birth weight newborns by the total number of newborns. The map displays an average of births from 2007 to 2009 assigned to towns based on the mother's residence.

While the trend for the Pioneer Valley in the percentage of all births that are very low birth weight is fairly erratic from year to year, the overall trend reflects a slight increase over time. These are consistent findings with the previous decade. Pioneer Valley trends seem to follow the state average for this indicator. However, there appears to be a general plateau in 2005 to 2008, followed by another spike in 2009.

The rates of very low births were fairly consistent across most communities within the Pioneer Valley, though eleven communities fell at or above 2.0% and five of those communities had much more elevated rates, hovering around 5% or much higher. Granville came in with the highest rate (10.3%). Out of twenty-nine total births in the town, three were with very low birth weight. The top five highest rates were also comprised of Northfield, Leyden, Montgomery, and Colrain. Notably, all five of these communities are all among the smallest and most rural communities within the region.



Percentage of Births to Very Low Birth Weight Babies



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: Massachusetts Department of Public Health, 2007-2009

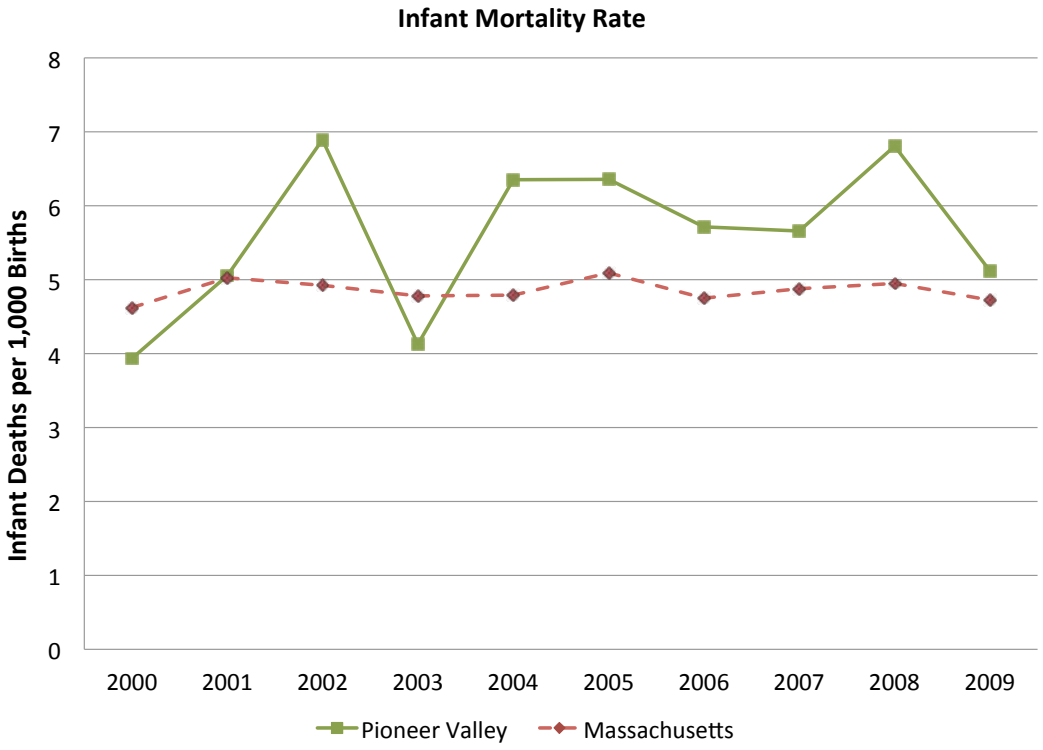
Ashfield	0.0%
Bernardston	0.0%
Blandford	0.0%
Buckland	0.0%
Charlemont	0.0%
Chester	0.0%
Chesterfield	0.0%
Conway	0.0%
Cummington	0.0%
Gill	0.0%
Goshen	0.0%
Granby	0.0%
Hadley	0.0%
Hampden	0.0%
Hatfield	0.0%
Hawley	0.0%
Heath	0.0%
Huntington	0.0%
Leverett	0.0%
Longmeadow	0.0%
Middlefield	0.0%
New Salem	0.0%
Pelham	0.0%
Plainfield	0.0%
Rowe	0.0%
Russell	0.0%
Shutesbury	0.0%
Southampton	0.0%
Sunderland	0.0%
Tolland	0.0%
Warwick	0.0%
Wendell	0.0%
Westhampton	0.0%
Whately	0.0%
Williamsburg	0.0%
Worthington	0.0%
Ware	0.5%
West Springfield	0.6%
Ludlow	0.6%
Northampton	0.8%
East Longmeadow	0.8%
Palmer	0.8%
South Hadley	1.0%
Easthampton	1.1%
Brimfield	1.1%
Westfield	1.1%
Chicopee	1.4%
Monson	1.4%
Greenfield	1.4%
Orange	1.5%
Pioneer Valley	***1.5%***
Amherst	1.6%
Holyoke	1.6%
Wales	1.6%
Holland	1.6%
Agawam	1.7%
Deerfield	1.7%
Belchertown	1.8%
Montague	2.0%
Shelburne	2.0%
Springfield	2.1%
Erving	2.2%
Wilbraham	2.5%
Southwick	3.1%
Colrain	4.9%
Leyden	5.6%
Montgomery	5.6%
Northfield	8.6%
Granville	10.3%
Monroe	NA

INFANT MORTALITY

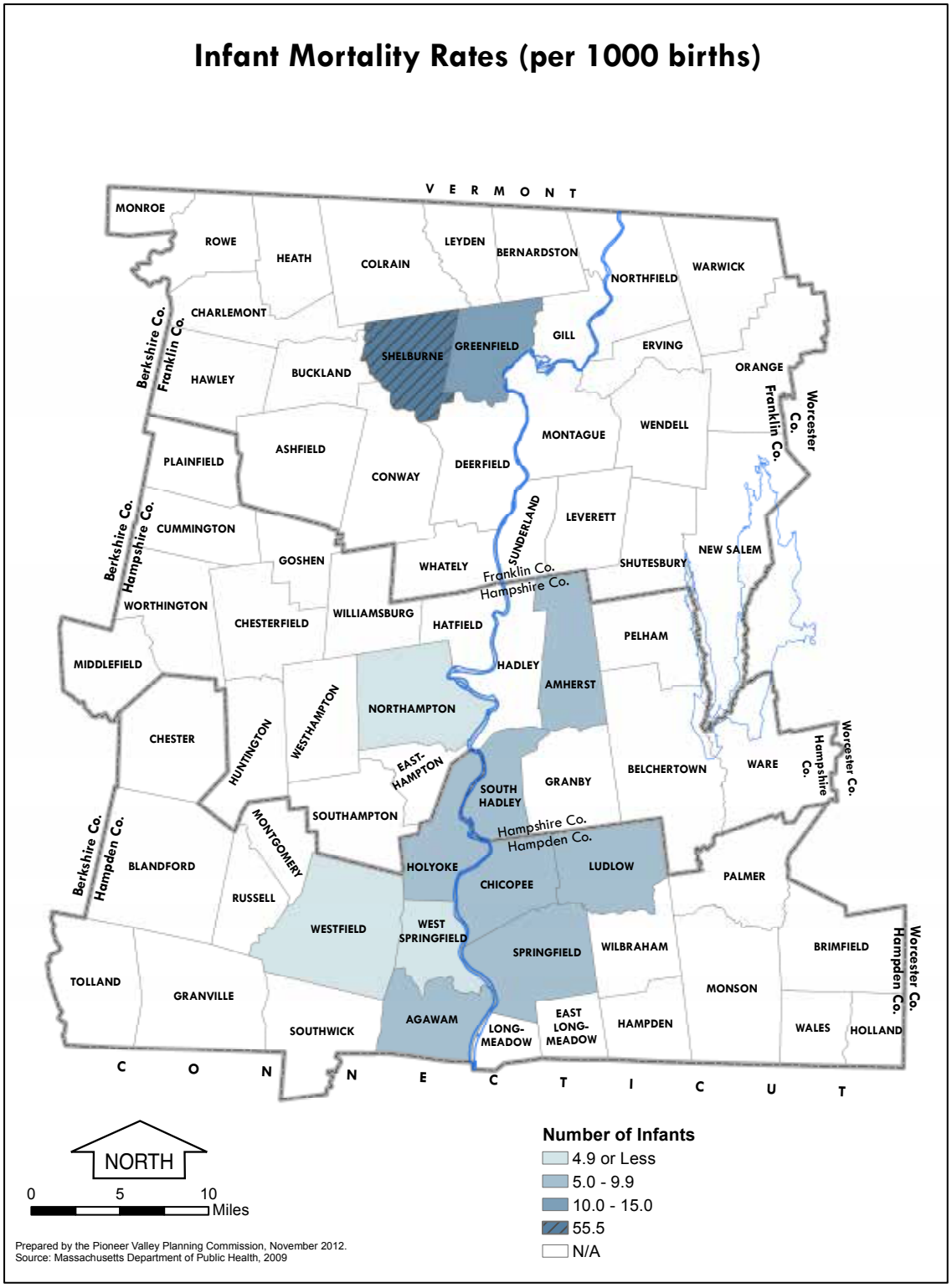
Infant mortality measures the percent of babies who do not survive past infancy and is a measure of total births divided by total infant deaths. According to the CDC, "Mortality statistics are frequently used to [quantify] the extent of public health problems and to determine the relative importance of the various causes of death."* This indicator measures infant mortality per 1000 births.

The Pioneer Valley has consistently had higher infant mortality rates than Massachusetts since 2004. Before then, the infant mortality rate in the region was much more erratic than that of Massachusetts totals, falling below the state in 2003 and before that increasing to a much higher rate. Throughout the last decade, there does not seem to be a clear trend, and while the region saw a major spike in 2008, the rate then decreased nearly as low as that statewide in 2009.

Although mortality rates are available on the county level as well as statewide, it is not available for all municipalities due to data suppression. Additionally, not all of the same municipalities are available from year to year. Of the data available between sample years 2008 and 2009, five communities stand out among the rest for highest infant mortality rates. Those towns are Blandford at 111 deaths for every 1,000 births, Northfield 105, Holland 77 and Shelburne 55. It should be noted that these towns are much more rural and are comprised of smaller populations than other towns within the region. This may be indicative of trends in public health in those communities, but also that an increase of only a few cases can significantly increase the overall rate of a community. Still, these rates are exceptionally higher in comparison to the overall 2009 rate for the Pioneer Valley which was 5.1.



* Center for Disease Control (CDC) and Prevention



Westfield	2.3
West Springfield	2.7
Northampton	4.9
Agawam	5.1
Pioneer Valley	***5.1***
Springfield	5.3
Chicopee	6.2
Ludlow	6.4
Amherst	6.4
South Hadley	7.5
Holyoke	7.7
Greenfield	15.0
Shelburne	55.6
Ashfield	NA
Belchertown	NA
Bernardston	NA
Blandford	NA
Brimfield	NA
Buckland	NA
Charlemont	NA
Chester	NA
Chesterfield	NA
Colrain	NA
Conway	NA
Cummington	NA
Deerfield	NA
East Longmeadow	NA
Easthampton	NA
Erving	NA
Gill	NA
Goshen	NA
Granby	NA
Granville	NA
Hadley	NA
Hampden	NA
Hatfield	NA
Hawley	NA
Heath	NA
Holland	NA
Huntington	NA
Leverett	NA
Leyden	NA
Longmeadow	NA
Middlefield	NA
Monroe	NA
Monson	NA
Montague	NA
Montgomery	NA
New Salem	NA
Northfield	NA
Orange	NA
Palmer	NA
Pelham	NA
Plainfield	NA
Rowe	NA
Russell	NA
Shutesbury	NA
Southampton	NA
Southwick	NA
Sunderland	NA
Tolland	NA
Wales	NA
Ware	NA
Warwick	NA
Wendell	NA
Westhampton	NA
Whately	NA
Wilbraham	NA
Williamsburg	NA
Worthington	NA

D+
RATING

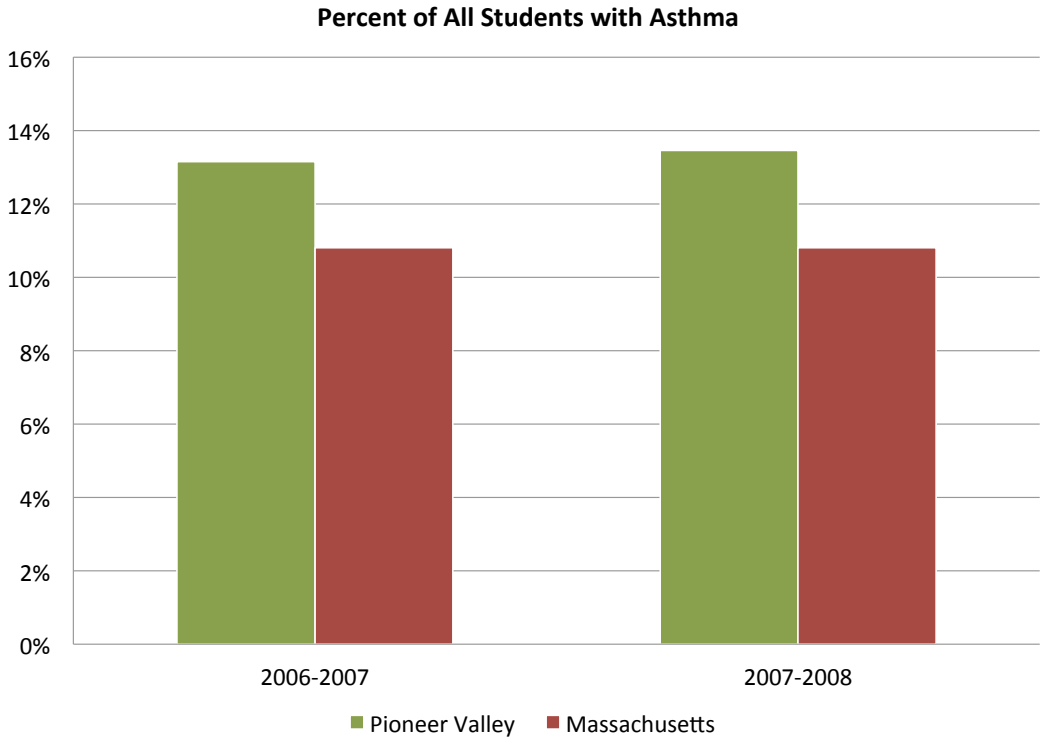
CHILDHOOD ASTHMA

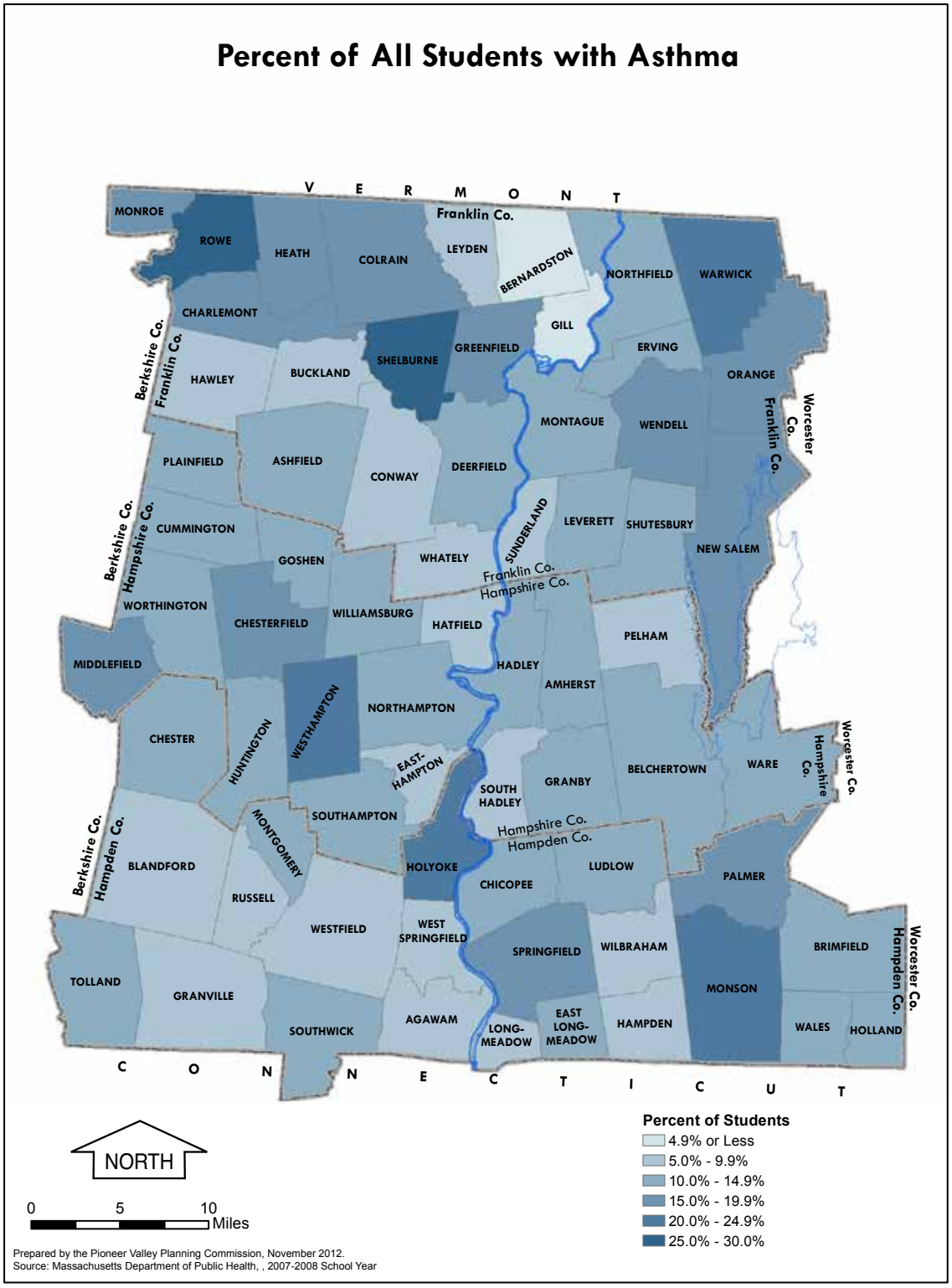
According to the Massachusetts Bureau of Environmental Health, "acute asthma attacks can be triggered by indoor and outdoor air pollutants and allergens. Twenty percent of the U.S. population, or nearly 55 million people, spend their days in elementary and secondary schools. In the mid-1990s, studies showed that 1 in 5 of the nation's 110,000 schools reported unsatisfactory indoor air quality, and 1 in 4 schools reported unsatisfactory ventilation, which has an impact on indoor air quality." This indicator reflects the prevalence of asthma, an ailment so commonly caused by negative environmental factors, in the children who attend schools in the Pioneer Valley. It reflects the living environments of the Pioneer Valley and may also capture trends about the status of school facilities and school policy. The percent of all students enrolled in school who have asthma is measured in this indicator.

In the two school years when data was available, the Pioneer Valley consistently had an asthma prevalence rate about 2.5% higher than the rate for the state of Massachusetts as a whole. Rates remained stable between the 2006-2007 and the 2007-2008 school year with Pioneer Valley holding steady at just above 13 percent of enrolled students.

There was a great disparity in rates of asthma across the schools of the Pioneer Valley. While 14 communities had rates below eight percent, six communities had rates over twenty. Communities with the highest rates include Rowe, Shelburne, Holyoke, Warwick, Westhampton, Monson, and Orange. There were only a couple of municipalities that were both higher than the state average and statistically significant. Those communities are Orange, Warwick, Amherst, Holyoke, Springfield, East Longmeadow, Westhampton, Chesterfield, Greenfield, Shelburne and Rowe.

From the two years available for this data it could be said that the Pioneer Valley is headed towards a positive direction with a five community reduction in the two years (from 2006-'07 to 2007-'08) labeled statistically significant and higher than the state average. In '07-'08 there was only eleven communities out of a possible sixty-nine. Although, within those two years the valley appears to be going in a positive direction, overall long term trends cannot be determined from a two year sample. Notably, from the towns with the highest asthma rates, there is a representation of urban, suburban and rural communities. Holyoke is the only urban center that has over 20. Additionally, Rowe, which is located on the northwest corner of Franklin County and is more rural, had the highest prevalence with 30 cases per 1,000 people. It is worth noting that in a small community, a single case may affect the rate more heavily than a single case in a large city or school district and thus this may impact the rates in small towns.





Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: Massachusetts Department of Public Health, , 2007-2008 School Year

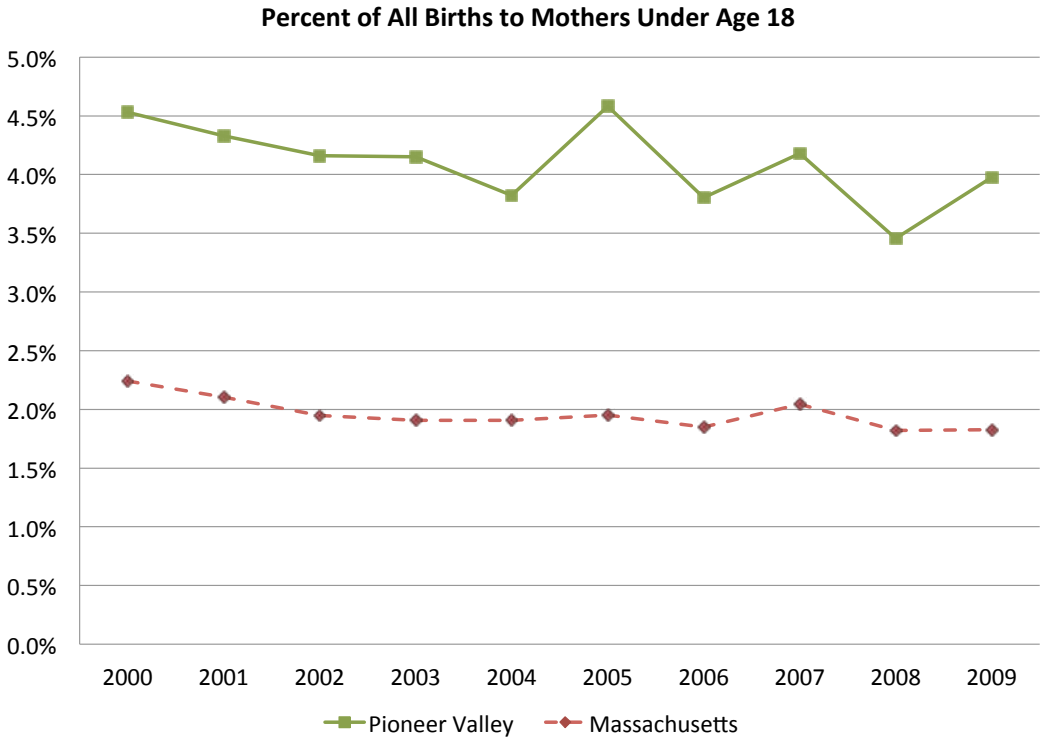
Gill	4.1
Bernardston	4.8
West Springfield	6.4
Granville	6.4
Hatfield	6.4
Conway	6.6
Buckland	6.6
Longmeadow	6.9
Pelham	7.1
Leyden	7.3
Russell	7.3
Agawam	7.5
Blandford	7.8
Sunderland	7.9
Whately	8.1
Easthampton	8.2
Hawley	8.3
Hampden	8.5
Westfield	9.2
Wilbraham	9.8
South Hadley	9.9
Montague	10.0
Deerfield	10.1
Shutesbury	10.2
Chester	10.2
Belchertown	10.3
Hadley	10.3
Cummington	10.6
Leverett	10.7
Ashfield	11.1
Wales	11.2
Northampton	11.3
Chicopee	11.4
Southampton	11.6
Southwick	11.6
Williamsburg	11.8
Huntington	11.9
Worthington	12.2
Tolland	12.2
Ludlow	12.3
Northfield	12.6
East Longmeadow	12.7
Ware	13.0
Amherst	13.2
Granby	13.2
Pioneer Valley	***13.5***
Plainfield	14.0
Montgomery	14.1
Brimfield	14.1
Goshen	14.7
Holland	14.8
Erving	14.9
Middlefield	15.0
Monroe	15.4
Heath	15.5
Colrain	15.6
Greenfield	15.7
Charlemont	16.0
Palmer	16.9
Springfield	17.6
New Salem	17.7
Chesterfield	18.0
Wendell	18.6
Orange	19.6
Monson	20.6
Westhampton	20.7
Warwick	20.9
Holyoke	23.3
Shelburne	29.4
Rowe	30.0

TEENAGE MOTHERS

Though there are undoubtedly exceptions, teenage mothers are more likely to be poor and less likely to complete a college degree than non-teenage mothers. Statistically, children of teenage mothers are more likely to grow up in poverty and less likely to complete high school or college. This indicator represents the number of births to young mothers as a percent of all births. For comparisons between individual cities and towns, teenage mothers are defined as under 20 and for regional to state comparisons teenage mothers are defined as under 18. While we would prefer to consistently use the latter definition, the limited data for many communities prevents us from doing so. *

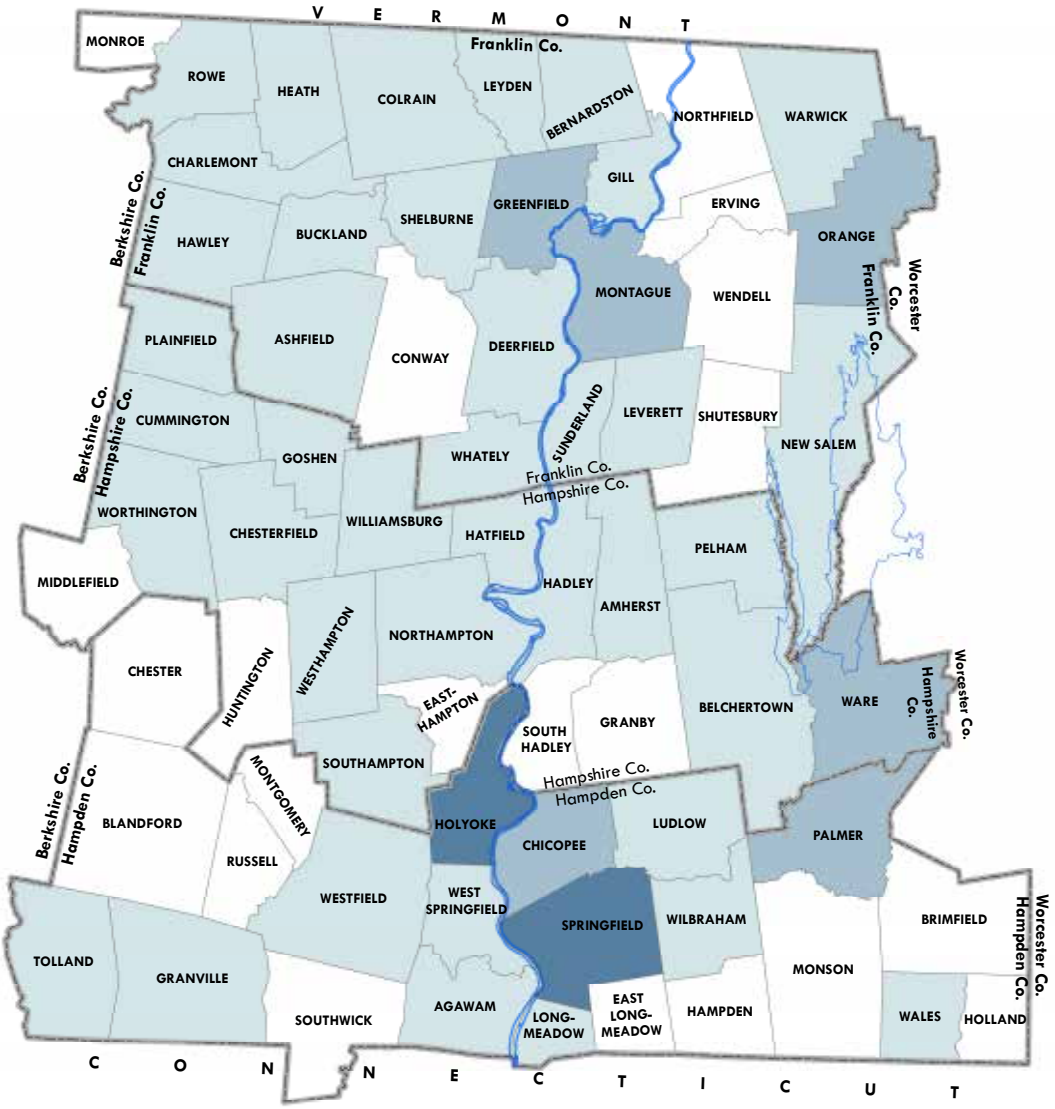
Continuing the positive downward trend of the previous decade, the percent of teenage mothers dipped below 3.5% in 2008. Even with two sharp increases within the Pioneer Valley in 2005 and 2007, the region still continued an overall downward slope, showing improvement over time. From 1999 to 2008, the Pioneer Valley percent teenage mother births have dropped an entire percentage point from just over 4.5% to just under 3.5 percent. Compared to the state of Massachusetts as a whole, the Pioneer Valley consistently had much higher rates (by 2-3%) of teen pregnancy throughout the decade, though the region appears to be slowly narrowing the gap. Previous to this decade, the statewide average had been on steady decline. However, from 2001 to 2005 the state reached a plateau at around 2% and has not come down much since then. Still, while the direction of the trend in the Pioneer Valley may be better than that statewide, the rates continue to be higher within the region.

Teen pregnancy rates were quite varied across communities throughout the region. Only eight communities had rates over 2%, though some of those communities were significantly higher. Most alarming were the cities of Holyoke (7.9%) and Springfield (6.6%) which continue to have numbers nearly four times that rate. Aside from these few towns, the percent teen births tends to slowly level off and 33 communities had no teen births between 2007-2009.



* MassCHIP (this report's source) requires selection of five-year age cohorts or individual ages (e.g. 13, 14, etc.). With individual ages selected, the number of births was so small for many communities that the data was suppressed for confidentiality reasons.

Percent of All Births to Mothers Under Age 18



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: Massachusetts Department of Public Health, 2007-2009

Ashfield	0.0%
Bernardston	0.0%
Buckland	0.0%
Charlemont	0.0%
Chesterfield	0.0%
Colrain	0.0%
Cummington	0.0%
Deerfield	0.0%
Gill	0.0%
Goshen	0.0%
Granville	0.0%
Hadley	0.0%
Hatfield	0.0%
Hawley	0.0%
Heath	0.0%
Leverett	0.0%
Leyden	0.0%
Longmeadow	0.0%
New Salem	0.0%
Pelham	0.0%
Plainfield	0.0%
Rowe	0.0%
Shelburne	0.0%
Southampton	0.0%
Sunderland	0.0%
Tolland	0.0%
Wales	0.0%
Warwick	0.0%
Westhampton	0.0%
Whately	0.0%
Wilbraham	0.0%
Williamsburg	0.0%
Worthington	0.0%
Ludlow	1.0%
Belchertown	1.2%
Amherst	1.4%
Westfield	1.6%
Agawam	1.7%
Northampton	1.8%
West Springfield	1.9%
Greenfield	2.1%
Palmer	2.2%
Montague	2.3%
Orange	2.6%
Ware	2.8%
Chicopee	3.6%
Pioneer Valley	***3.9%***
Springfield	6.6%
Holyoke	7.9%
Blandford	NA
Brimfield	NA
Chester	NA
Conway	NA
East Longmeadow	NA
Easthampton	NA
Erving	NA
Granby	NA
Hampden	NA
Holland	NA
Huntington	NA
Middlefield	NA
Monroe	NA
Monson	NA
Montgomery	NA
Northfield	NA
Russell	NA
Shutesbury	NA
South Hadley	NA
Southwick	NA
Wendell	NA

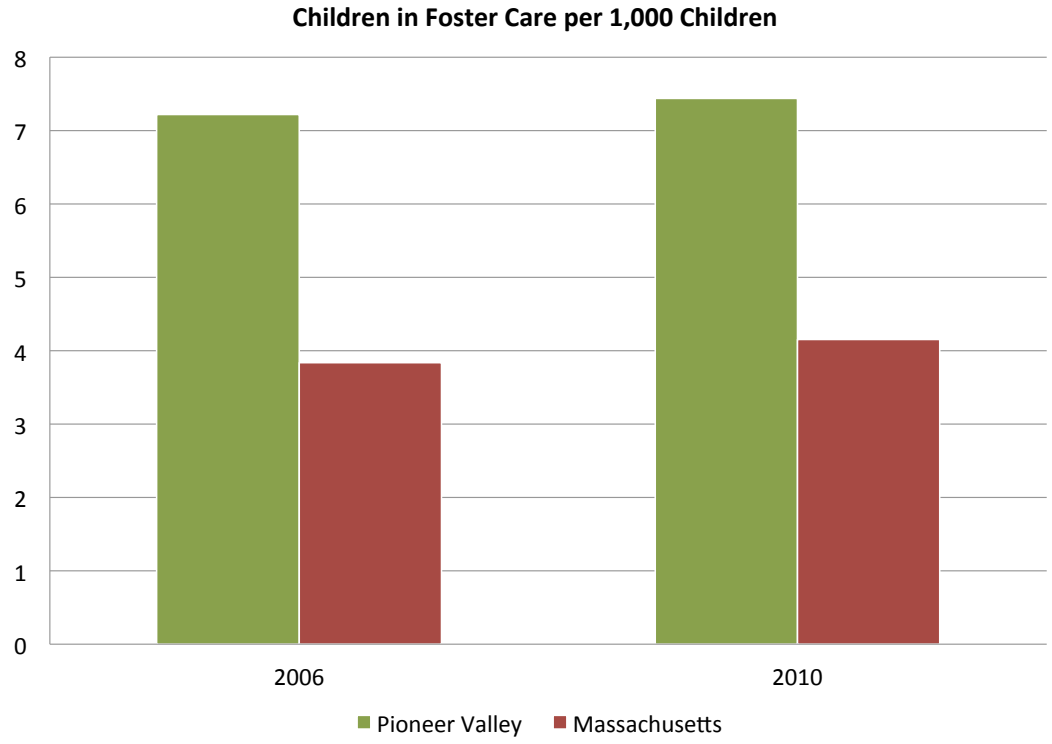
C-
RATING

CHILDREN IN FOSTER CARE

The ratio of children in foster care compared to all children is a vital signal of the state of families in the Pioneer Valley as a whole. * There are numerous reasons why a child might be in foster care: deceased parents, parents unable to care for their child, child abuse or neglect by parents, or parents surrendering custody to the state because of a child's mental health or criminal history. Regardless of the reason, this indicator reflects the share of our region's children who are not being raised by their parents and who may, therefore, have emotional and social challenges not faced by children living with their birth or adoptive parents. This indicator reflects the number of children living in foster care per 1,000 children, based on the location of the foster care residence. It is important to understand that this does not indicate the number of children living in foster care based on their residence prior to placement.

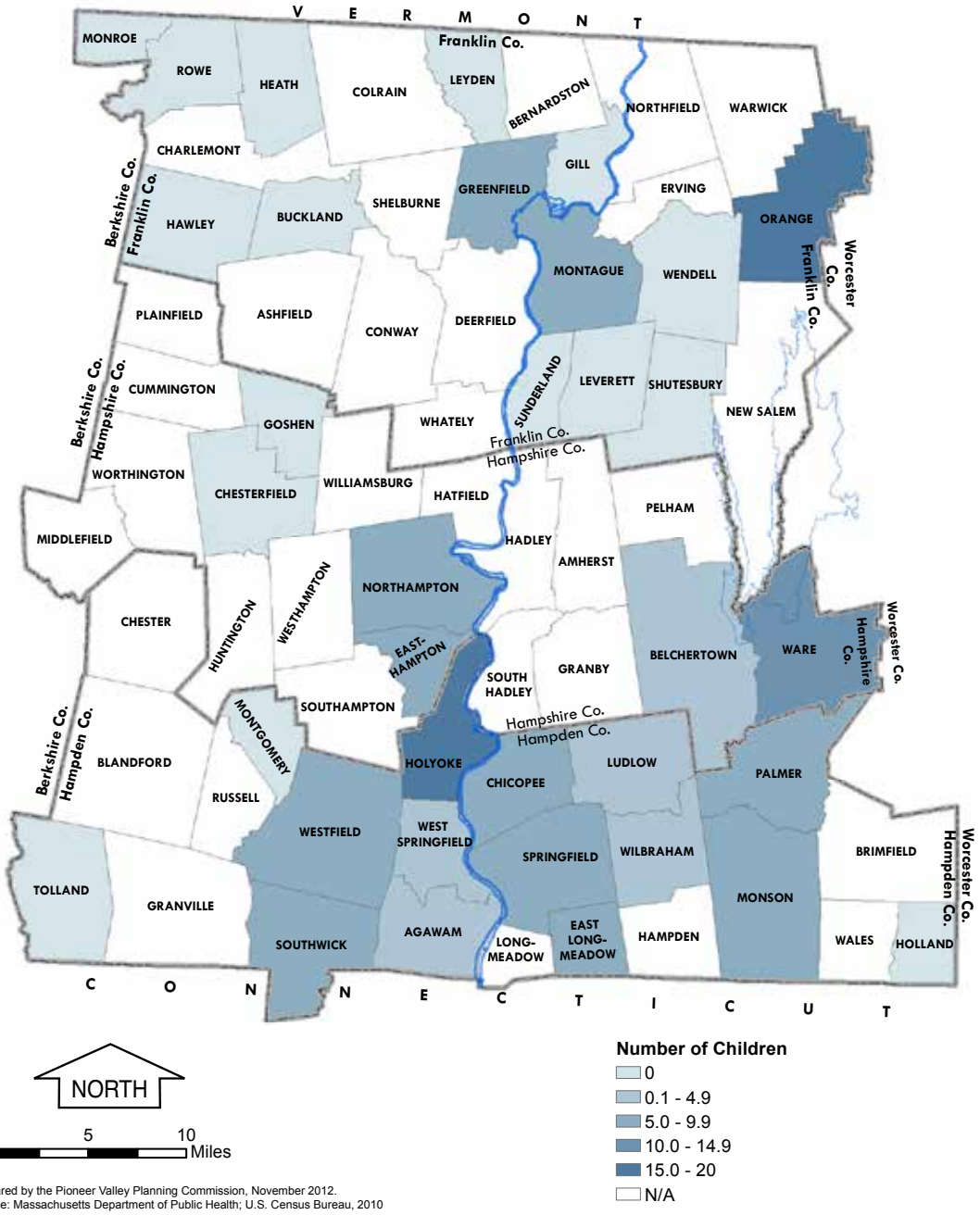
The Pioneer Valley has a much higher rate of children in living in foster care than Massachusetts as a whole. The increase from 2006 to 2010 was only 0.22. Though the region remains higher than the state average, it seems to be following the state trend, since the state's average only increased by 0.31. However, this is still a disappointing trend since trends of the previous decade showed a decrease from 1998 to 2002 for both the valley and the state. In 2010, 7.4 of every 1,000 children in the Pioneer Valley were living in foster care, just under twice the number for Massachusetts (4.2 of 1,000).

The majority of these high rates of children in foster care (5 or more per 1,000) appear to be occurring in only 14 of the Pioneer Valley's 69 communities. Municipalities with the highest rate of children in foster care, in order, are; Orange 16.1, Holyoke 15.9, Ware 11.1, Springfield 9.9, and Palmer 9.8. Among the largest cities in the region, Springfield has decreased its population of children in foster care through the years (15.3 in 2002), while Holyoke has remained relatively constant. Those towns listed as having a rate of zero had numbers too small to be reported by the Department of Public Health for confidentiality reasons.



* This report assumes that children living in foster care in the region are somewhat likely to have been from the region prior to foster care placement. Of course, this same assumption cannot be made at the municipal level.

Children (0-17) in Foster Care per 1000 Children



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: Massachusetts Department of Public Health; U.S. Census Bureau, 2010

Buckland	0.0
Chesterfield	0.0
Gill	0.0
Goshen	0.0
Hawley	0.0
Heath	0.0
Holland	0.0
Leverett	0.0
Leyden	0.0
Monroe	0.0
Montgomery	0.0
Rowe	0.0
Shutesbury	0.0
Sunderland	0.0
Tolland	0.0
Wendell	0.0
Ludlow	2.5
Belchertown	2.7
Wilbraham	3.0
Agawam	4.5
West Springfield	4.8
Chicopee	5.3
Southwick	5.7
East Longmeadow	5.8
Northampton	5.8
Westfield	6.2
Montague	6.4
Greenfield	7.0
Pioneer Valley	***7.4***
Monson	7.8
Easthampton	9.0
Palmer	9.8
Springfield	9.9
Ware	11.1
Holyoke	15.9
Orange	16.1
Amherst	NA
Ashfield	NA
Bernardston	NA
Blandford	NA
Brimfield	NA
Charlemont	NA
Chester	NA
Colrain	NA
Conway	NA
Cummington	NA
Deerfield	NA
Erving	NA
Granby	NA
Granville	NA
Hadley	NA
Hampden	NA
Hatfield	NA
Huntington	NA
Longmeadow	NA
Middlefield	NA
New Salem	NA
Northfield	NA
Pelham	NA
Plainfield	NA
Russell	NA
Shelburne	NA
South Hadley	NA
Southampton	NA
Wales	NA
Warwick	NA
Westhampton	NA
Whately	NA
Williamsburg	NA
Worthington	NA

C-
RATING

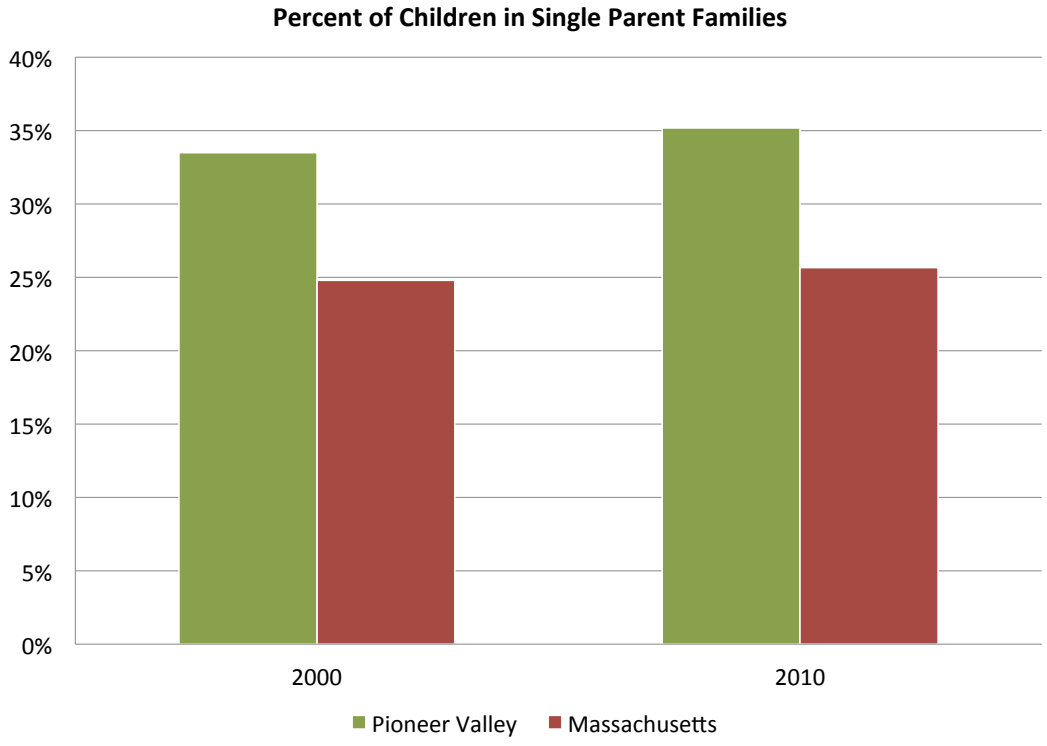
CHILDREN IN SINGLE-PARENT FAMILIES

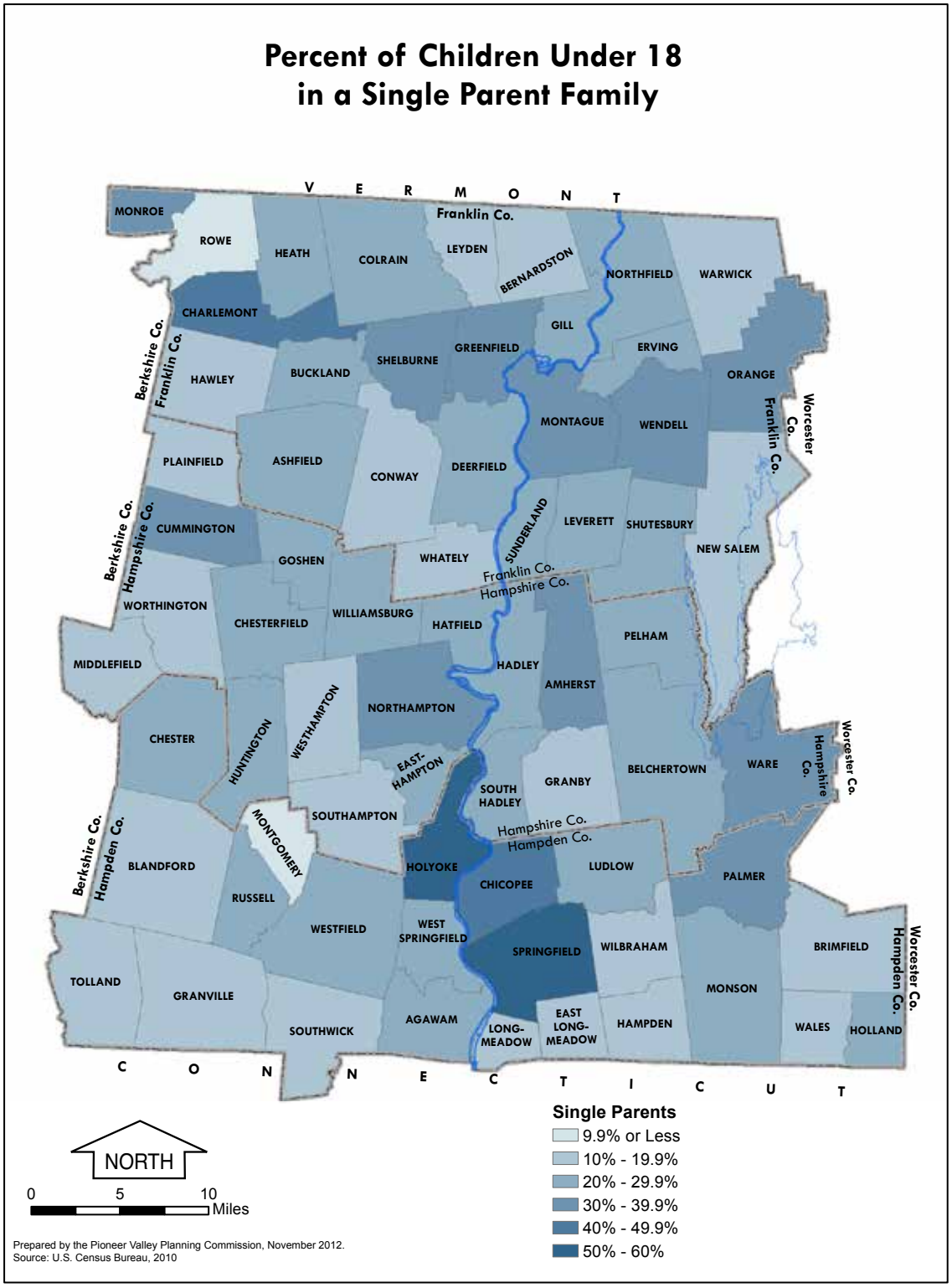
While there are numerous exceptions, a child who grows up in a single-parent family is, statistically, more likely to experience poverty as a child and is less likely to go to college than a child raised in a two-parent family. Given this reality, children growing up in single-parent situations are likely to face greater social and health challenges throughout their childhood and adolescence. This says nothing of an individual's parenting ability, but instead suggests the extremely difficult task of raising children as a single parent. This is an important measure of children's basic family situation and their overall social and economic well-being.

The number of children under 18 who were living with only one parent divided by the total number of children to determine the percent of children in single-parent families.

The Pioneer Valley has continued with state and historic trends by increasing the percent children in single parent families. However, the past decade (2000-2010) has only seen an increase of 1.7 %, compared to the 3% increase of the previous decade (1990-2000). The entire state of Massachusetts has also been increasing, but at a slower rate. For the most recent decade it has only increased by 0.9 percent. Although the state levels have increased more than the Pioneer Valley, the region continues to have a rate of children in single-parent households 10% higher than the rate of the state as a whole.

Across the Pioneer Valley, there were some large disparities in rates of single-parent households. While ten communities had experienced more than a third of all children in single-parent households, fifteen communities had less than half that rate. Communities with rates over the 50% threshold included Springfield and Holyoke at 54 and 52.3 percent. The next three towns, rounding out the top five, were Chicopee 40.7%, Charlemont 40.3%, and Monroe 39.1 percent. The towns of Montgomery and Rowe had fewer than 5% of their children living in single-parent households in 2010.





Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: U.S. Census Bureau, 2010

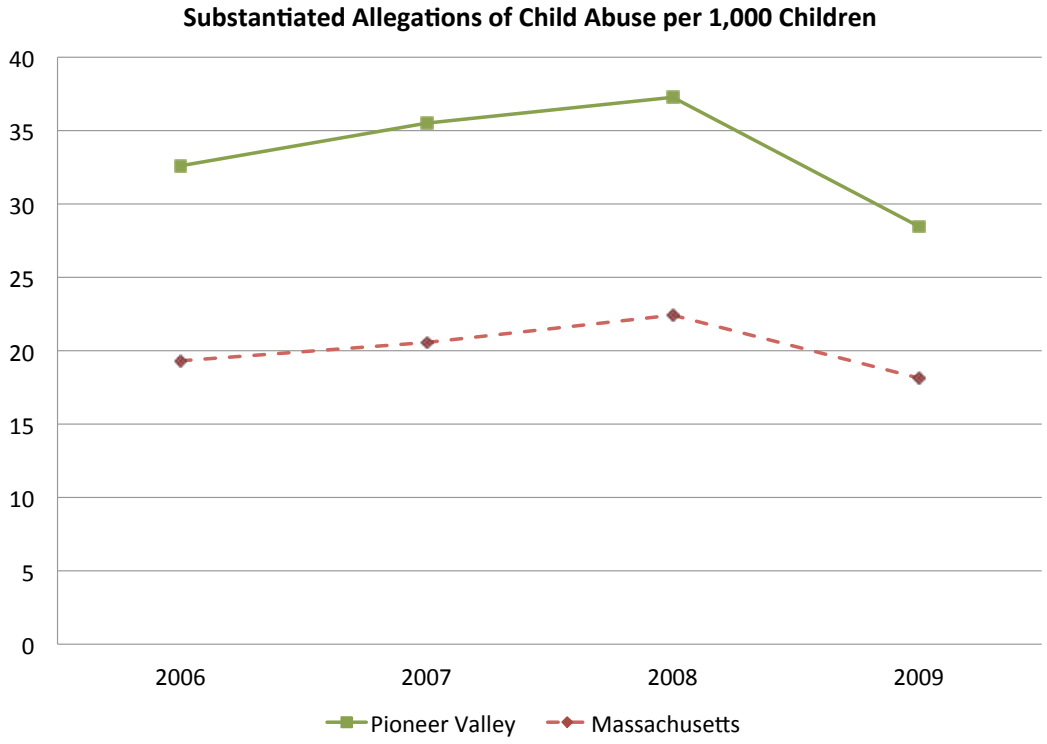
Montgomery	4.5%
Rowe	4.9%
Longmeadow	10.9%
Blandford	11.7%
Leyden	12.5%
Tolland	13.2%
Middlefield	13.5%
Wilbraham	13.8%
Southampton	15.5%
East Longmeadow	15.6%
Hampden	15.7%
Westhampton	15.7%
Plainfield	15.8%
Conway	15.9%
Southwick	16.3%
Worthington	16.6%
Granville	16.6%
Brimfield	16.9%
Hawley	17.0%
Warwick	17.0%
Whately	17.3%
Granby	17.6%
Bernardston	18.3%
New Salem	18.5%
Wales	19.1%
Pelham	20.7%
Belchertown	20.8%
Northfield	21.1%
Ludlow	21.2%
Goshen	21.3%
Agawam	21.5%
Deerfield	21.7%
Monson	21.8%
Shutesbury	21.9%
Huntington	22.5%
Erving	23.0%
Hadley	23.2%
Leverett	23.4%
Holland	23.4%
Chesterfield	23.9%
Chester	24.4%
Westfield	24.5%
Sunderland	24.8%
Gill	24.8%
South Hadley	24.9%
Colrain	25.2%
Russell	25.5%
Hatfield	25.9%
Heath	26.4%
Ashfield	27.2%
Buckland	27.6%
West Springfield	28.1%
Easthampton	28.4%
Williamsburg	28.6%
Cummington	30.1%
Amherst	30.2%
Orange	31.0%
Palmer	31.2%
Shelburne	32.2%
Pioneer Valley	*35.2%*
Ware	35.5%
Montague	35.6%
Northampton	35.9%
Greenfield	37.4%
Wendell	38.0%
Monroe	39.1%
Charlemont	40.3%
Chicopee	40.7%
Springfield	52.3%
Holyoke	54.0%

CHILD ABUSE AND NEGLECT

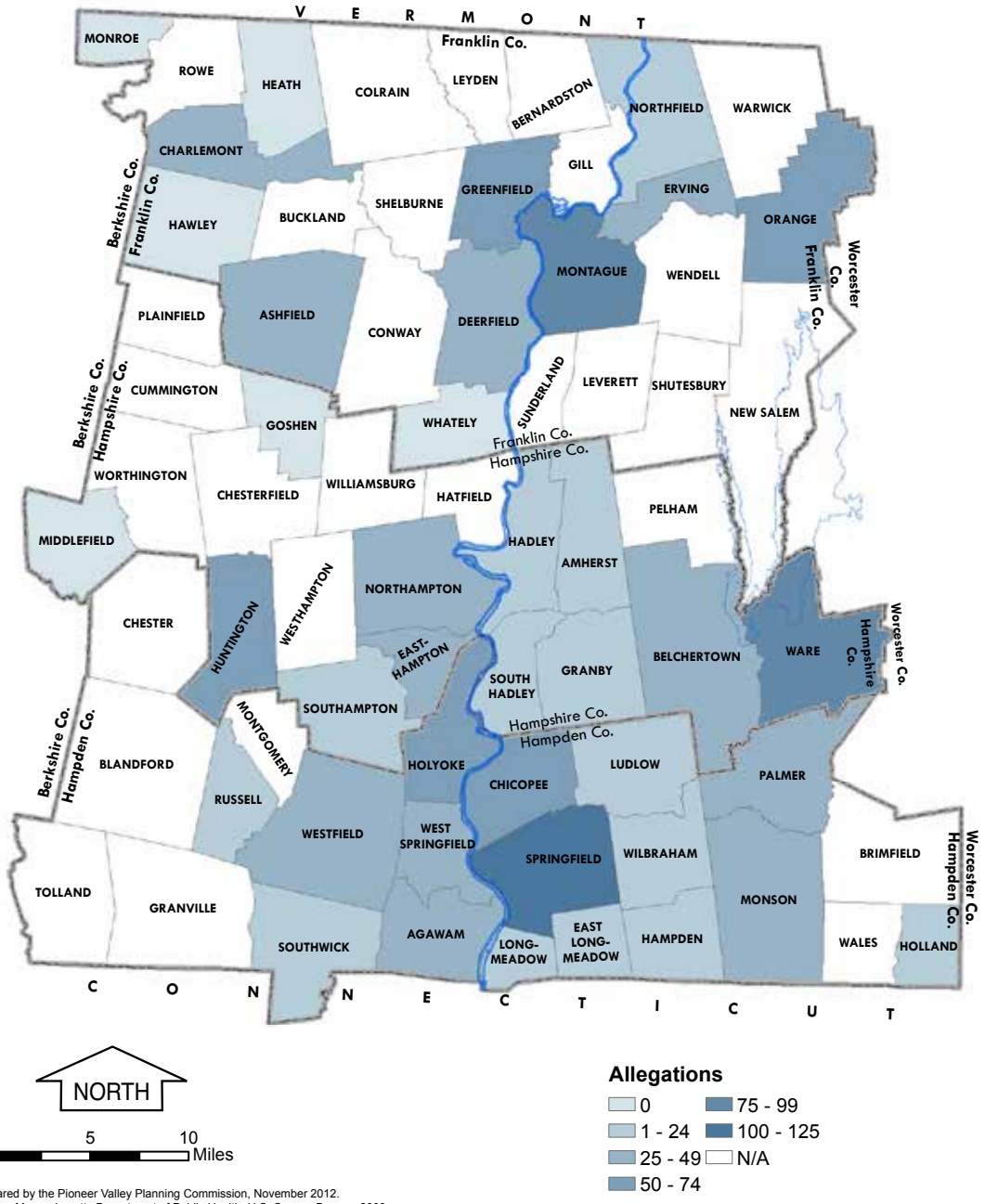
As with children in foster care, this indicator reflects the ability of those raising children in our society to care for and protect their well-being. High incidence of child abuse and neglect is indicative of destructive family situations and, for those affected children, may lead to greater social challenges into adulthood. The indicator is also vital because children who are abused are more likely to become abusers, continuing a cycle of violence. Child abuse and neglect is measured by the number of child abuse and neglect cases being managed by the Massachusetts Department of Children and Families. This indicator measures confirmed allegations of child maltreatment, unduplicated (so a single child is not counted twice due to two allegations filed for a single child). For comparative purposes, data shows the number of children, per 1,000 total children under 18, who are confirmed to have experienced child abuse or neglect. As a large number of domestic abuse cases go unreported, this indicator can be thought of as showing a general trend, but is likely to be a significant undercount of the actual rates of child abuse and neglect in the Pioneer Valley.

The Pioneer Valley, though higher than the state average, appears to be following state trends which were showing improvement in 2009. As shown in the graph, between years 2006 and 2009, instances of substantiated child abuse have risen in the interim years while showing a significant decrease by 2009. In the four year period between 2006-2009, the gap between the Pioneer Valley and the state as a whole was reduced from 13.2 to 10.3 children per 1,000.

Across the Pioneer Valley, there were drastic differences in rates of child abuse and neglect. Communities with the highest rates of child abuse were Springfield, Montague, Ware, Holyoke, Orange, and Greenfield. Notably, communities with higher rates of child abuse crossed urban and rural boundaries, however communities with much lower rates of child abuse fell primarily in the smaller and more rural categories. Those towns included Whately, Monroe, Middlefield, Heath, and Hawley.



Substantiated Allegations of Child Abuse per 1,000 Children



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: Massachusetts Department of Public Health, U.S. Census Bureau, 2009

Goshen	0.0
Hawley	0.0
Heath	0.0
Middlefield	0.0
Monroe	0.0
Whately	0.0
Southwick	1.2
Holland	2.1
Longmeadow	4.3
Southampton	7.5
Wilbraham	8.7
Northfield	9.7
Russell	9.8
Hampden	13.1
Ludlow	14.4
South Hadley	15.4
Granby	16.2
East Longmeadow	17.6
Hadley	19.7
Amherst	23.1
Pioneer Valley	***28.5***
Deerfield	28.9
Easthampton	29.6
Erving	29.8
Belchertown	30.2
Northampton	31.3
Westfield	32.3
West Springfield	35.7
Charlemont	36.5
Monson	39.6
Ashfield	39.8
Agawam	42.3
Palmer	44.9
Huntington	55.9
Chicopee	62.8
Greenfield	68.9
Orange	69.7
Holyoke	73.9
Ware	75.0
Montague	77.5
Springfield	109.0
Bernardston	NA
Blandford	NA
Brimfield	NA
Buckland	NA
Chester	NA
Chesterfield	NA
Colrain	NA
Conway	NA
Cummington	NA
Gill	NA
Granville	NA
Hatfield	NA
Leverett	NA
Leyden	NA
Montgomery	NA
New Salem	NA
Pelham	NA
Plainfield	NA
Rowe	NA
Shelburne	NA
Shutesbury	NA
Sunderland	NA
Tolland	NA
Wales	NA
Warwick	NA
Wendell	NA
Westhampton	NA
Williamsburg	NA
Worthington	NA

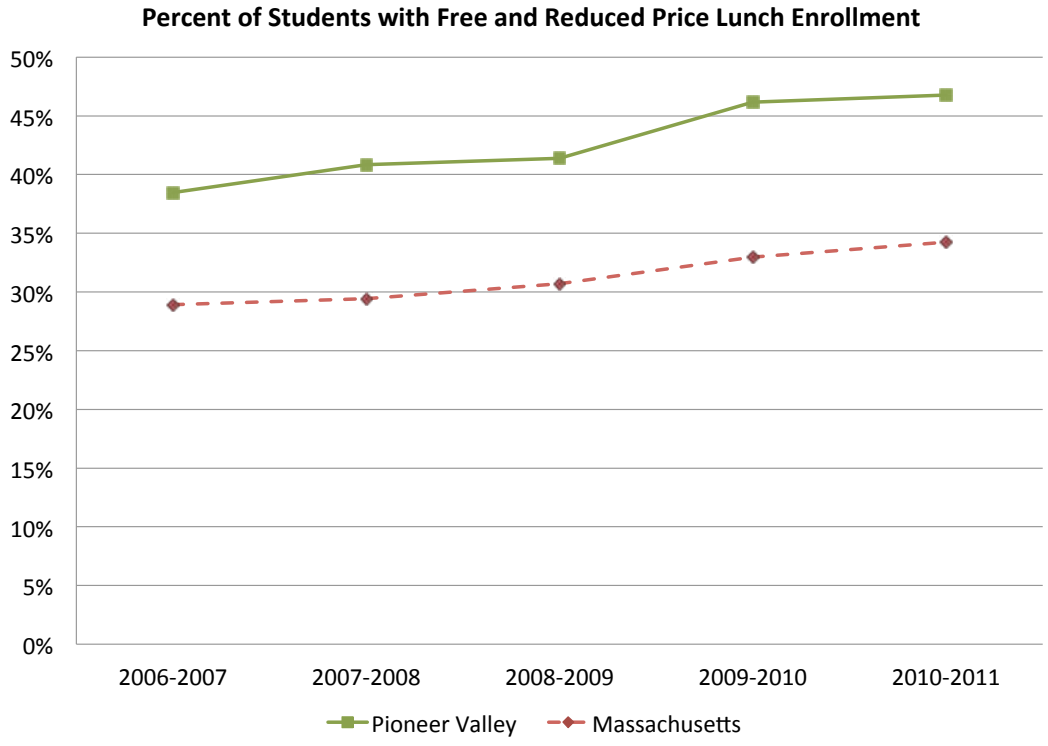
D
RATING

FREE AND REDUCED PRICE LUNCH

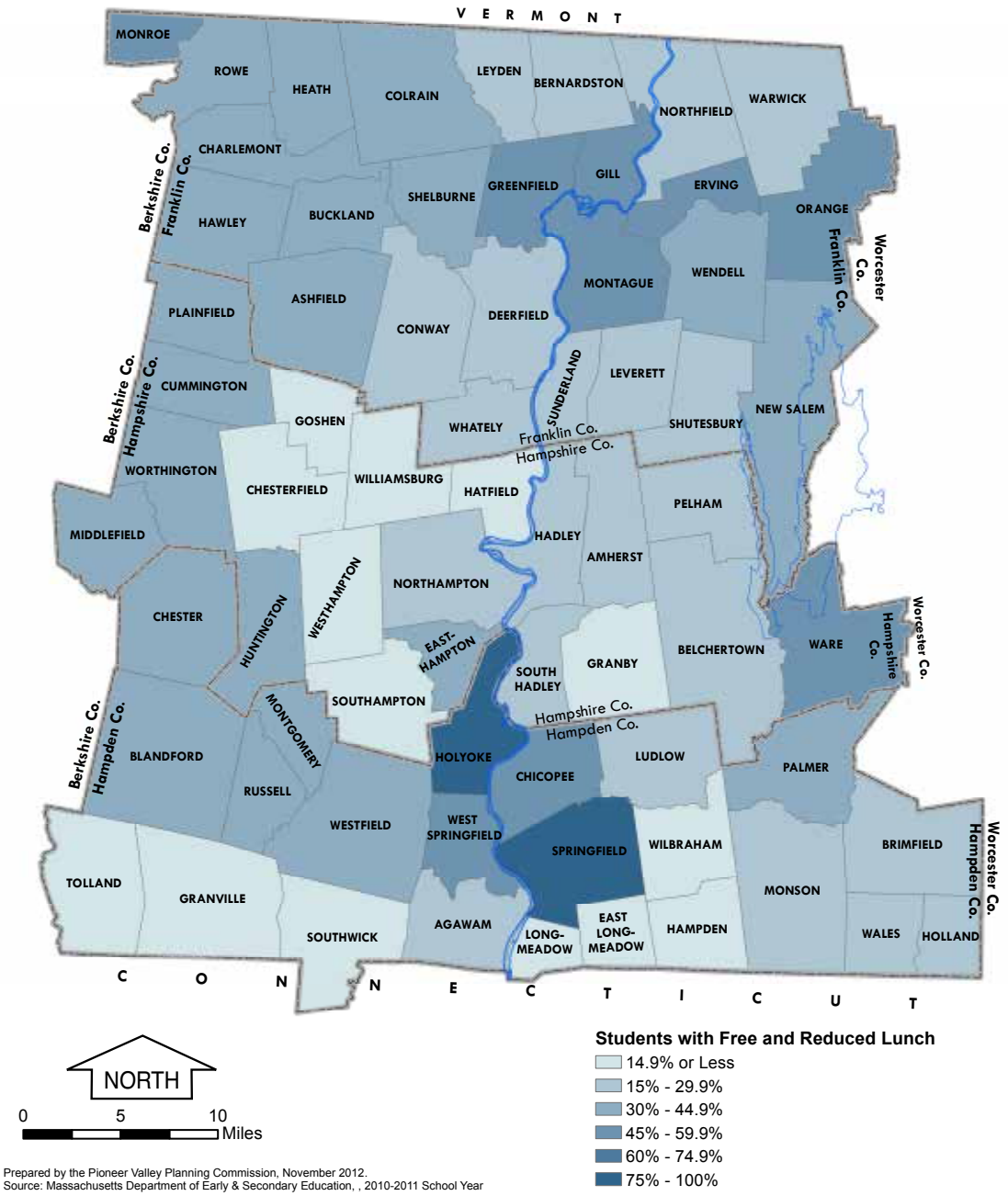
The income level of families with children in public schools can vary significantly from that of the child population as a whole because some portion of children are enrolled in private or parochial schools. Therefore, the percent of enrolled students receiving free or reduced-price lunch is a more precise indicator than others, such as child poverty rate, of the socioeconomic realities facing public school districts. Because children from low-income backgrounds are less likely to have parents with high levels of education, districts with high percentages of students from low-income backgrounds face a far greater challenge providing equivalent educational opportunities. The percent of public school students from kindergarten through the twelfth grade who qualify for free or reduced-price lunch is measured in this indicator. A student qualifies for reduced price meals if their family is between 130 and 185 percent of the poverty level. It should be noted that this data is derived from school district geographies which, in many cases, encompasses multiple towns. In these cases, the percent of participating students for the entire district is applied to each town within the school district.

Between 2006-2010, the Pioneer Valley has consistently had significantly higher rates of students receiving free or reduced lunch as compared to the state as a whole. What's more, while both the state and the region have seen increases in recent years, those increases have been twice as a large in the Pioneer Valley. Compared with 2006-2007 rates, the percentage of students receiving subsidized lunches increased substantially from 38% to 46% for the entire Pioneer Valley.

As with most economic-related indicators, the concentrations of free and reduced lunch eligibility were not shared equally across the region. In many communities, there is a long term pattern of increased student participation in these programs. In the 2002-2003 school year, only 3 municipalities were over the 50% threshold. In the 2010-2011 there were three times as many communities above that threshold. Those communities included Springfield 84.2%, Holyoke 82.6%, Chicopee 58.4%, Monroe, 56.1%, Greenfield 55.6%, Montague 52.5%, Gill 52.5%, Erving 50%, and Ware 50 percent. Noticeably, there is a large difference (almost 25%) between Springfield and Holyoke's numbers compared with Chicopee and the other six towns. At the same time, the communities of Longmeadow, Hampden, and Wilbraham all had participation rates under 10% in the 2010-2011 school year. While many of the increases across the region are likely due to increased rates of poverty and thus eligibility for the programs, there may be some other contributing factors. Several superintendents from around the region attributed the increase enrollment in the program to these factors: Improved reporting mechanism to the state; point-of-scale system, which provide anonymity and thus made it more comfortable for families to identify their financial situation; changing demographics of their school district population; and a changing economy



Percent of Students with Free and Reduced Price Lunch Enrollment



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: Massachusetts Department of Early & Secondary Education, , 2010-2011 School Year

Longmeadow	4.1%
Hampden	9.9%
Wilbraham	9.9%
East Longmeadow	11.0%
Hatfield	11.5%
Westhampton	11.9%
Southampton	12.1%
Chesterfield	12.8%
Goshen	12.8%
Williamsburg	13.5%
Southwick	14.9%
Tolland	14.9%
Granby	14.9%
Granville	14.9%
Deerfield	15.7%
Hadley	16.7%
Belchertown	17.5%
Brimfield	17.9%
Whately	19.0%
Wales	19.7%
Conway	20.3%
Holland	20.4%
Sunderland	21.3%
Pelham	23.1%
Monson	23.2%
Shutesbury	23.5%
Bernardston	24.7%
Leyden	24.7%
Northfield	24.7%
Warwick	24.7%
Ludlow	24.8%
Leverett	24.8%
Agawam	25.4%
South Hadley	28.1%
Northampton	28.7%
Amherst	29.8%
Easthampton	31.1%
Westfield	31.2%
Blandford	31.7%
Chester	31.7%
Huntington	31.7%
Middlefield	31.7%
Montgomery	31.7%
Russell	31.7%
Worthington	31.7%
Cummington	32.1%
Palmer	36.3%
Ashfield	36.7%
Buckland	36.7%
Colrain	36.7%
Heath	36.7%
Plainfield	36.7%
Rowe	36.7%
Shelburne	36.7%
Charlemont	37.6%
Hawley	37.6%
New Salem	39.9%
Wendell	39.9%
Orange	46.3%
West Springfield	46.4%
Pioneer Valley	*47.8%*
Ware	50.0%
Erving	50.0%
Gill	52.5%
Montague	52.5%
Greenfield	55.6%
Monroe	56.1%
Chicopee	58.4%
Holyoke	82.6%
Springfield	84.2%

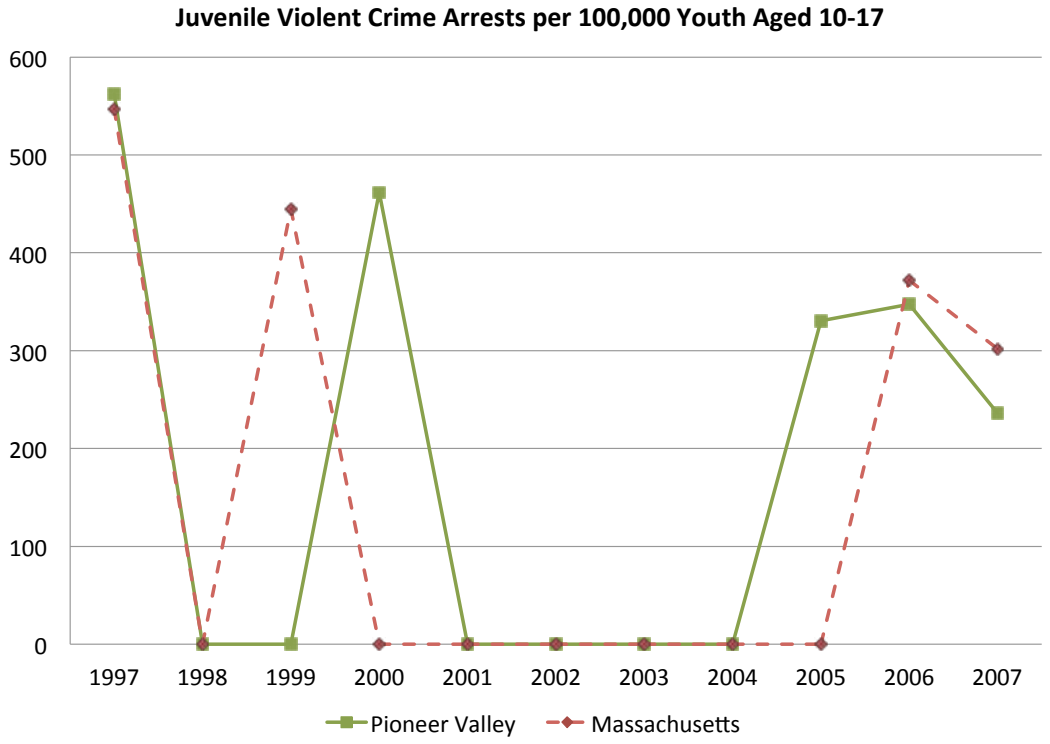
B-
RATING

JUVENILE VIOLENT CRIME

When people are involved in crime, violence, and gangs at a young age, it is often a sign of that the youth in the community are not getting the support and direction needed to make good choices for themselves and to see constructive possibilities for their future. Early involvement in crime and violence often lead to life-long problematic trends for the individual and also contribute to a lack of safety and security for the community at large. Measuring the occurrence of juvenile violent crime arrests can be a good way to also measure the success of certain community action programs as well as local and statewide social services. Evaluating crime rates against the quality and quantity of programs that exist to help give youths direction, purpose, aid in developing life and career skills is useful to determine what towns and communities can do differently. This indicator measures the total number of juvenile violent crime arrests per 100,000 people who are 10-17 years old.

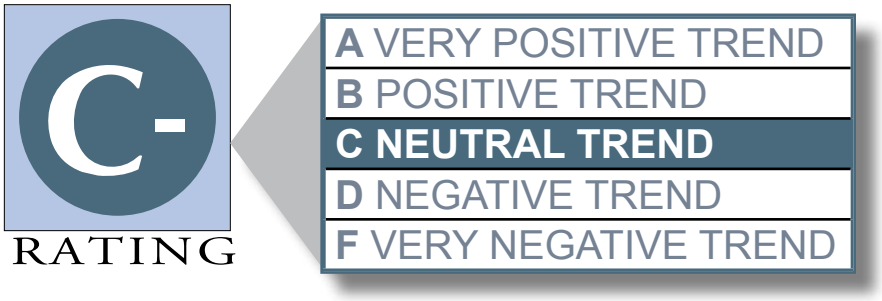
The Pioneer Valley appears to have experienced fairly significant decreases in juvenile violent crime between 1997 and 2007, decreasing by more than 50% in that ten year period. The region has remained fairly consistent with statewide averages. While in 1997 the Pioneer Valley had a rate of 562, arrests per 1,000 teens, 15 higher than the state, by 2007 the region reached a low of 235 which was a full 67 lower than the state as a whole.

Hampden County has historically had more occurrences of juvenile violent crimes compared to the other two counties of the valley. Though, together, all three counties have significantly decreased crime rates between throughout the decade. The distribution of change in crime rates has not been significantly uneven across the counties, weighing more heavily one more than the others.



Source: U.S. Federal Bureau of Investigation

Note: Pioneer Valley data is calculated as weighted averages of county-wide data for the population between 10 and 17 years of age. For the years 1997-2004, data from the 2000 Census was used. For the years 2005-2007, available American Community Survey estimates were used as the weight.



ELDERLY

The aging "Baby Boomer" population is causing a demographic shift across the nation as the proportion of the elderly population increases. Maintaining and improving the quality of life for the older people in the community is essential as we live longer. Demand for health and senior services will continue to increase, creating both staff and infrastructure needs as well as economic opportunities. Understanding trends related to the elderly population through a variety of indicators such as living situations, economic security, and access to transportation will allow for better planning, care, and quality of living for our senior citizens. Alternatively, if we cannot care for our elderly citizens we may see out-migration as the elderly choose to retire in other locations. This may lead to lower rates for volunteerism, public participation, and a reduced wealth of knowledge, as the elderly tend to be the largest age demographic to engage in volunteering and local issues.

The Pioneer Valley is nearly on par with statewide rates for much of this category and has neutral ratings for many indicators including poverty rates, population who live alone, and access to cars. One area where the Pioneer Valley struggles is of grandparents who are responsible for grandchildren as the regional rate is significantly higher than that statewide and continues to increase. The life expectancy of the Pioneer Valley is a full year lower than the state average and a high degree of inequity between communities is prevalent. The percentage of elderly population who are choosing to remain in the workforce has been growing significantly in the past ten years; this may be due to an increasing life expectancy and augmented by the recent recession.

Indicator	Summary	Rating
Poverty Rates For People 65+	Poverty rates for people over 65 have been stable, increasing slightly over two decades. Equity between most communities is very good, but it is poor between the highest and lowest performing communities.	C
Population 65+ Who remain Engaged in the Workforce	The percent of workers who remain in the labor force over age 65 has nearly doubled over a decade, but remains slightly below the statewide rate. Many communities have similar rates, but there is a wide gap between highest and lowest performing communities.	D+
Grandparents Responsible for Grandchildren	The percent of grandparents who are responsible for raising their grandchildren continues to rise and is much higher than that statewide. Equity is very good amongst most communities, but very poor between the lowest and highest performing communities.	D
Population 65+Who Live Alone	The percent of people over 65 who live alone is generally stable and similar to that of the state. Equity is poor between most communities.	C-
Population 65+ With Access to a Car	The percent of people over 65 who have access to a car continues to increase slowly, and is slightly higher than the Massachusetts rate. However, equity is very poor amongst most communities.	C-
Life Expectancy	Growth in life expectancy has been relatively stagnant in recent years and is more than a year lower than that statewide.	D+

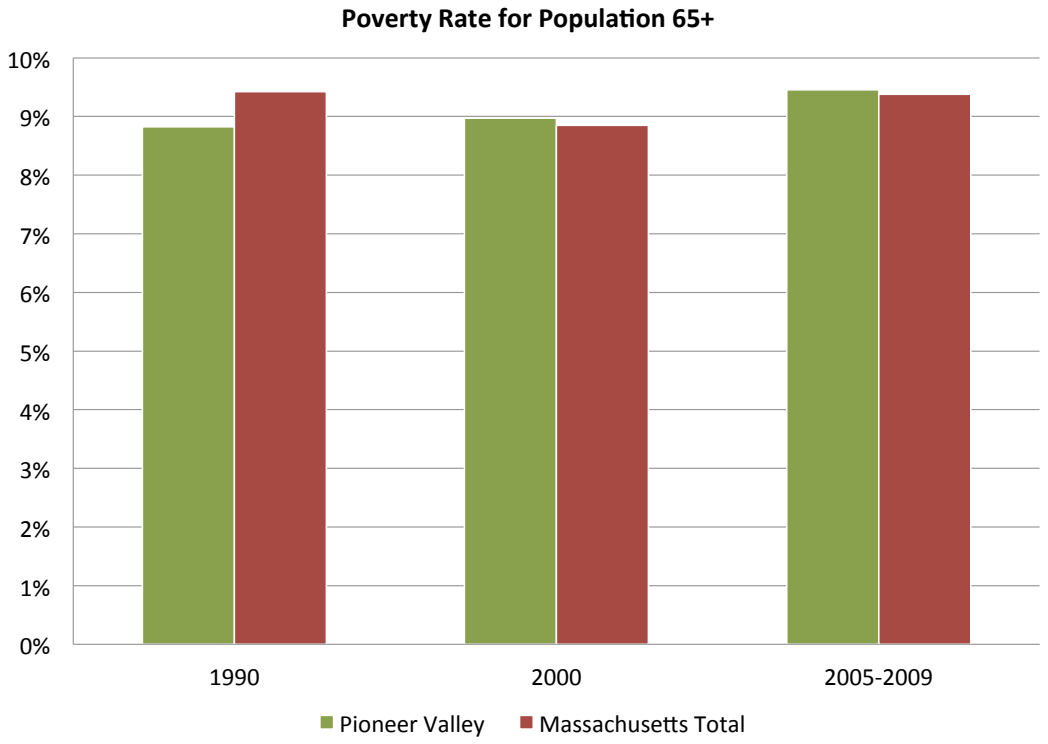
C
RATING

POVERTY RATES FOR PEOPLE 65+

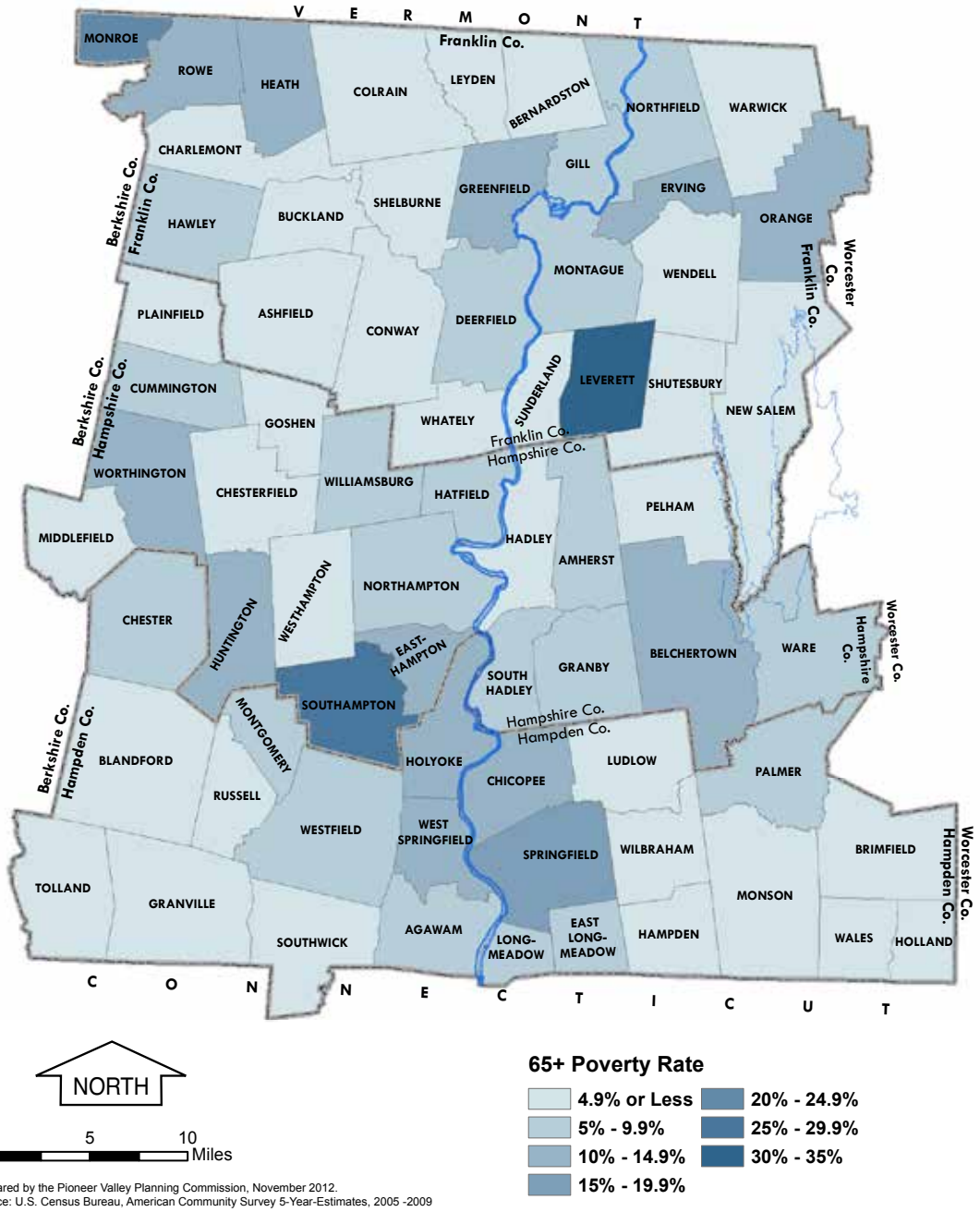
As people age their income and support networks often decrease significantly, at a time when certain expenses may be increasing, such as health and medical costs. It is not uncommon for people to move from relative economic security throughout their working career to a lower income or impoverished economic state during this time when they must rely on fixed incomes and retirement savings or funds they have managed to accrue. As people get older, they are less likely to be able to work to support themselves economically and they may be less likely to have friends or family members who can assist them. This indicator measures the percentage of all people over the age of 65 whose income falls below the poverty line. It is an indicator of the health and well-being of our older population. Additionally, because older people with fewer resources are likely to rely on their younger family members, this is also a suggestion of the type of economic or emotional strains that the middle-aged cohort may be experiencing as a result of these additional needs.

Between 1990 and 2005-2009, there appears to be a steady, slight increase (just over half of a percent) in the poverty rate for the population over 65 years old in the Pioneer Valley. Rates in the region have generally been similar to that of the state as a whole.

Across the region, most communities have elderly poverty rates under 10 percent, while a few outlying communities have rates significantly higher. According to the 2005-2009 American Community Survey, five communities had 0% of their elderly population living below the poverty level. These communities were all fairly small and rural and included Pelham, Bernardston, Conway, Middlefield and Whately. Conversely, four communities had rates significantly higher than the region as a whole, and those included Leverett (30%), Southampton (27%), Monroe (24%), and Springfield (19%).



Poverty Rate for Population 65+



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: U.S. Census Bureau, American Community Survey 5-Year-Estimates, 2005 -2009

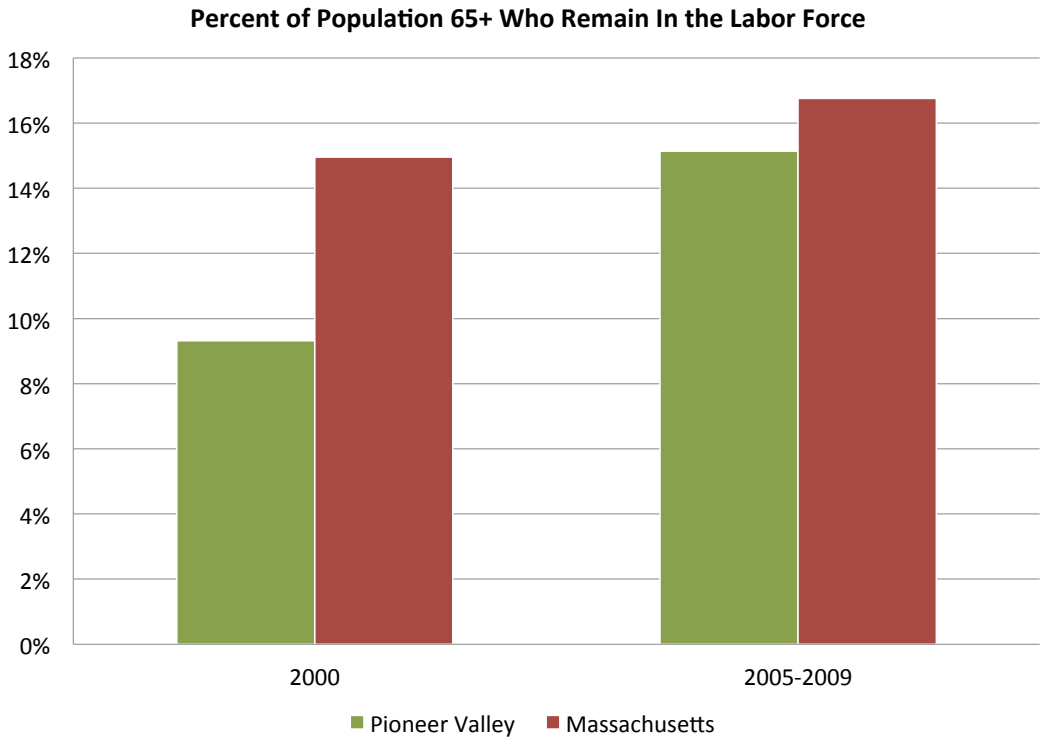
Bernardston	0.0%
Conway	0.0%
Middlefield	0.0%
Pelham	0.0%
Whately	0.0%
Hampden	1.2%
Wilbraham	1.3%
Wales	1.7%
Russell	1.7%
Plainfield	2.1%
Charlemont	2.2%
Chesterfield	2.5%
Holland	2.5%
Colrain	2.8%
Southwick	2.8%
Wendell	2.9%
Westhampton	3.0%
Buckland	3.1%
Shutesbury	3.2%
Brimfield	3.6%
Warwick	3.7%
Ludlow	3.9%
Blandford	4.1%
Ashfield	4.1%
Goshen	4.3%
Monson	4.4%
Shelburne	4.4%
Granville	4.4%
Tolland	4.5%
Leyden	4.5%
New Salem	4.7%
Hadley	4.7%
Sunderland	4.9%
East Longmeadow	5.0%
Gill	5.2%
Hawley	5.2%
Longmeadow	5.4%
Granby	5.5%
Chester	5.5%
Palmer	5.6%
Amherst	6.0%
Northampton	6.0%
Williamsburg	6.5%
Northfield	6.5%
Ware	7.3%
Montague	7.4%
Agawam	7.6%
Deerfield	8.0%
South Hadley	8.3%
Cummington	8.9%
Westfield	9.1%
Montgomery	9.1%
Hatfield	9.2%
Pioneer Valley	***9.46%***
Huntington	10.0%
Heath	10.1%
Worthington	10.1%
West Springfield	10.4%
Easthampton	10.6%
Erving	10.8%
Greenfield	10.9%
Rowe	11.4%
Belchertown	11.5%
Chicopee	11.6%
Orange	13.1%
Holyoke	14.9%
Springfield	19.1%
Monroe	23.8%
Southampton	26.9%
Leverett	30.3%

PERCENT OF THE POPULATION 65+ WHO REMAIN ENGAGED IN THE WORKFORCE

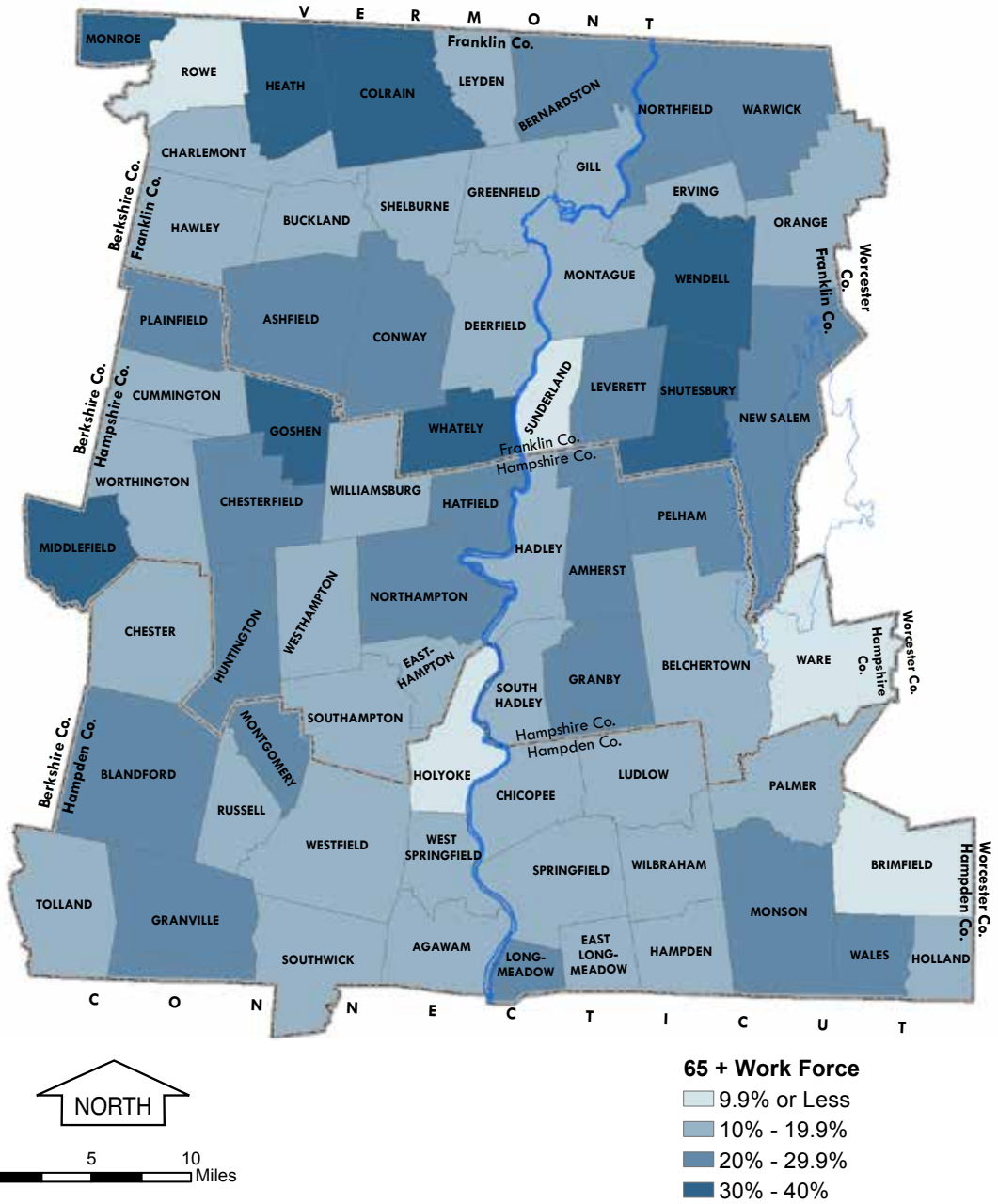
As we get further into the new economy, and as people tend to live longer, the retirement age is slowly pushed back and people tend to work later in their life. Across the nation, and in particular in the Pioneer Valley, studies have shown that there may be a labor shortage as this generation of older workers retires due to the size of the Baby Boom generation being so much larger than generations to follow. When people over the age of 65 leave the labor force (retire), it may create a gap in the economy as well as put those older people at greater risk of financial insecurity. This indicator is complex in what it represents. Being able to afford to retire past the age of 65 speaks to the quality of life that many are able to afford. Remaining in the workforce longer could signal a lack of financial security, or it could be a sign of increased long term health and abilities. The percentage of people over the age of 65 who remain engaged in the labor force, whether currently employed or unemployed is measured by this indicator.

The engagement in the workforce of people over 65 years old increased steadily over the course of the last decade. While this is true for both the Pioneer Valley as well as the state, the increases have been much more significant within the region. The Pioneer Valley has consistently had rates below the state's average, but that gap has been closing. In 2000, the rate in the Pioneer Valley was a full 6% lower than that of the state as whole, but by the 2005-2009 period, this gap had shrunk to 2 percent. This increased rate of people 65+ remaining in the labor force may be a sign of longer term good health, but based on how quickly this increase has occurred, it may be more likely to reflect recent economic woes, leaving people no choice but to postpone retirement.

Across the region, there was significant variation in labor force engagement for the 65+ population. Although in most communities, at least one in every ten people over 65 years old was still engaged in the labor force. Only five communities had rates below 10% and these included Sunderland, Ware, Brimfield, Holyoke, and Rowe. Conversely, there were 28 communities that had 65+ population labor force engagement rates of more than 20 percent. The five towns with the highest percentage of elderly people in the work force were Heath, Wendell, Whately, Colrain and Monroe.



Percent of the 65+ Population Who Remain in the Work Force



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: U.S. Census Bureau, American Community Survey 5-Year-Estimates, 2005-2009

Sunderland	5.0%
Ware	6.6%
Brimfield	7.4%
Holyoke	7.8%
Rowe	9.1%
Tolland	10.8%
Hadley	11.1%
East Longmeadow	11.7%
Agawam	12.3%
Westhampton	12.5%
Westfield	12.8%
Easthampton	13.3%
Leyden	13.4%
Greenfield	13.8%
Chicopee	13.8%
Deerfield	13.9%
Springfield	13.9%
Ludlow	14.0%
Southwick	14.2%
Shelburne	14.3%
Williamsburg	14.4%
Montague	14.4%
Russell	14.4%
Gill	14.4%
Palmer	14.7%
Wilbraham	14.9%
Pioneer Valley	*15.1%*
Buckland	15.7%
Cummington	16.0%
South Hadley	16.3%
Chester	16.4%
Orange	16.4%
Hawley	16.7%
Holland	18.1%
Belchertown	18.1%
Erving	18.2%
Hampden	19.2%
Charlemont	19.3%
West Springfield	19.5%
Southampton	19.5%
Worthington	19.6%
Plainfield	20.0%
Longmeadow	20.2%
Leverett	20.7%
Granby	20.7%
Monson	20.9%
New Salem	21.9%
Northampton	22.1%
Blandford	22.7%
Pelham	23.1%
Montgomery	23.4%
Amherst	23.9%
Conway	24.1%
Warwick	24.4%
Wales	24.4%
Hatfield	24.9%
Bernardston	25.5%
Ashfield	25.5%
Huntington	26.8%
Granville	27.0%
Chesterfield	27.9%
Northfield	28.5%
Middlefield	30.9%
Goshen	31.9%
Shutesbury	32.8%
Monroe	33.3%
Colrain	33.6%
Whately	34.4%
Wendell	37.5%
Heath	39.2%

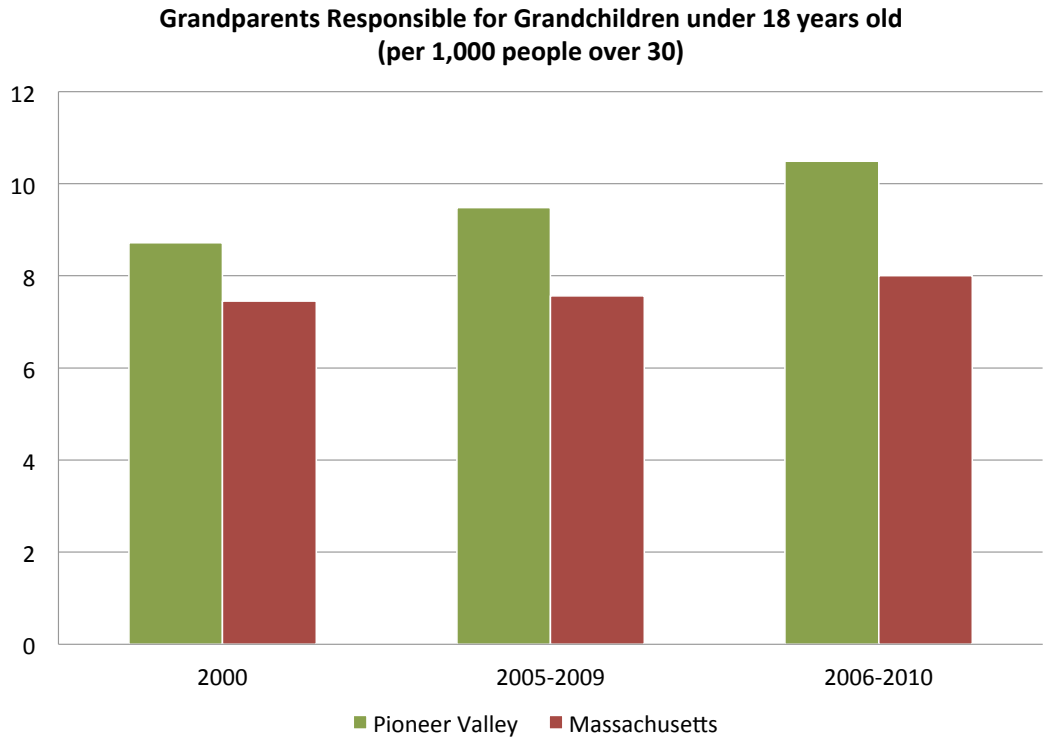
D
RATING

GRANDPARENTS RESPONSIBLE FOR GRANDCHILDREN UNDER 18

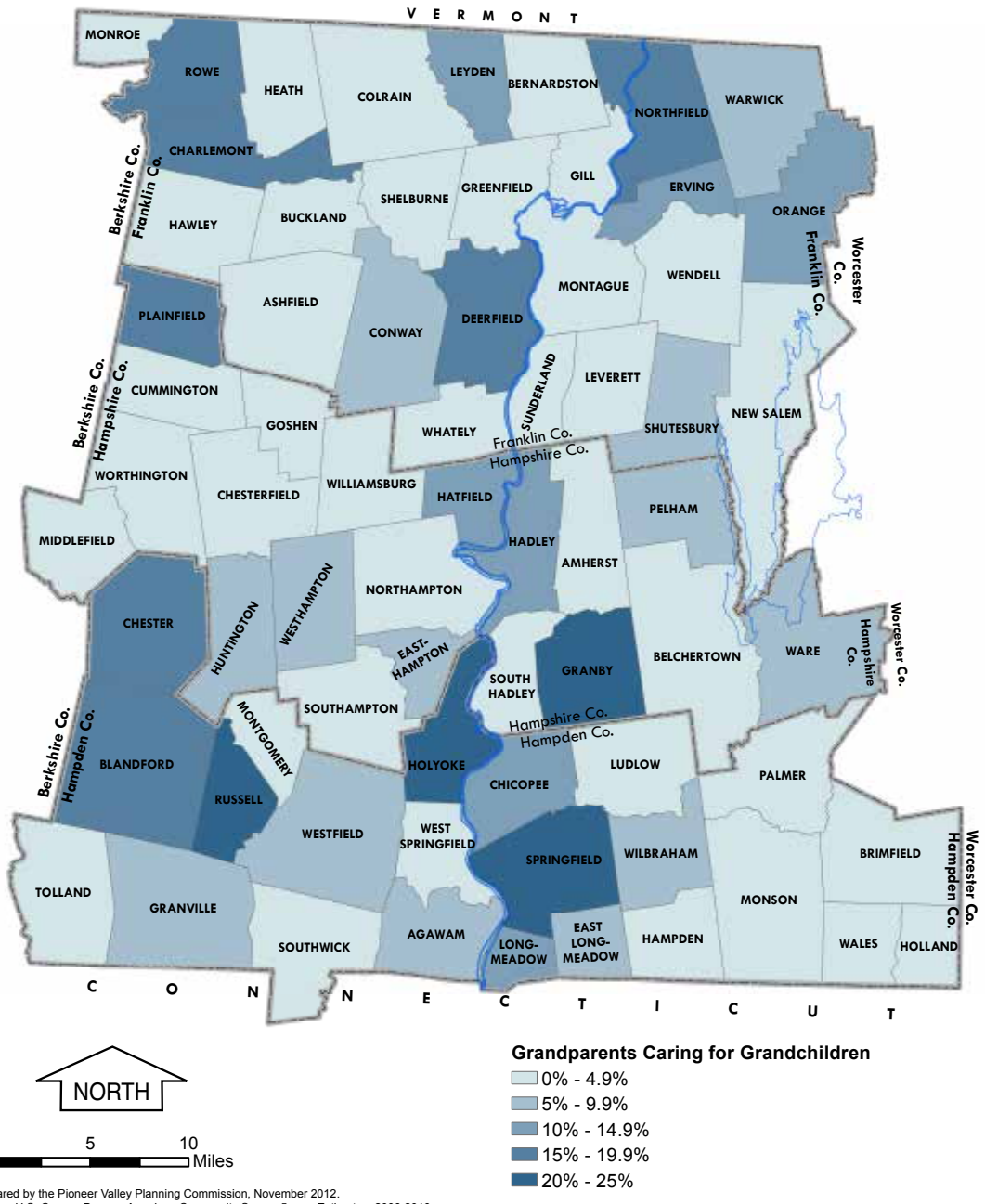
When grandparents are responsible for the care of their grandchildren, it reflects on the life circumstances and potential quality of life issues for the grandparents and the child. While not always the case, a grandparent raising their grandchild is often a symptom of stress in the family and can cause emotional difficulties for the child whose parents are not available to raise him or her. Families in this situation are often under more economic stress as well since most adults do not plan their retirement and later-in-life economic needs to include having a child to support. This indicator measures the number of grandparents who are responsible for their grandchildren and is taken as a rate of the total population 30 years old and over.

The Pioneer Valley has continued to see gradual increases in the rate of grandparents caring for their grandchildren between 2000 and 2006-2010. The region's rates have been consistently higher than the state totals. Since 2000, each year the rate of grandparents responsible for grandchildren has increased and reached 10.5 during the 2006-2010 period. In fact, the gap between the state and the region is increasing as well, indicating that the region may be accelerating at a faster rate for this indicator. Although the state is also increasing the rate of grandparents with responsibility for grandchildren, it is growing at a slower rate than the region.

Although the region as a whole is increasing at a faster rate for this indicator, there are still 27 out of 69 communities that have a rate of zero grandparents responsible for grandchildren. Most of those communities are smaller and more rural in nature. Municipalities with the highest rates with over 20 were Springfield (23), Russell (23), Granby (21), and Holyoke (20.1). Although all of the urban core cities of the Pioneer Valley have higher rates for this indicator, there are also several more rural towns that show up above the regional rate. Still, most of the communities within the Pioneer Valley are below both the regional average as well as the state average.



Grandparents Responsible for Grandchildren under 18 years old (per 1,000 people over 30)



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: U.S. Census Bureau, American Community Survey 5-year-Estimates, 2006-2010

Ashfield	0.0
Bernardston	0.0
Brimfield	0.0
Buckland	0.0
Chesterfield	0.0
Cummington	0.0
Gill	0.0
Goshen	0.0
Hampden	0.0
Hawley	0.0
Heath	0.0
Holland	0.0
Leverett	0.0
Middlefield	0.0
Monroe	0.0
Montgomery	0.0
New Salem	0.0
Palmer	0.0
Shelburne	0.0
South Hadley	0.0
Southampton	0.0
Southwick	0.0
Sunderland	0.0
Tolland	0.0
Wendell	0.0
Whately	0.0
Worthington	0.0
Ludlow	1.9
Belchertown	2.0
Monson	2.1
Wales	2.4
Colrain	2.5
Amherst	3.0
West Springfield	3.5
Montague	3.5
Greenfield	4.0
Williamsburg	4.3
Northampton	4.9
Shutesbury	5.5
Westfield	5.9
Conway	6.2
Agawam	6.7
Warwick	7.0
Ware	7.2
Wilbraham	7.3
Pelham	7.5
Westhampton	8.4
Granville	8.6
Huntington	8.7
Easthampton	8.8
East Longmeadow	9.9
Pioneer Valley	***10.5***
Leyden	10.7
Longmeadow	12.6
Hatfield	13.5
Hadley	13.5
Chicopee	14.4
Erving	14.5
Orange	14.7
Northfield	15.2
Deerfield	16.6
Chester	17.1
Charlemont	17.8
Blandford	19.0
Plainfield	19.1
Rowe	19.6
Holyoke	20.1
Granby	21.0
Russell	23.0
Springfield	23.0

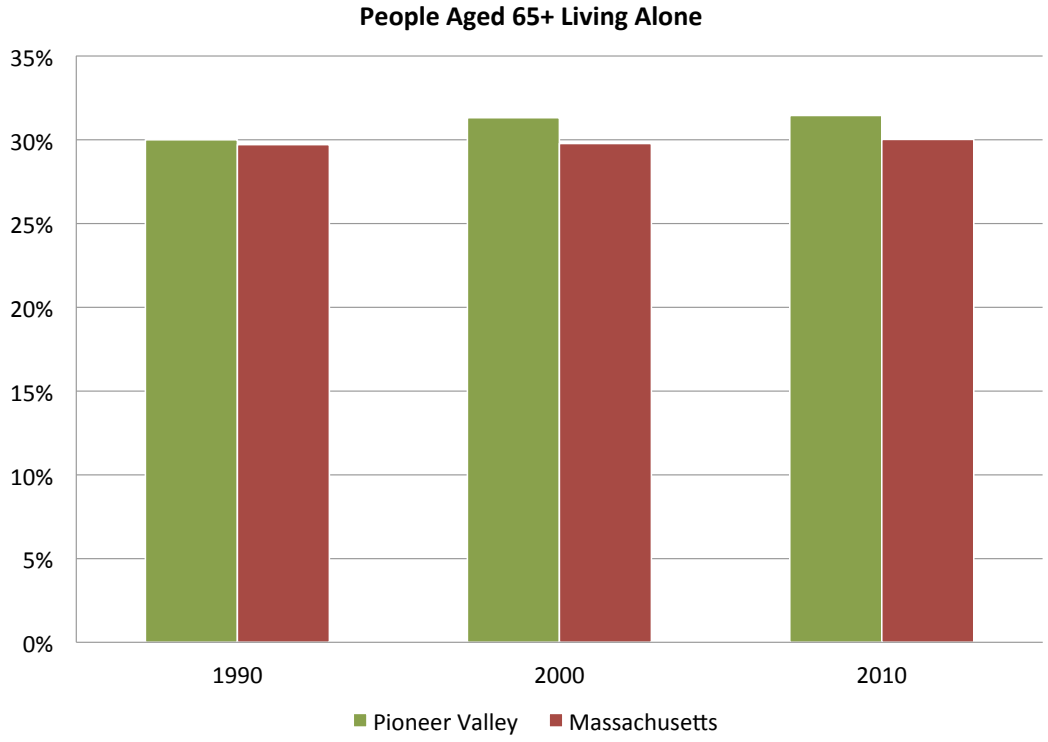
C-
RATING

POPULATION 65+WHO LIVE ALONE

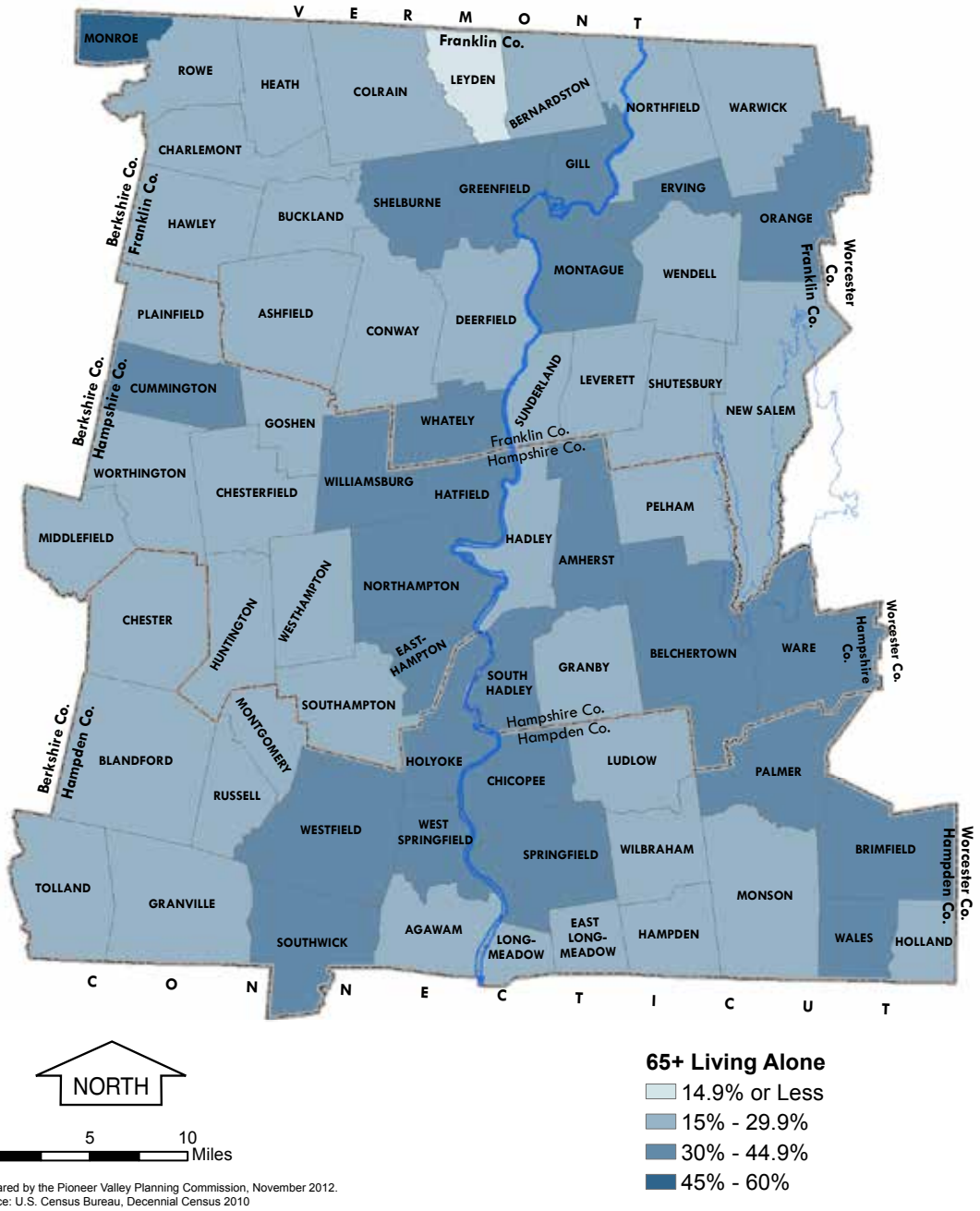
The percentage of our elderly population living alone can be an important indicator of the social inclusion or isolation experienced by the older segment of a population. It can also serve to be an indicator of cultural values and the level of support that individuals have as they age and might require additional assistance with social and medical needs. It is clear that elderly persons can require more medical attention, and are highly susceptible to temperature changes and severe weather. This indicator measures the percentage of all people over the age of 65 who live alone.

Over the past two decades the Pioneer Valley has consistently had slightly higher rates of people living alone over the age of 65 than the state of Massachusetts. Between 1990 – 2010, that rate has increased by about 1.5 percent. By 2010, more than 31 percent of all people over 65 years old in the Pioneer Valley lived along (compared to 30 percent statewide). During the same time, the state remained relatively stable, increasing a slight 0.3 percent. However, most of the increase attributed to the Pioneer Valley happened in the 1990's, where by 2000 the percent had increased by 1.3 percent. In fact, between 2000 and 2010 the region's rate increased by only a little more than 0.1 percent.

Across the individual communities of the Pioneer Valley, communities range across the spectrum in rates of people over 65 years living alone. The town of Monroe has a particularly high rate with more than half of all people over the age of 65 living alone (54.4%), and 25 other communities had rates of 30% or above. Those communities include Cummington, Greenfield, Easthampton and Orange. Nine communities had rates below 20 percent. The towns with the lowest percentage of 65+ living alone are Leyden Pelham, Russell, Warwick, and Chesterfield.



Percentage of People Aged 65+ Living Alone



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: U.S. Census Bureau, Decennial Census 2010

Leyden	12.5%
Pelham	16.9%
Russell	17.7%
Warwick	18.1%
Chesterfield	18.4%
Westhampton	18.6%
Montgomery	18.8%
Tolland	19.3%
Hampden	19.5%
Conway	20.0%
Granville	20.2%
Rowe	20.4%
Leverett	20.7%
Heath	21.0%
Plainfield	21.5%
Hawley	21.6%
Blandford	22.6%
Chester	22.6%
Granby	22.9%
New Salem	23.3%
Goshen	23.3%
Huntington	23.3%
Wilbraham	23.7%
Middlefield	23.9%
Holland	24.2%
Worthington	25.7%
Monson	25.8%
Southampton	26.2%
Northfield	26.6%
Colrain	26.8%
Bernardston	27.0%
Wendell	27.2%
Hadley	27.4%
Longmeadow	27.4%
Deerfield	27.7%
Charlemont	27.9%
East Longmeadow	28.0%
Buckland	28.4%
Shutesbury	28.8%
Agawam	29.1%
Ashfield	29.3%
Ludlow	29.6%
Sunderland	29.8%
Gill	30.0%
Belchertown	30.0%
Hatfield	30.2%
Westfield	30.3%
Whately	30.4%
Brimfield	30.5%
Erving	30.7%
Pioneer Valley	***31.5%***
Ware	31.6%
Williamsburg	31.7%
Northampton	31.7%
Palmer	31.8%
Wales	32.0%
South Hadley	32.1%
Amherst	32.2%
Montague	32.4%
Southwick	32.6%
Holyoke	33.2%
West Springfield	33.6%
Shelburne	34.1%
Springfield	35.0%
Chicopee	35.1%
Orange	35.3%
Easthampton	37.2%
Greenfield	37.3%
Cummington	37.8%
Monroe	52.4%

C-
RATING

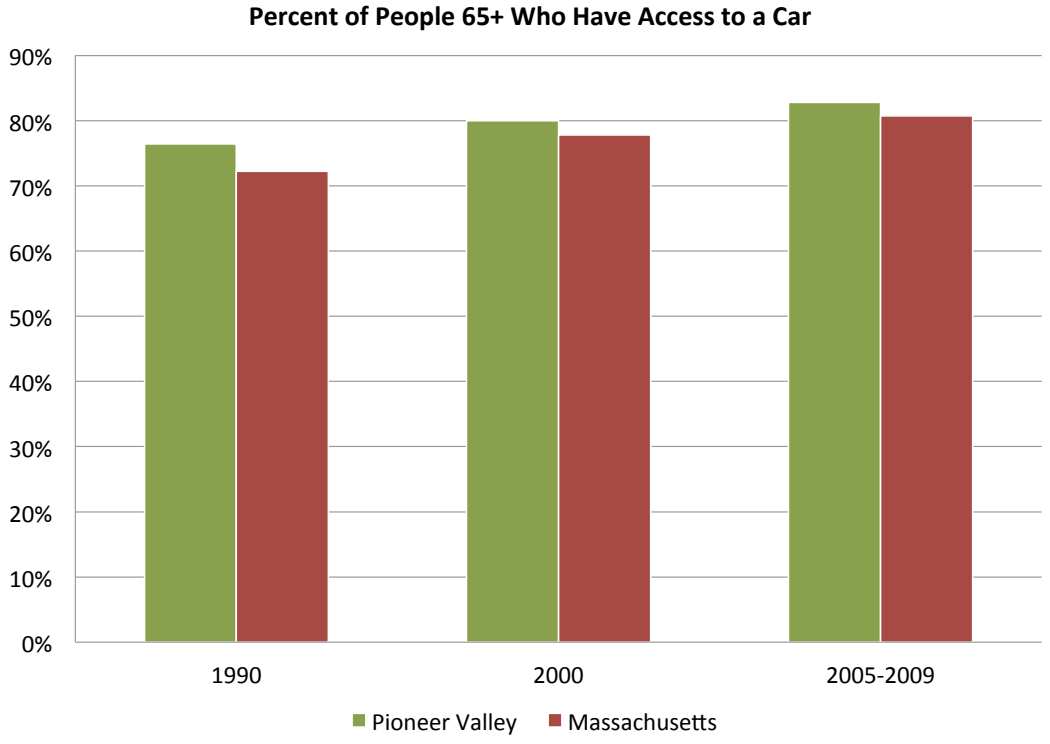
ACCESS TO A CAR

Access to transportation is an important issue for the elderly population, either through public transit or access to cars. Access to cars and transportation in general is a good indicator of quality of life for the population over 65 years old as it suggests more lifestyle independence. Additionally, since most elderly people need access to health care more frequently than the younger portions of the population, it is important to have access to a car for quick, reliable transportation. In this indicator, housing units with a householder 65 years and over with one or more cars present is being measured. This represents those in the elderly population who have at least minimal access to a car.

Overall, for the past two decades, the Pioneer Valley has consistently had higher rates of access to a car for the older portions of the population. Since 1990 the general trend for access to cars for the elderly population has been steadily increasing. While this upward trend of increased access to cars has been consistent across the state, people over the age of 65 in the Pioneer Valley in particular have had consistently higher rates of car access than that the state as a whole. This may be due in part to the lower levels of access to public transit in the Pioneer Valley which makes the need for a car all the more essential. The state started at 72% in 1990 and increased to 81% during 2005-2009. The Pioneer Valley has been following the same trend, and with increasing access to cars for its elderly population hitting 83% during 2005-2009.

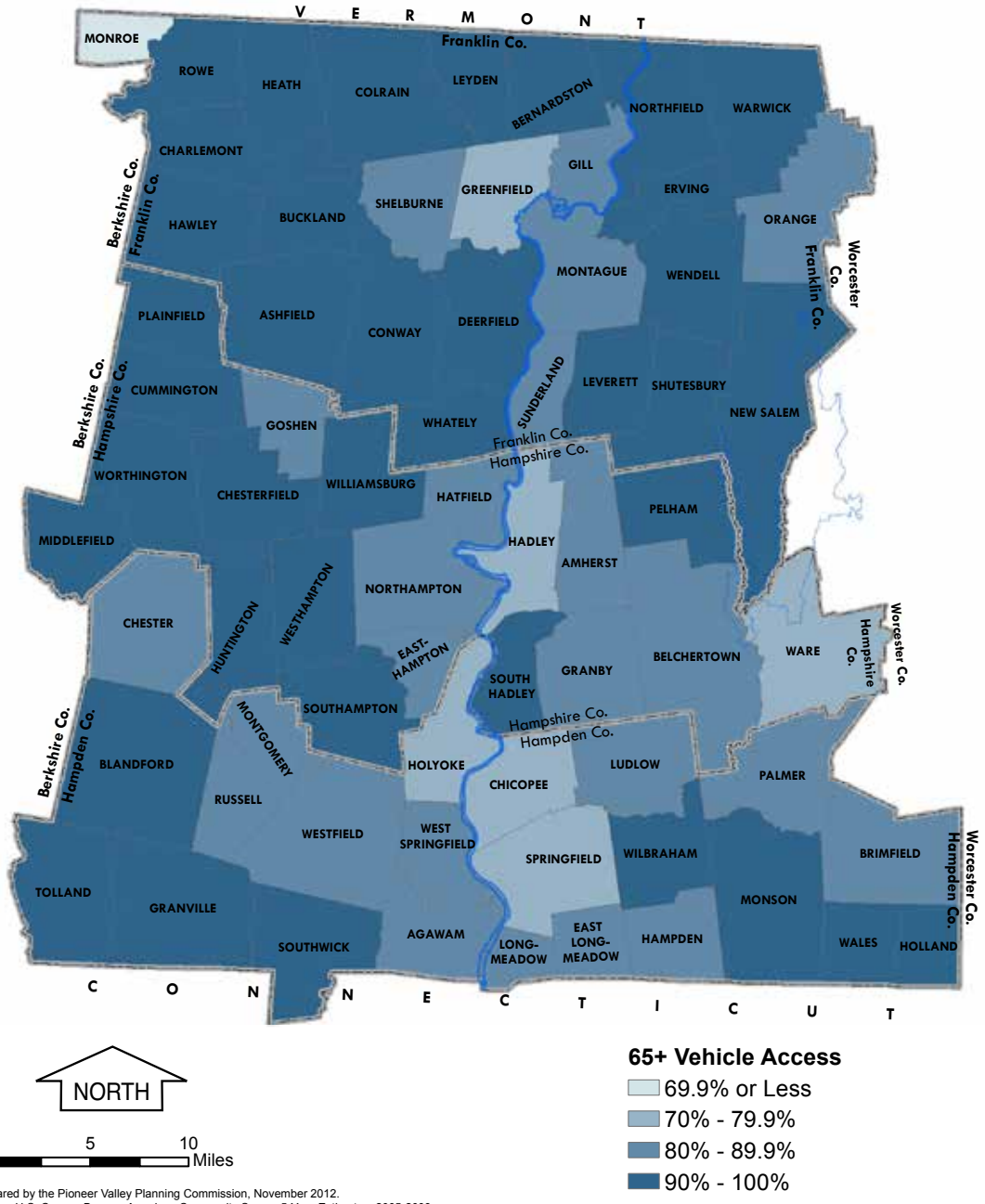
Across the region, most communities in the Pioneer Valley have quite high access to cars, with 63 out of 69 communities having rates over 80 percent and nine towns achieving 100% access. Those towns included Ashfield, Heath, Leyden, Northfield, Rowe, Warwick, Granville, Holland, and Middlefield. Alternatively, the five cities and towns with the lowest percent access to a car for its elderly population were Monroe, Springfield, Ware, Holyoke, and Greenfield. Monroe was the only town in which over half of the elderly population does not have access to a car, with 36% who have access.

Again, seen here is a trend that has been associated with many of the indicators presented for this report, which is the highest portions of the populations that face the most hardship, access, and need issues tend to be the urban centers, such as Springfield and Holyoke. Overall, both the region and the state see improved conditions regarding car access to its elderly population.*



* It should be noted that the Census Bureau estimated only 11 people over the age of 65 were living in Monroe during that time period, which very likely has an impact on this estimate. The margin of error provided for the number of people over 65 with access to a car suggests that this rate could be as high as 54.5 percent. Additionally, the estimate provided for total number of people over the age of 65 was provided as a total of 11 with a margin of error of 141 people. Thus, estimates for such a small population as Monroe, in this case, should be considered within that context.

Percent of People 65+ Who Have Access to a Car



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: U.S. Census Bureau, American Community Survey 5-Year-Estimates, 2005-2009

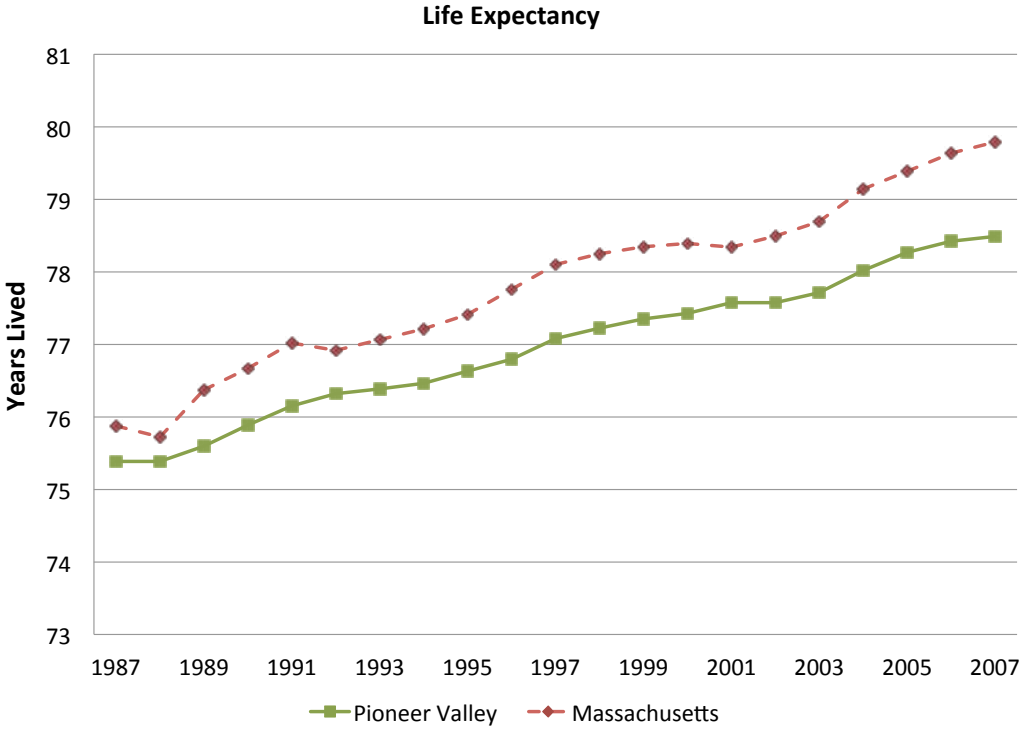
Monroe	36.4%
Springfield	73.0%
Ware	73.8%
Holyoke	73.9%
Greenfield	77.3%
Hadley	77.9%
Chicopee	79.3%
Goshen	81.4%
Longmeadow	81.5%
Westfield	82.1%
Palmer	82.7%
Orange	82.8%
Pioneer Valley	***83.0%***
Montgomery	83.3%
Belchertown	83.6%
Russell	84.5%
Amherst	85.6%
Granby	85.7%
Ludlow	86.5%
Montague	87.0%
Agawam	87.4%
Easthampton	87.5%
Brimfield	87.5%
Hampden	87.9%
West Springfield	88.0%
Northampton	88.3%
East Longmeadow	88.4%
Hatfield	88.4%
Shelburne	88.5%
Chester	88.8%
Sunderland	88.9%
Gill	89.4%
Blandford	90.3%
Southwick	90.3%
Pelham	91.1%
Wilbraham	91.1%
South Hadley	91.6%
Colrain	92.3%
Williamsburg	92.8%
Huntington	92.9%
Erving	92.9%
Deerfield	93.7%
Conway	93.8%
Buckland	93.9%
Charlemont	94.2%
Worthington	94.3%
Tolland	95.2%
Southampton	95.3%
Wales	95.8%
Wendell	95.9%
Chesterfield	96.3%
Leverett	96.5%
New Salem	96.5%
Plainfield	96.7%
Hawley	96.9%
Whately	97.1%
Cummington	97.1%
Bernardston	97.2%
Shutesbury	97.2%
Westhampton	97.5%
Monson	97.5%
Ashfield	100%
Granville	100%
Heath	100%
Holland	100%
Leyden	100%
Middlefield	100%
Northfield	100%
Rowe	100%
Warwick	100%

LIFE EXPECTANCY

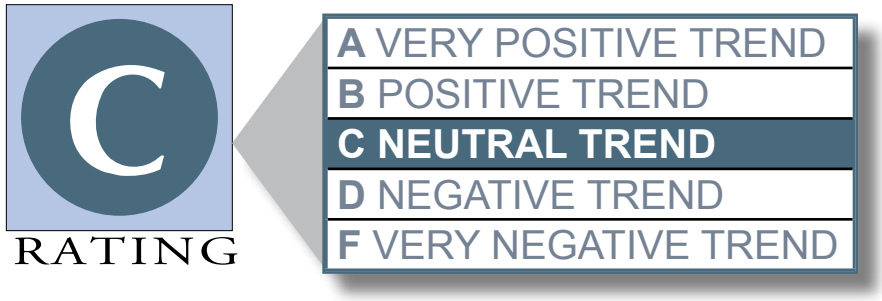
The average life expectancy of a person is determined by many factors including access to good medical care, the quality of the surrounding environment, genetics, social support networks, race, time period of birth, diet and gender. The fact that so many factors can impact life expectancy is exactly why it is a good measure of the overall health of a community. Communities with higher life expectancies are likely to have people in later years of life enjoying a better quality of life as they are more likely to be healthy and have positive environmental and social surroundings. This indicator evaluates not just personal health, but the health of the entire region socially, economically and environmentally. This indicator measures the average life span for the population of the Pioneer Valley and the state. The data provided by the Institute for Health Metrics and Evaluation was provided separately for male and female populations. Thus, a combined number was created for the total population by weighting values by the female and male populations as counted in the 2000 Decennial Census.

Generally, the life expectancy for people living in the Pioneer Valley is consistently a little less than that of people across the state of Massachusetts as a whole. The average gap is almost a whole year of greater life expectancy for the state as a whole over the Pioneer Valley. The trend over the last 20 years is that the there is an increasing gap between the state and the Pioneer Valley for average life expectancy beginning with about a half of a year gap in 1987 to almost a whole year and a half in 2007 (1.3 years).

However, what the data shows is that the average life span of the Pioneer Valley population is increasing over time, just not as fast as the state as a whole. This is important to note, because although it shows that the Pioneer Valley is experiencing a positive trend for this indicator, it also shows that the region lags behind the state.



Source: Institute for Health Metrics and Evaluation



EDUCATION

Education is of increasing importance to the present and future of all demographics in the Pioneer Valley. Not only must we ensure educational opportunities are provided from an early age and continue well into adulthood, but the opportunities must be of the highest quality in order to ensure sustainable economic and social progress. Accordingly, this section exposes the region's progress in early education enrollment, educational attainment, high school graduation rates, and ninth grade retention rates. The Massachusetts Comprehensive Assessment System (MCAS) is one of the most common ways to quantitatively measure educational achievement from elementary school through the tenth grade. Here we have used third grade scores to estimate reading proficiency, eighth grade scores to estimate math proficiency, and comprehensive tenth grade scores to estimate overall achievement. Student mobility, or the measure of how many students enter and leave the district within a given year, indicates whether or not our classrooms provide stable space for education.

Within the Pioneer Valley, there has been great progress in improving MCAS test scores for all grades observed, with 8th grade math scores making the most gains. While some subjects and grades are still below state averages, the gap is slowly narrowing. Ninth grade retention rates have also improved significantly while state rates remain higher. Unfortunately, the high school graduation rates still remain lower than the state. Student mobility rates have been neutral, while the attainment of higher education remains lower than state levels but has seen improvement in recent years.

Indicator	Summary	Rating
Early Education Enrollment	Enrollment in early education has been decreasing in recent years at the same time statewide rates have increased. Less than half of children 3-5 are enrolled. Equity is neutral between most communities but poor between highest and lowest performing communities.	D-
Reading Proficiency in 3rd Grade (MCAS)	MCAS 3rd grade reading scores have increased slightly but remain almost 10% below Massachusetts rates. Equity is poor between most communities.	C-
Math Proficiency in 8th Grade (MCAS)	MCAS 8th grade math scores have increased about 10% in 5 years, and just surpassed rates statewide. Equity amongst most communities is poor, however the gap between highest and lowest performing communities is not as large as some other indicators.	C+
English Proficiency in 10th Grade (MCAS)	MCAS 10th grade English scores have increased nearly 20% in 5 years. Rates remain below those statewide but the gap is closing. Equity amongst most communities is poor, however the gap between highest and lowest performing communities is not as large as some other indicators.	C+
Math Proficiency in 10th Grade (MCAS)	MCAS 10th grade math scores have increased about 10% in 5 years, but are consistently lower than Massachusetts rates. Equity between most communities is very poor.	C
High School Graduation Rate	High school graduation rates remain stable, but consistently below those statewide. Equity between communities was poor with very wide gaps between the highest and lowest performing communities.	D+
Attainment of Higher Education	Attainment of higher education has increased slightly in recent years, but remains significantly below Massachusetts rates and the gap is increasing. Equity is good between many communities but poor between the highest and lowest performing communities.	C
Ninth Grade Retention	Ninth grade retention rates have dropped significantly in the last few years, while Massachusetts rates have increased. Equity between most communities was very good, but the gap between highest and lowest performing communities was large.	B
Student Mobility	Student mobility rates have remained stable and are basically equal to those statewide. Equity amongst most communities is poor, however the gap between highest and lowest performing communities is not as large as some other indicators.	C

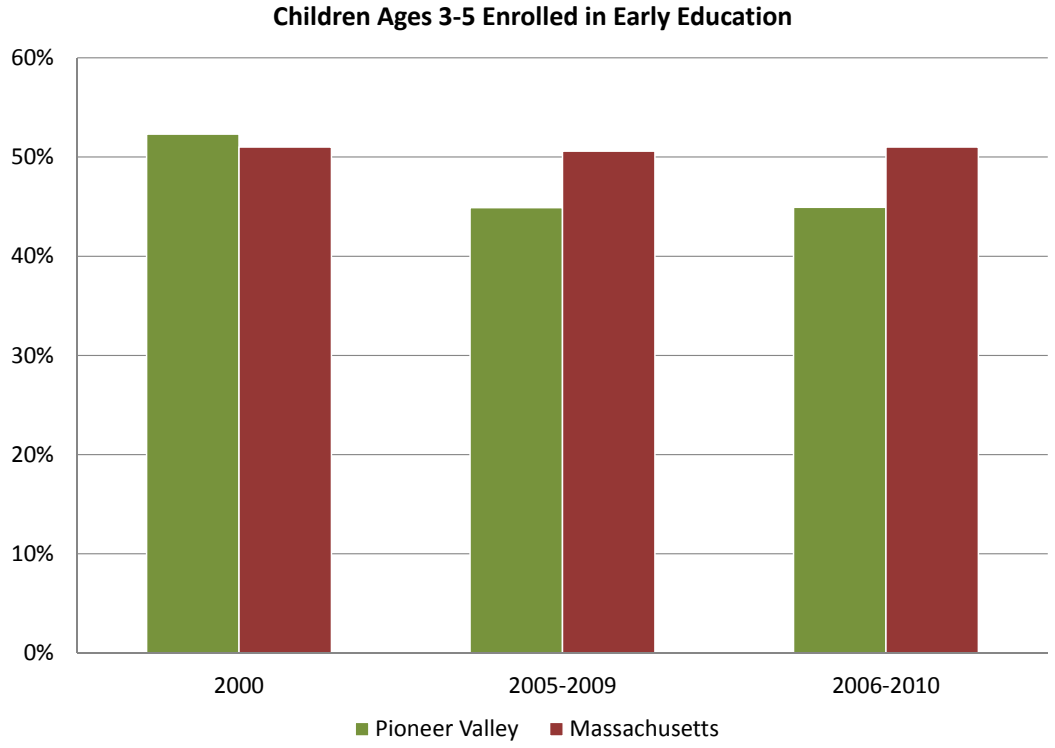
D-
RATING

EARLY EDUCATION (PRESCHOOL) ENROLLMENT

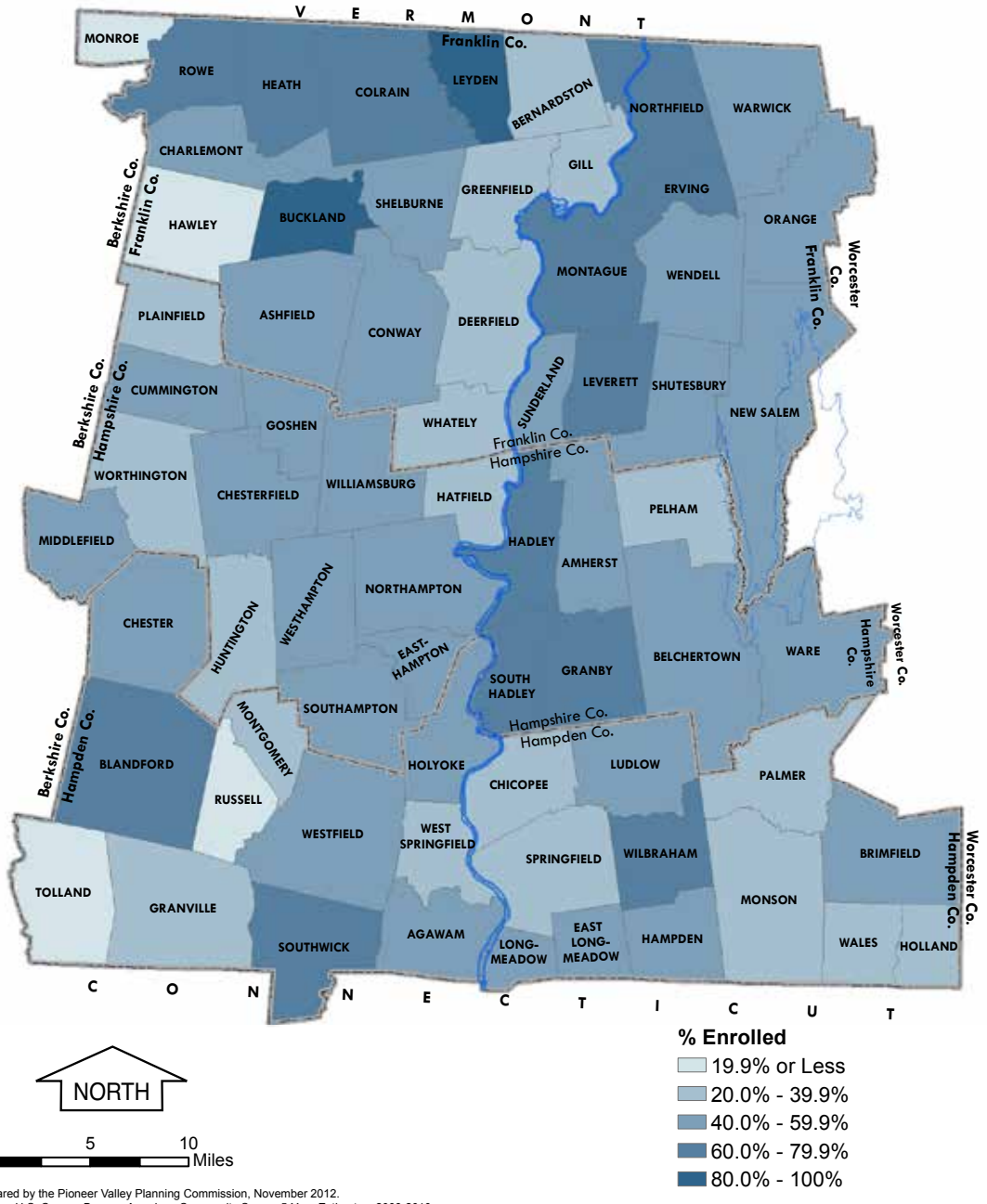
Early childhood education helps provide the opportunities necessary for positive development at this young and critical age. It is now supported by extensive research that a high quality early childhood education experience has significant long-term effects on a person's life outcomes ranging from their achievement in K-12 school to their economic success or the probability that they will be involved in the juvenile justice system. Early childhood education helps provide the opportunities for positive development in all the early childhood domains, social/emotional, cognitive and physical. Analyzing the percent of young children enrolled in early education programs helps evaluate both supply and demand of early education and care services. It is useful to evaluate whether or not there are sufficient programs to serve the needs of young children in the region as well as whether families see the value in early education and are taking advantage of opportunities that are available. The percent of all children between the ages of 3 and 5 years old who are enrolled in any type of formal early education program (public, private, family child care, center-based preschool) are examined in this indicator. This is calculated by dividing the total number of children enrolled in preschool or nursery school (as definined by the U.S. Census Bureau) by the total number of children ages 3-5 years. Because many 5-year-olds are in kindergarden, this calculation is likely to be an undercount. Nevertheless, the calcaultions are consistent across all geographies.

Since 2000, the overall trend for Early Education enrollment has not been positive. In 2000, the Pioneer Valley had 52.3 percent of children ages 3-5 enrolled in an early education program, slightly higher than the Massachusetts statewide total of 51.0 percent. While the statewide figure has remained steady at about 51.0 percent, enrollment for the Pioneer Valley over the past decade has since declined over 7 percent to 44.9 percent, falling well below .the statewide figure according to 2006-2010 estimates.

Among individual communities in the Pioneer Valley, there were huge disparities in early education enrollment. Five communities had rates over 70%, with Buckland and Leyden estimated at 100% enrollment. Yet nearly half of all communities had rates under 50% and four had rates under 20%. Hawley, Monroe, and Tolland were estimated to have enrollment rates of 0%, though this is likely distorted due to a sampling error in very small communities. Still, many of the lowest enrollments were in the region's smallest communities including Granville, Wales, and Russell. The most populated communities in the region also had low enrollment percentages, including Holyoke (41.5%), Chicopee (37.3%), Springfield (37.1%), West Springfield (34.6%), and Greenfield (31.1) implying that a fairly large absolute number of children in these communities are not participating in programs critical to their development.



Children Ages 3-5 Enrolled in Early Education (%)



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: U.S. Census Bureau, American Community Survey 5-Year-Estimates, 2006-2010

Hawley	0.0
Monroe	0.0
Tolland	0.0
Russell	18.4
Wales	22.4
Granville	28.8
Hatfield	29.8
Plainfield	30.0
Greenfield	31.1
Worthington	31.3
Whately	31.3
Monson	31.7
Palmer	31.9
Montgomery	33.3
Huntington	34.1
Pelham	34.3
West Springfield	34.6
Springfield	37.1
Holland	37.3
Chicopee	37.3
Gill	37.9
Bernardston	38.0
Deerfield	39.6
Southampton	41.0
Holyoke	41.5
Pioneer Valley	***44.9***
New Salem	45.5
Hampden	46.0
Williamsburg	46.6
Goshen	47.1
Brimfield	47.7
Cummington	48.4
Ludlow	48.9
Ashfield	50.0
Middlefield	50.0
Warwick	50.0
Wendell	50.0
Agawam	50.4
Orange	50.5
Longmeadow	51.0
Ware	51.0
Easthampton	51.5
Chester	51.7
Shutesbury	51.9
Belchertown	53.0
Westhampton	53.7
East Longmeadow	53.7
Amherst	54.3
Northampton	54.9
Chesterfield	55.6
Westfield	57.1
Sunderland	57.1
Conway	58.1
Charlemont	58.8
Shelburne	59.6
Rowe	60.0
Heath	62.5
Montague	62.8
Colrain	63.0
Erving	65.3
Southwick	65.4
Northfield	65.6
Hadley	66.0
Blandford	66.7
Wilbraham	69.3
South Hadley	70.1
Granby	71.4
Leverett	79.2
Buckland	100.0
Leyden	100.0

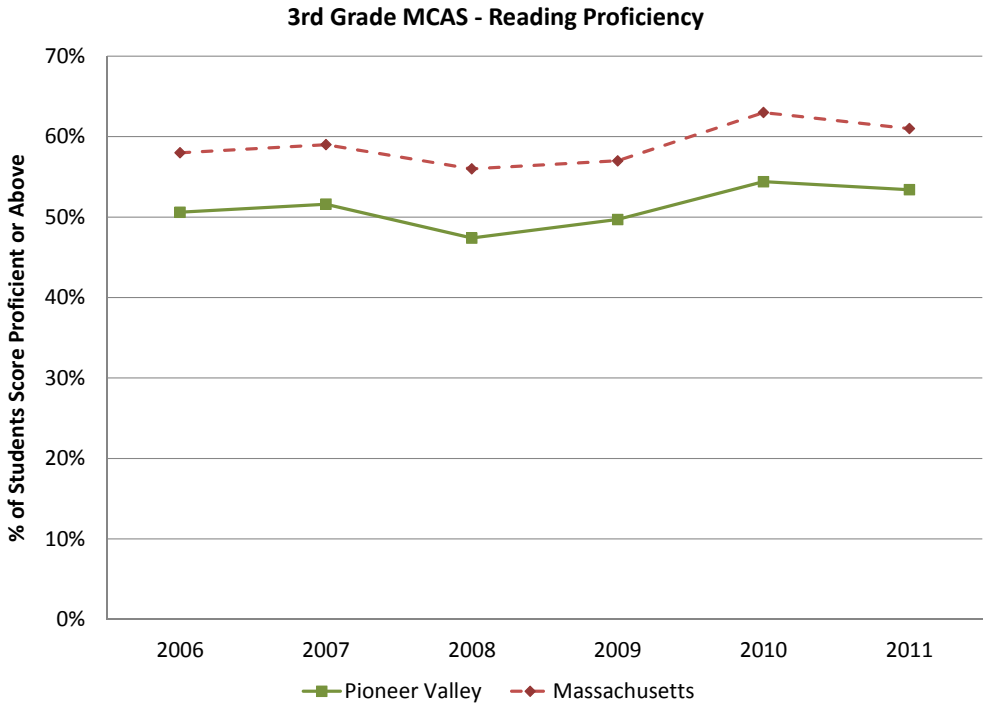
C-
RATING

READING PROFICIENCY (THIRD GRADE MCAS)

In an educational environment increasingly requiring quantitative measures of achievement and accountability, the scores from the standardized MCAS test are used to "identify the strengths and weaknesses in curriculum and instruction" at the local level and to hold schools and school districts accountable with respect to "established standards for performance for districts that improve or fail to improve student academic performance."* Educational development standards indicate that students should be able to read proficiently by the end of third grade, that is, have a wide vocabulary, comprehend, write logically, speak coherently, read fluently and understand different types of texts, because, beginning in fourth grade, all these skills are necessary for them to progress with more challenging work. The percent of all children in the third grade who received a score of "proficient" or higher on the MCAS English language arts test for the years 2006-2011 in part reflects the level of readiness for kindergarten and early literacy skills achieved in a formal early childhood education experience.

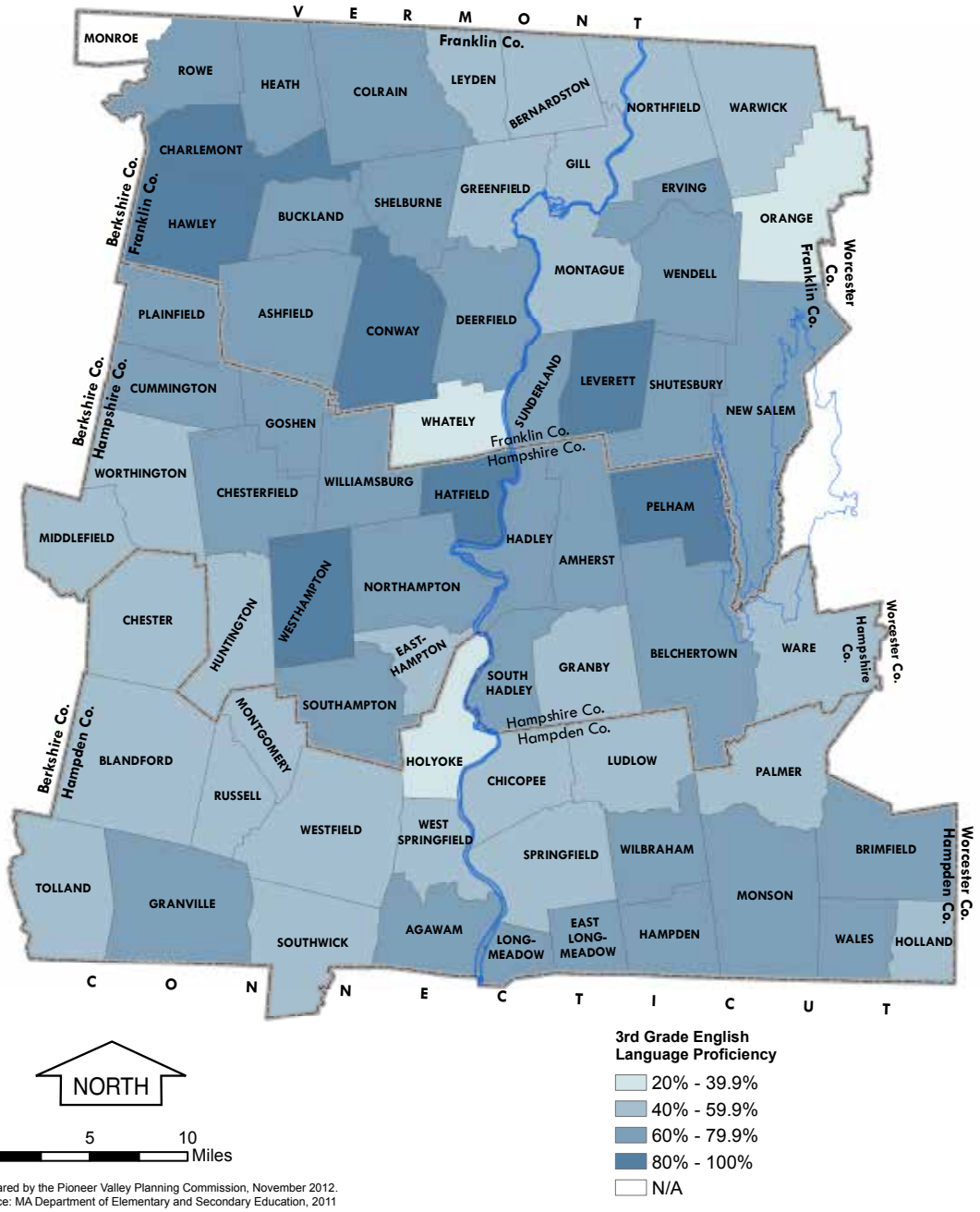
The trend of third grade reading proficiency in the Pioneer Valley has not been a great one in recent years. Though the percent of students scoring proficient or above increased slightly in the last six years, from 50 to 53%, nearly half of all third graders continue to score below proficient. What's more, the Pioneer Valley has consistently scored between 7-9% lower than the state as a whole.

There was great disparity in third grade reading proficiency across the region. Seven school districts, most of them primarily more rural, had at least 80 percent of third graders tested as proficient in reading in 2011. In the same year, eight communities had fewer than 50 percent of third graders testing as proficient in reading. Of particular concern was the City of Holyoke, where only 21 percent of third graders received proficient scores on the MCAS reading exam in 2011. While this may be, in part, a reflection of Holyoke's high population of students for whom English is a second language, it is still has serious implications for the future achievement prospective for those children.



* Massachusetts Department of Elementary and Secondary Education

Percent of Students Scoring Proficient or Better on 3rd Grade Reading MCAS



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: MA Department of Elementary and Secondary Education, 2011

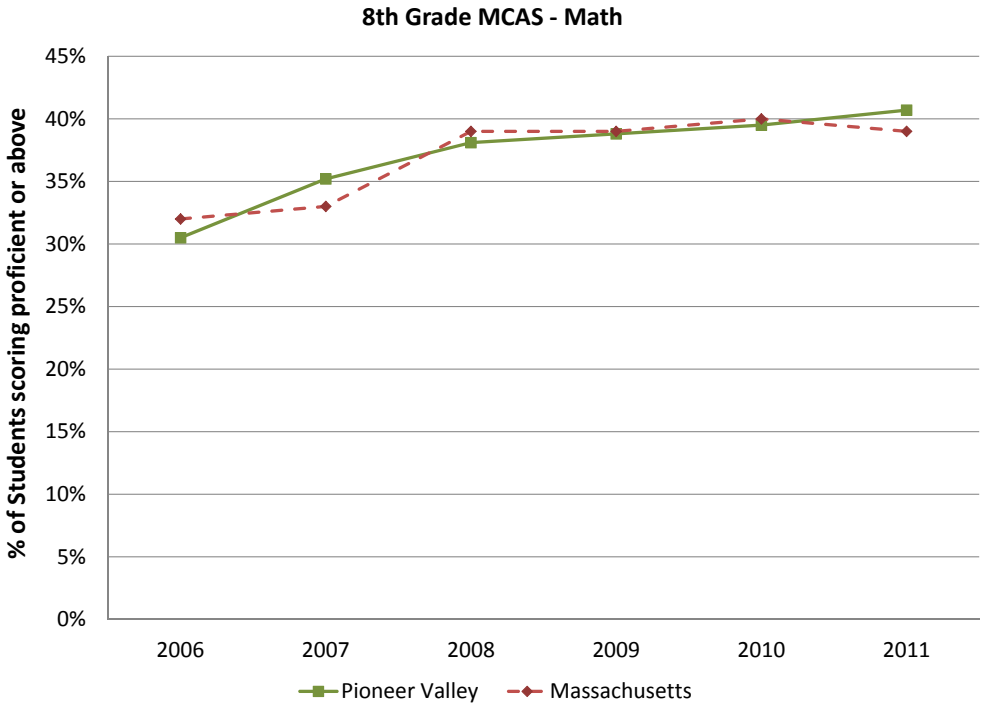
Holyoke	21.0%
Orange	37.0%
Whately	37.0%
Springfield	40.0%
Ludlow	44.0%
Gill	45.0%
Montague	45.0%
Greenfield	46.0%
Chicopee	52.0%
Easthampton	52.0%
Westfield	52.0%
Pioneer Valley	***53.5%***
Bernardston	54.0%
Holland	54.0%
Leyden	54.0%
Northfield	54.0%
Warwick	54.0%
West Springfield	54.0%
Palmer	55.0%
Ware	55.0%
Granby	57.0%
Southwick	57.0%
Tolland	57.0%
Blandford	59.0%
Chester	59.0%
Huntington	59.0%
Middlefield	59.0%
Montgomery	59.0%
Russell	59.0%
Worthington	59.0%
Chesterfield	60.0%
Goshen	60.0%
Belchertown	61.0%
Erving	61.0%
Cummington	62.0%
Northampton	62.0%
Monson	63.0%
New Salem	63.0%
Wendell	63.0%
Amherst	65.0%
Deerfield	65.0%
South Hadley	67.0%
Wales	68.0%
Agawam	70.0%
Ashfield	70.0%
Buckland	70.0%
Colrain	70.0%
Heath	70.0%
Plainfield	70.0%
Rowe	70.0%
Shelburne	70.0%
Williamsburg	71.0%
East Longmeadow	72.0%
Granville	73.0%
Hadley	73.0%
Shutesbury	75.0%
Sunderland	75.0%
Southampton	77.0%
Brimfield	79.0%
Hampden	79.0%
Longmeadow	79.0%
Wilbraham	79.0%
Hatfield	82.0%
Leverett	85.0%
Pelham	85.0%
Conway	87.0%
Charlemont	90.0%
Hawley	90.0%
Westhampton	93.0%
Monroe	NA

EIGHTH GRADE MATH PROFICIENCY (MCAS)

The MCAS is administered to all students in the eighth grade attending public school in Massachusetts; therefore, it provides a uniform measure of students' basic skills in mathematics. In addition, MCAS scores are used as a proxy to quantitatively value the quality of a public school or district in Massachusetts. * Regardless of debates over the merits of the MCAS and its link to high school graduation, the MCAS scores are now an important measure of the success of our educational institutions. Many studies have shown that success in obtaining skills in Algebra, typically studied in 8th grade, has a strong relationship to a student's future success. This related to academic success and the type of career options they are likely to have when they enter the workforce. This indicator represents the percent of all eighth grade students testing at the "proficient" level or above on the standardized MCAS math exams.

The results in the eighth grade math exam were not encouraging. While scores have risen fairly consistently between 2006 and 2011, in absolute terms student performance overall was generally low in the Pioneer Valley. The percent of students testing as proficient peaked at just over 40% in 2011 leaving well over half of the 8th graders in the region lacking adequate math proficiency. While these scores are discouraging, they are in line with the rates state-wide and Pioneer Valley trends have actually been slightly better than that of the State.

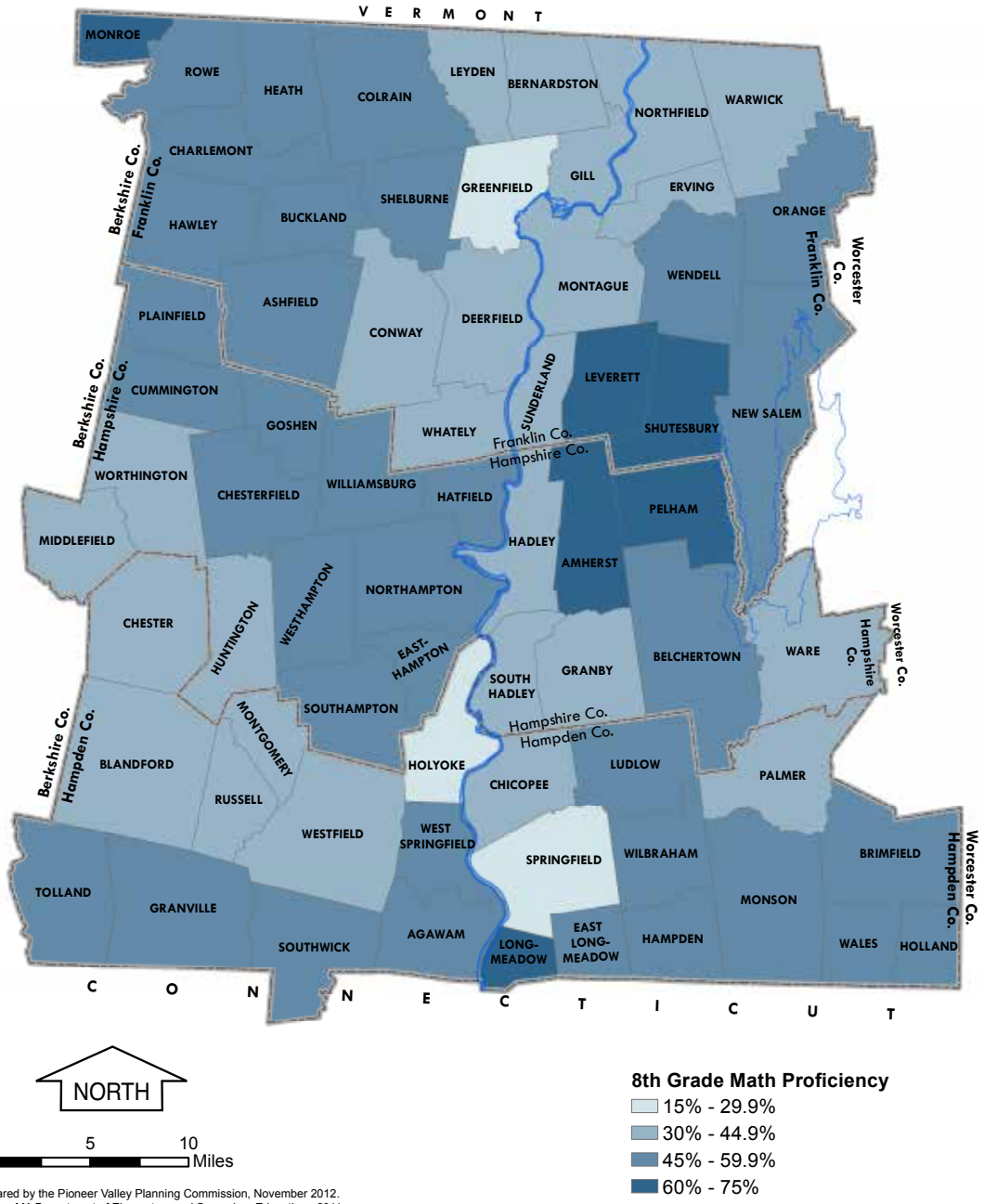
Looking at communities within the Pioneer Valley, there was great variation and many individual municipalities scored significantly better than the region as whole. While only one school district had proficiency rates for more than two-thirds of the students, there was high disparity between the highest and lowest performing communities. Longmeadow, Amherst, Pelham, Leverett, Shutesbury and Monroe had the highest percent of students performing at or above proficiency in eighth grade math MCAS – each achieving 64 percent or better. ** The three lowest scoring communities were Springfield and Greenfield, and Holyoke. All three of these communities had less than one-third of students scoring at or above proficient and Springfield had the most alarming rate of only 16 percent.



* The 2002 Federal No Child Left Behind law requires monitoring of every school to determine if they are making "adequate yearly progress" (AYP). AYP in Massachusetts is determined, in part, by the percent of students passing the MCAS exam.

** Amherst, Pelham, Leverett and Shutesbury are part of the same school district (Amherst-Pelham Regional School District).

Percent of Students Scoring Proficient or Better on 8th Grade Math MCAS



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: MA Department of Elementary and Secondary Education, 2011

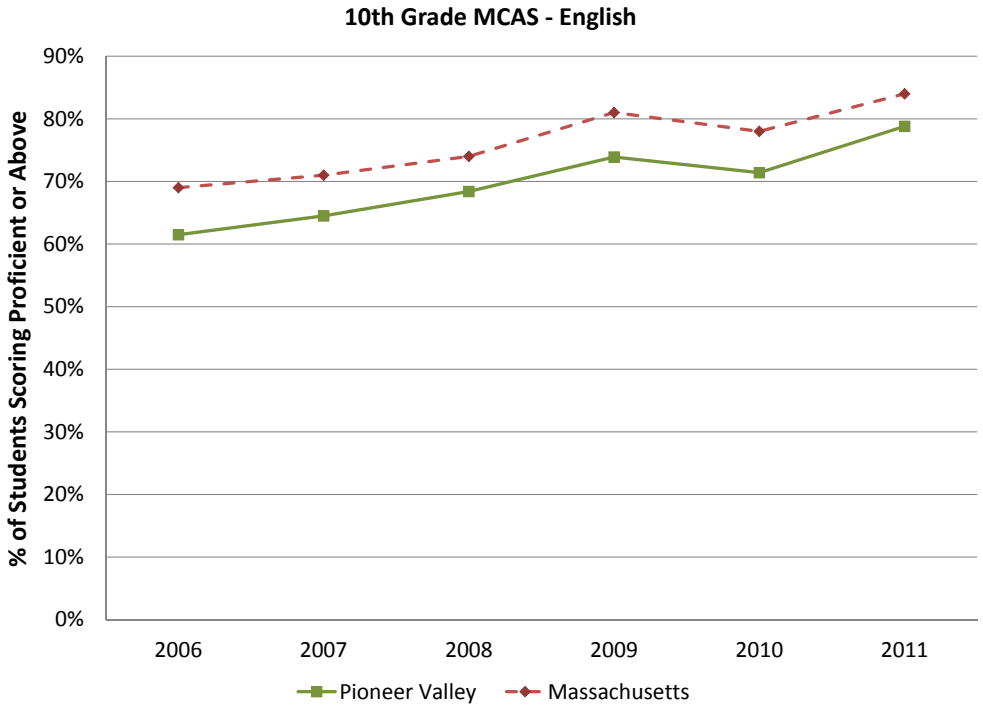
Springfield	16.0%
Greenfield	23.0%
Holyoke	24.0%
Bernardston	34.0%
Leyden	34.0%
Northfield	34.0%
Warwick	34.0%
Ware	36.0%
Palmer	37.0%
Erving	38.0%
Gill	38.0%
Montague	38.0%
Chicopee	39.0%
Granby	39.0%
Blandford	40.0%
Chester	40.0%
Conway	40.0%
Deerfield	40.0%
Huntington	40.0%
Middlefield	40.0%
Montgomery	40.0%
Russell	40.0%
Sunderland	40.0%
Whately	40.0%
Worthington	40.0%
Pioneer Valley	***40.7%***
Westfield	41.0%
Hadley	44.0%
South Hadley	44.0%
Hatfield	45.0%
Monson	47.0%
Cummington	48.0%
New Salem	48.0%
Orange	48.0%
Wendell	48.0%
Agawam	49.0%
East Longmeadow	49.0%
West Springfield	49.0%
Chesterfield	51.0%
Goshen	51.0%
Southampton	51.0%
Southwick	51.0%
Tolland	51.0%
Westhampton	51.0%
Williamsburg	51.0%
Belchertown	52.0%
Brimfield	53.0%
Granville	53.0%
Holland	53.0%
Wales	53.0%
Ashfield	54.0%
Buckland	54.0%
Charlemont	54.0%
Colrain	54.0%
Hawley	54.0%
Heath	54.0%
Ludlow	54.0%
Plainfield	54.0%
Rowe	54.0%
Shelburne	54.0%
Easthampton	55.0%
Northampton	56.0%
Hampden	59.0%
Wilbraham	59.0%
Monroe	64.0%
Amherst	66.0%
Leverett	66.0%
Pelham	66.0%
Shutesbury	66.0%
Longmeadow	71.0%

TENTH GRADE ENGLISH PROFICIENCY (MCAS)

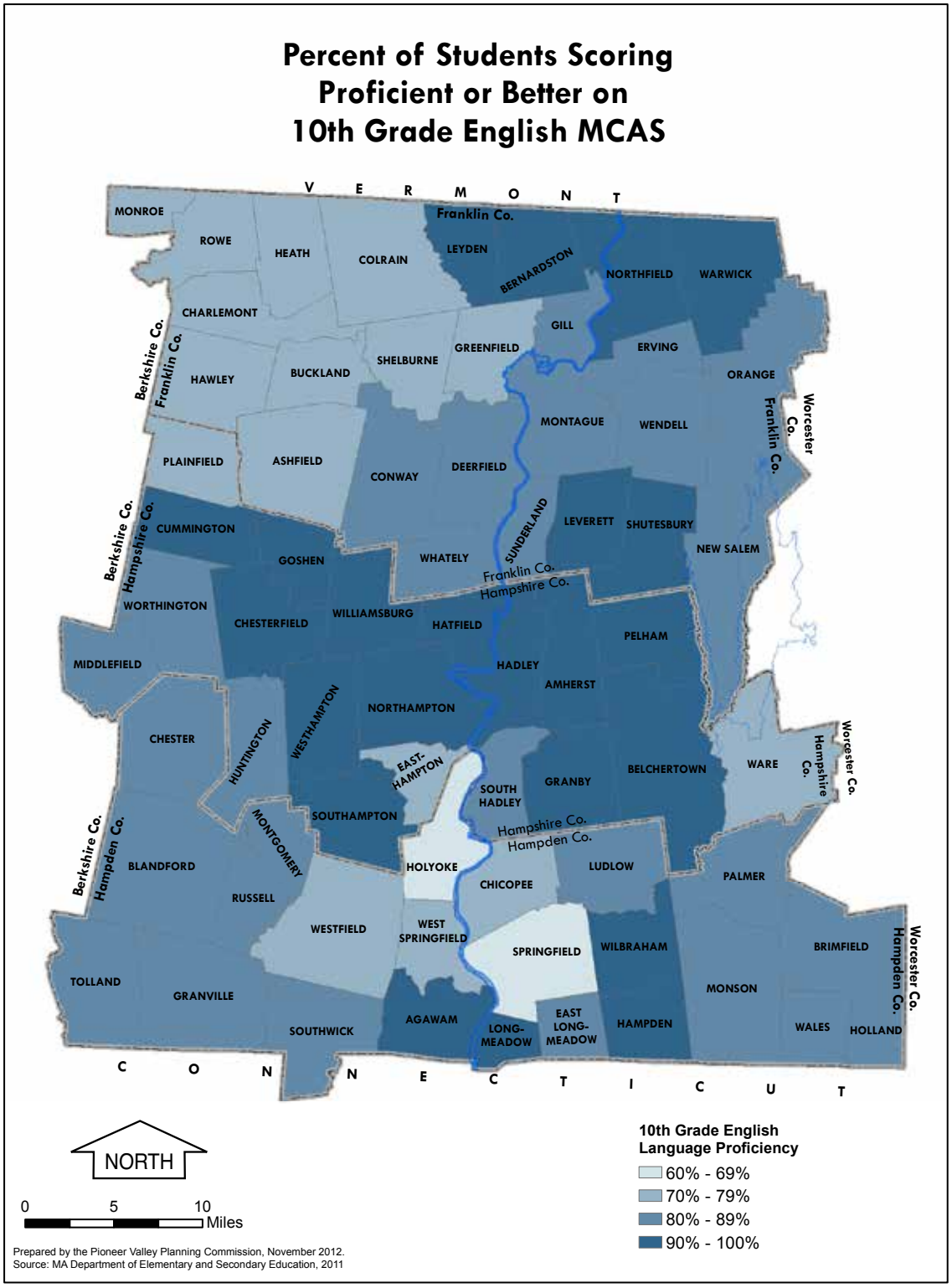
The MCAS is administered to all students in the tenth grade attending public school in Massachusetts; therefore, it provides a uniform measure of students' basic skills in the two primary subjects of English and mathematics. In addition, MCAS scores are used as a proxy to quantitatively value the quality of a public school or district in Massachusetts. * As of 2003, students must achieve advanced, proficient, or needs improvement (a scaled score above 220) in both English and math in order to receive a high school diploma. Regardless of debates over the merits of the MCAS and its link to high school graduation, the MCAS scores are now an important measure of the success of our educational institutions. This indicator represents the percent of all tenth grade students testing at the "advanced" or "proficient" level on the standardized MCAS English exams.

Between 2010 and 2011, the percent of tenth graders in the Pioneer Valley scoring as advanced or proficient on the MCAS English exam climbed from 71 to 78 percent. The 2011 increase continued the positive trend of improvement since 2006 when the proficiency scores in the region were as low as 61 percent. While Massachusetts had consistently higher rates state-wide, the trend was virtually identical, climbing 6 percent, from 78 percent to 84 percent between 2010 and 2011. The gap between the Pioneer Valley and Massachusetts narrowed, from 8% in 2006, percent to 5.2 percent in 2011, indicating that while the overall trend is positive, Pioneer Valley tenth graders still have way to go to catch up with their counterparts across Massachusetts.

When looking across the Pioneer Valley, one-third of all communities had proficiency rates of 90% or above. Hatfield, Hadley, Belchertown and the towns within the Hampshire and Amherst-Pelham school districts led the region in terms of the percent of students performing proficient or better on the 10th grade MCAS English exam. Communities with the lowest rates of proficiency tended to be more urban and included Springfield, Holyoke, West Springfield, Monroe, Chicopee, Greenfield, and Easthampton. Each of these communities had 10th grade MCAS English proficiency rates below 75 percent.



* The 2002 Federal No Child Left Behind law requires monitoring of every school to determine if they are making "adequate yearly progress" (AYP). AYP in Massachusetts is determined, in part, by the percent of students passing the MCAS exam.



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: MA Department of Elementary and Secondary Education, 2011

Springfield	60.0%
Holyoke	61.0%
West Springfield	71.0%
Chicopee	72.0%
Monroe	72.0%
Greenfield	73.0%
Easthampton	74.0%
Ashfield	75.0%
Buckland	75.0%
Charlemont	75.0%
Colrain	75.0%
Hawley	75.0%
Heath	75.0%
Plainfield	75.0%
Rowe	75.0%
Shelburne	75.0%
Ware	77.0%
Westfield	77.0%
Pioneer Valley	*78.8%*
Blandford	82.0%
Chester	82.0%
Erving	82.0%
Gill	82.0%
Huntington	82.0%
Ludlow	82.0%
Middlefield	82.0%
Montague	82.0%
Montgomery	82.0%
Russell	82.0%
Worthington	82.0%
New Salem	83.0%
Orange	83.0%
Wendell	83.0%
Brimfield	85.0%
Granville	85.0%
Holland	85.0%
Southwick	85.0%
Tolland	85.0%
Wales	85.0%
Palmer	86.0%
Conway	87.0%
Deerfield	87.0%
South Hadley	87.0%
Sunderland	87.0%
Whately	87.0%
East Longmeadow	88.0%
Monson	88.0%
Agawam	91.0%
Northampton	91.0%
Bernardston	92.0%
Cummington	92.0%
Leyden	92.0%
Northfield	92.0%
Warwick	92.0%
Amherst	93.0%
Granby	93.0%
Hampden	93.0%
Leverett	93.0%
Longmeadow	93.0%
Pelham	93.0%
Shutesbury	93.0%
Wilbraham	93.0%
Chesterfield	94.0%
Goshen	94.0%
Southampton	94.0%
Westhampton	94.0%
Williamsburg	94.0%
Belchertown	95.0%
Hadley	96.0%
Hatfield	97.0%

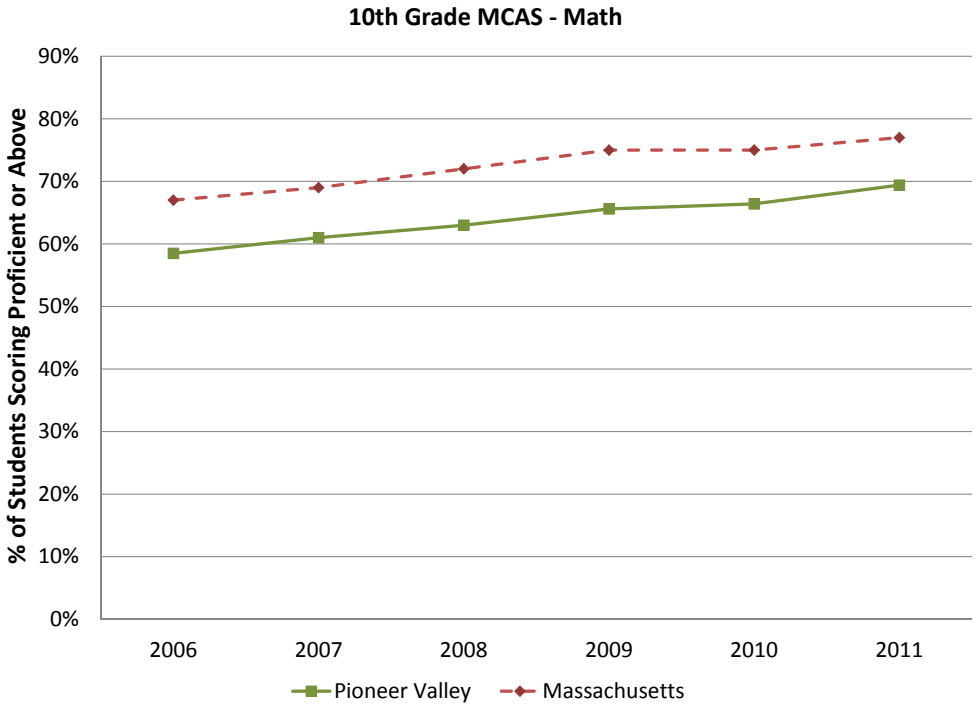
C
RATING

TENTH GRADE MATH PROFICIENCY (MCAS)

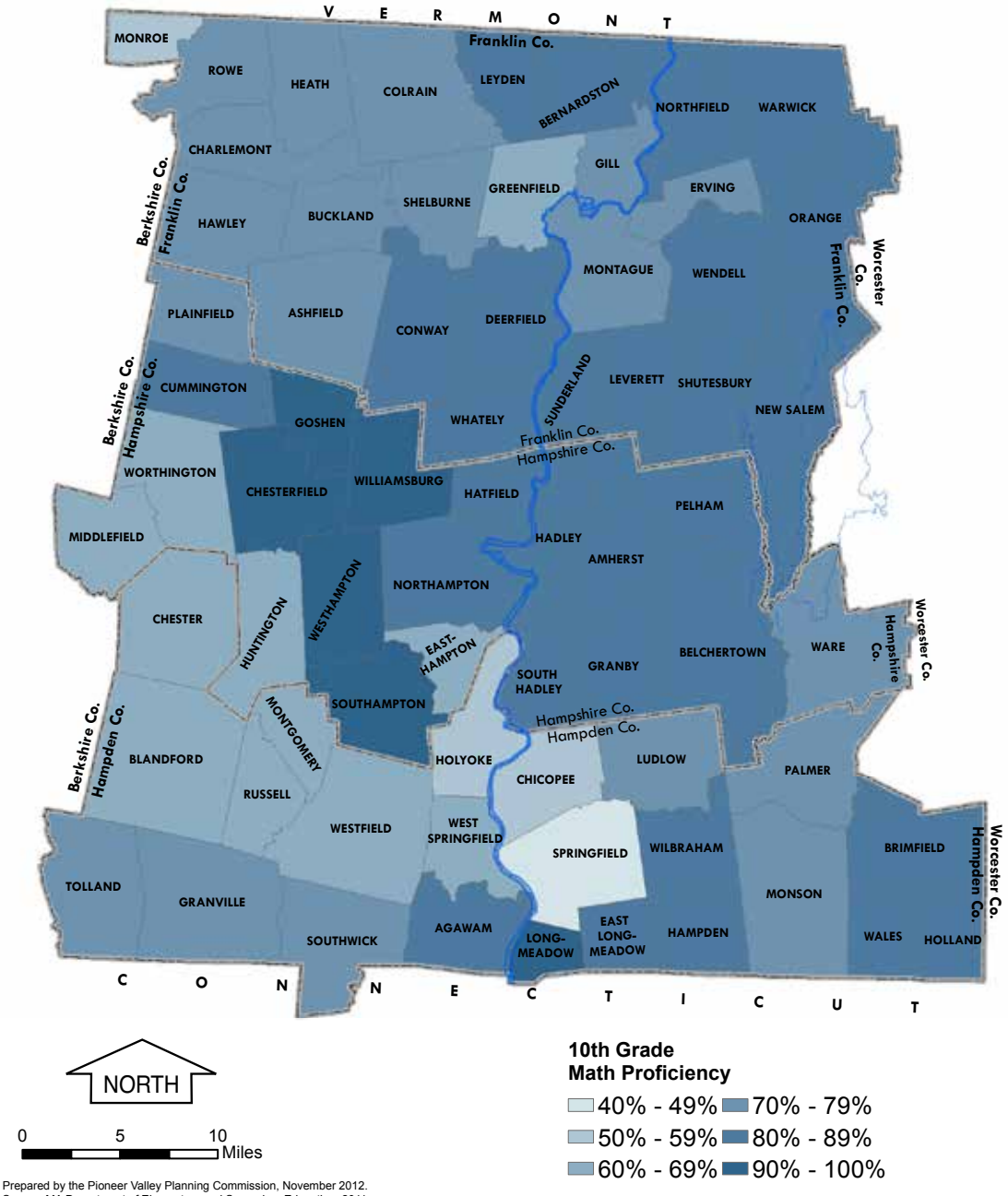
The MCAS is administered to all students in the tenth grade attending public school in Massachusetts; therefore, it provides a uniform measure of students' basic skills in the two primary subjects of English and mathematics. In addition, MCAS scores are used as a proxy to quantitatively value the quality of a public school or district in Massachusetts. As of 2003, students must achieve advanced, proficient, or needs improvement (a scaled score above 220) in both English and math in order to receive a high school diploma. Regardless of debates over the merits of the MCAS and its link to high school graduation, the MCAS scores are now an important measure of the success of our educational institutions. This indicator represents the percent of all tenth grade students testing at the "advanced" or "proficient" level on the standardized MCAS math exam.

Performance on the MCAS math exam has followed a similar pattern to that of the English exam, where scores have generally increased consistently since 2006 while still remaining a bit below the statewide average. This increase has, unfortunately, not been as significant as with the English scores. Proficiency rates did increase just over 10% between 2006-2011, however, in 2011, only 69% of Pioneer Valley tenth graders scored as proficient or above on the math exam. This compared to 77% of tenth graders statewide, a difference of 8 percentage points. The Pioneer Valley's schools are certainly improving performance on the MCAS math exam, yet are not quite on par with state-wide rates.

While there were differences across communities in the Pioneer Valley, nearly 80% of all communities had proficiency rates above the rate of the region in 2011. Clearly, this means that the lowest performing communities were also those with the highest populations. Communities, Hampshire school district as well as Longmeadow, Belchertown, Hadley, Hatfield performed well, with 87 percent or more of their students performing proficient or better on the 10th grade Math MCAS exam. Some of the most low-income and highly populated communities such as Springfield, Holyoke, and Chicopee as well as the more rural town of Monroe had the lowest rates of proficiency, all below 60 percent.



Percent of Students Scoring Proficient or Better on 10th Grade Math MCAS



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: MA Department of Elementary and Secondary Education, 2011

Springfield	41.0%
Holyoke	56.0%
Monroe	58.0%
Chicopee	59.0%
Blandford	62.0%
Chester	62.0%
Huntington	62.0%
Middlefield	62.0%
Montgomery	62.0%
Russell	62.0%
Worthington	62.0%
Easthampton	66.0%
West Springfield	67.0%
Greenfield	68.0%
Westfield	68.0%
Pioneer Valley	***69.4%***
Ashfield	71.0%
Buckland	71.0%
Charlemont	71.0%
Colrain	71.0%
Hawley	71.0%
Heath	71.0%
Plainfield	71.0%
Rowe	71.0%
Shelburne	71.0%
Ware	71.0%
Granville	75.0%
Monson	75.0%
Palmer	75.0%
Southwick	75.0%
Tolland	75.0%
Erving	76.0%
Gill	76.0%
Montague	76.0%
Ludlow	79.0%
Brimfield	81.0%
Holland	81.0%
Wales	81.0%
Bernardston	82.0%
Leyden	82.0%
Northfield	82.0%
South Hadley	82.0%
Warwick	82.0%
New Salem	83.0%
Orange	83.0%
Wendell	83.0%
Granby	84.0%
Northampton	84.0%
Agawam	85.0%
Amherst	85.0%
Conway	85.0%
Cummington	85.0%
Deerfield	85.0%
East Longmeadow	85.0%
Hampden	85.0%
Leverett	85.0%
Pelham	85.0%
Shutesbury	85.0%
Sunderland	85.0%
Whately	85.0%
Wilbraham	85.0%
Hadley	87.0%
Hatfield	87.0%
Belchertown	89.0%
Chesterfield	91.0%
Goshen	91.0%
Longmeadow	91.0%
Southampton	91.0%
Westhampton	91.0%
Williamsburg	91.0%

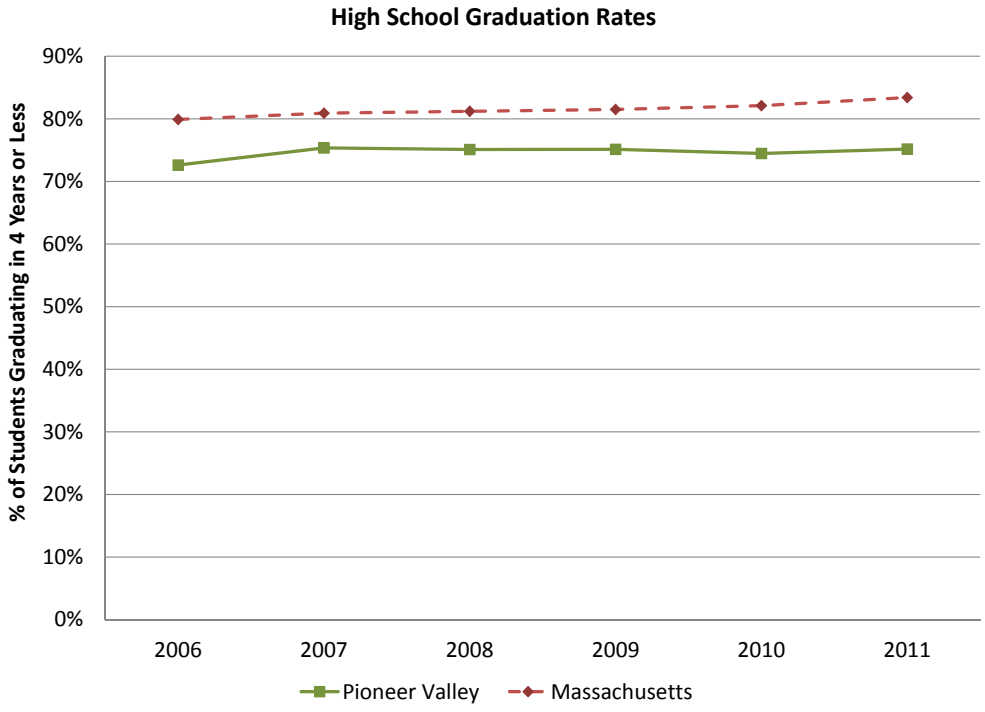
D+
RATING

HIGH SCHOOL GRADUATION RATE

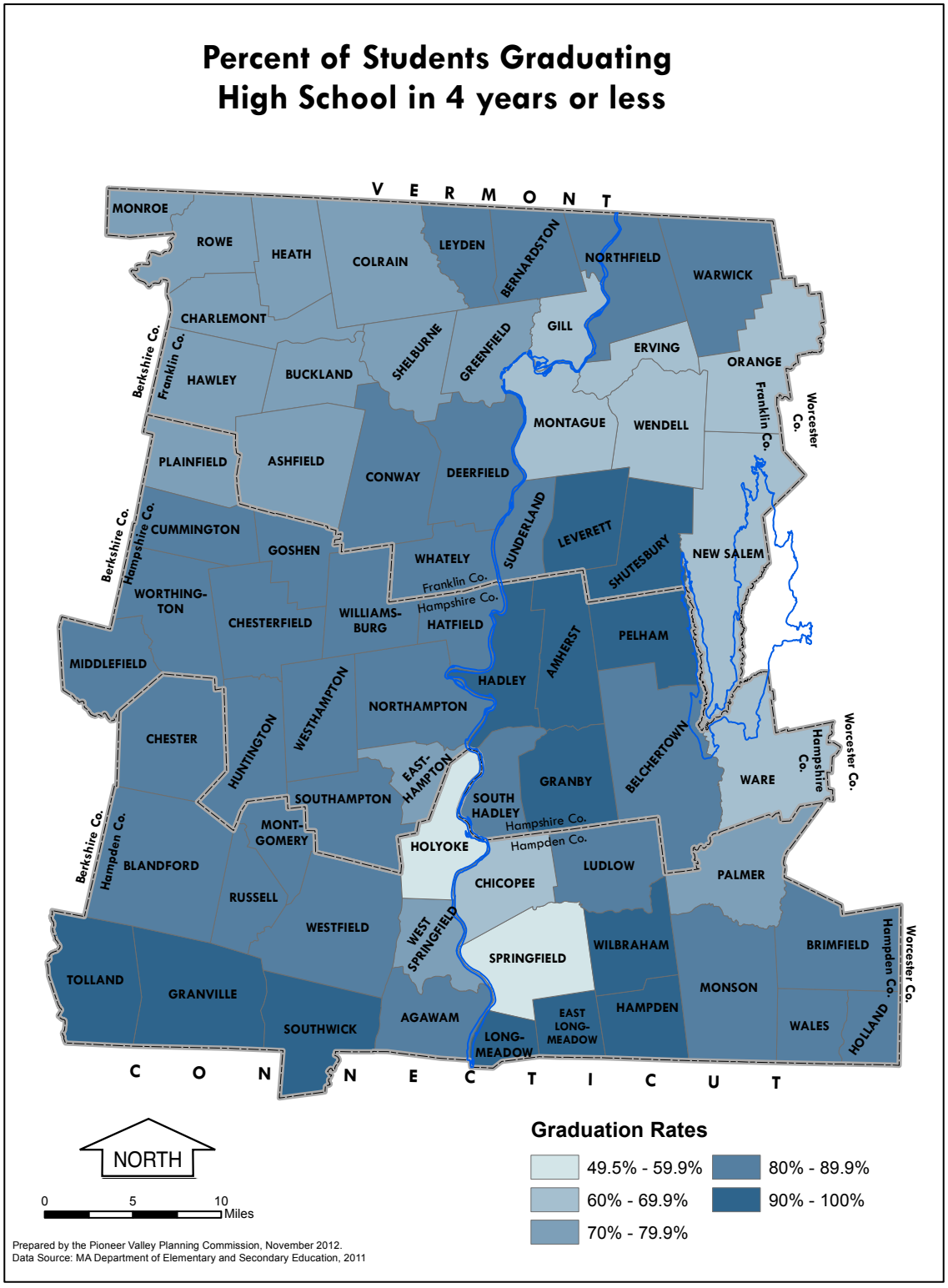
High school graduation rates are a vital component in assessing the status of individuals and communities because educational attainment has a strong influence on future work and earning potential as well as the ability to constructively contribute to one's community. Graduating from high school has become a minimum requirement for participation in most of our nation's economy. The percent of all students enrolled in grades nine through twelve who graduate within 4 years or less is measured in this indicator.

Between 2006 and 2011, the Pioneer Valley graduation rates have remained relatively stable, hovering around 74-75 percent. While the trend of very slight increase was similar to that across Massachusetts, the overall rate across the state was consistently 7-8% higher.

The graduation rates varied significantly throughout the Pioneer Valley with major gaps between the communities with the highest and lowest rates. While in 2011 more than two-thirds of communities had graduation rates over 85 percent, Holyoke and Springfield, with annual high school graduation rates of 49 and 52 percent respectively, had only about half of students graduating high school in four years. Communities that tended to be less urban and more wealthy had the highest graduation rates, including Granby, East Longmeadow, Longmeadow, Hadley, those communities in the Amherst-Pelham* school district, those in the Hampden-Wilbraham school district, and those in the Southwick-Tolland-Granville school district which all had rates of over 90 percent.



* Amherst-Pelham towns – Amherst, Leverett, Pelham, Shutesbury



Prepared by the Pioneer Valley Planning Commission, November 2012.
Data Source: MA Department of Elementary and Secondary Education, 2011

Holyoke	49.5%
Springfield	52.1%
New Salem	62.1%
Orange	62.1%
Wendell	62.1%
Erving	67.1%
Gill	67.1%
Montague	67.1%
Ware	69.6%
Chicopee	69.7%
Palmer	70.8%
Monroe	73.3%
Easthampton	74.4%
Pioneer Valley	***75.2%***
Ashfield	76.1%
Buckland	76.1%
Charlemont	76.1%
Colrain	76.1%
Hawley	76.1%
Heath	76.1%
Plainfield	76.1%
Rowe	76.1%
Shelburne	76.1%
Greenfield	76.6%
West Springfield	77.5%
Hatfield	80.0%
Bernardston	81.1%
Leyden	81.1%
Northfield	81.1%
Warwick	81.1%
Westfield	83.8%
Blandford	85.1%
Chester	85.1%
Huntington	85.1%
Middlefield	85.1%
Montgomery	85.1%
Russell	85.1%
Worthington	85.1%
Monson	86.0%
South Hadley	86.1%
Cummington	87.2%
Ludlow	88.4%
Brimfield	89.2%
Holland	89.2%
Northampton	89.2%
Wales	89.2%
Belchertown	89.4%
Agawam	89.5%
Conway	89.5%
Deerfield	89.5%
Sunderland	89.5%
Whately	89.5%
Chesterfield	89.9%
Goshen	89.9%
Southampton	89.9%
Westhampton	89.9%
Williamsburg	89.9%
Amherst	90.3%
Leverett	90.3%
Pelham	90.3%
Shutesbury	90.3%
Granville	90.4%
Southwick	90.4%
Tolland	90.4%
Granby	91.0%
Hampden	92.1%
Wilbraham	92.1%
East Longmeadow	93.3%
Longmeadow	96.0%
Hadley	97.8%

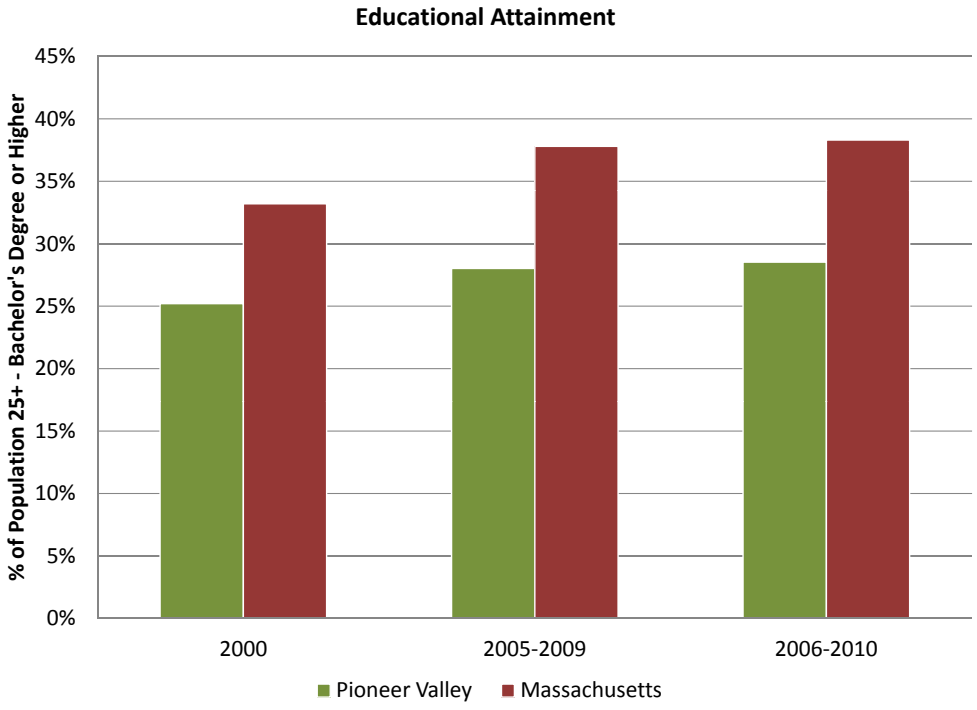
C
RATING

ATTAINMENT OF HIGHER EDUCATION

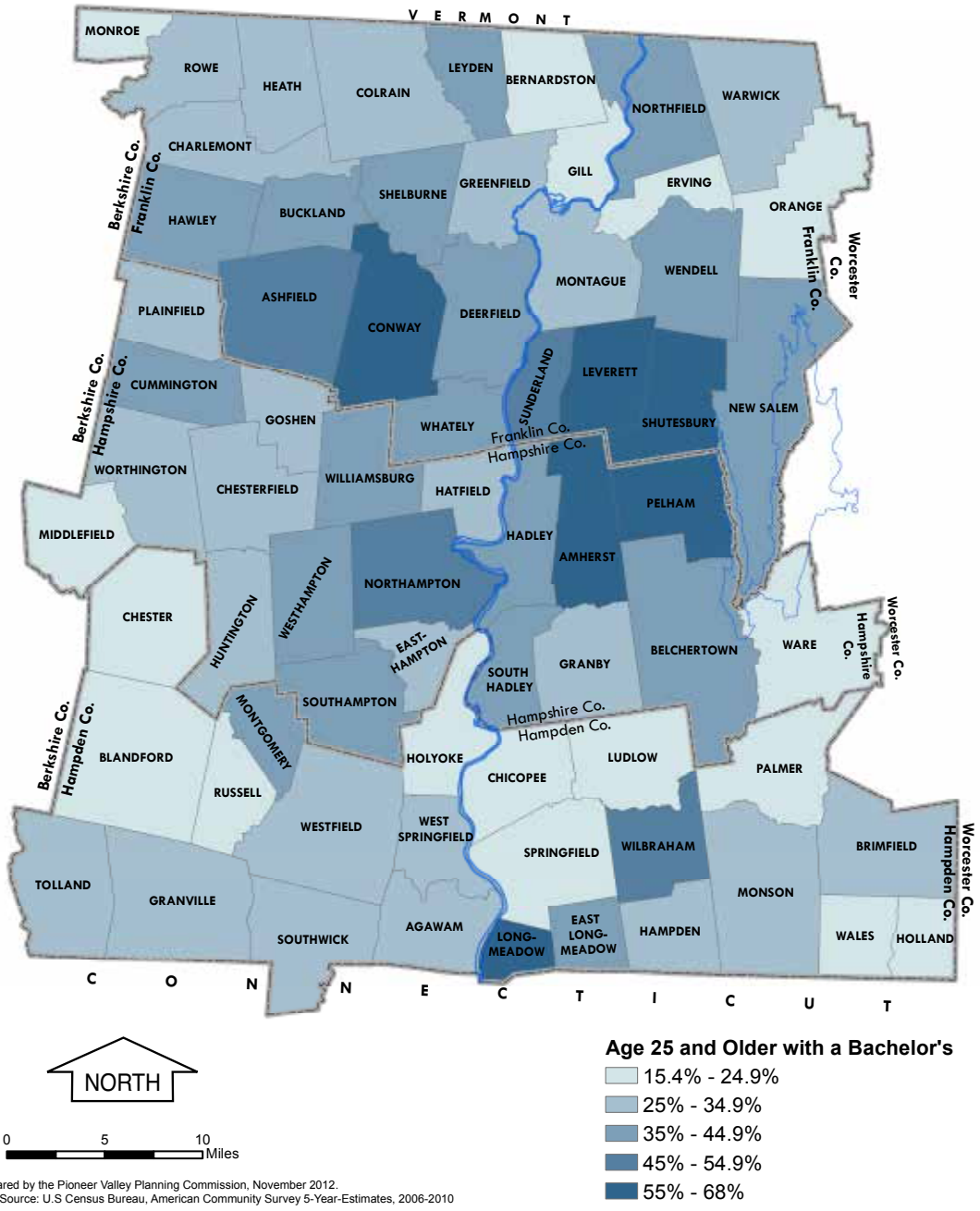
Higher education is increasingly necessary for long-term access to well-paying jobs. The extent of educational attainment, therefore, is indicative of a population's ability to function and excel economically and an individual's economic and social opportunities in life. While two-year associate's degrees meet the needs of many positions, the bachelor's degree is rapidly becoming a requirement for even some entry-level positions. Because a solid educational background, typically achieved during high school, is a prerequisite for getting a bachelor's degree, this indicator also measures a community's ability to prepare their children for college. The percent of the population over age 25 with a Bachelor's degree or higher is measured in this indicator.

Over a ten-year period, the Pioneer Valley experienced a marked increase in the percent of the population with a bachelor's degree or higher, rising from 25.2% in2000 to nearly 29% in 2006-2010 estimates. While rates have been relatively high and the trend has been positive, unfortunately, the Pioneer Valley remained behind the State-wide rates for Massachusetts. The U.S. Census Bureau 2006-2010 estimates put the percent of residents with a bachelor's degree or higher to be almost 10% lower in the region than the Massachusetts statewide figure of just over 38 percent.

Overall, there were great differences in the educational attainment rates across the region. Nine communities had rates under 20% and these tended to include some of the most rural and urban communities with the lowest average incomes (Erving, Chicopee, Ware, Middlefield, Springfield, Orange, Palmer, Wales, and Holyoke). On the other end of the spectrum, the Pioneer Valley has many communities with unusually high educational attainment rates, nine of which reached 50% or much higher. Some of these communities are those supporting much of the population of the major colleges in the region such as Amherst, Pelham, Shutesbury, Leverett, Northampton, and Sunderland. Other top performers in this category included Longmeadow, Conway, and Wilbraham.



Percent of 25+ Population with Bachelor's Degree or Higher



Prepared by the Pioneer Valley Planning Commission, November 2012.
Data Source: U.S Census Bureau, American Community Survey 5-Year-Estimates, 2006-2010

Erving	15.4%
Chicopee	16.5%
Ware	16.6%
Middlefield	16.7%
Springfield	16.9%
Orange	18.0%
Palmer	18.7%
Wales	18.8%
Holyoke	19.8%
Ludlow	20.1%
Russell	20.6%
Chester	23.0%
Monroe	23.8%
Bernardston	24.0%
Holland	24.2%
Blandford	24.6%
Gill	24.7%
Huntington	25.3%
Colrain	25.4%
Agawam	25.6%
Rowe	25.9%
West Springfield	25.9%
Westfield	26.0%
Greenfield	26.1%
Montague	26.4%
Monson	27.2%
Charlemont	27.3%
Granby	27.5%
Pioneer Valley	***28.5%***
Goshen	28.6%
Warwick	29.2%
Hampden	29.5%
Southwick	29.9%
Easthampton	30.0%
Chesterfield	30.3%
Tolland	31.0%
Granville	33.0%
Brimfield	33.2%
Worthington	33.2%
Heath	33.7%
Plainfield	33.9%
Hatfield	34.8%
Southampton	35.2%
Westhampton	35.4%
Buckland	36.3%
South Hadley	36.4%
Hawley	36.8%
New Salem	38.3%
Northfield	39.0%
Shelburne	39.4%
Belchertown	39.5%
Hadley	39.9%
East Longmeadow	40.2%
Leyden	41.1%
Wendell	41.1%
Cummington	41.3%
Deerfield	41.3%
Williamsburg	41.7%
Montgomery	42.0%
Whately	43.2%
Ashfield	47.7%
Wilbraham	50.0%
Sunderland	51.4%
Northampton	51.8%
Conway	56.3%
Leverett	58.0%
Shutesbury	62.2%
Longmeadow	62.9%
Pelham	67.4%
Amherst	68.0%

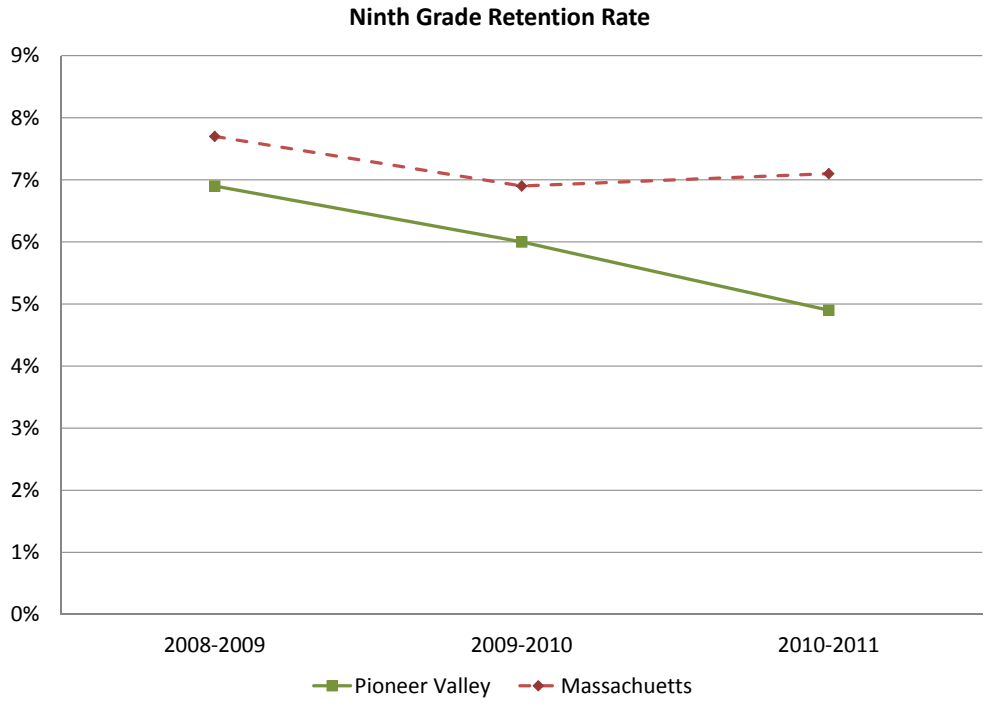
B
RATING

NINTH GRADE RETENTION

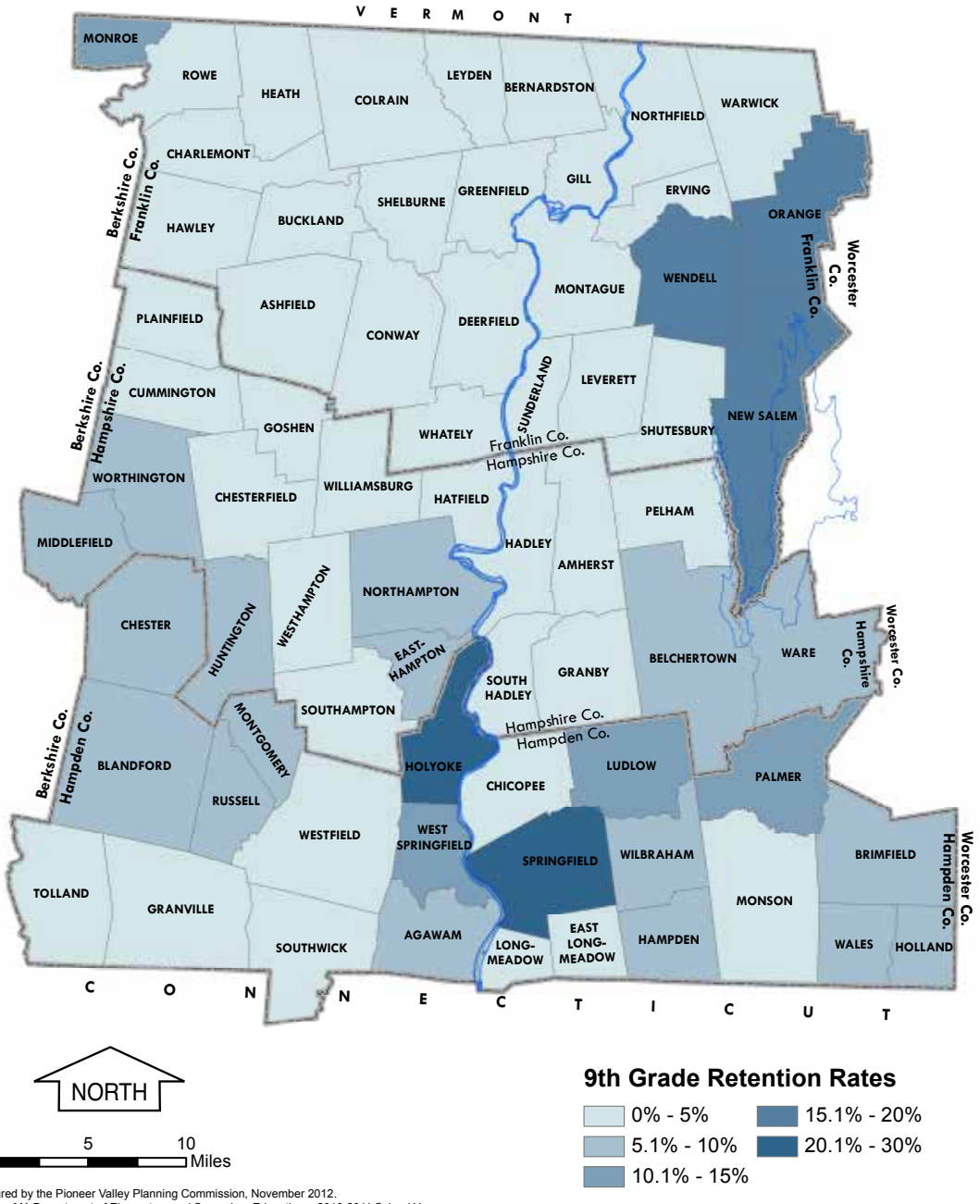
When it is determined that a student needs to repeat 9th grade, it can be indicative of a lack of preparation for the academic rigors of high school and can also point to problems around transition between middle school and high school. Students repeating 9th grade are at a higher risk for dropping out of high school. Knowing the percent of students that meet this criterion can serve as another way to gauge the effectiveness of our education system and the likelihood of student success. The percent of students that repeat the ninth grade is reflected in this indicator.

The Pioneer Valley has experienced a significant improvement in ninth grade retention rates during the three year period between the 2008-2009 and 2010-2011 school years. During that time period, the rate has decreased from 6.9 to 4.9 percent. At the same time, the region's rates were consistently below those of the State. Indeed statewide, students did not improve at nearly the rates of those in the Pioneer Valley.

Unfortunately, this success in minimizing ninth grade retention was not shared equally throughout the region during the 2010-2011 school year. While several communities had retention rates of zero, and nearly two-thirds had rates under 5 percent, the communities of Holyoke, New Salem, Orange, Springfield, and Wendell had retention rates of over 15 percent. Most alarmingly, more than 25% of ninth grade students in Holyoke and Springfield were repeating ninth grade during that year.



Ninth Grade Retention Rate



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: MA Department of Elementary and Secondary Education, , 2010-2011 School Year

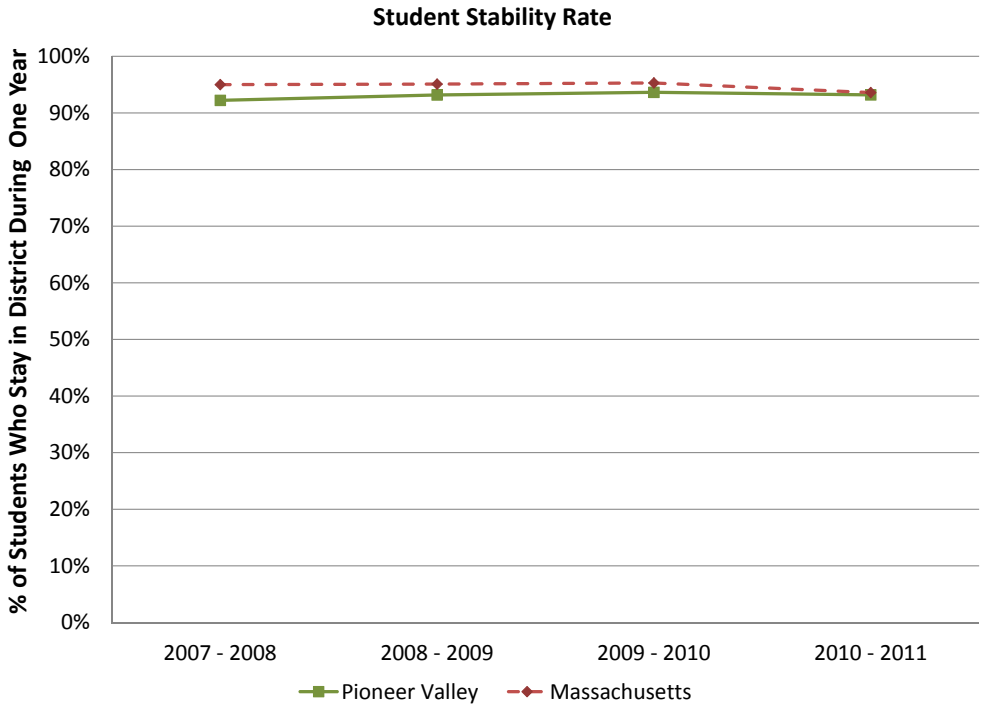
Bernardston	0.0
Granby	0.0
Hatfield	0.0
Leyden	0.0
Longmeadow	0.0
Northfield	0.0
Warwick	0.0
East Longmeadow	0.5
Granville	0.8
Southwick	0.8
Tolland	0.8
Conway	0.9
Deerfield	0.9
Sunderland	0.9
Whately	0.9
Chesterfield	1.5
Goshen	1.5
Southampton	1.5
Westhampton	1.5
Williamsburg	1.5
Chicopee	1.7
Westfield	1.9
Hadley	2.1
Ashfield	2.3
Buckland	2.3
Charlemont	2.3
Colrain	2.3
Hawley	2.3
Heath	2.3
Plainfield	2.3
Rowe	2.3
Shelburne	2.3
Erving	3.0
Gill	3.0
Montague	3.0
South Hadley	3.0
Amherst	3.4
Leverett	3.4
Pelham	3.4
Shutesbury	3.4
Cummington	4.3
Monson	4.6
Greenfield	4.9
Pioneer Valley	***4.9***
Blandford	6.0
Chester	6.0
Easthampton	6.0
Huntington	6.0
Middlefield	6.0
Montgomery	6.0
Russell	6.0
Worthington	6.0
Ware	6.2
Agawam	6.6
Hampden	6.6
Wilbraham	6.6
Belchertown	6.7
Northampton	7.8
Brimfield	8.1
Holland	8.1
Wales	8.1
Ludlow	10.3
West Springfield	11.9
Monroe	12.3
Palmer	12.7
New Salem	15.5
Orange	15.5
Wendell	15.5
Holyoke	25.4
Springfield	28.3

STUDENT MOBILITY (STABILITY RATE)

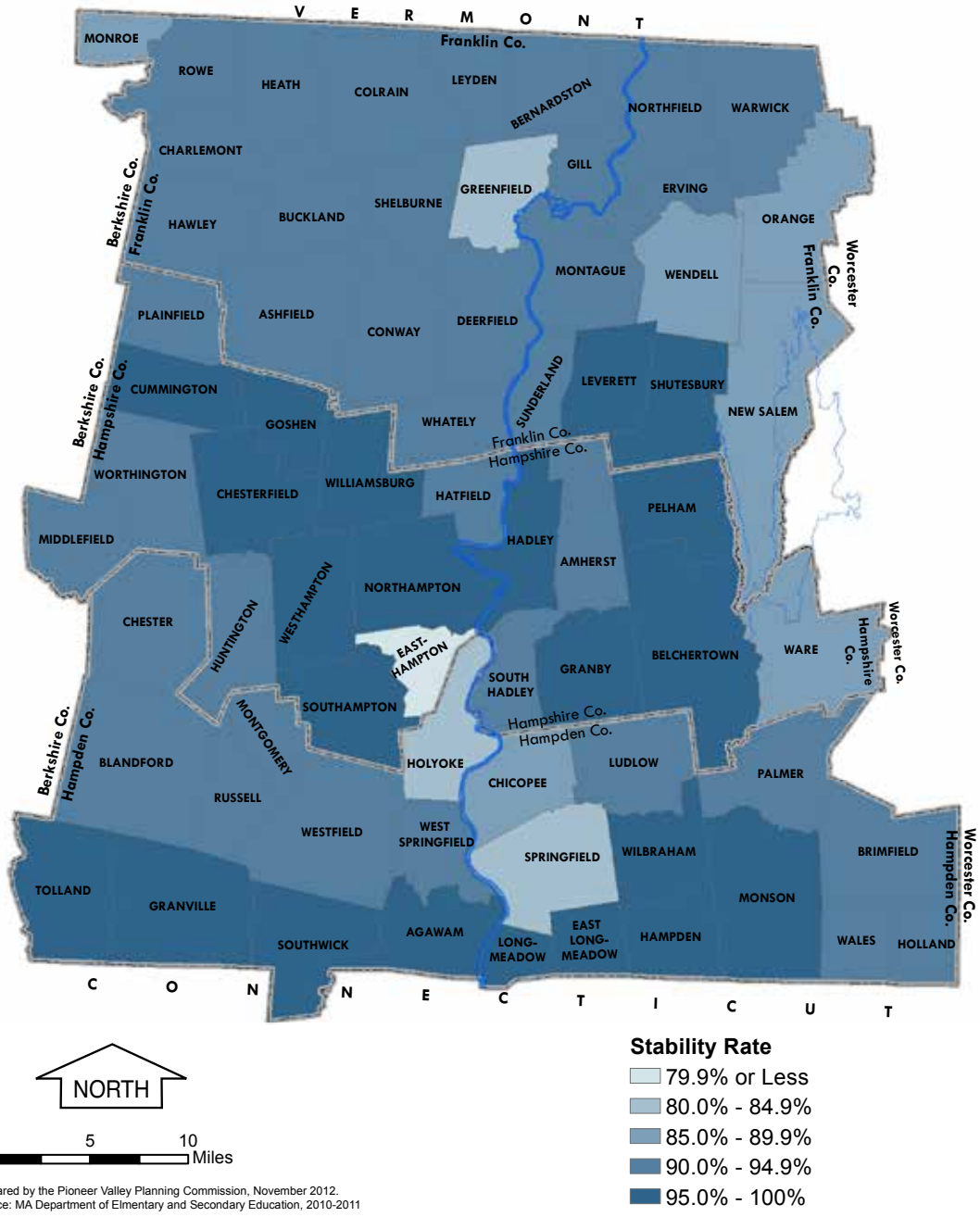
When a student moves between school districts during a school year or even from one grade to another, it causes disruption in the child's education and in the classroom since schools and classes do not teach all of the same information at the exact same time. A teacher must adapt curriculum to the background of a student transferring from a new district based on what that student has already been exposed to, and a student must start where the new class is in their lessons regardless of whether it is repetitive of previous experience or if they have the background skills to accomplish what is expected of him or her in the new class. Knowing how many students enter and exit our school system can help us understand the degree of instability in the classrooms as well as in the lives of the children who have been moved. The degree to which students remain in the same classroom is called the student stability rate. The stability rate is defined by the Massachusetts State Department of Elementary and Secondary Education as the percentage of students who remain in a district or school throughout the school year. This indicator measures student stability rate.

The Pioneer Valley had fairly consistent stability rates overall between the 2007-2008 and 2010-2011 school years, ranging from 92-93% during that time period. While Massachusetts tended to have slightly higher rates of stability, the rates of the State have been dropping in recent years while the Pioneer Valley has remained steady. These trends resulted in a narrowing of the gap between the region and the state; by the 2010-2011 school year, the rates were almost exactly the same.

Throughout the Pioneer Valley, the majority of communities had stability rates above 90 percent. The most stable communities were a mix of suburban and rural and included Longmeadow, Belchertown, East Longmeadow Granby, Hadley, Hampden, and Wilbraham. Only ten municipalities had stability rates lower than 90%, and all were above 75 percent. Three of the region's largest cities, Springfield, Holyoke and Chicopee, all had relatively low stability rates of 84.6%, 81%, and 86%, respectively. In this same sub-90% group were more rural towns as well, including New Salem, Ware, and Orange. Most of the communities with the lowest stability rates did tend to have higher poverty rates, though Easthampton, who ranks squarely in the middle of all communities when it comes to poverty rates, had the lowest stability rate in the region – only 76.5 percent.

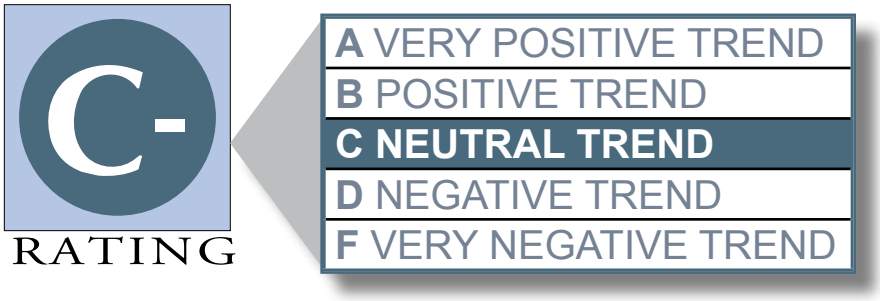


Student Stability Rate



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: MA Department of Elmentary and Secondary Education, 2010-2011

Easthampton	76.5
Holyoke	81.0
Greenfield	84.1
Springfield	84.6
Orange	85.6
Chicopee	86.0
Wendell	86.4
New Salem	86.7
Ware	87.4
Monroe	87.8
West Springfield	91.3
Ashfield	91.7
Buckland	91.7
Charlemont	91.7
Colrain	91.7
Hawley	91.7
Heath	91.7
Plainfield	91.7
Rowe	91.7
Shelburne	91.7
Erving	92.2
Gill	92.2
Montague	92.2
Palmer	92.7
Pioneer Valley	***93.2***
Amherst	93.4
Wales	93.4
Brimfield	93.7
Bernardston	93.8
Leyden	93.8
Northfield	93.8
Warwick	93.8
Holland	94.0
Ludlow	94.2
Conway	94.4
Deerfield	94.4
Sunderland	94.4
Whately	94.4
Blandford	94.7
Chester	94.7
Huntington	94.7
Middlefield	94.7
Montgomery	94.7
Russell	94.7
Westfield	94.7
Worthington	94.7
Hatfield	94.9
South Hadley	94.9
Cummington	95.5
Leverett	95.7
Northampton	95.7
Granville	95.8
Monson	95.8
Shutesbury	95.8
Southwick	95.8
Tolland	95.8
Pelham	95.9
Agawam	96.1
Westhampton	96.6
Williamsburg	96.6
Chesterfield	96.7
Goshen	96.7
Hadley	96.8
Hampden	96.8
Wilbraham	96.8
Granby	97.0
Southampton	97.4
Belchertown	97.5
East Longmeadow	97.5
Longmeadow	98.2



HEALTH AND SAFETY

The health and safety of our community affects us on personal, local, and regional scales, speaking to our quality of life, physical and mental well-being, and our ability to take care of ourselves and our neighbors. Due to a variety of factors including nearly universal health insurance coverage and world-class health institutions, the Commonwealth of Massachusetts is one of the leading states across the nation when it comes to the health of its citizens. Health and safety indicators range from those that point to instances of systemic failure or, in the case of the Pioneer Valley, success, as in the extremely low rates of uninsured residents. Other indicators point to places where a widespread behavioral shift is needed, such as substance abuse or diabetes rates. The rate of HIV/AIDS, asthma, and premature mortality all touch on systemic problems and individual behaviors that affect the health and safety of the region. Crime rates tell us about how safe we, and our visitors, are in our community.

Only five years after the percentage of the population without health insurance reached an all-time high in 2005 there have been enormous strides in the reducing this number with the 2006 Massachusetts Health Care Reform Law. The occurrence of premature mortality for our region has been falling between 2000 and 2008 and the number of persons admitted to substance abuse programs has been declining although the region's rate is still above that statewide. While the prevalence of HIV/AIDS has risen, it appears that this number will be leveling off and this increase may be due to enhanced efforts of HIV/AIDS testing. One area of concern is the number of asthma related hospitalizations, which has increased 70% since 2000. This rate has also been consistently above the state average and does not appear to be slowing its growth rate. Asthma incidents can be influenced by several factors, perhaps the biggest among them being airborne environmental contaminants.

Note: Since there is only one indicator related to crime in this section, the grade for crime rates was counted twice when calculating the Health and Safety overall grade.

Indicator	Summary	Rating
Premature Mortality	The rate of premature deaths has decreased slightly over the last few years, but remains consistently above that of the state. Equity between many communities is good, but the gap between the highest and lowest performing communities is large.	C
Health Insurance Coverage	The percent of people who are uninsured has dropped significantly in the last ten years, and is close to that statewide. Equity between many communities is good, but the gap between the highest and lowest performing communities is large.	B-
Nutrition	Consumption of fruits and vegetables remains mostly stagnant with a slight decrease. Trends are generally in line with those throughout Massachusetts.	C
Tobacco Use	Tobacco use has decreased nearly 10% in the last ten years, but remains slightly above statewide rates. Equity between most communities is neutral, but poor between those that are highest and lowest performing.	C+
Substance Abuse	Substance abuse has decreased slightly in the last ten years, and while statewide rates are lower, the gap has been narrowed. Equity between many communities is good, but the gap between the highest and lowest performing communities is large.	C+
Mental Health	Mental health hospitalizations have remained steady, increasing slightly in the last few years. Rates are consistently higher than those for Massachusetts. Equity between many communities is good, but the gap between the highest and lowest performing communities is large.	D+
Crime	Crime rates have been decreasing in recent years after significant increases, but stil remain above rates statewide. Equity between many communities is good, but the gap between the highest and lowest performing communities is large.	C+
Asthma	Asthma rates for all ages have increased steadily over the last eight years and remain consistently above the Massachusetts rate. Equity between many communities is good, but the gap between the highest and lowest performing communities is large.	D
Diabetes	Diabetes related hospitalizations have increased significantly in the last decade, though trends remain in line with those statewide. Equity between most communities is poor.	D-
HIV/AIDS Cases	The number of HIV/AIDS cases in the community has gradually risen throughout the decade, with trends in line with those statewide. Equity between many communities is good, but the gap between the highest and lowest performing communities is large.	D+
Obesity	Obesity rates have increased almost 10% in seven years, though the gap with the state has been narrowing recently.	D+
Oral Health	Rate of dental visits have been increasing slightly over the last decade, remaining just below rates statewide.	B-

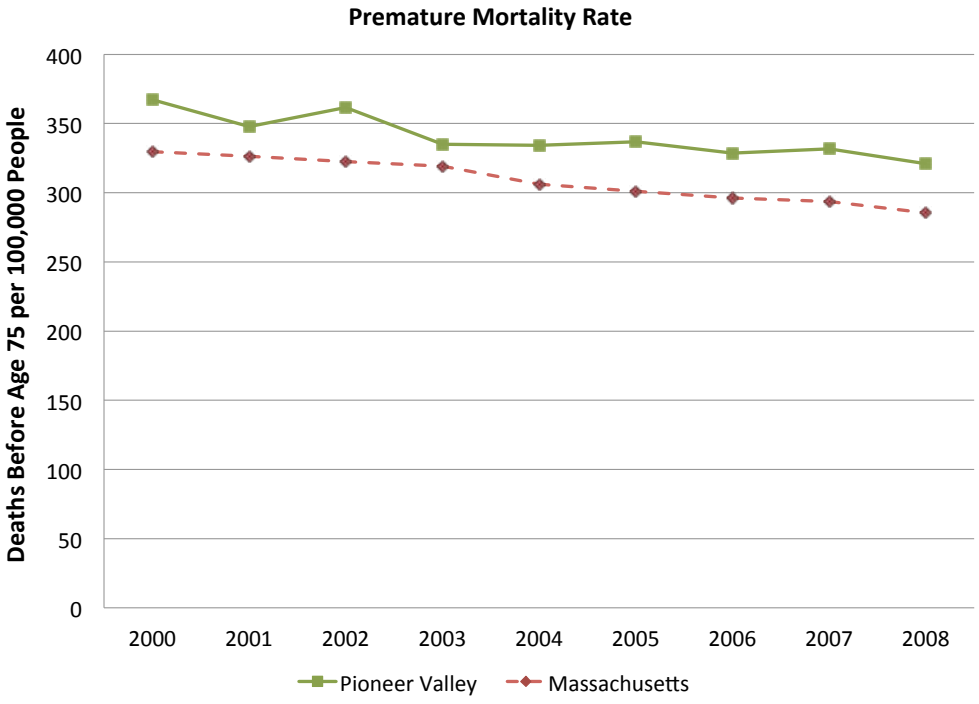
C
RATING

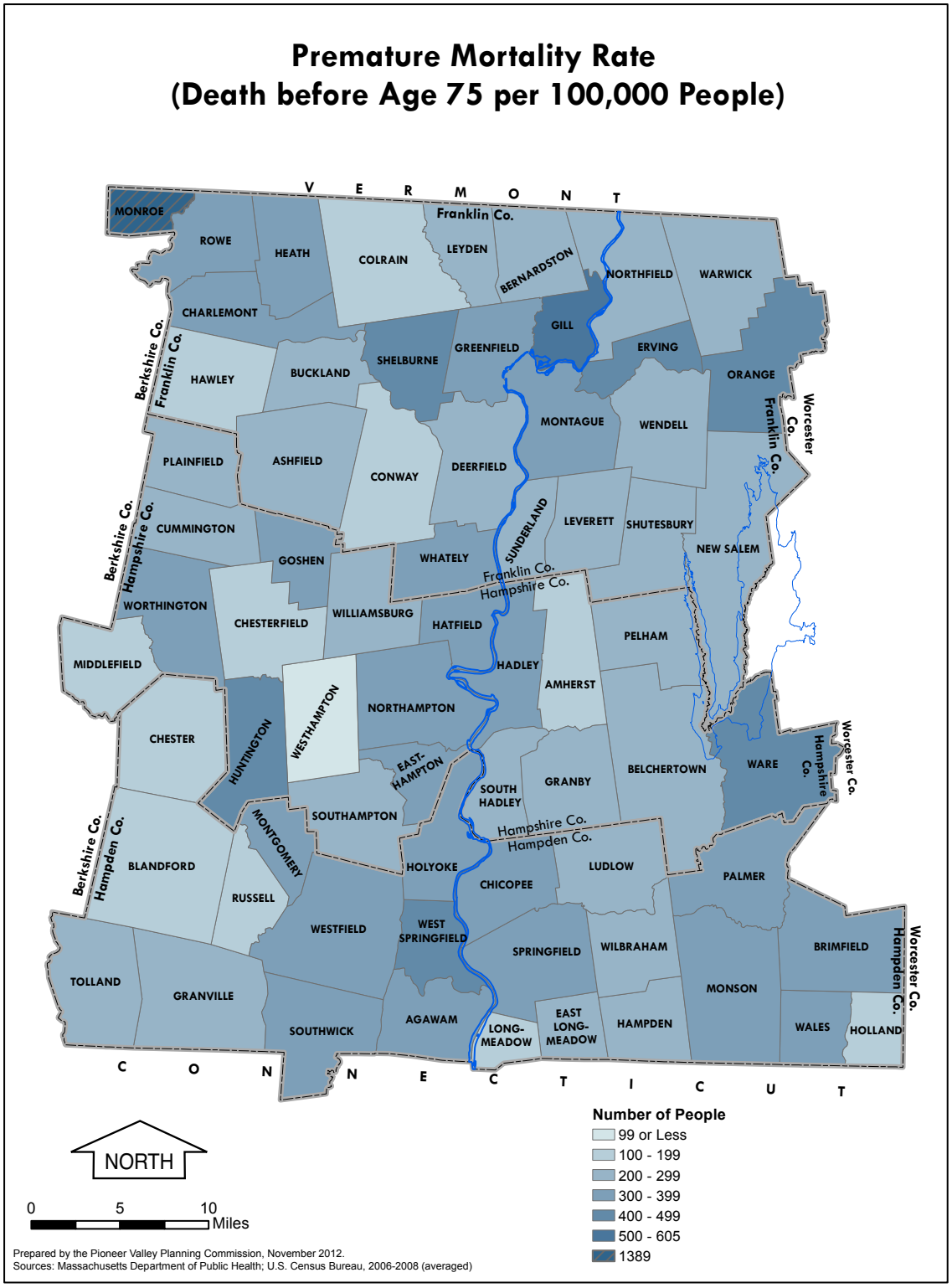
PREMATURE MORTALITY

In addition to being a reflection of the health of a community, the premature mortality rate is also a measure of overall community conditions. The premature mortality rate is a widely recognized indicator of the state of public health within a community. High premature mortality rates can draw attention to areas where preventable health issues are not being dealt with as well as they could be and thus can help target strategies for improvement. This indicator reflects the number of people who die prematurely as defined by the Massachusetts Department of Public Health (deaths occurring before age 75) each year, for every 100,000 people in the population. Due to the fact that numbers for some communities were very small, three years of data were averaged in order to compare trends across municipalities.

Between 2000 and 2008, the Pioneer Valley had a slightly decreasing (or improving) premature mortality rate declining from a high of 367 deaths per 100,000 people in 2000, to a low of 321 in 2008 representing a 12.5% improvement. This is a positive reflection on general public health trends, indicating that the Pioneer Valley is more and more successful at addressing preventative health issues. While this trend is positive and consistent with the trend of the statewide, the region consistently had higher rates than the state. While the region managed to narrow the gap a few times, coming closest in 2003, the gap has since widened again and was more than 12% higher than the state in 2008.

Looking at individual communities within the Pioneer Valley, there was a very wide variation in premature death rates. Monroe, Gill, Orange, Ware, Shelburne, Erving, Huntington, and West Springfield had the highest premature mortality rates, with each community coming in at greater than 400 premature deaths per 100,000 people in the population. The communities of Amherst, Blandford, Chesterfield, Conway, and Westhampton had the lowest rates of premature deaths, with each coming in below 150 premature deaths per 100,000 people.





Westhampton	84.1
Conway	106.2
Amherst	112.8
Blandford	130.3
Chesterfield	130.9
Chester	154.3
Colrain	181.2
Middlefield	181.5
Russell	192.7
Holland	197.5
Longmeadow	198.1
Hawley	198.4
Wendell	199.4
Hampden	201.1
Williamsburg	204.9
Cummington	205.3
Shutesbury	218.1
Granville	218.8
Tolland	221.7
Plainfield	222.2
Sunderland	224.0
Bernardston	224.7
Deerfield	225.5
Pelham	237.4
Ashfield	238.8
Leverett	248.2
Leyden	249.4
Belchertown	255.3
Ludlow	255.3
Southampton	262.8
Warwick	266.7
Northfield	268.0
New Salem	269.4
East Longmeadow	271.5
Buckland	284.8
South Hadley	285.1
Granby	291.7
Wilbraham	294.6
Montgomery	309.5
Goshen	313.8
Hatfield	317.2
Monson	318.6
Southwick	325.2
Westfield	325.4
Pioneer Valley	***333.0***
Easthampton	334.1
Heath	334.6
Agawam	338.8
Brimfield	360.8
Whately	364.4
Northampton	364.9
Holyoke	366.6
Worthington	366.9
Greenfield	367.1
Palmer	371.0
Montague	376.0
Wales	379.6
Rowe	384.2
Hadley	389.9
Charlemont	390.1
Springfield	397.1
Chicopee	398.4
West Springfield	400.9
Huntington	410.4
Erving	412.1
Shelburne	425.7
Ware	426.2
Orange	457.5
Gill	604.3
Monroe	1388.9

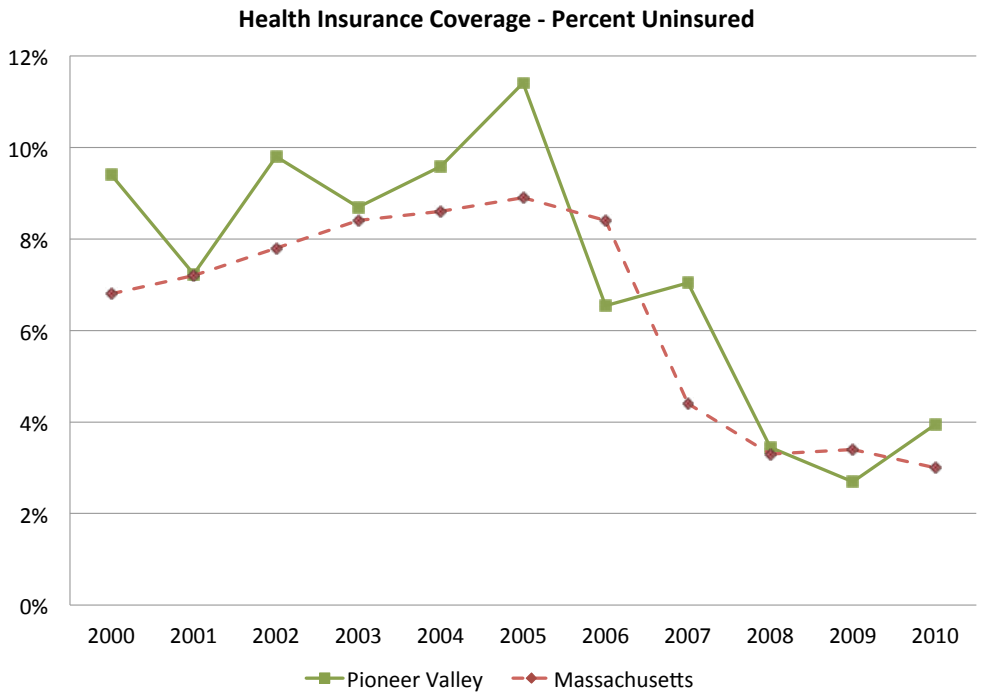
B-
RATING

HEALTH INSURANCE COVERAGE

Despite the existence of vast financial resources and cutting edge health services, access to health care in the United States is limited. The percentage of people who are not able to benefit from this system because they lack health insurance is a measure of our inability, as a society and community, to provide equal protection to all members. Furthermore, because emergency rooms and neighborhood clinics providing free services are increasingly the only option for those without health insurance, the percentage of the population without health insurance is indicative of demand for emergency and neighborhood services. The estimated percent of the population (of all ages and incomes) who do not have any form of health insurance (whether private or public) is reflected in this indicator. This is based on a survey conducted on a sample population, through the Behavioral Risk Factor Surveillance System (BRFSS), a program of the Centers for Disease Control, an arm of the United States Department of Health and Human Services.

Overall, the rate of uninsured people in the Pioneer Valley has decreased significantly between 2000 and 2010, beginning the decade at 9.4%, reaching a high point of 11.4% in 2005, and then plummeting to 3.9% by 2010. While there was a slight increase of 1.2% from 2009 to 2010, the region still has a very low rate of uninsured people.

This trend was generally consistent with trends across the state of Massachusetts where, during the same period, the percent of those without health insurance declined from 6.8% to 3 percent. While the rate of uninsured remains slightly higher in the Pioneer Valley than it does statewide, the improvements of the region surpassed that of the state in terms of a faster increase in the percent of people gaining health insurance. This sharp decline in uninsured people throughout the decade is likely related to the enactment of statewide legislation in 2006, which mandated the purchase of health insurance by nearly all residents of the state and creating the Commonwealth Health Insurance Connector Authority to assist people in doing so.



Source: U.S. Census Bureau

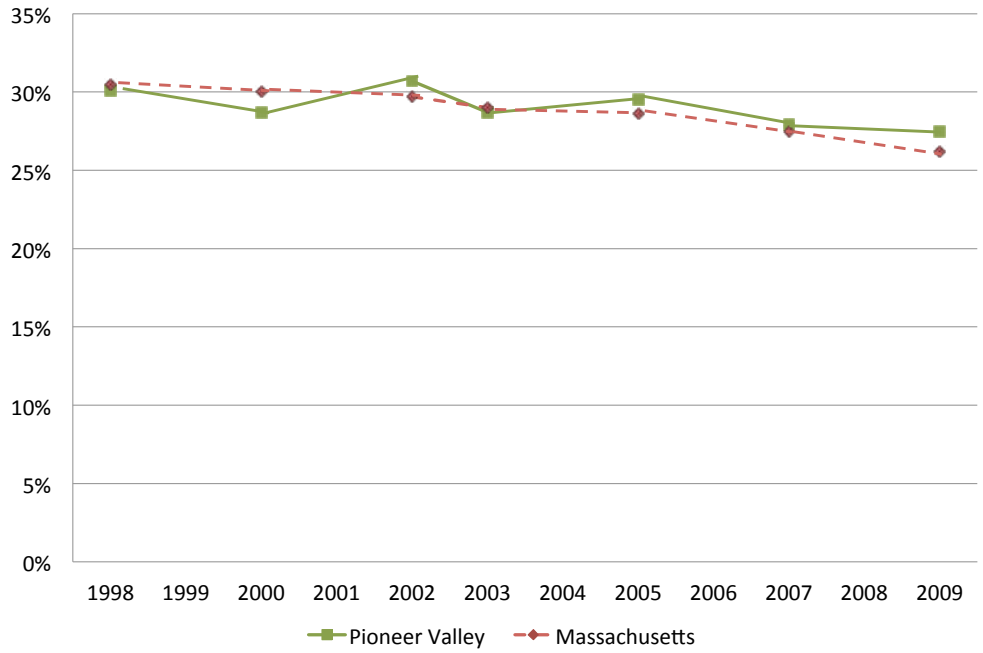
C
RATING

NUTRITION

Nutrition is what sustains us. Food we eat that contains nutrients allows us to function – both physically and mentally. Certain foods, such as fruits and vegetables are high in nutrition, and are healthy. Fruits and vegetables contain the necessary antioxidants, vitamins, carbohydrates, and other items that can help contribute to a nutritious diet. While not directly causal, nutrition and economics are often integrally related. Access to healthy foods that make up such a balanced diet often depends on the geography and economic circumstances of a community. Communities with less buying power, more public safety challenges, or negative false reputations based on stereotypes are also often challenged by full service supermarkets refusing to locate in their neighborhoods. This indicator serves as a proxy for how well the healthy food needs of the residents in the Pioneer Valley are being met. The percent of the population that indicated that they receive sufficient fruits and vegetables (5 or more servings per day) is reflected in this indicator.

Overall, the percent of the population within the Pioneer Valley, as well as across Massachusetts, who eat an adequate number of fruits and vegetables daily is quite low. Indeed, less than one in three people reached this goal at any point between 1998 and 2009. What's more, during that 11 year time period, both the Pioneer Valley and Massachusetts have experienced a slow, but steady decline. During that time period, the Pioneer Valley saw a decrease in this indicator, from 30.5 to 27.5 percent. Massachusetts saw an even steeper slide, dropping from 30.1 to 26.2 percent. The overall percent value of this indicator has generally been slightly better, for the Pioneer Valley than for Massachusetts, particularly in the most recent years. The Pioneer Valley has been doing slightly better than Massachusetts as of late, and between 2007 and 2009 the Pioneer Valley remained basically stable, while Massachusetts continued to decline more than another whole percentage point.

Percent of Population Eating 5+ Servings a Day Of Fruits or Vegetables



Source: Behavioral Risk Factor Surveillance System (BRFSS) via Massachusetts Department of Public Health; U.S. Census Bureau

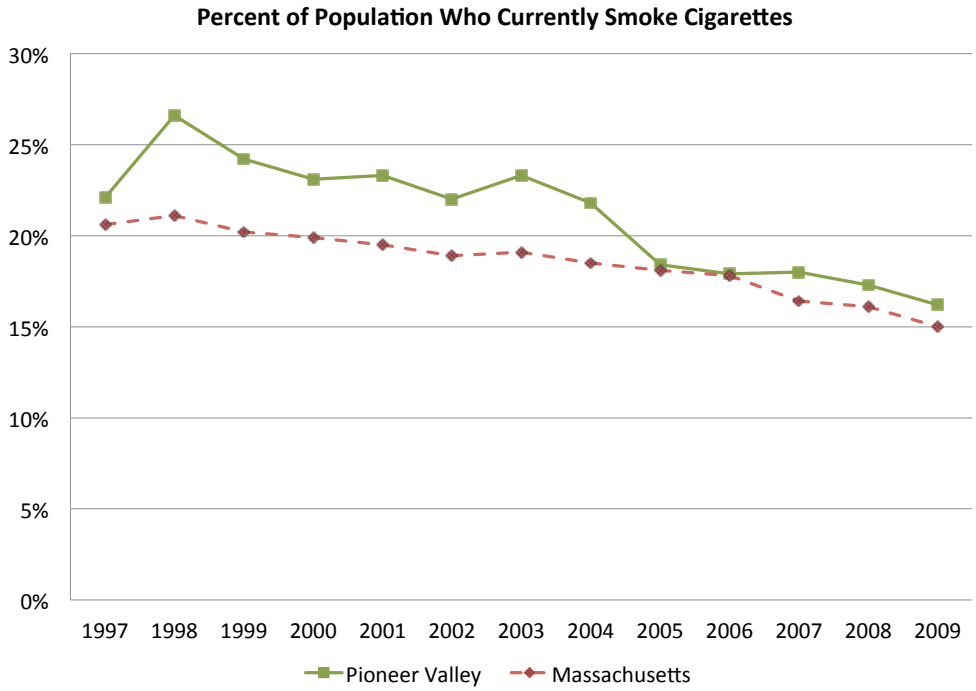
Note: Data was not available for some years due to low survey sample.

TOBACCO USE

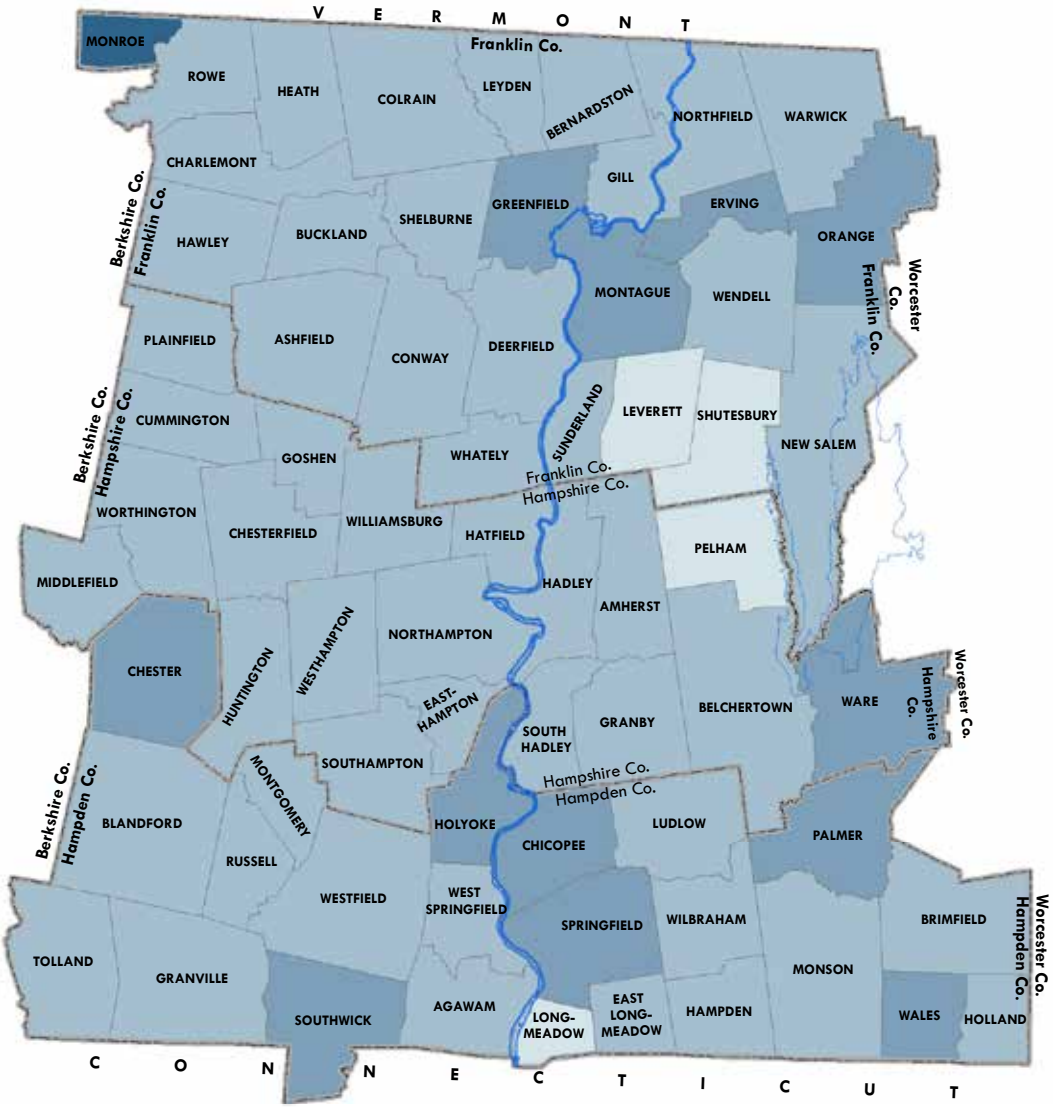
It is now well known that tobacco use causes countless serious health conditions, including death. According to the U.S. Centers for Disease Control and Prevention, "tobacco use is the single most preventable cause of disease, disability, and death in the United States." Identifying the percentage of adults that engage in tobacco use help us to understand how well we, as a community, are reducing the prevalence of this harmful and risky behavior and thus the likelihood of continued health needs that are likely to arise. The estimated percent of all people who are currently tobacco smokers is reflected in this indicator.

The prevalence of smoking in the Pioneer Valley between 1997 and 2009 declined considerably, from 22% to 16%, reflecting an overall decrease of 6 percent. This trend is consistent with that of Massachusetts which, while consistently slightly lower than the region, saw an overall decrease of just over 5 percent. The peak year for tobacco use was 1998 in both the Pioneer Valley and State-wide, at 27 percent and 21 percent respectively. That same year saw the widest gap between the two areas, almost 6 percent. This gap narrowed considerably in subsequent years. In 2009, that gap was just over 1 percent, with the Pioneer Valley having a slightly higher prevalence of smoking.

Across the Pioneer Valley, tobacco use varied widely. While four communities had fewer than 10% of people who were smokers, 13 communities have rates over 20 percent. The communities with the lowest rates tended to be more rural or suburban such as Longmeadow, Leverett, Shutesbury, and Wilbraham. The communities with the highest rates were more geographically diverse but included many of the communities who struggle more in other socio-economic and educational attainment indicators. These communities included Monroe, Springfield, Orange, Chicopee, Palmer, Greenfield, and Ware.



Percent of Population Who Currently Smoke Cigarettes



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: Massachusetts Tobacco Cessation and Prevention, 2008

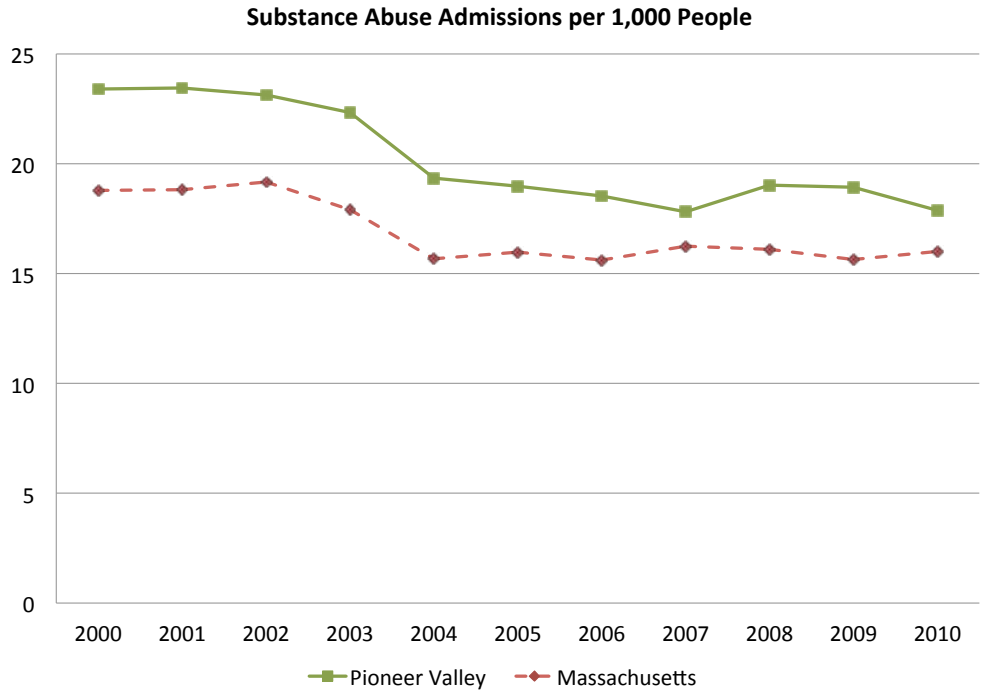
Longmeadow	7.4
Pelham	8.5
Leverett	8.7
Shutesbury	9.7
Wilbraham	11.3
Conway	11.7
Whately	11.9
Ashfield	12.4
Montgomery	12.7
Williamsburg	12.7
Amherst	12.9
Westhampton	13.0
Hadley	13.1
Southampton	13.1
Hampden	13.5
E. Longmeadow	13.6
Tolland	13.6
Shelburne	13.8
Cummington	13.9
Rowe	13.9
Worthington	14.3
Deerfield	14.6
Northfield	14.7
Gill	14.8
New Salem	14.8
Hatfield	15.0
Northampton	15.0
Bernardston	15.1
Sunderland	15.1
Leyden	15.6
Buckland	15.9
Granville	15.9
Granby	16.1
Plainfield	16.1
Belchertown	16.3
Goshen	16.5
Warwick	16.5
Wendell	16.5
South Hadley	16.7
Heath	16.8
Brimfield	16.9
Charlemont	16.9
Blandford	17.3
Pioneer Valley	***17.3***
Huntington	17.7
Russell	17.7
Chesterfield	17.8
Middlefield	18.0
Colrain	18.1
Agawam	18.6
Holland	18.6
Hawley	18.8
Monson	18.8
Ludlow	19.0
Easthampton	19.7
West Springfield	19.7
Westfield	19.9
Southwick	20.3
Wales	20.4
Chester	20.5
Holyoke	20.6
Erving	20.9
Montague	21.2
Greenfield	22.0
Ware	22.0
Palmer	22.3
Chicopee	22.5
Orange	23.0
Springfield	23.8
Monroe	43.2

SUBSTANCE ABUSE

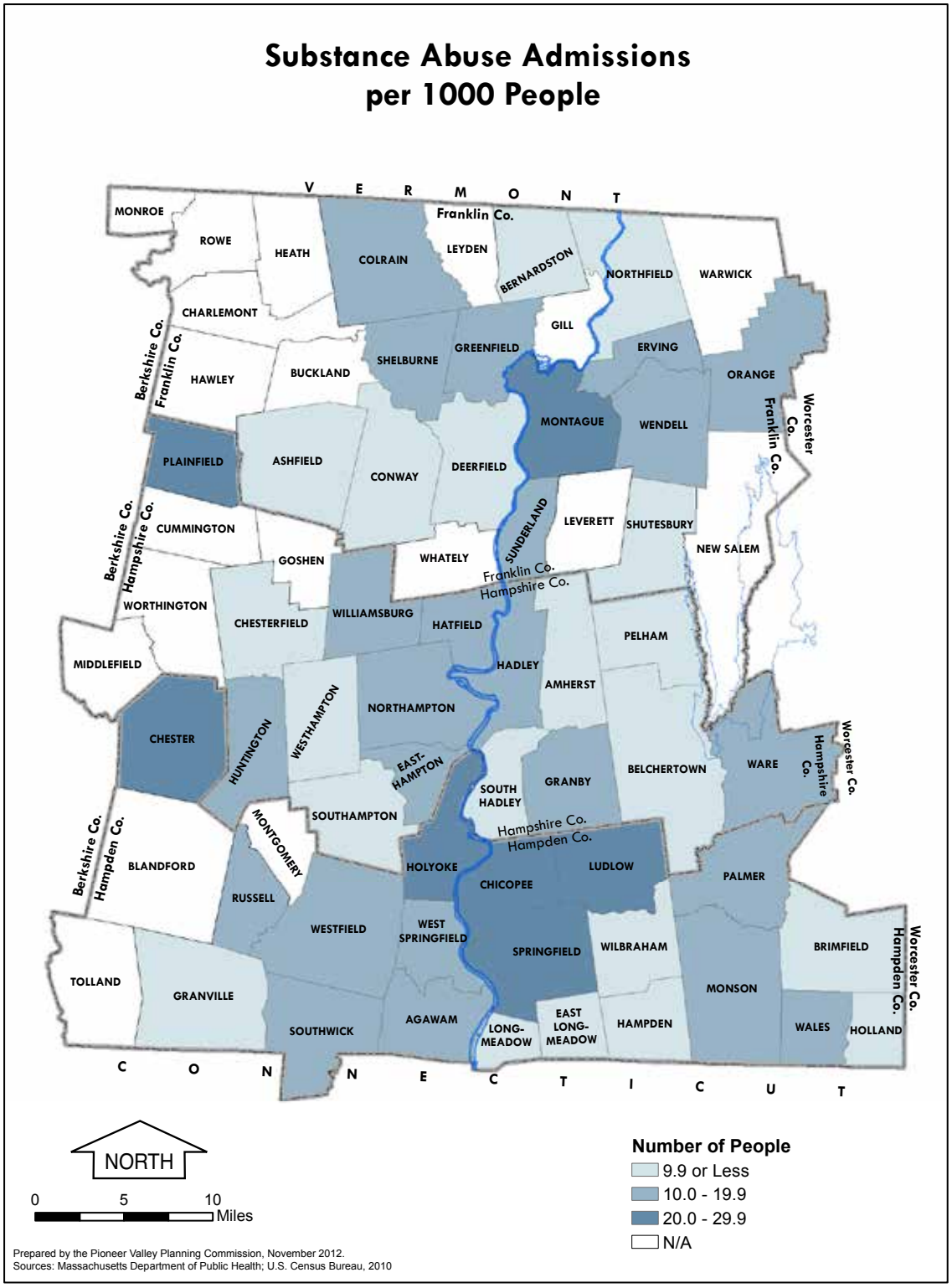
The prevalence of substance abuse is an indicator of health and risk factors in a community. A community with higher rates of substance abuse is more likely to have higher rates of crime, poverty, and poor health outcomes. Individual patterns of substance (drug) use can lead to significant problems or distress such as failure to attend work/school, substance use in dangerous situations (driving a car), substance-related legal problems, and negative effects on friendships and family relationships. This indicator reflects the number of substance abuse program admissions per 1,000 people in the population.

Between 2000 and 2010, the Pioneer Valley generally experienced declining rates in this indicator seeing a reduction in admissions by 24 percent, going from 23.39 admissions per 1,000 people in 2000, to 17.88 admissions per 1,000 people in 2010. While the lowest point was in 2007, at 17.80 admissions per 1,000 people, the rate in 2010 was only slightly higher. This decline was steady, increasing slightly in 2008. Massachusetts has seen a similar but not as significant a trend of improvement statewide, experiencing a reduction of 14 percent, going from 18.78 admissions per 1,000 to 16.01 admissions per 1,000 people. Still, while the Pioneer Valley improved at a faster rate than statewide trends, the region also had consistently higher rates of admissions for the entire decade indicating that there is still room for improvement in this area.

Looking across communities within the Pioneer Valley in 2010, there were large disparities in substance abuse admissions. The communities of Holyoke, Ludlow, Montague, Plainfield, and Springfield had the highest rates of substance abuse admissions, with at least 23 admissions per 1,000 people. On the other hand, the communities of Amherst, Conway, Deerfield, Northfield, and Wilbraham each had substance abuse admissions rates of 6 admissions or less per 1,000 people. Communities in the Pioneer Valley ranged significantly, from just under 4 admissions per 1,000 to greater than 28 admissions per 1,000 people.



Note: It should be noted that rates in smaller communities are subject to more extreme fluctuations from year to year since a few cases can have a much larger affect on the rate for the community when the total population is smaller. For more information, see note in "About the Data" section of this report.



Prepared by the Pioneer Valley Planning Commission, November 2012.
Sources: Massachusetts Department of Public Health; U.S. Census Bureau, 2010

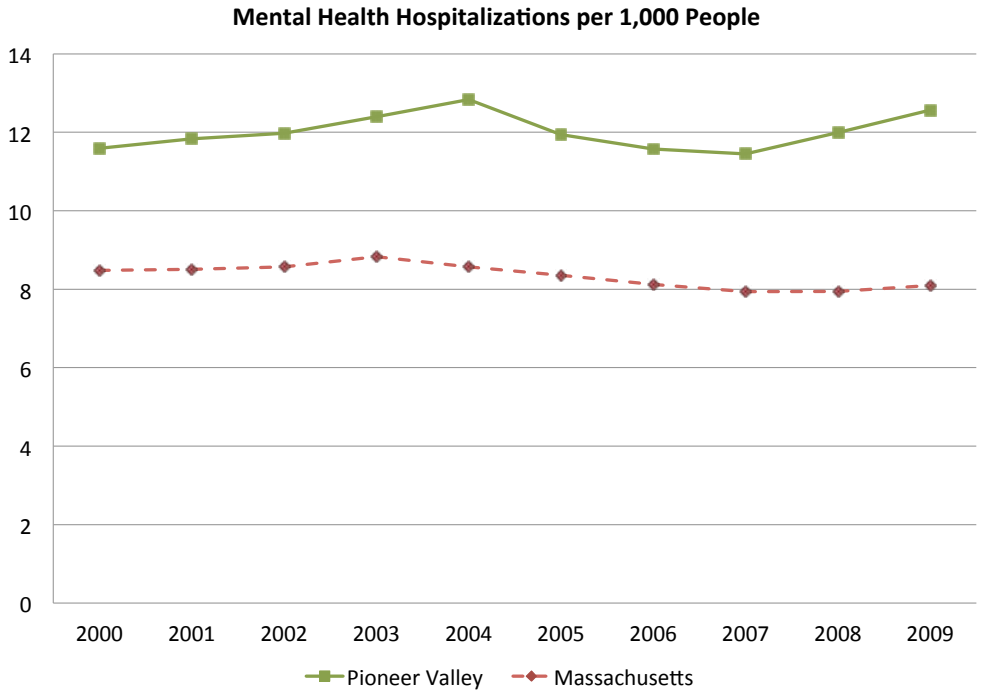
Amherst	3.6
Wilbraham	5.4
Northfield	5.6
Conway	5.8
Deerfield	6.0
Longmeadow	6.3
Granville	6.4
Belchertown	7.1
Brimfield	7.2
Westhampton	7.5
Hampden	7.6
East Longmeadow	7.8
Bernardston	8.0
Ashfield	8.6
Chesterfield	9.0
Pelham	9.1
South Hadley	9.5
Shutesbury	9.6
Holland	9.7
Southampton	9.8
Ware	10.1
Colrain	10.2
Russell	10.7
Monson	10.7
Williamsburg	10.9
Southwick	11.2
Wales	11.4
Erving	11.7
Hadley	11.8
Sunderland	11.9
Granby	13.3
Hatfield	13.7
Wendell	14.2
Huntington	15.1
Easthampton	15.2
Westfield	15.4
Palmer	15.9
Agawam	17.3
Orange	17.5
Pioneer Valley	*17.9*
Shelburne	18.0
Northampton	18.6
Greenfield	19.2
West Springfield	19.4
Chicopee	20.9
Chester	20.9
Plainfield	23.1
Montague	23.5
Ludlow	25.1
Springfield	28.5
Holyoke	29.2
Blandford	NA
Buckland	NA
Charlemont	NA
Cummington	NA
Gill	NA
Goshen	NA
Hawley	NA
Heath	NA
Leverett	NA
Leyden	NA
Middlefield	NA
Montgomery	NA
New Salem	NA
Rowe	NA
Tolland	NA
Warwick	NA
Whately	NA
Worthington	NA

MENTAL HEALTH

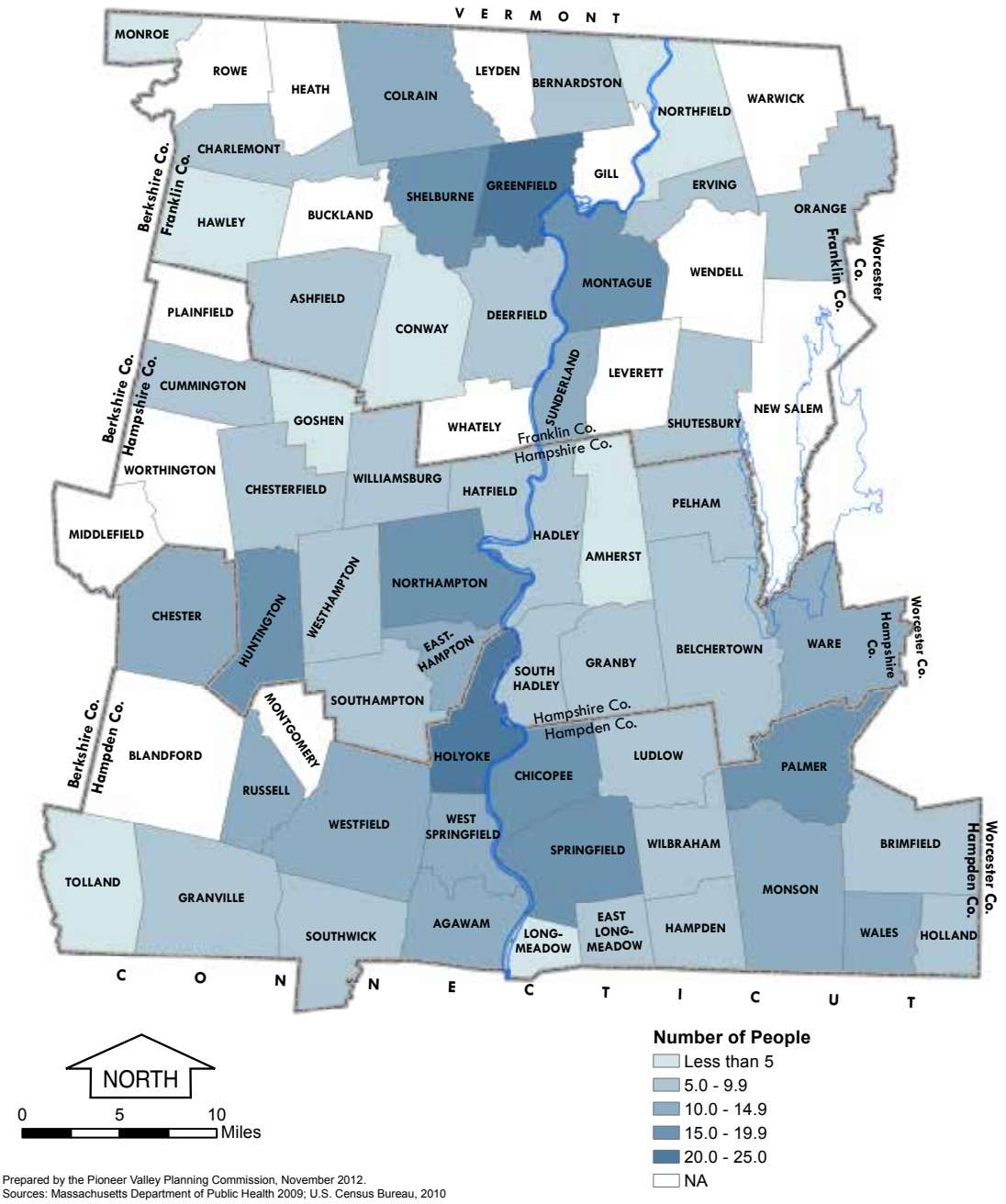
The condition of one's mental health can affect every aspect of a person's life including how positive and productive that person is in their community. As described by the World Health Organization, "mental health is a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community." High levels of mental health distress in a community can suggest underlying social and societal problems as well as indicate a higher likelihood of increased social challenges such as poverty, unemployment, and crime. Understanding how severe our community's mental health challenges are is integral to understanding how well the overall health needs of our community are being met. This indicator reflects the number of mental health hospitalizations per 1,000 people in the population as a whole.

Between 2000 and 2009, the Pioneer Valley saw a slight increase in the rate of mental health hospitalizations, from 11.6 to 12.6 hospitalizations per 1,000 people. While some decrease in the rate was experienced between 2004-2007, this trend was almost completely reversed during the following two years. The Pioneer Valley consistently had higher rates of mental health hospitalizations that those statewide, remaining 3.0 – 4.5 more hospitalizations per 1,000 people throughout the ten year period. During the same period, Massachusetts saw a very slight decrease, going from 8.5 to 8.1 hospitalizations per 1,000 people. This resulted in the gap between the Pioneer Valley and the state reaching its highest point in 2009.

Mental health hospitalizations were not distributed equally throughout the region, and the highest rates seemed to be concentrated in the region's most urban areas coupled with a few of the most small and rural towns. While 8 communities had hospitalization rates under 5 per 1,000 people, 9 communities had rates over 15. The communities with the highest hospitalization rates included Greenfield, Holyoke, Springfield, Palmer, Shelburne, Montague, Chicopee, and Northampton.



Mental Health Hospitalizations per 1,000 People



Prepared by the Pioneer Valley Planning Commission, November 2012.
Sources: Massachusetts Department of Public Health 2009; U.S. Census Bureau, 2010

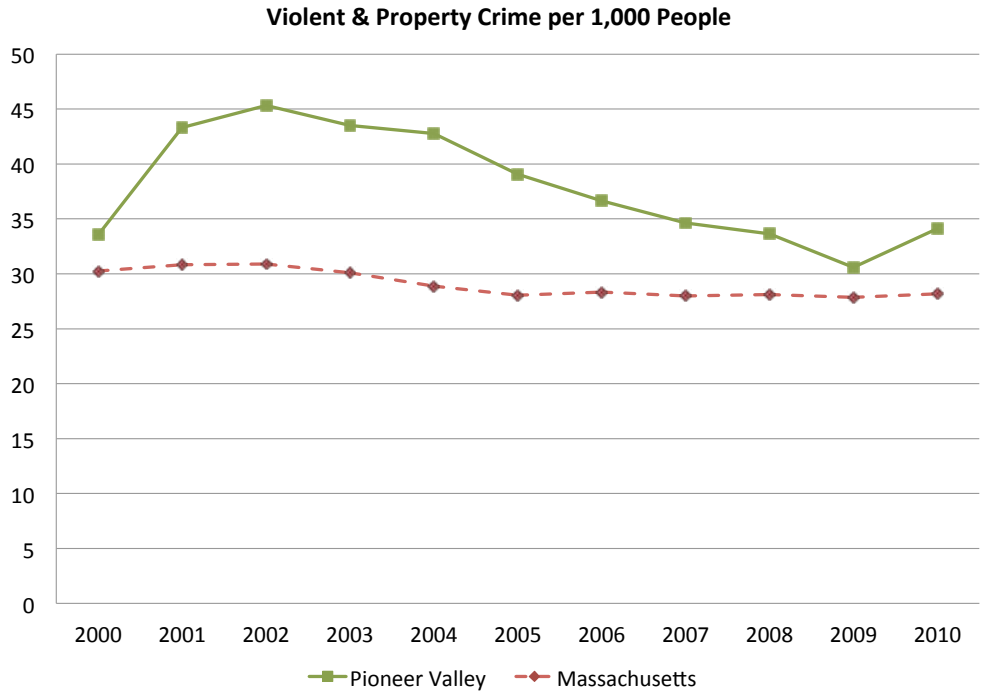
Goshen	0.0
Hawley	0.0
Monroe	0.0
Tolland	0.0
Amherst	4.2
Longmeadow	4.5
Conway	4.7
Northfield	4.9
Deerfield	5.1
Ashfield	5.2
Southampton	5.5
Erving	5.6
Granby	5.8
Wilbraham	6.0
Williamsburg	6.0
South Hadley	6.4
Hampden	6.6
Belchertown	6.7
Shutesbury	6.8
Brimfield	6.9
Hatfield	7.0
Granville	7.0
Hadley	7.2
Holland	7.3
Chesterfield	7.4
Westhampton	7.5
Pelham	7.6
East Longmeadow	7.7
Ludlow	7.8
Charlemont	7.9
Bernardston	8.0
Cummington	8.0
Orange	8.7
Southwick	8.7
Monson	10.0
Sunderland	10.6
Colrain	10.8
Agawam	10.8
Ware	10.8
Wales	11.4
Westfield	11.6
Chester	12.0
Pioneer Valley	***12.7***
Russell	13.0
Easthampton	13.4
West Springfield	14.1
Huntington	15.1
Northampton	15.3
Chicopee	15.4
Montague	15.9
Shelburne	16.4
Palmer	17.3
Springfield	18.1
Holyoke	20.4
Greenfield	23.3
Blandford	NA
Buckland	NA
Gill	NA
Heath	NA
Leverett	NA
Leyden	NA
Middlefield	NA
Montgomery	NA
New Salem	NA
Plainfield	NA
Rowe	NA
Warwick	NA
Wendell	NA
Whately	NA
Worthington	NA

CRIME

Crime rates are probably the most recognizable indicator of community safety, reflecting a community's ability to protect its people and their property. This indicator speaks directly to the level of crime within a community and the likelihood of a person within a community being the victim of a crime. Safe living conditions affect people's quality of life as well as the economy of a region. When crime rates are higher, employers are less likely to locate their businesses in that area, people are less likely to want to live or spend time in that community, and municipalities are required to spend more money protecting public safety, thus diverting public funds from other important areas. The number of reported violent and property crimes per 1,000 people are represented by this indicator. Violent crimes include murder, rape, robbery, and aggravated assault. Property crimes include burglary, larceny, and motor vehicle thefts.

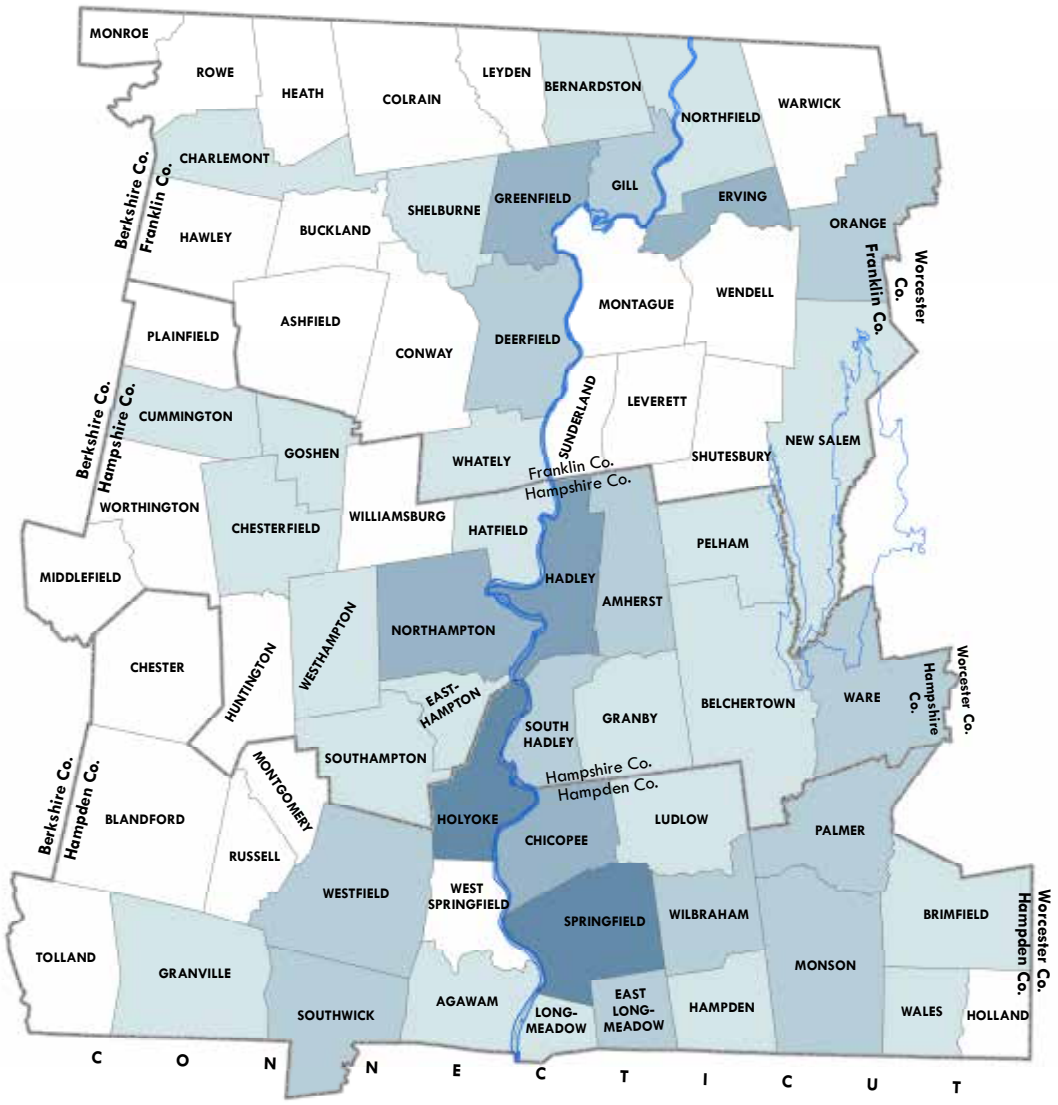
The rate of violent and property crimes throughout the Pioneer Valley spiked early in the decade, rising from 33.5 to 45.3 in a three-year time period between 2000-2002, however there has generally been a steady decline since then, recovering almost completely to 2000 rates by 2010. Indeed, between 2002 and 2010 the Pioneer Valley experienced a 25% decrease in violent and property crime rates, rising only slightly in 2010. Still, the region consistently had much higher violent and property crime rates than those statewide. While the state of Massachusetts also experienced a decrease (a more modest 9% reduction), the state finished 2010 with a rate of 28.2 which was 17% lower than the Pioneer Valley's rate of 34.1 percent.

Throughout the region, there was great disparity in the share of violent and property crimes. In 2009, while 13 communities had rates under 10 per 1,000 people, 11 communities had rates over 20. The communities of Holyoke, Springfield, Hadley, and Erving had the highest rates in the Pioneer Valley; all had rates over 40 per 1,000 people. On the other end of the spectrum, Hatfield, Cummington, Chesterfield, and Wales, all relatively small communities, had rates less than 3 per 1,000 people.



Note: It should be noted that rates in smaller communities are subject to more extreme fluctuations from year to year since a few cases can have a much larger affect on the rate for the community when the total population is smaller. For more information, see note in "About the Data" section of this report.

Violent and Property Crime/1000 People



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: U.S. Federal Bureau of Investigation, 2009

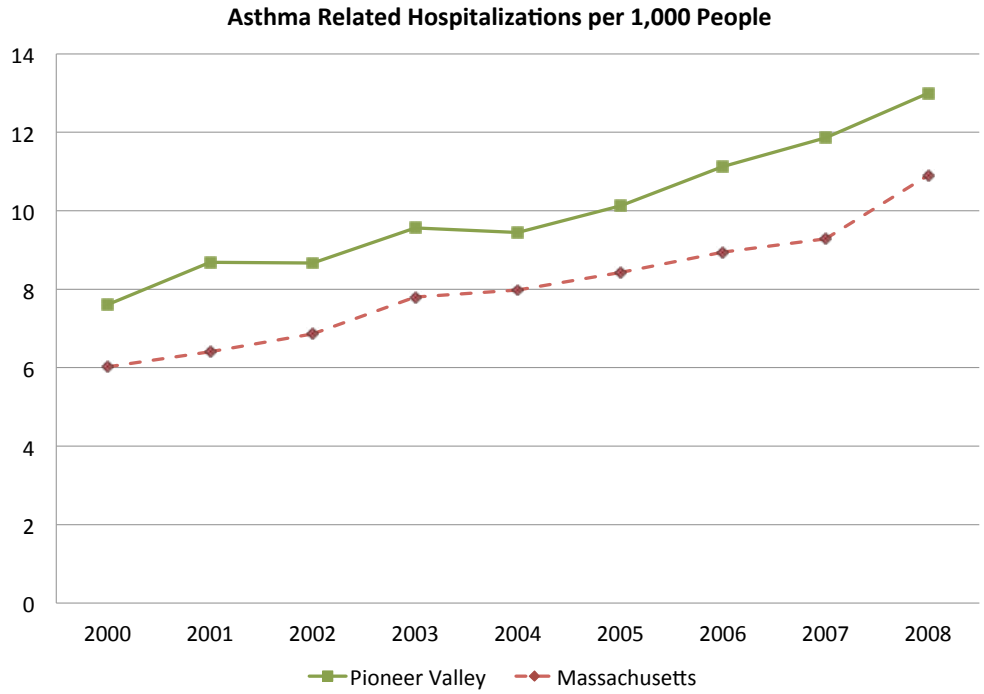
Hatfield	1.8
Cummington	2.0
Chesterfield	2.3
Wales	2.7
Brimfield	3.2
Westhampton	4.9
Charlemont	5.1
Goshen	5.1
Granville	5.2
New Salem	6.9
Pelham	7.7
Hampden	9.1
Granby	10.0
Shelburne	10.2
Southampton	11.0
Agawam	12.0
Bernardston	12.0
Northfield	12.2
Longmeadow	13.6
Ludlow	13.9
Easthampton	14.0
Belchertown	14.4
Whately	14.6
Wilbraham	15.0
Southwick	15.0
South Hadley	16.3
Amherst	16.4
Monson	17.2
Palmer	17.3
Gill	17.9
Westfield	18.9
Ware	21.2
Orange	23.6
Deerfield	26.4
East Longmeadow	28.7
Northampton	32.5
Pioneer Valley	***34.1***
Greenfield	34.5
Chicopee	36.0
Erving	40.3
Hadley	45.7
Springfield	61.5
Holyoke	75.4
Ashfield	NA
Blandford	NA
Buckland	NA
Chester	NA
Colrain	NA
Conway	NA
Hawley	NA
Heath	NA
Holland	NA
Huntington	NA
Leverett	NA
Leyden	NA
Middlefield	NA
Monroe	NA
Montague	NA
Montgomery	NA
Plainfield	NA
Rowe	NA
Russell	NA
Shutesbury	NA
Sunderland	NA
Tolland	NA
Warwick	NA
Wendell	NA
West Springfield	NA
Williamsburg	NA
Worthington	NA

ASTHMA

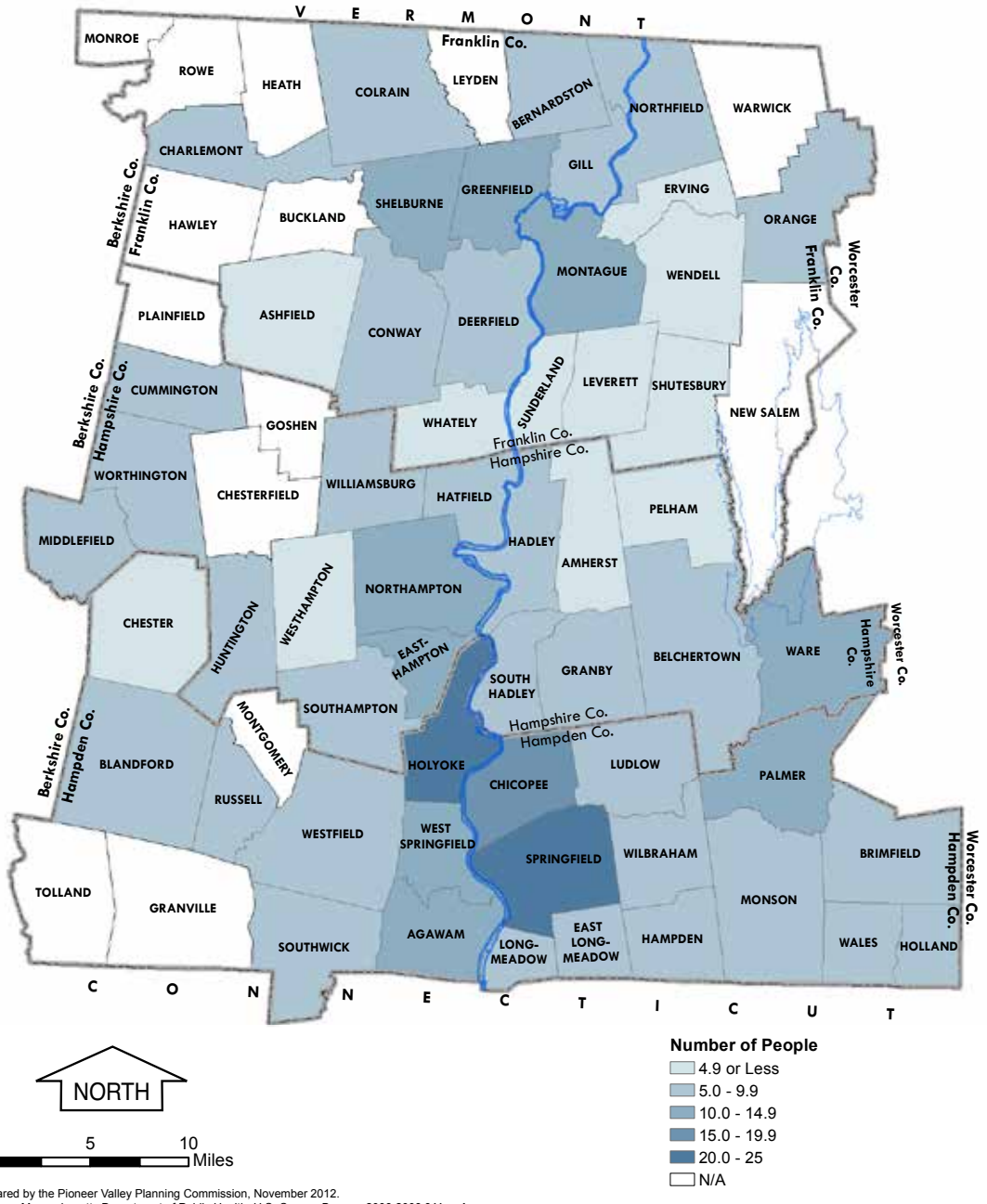
Asthma is closely related to environmental quality, including everything from air quality to the presence of mold in older residential structures. This indicator, therefore, measures the impact of our living environment on our health and well-being as well as how balanced or imbalanced the impact of environmental health factors is across the varied populations in the Pioneer Valley. An increase in asthma hospitalizations would likely indicate an increase in problematic environmental conditions. The number of people admitted to the hospital as a result of asthma or asthma-related complications is represented in this indicator by the number of hospitalizations per 1,000 people. Because such factors as rapid changes in weather can also trigger asthma symptoms, year-to-year changes may be related to differing seasonal weather patterns. Due to this as well as the fact that numbers for some communities were very small and disease incidences can vary greatly from year to year in small geographic areas, three years of data were averaged in order to compare trends across municipalities.

Overall, the number of asthma-related hospitalizations in the Pioneer Valley has steadily increased between 2000 and 2008, reaching 13 hospitalizations per 1,000 people in 2008. In 2000, The Pioneer Valley only saw 7.6 asthma and asthma related hospitalizations per 1,000 people. This represents a 70% increase in these types of hospitalizations. Though Massachusetts also saw increasing asthma and asthma related hospitalizations, increasing 80% statewide during that same time period, rates in the Pioneer Valley have been consistently higher than those statewide. Massachusetts asthma and asthma-related hospitalizations reached in 10.9 hospitalizations per 1,000 people in 2008, roughly 20% less than the rates for the Pioneer Valley.

Across the Pioneer Valley, communities varied in terms of the rates of asthma and asthma related hospitalizations and there was great disparity between the communities with the highest and lowest rates. On one hand, 12 communities had hospitalization rates under 5 per 1000 people, including Ashfield, Pelham, Shutesbury, Wendell, and Whately with the lowest rates in the region. At the same time, 12 communities had rates over ten, with the highest rates of hospitalizations located in Holyoke, Springfield, Chicopee, Shelburne Falls, West Springfield, and Ware. Unfortunately the communities that constitute the Urban Core of the Pioneer Valley all have high asthma and asthma related rates of hospitalization. This is likely affected by proximity of major highways (and associated vehicular traffic and emissions) and localized air quality issues.



Asthma Related Hospitalizations per 1000 People



Prepared by the Pioneer Valley Planning Commission, November 2012.
Sources: Massachusetts Department of Public Health; U.S. Census Bureau, 2006-2008 3 Year Average

Ashfield	1.6
Whately	1.7
Pelham	2.1
Wendell	2.6
Shutesbury	2.9
Chester	3.1
Amherst	3.7
Erving	4.1
Sunderland	4.1
Westhampton	4.2
Leverett	4.9
Worthington	5.0
Northfield	5.2
Charlemont	5.3
Southampton	5.5
Hampden	5.8
Conway	6.0
Deerfield	6.2
Bernardston	6.4
Longmeadow	6.5
Colrain	6.5
Granby	6.5
Hatfield	6.6
Holland	6.7
Hadley	6.9
Gill	7.0
Blandford	7.2
Williamsburg	7.2
Belchertown	7.3
Southwick	7.5
Wilbraham	7.8
Monson	7.8
Cummington	7.9
Huntington	8.0
Ludlow	8.0
Westfield	8.0
East Longmeadow	8.7
South Hadley	8.9
Brimfield	9.1
Wales	9.1
Orange	9.2
Middlefield	9.6
Russell	9.7
Montague	10.2
Agawam	10.3
Northampton	10.9
Easthampton	11.0
Greenfield	11.7
Palmer	11.8
Ware	11.9
West Springfield	12.2
Pioneer Valley	***13.0***
Shelburne	14.3
Chicopee	16.3
Springfield	22.2
Holyoke	22.9
Buckland	NA
Chesterfield	NA
Goshen	NA
Granville	NA
Hawley	NA
Heath	NA
Leyden	NA
Monroe	NA
Montgomery	NA
New Salem	NA
Plainfield	NA
Rowe	NA
Tolland	NA
Warwick	NA

D-
RATING

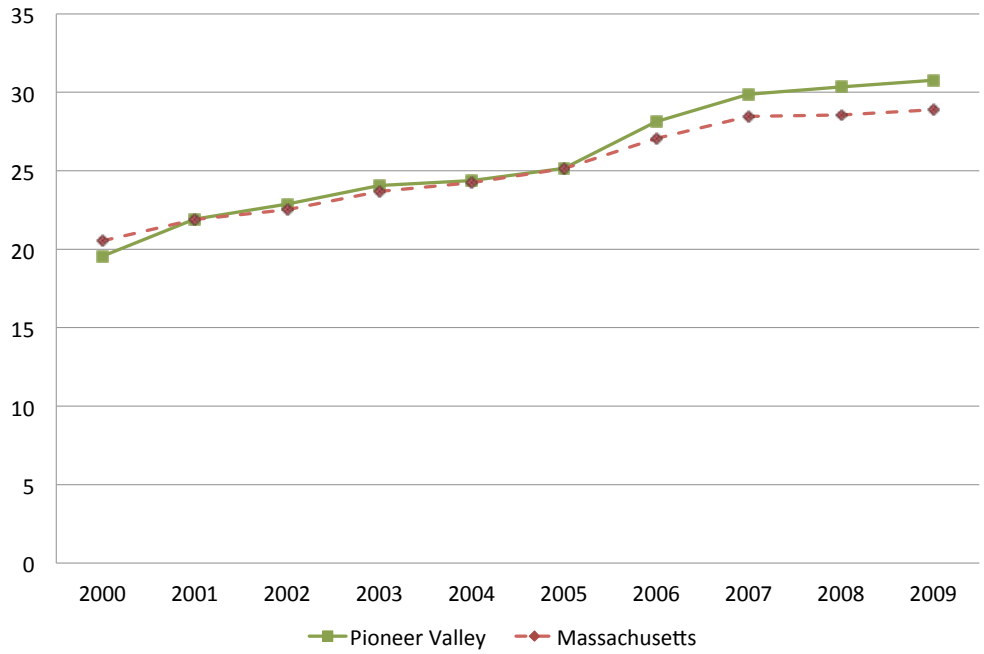
DIABETES

Similar to cardio vascular disease and many types of cancer, diabetes is a health condition whose risk can often be reduced by diet and lifestyle choices. Diabetes is also a health condition that contributes to other serious diseases and can be life threatening. In addition to the physical impacts this has on individuals, a high prevalence of diabetes also creates a high financial burden to the broader community and health care system. Thus, tracking the trends in the prevalence of diabetes suggests how well we are doing, as a community, in promoting and allowing for healthy lifestyle choices as well as preventing physically and financially costly diseases throughout the population. The number of hospitalizations due to diabetes and diabetes related complications per 1,000 people are reflected in this indicator.

Overall, between 2000 and 2009, the rate of diabetes related hospitalizations consistently rose across the Pioneer Valley, increasing from just under 20 per 1,000 people in 2000 to over 30 in 2009. This trend was similar to that of the state of Massachusetts as a whole, though the Pioneer Valley's rate has been higher than Massachusetts since 2001.

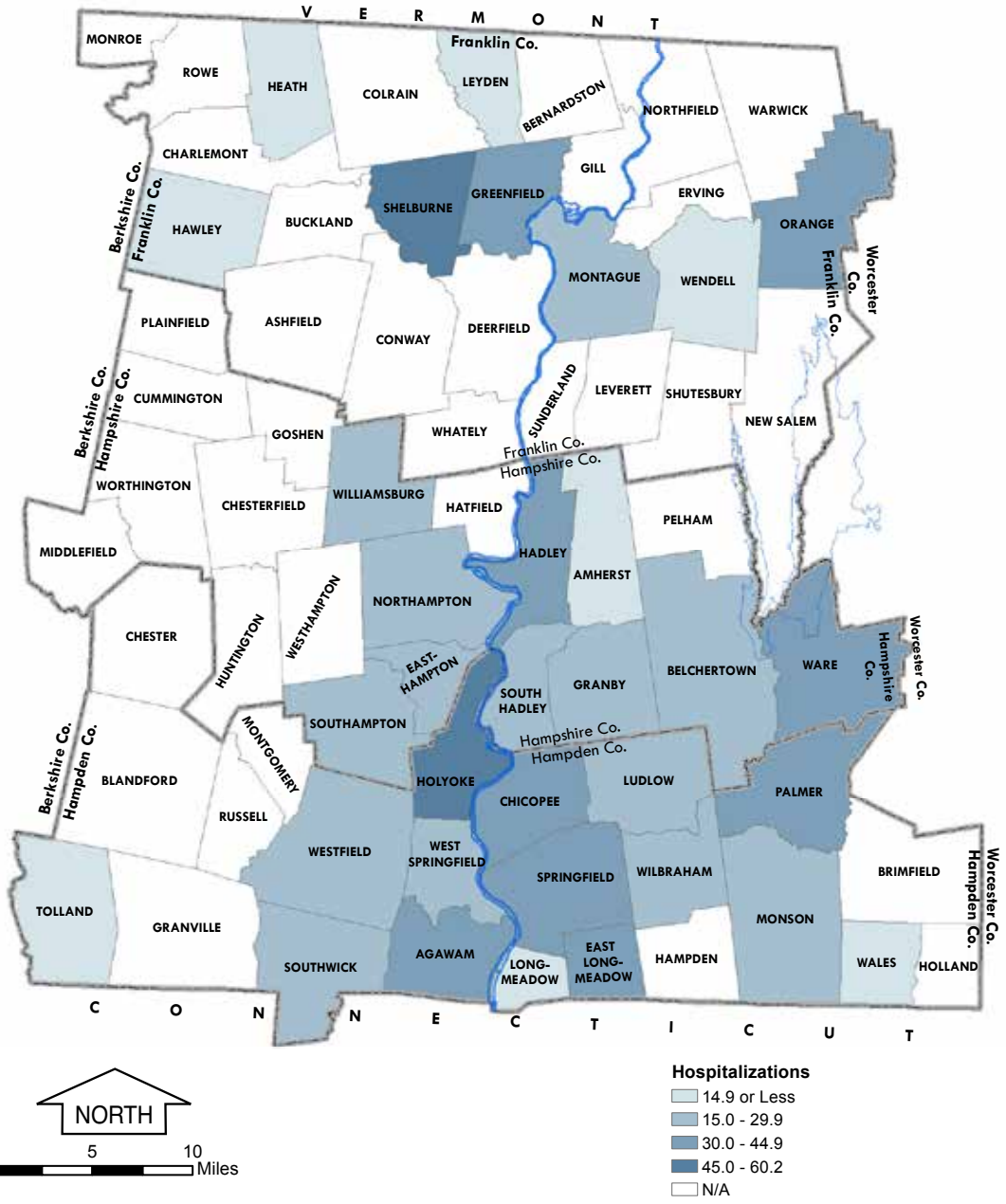
While there were many communities for which data was not available due to confidentiality reasons, there was a wide range of diabetes related hospitalizations across the region for those communities where data exists. Hawley, Leyden, and Tolland all reported zero hospitalizations per 1,000 people and Amherst, Heath and Wendell were all around 10 hospitalizations or below. At the same time, seven communities reported 35 hospitalizations or more (per 1,000 people) with Shelburne topping the list at 60.19. Below Shelburne were most of the region's more urban or low income communities including Holyoke, Springfield, Palmer, and Chicopee.

Diabetes and Diabetes Related Hospitalizations per 1,000 People



Note: It should be noted that rates in smaller communities are subject to more extreme fluctuations from year to year since a few cases can have a much larger affect on the rate for the community when the total population is smaller. For more information, see note in "About the Data" section of this report.

Diabetes and Diabetes Related Hospitalizations per 1,000 People



Prepared by the Pioneer Valley Planning Commission, November 2012.
Sources: Behavioral Risk Factor Surveillance System (BRFSS) via Massachusetts Department of Public Health; U.S. Census Bureau, 2009

Hawley	0.0
Leyden	0.0
Tolland	0.0
Amherst	7.1
Heath	8.8
Wendell	10.0
Longmeadow	14.9
Williamsburg	19.9
Belchertown	20.7
Southwick	21.2
Monson	23.7
Granby	24.0
Southampton	24.2
Ludlow	25.2
Westfield	25.8
Easthampton	26.3
West Springfield	26.5
Wilbraham	26.9
Montague	27.0
South Hadley	27.6
Northampton	29.0
Greenfield	30.4
Pioneer Valley	***30.8***
Orange	32.4
Hadley	33.0
Ware	34.9
East Longmeadow	36.7
Agawam	37.9
Chicopee	39.9
Palmer	40.8
Springfield	40.8
Holyoke	45.9
Shelburne	60.2
Ashfield	NA
Bernardston	NA
Blandford	NA
Brimfield	NA
Buckland	NA
Charlemont	NA
Chester	NA
Chesterfield	NA
Colrain	NA
Conway	NA
Cummington	NA
Deerfield	NA
Erving	NA
Gill	NA
Goshen	NA
Granville	NA
Hampden	NA
Hatfield	NA
Holland	NA
Huntington	NA
Leverett	NA
Middlefield	NA
Monroe	NA
Montgomery	NA
New Salem	NA
Northfield	NA
Pelham	NA
Plainfield	NA
Rowe	NA
Russell	NA
Shutesbury	NA
Sunderland	NA
Wales	NA
Warwick	NA
Westhampton	NA
Whately	NA
Worthington	NA

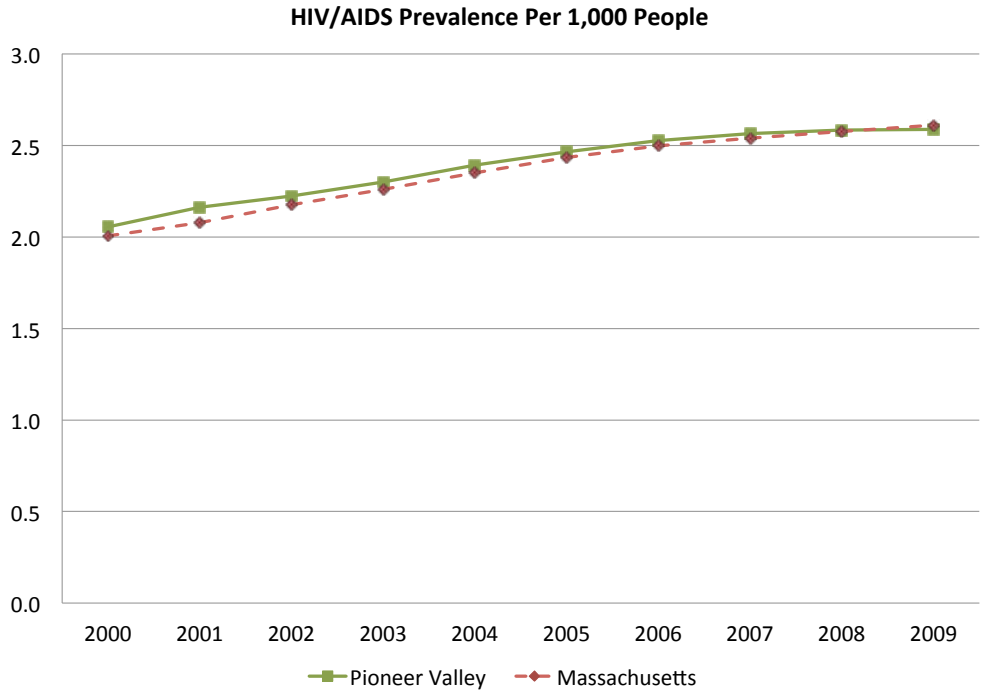
D+
RATING

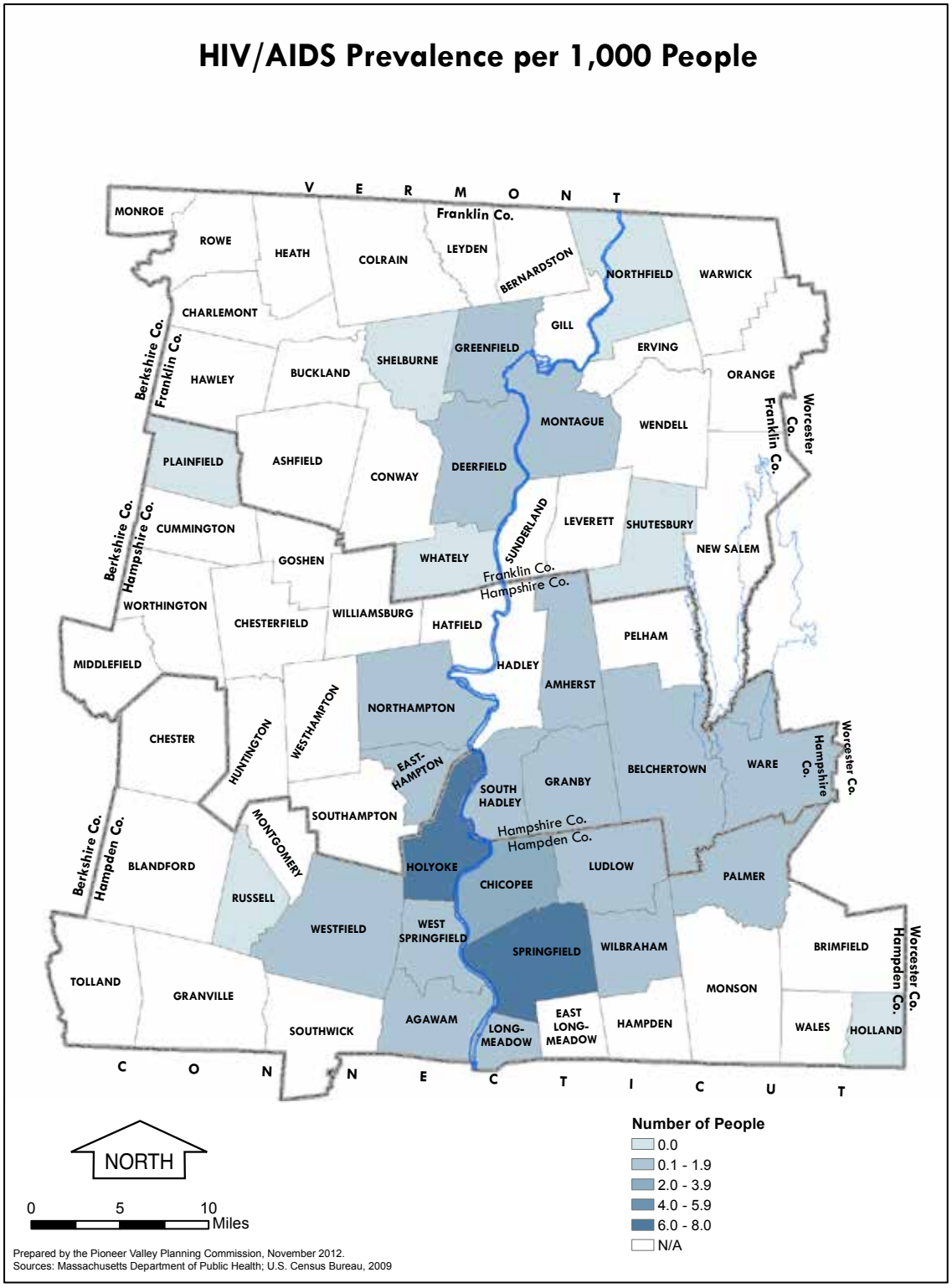
HIV/AIDS CASES

HIV (Human Immunodeficiency Virus) is the retrovirus that leads to AIDS (Acquired Immune Deficiency Syndrome). Since AIDS is largely a preventable disease, the prevalence of HIV/AIDS cases is a measure of society's ability to educate itself and take preventive action. Also, because intravenous drug use is one of the leading and fastest growing means of transmission for HIV/AIDS, this indicator also serves as a partial proxy for the prevalence of drug use in our region. This indicator reflects the number of cases of HIV/AIDS per 1,000 people in the population.

The Pioneer Valley experienced a slightly increasing rate of the prevalence of HIV/AIDS cases from 2000 through 2009 increasing from 2 to 2.5 people with HIV/AIDS per 1,000 people in the population. Encouragingly, during the last few years the number of cases appears to be leveling off indicating that growth in the spread of the AIDS/HIV may be slowing down. This trend within the region was quite similar to that across the state of Massachusetts. Between 2000 and 2009, Massachusetts saw a slightly sharper increase in the prevalence of HIV/AIDS statewide, increasing from 2 to 2.6 people with HIV/AIDS per 1,000 people in the population. The overall increase during that same time period was larger for Massachusetts (0.60) than that of the Pioneer Valley (0.53), indicating that the Pioneer Valley may be slightly better with regards to education, preventative actions, and in reducing intravenous drug usage.

Because of the small numbers involved and confidentiality reasons, it is not possible to determine the prevalence of HIV/AIDS cases per 1,000 people for every community in the Pioneer Valley. However, the data indicates that their occurrence is generally concentrated in the more urban areas of the region. In 2009, while seven communities had rates of zero, 11 communities had rates over one per 1,000 people. Clearly the low rates of AIDS/HIV cases were not consistent across the region as the region's largest cities of Holyoke and Springfield continued to experience alarmingly high rates (7.18 and 6.44 respectively).





Prepared by the Pioneer Valley Planning Commission, November 2012.
Sources: Massachusetts Department of Public Health; U.S. Census Bureau, 2009

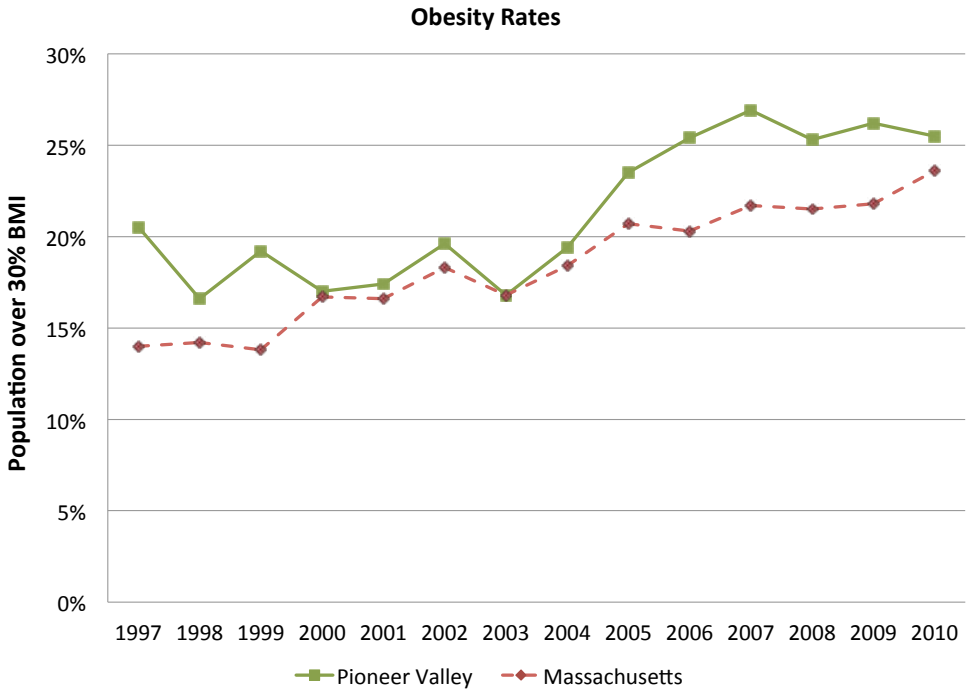
Holland	0.0
Northfield	0.0
Plainfield	0.0
Russell	0.0
Shelburne	0.0
Shutesbury	0.0
Whately	0.0
Wilbraham	0.4
Westfield	0.6
Palmer	0.7
South Hadley	0.7
Agawam	0.7
Granby	0.8
Amherst	0.8
Ware	0.8
Belchertown	0.8
Easthampton	1.1
Longmeadow	1.3
Northampton	1.5
Ludlow	1.6
Greenfield	1.6
West Springfield	1.6
Deerfield	1.7
Montague	1.7
Chicopee	2.3
Pioneer Valley	***2.6***
Springfield	6.4
Holyoke	7.2
Ashfield	NA
Bernardston	NA
Blandford	NA
Brimfield	NA
Buckland	NA
Charlemont	NA
Chester	NA
Chesterfield	NA
Colrain	NA
Conway	NA
Cummington	NA
East Longmeadow	NA
Erving	NA
Gill	NA
Goshen	NA
Granville	NA
Hadley	NA
Hampden	NA
Hatfield	NA
Hawley	NA
Heath	NA
Huntington	NA
Leverett	NA
Leyden	NA
Middlefield	NA
Monroe	NA
Monson	NA
Montgomery	NA
New Salem	NA
Orange	NA
Pelham	NA
Pioneer Valley	NA
Rowe	NA
Southampton	NA
Southwick	NA
Sunderland	NA
Tolland	NA
Wales	NA
Warwick	NA
Wendell	NA
Westhampton	NA
Williamsburg	NA
Worthington	NA

D+
RATING

OBESITY

The American epidemic and risks of obesity are, at this point, well documented and well known. Risks include higher rates of cardiovascular diseases, diabetes, musculoskeletal disorders, and some cancers. To a large extent, being overweight or obese is impacted by diet and exercise lifestyle choices. Obesity rates can be a good proxy for the type of education and resources available to population such as stores with health food options, and access to parks, bike paths, and recreation opportunities. The percent of the population whose Body Mass Index (BMI) was greater than 30% (considered obese) is reflected in this indicator.

The trend in obesity rates throughout the Pioneer Valley has not been good. While rates hovered around 17-20% in the late 1990's and even dipped as low as 16% in 2002, they have since skyrocketed, remaining over 25% between 2006-2010. While the region has consistently had higher rates than those state-wide, the trend across the state has actually been more dramatically negative. Massachusetts had rates as low as 14% in the late 1990's but reached a rate of just under 24% by 2010 – an increase of 10 percentage points. While this indicates a narrower gap between the Pioneer Valley and the whole of Massachusetts, the concerning truth is that in both cases, approximately one of every four people is considered obese. At the same time, this is significantly lower than the national rate of 35.7 percent.



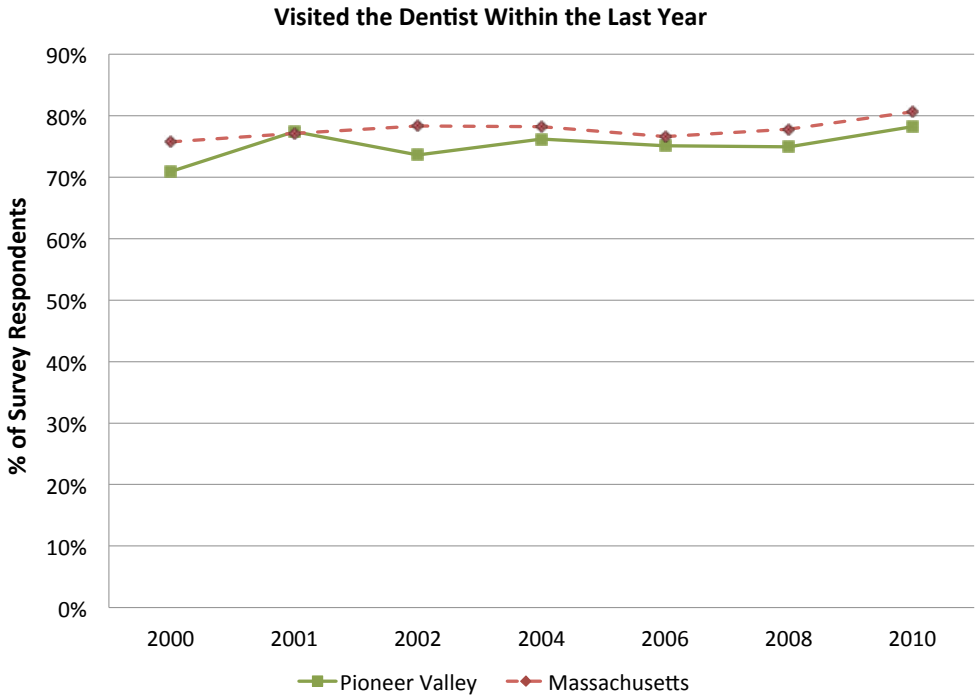
Source: Behavioral Risk Factor Surveillance System (BRFSS) via Massachusetts Department of Public Health; U.S. Census Bureau

B-
RATING

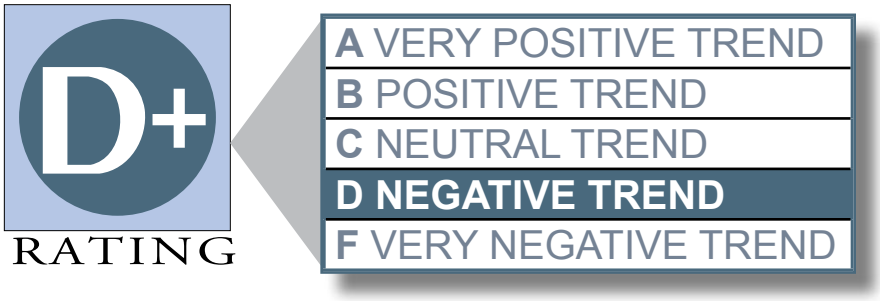
ORAL HEALTH

Good oral health is not just about having pretty and healthy teeth. Oral health includes many broader issues, as described by the U.S Surgeon General as being free of chronic oral-facial pain conditions, oral and throat cancers, oral soft tissue lesions, birth defects such as cleft lip and palate, and scores of other diseases and disorders that affect the oral, dental, and other tissues. Dentists and other oral health care providers are trained to look for early signs of much broader problems ranging from malnutrition, eating disorders, and cancerous tumors. The National Institute of Health recommends that annual visits with an oral health care provider can help ensure adequate prevention and diagnosis, risk assessment and risk management, and treatment of oral diseases and disorders. The percent of all people who had a dental visit within the last year is reflected in this indicator.

The Pioneer Valley has seen a positive trend in the percent of the population who regularly have a dental visit, increasing from 71% to 78% between 2000 and 2010. While rates within the region were consistently slightly below rates state-wide, the Pioneer Valley has been closing the gap in recent years. In 2001, the region was 5% below the state, but had closed that gap to only 2.5% in 2010 suggesting that relative to Massachusetts, the Pioneer Valley is improving.



Source: Behavioral Risk Factor Surveillance System (BRFSS) via Massachusetts Department of Public Health; U.S. Census Bureau



ECONOMIC SECURITY

Perhaps less personal than health and safety, but no less important, is the economic security of the region's residents. This section focuses on financial security: household income, income equality, poverty rates, unemployment rates, and presence of food deserts (lack of access to affordable healthy food, according to the USDA). These indicators measure the health and vitality of the region—without financial security, people cannot afford to pay for their basic needs, contribute a strong tax base to invest in their community (safety, education, infrastructure), or help support a thriving local economy.

Overall, our region's economic security is not as strong rates statewide. The median household income is a mere 78% of the Massachusetts rate, and unemployment rates have been slightly higher within the region as well, rising along with state and national rates during the recent economic downturn. On a positive note, the Pioneer Valley has higher rates of income equality between households and this continues to improve in recent years.

Indicator	Summary	Rating
Household Income	Median household income has been stable, but consistently much lower than that statewide, with the gap increasing. Equity is poor amongst most communities.	D+
Income Equality	Income equality is stable, and consistently better than Massachusetts rates. Many communities within the region have much better income equality than others.	C+
Poverty	Poverty rates are consistently higher than those statewide, and the gap continues to increase. While most communities within the region have similar rates, there is poor equity between the highest and lowest performing communities.	D
Family Economic Self-Sufficiency	Rates of family economic self-sufficiency are lower within the region than statewide. Equity between most communities is good, but the gap between the highest and lowest performing communities is poor.	D
Unemployment	Unemployment rates rose significantly within the last few years, and were slightly higher than those for Massachusetts. Equity was neutral amongst most communities, but poor for the highest and lowest within the region.	D+
Food Deserts	The percentage of the population living in a food desert was higher than that statewide, but concentrated in a few areas. Equity was good amongst most communities but the gap between the highest and lowest performing communities was large.	D+

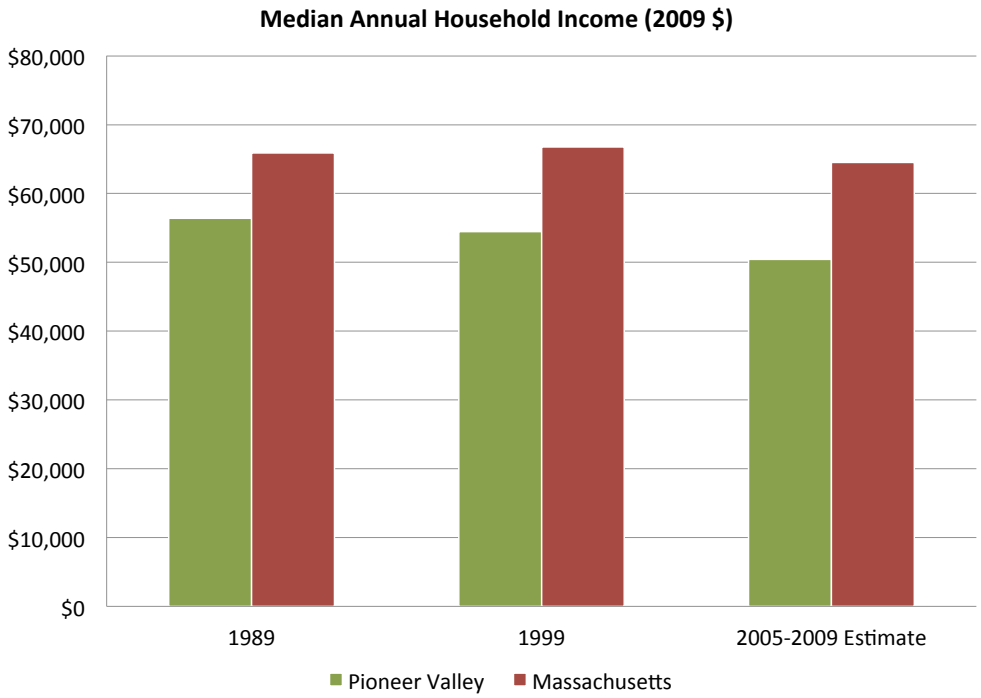
HOUSEHOLD INCOME

Median household income represents how much money a precisely middle-income household receives in a year and, because of this, it is a common indicator of household finances. Unlike measuring average (or mean) income, which can be elevated by the presence of a very few wealthy households, the median reflects the true middle. The amount of money a household has to live on is perhaps the most important indicator of economic security, because it reflects a household's ability to provide for itself.

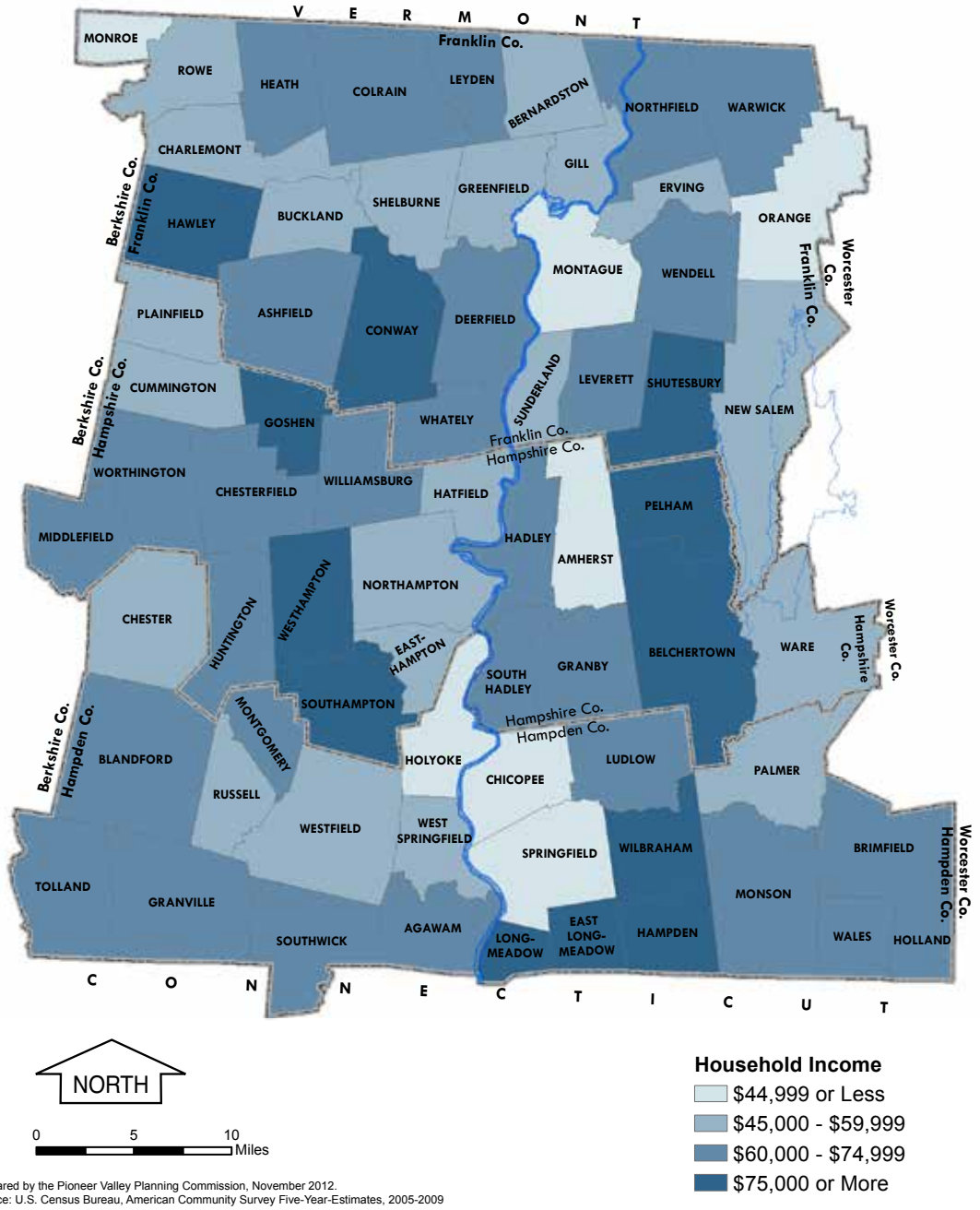
Half of all households have more income and half of all households have less income than the median household income for a given community. A household refers to any group of people who live within the same housing unit, and their collective income is the amount of money received by all members of the household who are older than 14 during the course of the year. Household income includes wages, social security, retirement funds, public assistance, and other forms of cash income.

According to the U.S. Census Bureau's 2005-2009 American Community Survey, the median household income for the Pioneer Valley was $50, 417. When applied to the range of median household incomes for each community, only 14 towns fall below this mark. In the same survey, Massachusetts as a whole had a median household income of $64,496. Applying this number to the Pioneer Valley communities, over half of the valley falls under the state's median. Since 1989, the median household income in the Pioneer Valley has consistently been significantly lower than the state as a whole and this gap appears to be increasing. In 1989, the median household income in the region was about 86% of that of the state. Yet the 2005-2009 estimates show this dropping to only 78 percent.

Within the region, there was significant disparity. The five communities with the lowest median household income ranged between $31,000 – 42,000 and included Monroe, Springfield, Holyoke, Orange and Montague. Chicopee was sixth from the bottom with a median income of $42,788. This measure displays significant challenges in both rural and urban areas. To emphasize the disparity across the region, while Longmeadow was community with the median household income at $91,132, Monroe was the lowest at $31,071, representing only 34% of the income levels in Longmeadow.



Median Annual Household Income (2009 $)



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: U.S. Census Bureau, American Community Survey Five-Year-Estimates, 2005-2009

Monroe	$31,071
Springfield	$34,113
Holyoke	$34,496
Orange	$41,000
Montague	$41,865
Chicopee	$42,788
Amherst	$44,011
Greenfield	$45,188
Ware	$46,992
Erving	$49,076
Charlemont	$49,792
Sunderland	$49,985
Easthampton	$50,257
Buckland	$50,350
Pioneer Valley	*$50,417*
Northampton	$51,018
West Springfield	$51,099
Rowe	$51,125
Palmer	$51,154
Westfield	$52,425
Hatfield	$53,684
Cummington	$54,375
Plainfield	$54,375
Shelburne	$55,197
Gill	$56,066
Chester	$56,125
Russell	$58,917
New Salem	$59,267
Bernardston	$59,438
Chesterfield	$60,000
Colrain	$60,028
Wales	$60,132
Ashfield	$60,375
Worthington	$60,463
Montgomery	$61,042
Ludlow	$61,768
Agawam	$61,944
South Hadley	$62,465
Hadley	$62,731
Tolland	$62,788
Williamsburg	$63,636
Heath	$64,531
Wendell	$65,104
Warwick	$66,250
Leverett	$66,630
Deerfield	$66,703
Middlefield	$67,083
Granby	$68,412
Monson	$68,661
Huntington	$69,539
Northfield	$70,064
Southwick	$70,423
Blandford	$71,042
Whately	$72,868
Holland	$73,125
Leyden	$73,523
Granville	$73,571
Brimfield	$74,355
Belchertown	$75,068
Shutesbury	$76,250
Hawley	$76,406
Westhampton	$76,739
Conway	$78,095
East Longmeadow	$78,578
Hampden	$78,659
Southampton	$80,667
Pelham	$81,389
Goshen	$83,333
Wilbraham	$90,670
Longmeadow	$91,132

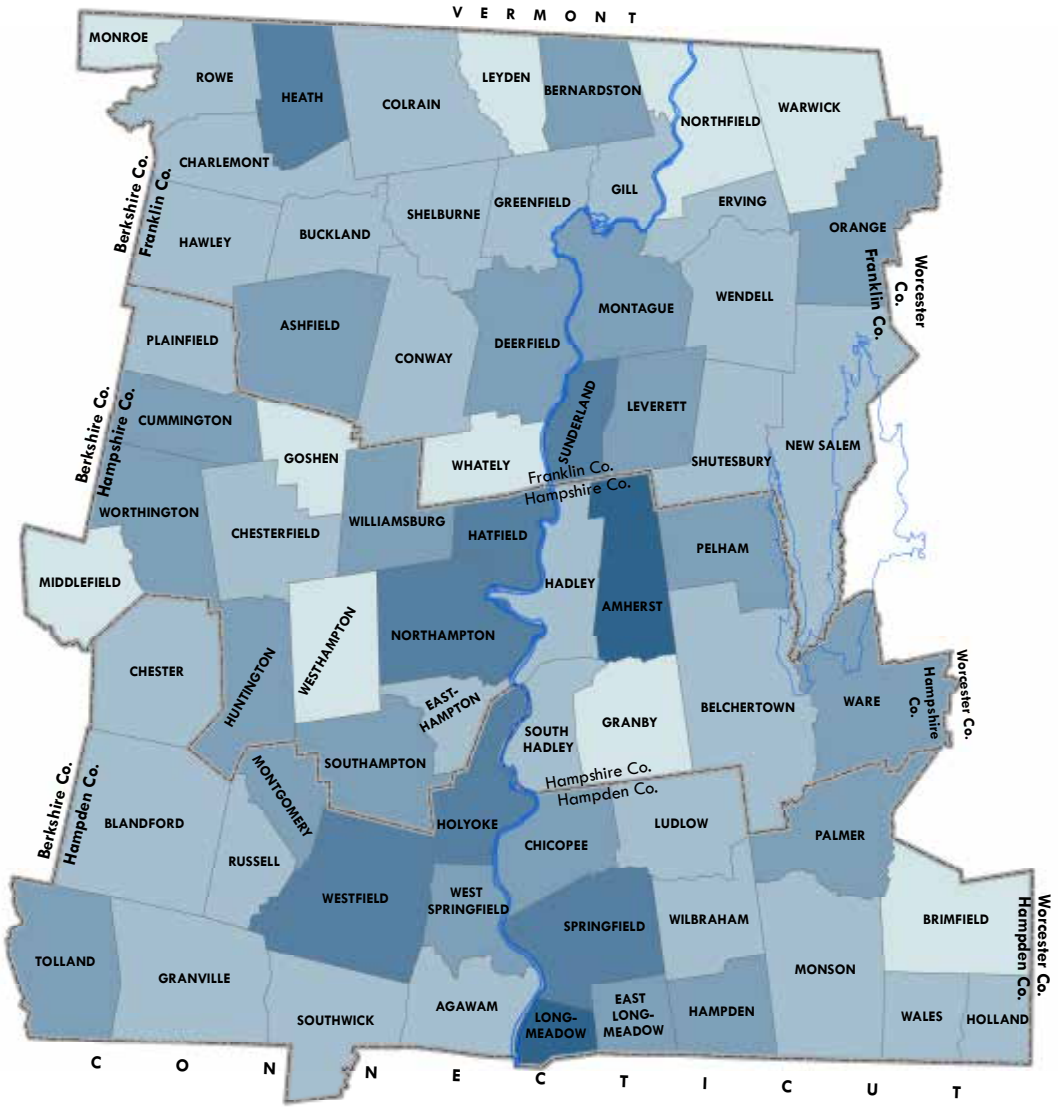
INCOME EQUALITY

In addition to measuring how the average person or family is doing economically in the region or how many households are in a state of crisis, it is beneficial to measure the overall level of economic equality or inequality between the people throughout the region. A community with lower levels of economic inequality is more likely to have economic and social stability at a community-wide level. Income inequality is a good way to provide a snapshot of how income is distributed throughout a particular study area. A way to measure the equality of a region is by using the Gini Coefficient. The Gini is a measure of how income is or is not equally distributed through a particular area. The Gini is measured on a scale of 0 to 1, where 0 is complete equality and 1 is complete inequality. This indicator is important to measure because it can show areas that might not otherwise appear on other simple income analyses which deal more with averages - the Gini Coefficient has the ability to hold accountable higher incomes that would skew those analysis that analyze standard averages.

Comparing the income inequality of the Pioneer Valley to Massachusetts as a whole, the Pioneer Valley has more equality of income than the state as a whole. In 2010, income inequality in the region was slightly less than it was in 2006. Simultaneously, the income inequality for the state has increased slightly over the same period of time.

Municipal level income inequality (inequality within a single city or town) varied greatly across the region. Communities with the highest Gini Coefficients (highest inequality) included communities with a wide-variety of poverty rates and median household incomes and included Amherst (0.525), Longmeadow (0.501), Holyoke (0.480), Northampton (0.479), and Heath (0.470). From the top five it can be said that the communities with higher inequality tend to be those that are higher in population, but not necessarily urban core cities. Amherst and Northampton, although fairly populous, are representative of the Five College area, where it would be expected to have large segments of the population with relatively low-income residents such as students. Communities with the lowest income inequality tend to be the more rural and suburban towns. These include Westhampton (0.317), Whately (0.322), Warwick (0.326), Monroe (0.337), and Leyden (0.337).

GINI Index
Income Inequality



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: U.S. Census Bureau, American Community Survey 5-Year-Estimates, 2006-2010

Westhampton	0.317
Whately	0.322
Warwick	0.326
Monroe	0.329
Leyden	0.337
Northfield	0.338
Middlefield	0.341
Brimfield	0.343
Goshen	0.344
Granby	0.346
Russell	0.350
Rowe	0.358
Erving	0.363
Monson	0.364
Plainfield	0.364
South Hadley	0.364
Gill	0.366
Holland	0.367
Chester	0.368
New Salem	0.368
Charlemont	0.370
Ludlow	0.379
Shelburne	0.381
Granville	0.383
Shutesbury	0.387
Southwick	0.387
Wales	0.387
Belchertown	0.388
Hawley	0.388
Hadley	0.389
Wendell	0.389
Wilbraham	0.390
Blandford	0.391
Chesterfield	0.391
Colrain	0.391
Easthampton	0.395
Agawam	0.397
Buckland	0.398
Greenfield	0.398
Conway	0.399
Orange	0.401
Williamsburg	0.402
Hampden	0.403
Huntington	0.403
Ware	0.403
Deerfield	0.404
Pelham	0.404
Ashfield	0.406
Tolland	0.407
Southampton	0.408
Worthington	0.410
Bernardston	0.411
Chicopee	0.415
East Longmeadow	0.418
Montgomery	0.427
Cummington	0.433
West Springfield	0.433
Montague	0.435
Palmer	0.436
Leverett	0.438
Pioneer Valley	***0.450***
Sunderland	0.453
Westfield	0.456
Springfield	0.457
Hatfield	0.463
Heath	0.470
Northampton	0.479
Holyoke	0.480
Longmeadow	0.501
Amherst	0.525

D RATING

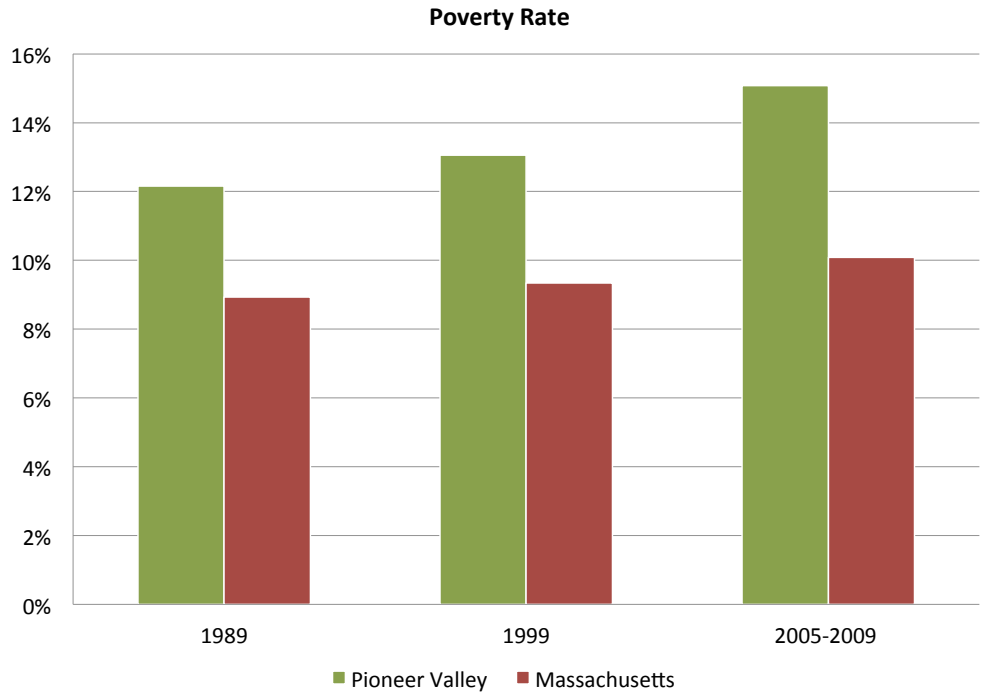
POVERTY

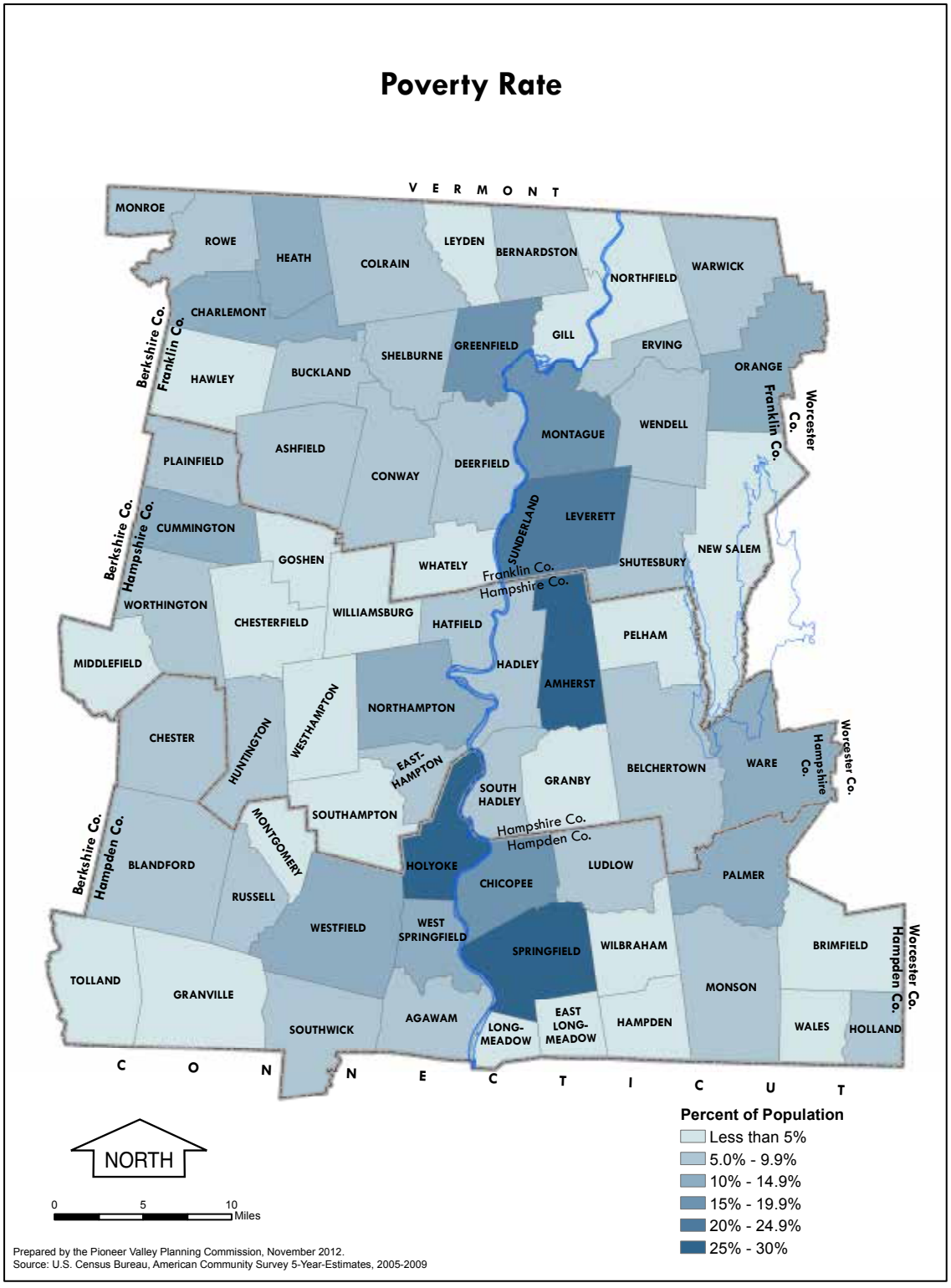
Poverty rates are an important indicator of what portion of a community's population likely lacks the necessary resources to provide for themselves or their families. Furthermore, poverty rates are very valuable as a comparative tool, allowing the identification of particular neighborhoods or communities that have a significant population of people who are financially poor.

The most widely used measure of poverty is the poverty rate, which is the percentage of all people (for whom poverty status was determined) who are living in households with incomes that fall below the federal poverty line. The poverty line is established based on the current cost of basic goods and services (such as food, housing, transportation, and other goods and services), and what proportion of family income is spent on those items. While the threshold is adjusted over time and is dependent on family size and ages of family members, it is increasingly thought to understate the extent of poverty. In 1999, the poverty threshold for a family of four with two children under 18 was $16,895. The threshold in 2009 was $21,954 – a very low level of income given that a low-cost one-bedroom apartment in western Massachusetts will typically rent for more than $7,500 per year.

Over the two decades between 1989 and 2009, poverty rates in the Pioneer Valley have been on the rise, increasing by 0.9% between 1989-1999 and by 2% between 1999-2009. The poverty rate for the Pioneer Valley, according to the 2005-2009 estimates, was 15.1 percent. While the Massachusetts statewide trends are also of continued increases in poverty, the poverty rates within the region are, unfortunately, much higher and increasing at a faster rate. Compared to the region's poverty rate of 15.1 percent, the rate statewide during the same time period was 10.1 percent.

Like other economic indicators, there was much disparity across the individual communities of the Pioneer Valley when it came to poverty rates. While 23 communities in the region had poverty rates below 5 percent, 17 communities had rates above 10 percent. Five of these communities had poverty rates above 20% and included Leverett, Sunderland, Springfield, Holyoke, and Amherst. The presence of a large student population may have influenced the presence of Amherst and Sunderland in this list.





Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: U.S. Census Bureau, American Community Survey 5-Year-Estimates, 2005-2009

Middlefield	0.8%
Granville	1.1%
Goshen	1.2%
Longmeadow	1.8%
East Longmeadow	2.2%
Leyden	2.6%
Hampden	3.0%
Northfield	3.5%
Whately	3.5%
Chesterfield	3.6%
Westhampton	3.6%
Wilbraham	3.9%
Brimfield	4.0%
New Salem	4.1%
Granby	4.3%
Montgomery	4.5%
Wales	4.5%
Williamsburg	4.5%
Gill	4.6%
Southampton	4.7%
Pelham	4.7%
Tolland	4.7%
Hawley	4.9%
Belchertown	5.0%
Ludlow	5.1%
Warwick	5.1%
Blandford	5.1%
Hatfield	5.5%
Bernardston	5.6%
Chester	5.7%
Southwick	5.7%
Agawam	6.1%
Colrain	6.3%
South Hadley	6.7%
Easthampton	6.8%
Ashfield	6.9%
Holland	7.0%
Hadley	7.1%
Russell	7.2%
Monson	7.4%
Wendell	7.6%
Plainfield	7.6%
Worthington	8.0%
Shutesbury	8.1%
Buckland	8.1%
Conway	8.3%
Monroe	8.3%
Deerfield	8.4%
Shelburne	8.9%
Huntington	9.0%
Rowe	9.1%
Erving	9.8%
Palmer	10.1%
Charlemont	10.3%
West Springfield	11.5%
Westfield	12.0%
Northampton	12.7%
Heath	14.2%
Ware	14.3%
Cummington	14.7%
Orange	14.9%
Pioneer Valley	*15.1%*
Montague	15.1%
Chicopee	15.4%
Greenfield	16.4%
Leverett	20.5%
Sunderland	21.4%
Springfield	27.4%
Holyoke	28.4%
Amherst	29.3%

D
RATING

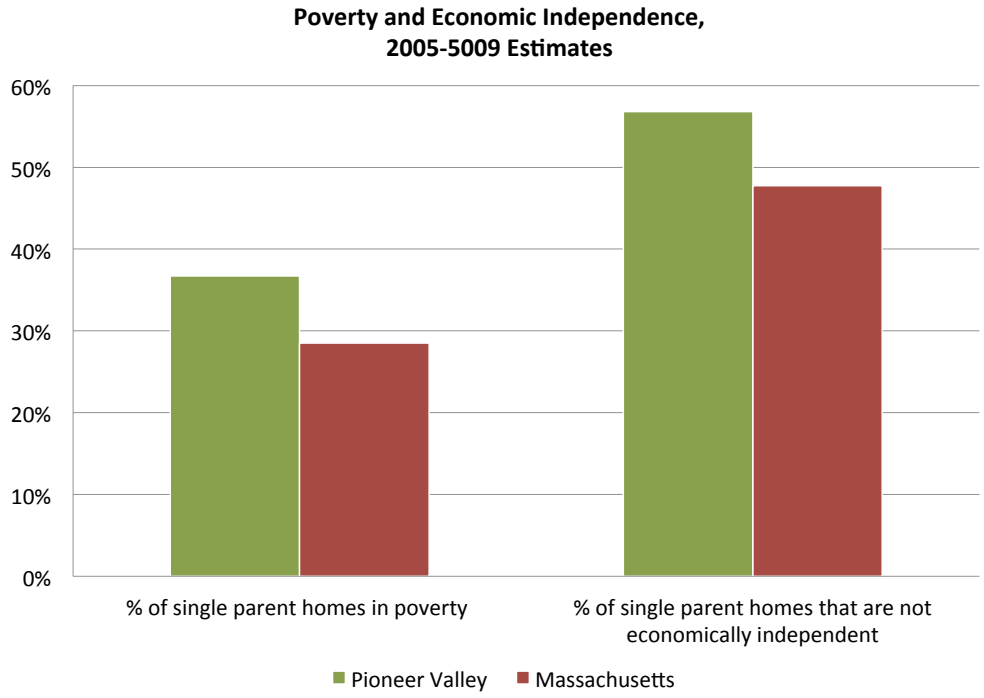
SELF-SUFFICIENCY

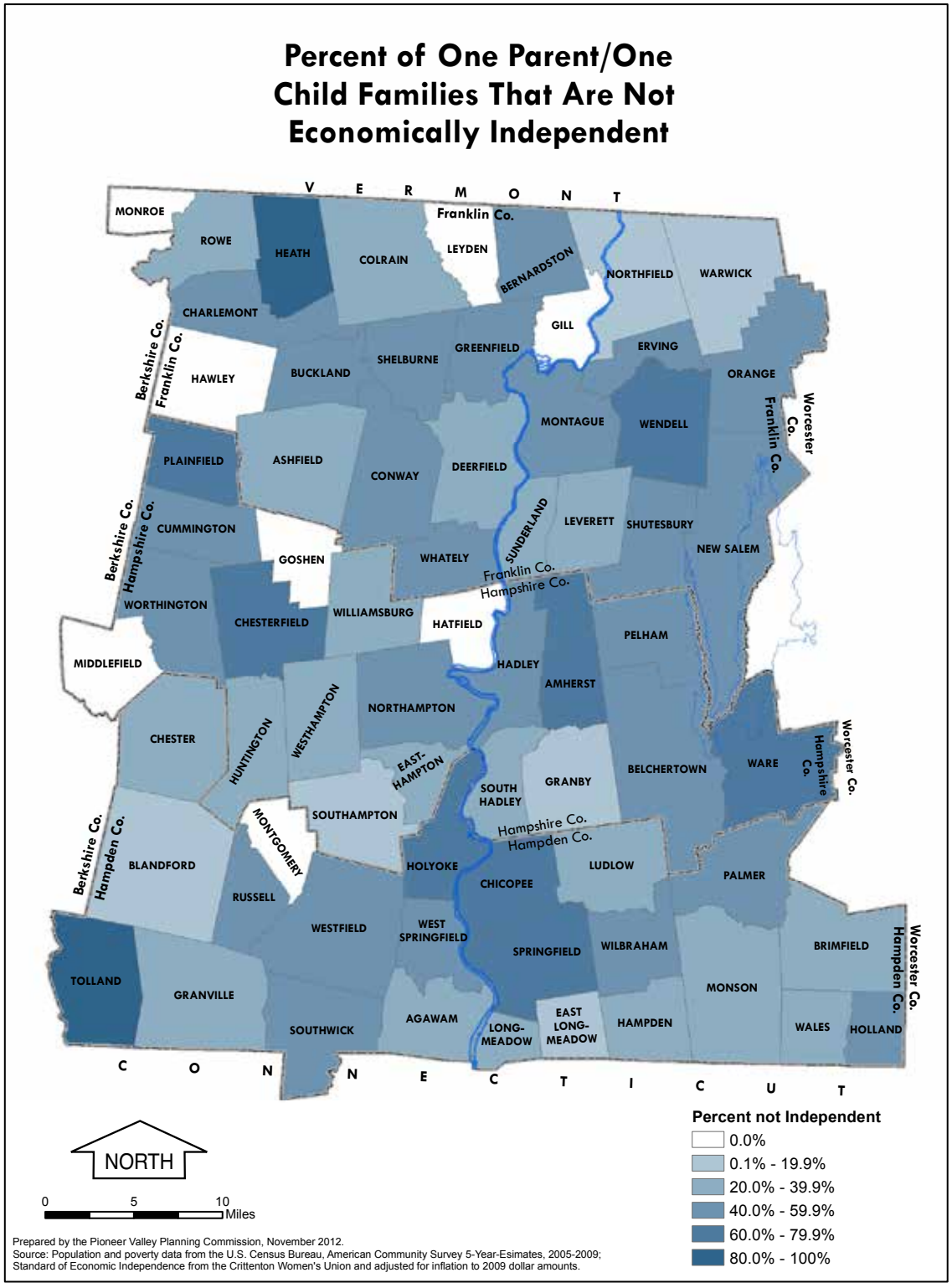
While measuring poverty and median household income provides some baseline measure of what portion of our community is in dire economic need or the general direction of household economic trends, those measures each have some limitations and don't necessarily answer the direct question of whether households have what they need to support themselves in an effective and sustainable manner. To help answer this question, the Crittenton Women's Union developed the 2010 Massachusetts Economic Independence Index (Mass Index) which is described as an index that provides a realistic estimate of "what it takes for a family to make ends meet in Massachusetts without relying on public or private assistance." This indicator compares the percent of single parent homes that are considered to not be economically independent based on the Mass. Index and compares it to the poverty rate during the same time period.

The census poverty threshold in 2009 was $17,268 for 2 adults and 1 child and $14,787 for one adult (under 65 years old) and one child. In comparison, the annual salary needed by one adult and one child in the Mass Index was $32,667 for Franklin County, $33,481 for Hampden County and $33,170 for Hampshire County.

As with poverty rates, the Pioneer Valley has a significantly higher rate of single parent families who make below the Mass Index level of self-sufficiency. In the Pioneer Valley, 36.7% of single parent families live below the poverty line, and 56.8% of single parent families are not economically independent.

The municipalities that have the top five highest rates of single parent families that are not economically independent include Chesterfield, Plainfield, Holyoke, Tolland and Heath, with Springfield and Ware following closely. Both Heath and Tolland have 100% of their single parent families qualifying as not economically independent with Holyoke following at 74.7 percent. There are eight towns estimated to have no single parent families who are not economically independent. Those communities are Hawley, Monroe, Hatfield, Gill, Goshen, Montgomery, Leyden, and Middlefield.





Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: Population and poverty data from the U.S. Census Bureau, American Community Survey 5-Year-Esimates, 2005-2009;
Standard of Economic Independence from the Crittenton Women's Union and adjusted for inflation to 2009 dollar amounts.

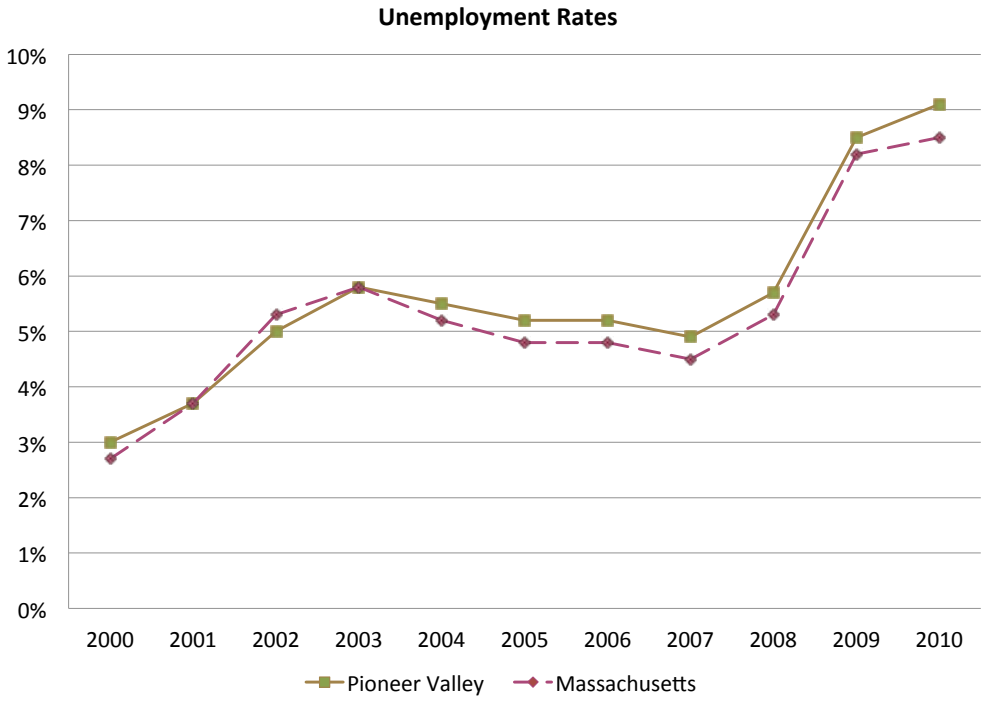
Gill	0.0%
Goshen	0.0%
Hatfield	0.0%
Hawley	0.0%
Leyden	0.0%
Middlefield	0.0%
Monroe	0.0%
Montgomery	0.0%
Blandford	8.0%
East Longmeadow	11.3%
Granby	13.0%
Southampton	13.6%
Warwick	15.8%
Northfield	19.4%
Rowe	20.0%
Monson	20.7%
Brimfield	21.8%
Granville	22.2%
Westhampton	24.5%
Williamsburg	25.5%
Leverett	26.0%
Huntington	26.4%
Colrain	27.3%
Agawam	27.4%
Easthampton	29.1%
Longmeadow	30.0%
Deerfield	30.1%
Ashfield	30.4%
Chester	31.6%
South Hadley	32.1%
Wales	32.7%
Sunderland	34.4%
Ludlow	35.9%
Hampden	36.0%
Bernardston	40.8%
Charlemont	40.9%
Northampton	41.6%
Belchertown	42.2%
Wilbraham	42.4%
Conway	42.6%
Holland	42.6%
New Salem	42.9%
Montague	44.0%
Shelburne	45.2%
West Springfield	45.3%
Orange	47.2%
Worthington	48.1%
Buckland	50.0%
Cummington	50.0%
Southwick	52.4%
Erving	52.9%
Westfield	53.0%
Greenfield	53.2%
Russell	54.2%
Shutesbury	54.5%
Pelham	54.9%
Whately	55.0%
Palmer	56.5%
Pioneer Valley	***56.8%***
Hadley	56.8%
Amherst	61.3%
Chicopee	66.1%
Wendell	67.7%
Springfield	68.4%
Ware	69.4%
Chesterfield	69.7%
Plainfield	72.7%
Holyoke	74.7%
Heath	100.0%
Tolland	100.0%

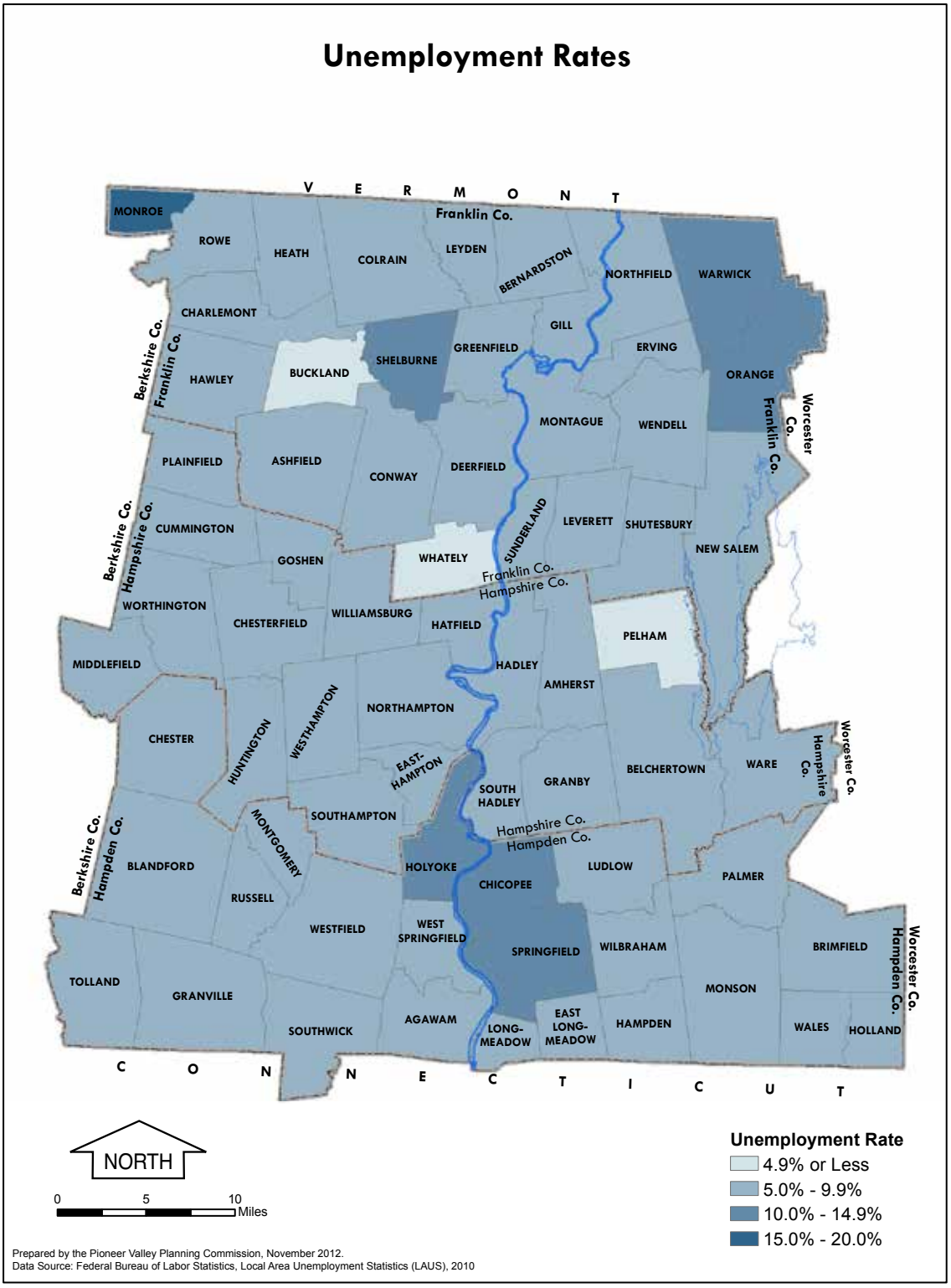
UNEMPLOYMENT

The unemployment rate, produced by the U.S. Bureau of Labor Statistics, is the percentage of people in the labor force who do not have a job (the labor force is the sum of those who have a job and those who are looking for a job). The unemployment rates are an often-used indicator to report on the state of the economy: a high unemployment rate can indicate a shrinking economy. Furthermore, unemployment rates give an idea of the portion of a community's population that is financially insecure because they do not have a job. It should be noted that because unemployment rates are calculated based on a percentage of the people who are looking for work, it is actually an undercount of the total number of unemployed people who may actually wish to be employed. The unemployment rate does not include people who left the official labor force. This too is a significant factor as it underscores the growing portion of the population who are no longer considered employable for any number of reasons.

Since 2000, unemployment trends of the Pioneer Valley reflect that of Massachusetts as whole. While converging in 2003 at just below 6%, the valley's unemployment rates have remained slightly higher than the state as a whole since then. After rising in the early 2000's, unemployment hit a plateau from 2003 to 2007, and even decreased some before rising again in 2008. Most recently unemployment numbers have been on the rise since late 2008 when it was at about 6% through 2010 when the most recent recession hit the nation's economy and the Pioneer Valley's unemployment rose to 9.1 percent.

There was a wide variety of unemployment rates throughout the valley, from 3.8% in Pelham, to 8.5% in Westfield to 18.5% in Monroe. There were only 3 communities with unemployment below 5%, and those communities are Pelham, Buckland and Whately. There were sixteen Pioneer Valley communities above the regional unemployment level of 9.1% in 2010. The seven towns with the highest unemployment rates in the region ranged from 10% in Warwick to a striking 18.5% in Monroe. While the urban core cities of Springfield, Holyoke, and Chicopee were among the communities on that list, the others were all smaller, more rural communities.





Prepared by the Pioneer Valley Planning Commission, November 2012.
Data Source: Federal Bureau of Labor Statistics, Local Area Unemployment Statistics (LAUS), 2010

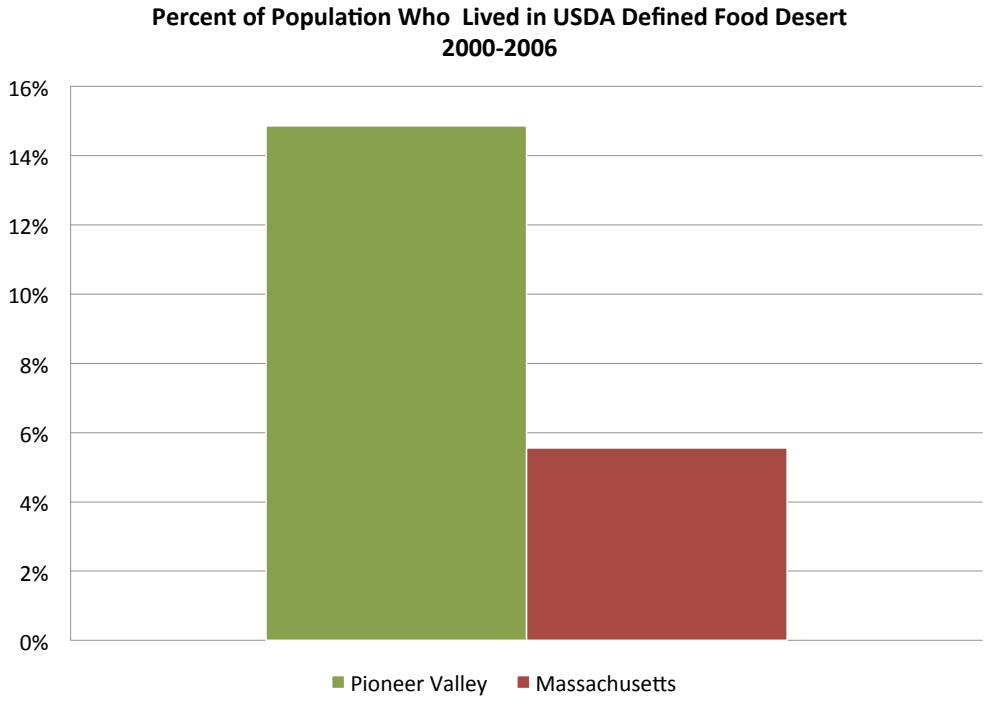
Pelham	3.8
Buckland	4.2
Whately	4.5
Tolland	5.1
Leverett	5.3
Sunderland	5.5
Amherst	5.6
Conway	5.6
Leyden	5.6
Shutesbury	5.8
Goshen	6.1
Hatfield	6.1
Longmeadow	6.1
Northampton	6.1
Ashfield	6.2
Middlefield	6.2
Westhampton	6.2
Southampton	6.8
Heath	6.9
Northfield	7.0
Belchertown	7.1
Hawley	7.1
Wilbraham	7.1
Deerfield	7.3
East Longmeadow	7.3
Hadley	7.3
South Hadley	7.3
Worthington	7.3
Charlemont	7.4
Chesterfield	7.5
Granby	7.5
New Salem	7.6
Wendell	7.7
Blandford	7.9
Hampden	7.9
Easthampton	8.0
Gill	8.1
Brimfield	8.2
Williamsburg	8.2
Agawam	8.4
Bernardston	8.4
Greenfield	8.5
Massachusetts	***8.5***
Montgomery	8.5
Westfield	8.5
Colrain	8.7
Cummington	8.7
Monson	8.9
Wales	9.0
Erving	9.1
Granville	9.1
Plainfield	9.1
Rowe	9.1
Russell	9.1
Pioneer Valley	***9.1***
Holland	9.3
Huntington	9.4
Montague	9.5
Southwick	9.5
West Springfield	9.6
Ludlow	9.7
Palmer	9.7
Chester	9.8
Ware	9.9
Warwick	10.0
Chicopee	10.2
Orange	11.3
Shelburne	11.4
Holyoke	11.6
Springfield	12.6
Monroe	18.5

FOOD DESERTS

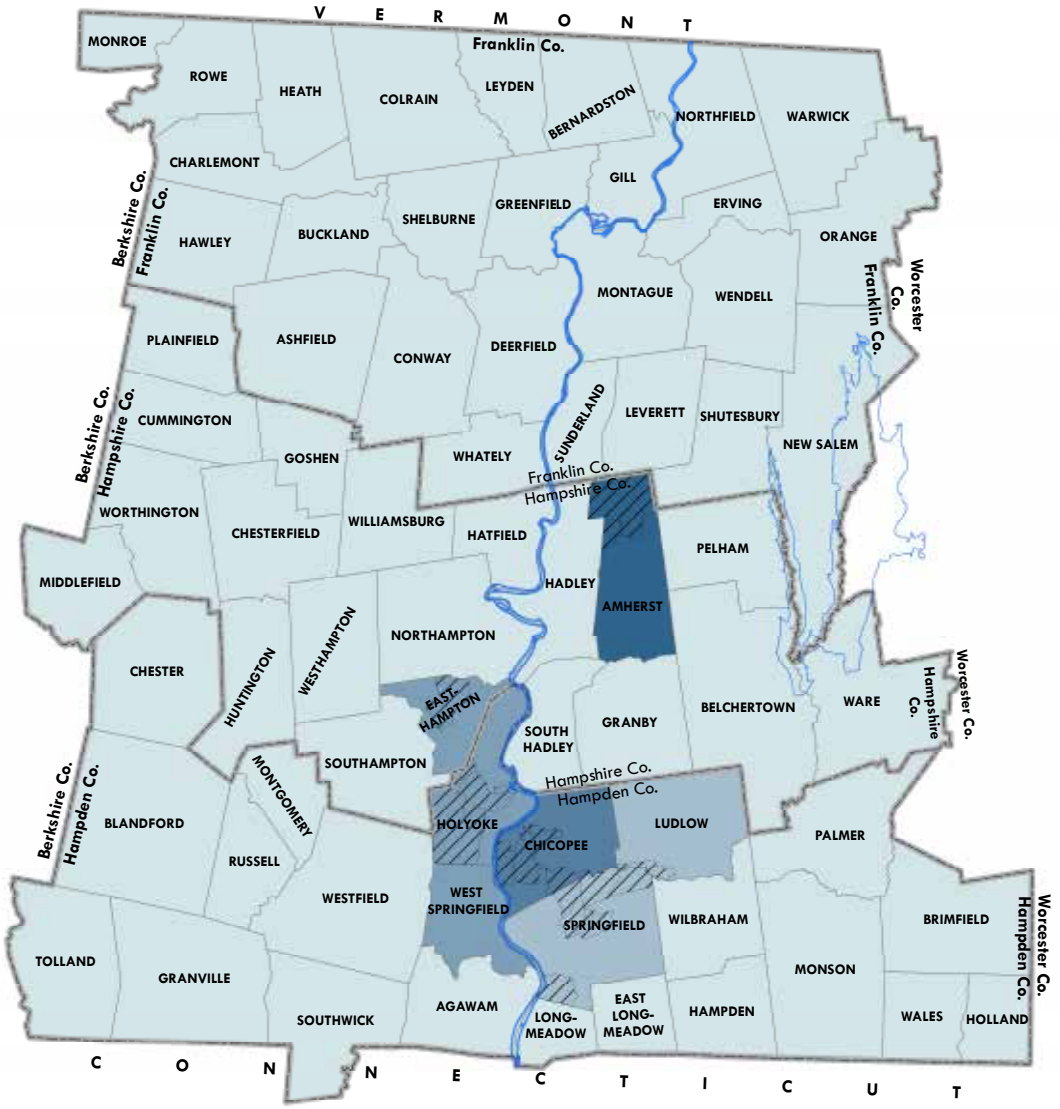
The Center for Disease Control (CDC) and Prevention defines a food desert as "areas that lack access to affordable fruits, vegetables, whole grains, low fat milk, and other foods that make up a full range of a healthy diet" . Often certain liberties are taken to evaluate food deserts and usually involve some measure of demographics, including income level and population density, around certain areas that may have limited access to food stores in general. However, the primary goal of food deserts is to evaluate the degree of access people have to supermarkets and/or fresh and healthy food. By identifying locations of food desserts, action can be taken to help supplement the lack of healthy and affordable food in the region which can negatively affect people's health and economic stability, both of which influence the overall sustainability and health of a community. This indicator examines data from a U.S. Department of Agriculture (USDA) study conducted in 2011, which was based on data aggregated from 2000 to 2006 and identified food dessert locations by census tract.

Based on USDA definitions, which could be incomplete, it does not appear that the Pioneer Valley or the state of Massachusetts as a whole have a significant problem with food deserts. However, there are certainly some areas for concern and the Pioneer Valley has a higher percentage of its population living in those areas than the state as a whole. The total number of people living in a food desert within the Pioneer Valley represented about 18% of the total population of Massachusetts that lived in a USDA designated food desert. Since only about 11% of the state's total population lived in the Pioneer Valley in 2000, this rate is disproportionally high. The percent of people living in a Food Desert within the Pioneer Valley was 0.10% of the regions total population, while the state rate was 0.06 percent.

The average amount of people who reside within a Food Desert per community with a Food Desert for the Pioneer Valley is 0.20 percent. Throughout the region, these food deserts mostly found in the urban areas of Springfield, Chicopee, Holyoke, West Springfield and suburban areas like Ludlow, Amherst and Easthampton. In comparison to the other metro area of Massachusetts, the Springfield metro area has a much higher prevalence of food deserts. The Springfield area has a high density of these deserts and is home to about 22% of all people living in urban areas within Massachusetts designated as food deserts. Worcester and Boston collectively only account for about 12% of that same population.

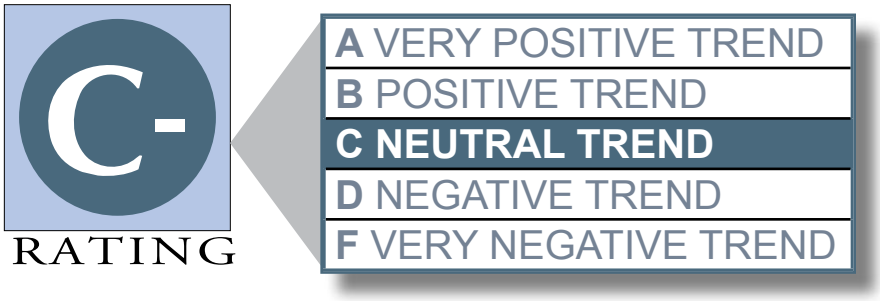


Percent of Population Living in a Food Desert



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: U.S. Department of Agriculture, 2000-2006

Agawam	0.0%
Ashfield	0.0%
Belchertown	0.0%
Bernardston	0.0%
Blandford	0.0%
Brimfield	0.0%
Buckland	0.0%
Charlemont	0.0%
Chester	0.0%
Chesterfield	0.0%
Colrain	0.0%
Conway	0.0%
Cummington	0.0%
Deerfield	0.0%
East Longmeadow	0.0%
Erving	0.0%
Gill	0.0%
Goshen	0.0%
Granby	0.0%
Granville	0.0%
Greenfield	0.0%
Hadley	0.0%
Hampden	0.0%
Hatfield	0.0%
Hawley	0.0%
Heath	0.0%
Holland	0.0%
Huntington	0.0%
Leverett	0.0%
Leyden	0.0%
Longmeadow	0.0%
Middlefield	0.0%
Monroe	0.0%
Monson	0.0%
Montague	0.0%
Montgomery	0.0%
New Salem	0.0%
Northampton	0.0%
Northfield	0.0%
Orange	0.0%
Palmer	0.0%
Pelham	0.0%
Plainfield	0.0%
Rowe	0.0%
Russell	0.0%
Shelburne	0.0%
Shutesbury	0.0%
South Hadley	0.0%
Southampton	0.0%
Southwick	0.0%
Sunderland	0.0%
Tolland	0.0%
Wales	0.0%
Ware	0.0%
Warwick	0.0%
Wendell	0.0%
Westfield	0.0%
Westhampton	0.0%
Whately	0.0%
Wilbraham	0.0%
Williamsburg	0.0%
Worthington	0.0%
Pioneer Valley	***14.8%***
Ludlow	19.4%
Springfield	21.6%
West Springfield	29.6%
Holyoke	30.5%
Easthampton	31.8%
Chicopee	39.8%
Amherst	48.1%



HOUSING

Housing is a basic need for the entire region, for individual residents as well as the economic and social vitality of the region as a whole. Truly a component of economic security, having safe and affordable homes is at the root of building strong, stable, and vibrant communities. The ability to own a home in an area establishes roots encouraging people to become invested in their community. Investing in a community positively impacts many aspects of the locality including the environment, economy, education, and health. Housing is also the most common method of creating personal wealth; it can be transferred to following generations, effectively improving succeeding generations' standard of living. Minimizing commute time is important to the sustainability of the region and to better understand any spatial mismatches between centers of employment and housing availability. The variety of indicators that have been collected such as homeownership, foreclosure rates, and the percentage of residents who are housing cost burdened help determine the availability of housing stock and ability to afford and maintain housing by residents of all socio-economic statuses.

Overall, the situation of our region's housing is mixed. Housing cost burden, home ownership, and subsidized housing availability trends have been neutral. The housing affordability ratio shows a positive trend. At the same time, the Pioneer Valley was clearly not spared from the housing and economic crisis that occurred nationally in recent years as foreclosures and homelessness have been on the rise.

Indicator	Summary	Rating
Housing Affordability	The housing affordability ratio is consistently higher than that statewide. Equity is poor between many communities and particularly bad between the highest and lowest performing communities.	B-
Housing Cost Burden	The portion of residents who are housing cost burdened is slightly lower than it was 10 years ago, while rates statewide have climbed almost 10%. Equity between most communities in neutral but the gap between the highest and lowest performing communities is high.	C+
Home Ownership	Home ownerships rates have been stable for twenty years, and remain slightly above rates statewide. Equity between most communities is poor.	C-
Subsidized Housing Availability	The percent of communities with at least 10% of their housing units subsidized remains above statewide rates, but has been stagnant over the last nine years. Equity is good between most communities but the gap between the highest and lowest performing communities is large.	C
Foreclosures	Foreclosure rates have increased significantly in recent years, following state and national trends. Equity is good amongst many communities but the gap between the highest and lowest performing communities is large.	D+
Homelessness	The rate of homelessness has increased significantly in recent years, and reached rates much higher than those for Massachusetts.	D-

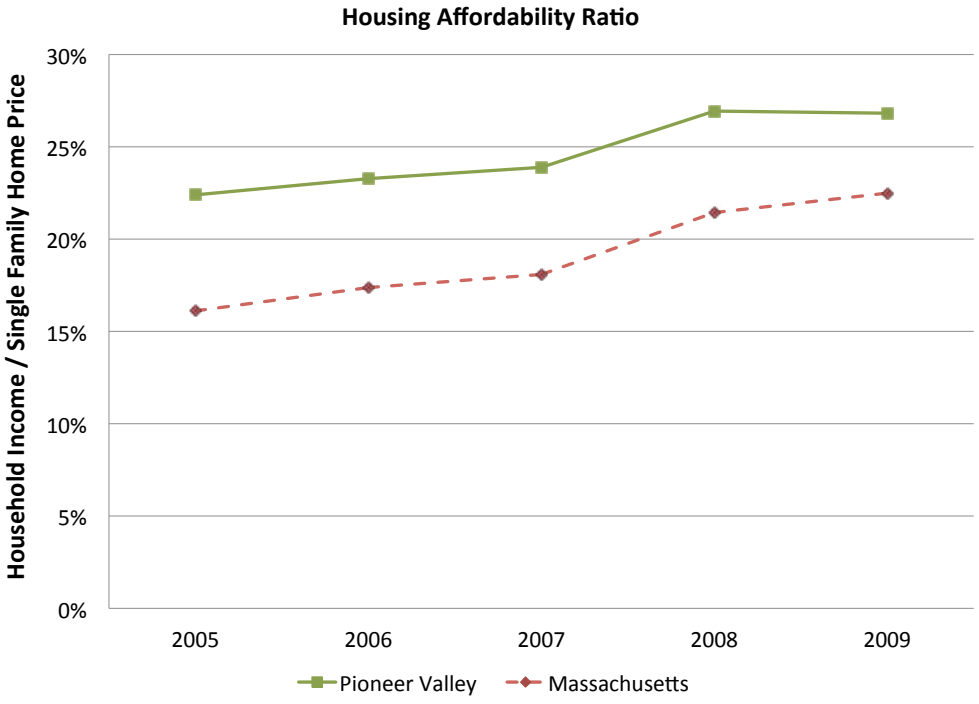
B-
RATING

HOUSING AFFORDABILITY

Home values vary in relation to location; however, this variation alone does not express whether the cost of housing is out of sync with the income of those who live in the same community. The goal of the affordability ratio is to capture the affordability of housing in one community in relation to the income of residents in that same community. Because this ratio compares income in one community to home price in the same community, a ratio that indicates a community is not affordable is indicative of a community in which current residents may not be able to afford to remain. It is not a measure of absolute affordability based on any universal standard that would compare prices in one community directly to another. Since the ratio of median household income over median municipal single family home price is turned into a percent, the closer to 100%, the more affordable housing is in that particular community. Conversely, the closer a municipality scores to 0%, then that particular community would be considered less affordable.

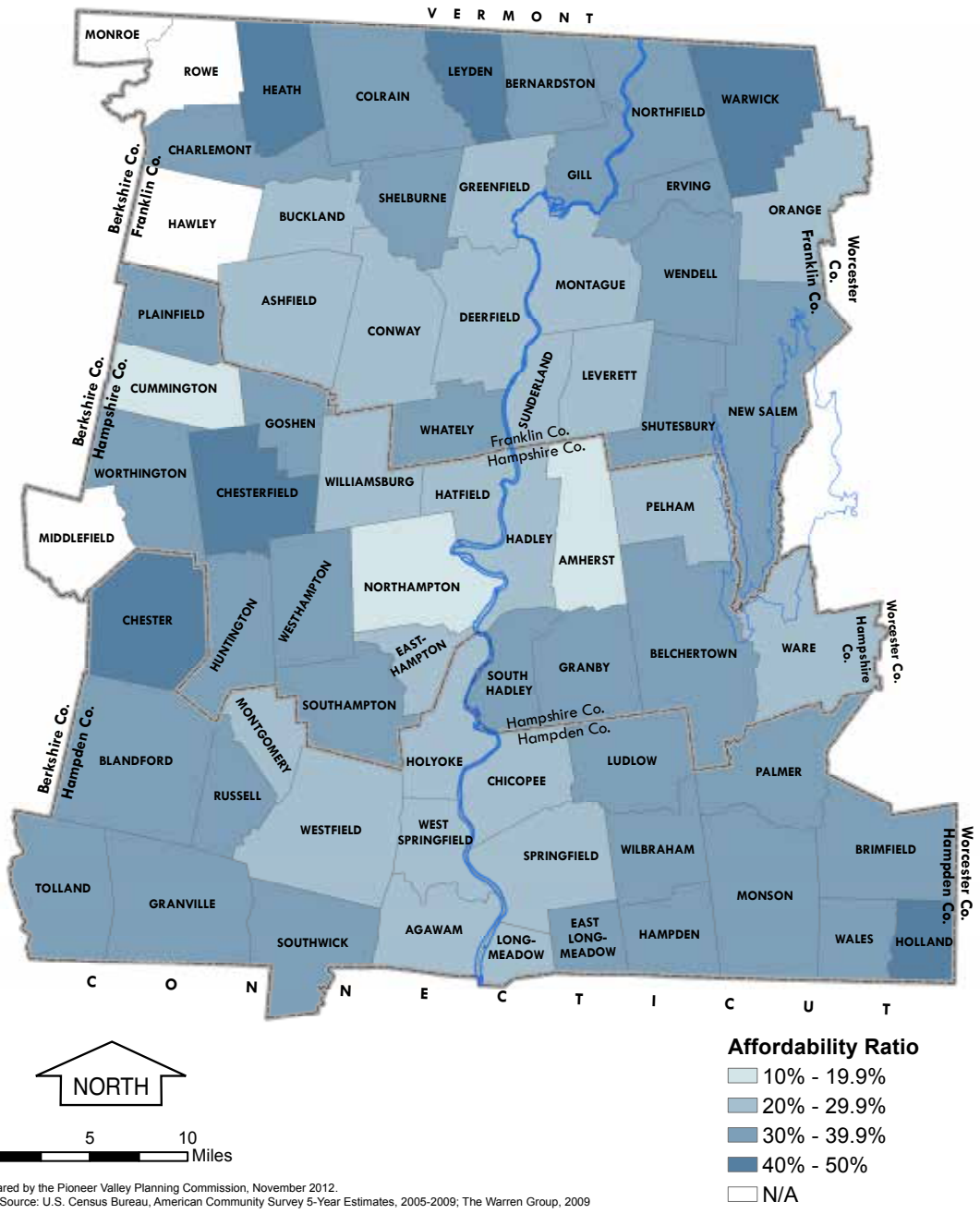
Housing affordability data for recent years showed that, overall, the Pioneer Valley continues to be more affordable than the state of Massachusetts as a whole. Over the five year period between 2005-2009, home affordability increased across the Pioneer Valley as well as the state. During that five year period, Pioneer Valley affordability increased by about 4.4% and was consistently higher than the statewide rates. However, by 2008 and 2009, both the state and the valley seem to have hit a plateau and the Pioneer Valley even saw a minor decrease in 2009. This shift in affordability was likely affected greatly by the economic downturn that was beginning at that time.

There was significant variety in the degree to which housing was affordable across the region. While eight communities had housing affordability ratios of approximately 40% or more (as determined by dividing the median household income by median single-family home sale price), eleven communities had ratios of less than 25 percent. The six communities with the lowest ratios were Amherst, Cummington, Northampton, Sunderland, Holyoke, and Hadley. Of note, four of these communities are within the Five College area where student incomes are likely to be quite low and there are often many students living in a single residence. Some of the most affordable communities in the region, according to this ratio, included Leyden, Warwick, Heath, Holland, Chester and Chesterfield. Notably, all of these towns are in rural areas of each county. .



Note: No affordability ratio was available for Hawley, Monroe, Rowe or Middlefield due to a lack of single-family home sales statistics available in the year 2009.

Housing Affordability Ratio (Median Household Income/Municipal Median Single-Family Home Sale Price)



Prepared by the Pioneer Valley Planning Commission, November 2012.
Data Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2005-2009; The Warren Group, 2009

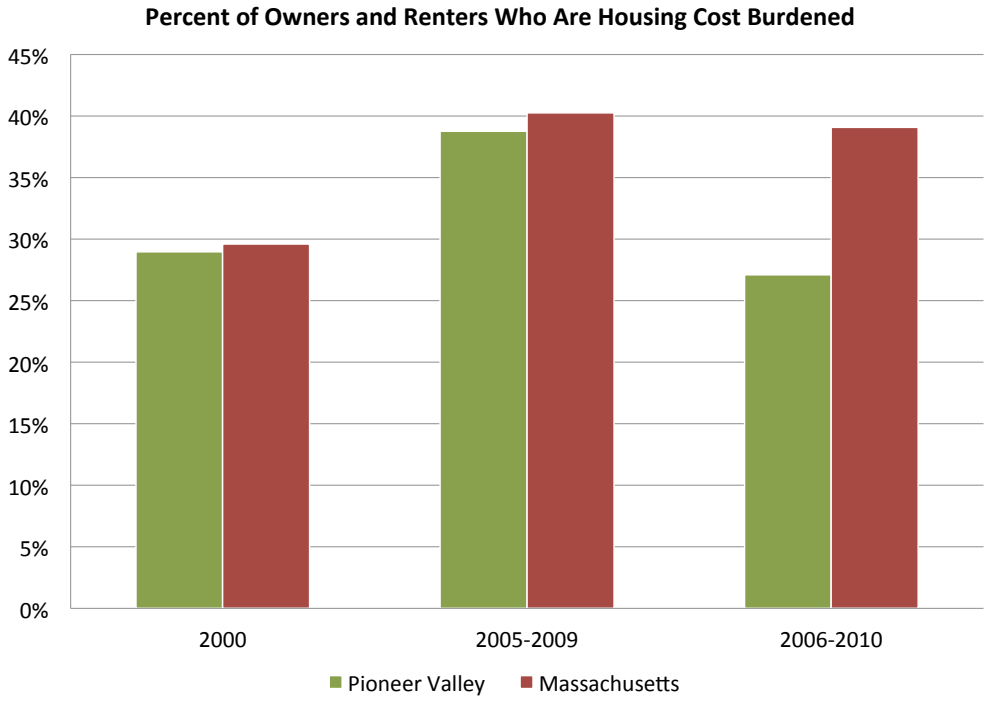
Amherst	14.0%
Cummington	16.3%
Northampton	19.6%
Sunderland	20.4%
Holyoke	21.0%
Hadley	22.7%
Hatfield	22.8%
Easthampton	23.8%
Williamsburg	23.8%
Montague	24.6%
Conway	24.6%
Greenfield	25.6%
Leverett	25.7%
Ashfield	26.4%
Chicopee	26.5%
Pioneer Valley	***26.8%***
Springfield	27.0%
West Springfield	27.2%
Westfield	27.2%
Buckland	27.8%
Deerfield	27.9%
Orange	28.5%
Pelham	28.6%
Longmeadow	28.8%
Montgomery	29.1%
Agawam	29.4%
Ware	29.9%
Charlemont	30.0%
Palmer	30.1%
Southampton	30.2%
South Hadley	30.3%
Bernardston	30.4%
Belchertown	30.5%
Granby	30.5%
Shelburne	30.7%
Plainfield	30.8%
Gill	31.2%
Whately	31.7%
Southwick	32.0%
Erving	32.6%
Shutesbury	32.9%
Tolland	33.0%
Wilbraham	34.2%
Ludlow	34.3%
Hampden	35.0%
Worthington	35.0%
Westhampton	35.2%
New Salem	35.6%
East Longmeadow	35.7%
Monson	36.2%
Granville	36.8%
Russell	36.8%
Brimfield	37.4%
Northfield	37.5%
Goshen	37.5%
Wales	37.6%
Huntington	37.9%
Wendell	38.6%
Colrain	39.8%
Blandford	39.9%
Leyden	42.0%
Warwick	42.7%
Heath	43.0%
Holland	43.6%
Chester	48.8%
Chesterfield	49.5%
Hawley	NA
Middlefield	NA
Monroe	NA
Rowe	NA

HOUSING COST BURDEN

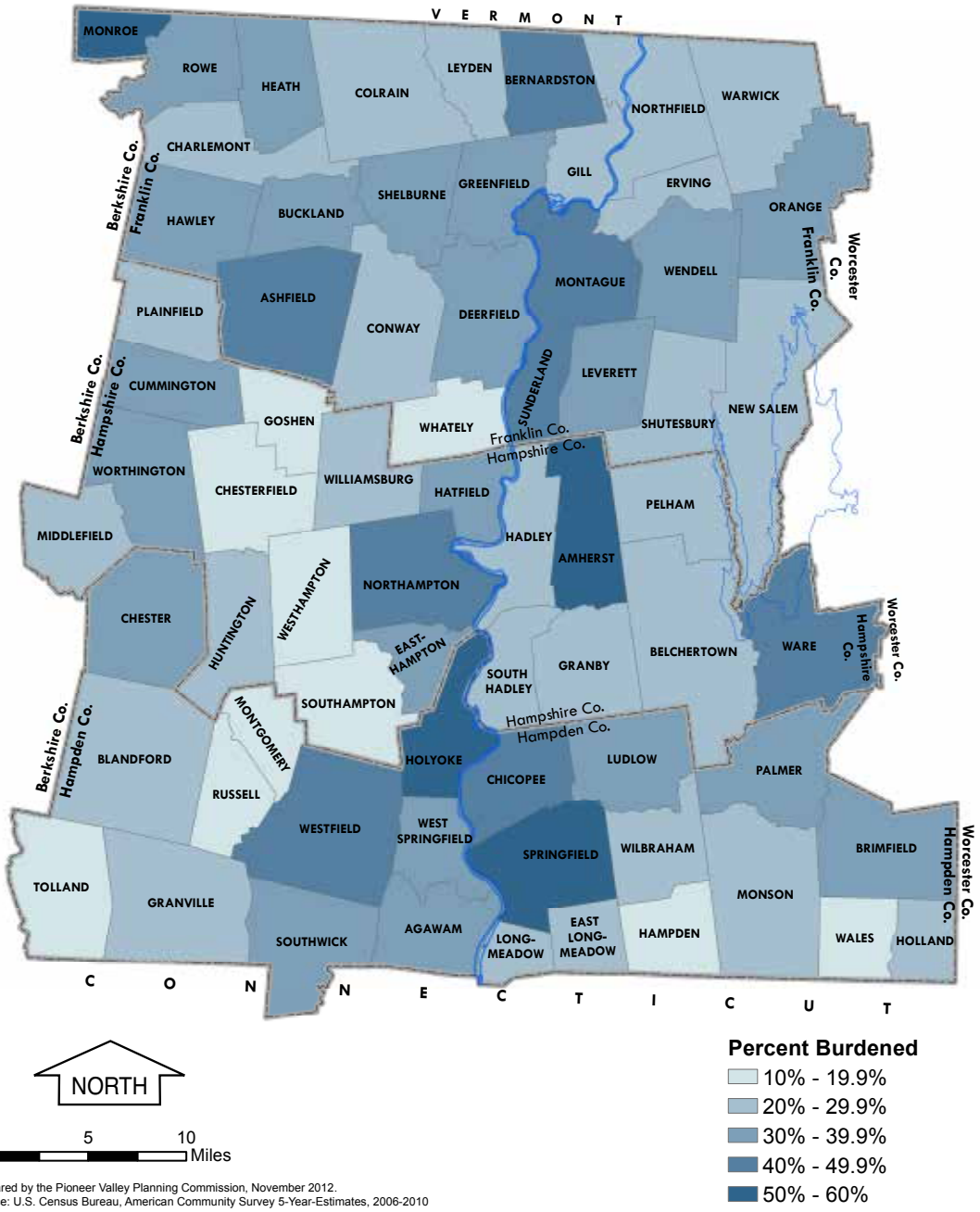
According to many government agencies, people who pay more than 30% of their income on housing costs are considered to be housing cost burdened. The U.S. Census Bureau provides estimates on this statistic based on in the American Community Survey. Data for this indicator includes renters and homeowners who have mortgages who were surveyed. Monthly owner costs include payment for rent, mortgages, real estate taxes, various insurances, utilities, fuels, mobile home costs, and condominium fees. Housing cost burden identifies anyone who pays over 30% of their income towards either rent or home ownership. This indicator tracks the percent of the population who are housing cost burdened.

The Pioneer Valley looks good in comparison to the state average for this indicator, experiencing a lower rate of housing cost burden throughout the decade of 2000-2010. Just under 40% of all Massachusetts renters and owners were estimated to having a housing cost burden in 2006-2010 estimates, while only 27% were housing cost burdened in the Pioneer Valley during the same time period. Both the Pioneer Valley and the state experienced increases of housing cost burden between 2000 and 2009. By 2010, housing cost burden decreased for both the state and the Pioneer Valley, and the decrease within the region was even larger than that across the state. These recent decreases reflected the national housing market trends, which experienced an increase in foreclosed properties and lower housing prices. However, this same time period corresponded with decreased wages and increased unemployment, which also effects whether someone is housing cost burdened, so the recession likely does not explain this entire decrease. Since 2000, the Pioneer Valley has decreased its housing cost burden costs by almost 2% while Massachusetts experienced an increase of almost 10 % showing that the Pioneer Valley continues to be a more affordable region of Massachusetts to live in.

Across the region, there is significant disparity between communities regarding their degree of housing cost burden. Southampton had the lowest percent of its community who were housing cost burdened, totaling 10 percent. Other communities with rates of 15% or less included Montgomery, Tolland, Westhampton, and Russell. On the other end of the spectrum, 12 communities had rates of 40% or higher. The communities that had the highest rates of housing cost burden were Amherst, Holyoke, Springfield, Monroe, and Sunderland. It is likely that high prevalence of college students in Amherst and Sunderland and their corresponding low-incomes contributed significantly to that town featuring so prominently on the list. The other municipalities ranking in the top five highest included the two largest cities in the region as well as two smaller and more rural towns, showing that housing cost burden occurs in all types of communities.



Percent of Owners and Renters Who Are Housing Cost Burdened



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: U.S. Census Bureau, American Community Survey 5-Year-Estimates, 2006-2010

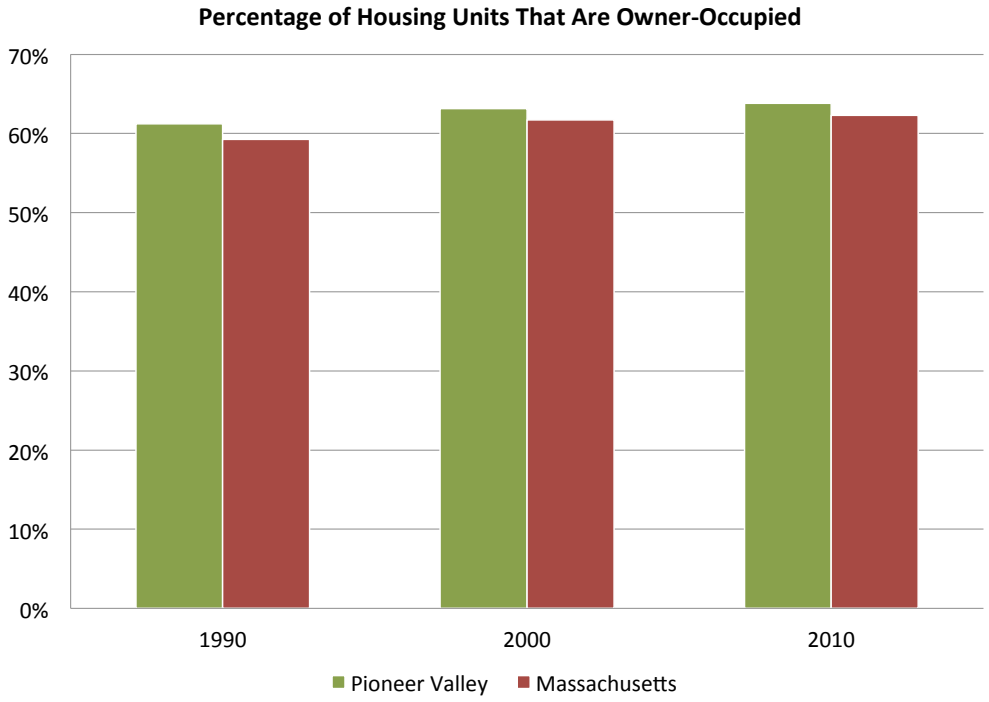
Southampton	10%
Montgomery	12%
Tolland	14%
Westhampton	15%
Russell	15%
Wales	16%
Hampden	17%
Chesterfield	17%
Goshen	19%
Whately	19%
Blandford	20%
Pelham	21%
Gill	21%
Holland	21%
Monson	22%
Granville	23%
Belchertown	24%
Wilbraham	24%
Erving	25%
East Longmeadow	26%
Williamsburg	26%
Northfield	26%
New Salem	26%
Longmeadow	26%
Leyden	26%
Conway	27%
Pioneer Valley	***27%***
Huntington	27%
Plainfield	28%
Granby	28%
Warwick	28%
Shutesbury	28%
Charlemont	28%
Colrain	29%
Middlefield	29%
Hadley	29%
South Hadley	29%
Hatfield	30%
Chester	30%
Leverett	30%
Worthington	30%
Agawam	31%
Heath	31%
Rowe	31%
Hawley	32%
Ludlow	32%
Southwick	32%
Brimfield	33%
Orange	35%
Cummington	35%
Wendell	35%
West Springfield	36%
Easthampton	36%
Palmer	38%
Shelburne	38%
Deerfield	38%
Buckland	39%
Greenfield	39%
Chicopee	40%
Ashfield	41%
Northampton	42%
Ware	42%
Bernardston	43%
Montague	43%
Westfield	44%
Sunderland	49%
Monroe	50%
Springfield	50%
Holyoke	51%
Amherst	56%

HOME OWNERSHIP

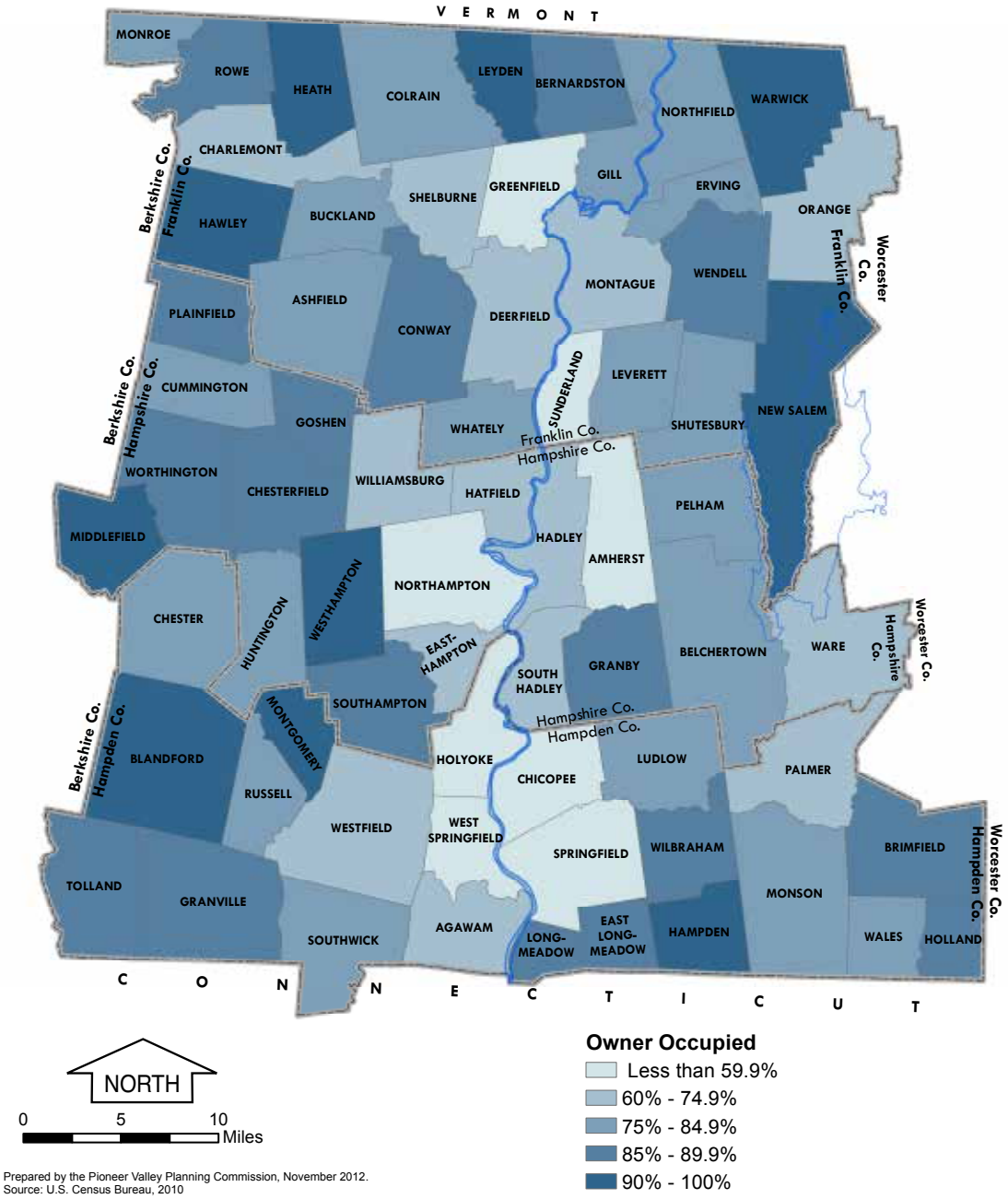
Home ownership is a significant indicator of economic security, because the primary financial investment for the vast majority of people in this country is their homes. Home ownership also strengthens communities by building a strong connection between people and the place they live. However, the downside of a high owner-occupancy rate is that rental options for young, old, or transitional populations are limited. A lack of rental options, often supported by local zoning regulations, can also help to perpetuate socio-economic segregation throughout the region. Home ownership is expressed as the percent of all housing units that are occupied by the property's owner.

The Pioneer Valley has had fairly consistent home ownership rates over the last two decades, with just under two thirds of all housing units being owner-occupied in 2010. While these rates are not incredibly high compared to national rates, they have consistently been slightly higher than that of the state of Massachusetts as a whole. This could be partially due to less variety in types of housing in the Pioneer Valley than the larger metro areas around greater Boston which allow for more rental options. Positively, the percent of owner-occupied housing units in the Pioneer Valley increased from 61.2 percent in 1990 to 63.1 percent in 2000, and again increasing in 2010, indicating that home ownership is on the rise in the region. As home ownership continues to grow in the valley it also continues to grow statewide.

There was widespread disparity in home ownership rates across communities in the region. While eight communities had ownership rates below 60%, there were 10 communities with ownership rates above 90 percent. The communities with the lowest percent homeownership rates included some of the most populous communities in the region – Holyoke, Amherst, Sunderland, Springfield, and Greenfield. In particular, ownership rates in Holyoke, Amherst, Sunderland, and Springfield all have home ownership rates below 50 percent. This is likely due to a high concentration of elevated poverty rates and low income households, especially in the cases of Springfield and Holyoke. The low ownership rates in Amherst and Sunderland are likely more attributable to the large college student population present from the University of Massachusetts and the surrounding colleges. It can be inferred that most undergraduates who attend these institutions do not own the homes they reside in. However, both those towns still have high poverty rates and lower incomes. The communities with the five highest home ownership rates were Montgomery, Leyden, Middlefield, Westhampton, and Blandford. This correlates very well with the housing cost burden and home affordability indicators.



Percentage of Occupied Housing Units That Are Owner-Occupied



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: U.S. Census Bureau, 2010

Holyoke	41.6%
Amherst	46.0%
Sunderland	46.8%
Springfield	49.8%
Greenfield	55.7%
Northampton	56.3%
West Springfield	58.0%
Chicopee	58.8%
Montague	61.2%
Easthampton	62.1%
Shelburne	63.4%
Pioneer Valley	***63.8%***
Ware	66.9%
Palmer	67.3%
Westfield	67.5%
Orange	69.1%
Hadley	69.3%
Hatfield	71.8%
Charlemont	73.1%
South Hadley	73.9%
Agawam	74.2%
Williamsburg	74.8%
Deerfield	74.8%
Cummington	76.2%
Buckland	76.8%
Ludlow	77.2%
Huntington	78.5%
Northfield	79.4%
Erving	80.1%
Ashfield	80.9%
Gill	81.2%
Southwick	81.7%
Monson	82.0%
Russell	82.2%
Belchertown	82.2%
Monroe	82.5%
Wales	82.5%
Pelham	82.5%
Leverett	83.2%
Colrain	83.5%
Whately	83.5%
Chester	83.6%
Shutesbury	84.0%
Bernardston	85.1%
East Longmeadow	85.2%
Granby	85.8%
Wendell	86.4%
Granville	86.5%
Brimfield	87.1%
Tolland	87.3%
Southampton	87.4%
Rowe	87.4%
Wilbraham	87.6%
Plainfield	88.1%
Conway	88.8%
Worthington	89.5%
Longmeadow	89.6%
Chesterfield	89.6%
Holland	89.7%
Goshen	89.9%
Hampden	90.5%
Hawley	90.6%
Heath	91.1%
New Salem	91.1%
Warwick	91.5%
Blandford	92.5%
Westhampton	92.6%
Middlefield	93.6%
Leyden	93.8%
Montgomery	95.5%

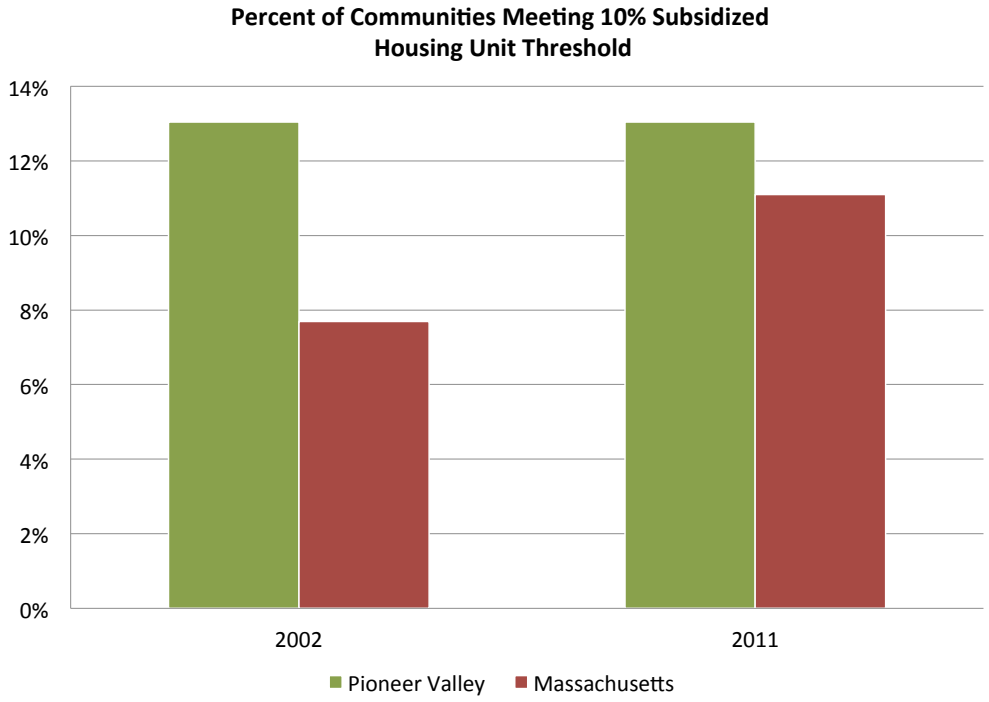
C
RATING

SUBSIDIZED HOUSING AVAILABILITY

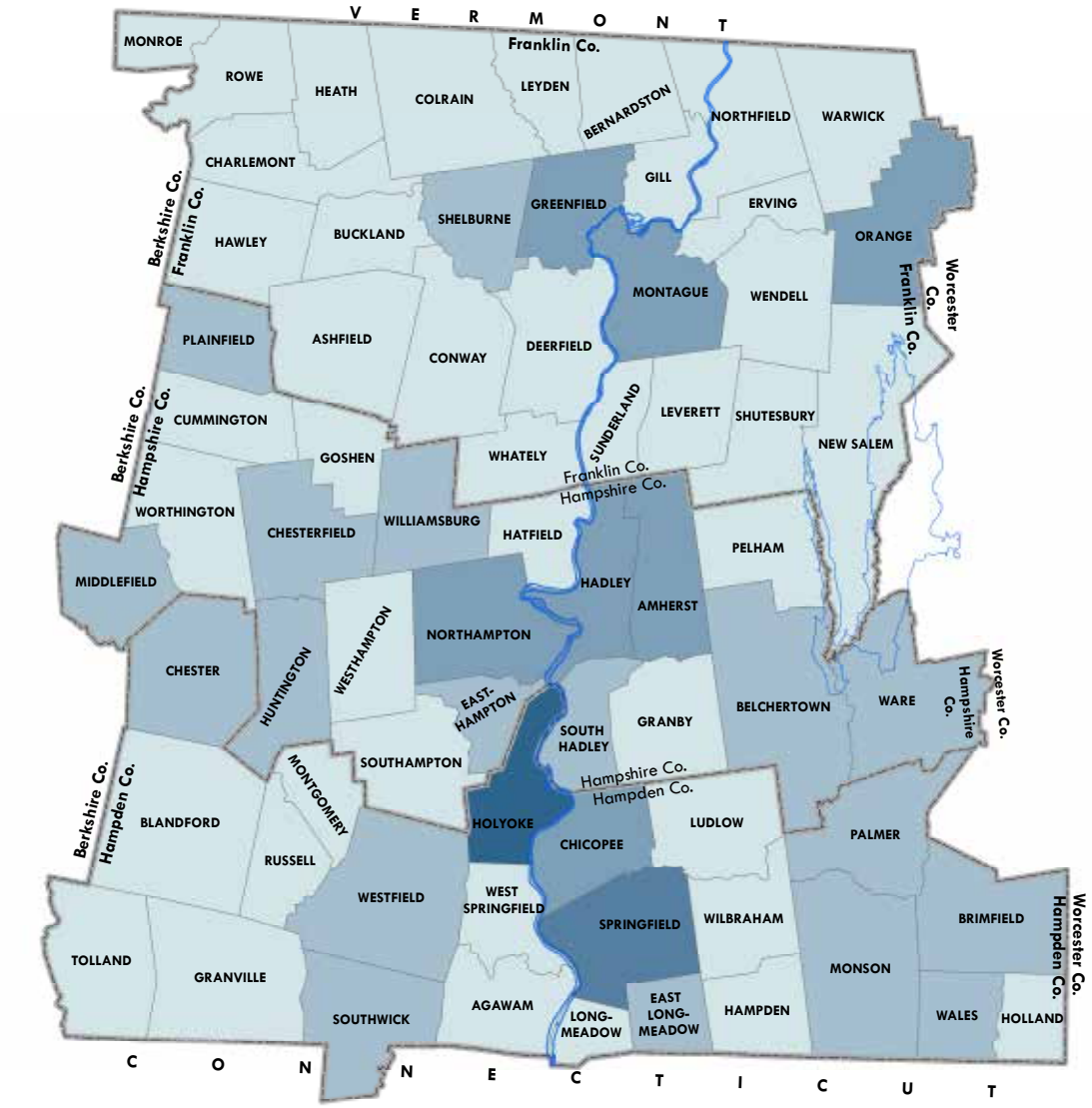
Subsidized housing is housing that is restricted to individuals and families with low to moderate incomes and it typically receives some manner of financial assistance to bring down the cost of owning or renting the unit, usually in the form of a government subsidy. Subsidized housing in Massachusetts dates to the 1930s when our state and federal governments acknowledged that there was an overriding public interest in providing subsidies to lower income households to help them afford a decent place to live. The theory was and continues to be that such assistance will help to alleviate the housing cost burden and allow these households to focus on employment, education and personal health. It is important to evaluate the percentage of subsidized housing in a municipality to assess the need for additional subsidized units and to gauge a community's progress on making room for lower income households. The state's Comprehensive Permit Law, alternatively called "Chapter 40B" was adopted in 1969 to address racial and economic segregation, shortage of decent housing, inner city decline and unrest, and exclusionary zoning practices in the suburban and rural communities. It compels communities to have at least 10 percent of all housing set aside as affordable housing that is protected by long-term affordability restrictions. Communities below 10 percent must allow a streamlined process for proposed housing developments on the condition that 25 percent or more of the proposed units are reserved for low or moderate income households. This indicator measures the percent of all housing units in a community that are designated as subsidized housing units. Not included in this indicator is housing that is affordable, but does not have established long-term affordability restrictions attached to the property.

On the whole, the Pioneer Valley has a low rate of communities meeting the Comprehensive Permit Law subsidized housing threshold. Only 13% of communities in the Pioneer Valley met their threshold in 2011, a percentage that remained unchanged from 2002 to 2011. While the Pioneer Valley continues to have a higher percentage of communities meeting the 40B threshold than the state as a whole, this gap has been narrowing in recent years. The state saw the number of communities that met their 40B threshold increase by more than three percent over this period while the percentage of Pioneer Valley communities that have met their threshold has remained stagnant. Still, the vast majority of communities statewide and within the region do not meet this threshold.

As the regional aggregate data suggests, the stock of Comprehensive Permit Law subsidized housing units is not distributed equally throughout the region. Only nine out of 69 communities met the 10% threshold in 2011. These communities included Montague, Chicopee, Amherst, Orange, Northampton, Hadley, Greenfield, Springfield, and Holyoke (which topped the list with one in every five housing units being subsidized). On the opposite end of the spectrum, nine communities in the region did not have any subsidized housing. Those towns were Conway, Hawley, Leverett, Monroe, Montgomery, Rowe, Tolland, Warwick, and Westhampton.



Percentage of Housing Units That Are Subsidized



Prepared by the Pioneer Valley Planning Commission, November 2012.
Data source: Massachusetts Housing and Economic Development, Subsidized Housing Inventory, 2011; U.S. Census Bureau, 2010

Conway	0.0%
Hawley	0.0%
Leverett	0.0%
Monroe	0.0%
Montgomery	0.0%
Rowe	0.0%
Tolland	0.0%
Warwick	0.0%
Westhampton	0.0%
New Salem	0.2%
Ashfield	0.3%
Erving	0.3%
Shutesbury	0.3%
Sunderland	0.3%
Whately	0.3%
Blandford	0.4%
Colrain	0.5%
Pelham	0.5%
Wendell	0.5%
Buckland	0.6%
Heath	0.6%
Leyden	0.7%
Charlemont	1.0%
Deerfield	1.5%
Granville	1.6%
Goshen	1.8%
Southampton	1.9%
Ludlow	2.2%
Northfield	2.3%
Bernardston	2.6%
Russell	2.6%
Granby	2.8%
Holland	2.8%
Hatfield	3.0%
Hampden	3.1%
West Springfield	3.5%
Cummington	3.8%
Agawam	3.9%
Worthington	4.0%
Gill	4.2%
Longmeadow	4.5%
Wilbraham	4.7%
Monson	5.0%
Southwick	5.1%
Chesterfield	5.2%
Plainfield	5.3%
South Hadley	5.3%
Shelburne	5.7%
Brimfield	6.0%
Easthampton	6.3%
Belchertown	6.4%
Williamsburg	6.5%
Huntington	6.6%
Westfield	6.8%
Palmer	6.9%
East Longmeadow	7.1%
Middlefield	7.8%
Wales	7.9%
Chester	8.5%
Pioneer Valley	*9.6%*
Ware	9.8%
Montague	10.1%
Chicopee	10.2%
Amherst	10.6%
Orange	10.9%
Northampton	11.5%
Hadley	11.8%
Greenfield	14.0%
Springfield	16.4%
Holyoke	20.7%

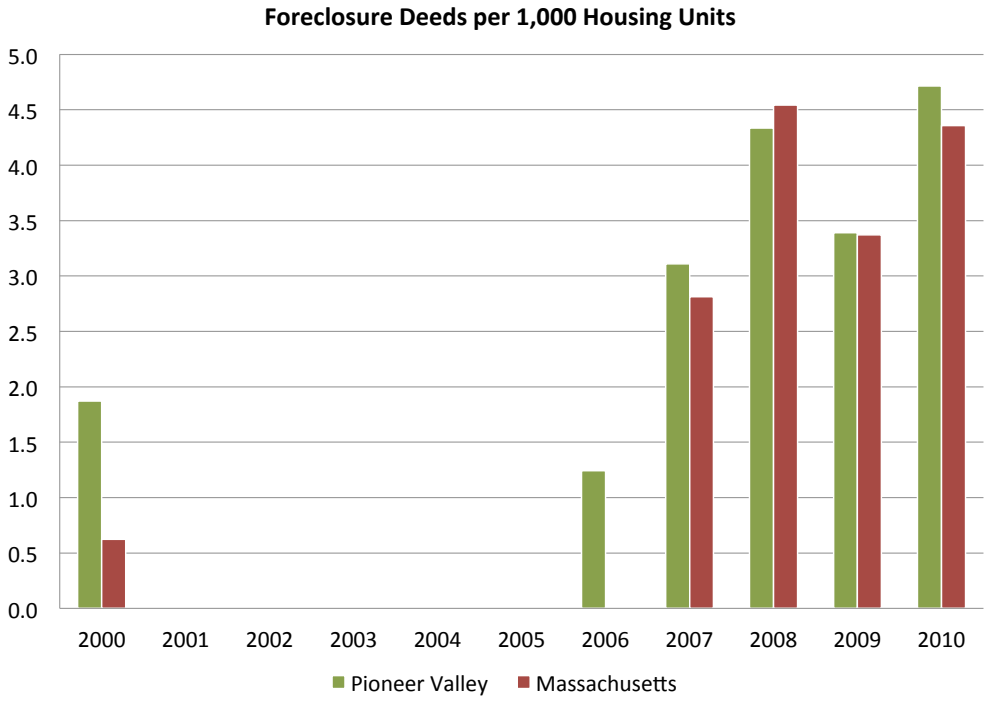
% of Pioneer Valley Communities Meeting 10% Threshold: 13.0%

FORECLOSURE RATES

Foreclosure rates are an important indicator of areas of distress and unstable neighborhoods. Having a home foreclosed upon represents a massive loss in equity for the individual, and therefore collectively reflects a loss in equity of the region. Foreclosures affect more than the individual family who loses their house, as they tend to drive down properties values of homes in the surrounding area when they are sold below market value or when they sit vacant and deteriorate for an extended period of time. The latest wave of foreclosures has been on the heels of the recession that started in 2008 when a housing market crash was one of the primary causes of the economic downturn. This indicator measures foreclosures as a rate per 1,000 housing units.

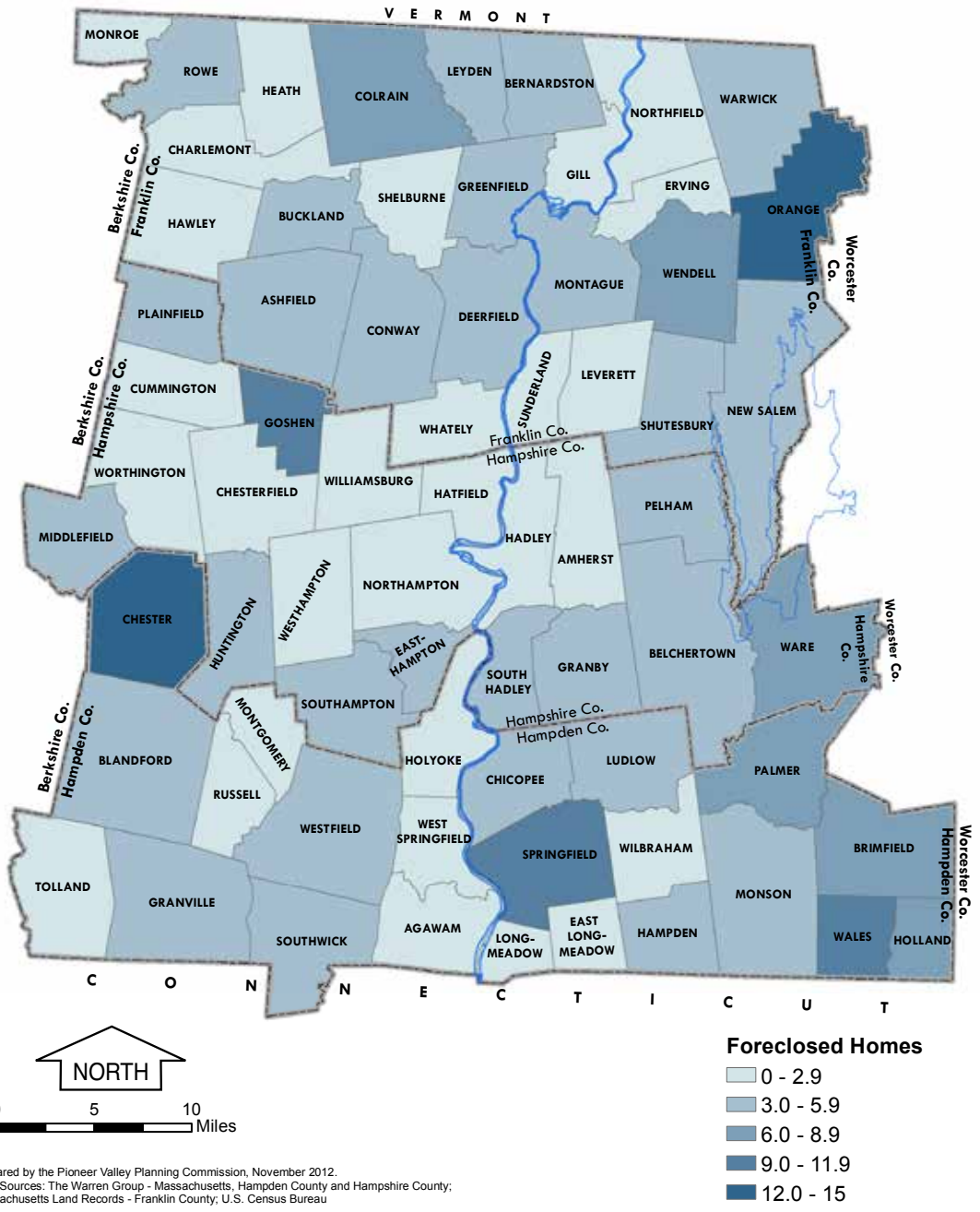
The foreclosure rate in the Pioneer Valley has increased significantly between 2000 and 2010, though this increase has been comparable to Massachusetts as whole. In 2000 the foreclosure rate in the Pioneer Valley was higher than the state totals and this continued until 2007. By 2008, the year the recession began, the foreclosure rate of the state narrowly surpassed passed that of the region at 3.1 foreclosures per 1,000 housing units. By 2009, the state and the valley foreclosure rate converged with both having a rate of 3.4. In 2010, the Pioneer Valley showed an even greater rate of increase for foreclosures, and once again passed the state total, reaching 4.7, a difference of 0.3%.

Municipalities across the Pioneer Valley have not shared the region's foreclosures equally. There were five communities in the region that managed a foreclosure rate of zero in 2010. However, there were 18 communities with foreclosure rates higher than the state average. The five communities with the highest foreclosure rates in 2010 were Springfield, Goshen, Wales, Chester, and Orange. This particular indicator does not tend to clump the suburbs, rural towns and urban centers the way that other variables have. Of the urban center cities and towns, only Springfield had a higher rate than the region's average. Most other communities fell below the region's average of 4.7 units and even the state average of 4.4 foreclosures per 1,000 housing.



Note: Long term trend data was not available for years between 2000 and 2006. Also, in 2006 where Massachusetts shows as 0% on the graph, this is due to unavailability of state data for that year.

Foreclosure Deeds per 1,000 Housing Units in 2010



Prepared by the Pioneer Valley Planning Commission, November 2012.
Data Sources: The Warren Group - Massachusetts, Hampden County and Hampshire County; Massachusetts Land Records - Franklin County; U.S. Census Bureau

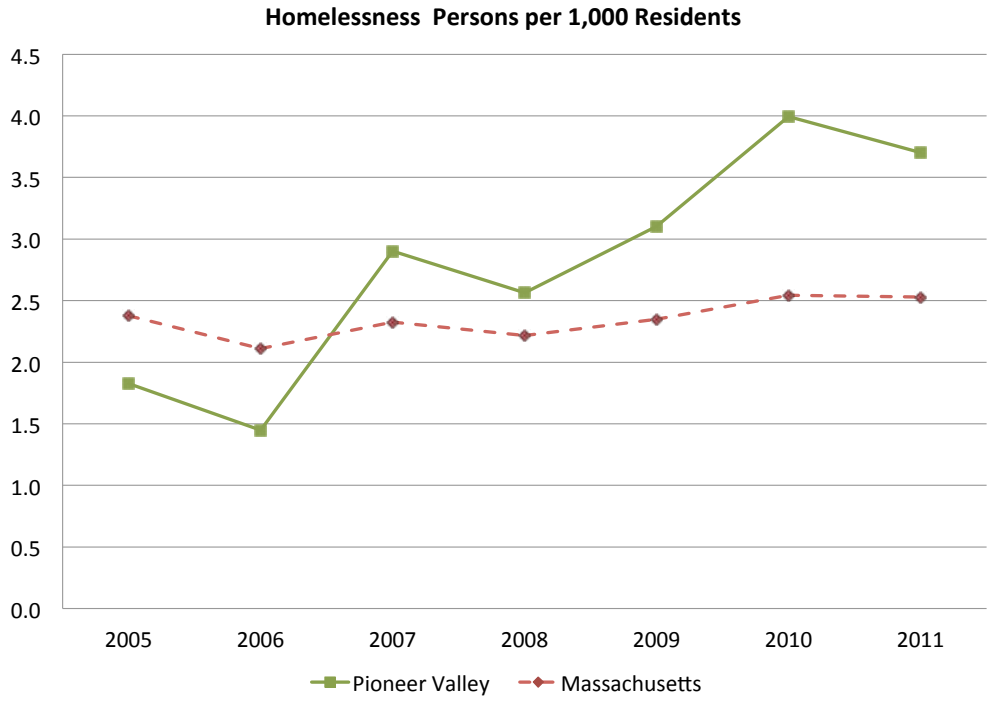
Hadley	0.0
Hawley	0.0
Monroe	0.0
Montgomery	0.0
Tolland	0.0
Amherst	0.5
Hatfield	0.6
Williamsburg	0.8
Shelburne	1.1
Leverett	1.2
Charlemont	1.5
Heath	1.5
Northampton	1.5
Whately	1.5
Worthington	1.6
Gill	1.6
Chesterfield	1.7
Sunderland	1.7
East Longmeadow	2.0
Longmeadow	2.0
Cummington	2.1
Northfield	2.2
Erving	2.5
Holyoke	2.6
Agawam	2.6
West Springfield	2.8
Russell	2.9
Westhampton	2.9
Wilbraham	2.9
Huntington	3.0
Ludlow	3.0
Plainfield	3.0
Leyden	3.1
Bernardston	3.2
Deerfield	3.2
Greenfield	3.3
Buckland	3.4
Ashfield	3.4
Southampton	3.4
Shutesbury	3.5
Pelham	3.5
Montague	3.5
Easthampton	3.5
Middlefield	3.6
Hampden	3.6
Belchertown	3.6
Conway	3.6
Chicopee	3.7
Westfield	4.0
South Hadley	4.1
New Salem	4.3
Rowe	4.4
Southwick	4.6
Granville	4.6
Monson	4.7
Warwick	4.7
Pioneer Valley	***4.7***
Granby	4.9
Blandford	5.2
Palmer	6.0
Brimfield	6.3
Ware	6.3
Wendell	6.9
Holland	7.3
Colrain	7.5
Springfield	9.6
Goshen	10.0
Wales	10.2
Chester	12.4
Orange	13.9

HOMELESSNESS

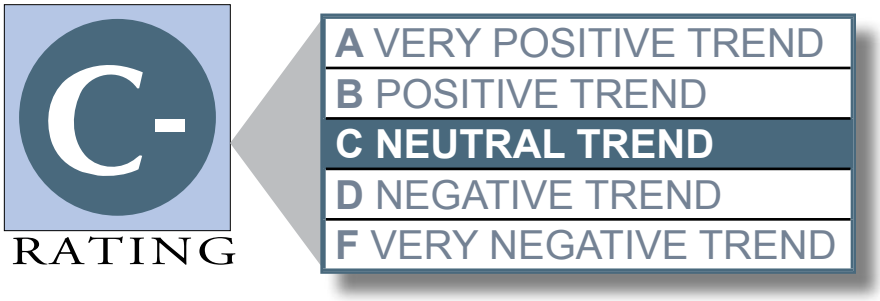
Reaching the point of homelessness is perhaps the most vulnerable a person can be. One is completely exposed to the physical and emotional impacts of weather, crime, hunger, and social isolation. When an individual becomes homeless, he or she has usually exhausted all other available resources to provide for his or her own basic needs. The degree to which a community has a large homeless population can serve as a proxy for how well our region is taking care of its residents and how well these residents can take care of themselves. Factors contributing to homelessness include: education, skills, and access allowing for gainful employment, affordable housing, mental health services, and non-discretionary expenses such as food. The number of people per 1,000 residents who were counted as homeless at a single point in time is measured in this indicator. This total count includes individuals who were in emergency shelters, transitional housing, or had no shelter at all.

The rate of homeless in the Pioneer Valley has increased significantly between 2005-2011, rising from a low point of 1.4 per 1,000 people in 2006 to a high point of 4.0 in 2010. While there was a slight decrease to 3.7 per 1,000 people in 2011, this rate is still concerning and significantly above the Massachusetts statewide rate of 2.5. The state's rate has been more consistent during the same period, and while the Pioneer Valley was doing a little better than state in 2005 and 2006, the region has consistently had considerably higher rates between 2007-2011.

While Springfield, the largest city in the region, has been and continues to be the location of a large proportion of the region's homeless population, this trend has been shifting and homelessness has been becoming more pervasive across the region. In 2005, 53% of the Pioneer Valley's homeless population (668 people) was in Springfield. By 2011, Springfield's share had dropped to 40% but the number of homeless individuals actually increased to 1,025 people. It should be noted that some cities and towns (including Springfield) have a wider array of services and shelters for homeless people, and thus people in need of those services are more likely to go to those communities. A high count of homeless people in a community does not necessarily mean that those people all became homeless while living in that community, but more specifically represents the total number of homeless people residing in that community at a specific point in time and may mean that this is an area where homeless people often come to or are housed in shelters.



Source: U.S. Census Bureau; Western Massachusetts Network to End Homelessness



CIVICS, ARTS AND RECREATION

Civics, arts, and recreation indicators address what many people intuitively think of as quality of life. The presence of a vibrant arts community or the availability of high-quality public libraries are the sometimes intangible elements of a community that make it home. Data to measure these qualities is sometimes difficult to find, but we have attempted to share indicators that speak to these aspects, which are so important to community life. In addition to arts and libraries, the overall presence and support of nonprofit organizations, municipal spending on culture and recreation, and engagement in the political process are important measures of civic involvement, arts, and recreation.

The Pioneer Valley has a long standing reputation as a cultural center due to several arts, humanities, and civics programs within institutions of higher education, as well as over 163 non-profits, a prevalent community of politically engaged citizens, and an abundance of outdoor recreation opportunities. Trends have been steady, but neutral for voter registration, library attendance, and prevalence, expenditures, and support of non-profit organizations within the region. Positively, communities have increased their spending on culture and recreation. Unfortunately, the number of artist awards per capita, have seen recent decreases within the region.

Photo: Caterpillar, Eric Carle Museum by Massachusetts Office of Travel and Tourism

Indicator	Summary	Rating
Library Attendance	Library attendance per capita is slightly higher than it was 10 years ago, with some decreases in the last few years. While rates have generally been higher than those of Massachusetts, they dropped below the state rate in 2010. Equity between many communities is good, but the gap between the highest and lowest performing communities is high.	C
Culture and Recreation Spending	Culture and recreation spending has increased significantly in the last 10 years, and is now in line with Massachusetts rates, though the pace appears to be slowing. Equity between many communities is good, but the gap between the highest and lowest performing communities is high.	B-
Voter Registration	Voter registration rates have been consistent and in line with the state throughout the last 10 years. Equity between most communities is poor.	C-
Arts, Culture and Humanities Nonprofit Expenditures	Arts, culture, and humanities spending has been consistent over the last 9 years, but remains less than half of Massachusetts rates. Equity is good across most communities, but the gap between the highest and lowest performing communities is high.	C-
Nonprofit Support	Per capita public contributions to non-profit organizations have been erratic over the last nine years. Rates surpassed those statewide, and then dropped to about half in 2010.	C-
Support for Artists	Artist awards granted per capita have decreased significantly through the last 10 years. While rates were above those statewide for much of the decade, they dropped below Massachusetts in 2010.	D-

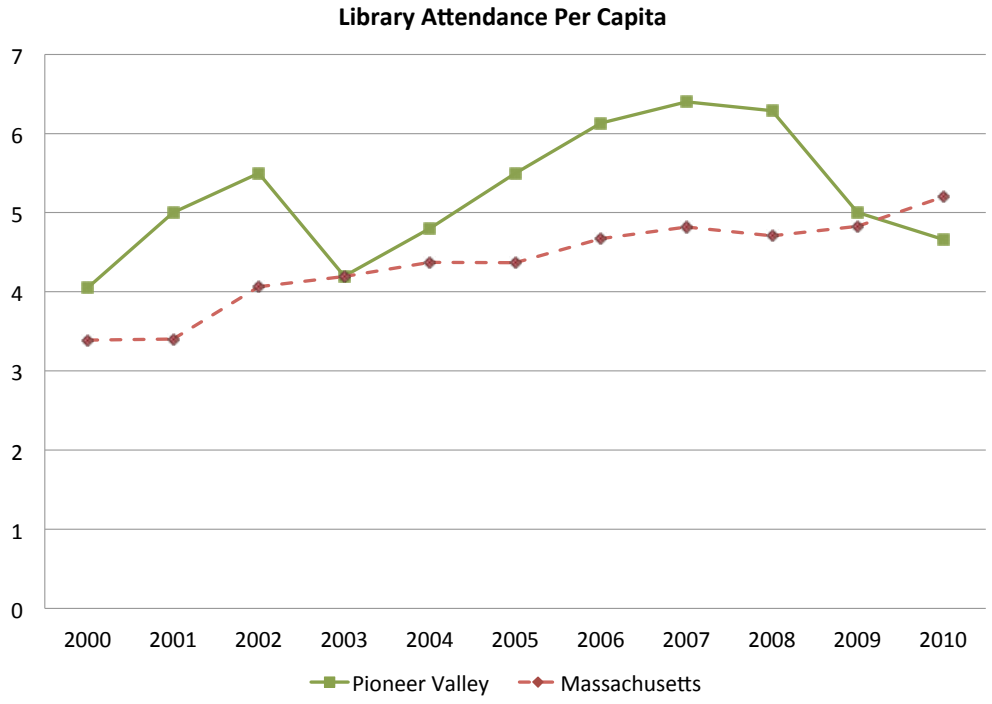
C
RATING

LIBRARY ATTENDANCE

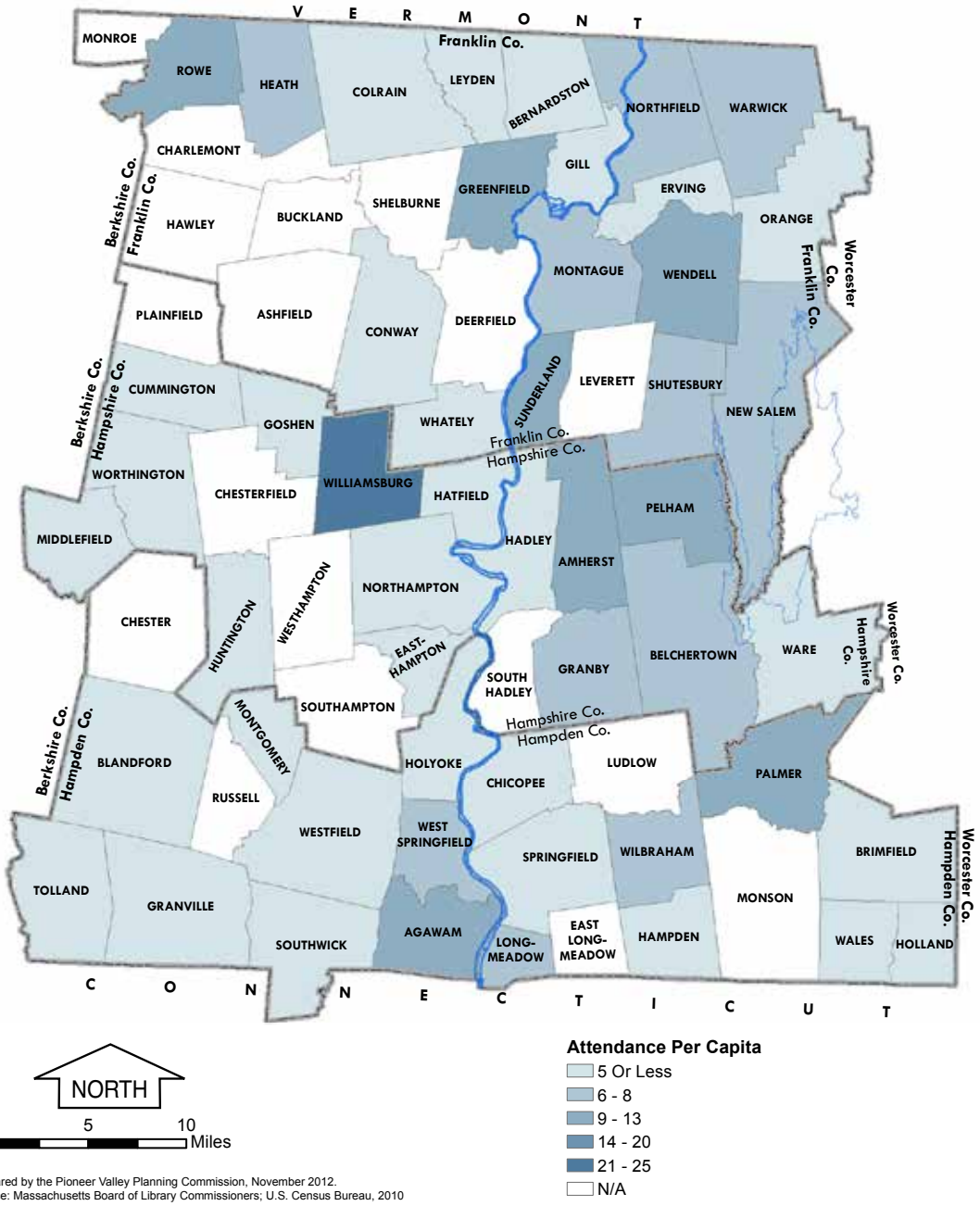
Public libraries serve as an important educational resource for residents and students within their respective communities. The number of library visits per resident is an important measure of the extent to which these residents are taking advantage of educational opportunities within their community, and how well the library is serving the needs of residents. Library attendance is one indicator that reflects a library's usage. This indicator is calculated by the number of visits to the library in a single year, divided by the population of the municipality in which it is located. While this indicator does not reflect the evolving nature of how people are accessing information (such as accessing e-books or reference materials online), it does demonstrate the strong connection made between the library and its constituents.

Residents in the Pioneer Valley, as of 2010, visited their library, on average, 4.7 times a year, slightly behind the Commonwealth of Massachusetts, at 5.2 visits per year. Visits to libraries in the Pioneer Valley increased between 2000 (4.1 visits per person, per year) and 2007 when the rate peaked at 6.3 visits per person, per year. Since then, the rate has declined somewhat to 4.7 visits per person per year in 2010. During this time period, the rate of library visits was consistently higher in the Pioneer Valley than the state as a whole, though the rate for State of Massachusetts increased more drastically, from 3.4 to 5.2 visits per person per year. The declining trend in the Pioneer Valley over the last two years has not been mirrored by the state as a whole and, in fact, in 2010 Massachusetts per-capita library attendance surpassed that of the Pioneer Valley for the first time in at least a decade. It is worth considering that the number of hours that libraries are open can have obvious impacts on the number of visits people will make, so it would be worth exploring whether the libraries in the Pioneer Valley had fewer average hours of operation than other libraries statewide. This was the case in 2001, and with recent budget crunches, it's quite possible that the same is still true.

In 2010, across the Pioneer Valley, library attendance among communities varied greatly ranging from a high of 21.5 visits per person in Williamsburg to just under one visit per person in Goshen. Libraries in the communities of Sunderland, Palmer, Wendell, Agawam, and Rowe each saw 10 or more visits per person. On the other end of the spectrum, the communities of Goshen, Holland, Cummington, Brimfield, Gill, Whately, Blandford, and Northampton each saw fewer than 2 visits per person, per year. Not surprisingly, Goshen and Brimfield (with two of the lowest rates) share municipal borders with the communities of Williamsburg and Palmer (respectively, as two of the communities with the highest rates), suggesting that residents may be choosing to visit nearby libraries, even if not located within the same town. Since most libraries in the Pioneer Valley belong to the same library system, patrons can use any of the member libraries of the system. As a result, patrons may choose to utilize a nearby library that may offer different services or hours of operation, than their home community library. Also of note, is the increased use and remote availability of digital and online materials, which may have contributed to the overall decrease in library attendance since 2007.



Per Capita Library Attendance by Location of Library



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: Massachusetts Board of Library Commissioners; U.S. Census Bureau, 2010

Goshen	0.9
Holland	1.1
Cummington	1.4
Brimfield	1.5
Gill	1.6
Whately	1.7
Blandford	1.7
Northampton	1.9
Wales	2.1
Ware	2.3
Middlefield	2.4
Holyoke	2.5
Hatfield	2.5
Conway	2.8
Hampden	2.9
Granville	3.0
Huntington	3.3
Worthington	3.5
Hadley	3.5
Leyden	3.6
Springfield	3.8
Colrain	3.9
Bernardston	4.0
Erving	4.0
Tolland	4.2
Montgomery	4.6
Pioneer Valley	***4.7***
Chicopee	4.8
Westfield	4.9
Southwick	5.1
Easthampton	5.1
Orange	5.4
Granby	5.5
New Salem	5.8
Montague	6.1
Warwick	6.1
Shutesbury	6.2
West Springfield	6.6
Wilbraham	6.7
Heath	7.3
Longmeadow	7.9
Northfield	8.0
Belchertown	8.3
Pelham	8.7
Amherst	9.4
Greenfield	9.7
Rowe	10.1
Agawam	10.4
Wendell	10.6
Palmer	10.9
Sunderland	13.4
Williamsburg	21.5
Ashfield	NA
Buckland	NA
Charlemont	NA
Chester	NA
Chesterfield	NA
Deerfield	NA
East Longmeadow	NA
Hawley	NA
Leverett	NA
Ludlow	NA
Monroe	NA
Monson	NA
Plainfield	NA
Russell	NA
Shelburne	NA
South Hadley	NA
Southampton	NA
Westhampton	NA

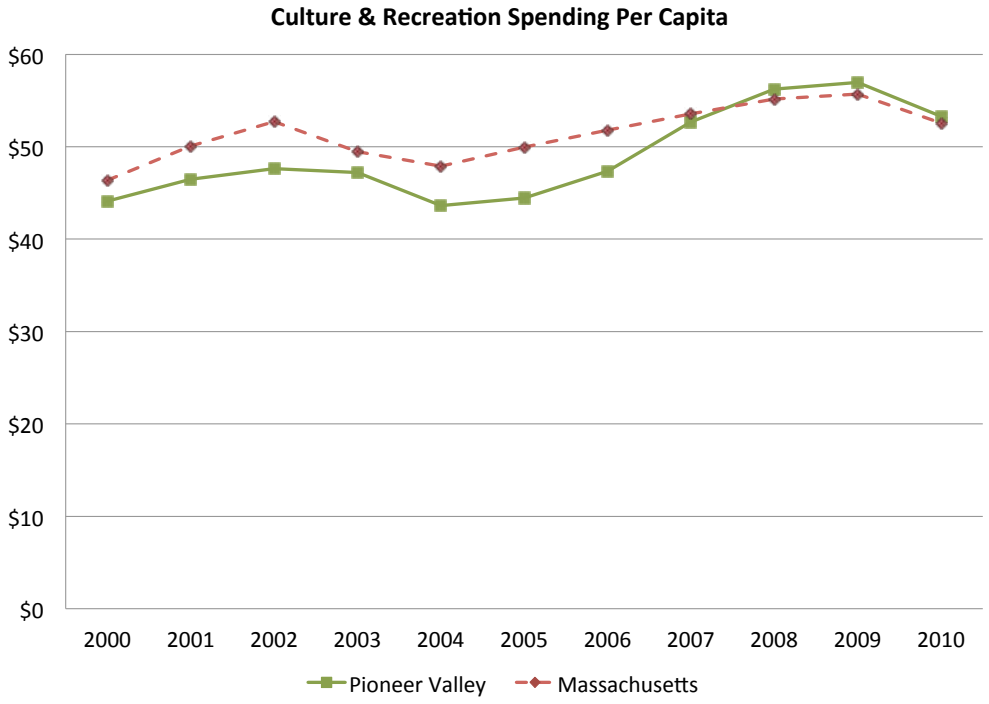
B-
RATING

CULTURE AND RECREATION SPENDING

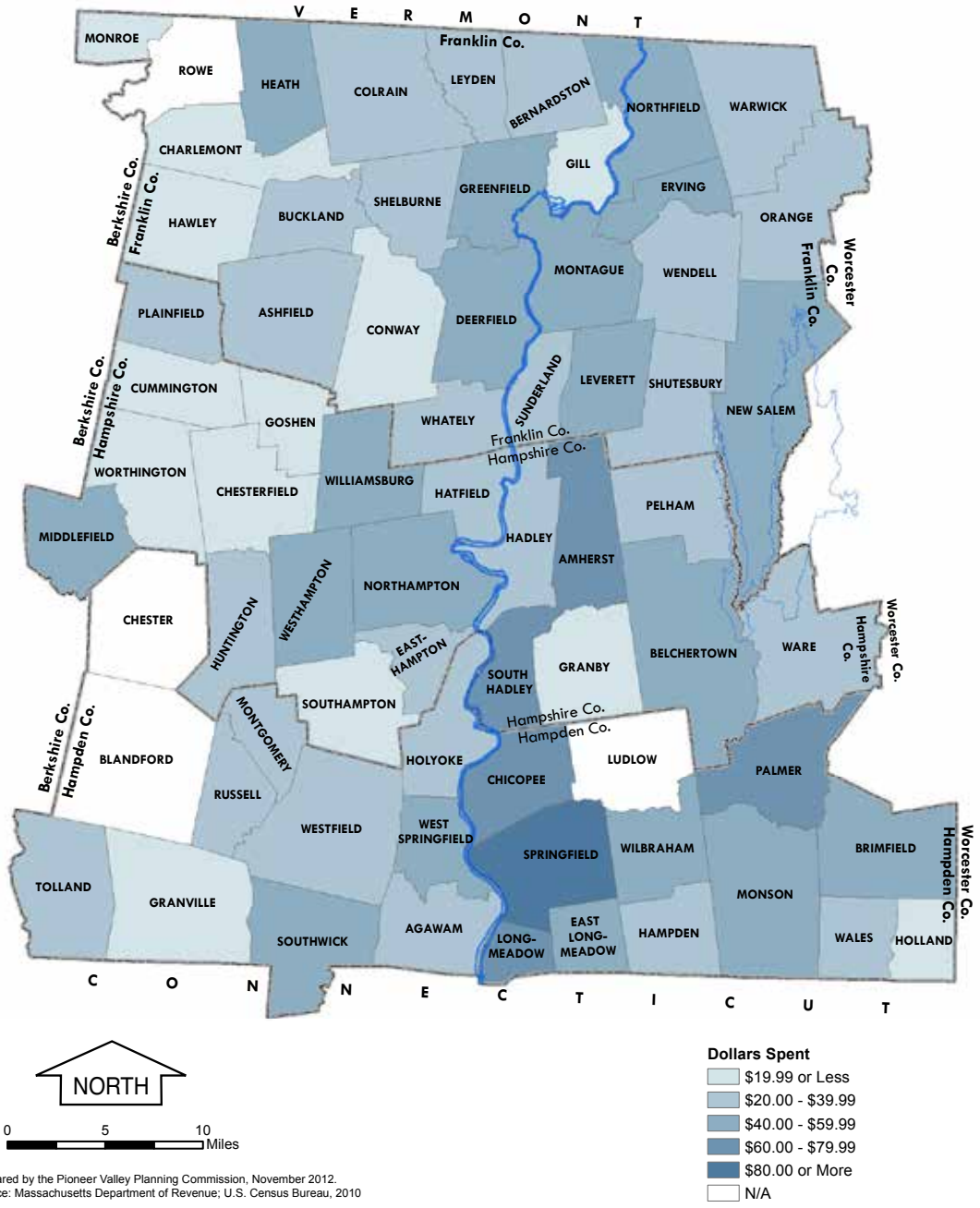
The degree of support local governments provide for culture and recreation activities will directly affect quality of life for community residents who take advantage of those activities. Per capita spending provides an opportunity to compare changes over time and relative differences in spending by communities. Changes over time in this indicator can reflect both changing fiscal realities (for example, budget cuts will reduce per capita spending) and changing municipal priorities (for example, reallocating funds to other areas). This indicator measures the amount spent by municipalities in the Pioneer Valley on culture and recreation divided by the total population of each community to determine per capita municipal spending. Culture and Recreation spending, as defined by the Massachusetts Department of Revenue, covers libraries, recreation activities, parks, historical commissions, and annual celebrations. Dollar amounts are adjusted for inflation so comparisons over time reflect real dollars.

As of 2010, The Pioneer Valley spends $53.20 per person on Culture and Recreation. That is a significant increase over spending in the year 2000, when $44.09 was spent. In comparison, during the same period, Massachusetts increased spending, from $46.37 in year 2000, to $52.55. Thus, the Pioneer Valley increased spending per capita by 20 percent while Massachusetts increased by 13 percent during the same time period.

On a municipal level, spending on Culture and Recreation varied greatly across the Pioneer Valley. The communities of Amherst, Chicopee, Longmeadow, Palmer, and Springfield led the Pioneer Valley, spending between $62 and $84 per person. The communities of Conway, Cummington, Hawley, Holland, and Worthington spent the least, $15 or less per person, which was significantly less than the Pioneer Valley average of $53.20 per person.



Culture & Recreation Spending Per Capita



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: Massachusetts Department of Revenue; U.S. Census Bureau, 2010

Blandford	$0.00
Chester	$0.00
Ludlow	$0.00
Rowe	$0.00
Hawley	$2.97
Cummington	$8.66
Conway	$9.93
Worthington	$10.40
Holland	$14.42
Monroe	$14.66
Charlemont	$14.85
Gill	$16.47
Goshen	$16.80
Southampton	$17.66
Granby	$18.34
Granville	$19.10
Chesterfield	$19.71
Westfield	$21.73
Bernardston	$22.93
Colrain	$23.12
Shutesbury	$23.25
Tolland	$23.77
Ashfield	$24.28
Montgomery	$24.66
Hampden	$24.80
Russell	$25.76
Sunderland	$26.35
Pelham	$26.42
Huntington	$27.90
Wales	$28.24
Plainfield	$28.33
Easthampton	$28.66
Buckland	$29.36
Hatfield	$29.63
Leyden	$29.91
Wendell	$30.56
Whately	$30.89
Orange	$32.15
Warwick	$33.69
Hadley	$34.38
Shelburne	$35.21
Ware	$35.57
Holyoke	$37.45
Agawam	$39.46
Heath	$40.14
Deerfield	$42.09
Southwick	$43.26
Northfield	$43.66
New Salem	$44.47
Westhampton	$44.83
Williamsburg	$45.22
Leverett	$46.88
West Springfield	$47.10
Belchertown	$47.97
Brimfield	$49.72
East Longmeadow	$49.85
Middleton	$50.70
Montague	$53.15
Pioneer Valley	***$53.20***
Northampton	$54.20
Monson	$54.62
Greenfield	$56.14
Erving	$57.72
Wilbraham	$57.91
South Hadley	$60.32
Chicopee	$62.55
Amherst	$71.79
Palmer	$71.85
Longmeadow	$78.11
Springfield	$84.84

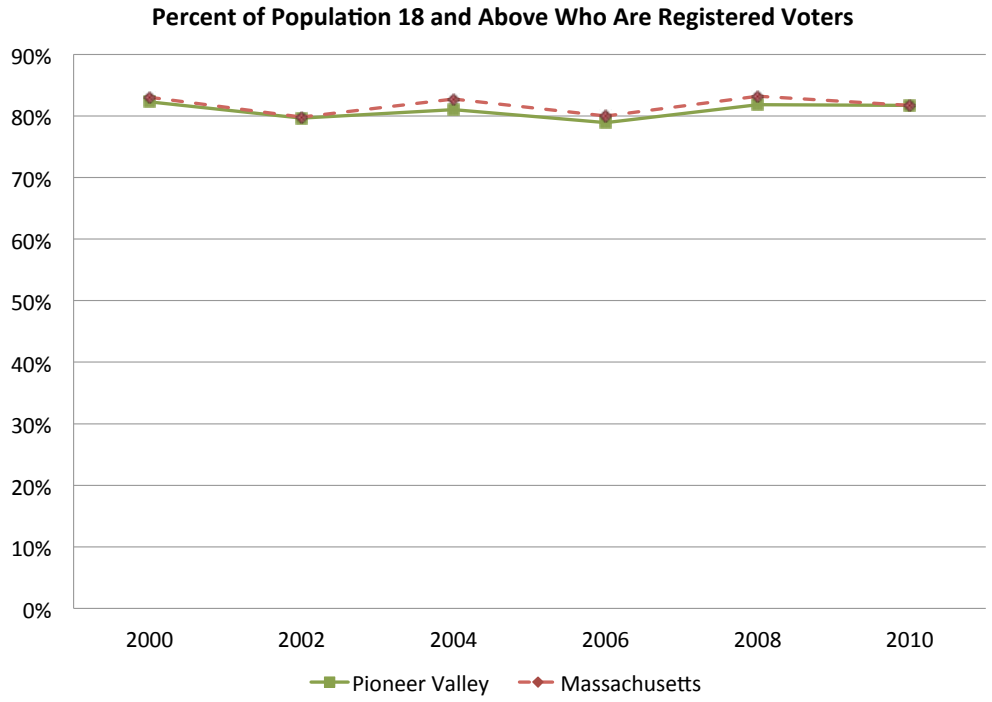
C-
RATING

VOTER REGISTRATION

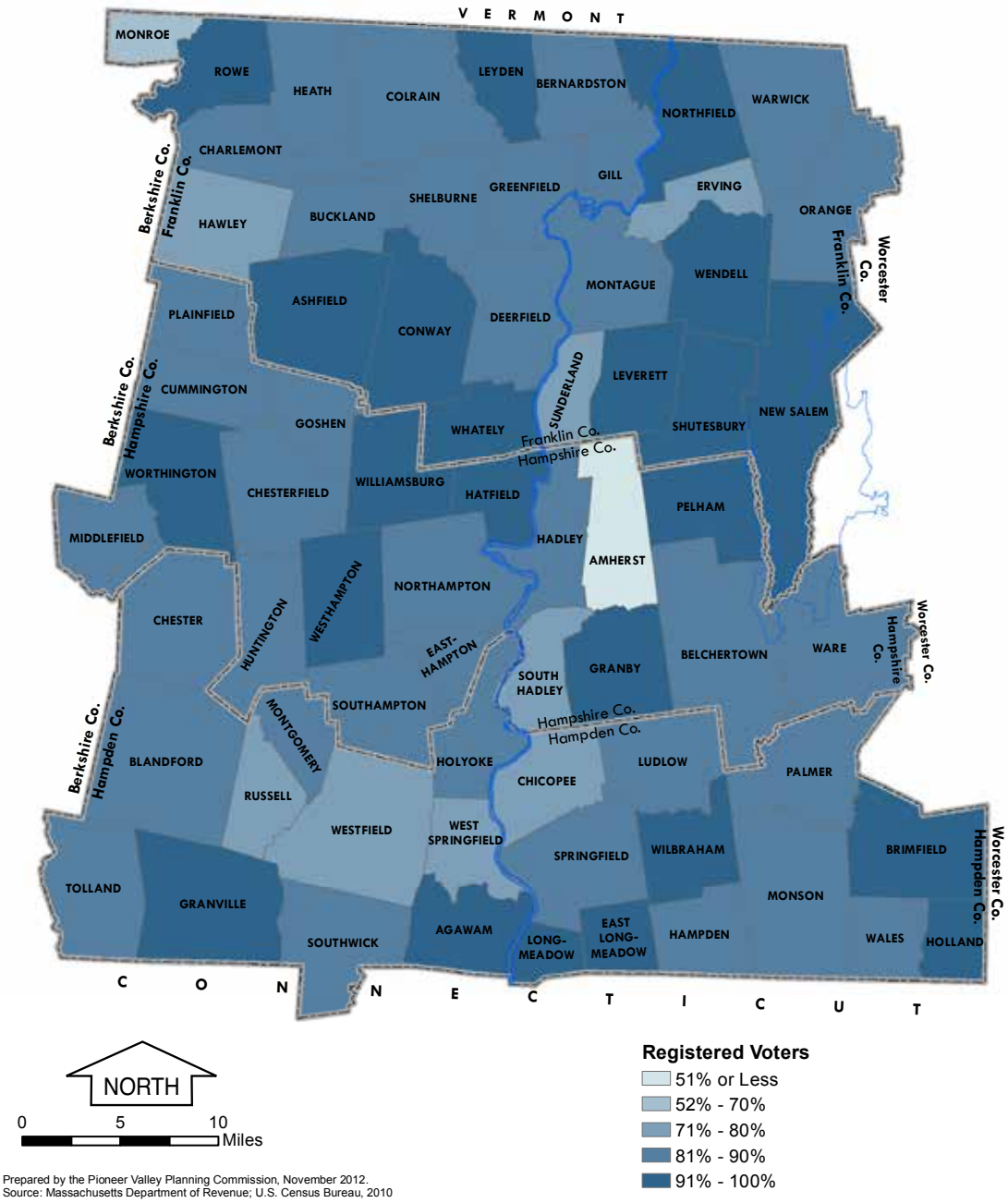
Voter registration is one method to measure the level of citizen engagement in the political process and the civic concerns of their community. Low voter registration rates can be interpreted in many ways. Some argue that low voter registration rates reflect a citizenry's lack of interest in the political process, a disconnection between citizen and government, and a sentiment that participation does not affect outcomes. Another interpretation of low voter registration argues that this trend reflects a citizenry that is satisfied with the status quo. Language and educational barriers also influence voter registration rates by inhibiting participation. Voter registration rates are, in some ways, a better indicator of civic participation than voter turnout rates because the former do not reflect as much year-to-year variation based on the issues or elections on the ballot. This indicator represents the number of total registered voters, divided by the total population over the age of 18 approximates the voter registration rate.

Between 2000 and 2010, the Pioneer Valley saw a fairly consistent voter registration rate. During that period, voter registration peaked in 2000, and by 2010, the voter registration rate was only slightly lower, down to 81.7 percent in 2010, from 82.3 percent in 2000. During the same period, Massachusetts had very similar rates statewide, only slightly higher throughout the decade. For Massachusetts, the rate peaked in 2008, at 83.3 percent. Massachusetts saw a more significant slide between 2000 and 2010, declining from 83 percent in 2000, to 81.7 percent in 2010.

There were significant differences in voter registration rates across the region. In 2010 the top five municipalities by voter registration rate were New Salem (99 percent), Westhampton (97 percent), Leverett, Leyden, and Rowe (96 percent). Four municipalities, Conway, Longmeadow, Pelham, and Shutesbury each indicated a 100 percent rate of voter registration. In 2010, the five municipalities with the lowest voter registration rate were Amherst (51 percent), Monroe (70 percent), West Springfield (76 percent), Sunderland (75 percent), and Westfield (73 percent). This low voter registration rate in Amherst, Sunderland, and Westfield are all likely a result of high non-resident student populations associated with nearby Universities.



Percent of Population 18 and Above Who Are Registered Voters



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: Massachusetts Department of Revenue; U.S. Census Bureau, 2010

Amherst	51%
Monroe	70%
Westfield	73%
Sunderland	75%
West Springfield	76%
South Hadley	76%
Russell	76%
Chicopee	79%
Erving	79%
Hawley	80%
Charlemont	81%
Ludlow	81%
Orange	81%
Pioneer Valley	***82%***
Northampton	82%
Greenfield	82%
Springfield	82%
Huntington	83%
Ware	83%
Buckland	84%
Southwick	84%
Palmer	84%
Holyoke	84%
Montgomery	85%
Warwick	85%
Belchertown	85%
Montague	85%
Middlefield	86%
Monson	86%
Hadley	86%
Goshen	86%
Blandford	86%
Chesterfield	87%
Colrain	87%
Easthampton	87%
Chester	88%
Shelburne	88%
Gill	88%
Bernardston	89%
Plainfield	89%
Heath	89%
Cummington	90%
Wales	90%
Tolland	90%
Hampden	90%
Southampton	90%
Deerfield	90%
Brimfield	91%
Northfield	91%
Holland	92%
Whately	92%
East Longmeadow	92%
Agawam	92%
Hatfield	93%
Granby	93%
Ashfield	93%
Granville	93%
Worthington	93%
Williamsburg	94%
Wendell	95%
Wilbraham	95%
Rowe	96%
Leverett	96%
Leyden	96%
Westhampton	97%
New Salem	99%
Conway	100%
Longmeadow	100%
Pelham	100%
Shutesbury	100%

C-
RATING

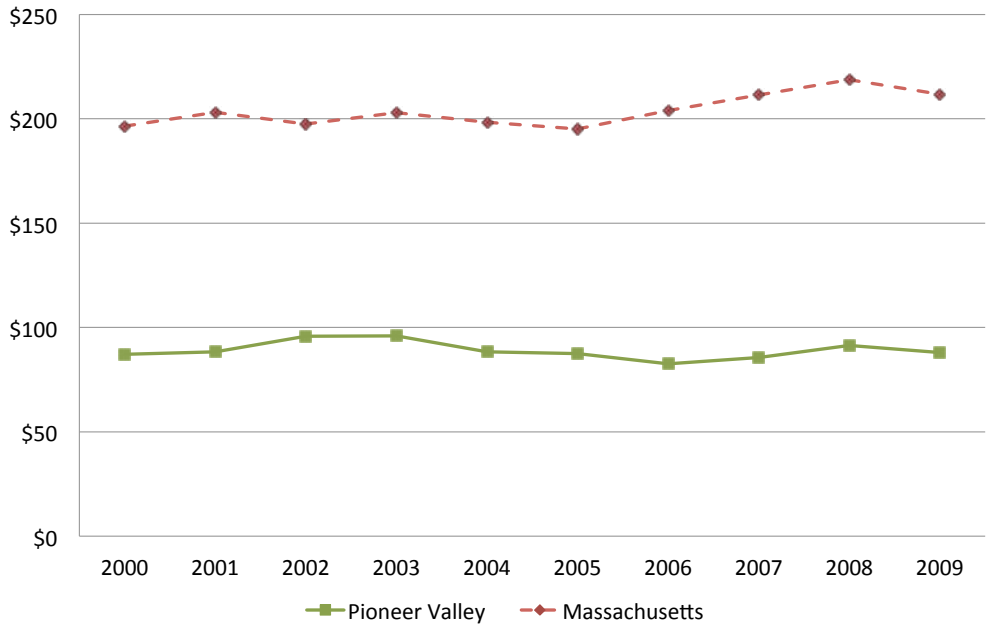
ARTS, CULTURE AND HUMANITIES NONPROFIT EXPENDITURES

Organizations focused on arts, culture, and humanities provide nuanced quality of life to the people in their communities, often providing opportunities for people to interact with creative and cultural experiences that they would not have been able to otherwise. The prevalence and the amount of expenditures by arts, culture, and humanities nonprofits can provide a measure of the activity and vitality of non-profits in these focus areas. While the number of arts, culture, and humanities nonprofits speaks to the variety and multitude of different organizations and opportunities are available, identifying the amount of expenditures associated with arts, culture, and humanities nonprofits can provide a measure of the economic activity, strength, and size of those organizations. The total number of arts, culture, and humanities nonprofit organizations and the per capita amount of their expenditures is reflected in this indicator.

As of 2009, the Pioneer Valley was home to 136 arts, culture, and humanities nonprofits, relative to 1,498 statewide in Massachusetts. With just under 11% of the state's population, the Pioneer Valley was home to 9% of the arts, culture, and humanities nonprofits. Per capita expenditures by these organizations within the Pioneer Valley, when adjusted for inflation, slightly increased between 2000 and 2009, from $87 to $88 per person. Unfortunately the Pioneer Valley lagged behind statewide spending in this area and, during the same period, Massachusetts saw an overall increase of $16 spent per person, from $196 to $212. The Pioneer Valley began the 2000s by spending roughly $0.44 for every dollar Massachusetts spent. By 2010, that gap had widened by three cents, when spending in the Pioneer Valley declined to $0.41 for every dollar spent relative to Massachusetts.

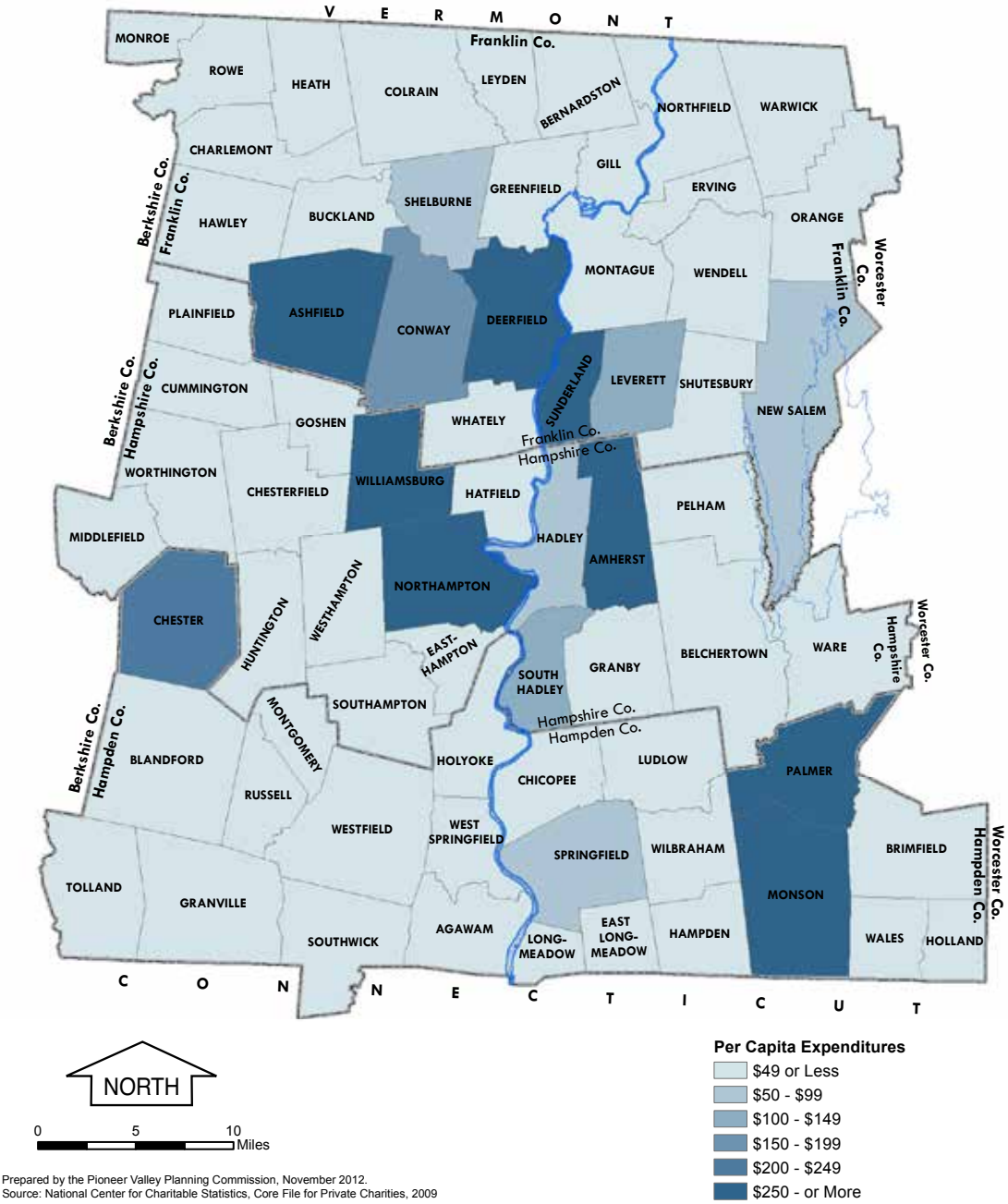
The range of per capita expenditures by these organizations varied greatly across the communities within the region. Just under half of the communities in the region (34) did not have any arts, culture, or humanities nonprofits reporting tax returns of $25,000 in or more, in 2009 thus having no expenditures. On the other hand, 35 communities had at least one organization under this category. The top five communities, by number of nonprofits, were Amherst, Greenfield, Holyoke, Northampton, and Springfield. Together, these five communities were home to 63 nonprofits – or 46% of all the arts, culture, and humanities nonprofits in the Pioneer Valley. This did not correlate completely with per capita expenditures however. While Northampton and Amherst were still in the top five for per capita expenditures (spending $445 and $291 respectively), Springfield, Holyoke, and Greenfield, all had expenditures of less than $100 per capita. Northfield, Bernardston, and Hatfield all had per capita expenditures of less than $15 while Deerfield topped the list with $1,393. Comparing the number of organizations to per capita spending, it is clear that, in some cases, communities have many smaller non-profit organizations of this type which pool together to create high expenditures, while in other cases there is just one or two very large organizations who create all of the expenditures on their own.

Per Capita Expenditures for Arts, Culture and Humanities 501(C)(3) Private Charities



Note: Information about churches, church-affiliated organizations, and organizations that earned under $25,000 is not included in this data because they are not required to report 990 tax forms from which the data was derived.

Per Capita Expenditures for Arts, Culture and Humanities 501(C)(3) Private Charities



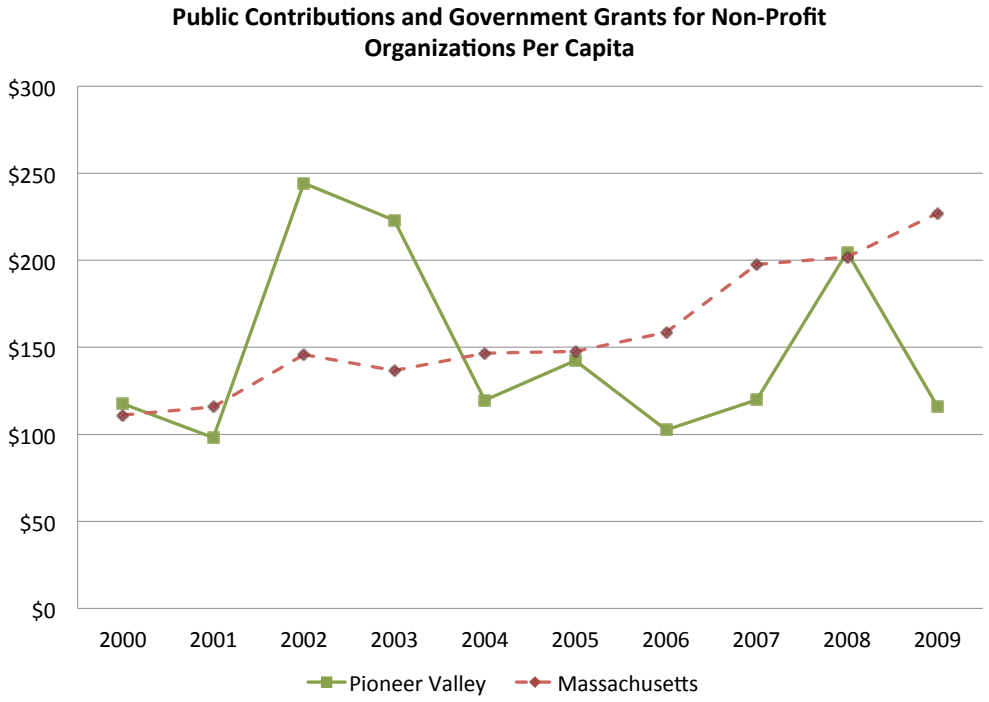
Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: National Center for Charitable Statistics, Core File for Private Charities, 2009

Brimfield	$0.00
Buckland	$0.00
Charlemont	$0.00
Chesterfield	$0.00
Colrain	$0.00
Cummington	$0.00
Erving	$0.00
Gill	$0.00
Goshen	$0.00
Granville	$0.00
Hampden	$0.00
Hawley	$0.00
Heath	$0.00
Holland	$0.00
Huntington	$0.00
Leyden	$0.00
Middleton	$0.00
Monroe	$0.00
Montgomery	$0.00
Orange	$0.00
Pelham	$0.00
Plainfield	$0.00
Rowe	$0.00
Russell	$0.00
Shutesbury	$0.00
Southampton	$0.00
Southwick	$0.00
Tolland	$0.00
Wales	$0.00
Warwick	$0.00
Wendell	$0.00
Westhampton	$0.00
Whately	$0.00
Worthington	$0.00
Granby	$1.27
Wilbraham	$2.17
Ludlow	$3.57
East Longmeadow	$4.30
Agawam	$4.82
Westfield	$6.44
Montague	$7.72
Belchertown	$8.18
Chicopee	$8.90
Ware	$9.85
Northfield	$11.19
Bernardston	$12.06
Hatfield	$13.82
Easthampton	$24.91
Blandford	$30.39
West Springfield	$34.43
Longmeadow	$34.66
Greenfield	$41.51
Holyoke	$43.24
New Salem	$49.46
Hadley	$71.26
Springfield	$78.51
Shelburne	$89.14
Pioneer Valley	***$89.41***
Leverett	$102.57
South Hadley	$104.90
Conway	$188.81
Chester	$208.58
Sunderland	$251.87
Monson	$252.15
Amherst	$290.96
Ashfield	$311.70
Palmer	$399.43
Northampton	$444.59
Williamsburg	$875.61
Deerfield	$1,392.88

NONPROFIT SUPPORT

The amount of monetary contributions per capita to nonprofit organizations in the Pioneer Valley provides a relative measure of year-to-year support. These nonprofits, ranging from youth development organizations, to housing and shelter advocacy organizations to civil rights and social action organizations, meet the daily physical, emotional, mental, and social needs of the region's residents and the level of support is an indicator of their ability to continue providing these services. The total amount of money contributed to nonprofit organizations through direct public contributions and federal, state, and local government grants per capita is used to measure the degree of support for the nonprofit sector. All 501(c)(3) organizations are included except those types of organizations that likely draw the majority of their public support from outside the region, including education, health, medical, research, foreign affairs, and religious organizations.

Overall per capita support for nonprofit organizations in the region (of which there were 357 in 2009) declined slightly from 2000 to 2009, with spikes in 2002 and 2003, and a sharp decrease in 2004. The overall average support during these years was $148 per capita. Consistently, from 2000 through 2009, contributions to nonprofit organizations per capita in Massachusetts exceeded the amount of per capita contributions in the Pioneer Valley. While the Pioneer Valley and Massachusetts experienced different patterns in changing support for nonprofit organizations from 2000 to 2009, the gap between the amount contributed in Massachusetts and the amount contributed in the Pioneer Valley began to once again, widen at the end of that period. By 2009, the per capita support for nonprofit organizations in all of Massachusetts was $112 higher than that of the Pioneer Valley.



Source: National Center for Charitable Statistics, Core File for Private Charities

D-
RATING

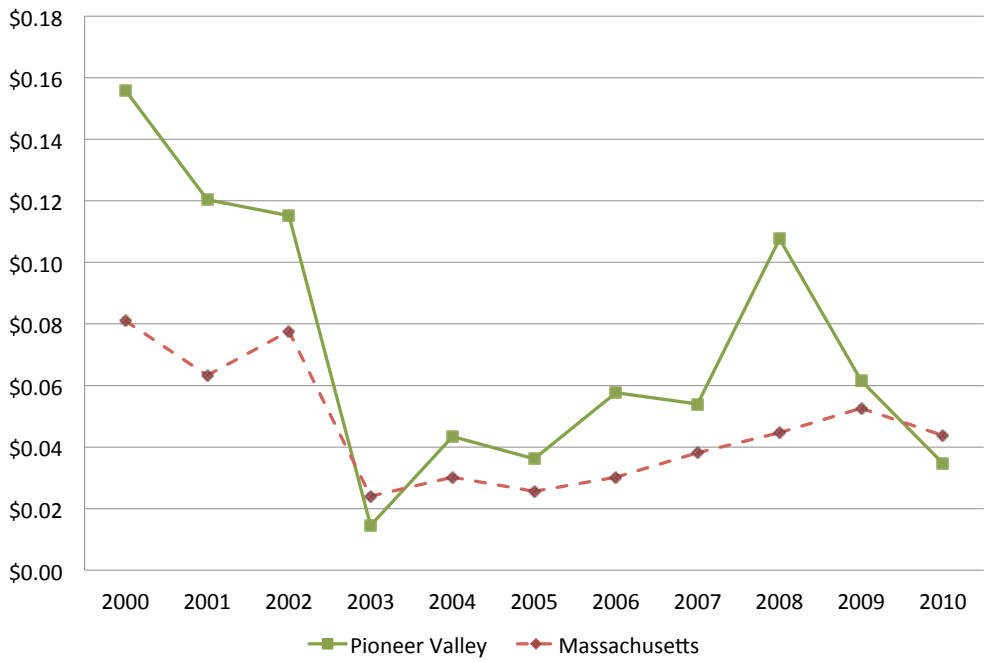
SUPPORT FOR ARTISTS

Arts and cultural activities are important to the quality of life in any community, and the presence of recognized artists in a community will likely increase the level and volume of art and cultural activities within that community. The Massachusetts Cultural Council provides grants to support the development of individual artists who are Massachusetts residents and have demonstrated or recognized talent. Therefore, receipt of Massachusetts Cultural Council artist grants, which go to those already established, is indicative of the presence of an established arts community. The amount of money distributed by the Massachusetts Cultural Council to artists in the Pioneer Valley and Massachusetts is divided by total population to measure the relative presence of artists between the region and the state. Actual dollar values of total grants awarded are shown for each community to identify various centers of arts in the region.

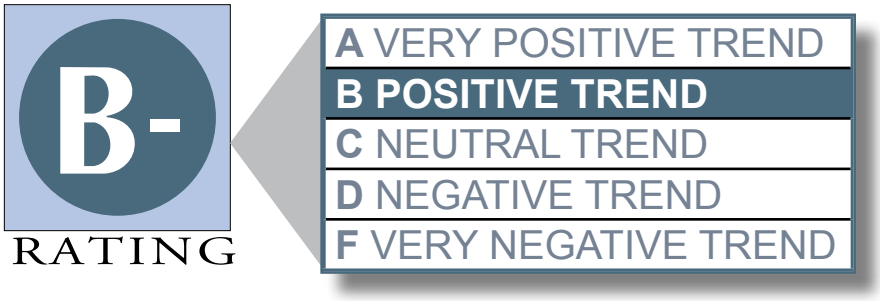
The amount of Massachusetts Cultural Council artist grants distributed per capita to the Pioneer Valley as compared to Massachusetts reveals the depth of artistic talent in the region. For every year from 2000 to 2010, except for 2003 and 2010, the Pioneer Valley received more dollars in artist grants per capita than Massachusetts as a whole. In 2000, the Pioneer Valley received almost 16 cents per capita from the Massachusetts Cultural Council. Although the amount significantly decreased by 2010, the Pioneer Valley remained above or very close to Massachusetts as whole between 2003 and 2010. Over the same period, residents of Massachusetts received on average, 1.5 fewer cents per capita in artist grants during the same time period.

Between 2000 and 2010, established artists in the Pioneer Valley received $551,500 dollars in grants, but these grants were not well distributed throughout the region. No grants were given to artists in 46 of the region's 69 communities. In the 23 communities that were home to artists who received grants during this period, artists in 11 communities received less than $10,000; artists in four communities — Charlemont, Chicopee, East Longmeadow, and Holyoke—received between $10,000 and $20,000; artists in Easthampton, Montague, Shelburne, Springfield, and Williamsburg received between $25,000 and $38,500; and artists in Amherst and Northampton, the center of arts activities in the region, received $79,000 and $194,500 in grants, respectively.

Artist Grants Awarded From the MA Cultural Council Per Capita



Source: National Center for Charitable Statistics, Core File for Private Charities



ENVIRONMENT

It is unlikely there is a factor that influences the region's long-term health and quality of life more than the environment. Air quality, water quality, recreational open space, and waste disposal all affect residents' physical well-being, economic condition, long-term livelihood, and capacity to enjoy their surroundings. Efforts to improve our air and water quality have made significant strides in recent years through the Connecticut River clean up, but there is still much that can be done to recover from years of pollution. A variety of indicators including recycling rates, average commute times, and the number of miles of bike paths help us gauge our progress in building a more sustainable region. By reducing our day-to-day impact and cleaning up previous pollution, our efforts will be realized through an improved quality of life for us today and for future generations tomorrow.

Observing the various environmental indicators we can see the environment is one category where the Pioneer Valley is making the greatest improvements. Most environmental indicators show a positive trend for the region and are better than the state average. The most significant positive indicators show large increases in the number of miles of bike paths, decreases in combined sewer overflows, as well as the proportion of our communities designated "Green Communities" increasing much faster than rates statewide. Trends have remained neutral for average commute times, access to recreational and open space, and the percent of days with healthy air quality.

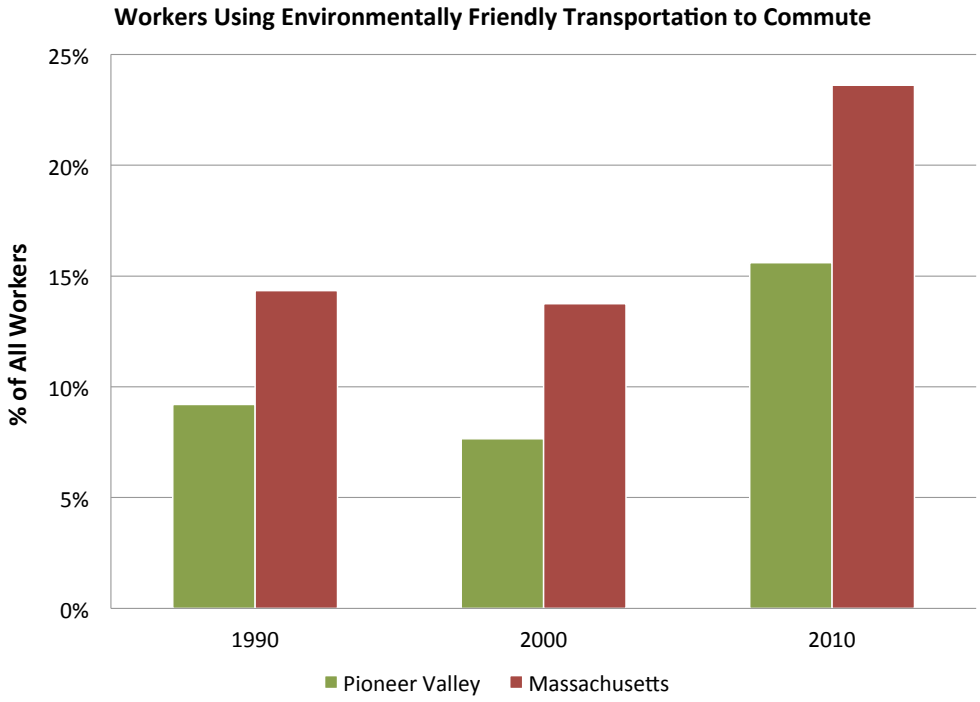
Indicator	Summary	Rating
Environmentally Friendly Transportation	The percent of commuters using environmentally friendly transportation options has increased significantly in the last 10 years. However rates remain well below the rates of Massachusetts, and growth has not kept pace with that statewide. Equity is good amongst many communities but the gap between the highest and lowest performing communities is large.	C+
Bike Paths	The number of miles of bike paths increased more than 450% in 9 years, and nearly doubled in the most recent 4 years.	A
Healthy Air Quality Days	The percent of days with healthy air quality has been generally stable over the last 10 years, with an increase of less than 1% since 1999.	C
Average Commute Time	Average commute times have increased slightly in recent years, but remain well below averages for Massachusetts. Equity between most communities is poor.	C
Recycling Rate	Recycling rates have increased slightly in recent years, and consistently remain above Massachusetts rates. Equity for most communities is neutral, but the gap between the highest and lowest performing communities is high.	B-
Green Communities	The percent of all municipalities that are designated Green Communities more than doubled between 2010 and 2011. Rates continue to be higher than those statewide.	A
Access to Recreational Space and Open Space	Access to recreational and open space has remained stable for over three decades. Rates have consistently been higher than those for Massachusetts, and have remained high as state rates have dropped. Equity between most communities is poor.	C
Water Quality (CSOs)	The number of combined sewer overflows has seen a steady decrease over the last ten years. Equity is good amongst most communities but the gap between the highest and lowest performing communities is large.	A-

"ENVIRONMENTALLY FRIENDLY" TRANSPORTATION OPTIONS

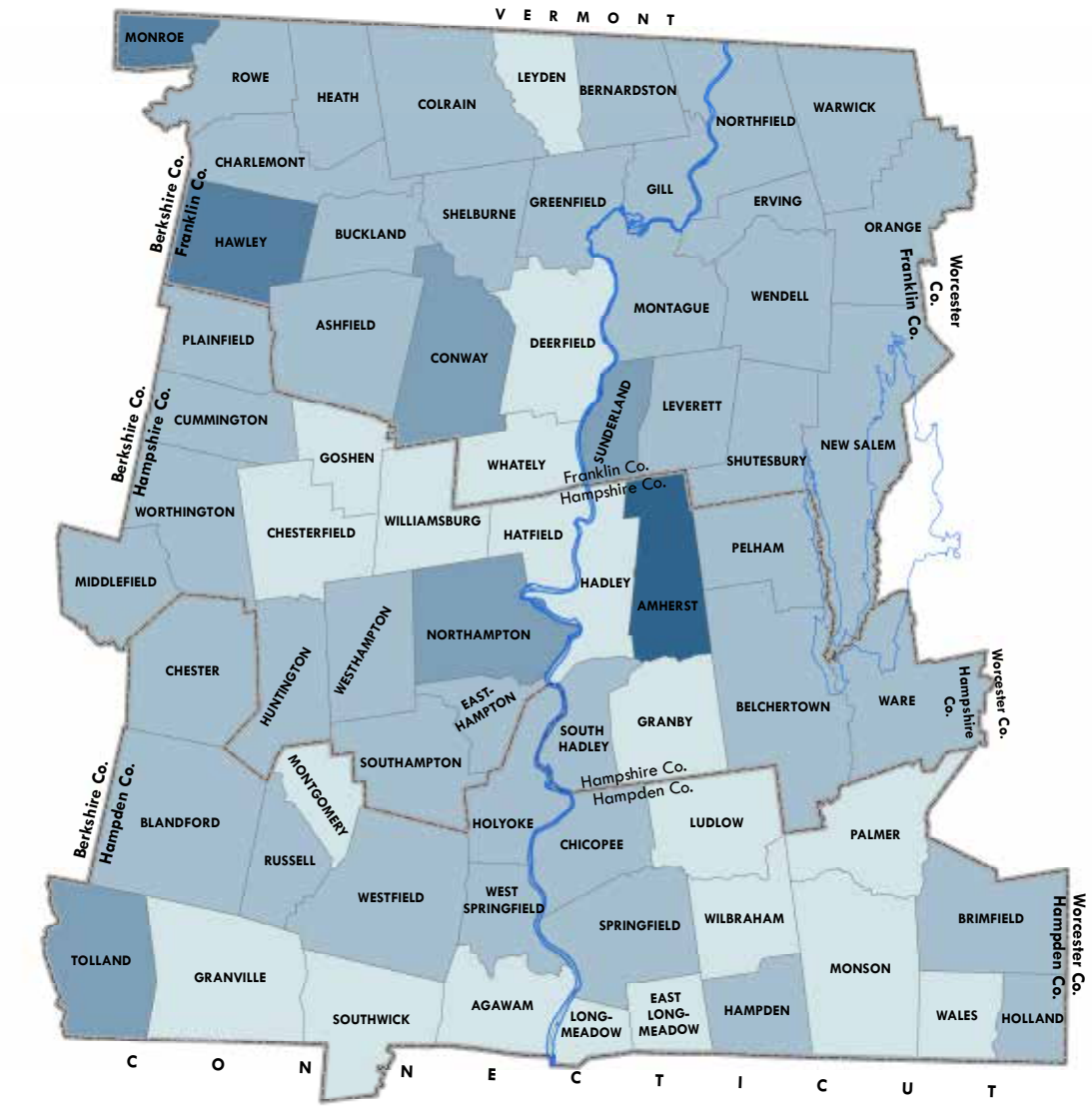
Commuting to work by single-occupancy vehicle is one of the major causes of pollution, greenhouse gas (GHG) emissions, and traffic. The portion of residents that use "environmentally friendly" modes of transportation to get to work is a key metric to evaluate how well the region's population is moving away from this type of travel and inherently reducing GHG emissions per person. "Environmentally friendly" transportation options include carpooling, taking public transit, bicycling, or walking to work. By proxy, this indicator reflects vehicular congestion, parking availability, air quality, and community walkability and bikeability. The percent of all residents who utilize one of these "environmentally friendly" methods to commute to work is reflected in this indicator.

Overall, use of "environmentally friendly" transportation options has increased tremendously in the last 20 years, both in the Pioneer Valley and across Massachusetts. In the Pioneer Valley, 2010 saw the highest percentage of workers opting for an environmentally friendly commute than in the previous 20 year period, about 15.6 percent. In the decade between 2000 and 2010, the Pioneer Valley saw this indicator rise about 104 percent. While the overall proportion of commuters who are "environmentally friendly" has been higher for Massachusetts over the years, the significant rebound in the Pioneer Valley has resulted in a faster rate of increase within the region than the trend statewide, though the gap between them continues to increase.

Within the Pioneer Valley, the use of "environmentally friendly" transportation options varied greatly between communities. While logic dictates that this behavior is heavily dependent on the urban or rural nature of a community as well as access to public transit, this was not always the case. In 2010, the communities with the highest rates of alternative transportation were the dense communities of Amherst, and Northampton, as well as the smaller communities of Hawley, Monroe, and Tolland. Each of these communities had at least 25 percent of residents using "environmentally friendly" transportation options. In the smaller towns of Hawley, Monroe, and Tolland, carpooling was a dominant method of work commute, suggesting that people who live farther away from the urban work centers may be more likely to share rides. Of note is the transit service availability in Amherst and Northampton due to the presence of the Five Colleges and UMass Transit Services. Also notable are the urban core cities of Chicopee, Holyoke, and Springfield, which together, constitute the main service area of the Pioneer Valley Transit Authority. Each of these communities had between 12 and 20 percent of residents using these transportation options. The communities with the lowest percentage of residents using these transportation options were Goshen, Granby, Hatfield, Leyden, and Wilbraham. Each of these communities had less than 7 percent of residents using "environmentally friendly" transportation options. This may be a result of each of these communities having limited or no access to public transit services.



Percent of Workers Using Environmentally Friendly Transportation to Commute



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2005-2009

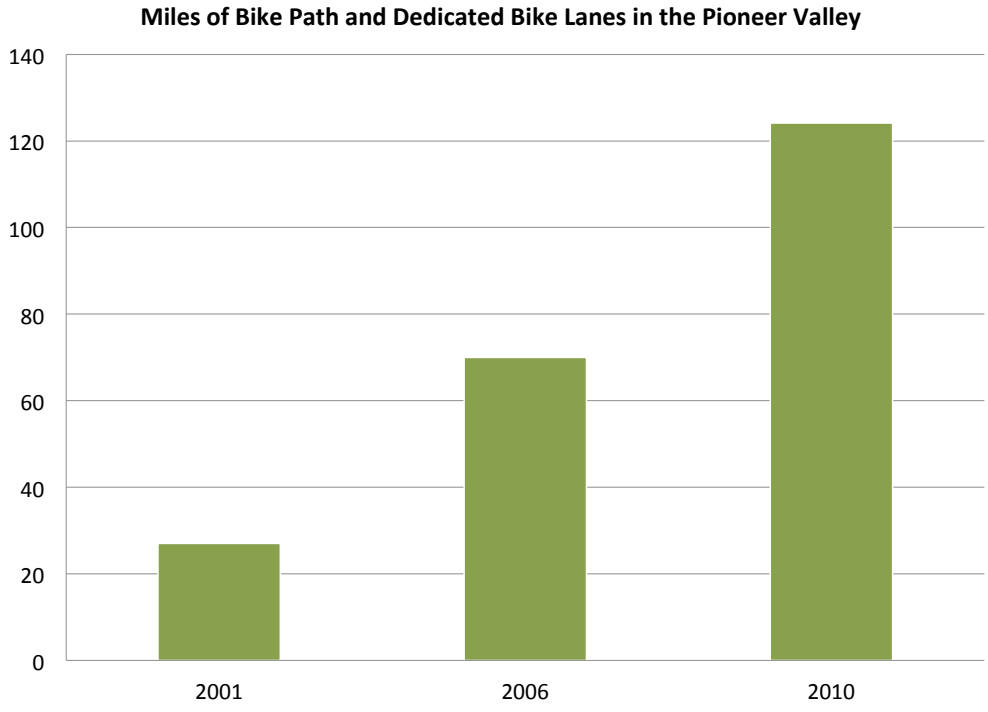
Goshen	4.8%
Leyden	4.9%
Wilbraham	5.3%
Granby	5.3%
Hatfield	6.9%
Monson	7.0%
Wales	7.1%
Hadley	7.1%
Longmeadow	7.4%
Chesterfield	7.4%
Agawam	7.6%
East Longmeadow	8.1%
Williamsburg	8.1%
Montgomery	8.1%
Southwick	8.5%
Granville	8.5%
Ludlow	9.5%
Deerfield	9.7%
Palmer	9.8%
Whately	10.0%
Worthington	10.1%
Westfield	10.2%
Northfield	10.3%
Hampden	10.4%
Westhampton	10.5%
Pelham	10.6%
Shutesbury	10.8%
Southampton	10.8%
Bernardston	11.2%
Ware	11.5%
Russell	11.7%
Belchertown	11.7%
Holland	12.2%
West Springfield	12.5%
Chicopee	12.6%
New Salem	12.6%
Charlemont	12.7%
Easthampton	12.8%
South Hadley	13.0%
Shelburne	13.1%
Buckland	13.5%
Rowe	13.5%
Colrain	13.6%
Brimfield	13.9%
Erving	14.4%
Plainfield	14.8%
Blandford	14.9%
Pioneer Valley	***15.6%***
Leverett	15.6%
Huntington	15.8%
Greenfield	16.0%
Middlefield	16.3%
Chester	16.4%
Warwick	16.5%
Ashfield	16.8%
Heath	17.5%
Montague	17.6%
Cummington	18.2%
Orange	18.3%
Holyoke	19.1%
Wendell	19.3%
Gill	19.9%
Springfield	20.0%
Conway	20.2%
Sunderland	22.8%
Tolland	25.3%
Northampton	28.7%
Monroe	31.3%
Hawley	36.1%
Amherst	46.0%

BICYCLE PATHS

Bicycle Paths are linear stretches that allow bicycle users of all ages to make connections between points of interest, either for recreational or commuting purposes. Bicycle Paths are generally closed to vehicular traffic and can provide safe and often well designed spaces that can enhance personal mobility, commuting, and physical activity. Bicycling is one of the most efficient means of transportation – both for the user and the environment at large. Providing, and continually extending these paths can assist communities in their goals of improving connectivity between destinations, providing transportation options to all users, and reducing the transportation impacts on the environment. The number of miles of bicycle paths and dedicated bike lanes is reflected in this indicator.

Bicycle path mileage in the Pioneer Valley grew significantly between 2001 and 2010. In 2001, the Pioneer Valley had 27 miles of bicycle paths; in 2010, there were 124 miles. Over this nine year period, Pioneer Valley residents gained access to 3.5 times more miles of bicycle paths. As of 2010, the share of miles of bike paths across counties was relatively even. Franklin County had 44 miles, Hampden County had 43 miles, and Hampshire County had 37 miles.

Across Massachusetts, the 2008 State Bicycle Plan identified 420 miles of improved bicycle facilities, along with 22 paths of shared use facilities, which total 300 miles. With a total of 124 miles as of 2010, this is an indication that the Pioneer Valley has been successful in making the availability of bicycle and shared use paths a priority in its transportation system.



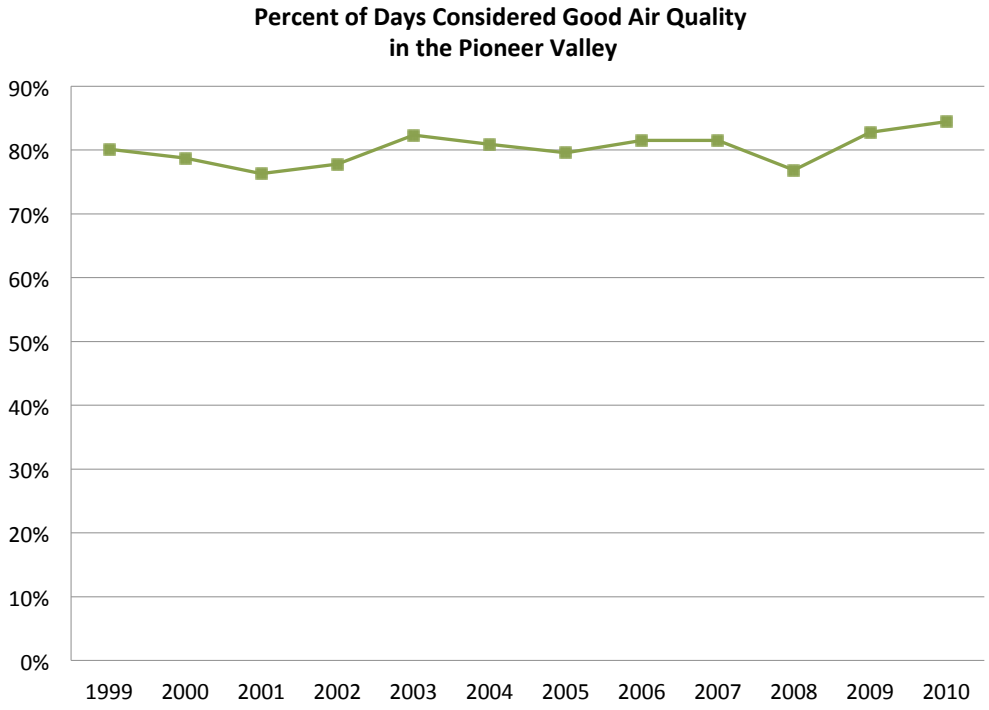
Source: Pioneer Valley Planning Commission

C
RATING

HEALTHY AIR QUALITY DAYS

Air Quality is an important environmental metric that impacts everyone in our community. The quality of the air we breathe affects our health in a number of different ways, such as asthmas rates and lost days of school or work due to illness. Measuring healthy air quality days over time tells us about our physical risk; it also tells us something about how polluting our individual and societal behaviors are, further contributing to health risks. Air quality is measured using an Air Quality Index (AQI) – which categorizes days based on the level of concern about impacts on human health. The United States Environmental Protection Agency (EPA) calculates the AQI on a 500 point scale. Any AQI score between 0 – 50 indicates good air quality conditions. The percent of days in a year that are considered good Air Quality Days is reflected in this indicator.

Between 1999 and 2010, the Pioneer Valley region saw, on average, 80% of all days providing good air quality. The percent of good air quality days peaked in 2010 at 84.4 percent, it was at a low of 76.3% in 2001. During the first half of the study period, between 1999 and 2003, the range of good air quality days was anywhere between 76-82%, reflecting a potential range of 22 days, or just over three calendar weeks. Between 2003 and 2010, the range of good air quality days was between 77-84%, reflecting a potential range of twenty-five days, or more than three and a half weeks. This is an indication that aside from the sheer higher number of good air quality days, the variation across the years continues to be great. While the percent of days with good air quality continues to be volatile from year to year, there does seem to be a trend towards improvement over the last decade.



Note: Air quality data is only available for metropolitan areas and certain counties through the Commonwealth of Massachusetts. Due to this data limitation, air quality data does not include Franklin County.

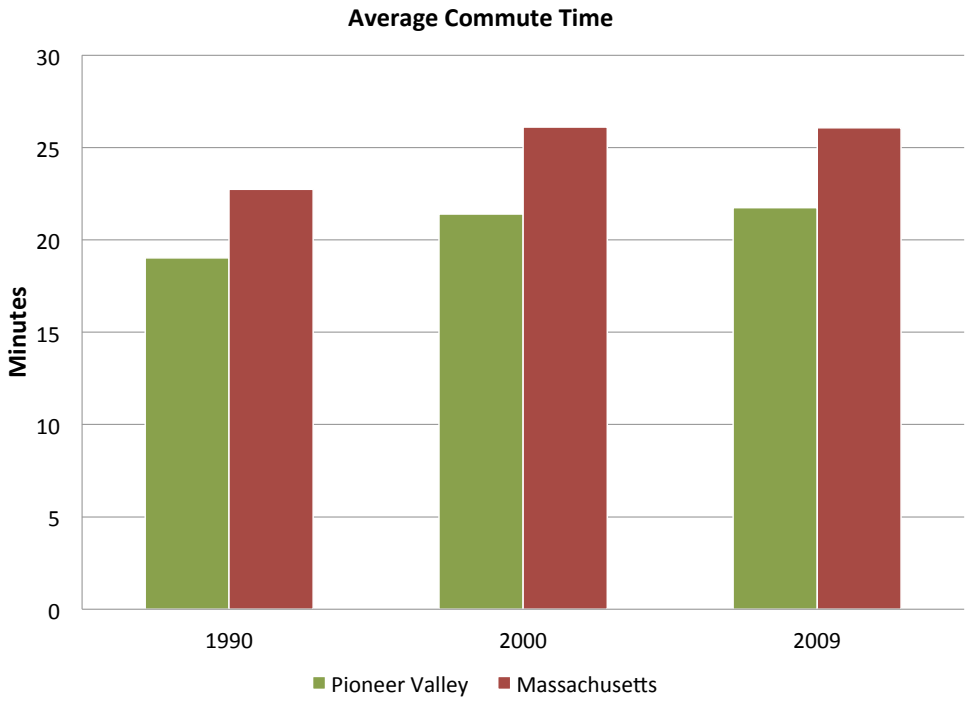
C
RATING

AVERAGE COMMUTE TIME

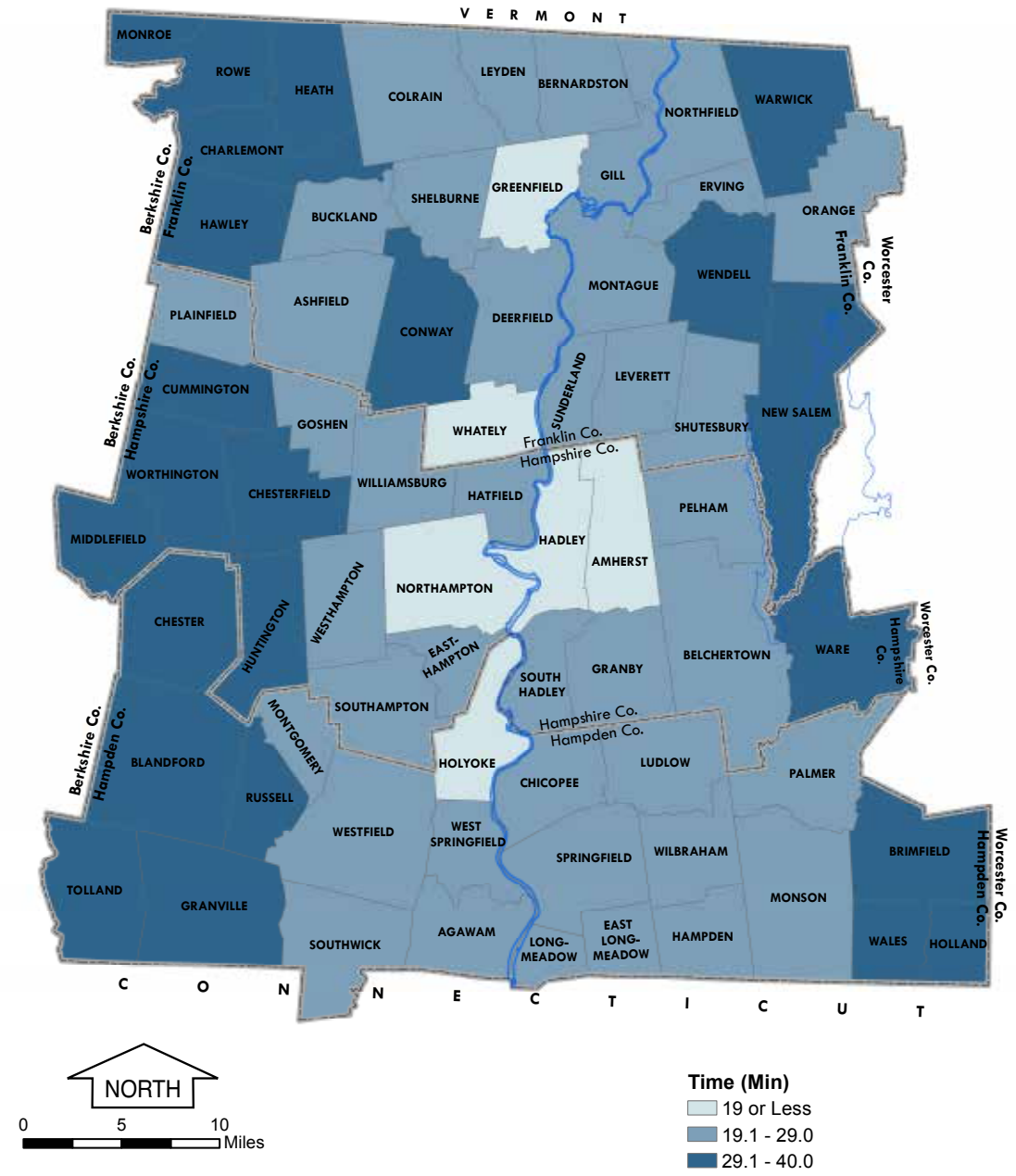
Understanding how average commute time has changed over time is an important component when considering impacts on our environment. Average commute time can serve as a proxy for transportation system efficiency or congestion, lost worker productivity, and vehicular greenhouse gas emissions. Some factors that may impact commute time include distance from work, traffic volume, availability of transit, wait times for transit, and the number of transit stops available or required while en route. Overall, the Pioneer Valley has both advantages and disadvantages when considering commute time. The region has some of the highest drive-to-work percentages in the state because of the lack of expansive and frequent transit. While the Pioneer Valley does have some bus access through the Pioneer Valley Transit Authority (PVTA) and the Franklin Regional Transit Authority (FRTA), service coverage and frequency is significantly less than the train and light rail services available in most of eastern Massachusetts. This is a major contributing factor to the high driving percentages. However, the Pioneer Valley has the advantage of significantly less traffic volumes. Unlike the grid-lock type commuting traffic that plagues areas like greater Boston and even Hartford, Connecticut, the Pioneer Valley's roadways are relatively less dense and bottle-necked. This indicator measures the average commute time from a person's home to their place of employment. Data does not include people who work from home.

Despite the lower availability of public transit, the Pioneer Valley has had average commute times below the state's average for the past two decades (between 1990 -2009). During that time period, both the region and the state overall have been slowly increasing time spent traveling to work. In 1990, the average commute time was 19 minutes in the Pioneer Valley. By 2009, the average commute time had increased slightly to 21 minutes. This reflects a two minute increase over the latest 20 year period. Throughout that time, the average commute time in the Pioneer Valley has remained shorter than Massachusetts, and that gap has widened since 1990. In 1990, the average commute time in the Pioneer Valley was 2.7 minutes shorter than the state, and in 2009, the average commute time was 4.3 minutes shorter. This indicates that Pioneer Valley workers are generally spending less time than their counterparts across the state traveling to work, and over time, the rate at which the commute time is growing, is slower in the Pioneer Valley than across Massachusetts.

Throughout the region, the commute times varied some but were mostly clustered between 20-35 minutes. Many of the towns with the shortest commute times were within and nearby the Five College region and include Amherst, Northampton, Whately, and Hadley. The urban areas of the region all had times of 20 minutes or less, including Greenfield and Holyoke with 18.4 minutes, Chicopee with 19.2 minutes, and Springfield with an average commute of 20 minutes. These communities with the shortest average commute times tend to be dense, significant job centers (except for Whately) that are supported by more significant transit services. Municipalities with the longest commutes were the more rural and suburban communities that are furthest from the city centers. Those communities included Middlefield, Brimfield, Chester, Hawley, Middlefield, New Salem, Tolland and Worthington, all experiencing average commute times of 34 minutes or more.



Average Commute Time in Minutes



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: U.S. Census Bureau, American Community Survey 5-Year-Estimates, 2005-2009

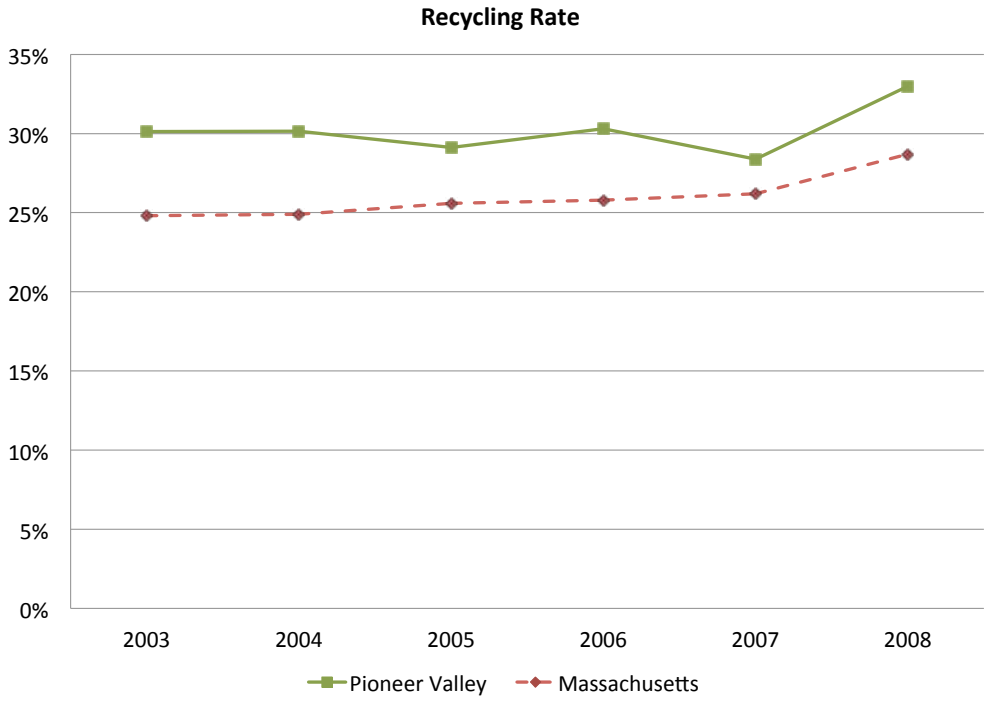
Amherst	16.7
Northampton	18.0
Greenfield	18.4
Whately	18.5
Hadley	18.6
Holyoke	18.6
Chicopee	19.2
South Hadley	19.2
West Springfield	19.3
Sunderland	19.3
Bernardston	19.8
Agawam	20.0
Longmeadow	20.0
Deerfield	20.0
Springfield	20.4
Pelham	20.6
Shelburne	20.7
East Longmeadow	20.9
Granby	21.3
Hampden	21.4
Hatfield	21.4
Easthampton	21.5
Ludlow	21.6
Pioneer Valley	***21.7***
Leverett	22.1
Erving	22.5
Westfield	22.7
Southampton	23.1
Orange	23.9
Goshen	24.4
Wilbraham	24.4
Palmer	24.4
Montague	24.8
Shutesbury	24.9
Belchertown	25.3
Plainfield	25.3
Williamsburg	25.4
Gill	25.8
Leyden	25.8
Buckland	25.9
Northfield	25.9
Ashfield	26.2
Southwick	26.4
Monson	26.8
Westhampton	28.5
Montgomery	29.0
Colrain	29.0
Granville	29.6
Conway	30.0
Ware	30.1
Wendell	30.2
Charlemont	30.4
Rowe	31.1
Russell	31.2
Chesterfield	31.2
Monroe	31.6
Cummington	31.7
Wales	31.8
Warwick	32.0
Blandford	32.5
Holland	32.7
Huntington	32.9
Middlefield	34.4
Heath	34.5
Brimfield	34.6
Worthington	34.6
Hawley	34.7
New Salem	35.7
Chester	35.9
Tolland	37.3

B-
RATING

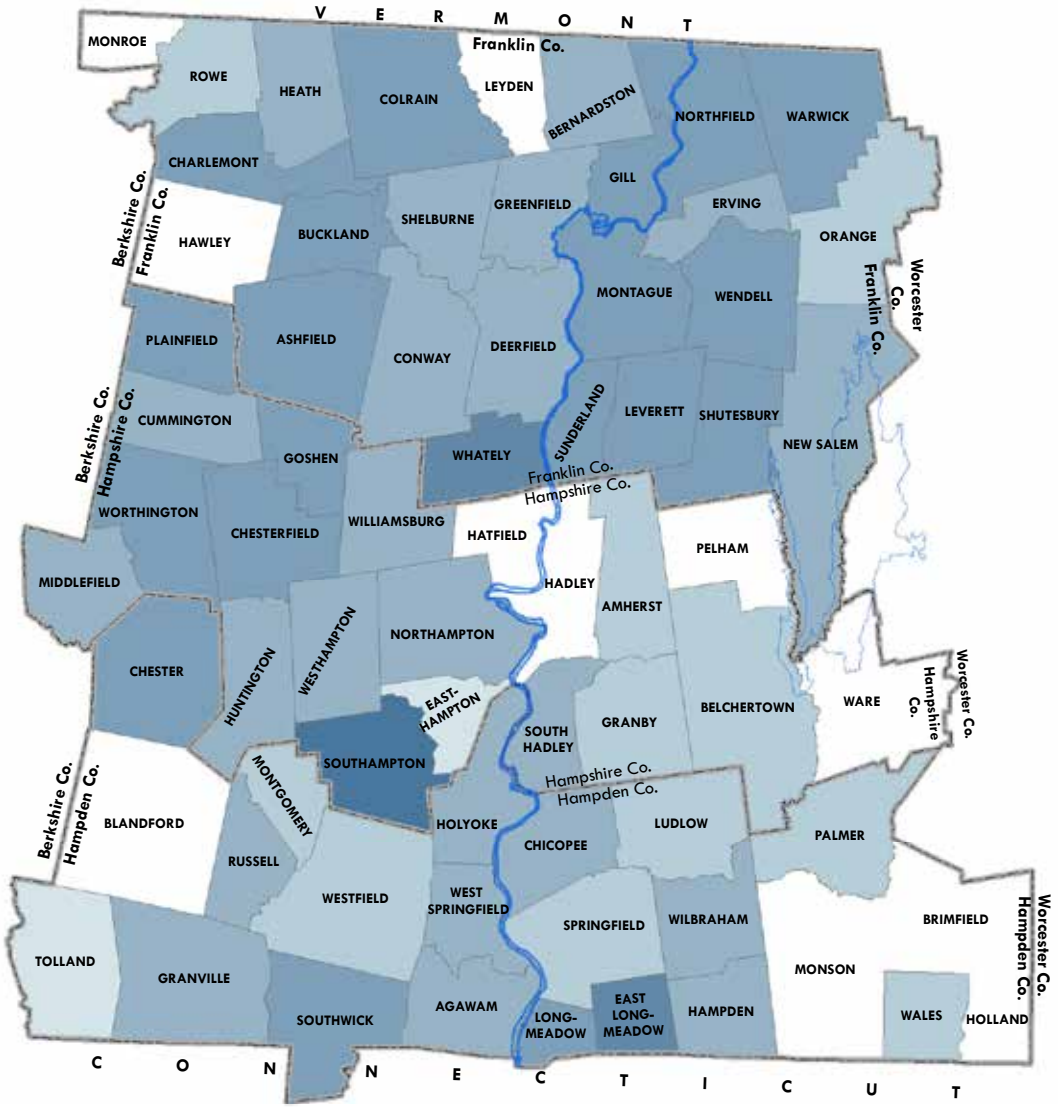
RECYCLING RATE

Recycling rates measure two important aspects of what makes a healthy environment and community – 1) how well we are minimizing the amount of waste that ends up in our landfills, thus protecting the environment and 2) the health of the people who live in our communities. Perhaps less obviously, it also measures the commitment to and involvement of individuals in recycling, a task that everyone can participate in at the individual level. Many household items that were once regarded as trash can now be recycled. Those items include paper, certain plastic containers, as well as various cans and metal containers. Items that are composted or hazardous materials that are separately collected are also counted as recycled materials. The number of tons of residential waste diverted, divided by the number of tons of residential waste produced, gives us the percent of waste recycled. This percent is reflected in the following recycling rate indicator.

Overall, the Pioneer Valley has consistently performed better than the state as a whole when it comes to recycling rates. In 2008, the average recycling rate in the Pioneer Valley was 33.0 percent, approximately 4.3 percentage points above the state-wide rate of 28.7%. Since 2003, the Pioneer Valley has consistently been above the state rate by at least 2% and as much as 5.3%.There was great disparity of recycling rates across the individual communities in the region. The top five municipalities with the highest recycling rates were: Southampton, East Longmeadow, Whatley, Longmeadow, and Leverett: each recycled between 54 percent and 87 percent of their waste. In the same year, the municipalities with the lowest recycling rates were: Springfield, Granby, Belchertown, Tolland, and Granby, with each recycling less than 20 percent of their waste.



Recycling Rate



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: Massachusetts Department of Environmental Protection, 2008

Easthampton	9%
Tolland	12%
Belchertown	18%
Granby	18%
Springfield	19%
Montgomery	22%
Palmer	22%
Rowe	24%
Wales	25%
Westfield	26%
Ludlow	27%
Amherst	29%
Orange	29%
Agawam	30%
Shelburne	30%
Chicopee	32%
Deerfield	32%
New Salem	33%
Pioneer Valley	***33%***
Huntington	34%
South Hadley	36%
West Springfield	36%
Russell	37%
Erving	38%
Heath	38%
Williamsburg	38%
Hampden	40%
Holyoke	40%
Middlefield	40%
Northampton	40%
Conway	41%
Greenfield	41%
Bernardston	42%
Cummington	43%
Granville	43%
Wilbraham	43%
Westhampton	44%
Southwick	46%
Warwick	46%
Wendell	46%
Northfield	47%
Shutesbury	48%
Chester	49%
Sunderland	49%
Worthington	49%
Buckland	50%
Goshen	50%
Ashfield	51%
Chesterfield	51%
Montague	51%
Plainfield	51%
Charlemont	52%
Colrain	53%
Gill	53%
Leverett	54%
Longmeadow	58%
Whately	61%
East Longmeadow	65%
Southampton	87%
Blandford	N/A
Brimfield	N/A
Hadley	N/A
Hatfield	N/A
Hawley	N/A
Holland	N/A
Leyden	N/A
Monroe	N/A
Monson	N/A
Pelham	N/A
Ware	N/A

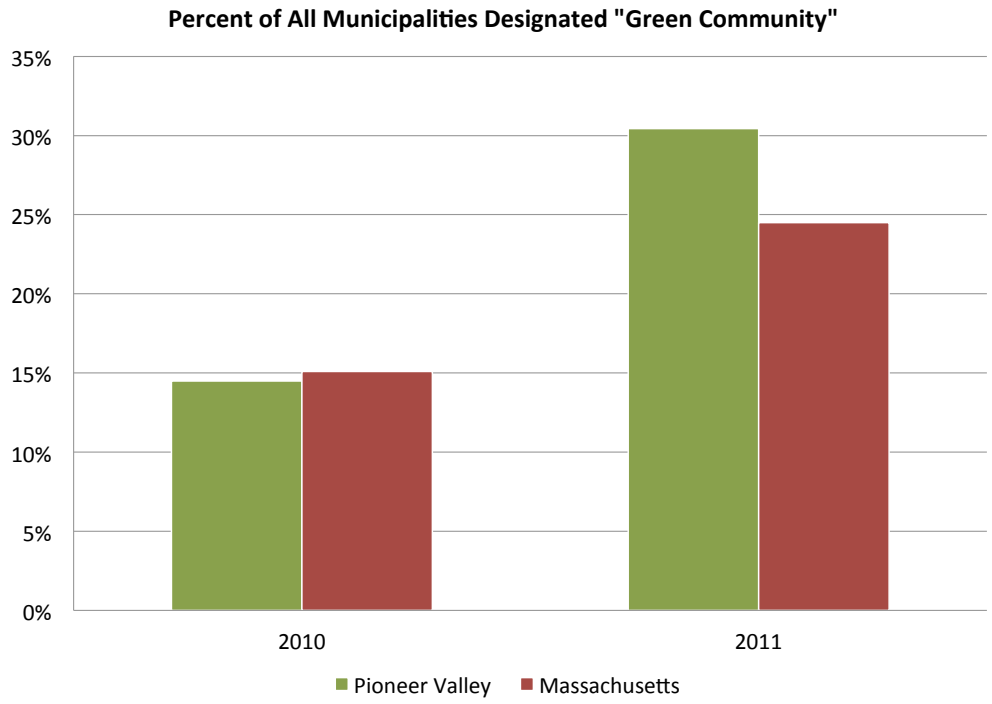
A
RATING

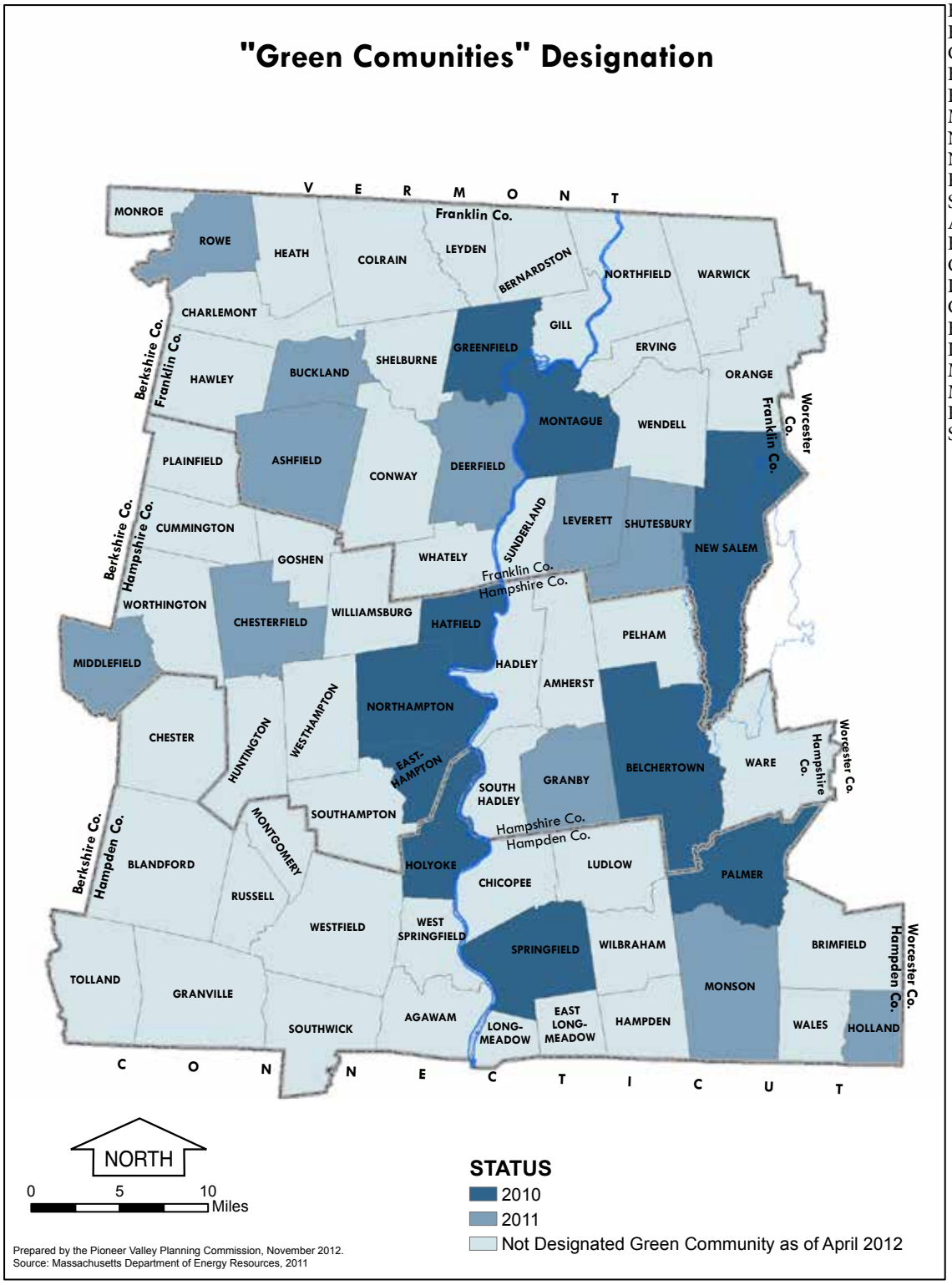
GREEN COMMUNITIES

In an effort to improve community health and local economies, the Green Communities division of the MA Executive Office of Energy and Environmental Affairs developed various incentives for cities and towns to reduce energy use and carbon emissions. Establishing a "Green Communities" designation is important for our communities because it shows a commitment towards improving energy efficiency and environmental protection standards; it also makes that community eligible for the afore-mentioned incentives and additional programs. This indicator measures the number of municipalities in the region that have achieved this designation.

The Pioneer Valley has shown a strong commitment to the "Green Communities" program, leading the state in "Green Community" designations and "Green Community Grant Awards" and more than doubling the number of designations in 2011. Within the region, about one-third of all municipalities achieved this designation as of 2011. Across the state of Massachusetts, 86 communities (about 25% of all municipalities in the state) reached that same designation. While the Pioneer Valley is home to about 10% of the population state-wide, about 25% of all "Green Communities" are located in the Pioneer Valley.

The 21 "Green Communities" in the Pioneer Valley have received over $4 million in grant money through this program. This is 24% of the statewide grant money awarded to Green Communities ($17.6 million). The largest award, $998,102, went to Springfield while the smallest of the awards went to Hatfield for $130,725. On average, communities in the region received $200,234 from the grant program. The upwards of $3 million awarded to municipalities in the region has served roughly 321,093 people. The smallest of these communities was Middlefield, with a population of 521, and the largest was Springfield, with a population of 153,060. This appears to be a fast-growing and beneficial designation for which many communities are eager to apply.





Belchertown	2010
Easthampton	2010
Greenfield	2010
Hatfield	2010
Holyoke	2010
Montague	2010
New Salem	2010
Northampton	2010
Palmer	2010
Springfield	2010
Ashfield	2011
Buckland	2011
Chesterfield	2011
Deerfield	2011
Granby	2011
Holland	2011
Leverett	2011
Middlefield	2011
Monson	2011
Rowe	2011
Shutesbury	2011
Agawam	NA
Amherst	NA
Bernardston	NA
Blandford	NA
Brimfield	NA
Charlemont	NA
Chester	NA
Chicopee	NA
Colrain	NA
Conway	NA
Cummington	NA
East Longmeadow	NA
Erving	NA
Gill	NA
Goshen	NA
Granville	NA
Hadley	NA
Hampden	NA
Hawley	NA
Heath	NA
Huntington	NA
Leyden	NA
Longmeadow	NA
Ludlow	NA
Monroe	NA
Montgomery	NA
Northfield	NA
Orange	NA
Pelham	NA
Plainfield	NA
Rowe	NA
Shelburne	NA
South Hadley	NA
Southampton	NA
Southwick	NA
Sunderland	NA
Tolland	NA
Wales	NA
Ware	NA
Warwick	NA
Wendell	NA
West Springfield	NA
Westfield	NA
Westhampton	NA
Whately	NA
Wilbraham	NA
Williamsburg	NA
Worthington	NA

C
RATING

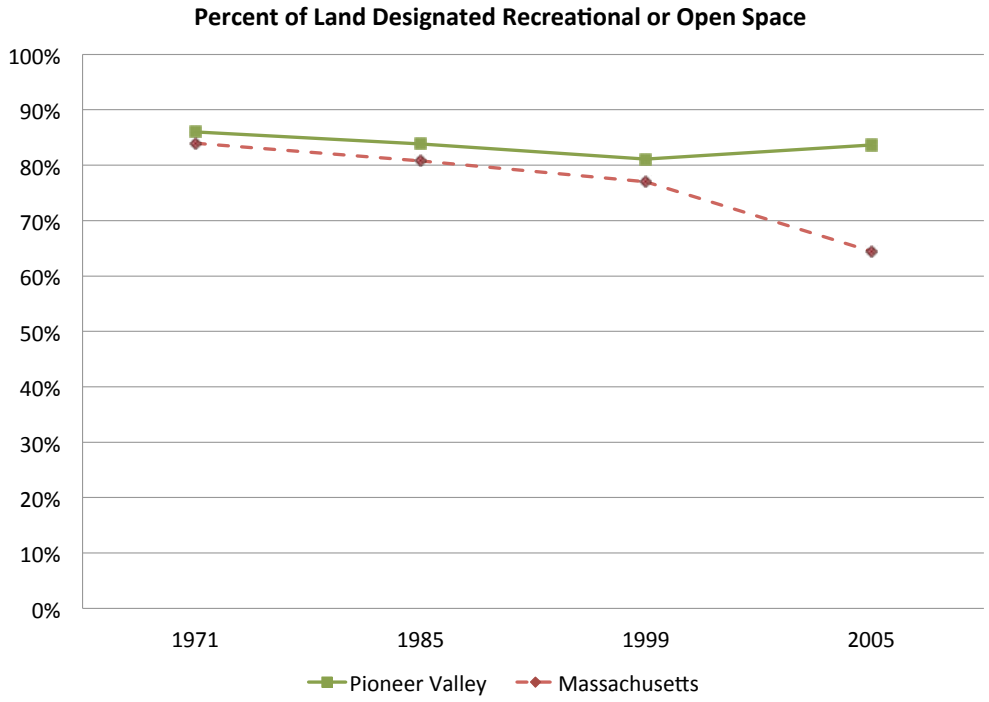
ACCESS TO RECREATIONAL SPACE AND OPEN SPACE

Dedicating lands as recreational or open space protects our natural environment while also enhancing many functions, including physical, social, environmental, and economic opportunities. Providing a space for physical activity and recreation has a positive impact on physical and mental wellness outcomes. The very nature of the use of these spaces provides a social component – essentially a space for people to come together, to socialize, interact, and to foster community pride. Economically, these spaces can provide valuable functions related to ecosystem services (such as water quality preservation, runoff reduction, flood control, and stormwater management – services typically performed by much more costly built physical infrastructure) and can serve as an impetus for several industries, including tourism and outdoor recreation, as well as agriculture, forestry, and related industries..

The percentage of a community's geographic area that is classified as recreational or open space is reflected in this indicator. Data on this indicator are not available on an annual basis, but is more sporadically determined by MassGIS when they obtain updated images and data. Thus, the most recent data available is from 2005.

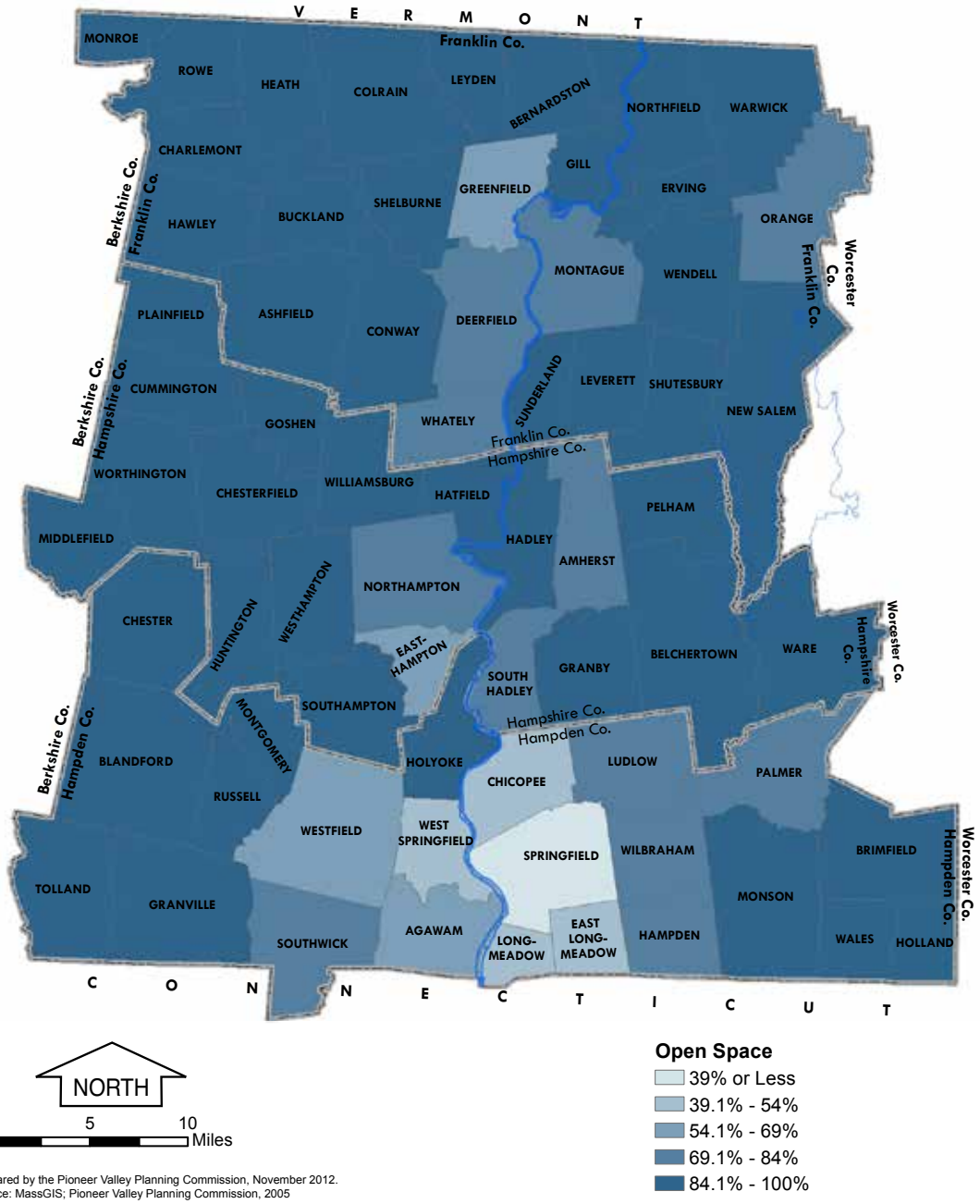
From 1971 to 2005, the Pioneer Valley consistently retained a higher percentage of open and recreational space than the state as a whole. In part, this reflects the higher concentration of urban areas in the eastern part of the state. The differences have become greater over the past three decades, with just a 2% difference in 1971 compared to the almost 20% difference in 2005. The Pioneer Valley continues to designate and maintain a large percentage of its geographic area as recreational or open space. As of 2005, roughly 84% of the area in the Pioneer Valley was found to be recreational or open space.

As for individual communities, there was a wide variety of conditions. As would be expected, it was generally found that the more urban communities had, as a percent of their total area, less space classified as recreational or open space. The five communities with the highest percent of area classified as recreation or open space were: Tolland, Middlefield, Blandford, Chesterfield, and Chester, each with at least 96 percent of land area classified as open space or designated for recreation. All of these communities are generally rural, and located on the western edge of the Pioneer Valley. The five communities with the lowest percent area of land classified as recreational or open space included: Springfield, Chicopee, Longmeadow, West Springfield, and East Longmeadow, each with between 36 percent and 54 percent of land area classified as open space or designated for recreation. These communities are all urban, and located in the central-southern area of the Pioneer Valley.



Note: Due to lack of longitudinal data for Franklin County, the Pioneer Valley data in the long range graph comparing the region to the state includes data for Hampden and Hampshire counties only. Based on the rural nature of much of the Franklin County area, Pioneer Valley numbers displayed are likely lower than the actuality of the three-county region.

Percent of Land Designated Recreational or Open Space



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: MassGIS; Pioneer Valley Planning Commission, 2005

Springfield	36.6%
Chicopee	40.6%
Longmeadow	53.0%
East Longmeadow	53.2%
West Springfield	53.8%
Agawam	60.4%
Greenfield	60.6%
Easthampton	63.8%
Westfield	67.5%
South Hadley	71.3%
Wilbraham	71.3%
Ludlow	73.6%
Amherst	76.5%
Whately	78.8%
Deerfield	78.9%
Northampton	79.5%
Orange	80.9%
Palmer	82.2%
Southwick	82.7%
Montague	82.8%
Pioneer Valley	***83.6%***
Hampden	84.0%
Hadley	84.1%
Sunderland	84.2%
Gill	85.1%
Hatfield	85.2%
Granby	85.6%
Shelburne	86.3%
Belchertown	86.3%
Northfield	87.0%
Bernardston	87.0%
Southampton	89.0%
Erving	89.1%
Ware	89.2%
Ashfield	89.3%
Leverett	89.4%
Holland	89.9%
Holyoke	89.9%
Buckland	90.5%
Brimfield	90.6%
Leyden	91.8%
Warwick	92.0%
Wendell	92.1%
New Salem	92.5%
Shutesbury	92.9%
Conway	92.9%
Williamsburg	93.0%
Russell	93.0%
Heath	93.1%
Huntington	93.1%
Wales	93.1%
Rowe	93.5%
Colrain	93.6%
Westhampton	94.1%
Charlemont	94.4%
Monson	94.6%
Montgomery	94.6%
Goshen	95.2%
Pelham	95.5%
Cummington	95.6%
Hawley	95.7%
Granville	95.8%
Worthington	95.9%
Plainfield	96.2%
Chester	96.4%
Monroe	96.5%
Chesterfield	96.7%
Blandford	97.0%
Middlefield	97.5%
Tolland	97.7%

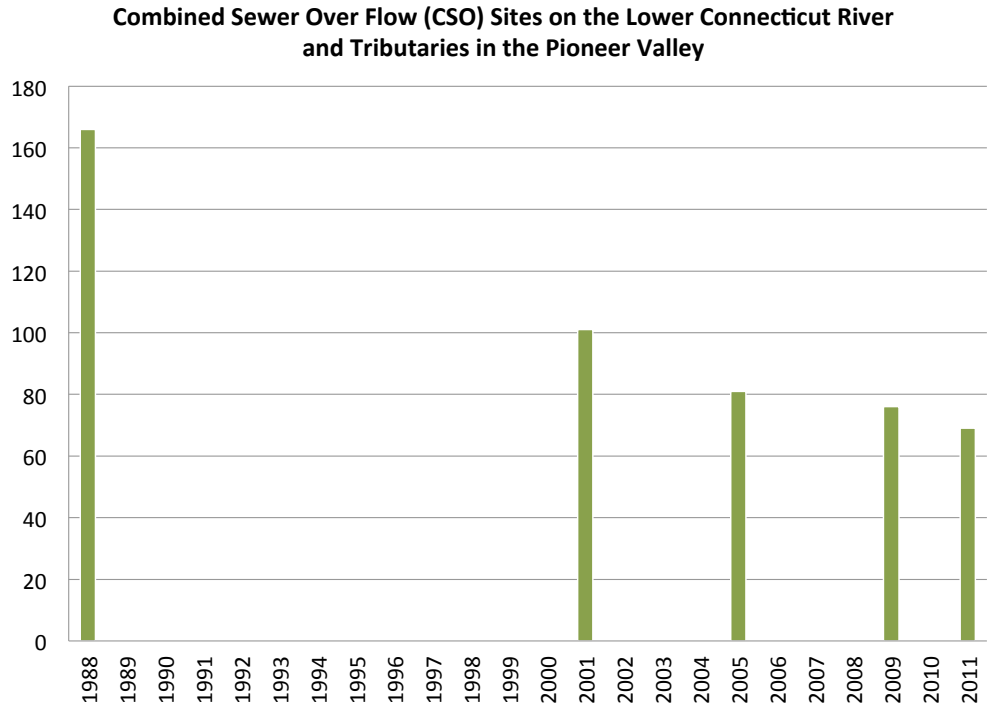
A-
RATING

WATER QUALITY –COMBINED SEWER OVERFLOWS IN THE CONNECTICUT RIVER

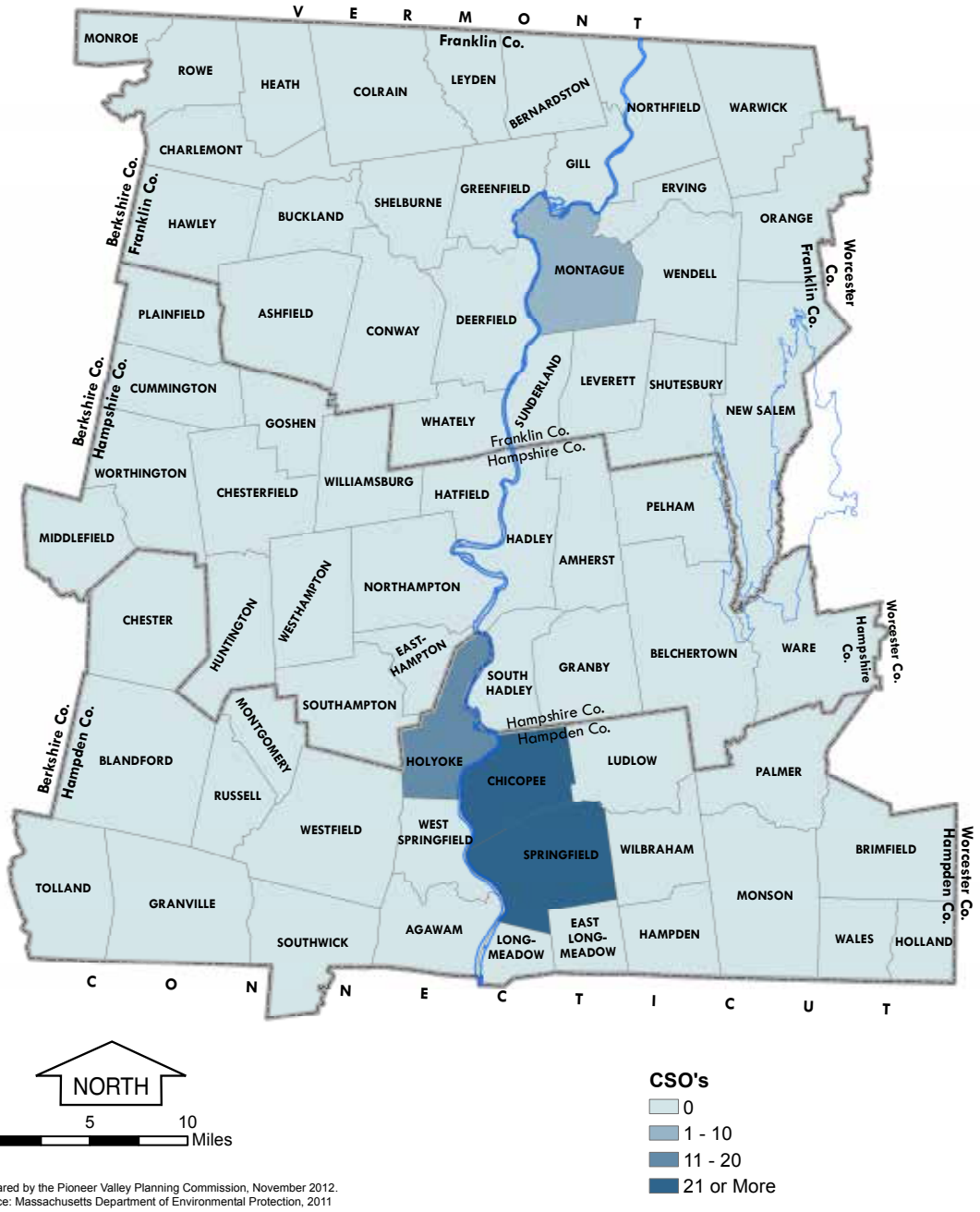
Combined Sewer Overflows (CSOs), according to the Massachusetts Department of Environmental Protection, "were built as part of sewer collection systems that were designed to carry both sewage and stormwater in the same pipe. When there is not a lot of stormwater, this mix is transported to a wastewater treatment plant where it is processed. However, after heavy rainfall or snowmelt, stormwater and sewage overload the system. Without CSOs, the mix would back up into homes, businesses, and public streets." The regulator structures in these overflow systems divert extra waste water into rivers, lakes and coastal areas, effectively compromising the area's water quality. In the Pioneer Valley Region CSOs primarily dump overflow waste into the Connecticut, Chicopee, Mill, Quabog, Swift, and Ware rivers, as well as Stony Brook and Buttery Brook. Twenty-four municipalities in the state have been issued CSO permits by federal and state environmental agencies. Most of these communities are older urbanized communities, including Springfield. Permittees must adhere to several different regulations that ensure safe use of CSOs. Even with regulations in place, CSOs are detrimental to people and place. Recording the number of CSOs on the Connecticut River measures one of the major contributors to water quality in the Pioneer Valley. The total number of CSOs that exist in a community are measured in this indicator.

At the time of this report, the MA Department of Environmental Protection recorded 312 CSOs in the state, all located within the twenty-four permitted communities. Sixty-nine of these CSOs are in the Pioneer Valley. This is less than half of the 166 that existed within the region in 1988, and reductions have been slow but steady. Since 2005, the number of Combined Sewage Overflows in the Pioneer Valley has decreased from 81 to 69 in 2011. If the rate of decline was to continue at 3.5 CSOs eliminated per year, as in 2009-2011, all CSOs in the Pioneer Valley would be eliminated by the middle of 2031. This scenario seems unlikely, however, given recent and anticipated Federal funding cutbacks. In the meantime, pollution continues to flow into the Connecticut River and its tributaries.

Within the Pioneer Valley the reduction of CSOs has occurred much more rapidly in the more rural and suburban communities, while those in urban core cities continue to remain. Most of the municipalities in the region have no CSOs, while those who do have sites ranging from 14 sites in Holyoke to 29 in Chicopee, with Springfield closely following Chicopee with 23. Palmer has shown the most improvement in recent years, eliminating all 6 sites between 2009 and 2011, followed by Ludlow, which eliminated its final CSO as of 2011. Chicopee has also seen improvement, reducing the number of sites from 32 to 29 between 2008 and 2011. Neither Springfield nor Holyoke have reduced the number of CSO sites in at least three years.



Combined Sewer Over Flow (CSO) Sites on the Lower Connecticut River and Tributaries



Prepared by the Pioneer Valley Planning Commission, November 2012.
Source: Massachusetts Department of Environmental Protection, 2011

Agawam	0
Amherst	0
Ashfield	0
Belchertown	0
Bernardston	0
Blandford	0
Brimfield	0
Buckland	0
Charlemont	0
Chester	0
Chesterfield	0
Colrain	0
Conway	0
Cummington	0
Deerfield	0
East Longmeadow	0
Easthampton	0
Erving	0
Gill	0
Goshen	0
Granby	0
Granville	0
Greenfield	0
Hadley	0
Hampden	0
Hatfield	0
Hawley	0
Heath	0
Holland	0
Huntington	0
Leverett	0
Leyden	0
Longmeadow	0
Ludlow	0
Middlefield	0
Monroe	0
Monson	0
Montgomery	0
New Salem	0
Northampton	0
Northfield	0
Orange	0
Palmer	0
Pelham	0
Plainfield	0
Rowe	0
Russell	0
Shelburne	0
Shutesbury	0
South Hadley	0
Southampton	0
Southwick	0
Sunderland	0
Tolland	0
Wales	0
Ware	0
Warwick	0
Wendell	0
West Springfield	0
Westfield	0
Westhampton	0
Whately	0
Wilbraham	0
Williamsburg	0
Worthington	0
Montague	3
Holyoke	14
Springfield	23
Chicopee	29
Pioneer Valley	*69*

ABOUT THE DATA

AMERICAN COMMUNITY SURVEY DATA

The United State Census Bureau's American Community Survey (ACS) was used as the primary source for multiple data indicators in this report. There are a few important points to note about this data.

1. These data are estimates based on a survey of a sample of the population for each geographic area. There are margins of error associated with this data which can be found on the U.S. Census Bureau's website. While this data is imperfect due to the margins of error, it is the best data that is available at this time on many subjects in this report, and thus it was determined that it was still worthwhile to include.
2. The ACS provides estimates that are often five-year estimates. These numbers do not represent an average of the five year period and should not be interpreted as such. In small geographic areas such as census tracts, block groups, and some small cities and towns, it takes many years for the ACS to be completed by enough people in the geographic area to represent a large enough sample of the population that it is possible to make area-wide estimates. Thus, a five-year estimate is an estimate calculated based on surveys collected in a geographic area over a period of five years.

PIONEER VALLEY REGIONAL RATES

Data from any source is rarely provided for all three counties of the Pioneer Valley directly. In most cases, data was collected at the County level, and then aggregated to create a total or rate for the Pioneer Valley as a whole. Whenever possible, raw numbers were used to calculate regional totals (i.e. adding total number of people unemployed for each county and total number of people in the labor force for each county and dividing the actual three county totals to arrive at the regional unemployment rate.) In some cases, such as median household income, the numbers provided by county were already calculations (such as median or a rate) and raw numbers were not available. In these cases, a weighted average of the three counties was calculated. For example, with median household income, a weighted average of the median household income for each county was calculated by weighting each county by the total number of households in the county. The total number of households was taken from the same Census table from which the median household income was obtained.

RATES IN SMALLER COMMUNITIES

In some indicators examined throughout this report, the data compared are provided in rates of the population (per capita or per 1,000 people). This is a common method for comparing trends amongst geographies because it allows the comparison to take into account how many people (or homes, or households, etc) are in a community rather than just comparing raw numbers. For example, comparing the total number of foreclosures in the City of Chicopee to the total number of foreclosures in the Town of Orange in 2010 would show that Chicopee had 93 foreclosures, almost twice as many as Orange which had 50. However, Chicopee has a much larger population and housing stock and this measure doesn't take into consideration the fact that Orange has a much larger proportion of their housing units under foreclosure. When foreclosures are examined as a rate per 1,000 housing units, a much different picture emerges. While Chicopee's foreclosure rate was 3.7 per 1,000 housing units, Orange experienced a rate of 13.9.

While this form of measurement is very helpful for comparison, it is also important to note that, in very small communities, there is the possibility for much more extreme changes in the rate when the actual number of cases (or foreclosures) is increased or decreased only slightly. In other words, five additional foreclosures in a community with 300 housing units will have a more significant affect on the community's rate than in a community with 2,000 housing units.

Using rates to measure community comparisons and trends was used the most in the section about Health and Safety. In those cases, five additional cases could even be one or two families with prevalence towards a certain chronic illness or a single person in and out of a specific kind of treatment. On the other hand, it can also point to a real trend for a specific indicator in that community. Given this complexity, it's important to look at longer term trends and the "reality on the ground" before making concrete conclusions about the situation in some of the smaller communities.