

2003 STATE OF THE PEOPLE

For The Pioneer Valley



Prepared by the
Pioneer Valley
Planning Commission

In partnership with
Community Foundation of
Western Massachusetts
Irene E. and George A. Davis
Foundation
Hampshire Community United Way
Human Service Forum
United Way of Franklin County
United Way of Pioneer Valley

January 2004
revised March 2004

2003
STATE OF THE PEOPLE:
FOR THE PIONEER VALLEY

January 2004
(revised March 2004)

Prepared By
Pioneer Valley Planning Commission
Regional Information Center
26 Central Street
Suite 34
West Springfield, MA 01089-2787
413 781-6045
Fax: 413 732-2593
<http://www.pvpc.org>

This document is made possible by funding from the
Federal Highway Administration, the Federal Transit Administration,
the Massachusetts Executive Office of Transportation and Construction, the
Massachusetts Highway Department, and the U.S. Department of Commerce,
Economic Development Administration.

TABLE OF CONTENTS

1	A LETTER FROM OUR PARTNERS
2	ACKNOWLEDGEMENTS
3	AN INTRODUCTION TO THE PIONEER VALLEY
4	AN INTRODUCTION TO THE STATE OF THE PEOPLE
8	THE STATE OF THE PIONEER VALLEY'S PEOPLE – A SUMMARY
9	CHILDREN
10	Prenatal Care
12	Very Low Birth Weight Babies
14	Teenage Mothers
16	Children in Single-Parent Families
18	Children in Foster Care
20	Child Poverty
22	Free and Reduced-price Lunch
24	Child Abuse and Neglect
25	EDUCATION
26	Early Education Demand and Capacity
28	Reading Proficiency (Third Grade MCAS)
30	MCAS Proficiency (Tenth Grade)
34	High School Dropout Rates
36	Attainment of Higher Education
39	HEALTH AND SAFETY
40	Health Insurance Coverage
41	New AIDS Cases
42	Cancer and Cardiovascular Disease Deaths
44	Asthma
46	Public Safety Spending
48	Infant Mortality
49	Motor Vehicle Fatalities
50	Crime
53	Teen Suicides
55	ECONOMIC SECURITY
56	Household Income
58	Poverty
60	Unemployment
62	Housing Affordability
64	Home Ownership
66	New Low-Income Housing Units
67	CIVICS, ARTS, AND RECREATION
68	Culture and Recreation Spending
70	Library Circulation
72	Library Hours
74	Per Capita Nonprofit Support
75	Support for Student Participation in the Arts
76	Support for Artists
78	Arts Institutions
80	Voter Registration
83	NOTES ON METHODS AND SOURCES
84	END NOTES

A LETTER FROM OUR PARTNERS

It has been a particular pleasure for us to collaborate on a project that we hope will be of help to the entire community of the Pioneer Valley.

The “State of the People” in our region is significantly shaped by a complex web of business, governmental, nonprofit, and individual interests, all making daily decisions about how to achieve their goals. For those whose primary mission is enhancing the quality of life for the people of the region, those decisions carry special weight. In times of shrinking resources and increasing needs, their obligation to sharpen the effectiveness of their decisions is even greater.

We believe the effectiveness of those decisions can be improved if they are informed by data that accurately describe the assets, opportunities, and challenges of the region. The Information Age has made that data available to an unprecedented extent. It has also made it possible for us to begin to measure whether those decisions are achieving the ends they were designed to reach.

We hope this report is just the beginning. The data collected here is important but necessarily limited. We hope it generates interest in pursuing a deeper understanding of all the issues that shape the quality of our lives together. We hope the entire community embraces the use of relevant data as a tool for making important decisions, and that a shared use of such data leads to collaborations on a scale that promises to have an impact on some of the larger issues facing our region.

We have particularly enjoyed working with the Pioneer Valley Planning Commission. We could not have asked for skills more suited for this task, and we are grateful for its loan of them. The dedication of this report to data of this kind is a community service of inestimable value, and deserves our warmest thanks.

We look forward to working together to keep this region the wonderful place to live and work we have all come to know.

Kent W. Faerber
Community Foundation
of Western Massachusetts

Beth Green
Human Service Forum

James W. Horne, Jr.
United Way of
Pioneer Valley

Linda Stacy
United Way of
Franklin County

Lewis S. Stess
Hampshire Community
United Way

Maty E. Walachy
Irene E. and George A.
Davis Foundation



COMMUNITY
FOUNDATION
OF WESTERN MASSACHUSETTS



The Irene E. & George A.
Davis Foundation



United Way of Franklin County
Inc.



United Way
of Pioneer Valley

ACKNOWLEDGEMENTS

The development, writing, and production of this report would have been impossible without the diligence of our numerous partners. The leaders of our six partner organizations each shaped the conversation that led to this report, defined indicators to be included, and developed a strategy for widely sharing and disseminating this information. In fact, the vision for this report, and for its usefulness to the community, originated with our partners.

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.

Kristen Beam, *United Way of Pioneer Valley*
 Timothy Brennan, *Pioneer Valley Planning Commission*
 Bruce Brown, *Community Foundation of Western Massachusetts*
 Joanne Dernoga, *United Way of Pioneer Valley*
 Kent W. Faerber, *Community Foundation of Western Massachusetts*
 Paul Foster, *Pioneer Valley Planning Commission*
 Michael Garjian, *Hampshire Community United Way*
 Beth Green, *Human Service Forum*
 Trish Hannon, *United Way of Pioneer Valley*
 Jim W. Horne, Jr., *United Way of Pioneer Valley*
 Peter Pufall, *Hampshire Community United Way*
 Nancy Reiche, *Community Foundation of Western Massachusetts*
 Linda Stacy, *United Way of Franklin County*
 Sarah Tanner, *Hampshire Community United Way*
 Linda Valentini, *United Way of Pioneer Valley*
 Mary E. Walachy, *Irene E. and George A. Davis Foundation*
 Brian Zelasko, *United Way of Pioneer Valley*

Kristen Beam, formerly of the United Way of Pioneer Valley, was tremendously helpful, coordinating communication between all partners on this project, scheduling meetings, preparing meeting notes, and generally keeping the process moving forward. Her commitment and effort were invaluable.

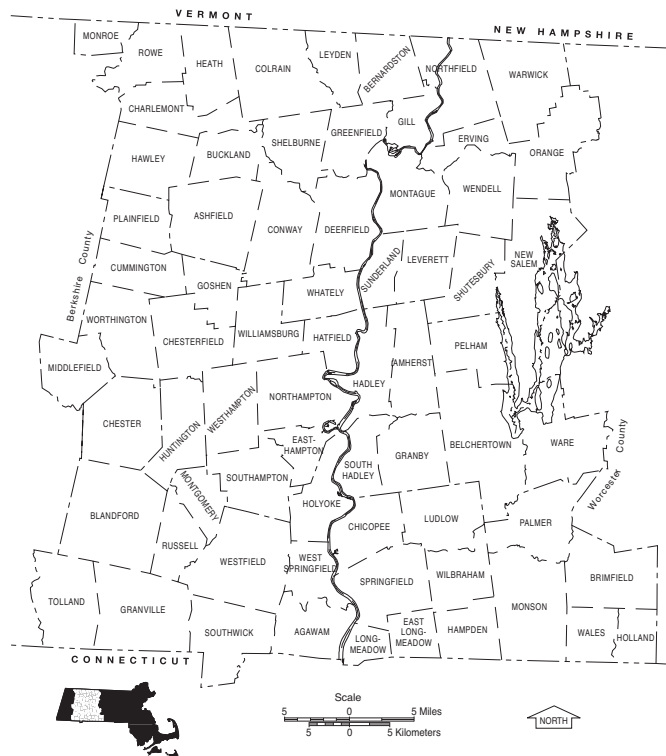
Finally, PVPC interns Elizabeth Malloy and Gillian Bearn, both graduate students at the University of Massachusetts, deserve special mention for their excellent work in both data analysis and writing of this report.

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 2002, an estimated 684,000 people, or 10.6 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, where families have worked the land for generations; in distribution centers in Westfield, near the crossroads of two interstate highways; in sawmills in Franklin County, where more than 75 percent of the land remains forested; and in a candle factory and store in Deerfield, which attracts more than one million visitors each year.

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 2000, the Pioneer Valley Planning Commission began an ongoing process, the State of the Region, to assess factors shaping the quality of life that we experience both as individuals and community members. First, we identified a set of indicators that measure these factors. Then, to gain a sense of how quality of life in our region may be evolving, we examined patterns of change in these indicators. Tracking trends for our selected indicators enables us to gain some understanding about how we are shaping the future for our region.

In 2001 and 2002 this work continued with updated reports. After the publication of the third edition of the State of the Region, however, we began to notice that our chosen indicators were very stable, not changing substantially from one year to the next. This realization, given the investment of resources required to produce the report, prompted us to evaluate our time frame. Ultimately, we decided that we would continue to produce the State of the Region report every other year and devote our energy in the “off-year” to the production of a more narrowly focused report highlighting a particular aspect of the region’s quality of life.

As we discussed plans internally for future editions of the State of the Region, we became increasingly aware of the activities and interests of other organizations in the Pioneer Valley. 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.

Happily, our own desire to produce a focused and issue-oriented report in 2003 coincided with these and other organizations’ desire to further their own use of data. For our first ever topical State of the Region report, we decided to focus on ourselves, the people of the Pioneer Valley.

What’s the Point?

We have multiple goals for this report. First, we hope this report will provide valuable and accessible information for decision-makers working to improve the quality of life in the Pioneer Valley. More broadly, however, we hope this 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 this report serves as an opening, or a beginning, to additional dialogue, planning, information gathering, and action. Each of our partners in this process conceives 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. We hope that this, our first ever State of the People report, becomes 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 feedback and encourage you to call or write with feedback, responses, and suggestions.

We hope your reactions will instigate a broad discussion among citizens articulating what they love most about the Pioneer Valley region 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 present findings. We have categorized the indicators in this report into five major subject areas of related indicators. These subject areas reflect both groups of people and issues of importance to them.

Children – examines issues affecting children including health, family status, and poverty.

Education – explores educational opportunity 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, with a particular focus on teenagers.

Economic Security – reviews basic economic and housing issues affecting Pioneer Valley residents.

Civics, Arts, and Recreation – examines the opportunity for and participation in civics, arts, and recreation activities.

Most indicators in this report are presented in two formats. First, a graph illustrates the regional and statewide trend 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 data available limited our ability to provide both a trend graph and a municipal map for an indicator.

Indicators included within each category, and the categories themselves, were selected through a collaborative and subjective process involving six community organizations. From May until November 2003, individuals from our partner organizations gathered about once per month 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, and 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, like 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 an amount 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.
4. We included those indicators that painted a consistent picture. For example, the percent of people receiving public assistance benefits was excluded as an indicator because 1996 welfare reform legislation revised the qualifications for receiving benefits; therefore, the eligible population is much different today by comparison.

Rating the Indicators

Previous State of the Region reports have included shorthand ratings (thumbs up or thumbs down) for each indicator depending on whether trends were improving or declining. For this report, we selected a more 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 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 breadth of the gap between high- and low-rated communities within the Pioneer Valley.

This ordering is based on the logic that, if we believe 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. The third factor, comparisons between municipalities, was used only to

determine a rating when there was no trend data or data comparing the region to the state. 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. This was done by converting the letters into a standard four-point scale (A=4, B=3, etc.) and then averaging.


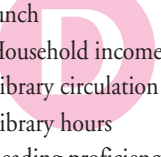
The purpose of these ratings is neither to scold nor to applaud, but to provide an honest assessment of how the Pioneer Valley is doing in providing a high quality of life for all our residents. You will notice that there are as many positive trends as negative ones, and that is good news for our region. Going forward, it is imperative that we be honest and build on our strengths while tackling our weaknesses. We hope 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 is the quality of civics, arts, and recreation in the region. Furthermore, our physical health seems to be good and improving, several education indicators are rapidly improving, and our housing security seems strong. On the other hand, indicators regarding quality of life for children are more negative than positive, our economic security appears fragile, and, in some areas, our educational achievement is a weakness.

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 table below 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.

<i>Positive</i>	<i>Neutral</i>	<i>Negative</i>
<ul style="list-style-type: none"> • Home ownership • Infant mortality • MCAS proficiency (10th grade) • Support for student participation in the arts • Voter registration 	<ul style="list-style-type: none"> • Attainment of higher education • Culture and recreation spending • High school dropout rates • Motor vehicle fatalities • Prenatal care • Public safety spending • Teenage mothers • Very low birth weight babies 	<ul style="list-style-type: none"> • Child abuse and neglect • Poverty 
<ul style="list-style-type: none"> • Arts institutions • Asthma • Cancer and cardiovascular disease deaths • Early education demand and capacity • Health insurance coverage • Housing affordability • New AIDS cases • New low-income housing units • Per capita nonprofit support • Support for artists • Unemployment 		<ul style="list-style-type: none"> • Child poverty • Children in foster care • Children in single-parent families • Crime • Free and reduced-price lunch • Household income • Library circulation • Library hours • Reading proficiency (third grade MCAS) • Teen suicides 



CHILDREN

The importance of children to our region—to any region—cannot be overstated. Our children are the future of the Pioneer Valley and their quality of life has a lot to say about how well we are creating the right kind of life and lifestyle in our 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 for 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 are more likely to have children who also grow up in difficult circumstances. As much as any other set of indicators, these statistics speak to the future of the Pioneer Valley.

Unfortunately, every single indicator of child well-being is neutral or negative. Newborn health has been stable, but indicators related to family stability and economic security for children are all trending negatively. Of particular concern is the extent of confirmed cases of child abuse and neglect in the Pioneer Valley, which is much greater than in the state as a whole.

<i>Indicator</i>	<i>Summary</i>	<i>Rating</i>
Prenatal Care	The percentage of mothers using prenatal care adequately is stable, but remains well below that of Massachusetts as a whole.	C
Very Low Birth Weight Babies	The percent of babies born with very low birth weight has remained stable in recent history.	C
Teenage Mothers	The percent of all births to teenage mothers remains persistently higher than in Massachusetts.	C
Children in Single-Parent Families	The percentage of all children in single parent families increased from 1990 to 2000 and is well above the percentage for the state.	D
Children in Foster Care	About twice as many children live in foster care in the Pioneer Valley than in Massachusetts, but the number declined from 1998 to 2002.	D
Child Poverty	Though dropping slightly since 1990, the child poverty rate in 1999 was 19.3% compared to only 12.0% for Massachusetts.	D
Free and Reduced-price Lunch	There is a wide gap between the 71.2% of children in Springfield (highest) and the less than 3.1% of children in Longmeadow (lowest) who qualify for free or reduced-price lunch.	D
Child Abuse and Neglect	One and a half times as many children (per 1,000) are confirmed victims of child abuse and neglect than in the state as a whole.	F



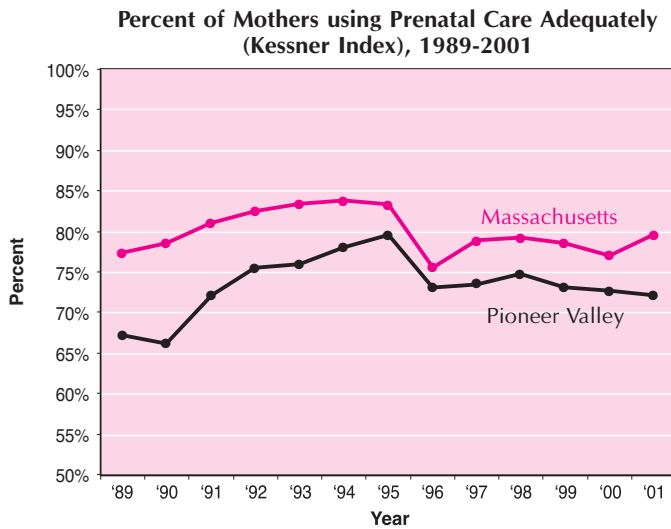
Prenatal Care

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. Prenatal care can be rated as adequate, intermediate, inadequate, or none.

The Pioneer Valley's trend in the use of prenatal care has varied over the last decade. While the percent of expectant mothers adequately using prenatal care increased sharply from 67.2 percent in 1989 to 79.4 percent in 1995 (a positive increase of more than 10 percent age points), those increases did not continue after 1996, and from 1998 to 2001 the percentage dropped from 74.6 to 72.1 percent. The sharp drop between 1995 and 1996 (visible in the graph) is likely the result of a shift in how data was collected or reported, as it mirrors the trend for Massachusetts as a whole. Unfortunately, the Pioneer Valley consistently remains below Massachusetts in the percent of expectant mothers using prenatal care adequately. Between 1989 and 2001, the Pioneer Valley narrowed the gap in percentage between the region and the state from 10.4 percent to 7.6 percent.

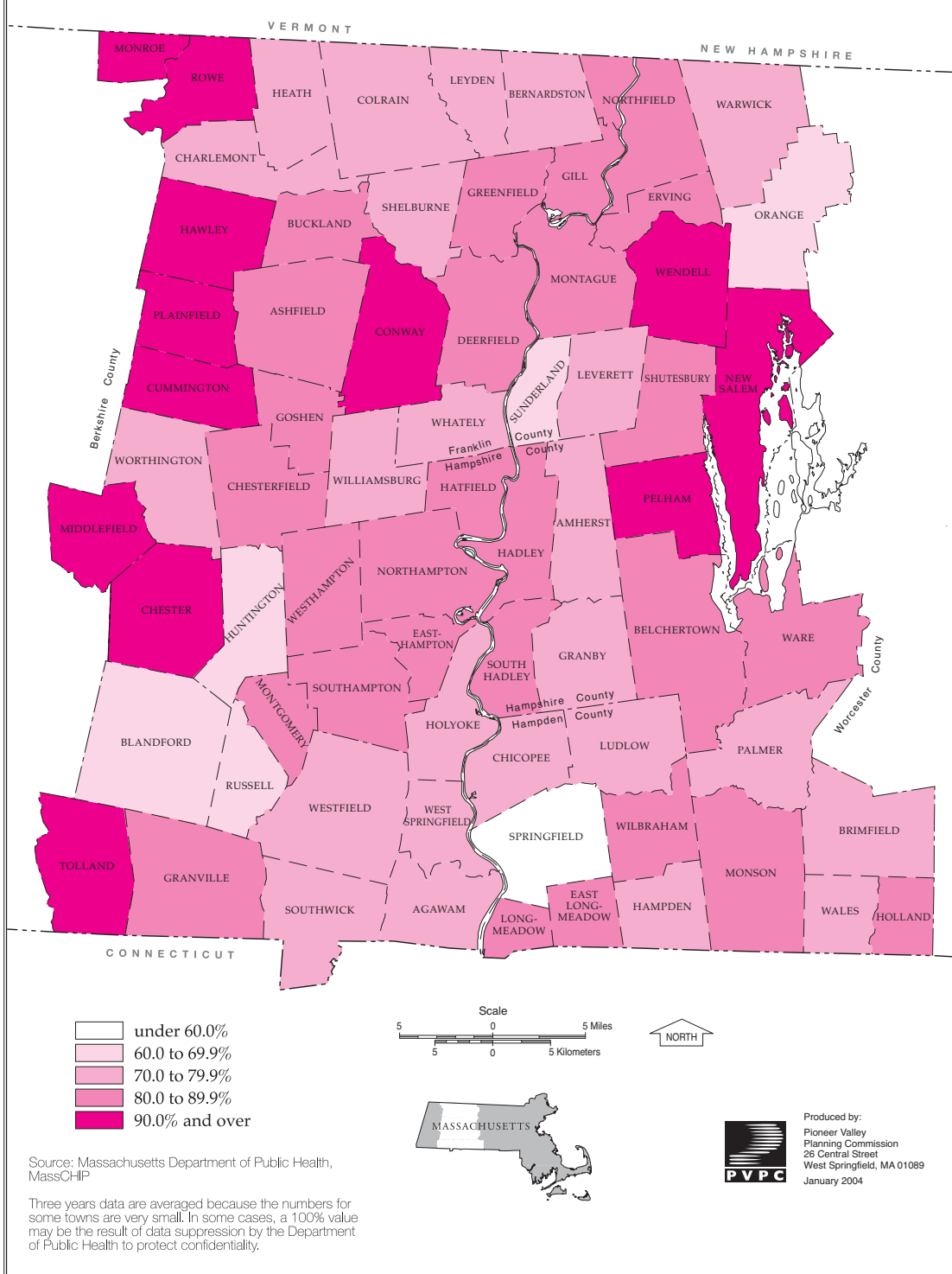
In six of the region's communities, the percent of mothers using prenatal care adequately was below 70 percent on average for the years from 1999 to 2001. Representing the lowest



Source: Massachusetts Department of Public Health, MassCHIP

percentage, only 59.6 percent of expectant mothers used prenatal care adequately residing in Springfield from 1999 to 2001. The remaining communities with less than 70 percent adequate use of prenatal care are all smaller communities: Blandford, Huntington, Orange, Russell, and Sunderland. The absence of Holyoke, the economically poorest community in the region, from this list is good news and may suggest the presence of successful public health initiatives in that city. Though the map indicates that in a number of communities 100 percent of expectant mothers use prenatal care adequately, these numbers are inconclusive because the results are for very small communities with such a small number of total births that some data are suppressed for purposes of confidentiality.¹

Percent of Pregnancies for which there was Adequate Prenatal Care (Kessner Index), 1999-2001



Cummington	100.0%
Hawley	100.0%
Middlefield	100.0%
Monroe	100.0%
New Salem	100.0%
Pelham	100.0%
Plainfield	100.0%
Rowe	100.0%
Tolland	100.0%
Wendell	100.0%
Conway	93.8%
Chester	90.9%
Southampton	89.6%
Goshen	88.9%
Montgomery	88.9%
Easthampton	88.6%
Greenfield	87.2%
Northfield	87.0%
Longmeadow	86.8%
Chesterfield	85.7%
Westhampton	85.7%
East Longmeadow	85.6%
Northampton	85.2%
Montague	85.1%
Buckland	84.6%
Granville	84.6%
Hatfield	84.0%
Hadley	83.7%
Belchertown	83.7%
Ware	83.5%
Ashfield	83.3%
Deerfield	83.3%
Shutesbury	83.3%
South Hadley	83.0%
Monson	81.3%
Wilbraham	81.0%
Erving	80.0%
Gill	80.0%
Holland	80.0%
Leverett	78.9%
Worthington	78.6%
Amherst	78.1%
Brimfield	76.9%
Leyden	76.9%
Wales	76.9%
Granby	76.8%
Charlemont	76.5%
Whately	76.5%
Southwick	76.2%
Agawam	75.9%
Hampden	75.5%
Warwick	75.0%
Westfield	74.1%
Holyoke	73.8%
Shelburne	73.7%
Williamsburg	73.7%
Ludlow	73.5%
Palmer	73.3%
Chicopee	72.8%
Pioneer Valley	72.6%
Bernardston	72.2%
Colrain	71.4%
West Springfield	70.5%
Heath	70.0%
Huntington	69.6%
Sunderland	69.2%
Russell	68.8%
Blandford	66.7%
Orange	62.4%
Springfield	59.6%

Produced by:
 Pioneer Valley
 Planning Commission
 28 Central Street
 West Springfield, MA 01089
 January 2004



Very Low Birth Weight Babies

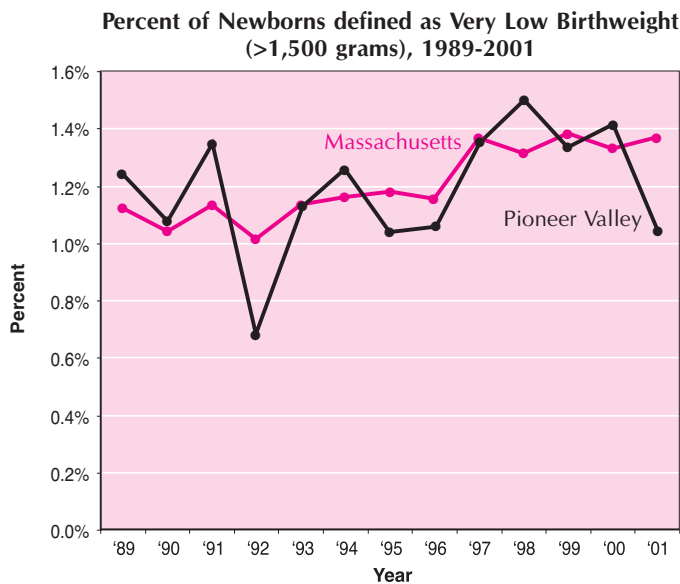
Very low birth weight is a complicated but significant public health indicator that often reflects a difficult pregnancy that ended prematurely. This can happen for many reasons such as poor nutrition, substance abuse, or inadequate prenatal care. Very low birth weight potentially leads to serious physical 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 child birth.

A newborn weighing less than 1,500 grams is considered to have “very low birth weight.” 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 1998 to 2001 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.² Between 1989 and 2001, anywhere from six to 15 of every 1,000 babies in the Pioneer Valley were born with very low birth weight. Positively, the rate of very low weight births for the Pioneer Valley is lower than the state's in six of 13 years studied.

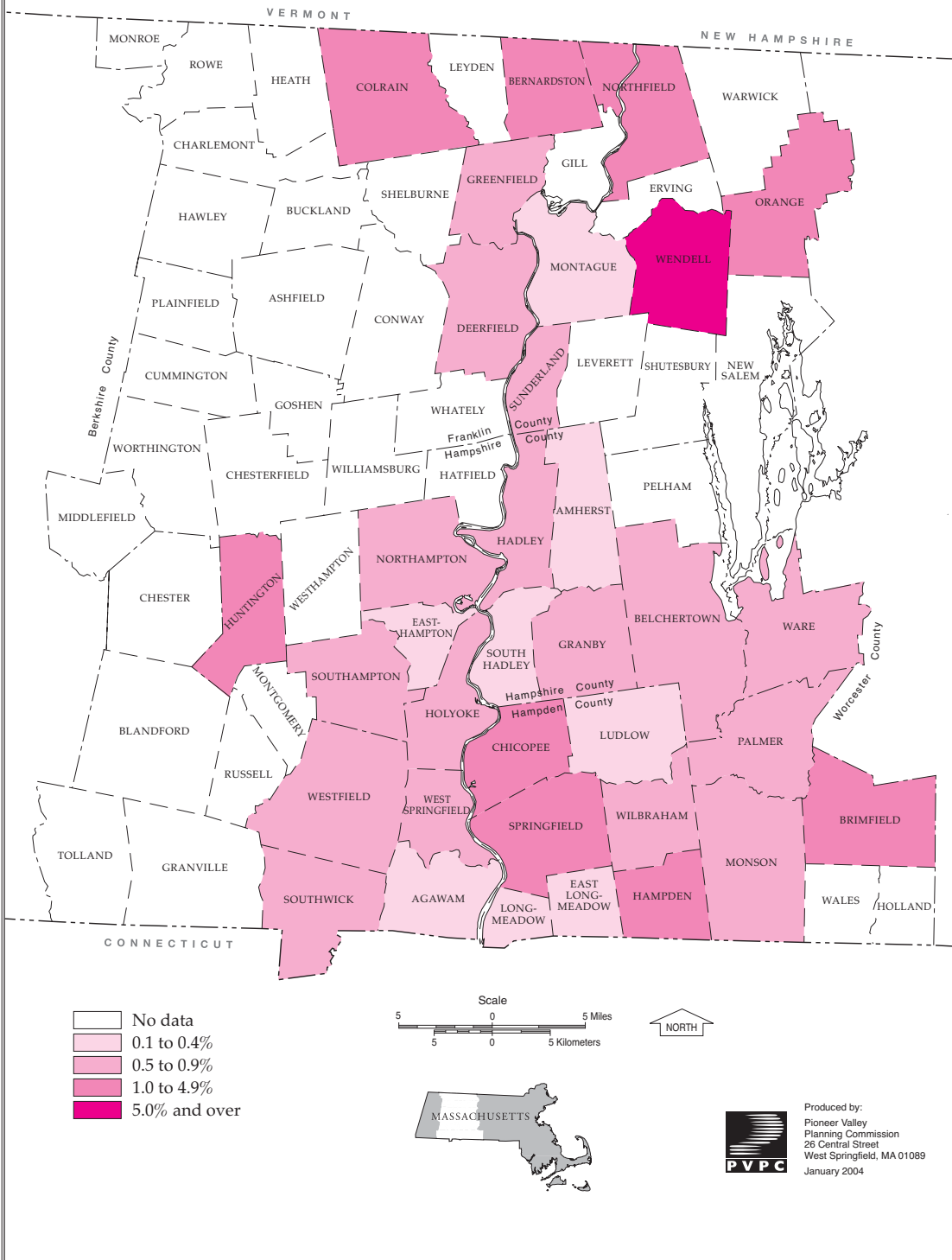
In 10 Pioneer Valley communities – Bernardston, Brimfield, Chicopee, Colrain, Hampden, Huntington, Northfield, Orange, Springfield, and Wendell – more than 1.0 percent of all births between 1998 and 2001 were of very low weight. As with prenatal care, the absence of

Holyoke from the list of those with high rates of very low weight births is notable and positive. In some cases, high numbers may simply be a reflection of a very small number of births. This is certainly true in Wendell, where the rate of 16.7 percent reflects the fact that one of six births between 1998 and 2001, as reported by the Department of Public Health, were very low birth weight. Also, those communities with zero percent very low birth weight babies have very small numbers of total births and some data is suppressed.



Source: Massachusetts Department of Public Health, MassCHIP

Percent of All Births that are Very Low Birthweight (below 1,500 grams), 1998-2001



Wendell	16.7%
Bernardston	4.9%
Colrain	3.8%
Brimfield	2.4%
Huntington	1.6%
Pioneer Valley	1.3%
Northfield	1.2%
Hampden	1.2%
Springfield	1.1%
Orange	1.0%
Chicopee	1.0%
Granby	0.9%
Sunderland	0.8%
Hadley	0.8%
Westfield	0.8%
Ware	0.7%
Wilbraham	0.7%
Greenfield	0.7%
West Springfield	0.6%
Deerfield	0.6%
Northampton	0.6%
Palmer	0.6%
Southampton	0.6%
Monson	0.5%
Southwick	0.5%
Holyoke	0.5%
Belchertown	0.5%
Easthampton	0.4%
Ludlow	0.4%
East Longmeadow	0.4%
Agawam	0.3%
South Hadley	0.3%
Montague	0.3%
Longmeadow	0.2%
Amherst	0.2%
Ashfield	-
Blandford	-
Buckland	-
Charlemont	-
Chester	-
Chesterfield	-
Conway	-
Cummington	-
Erving	-
Gill	-
Goshen	-
Granville	-
Hatfield	-
Hawley	-
Heath	-
Holland	-
Leverett	-
Leyden	-
Middlefield	-
Monroe	-
Montgomery	-
New Salem	-
Pelham	-
Plainfield	-
Rowe	-
Russell	-
Shelburne	-
Shutesbury	-
Tolland	-
Wales	-
Warwick	-
Westhampton	-
Whately	-
Williamsburg	-
Worthington	-

Note: Data unavailable for select municipalities



Teenage Mothers

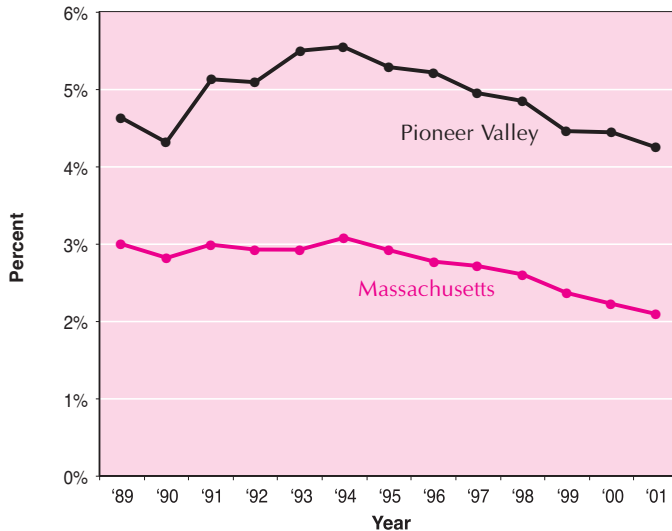
This is an important indicator because, though there are undoubtedly exceptions, teenage mothers are more likely to be poor and less likely to complete a college degree than non-teenage mothers and, statistically, children of teenage mothers are more likely to grow up in poverty and less likely to complete high school or college.

This indicator represents the number of births to young mothers as a percent of all births. For comparisons between individual communities, 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.³

The percent of babies born to teenage mothers (under 18) reached a recent high of 5.5 percent of all births in 1994. Since 1994, the percent of births to teenage mothers has steadily declined in the Pioneer Valley to 4.3 percent in 2001, the lowest point since 1989. However, the percent of births to teenage mothers in the Pioneer Valley is persistently higher than the percent for Massachusetts as a whole. For eight of the last 13 years, the Pioneer Valley had a teen birthrate over 2.0 percentage points higher than Massachusetts; in 2001, it was 2.2 percent higher.

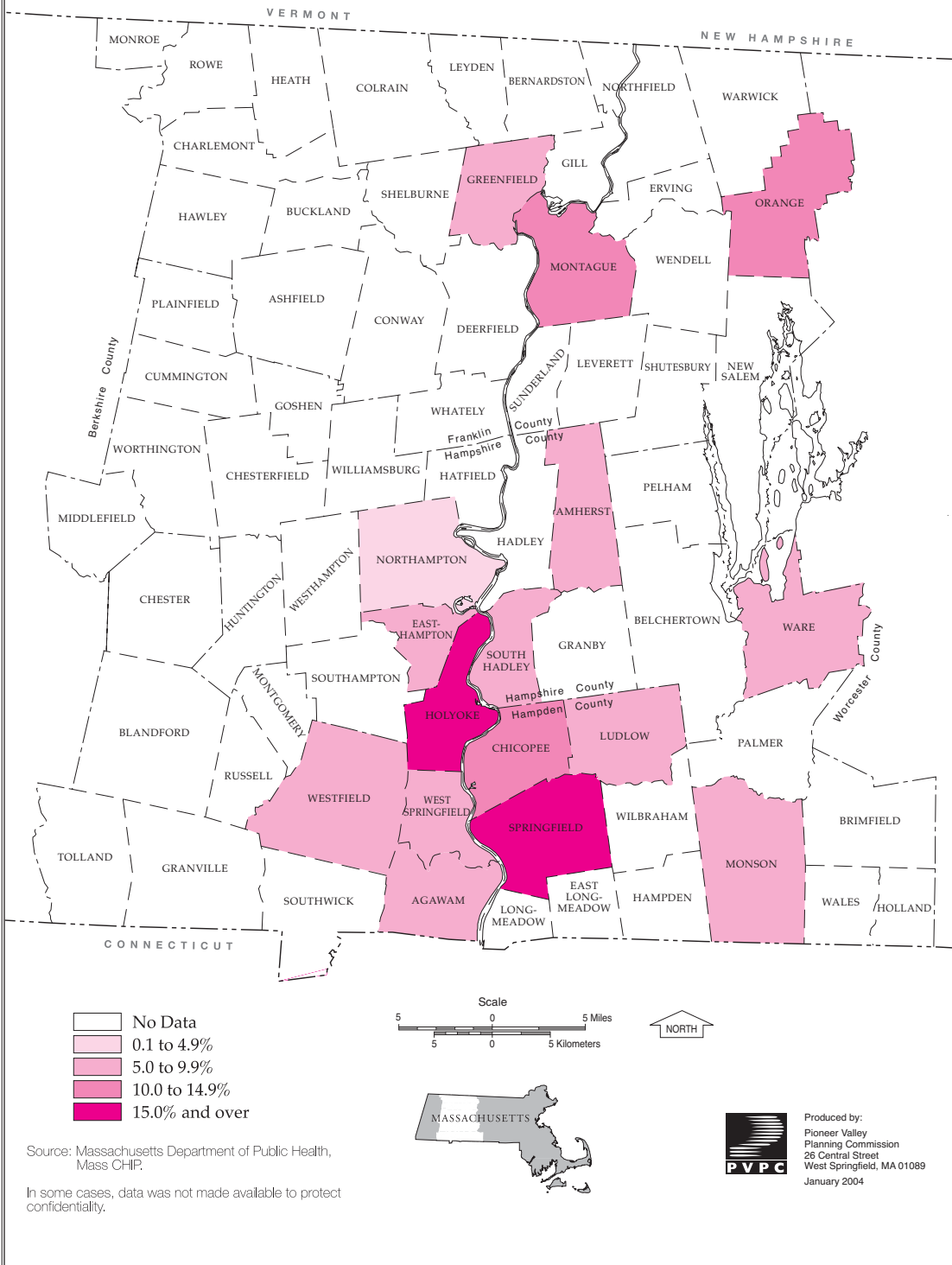
In five Pioneer Valley communities—Chicopee, Holyoke, Montague, Orange, and Springfield—the percent of births to teenage mothers (under 20) is over 10.0 percent. In Holyoke, an astonishing 22.4 percent of all births are to teenage mothers and Springfield follows closely with a rate of 17.9 percent.

Percent of all Births to Mothers Under Age 18, 1989-2001



Source: Massachusetts Department of Public Health, MassCHIP

Percent of All Births to Teenage Mothers, 2001



Holyoke	22.4%
Springfield	17.9%
Orange	12.9%
Chicopee	12.6%
Pioneer Valley	11.7%
Montague	10.3%
Ware	9.7%
West Springfield	9.1%
Greenfield	8.7%
Westfield	8.6%
Ludlow	7.7%
Easthampton	6.6%
Agawam	6.0%
Monson	5.5%
Amherst	5.2%
South Hadley	5.0%
Northampton	4.9%
Ashfield	-
Belchertown	-
Bernardston	-
Blandford	-
Brimfield	-
Buckland	-
Charlemont	-
Chester	-
Chesterfield	-
Colrain	-
Conway	-
Cummington	-
Deerfield	-
East Longmeadow	-
Erving	-
Gill	-
Goshen	-
Granby	-
Granville	-
Hadley	-
Hampden	-
Hatfield	-
Hawley	-
Heath	-
Holland	-
Huntington	-
Leverett	-
Leyden	-
Longmeadow	-
Middlefield	-
Monroe	-
Montgomery	-
New Salem	-
Northfield	-
Palmer	-
Pelham	-
Plainfield	-
Rowe	-
Russell	-
Shelburne	-
Shutesbury	-
Southampton	-
Southwick	-
Sunderland	-
Tolland	-
Wales	-
Warwick	-
Wendell	-
Westhampton	-
Whately	-
Wilbraham	-
Williamsburg	-
Worthington	-

Note: Data unavailable for select municipalities



Children in Single-Parent Families

This is an important measure of children’s basic family situation and their overall social and economic well-being. While there are numerous exceptions to this, statistically a child who grows up in a single-parent family is 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.

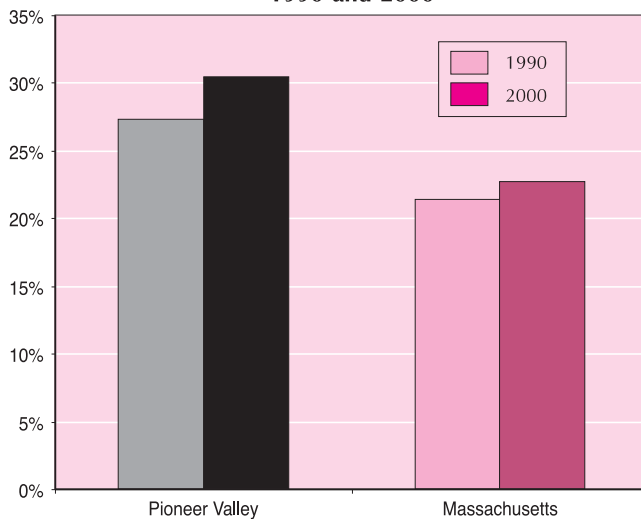
The number of children under 18 who were living with only one parent in 1990 and 2000 is divided by the total number of children to determine the percent of children in single-parent families.

The percent of children living in single-parent families increased for both the Pioneer Valley and Massachusetts in the 1990s, rising by 3.2 percentage points in the Pioneer Valley and 1.5 percentage points in Massachusetts. The percent of children living in single parent families is much higher in the Pioneer Valley than in Massachusetts as, in 2000, 30.4 percent of children in the Pioneer Valley lived in single-parent families as compared to 22.8 percent for Massachusetts. In fact, between 1990 and 2000, the percent of children in single parent families in the Pioneer Valley increased from 1.25 to 1.33 times the percent for Massachusetts.

Holyoke and Springfield have the highest percentages of children living in single-parent families; unsurprisingly, they also have the highest poverty rates for children in 2000. More than half of all children in Holyoke (52.3 percent) and Springfield (52.1 percent) live with only one parent. A number of other communities, including Chicopee, Greenfield,

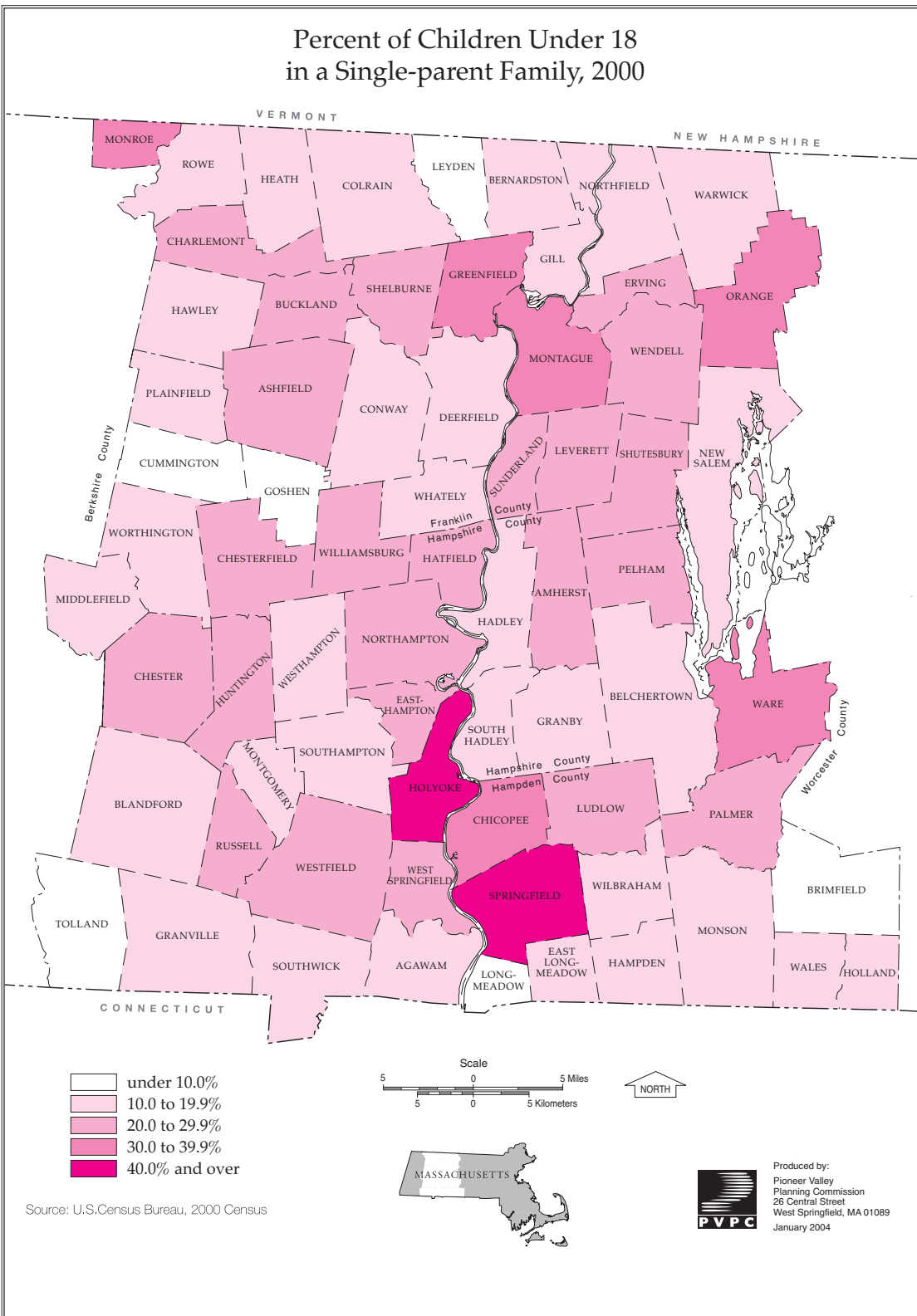
Montague, and Ware, have more than one third of their children living in single-parent families. On the other hand, Brimfield, Cummington, Goshen, Leyden, Longmeadow, and Tolland are communities where fewer than one in 10 children live in single parent homes.

Percent of Children in Single Parent Families, 1990 and 2000



Source: U.S. Census Bureau, 1990 and 2000 Census

Percent of Children Under 18 in a Single-parent Family, 2000



Holyoke	52.3%
Springfield	52.1%
Greenfield	38.0%
Chicopee	36.6%
Ware	35.2%
Montague	34.3%
Pioneer Valley	32.6%
Orange	32.5%
Monroe	30.8%
West Springfield	28.9%
Palmer	28.6%
Easthampton	28.6%
Leverett	27.9%
Northampton	27.5%
Amherst	26.8%
Ashfield	25.9%
Charlemont	25.9%
Erving	25.8%
Wendell	25.0%
Chesterfield	24.8%
Buckland	24.8%
Russell	24.1%
Shelburne	23.5%
Pelham	23.0%
Chester	22.4%
Westfield	21.7%
Sunderland	21.7%
Williamsburg	21.3%
Hatfield	21.1%
Ludlow	20.7%
Shutesbury	20.0%
Huntington	20.0%
Northfield	19.7%
Holland	19.2%
Gill	19.0%
Agawam	18.9%
Warwick	18.8%
Colrain	17.8%
New Salem	17.8%
Deerfield	17.7%
Plainfield	17.6%
Monson	17.4%
Whately	17.1%
Wales	17.1%
Bernardston	17.0%
Granby	16.5%
South Hadley	16.0%
East Longmeadow	15.4%
Belchertown	15.1%
Southwick	14.8%
Westhampton	14.8%
Rowe	14.7%
Southampton	14.4%
Conway	13.9%
Hadley	13.6%
Hawley	13.5%
Worthington	13.4%
Wilbraham	13.3%
Middlefield	13.3%
Granville	12.2%
Heath	11.9%
Hampden	11.3%
Montgomery	10.9%
Blandford	10.6%
Leyden	9.4%
Brimfield	9.1%
Longmeadow	8.9%
Cummington	7.5%
Goshen	4.9%
Tolland	0.0%

Source: U.S.Census Bureau, 2000 Census

Produced by:
 Pioneer Valley
 Planning Commission
 28 Central Street
 West Springfield, MA 01089
 January 2004



Children in Foster Care

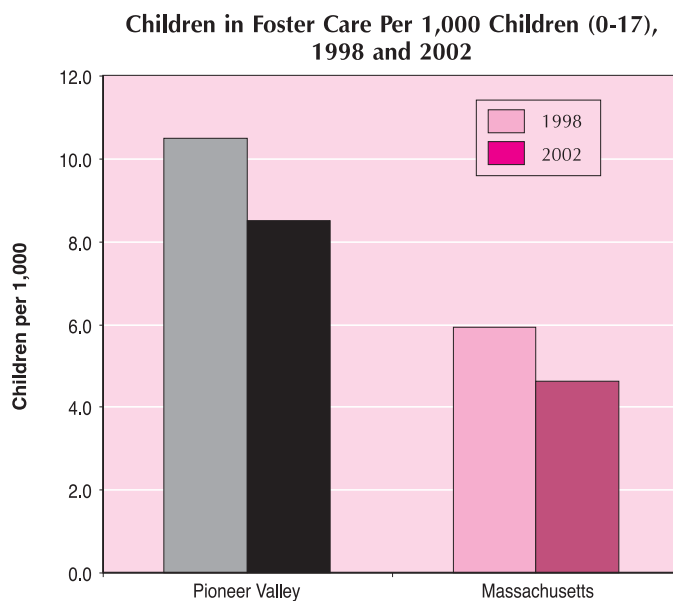
The ratio of children in foster care compared to all children is a vital signal of the state of families in the Pioneer Valley as a whole.⁴ There are numerous reasons why a child might be in foster care: deceased parents, parents unable to care for their child, child abuse or neglect by parents, or parents 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.

Unfortunately, the Pioneer Valley has a much higher rate of children in living in foster care than Massachusetts as a whole. In 2002, 8.5 of every 1,000 children in the Pioneer Valley were living in foster care, almost twice the number for Massachusetts (4.6 of 1,000). Positively, the rate for the Pioneer Valley has declined, dropping from 10.5 in 1998 to 8.5 in 2002, a decrease of 19.0 percent. Unfortunately, this rate of decline is slower than the drop of 22.0 percent seen in Massachusetts between 1998 and 2002.

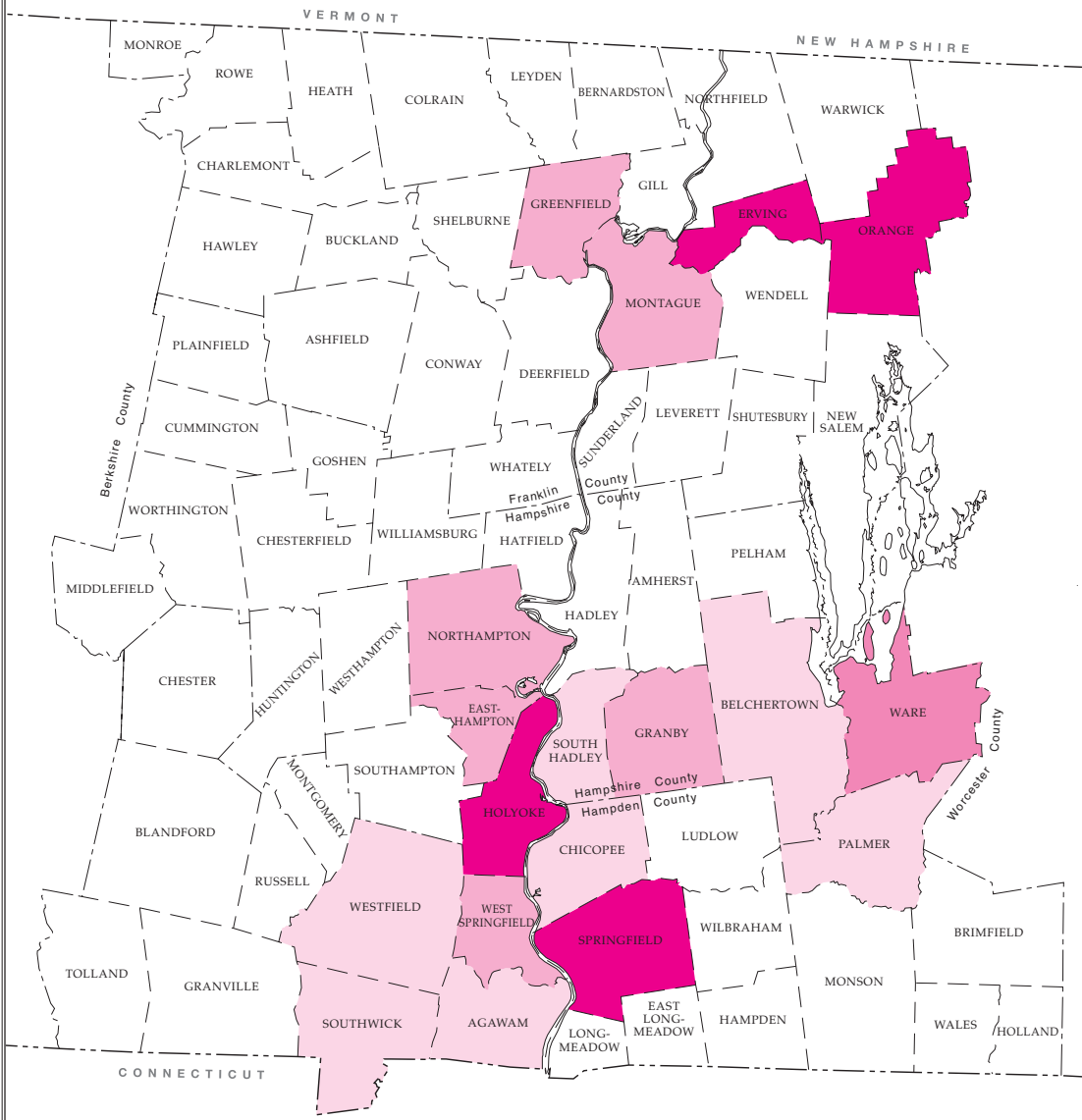
In terms of rates, disproportionately large numbers of children live in foster care in the towns of Erving and Orange with 29.8 and 20.5 children per 1,000 in foster care, respectively. This may indicate the presence of foster care homes in these communities that would increase the concentration. The region’s largest cities, Springfield and Holyoke, also have high rates of

children living in foster care, at 15.3 and 17.1 children per 1,000, respectively. 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.

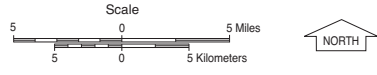


Source: Massachusetts Department of Public Health, MassCHIP;
U.S. Census Bureau, 2000 Census

Children (0-17) in Foster Care Per 1,000 Children, 2002



No data
 up to 4.99
 5.00 to 9.99
 10.00 to 14.99
 15.00 and over



Source: Massachusetts Department of Public Health, MassCHIP; U.S. Census Bureau, 2000 Census.

The denominator in this case is the total number of children in 2000.
 This reflects where foster children presently live, rather than where they lived prior to entering foster care.
 In some cases, data was not made available to protect confidentiality.

Produced by:
 Pioneer Valley
 Planning Commission
 26 Central Street
 West Springfield, MA 01089
 January 2004

Erving	29.76
Orange	20.46
Holyoke	17.12
Springfield	15.34
Ware	10.83
Easthampton	8.57
Pioneer Valley	8.50
Montague	7.70
West Springfield	6.73
Granby	6.39
Northampton	5.69
Greenfield	5.03
Westfield	4.82
Southwick	4.69
Chicopee	4.53
South Hadley	4.44
Palmer	4.13
Agawam	3.86
Belchertown	3.67
Amherst	-
Ashfield	-
Bernardston	-
Blandford	-
Brimfield	-
Buckland	-
Charlemont	-
Chester	-
Chesterfield	-
Colrain	-
Conway	-
Cummington	-
Deerfield	-
East Longmeadow	-
Gill	-
Goshen	-
Granville	-
Hadley	-
Hampden	-
Hatfield	-
Hawley	-
Heath	-
Holland	-
Huntington	-
Leverett	-
Leyden	-
Longmeadow	-
Ludlow	-
Middlefield	-
Monroe	-
Monson	-
Montgomery	-
New Salem	-
Northfield	-
Pelham	-
Plainfield	-
Rowe	-
Russell	-
Shelburne	-
Shutesbury	-
Southampton	-
Sunderland	-
Tolland	-
Wales	-
Warwick	-
Wendell	-
Westhampton	-
Whately	-
Wilbraham	-
Williamsburg	-
Worthington	-

Note: Data unavailable for select municipalities



Child Poverty

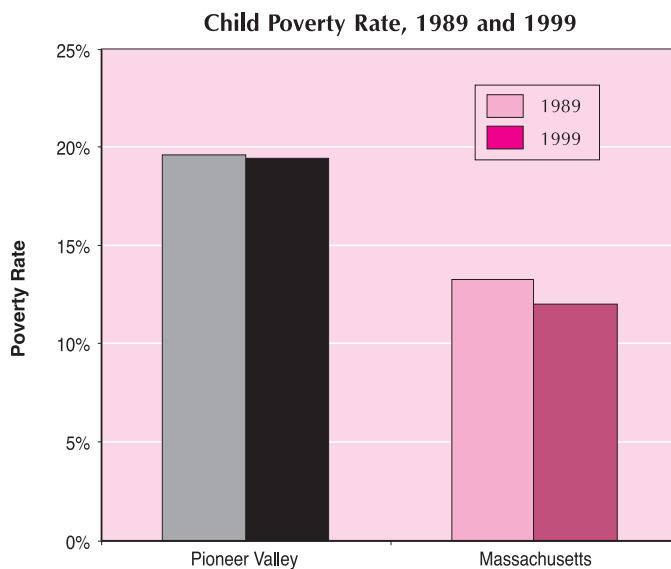
The child poverty rate is an indicator of how many children are living in desperate economic situations. The poverty line is not designed to measure how much is actually needed to survive and is often considered to indicate a severe lack of economic resources. The percent of children living in poverty is a principal measure of the future economic well-being of our region because children growing up in poverty, statistically, are less likely to receive quality primary and secondary educations, are more likely to drop out of high school, and are less likely to go to college.

The child poverty rate is the percent of all children (under 18) living in households with income below the federal poverty line. The poverty line is adjusted annually and varies according to family size and age of children. The child poverty rate is based on income from 1999 reported to the U.S. Census Bureau. For a family of four with two children under 18, the federal poverty line in 1999 was \$16,895.

In 1999, nearly one in five children in the Pioneer Valley, or exactly 19.3 percent, lived in poverty—a slight decrease from the 19.6 percent child poverty rate of 1989. By comparison, the Massachusetts child poverty rates for 1989 and 1999 were 13.2 percent and 12.0 percent, respectively. Despite the decline from 1989 to 1999, the gap between the Pioneer Valley and Massachusetts rates widened from a 6.4 percentage point difference in 1989 to a 7.3 percentage point difference in 1999. Unfortunately, while much of the economic data collected in the second half of the 1990s (unemployment rates, income, etc.) was positive, reflecting the peak of an economic cycle, these developments did little to improve the situation of low-income families with children, as child poverty rates remain high.

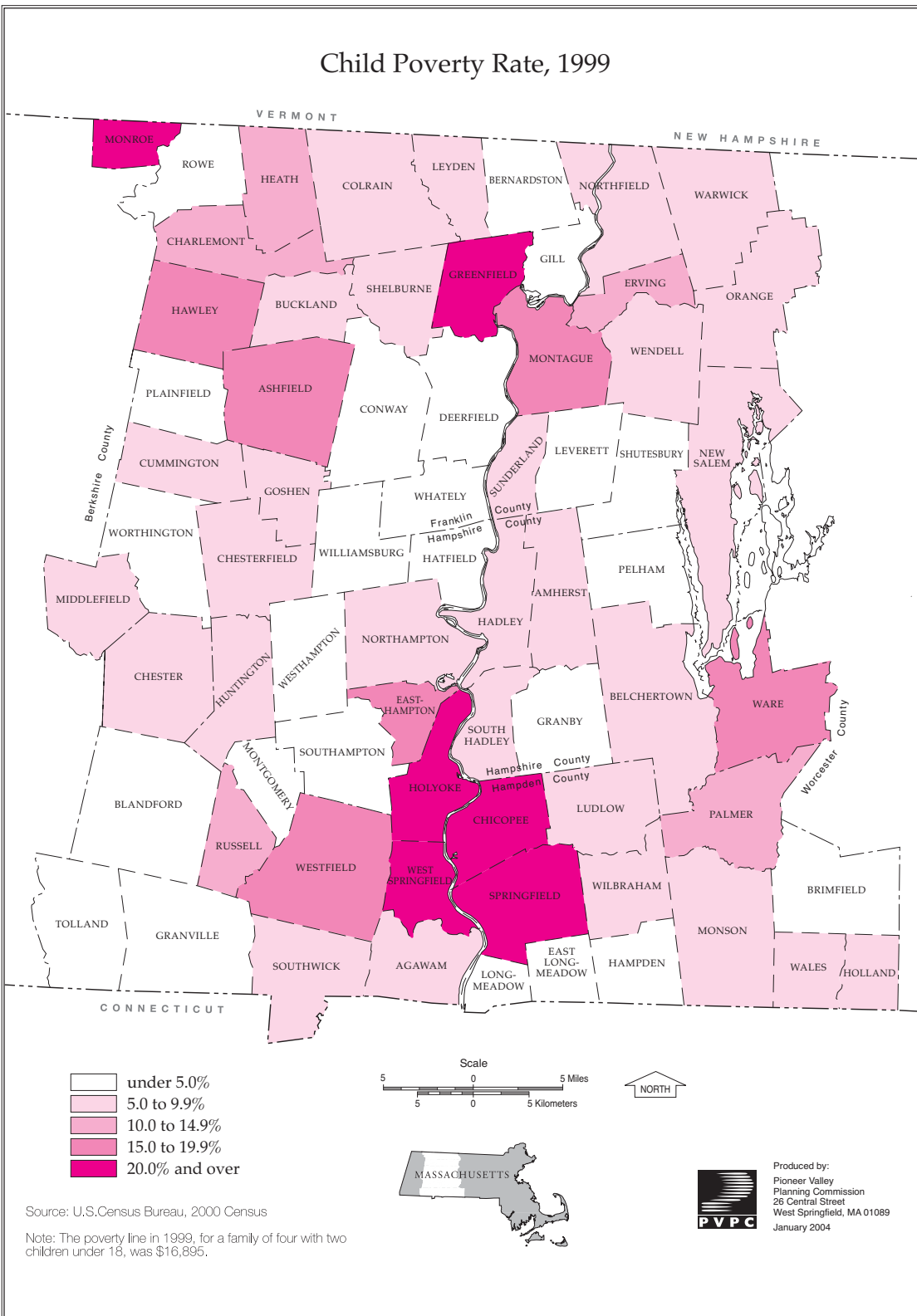
The city of Holyoke, which by some measures is the poorest community in Massachusetts,

has a child poverty rate of 41.9 percent, which translates into two of every five children living below the federal poverty line. Springfield, the region's largest city, had a child poverty rate of 34.3 percent. Other urban and rural communities with high child poverty rates include Chicopee (20.6 percent), Greenfield (20.1 percent), Monroe (30.8 percent), and West Springfield (20.8 percent). The region, however, is one of sharp contrasts, as a number of communities had child poverty rates below 2.0 percent. These include Hampden, Hatfield, Longmeadow, Rowe, Shutesbury, Tolland, and Whately. Longmeadow's child poverty rate, at 0.3 percent, is by far the lowest of all communities in the region



Source: U.S. Census Bureau, 1990 and 2000 Census

Child Poverty Rate, 1999



Holyoke	41.9%
Springfield	34.3%
Monroe	30.8%
West Springfield	20.8%
Chicopee	20.6%
Greenfield	20.1%
Pioneer Valley	19.3%
Montague	18.2%
Ware	17.0%
Hawley	16.5%
Westfield	16.4%
Easthampton	15.5%
Ashfield	15.4%
Russell	14.7%
Heath	12.6%
Charlemont	11.4%
Erving	10.7%
Palmer	10.3%
Holland	9.7%
Amherst	9.6%
Warwick	9.5%
Ludlow	9.4%
Middlefield	9.2%
Colrain	9.2%
Wendell	9.1%
Northampton	8.9%
Goshen	8.9%
New Salem	8.8%
Shelburne	8.2%
Orange	8.2%
Cummington	7.8%
Leyden	7.7%
Monson	7.7%
Hadley	7.3%
Buckland	7.1%
Belchertown	7.0%
Agawam	7.0%
Huntington	6.6%
Southwick	6.3%
South Hadley	6.1%
Wilbraham	5.9%
Sunderland	5.8%
Northfield	5.7%
Chesterfield	5.7%
Wales	5.1%
Chester	5.0%
Plainfield	4.9%
East Longmeadow	4.8%
Deerfield	4.3%
Westhampton	4.0%
Pelham	3.7%
Brimfield	3.6%
Bernardston	3.0%
Williamsburg	2.9%
Granby	2.8%
Southampton	2.8%
Conway	2.6%
Worthington	2.6%
Gill	2.5%
Blandford	2.4%
Granville	2.2%
Leverett	2.1%
Whately	1.8%
Hatfield	1.5%
Hampden	1.4%
Montgomery	1.3%
Shutesbury	1.2%
Longmeadow	0.3%
Rowe	0.0%
Tolland	0.0%

Source: U.S. Census Bureau, 2000 Census

Note: The poverty line in 1999, for a family of four with two children under 18, was \$16,895.

Produced by:
Pioneer Valley
Planning Commission
28 Central Street
West Springfield, MA 01089
January 2004



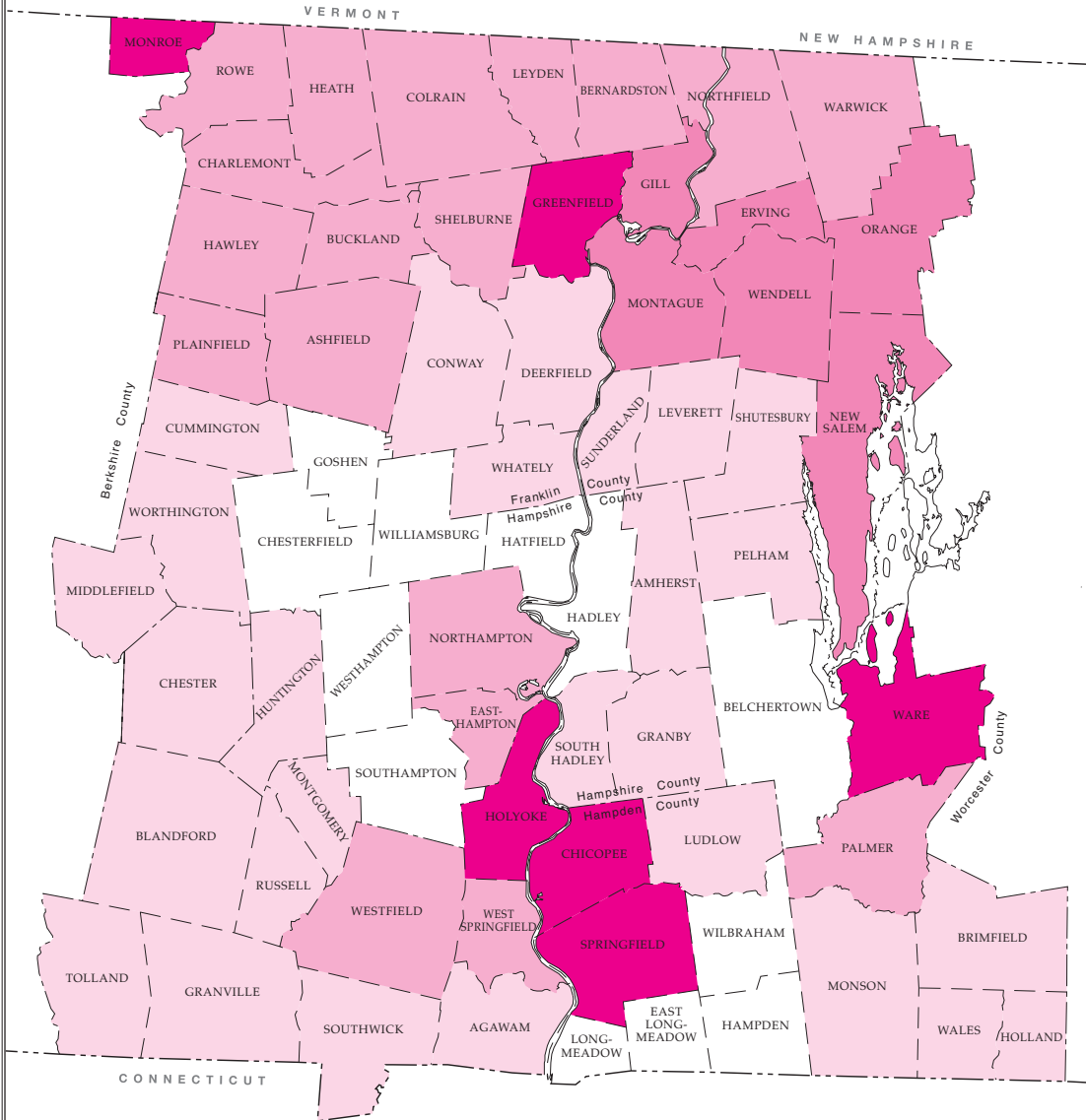
Free and Reduced-Price Lunch

The income level of students 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.

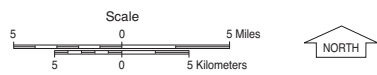
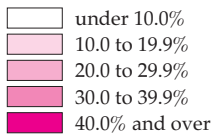
The percent of public school students from kindergarten through the twelfth grade who qualify for free or reduced-price lunch is based on the students' family income. For the 2003-2004 school year, children in a family of four making less than \$23,920 qualify for free lunch, and children in families making less than \$34,040 qualify for reduced-price lunch. The percentages for this indicator reflect all children qualifying for either. Throughout this report, data for regional school districts is mapped by municipality, with each municipality in a regional school district reflecting the aggregate value for the entire district.

For the 2002-2003 school year, about seven of every 10 public school students in the Springfield (71.2 percent) and Holyoke (69.0 percent) public schools qualified for free or reduced-price lunch. Chicopee (45.5 percent), Greenfield (41.0 percent), Monroe (41.4 percent), and Ware (51.5 percent) also had high percentages of students qualifying for the free or reduced-price lunch program. In contrast, four suburban communities, East Longmeadow, Hampden, Longmeadow, and Wilbraham, had less than 6.0 percent of students qualifying for free or reduced-price lunch.

Percent of K-12 Students Qualified for Free or Reduced Price Lunch, 2002-2003 School Year



Springfield	71.2%
Holyoke	69.0%
Ware	51.5%
Chicopee	45.5%
Monroe	41.4%
Greenfield	41.0%
Erving	37.1%
Gill	37.1%
Montague	37.1%
New Salem	36.6%
Orange	36.6%
Wendell	36.6%
Ashfield	29.8%
Buckland	29.8%
Charlemont	29.8%
Colrain	29.8%
Hawley	29.8%
Heath	29.8%
Plainfield	29.8%
Rowe	29.8%
Shelburne	29.8%
West Springfield	29.0%
Westfield	26.5%
Palmer	24.5%
Northampton	22.5%
Easthampton	22.4%
Bernardston	21.0%
Leyden	21.0%
Northfield	21.0%
Warwick	21.0%
Blandford	19.3%
Chester	19.3%
Huntington	19.3%
Middlefield	19.3%
Montgomery	19.3%
Russell	19.3%
Worthington	19.3%
Amherst	16.3%
Belchertown	16.3%
Leverett	16.3%
Pelham	16.3%
Shutesbury	16.3%
Cummington	15.9%
Conway	14.6%
Deerfield	14.6%
Sunderland	14.6%
Whatley	14.6%
Ludlow	14.2%
Monson	13.7%
Granby	13.1%
Granville	12.9%
Southwick	12.9%
Tolland	12.9%
Agawam	12.6%
Brimfield	12.5%
Holland	12.5%
Wales	12.5%
South Hadley	12.1%
Belchertown	9.8%
Hatfield	8.4%
Hadley	7.7%
Chesterfield	7.4%
Goshen	7.4%
Southampton	7.4%
Westhampton	7.4%
Williamsburg	7.4%
Hampden	5.6%
Wilbraham	5.6%
East Longmeadow	5.3%
Longmeadow	3.1%



Produced by:
 Pioneer Valley
 Planning Commission
 26 Central Street
 West Springfield, MA 01089
 January 2004

Source: Massachusetts Department of Education.

Presented by high school districts.

Note: For regional school districts, data for each municipality reflects the entire regional district. Monroe is part of a district with the Berkshire County community of North Adams.



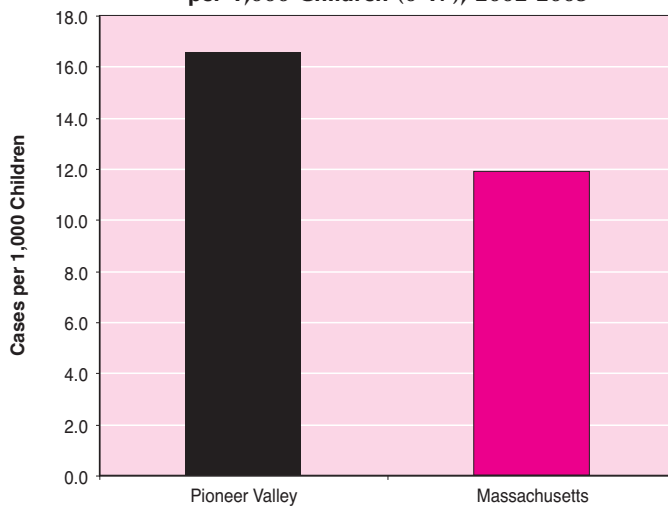
Child Abuse and Neglect

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, perpetuating the cycle of abuse.

Child abuse and neglect is measured by the number of child abuse and neglect cases being managed by the Massachusetts Department of Social Services. Based on statistics from one snapshot in time, this indicator shows the number of children, per 1,000 total children under 18, who are confirmed to have experienced child abuse or neglect.

In the Pioneer Valley, from July 2002 through June 2003, 16.6 of every 1,000 children have experienced child abuse or neglect. In other words, nearly two of every 100 children in the Pioneer Valley are monitored by the Department of Social Services because of confirmed abuse or neglect. The rate for the Pioneer Valley (16.6 per 1,000 children) is 39.5 percent higher than the rate for Massachusetts as a whole (11.9 per 1,000 children).

Child Abuse and Neglect Cases being Managed by the Department of Social Services per 1,000 Children (0-17), 2002-2003



Source: Massachusetts Department of Public Health, MassCHIP
U.S. Census Bureau, 2000 Census



EDUCATION

Education is of paramount importance in any region because measures of education, like indicators related to children, are predictive of the future. From the ability to provide quality early education opportunities to children ages three and four, to the ability to provide the highest levels of academic and professional training, education is crucial to

our region's future economic and social progress. The Massachusetts Comprehensive Assessment System (MCAS) is increasingly the measure of educational success across the state, and we have used two MCAS indicators here to capture trends in primary and secondary education. Research is ever more clear that education does not start with kindergarten and that the capacity of our region to provide quality early education experiences is important to lifelong development. Finally, whether or not our region's youth complete high school and the portion of our population with college degrees are significant indicators of the future potential of the region's workforce.

Positively, the Pioneer Valley's tenth graders have greatly improved their performance on the MCAS and have narrowed the gap between the region and the state. Though affordability remains a question, the region has a high level of capacity for early education and care services. On the other hand, third grade MCAS performances have declined and high school dropout rates have remained stable. While more Pioneer Valley residents had college degrees in 2000 than in 1990, a wide gap remains between the region and the state.

<i>Indicator</i>	<i>Summary</i>	<i>Rating</i>
Early Education Demand and Capacity	While the number of licensed slots is increasing and they are well distributed across the region, affordability remains a concern.	B
Reading Proficiency (Third Grade MCAS)	The percent of third graders proficient in reading has declined steadily from 2001 to 2003.	D
MCAS Proficiency (Tenth Grade)	Though a gap between the region and state remains, scores have improved dramatically in English and Math.	A
High School Dropout Rates	High school dropout rates have remained consistent, though Hispanic students have much higher rates than the population as a whole.	C
Attainment of Higher Education	The percent of the population with a bachelor's degree increased from 1990 to 2000, but the region fell further behind the state.	C



Early Education Demand and Capacity

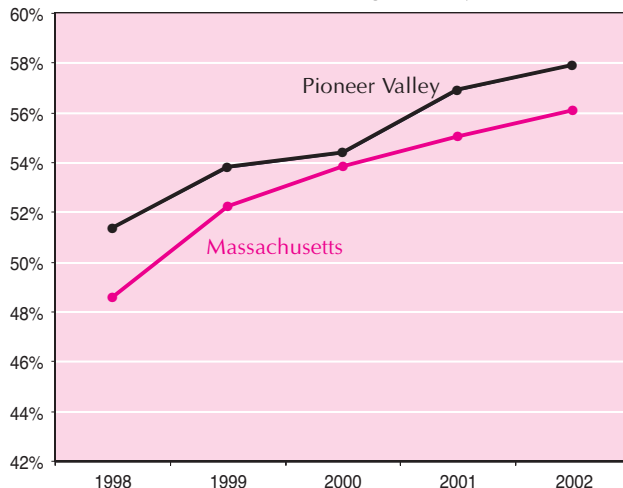
Analyzing the supply and demand of early education and care services is useful to evaluate whether or not there are sufficient programs to serve the needs of young children in the region.

The number of licensed early education and care slots (infant through pre-school) represents total early education capacity, while the number of children enrolled in preschool in 2000 is used as a proxy for demand.⁵ Enrollment data from the 2000 Census are limited to the number of children enrolled in a licensed child care or early education program rather than the total number of children who were pre-school age. Children cared for by other means are excluded from the demand estimate because they do not increase demand for licensed child care services. In the trend graph the number of slots is divided by the total 0–4 year old population to identify the percent of all young children who could be in a licensed early education and care setting.

Child care and early education providers are, for the most part, fairly evenly distributed over the region with some concentration of services in larger towns and cities. Holyoke, Springfield, and Greenfield had at least two slots per child needing services, while Northampton had three slots. Chicopee, Longmeadow, Easthampton, Amherst, and West Springfield all had more than one slot per child. Some of the smaller towns in the region had less than one slot per child needing services. This ratio, however, may simply indicate lower demand because of the availability of programs in a nearby town or because a parent prefers to enroll the child closer to their workplace than to their home.

Overall, in 2002 the majority of the towns and cities in the region had at least one slot with a licensed child care provider for each child in need of services. This is a good indication that there is sufficient capacity in the region for those who wish to enroll their child in such a program; however, this does not measure whether or not care is affordable for those in need of services. Anecdotally, the proliferation of unlicensed family day cares indicates that licensed child care, regardless of capacity, may not be affordable for many of the region’s residents.

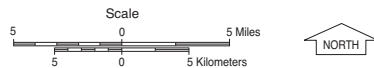
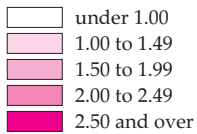
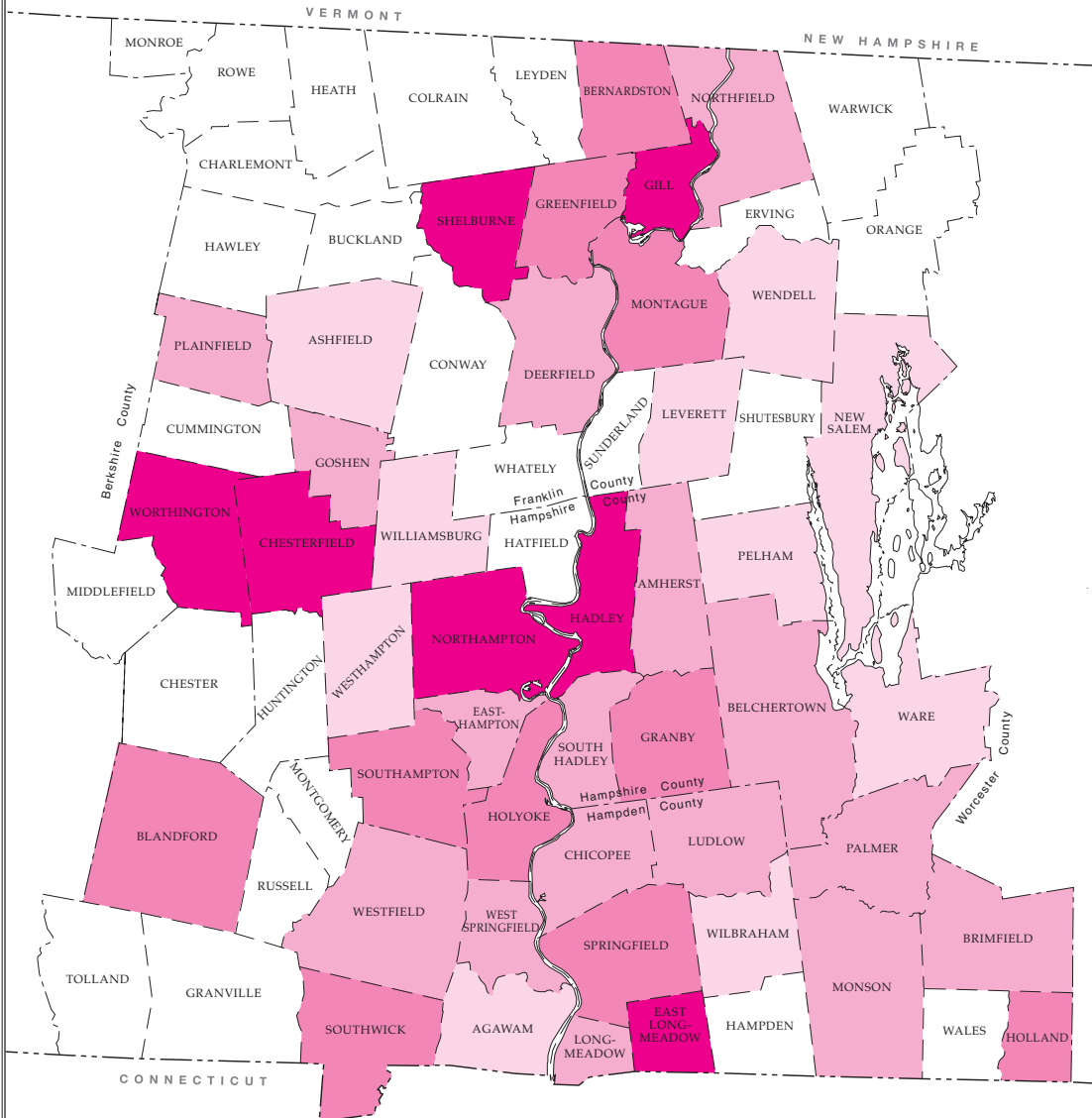
Number of Licensed Early Education and Care Slots as a Percent of Children Age 0 to 4, 1998-2002



Between 1998 and 2002, the percent of children up to age four for whom there was an available slot at a licensed child care or early education provider demonstrates the relationship between early education capacity and the maximum potential demand for services. Between 1998 and 2002, the percentage of children for whom there was a slot with a licensed early education and care provider increased. While in 1998, there was a slot for 51.4 percent of all children up to age four, that number increased to 58.0 percent by 2002. Positively, the percentage of all children up to age four in the Pioneer Valley for whom there was a licensed early education and care opening was consistently higher than the percentage for the Commonwealth during the entire five-year period.

Source: Massachusetts Department of Public Health, MassCHIP

Number of Licensed Early Education and Care Slots (2002) Per Child Enrolled in Preschool (2000)



Source: Massachusetts Office of Child Care Services; U.S. Census Bureau, 2000 Census

Note: This reflects slots in a given community divided by preschoolers who live in that community; therefore, you would expect higher values in communities with high levels of employment (some families enroll children in preschool near work rather than near home).



Produced by:
Pioneer Valley
Planning Commission
28 Central Street
West Springfield, MA 01089
January 2004

Gill	8.45
Chesterfield	6.75
Shelburne	3.39
Hadley	3.08
Northampton	3.02
Worthington	2.67
East Longmeadow	2.64
Holyoke	2.36
Springfield	2.32
Holland	2.28
Southampton	2.18
Granby	2.15
Bernardston	2.11
Southwick	2.09
Montague	2.08
Blandford	2.06
Greenfield	2.01
West Springfield	1.92
Easthampton	1.91
Monson	1.91
Pioneer Valley	1.91
Belchertown	1.90
South Hadley	1.88
Amherst	1.83
Plainfield	1.80
Deerfield	1.80
Goshen	1.77
Ludlow	1.76
Palmer	1.69
Longmeadow	1.60
Northfield	1.59
Brimfield	1.59
Westfield	1.58
Chicopee	1.56
Leverett	1.49
Agawam	1.47
Wilbraham	1.47
Ware	1.32
Ashfield	1.30
Wendell	1.30
Westhampton	1.26
Pelham	1.24
Williamsburg	1.23
New Salem	1.00
Charlemont	0.97
Leyden	0.92
Hatfield	0.88
Whately	0.85
Huntington	0.77
Erving	0.74
Russell	0.73
Sunderland	0.71
Chester	0.67
Hampden	0.67
Wales	0.67
Orange	0.65
Montgomery	0.60
Warwick	0.41
Buckland	0.40
Conway	0.33
Shutesbury	0.24
Colrain	0.23
Granville	0.17
Cummington	0.00
Hawley	0.00
Heath	0.00
Middlefield	0.00
Monroe	0.00
Rowe	0.00
Tolland	0.00



Reading Proficiency (Third Grade MCAS)

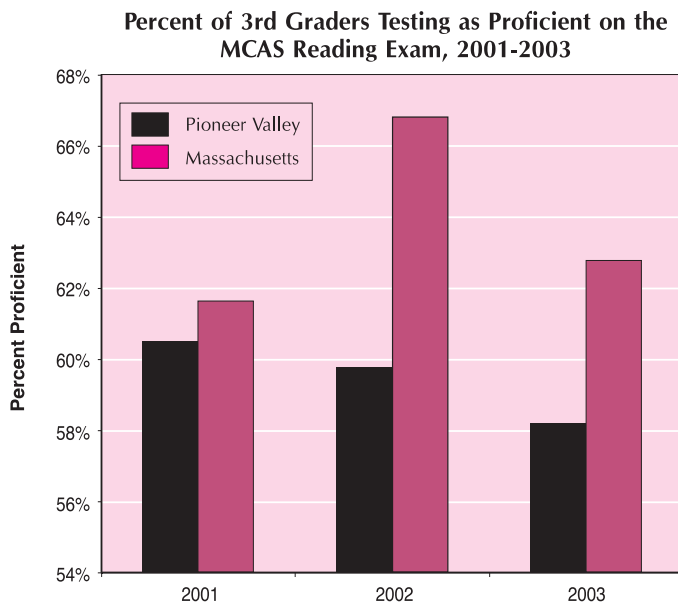
In an educational environment increasingly requiring quantitative measures of achievement and accountability, the scores from the standardized MCAS test are used to “identify the strengths and weaknesses in curriculum and instruction” at the local level and to hold schools and school districts accountable with respect to “established standards for performance for districts that improve or fail to improve student academic performance.”⁶ Educational development standards indicate that students should be able to read independently by the third grade, and it is generally accepted that children must then be able to read to learn.

The percent of all children in the third grade who received a score of “proficient” on the Massachusetts Comprehensive Assessment System (MCAS) reading exam for the years 2001-2003 reflects one aspect of the quality of early childhood and early primary school education.⁷

Unfortunately, the percentage of third graders in the Pioneer Valley who receive a “proficient” score on the MCAS has declined from 60.5 percent in 2001 to 58.2 percent in 2003. Perhaps more troubling, the gap between third graders in the Pioneer Valley and those in Massachusetts as a whole widened from 1.2 percentage points in 2001 to 5.6 percentage points in 2003. This latter year was an improvement over the 7.0 percentage point gap between the Pioneer Valley and Massachusetts in 2002.

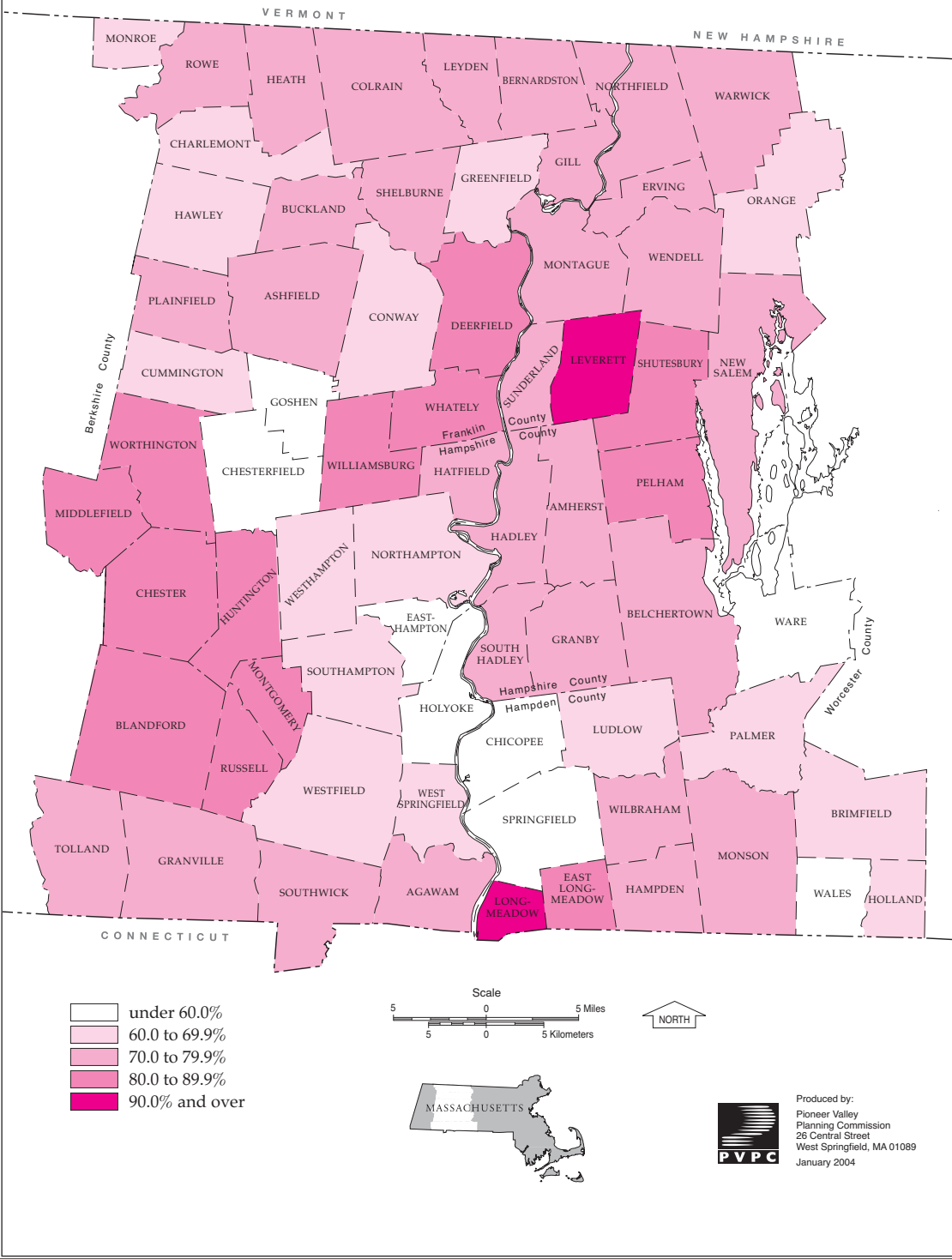
In five towns—Leverett, Longmeadow, Pelham, Shutesbury, and Whately—more than 85 percent of third graders tested as proficient in reading in 2002. At the opposite end of the spectrum, fewer than 55 percent of third graders tested as proficient in reading in 2002 in Chicopee, Easthampton, Holyoke, Wales, and Springfield. Of particular concern is the city of

Holyoke, where only 29 percent of third graders received proficient scores on the MCAS reading exam in 2002 (though this is in part a reflection of Holyoke’s high population of students for whom English is a second language).



Source: Massachusetts Department of Education

Percent of 3rd Graders Scoring as Proficient on the 3rd Grade MCAS Reading Exam, 2002



Leverett	100%
Longmeadow	91%
Pelham	86%
Shutesbury	86%
Whately	86%
Blandford	84%
Chester	84%
Huntington	84%
Middlefield	84%
Montgomery	84%
Russell	84%
Worthington	84%
Deerfield	82%
East Longmeadow	82%
Williamsburg	81%
Erving	79%
Hatfield	79%
Agawam	77%
Hadley	77%
Granville	76%
New Salem	76%
Southwick	76%
Tolland	76%
Wendell	76%
Gill	73%
Montague	73%
Amherst	72%
Belchertown	72%
Granby	72%
Hampden	72%
Wilbraham	72%
Ashfield	71%
Bernardston	71%
Buckland	71%
Colrain	71%
Heath	71%
Leyden	71%
Northfield	71%
Plainfield	71%
Rowe	71%
Shelburne	71%
South Hadley	71%
Warwick	71%
Monson	70%
Sunderland	70%
Brimfield	69%
Northampton	69%
Southampton	69%
Charlemont	68%
Hawley	68%
West Springfield	68%
Westhampton	68%
Conway	67%
Orange	67%
Holland	64%
Palmer	64%
Cummington	62%
Greenfield	62%
Ludlow	61%
Monroe	60%
Pioneer Valley	60%
Westfield	60%
Ware	57%
Chesterfield	56%
Goshen	56%
Easthampton	54%
Wales	54%
Chicopee	51%
Springfield	44%
Holyoke	29%



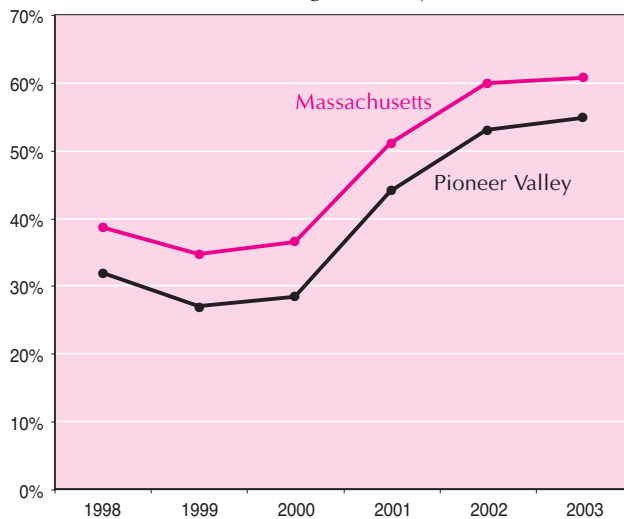
MCAS Proficiency (Tenth Grade)

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.⁸ 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.⁹ 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.

The trend graphs represent the percent of all tenth grade students testing at the “advanced” or “proficient” level on the standardized MCAS math and English exams, while the maps illustrate the average scaled scores on the math and English exams.¹⁰

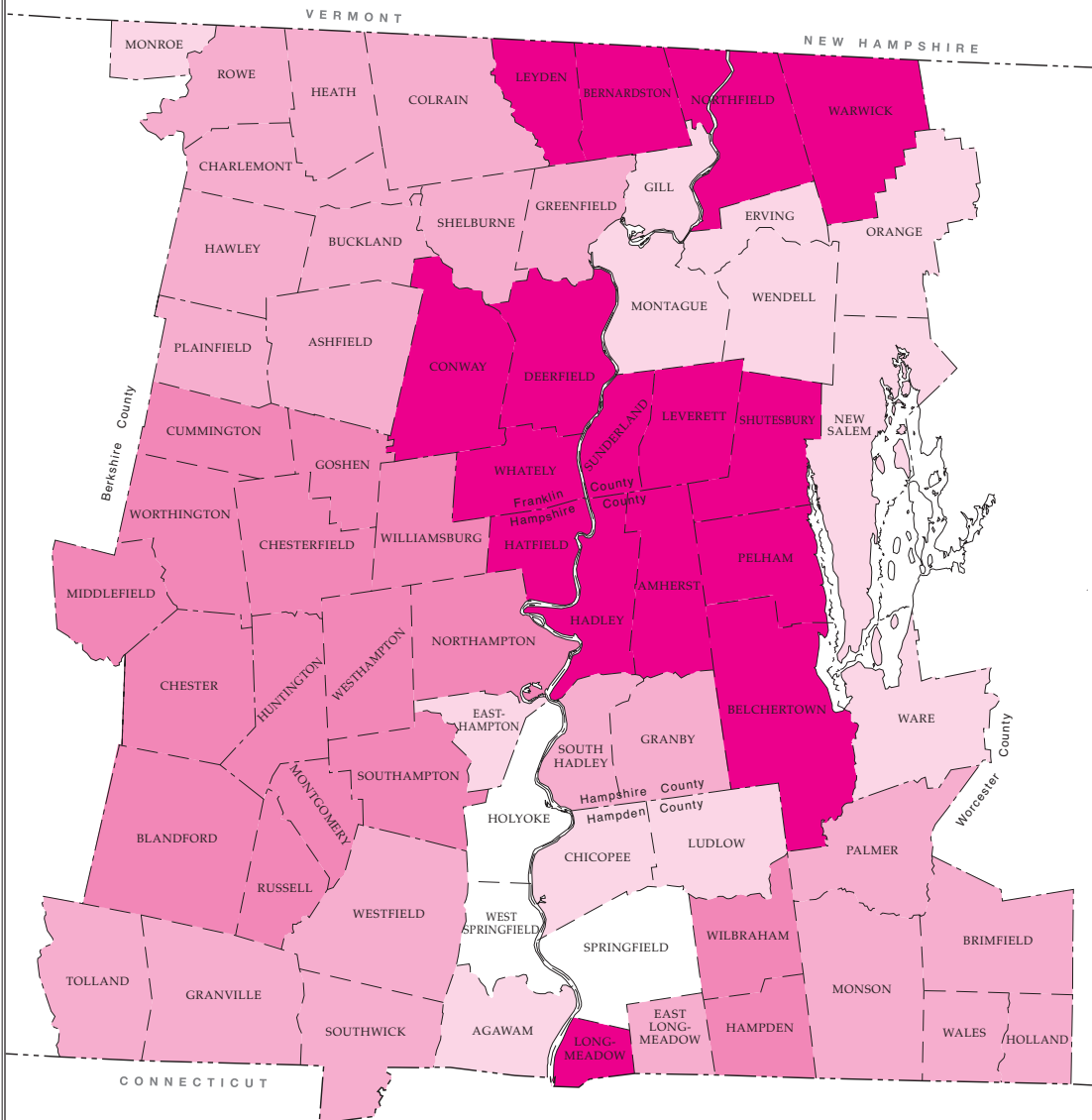
The percent of tenth graders scoring as advanced or proficient on the MCAS English exam reached a low point in 1999 with only 27.0 percent achieving at that level. This may be compared to 34.7 percent of tenth graders statewide, a gap of 7.7 percentage points. However, the percentage has increased quickly for both the region and the state, rising in 2003 to 54.9 percent and 60.7 percent testing as advanced or proficient, respectively. In addition, the gap between the region and the state narrowed in this time frame to 5.8 percentage points.

Percent of 10th Graders Testing as Advanced or Proficient on the MCAS English Exam, 1998-2003



Source: Massachusetts Department of Education

Average 10th Grade Scaled Score on 2002 MCAS English and Language Arts Exam

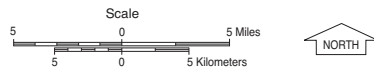


Belchertown	252
Conway	252
Deerfield	252
Sunderland	252
Whately	252
Bernardston	251
Hatfield	251
Leyden	251
Longmeadow	251
Northfield	251
Warwick	251
Amherst	250
Hadley	250
Leverett	250
Pelham	250
Shutesbury	250
Hampden	248
Wilbraham	248
Chesterfield	247
Goshen	247
Northampton	247
Southampton	247
Westhampton	247
Williamsburg	247
Cummington	246
Blandford	245
Chester	245
Huntington	245
Middlefield	245
Montgomery	245
Russell	245
Worthington	245
East Longmeadow	244
Ashfield	243
Brimfield	243
Buckland	243
Charlemont	243
Colrain	243
Granby	243
Hawley	243
Heath	243
Holland	243
Monson	243
Plainfield	243
Rowe	243
Shelburne	243
Wales	243
Greenfield	242
Palmer	241
South Hadley	241
Granville	240
Southwick	240
Tolland	240
Westfield	240
Ludlow	239
New Salem	239
Orange	239
Wendell	239
Agawam	238
Monroe	238
Pioneer Valley	238
Erving	237
Gill	237
Montague	237
Ware	237
Chicopee	236
Easthampton	236
West Springfield	234
Holyoke	227
Springfield	226

Needs Improvement

- under 235
- 235 to 239
- 240 to 244
- 245 to 249
- 250 and over

Proficient



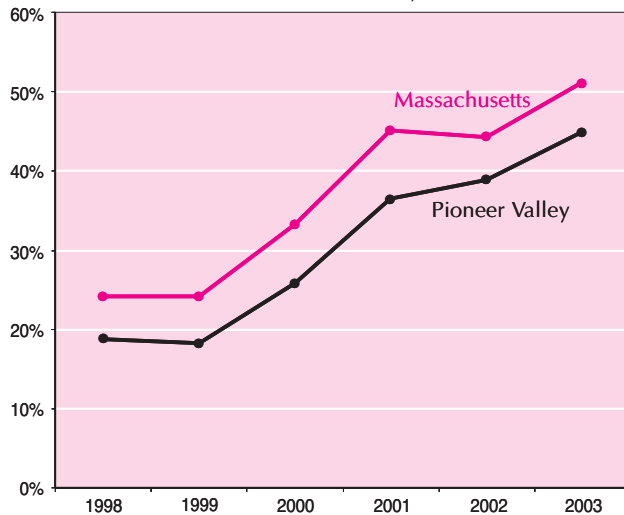
Produced by:
Pioneer Valley
Planning Commission
28 Central Street
West Springfield, MA 01089
January 2004

Source: Massachusetts Department of Education.

Note: For regional school districts, data for each municipality reflects the entire regional district. The town of Monroe's number largely reflects the Berkshire County community of North Adams.

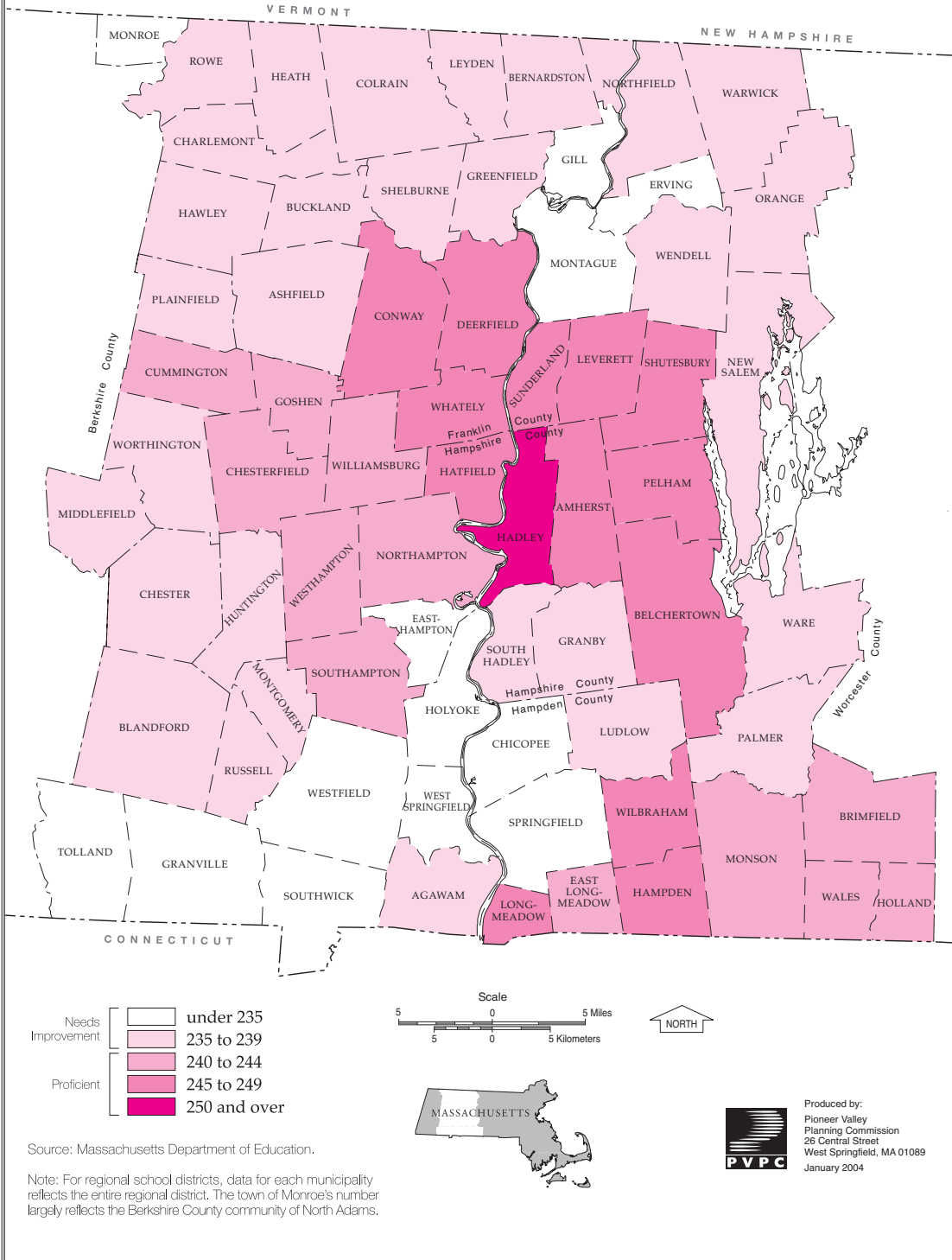
Performance on the MCAS math exam has followed a similar pattern to that of the English exam. At the lowest point in 1999, only 18.3 percent of Pioneer Valley tenth graders scored as advanced or proficient. In that same year, 24.2 percent of tenth graders statewide achieved advanced or proficient standing, a difference of 5.9 percentage points. However, scores have improved dramatically since then, rising in 2003 to 44.9 percent of all students in the Pioneer Valley scoring advanced or proficient. Nonetheless, the gap between the region and the state has persisted and was at 6.3 percentage points in 2003, a wider gap than in 1999. Therefore, the Pioneer Valley's schools are doing a good job of improving performance on the MCAS math exam, but the performance is not rising as quickly as in the state as a whole.

Percent of 10th Graders Testing as Advanced or Proficient on the MCAS Math Exam, 1998-2003



Source: Massachusetts Department of Education

Average 10th Grade Scaled Score on 2002 MCAS Math Exam



Hadley	251
Amherst	249
Leverett	249
Pelham	249
Shutesbury	249
Longmeadow	248
Hatfield	247
Belchertown	246
Hampden	246
Wilbraham	246
Conway	245
Deerfield	245
Sunderland	245
Whately	245
Brimfield	243
Holland	243
Monson	243
Wales	243
Chesterfield	242
Goshen	242
Northampton	242
Southampton	242
Westhampton	242
Williamsburg	242
East Longmeadow	241
Cummington	240
Agawam	239
Ashfield	239
Buckland	239
Charlemont	239
Colrain	239
Hawley	239
Heath	239
Ludlow	239
Plainfield	239
Rowe	239
Shelburne	239
New Salem	238
Orange	238
Wendell	238
Blandford	237
Chester	237
Greenfield	237
Huntington	237
Middlefield	237
Montgomery	237
Russell	237
South Hadley	237
Worthington	237
Granby	236
Bernardston	235
Leyden	235
Northfield	235
Palmer	235
Ware	235
Warwick	235
Easthampton	234
Westfield	234
Pioneer Valley	234
Granville	233
Southwick	233
Tolland	233
Chicopee	232
Erving	230
Gill	230
Monroe	230
Montague	230
West Springfield	230
Holyoke	223
Springfield	220



High School Dropout Rates

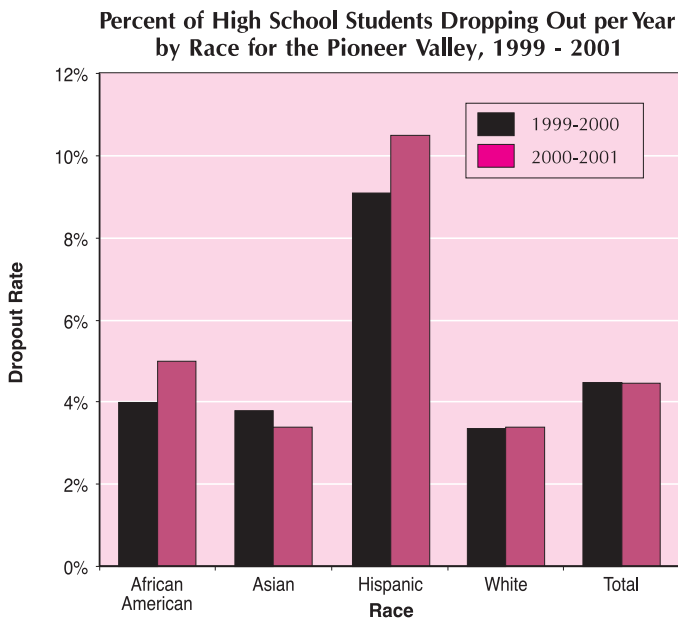
High school dropout rates are a vital component in assessing the status of individuals and communities because educational attainment has a strong influence on future work and earning potential.

The percent of all students enrolled in grades nine through twelve who stop attending school during a single academic year is the annual high school dropout rate. Multiplying the dropout rate by four provides a rough approximation of the percent of students in a single graduating class who do not complete high school.¹¹

The average percentage of students who dropped out of high school in the 2002-2003 academic year for all 69 municipalities in the Pioneer Valley is 4.5 percent. Springfield and Holyoke, with annual high school dropout rates of 8.0 percent and 8.6 percent, respectively, have the highest rates in the region, more than double the regional and state averages (3.5 percent). Chicopee, the third city in the region’s urban core, has a rate of 5.9 percent. West Springfield, home to numerous recent immigrants, has a fairly high dropout rate as well, at 6.6 percent. Among the region’s smaller communities, there are wide variations in dropout rates, from the towns of Ware and Montague, with dropout rates of 7.0 and 6.9 percent, respectively, to the communities of Easthampton and East Longmeadow, with dropout rates of 3.1 and 1.2 percent, respectively.

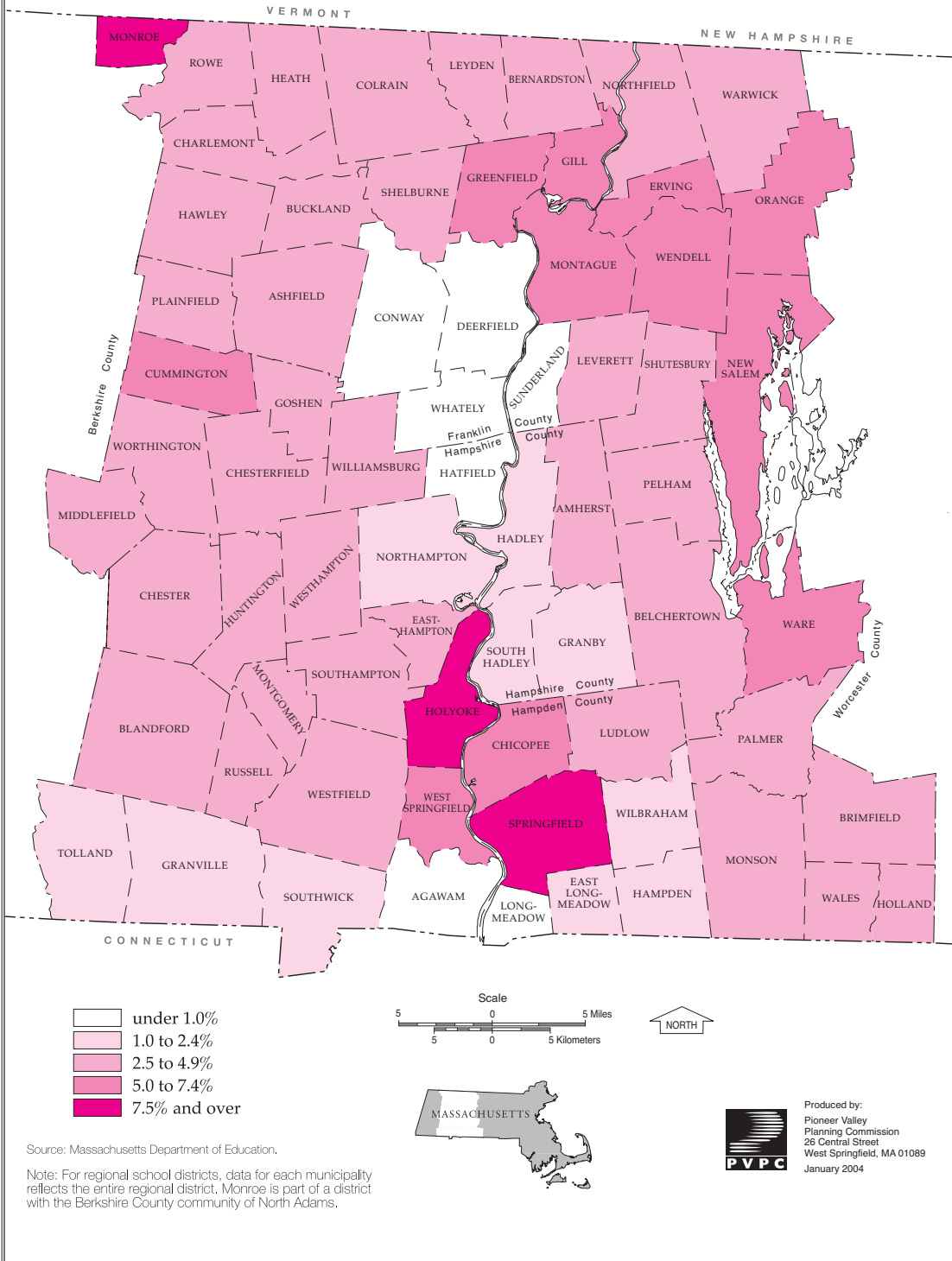
Within the region, there are also wide disparities in dropout rates by students’ race or ethnicity. For the two academic years between 1999 and 2001, the average dropout rate for all students was consistently 4.5 percent. However, Hispanic students were by far the least

likely to finish high school, with dropout rates of 9.1 and 10.5 percent in these two school years. At the opposite end, white students had the lowest dropout rates of about 3.4 percent for both years, and Asian students had similarly low rates of 3.8 and 3.4 percent. The dropout rate for African-American students hovered around the regional average at 4.0 and 5.0 percent in the two years.



Source: Massachusetts Department of Education

Annual Percent of High School Students Who Dropout, 2002-2003 School Year



Holyoke	8.6%
Springfield	8.0%
Monroe	7.7%
Ware	7.0%
Erving	6.9%
Gill	6.9%
Montague	6.9%
West Springfield	6.6%
Chicopee	5.9%
New Salem	5.6%
Orange	5.6%
Wendell	5.6%
Cummington	5.4%
Greenfield	5.4%
Blandford	4.9%
Chester	4.9%
Huntington	4.9%
Middlefield	4.9%
Montgomery	4.9%
Russell	4.9%
Worthington	4.9%
Bernardston	4.6%
Leyden	4.6%
Northfield	4.6%
Warwick	4.6%
Pioneer Valley	4.5%
Belchertown	3.6%
Chesterfield	3.6%
Goshen	3.6%
Palmer	3.6%
Southampton	3.6%
Westhampton	3.6%
Williamsburg	3.6%
Westfield	3.5%
Ashfield	3.3%
Buckland	3.3%
Charlemont	3.3%
Colrain	3.3%
Hawley	3.3%
Heath	3.3%
Plainfield	3.3%
Rowe	3.3%
Shelburne	3.3%
Easthampton	3.1%
Ludlow	3.1%
Monson	2.7%
Amherst	2.6%
Brimfield	2.6%
Holland	2.6%
Leverett	2.6%
Pelham	2.6%
Shutesbury	2.6%
Wales	2.6%
Granville	2.2%
Southwick	2.2%
Tolland	2.2%
Northampton	2.1%
Granby	1.6%
South Hadley	1.4%
East Longmeadow	1.2%
Hadley	1.2%
Hampden	1.1%
Wilbraham	1.1%
Conway	0.8%
Deerfield	0.8%
Hatfield	0.8%
Sunderland	0.8%
Whately	0.8%
Longmeadow	0.3%
Agawam	0.0%



Attainment of Higher Education

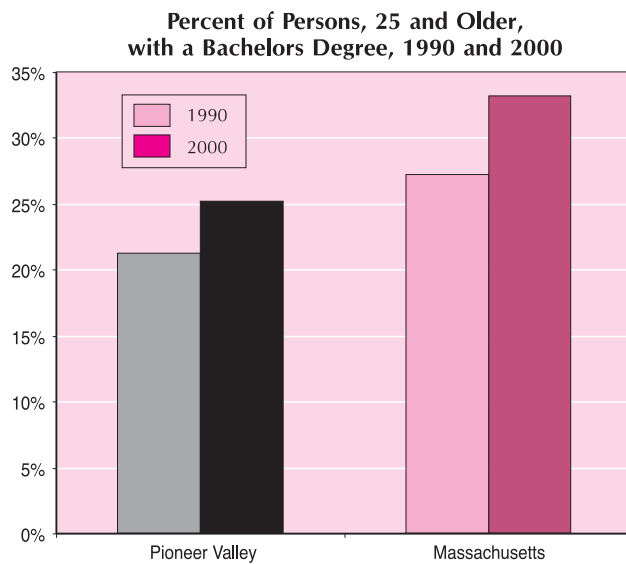
Higher education is increasingly necessary for long-term access to well-paying jobs. The extent of educational attainment, therefore, is indicative of a population’s ability to function and excel economically. While two-year associate’s degrees meet the needs of many positions, the bachelor’s degree 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 24 with a bachelor’s degree is used as a proxy for measuring the extent to which the population has attained higher education.

Positively, the Pioneer Valley witnessed a marked increase in the percent of the population with a bachelor’s degree, rising from 21.2 percent in 1990 to 25.2 percent in 2000, an overall increase of 18.9 percent. Unfortunately, the Pioneer Valley remained behind the Commonwealth. The percent of residents with a bachelor’s degree in the Pioneer Valley was 25.2 percent compared to 33.2 percent for the entire state. Furthermore, the Pioneer Valley lost ground to the state in this area. In 1990, the percent of the population with a bachelor’s degree was 28.4 percent higher in Massachusetts than in the Pioneer Valley. By 2000, the Massachusetts rate was 32.0 percent higher than the Pioneer Valley rate.

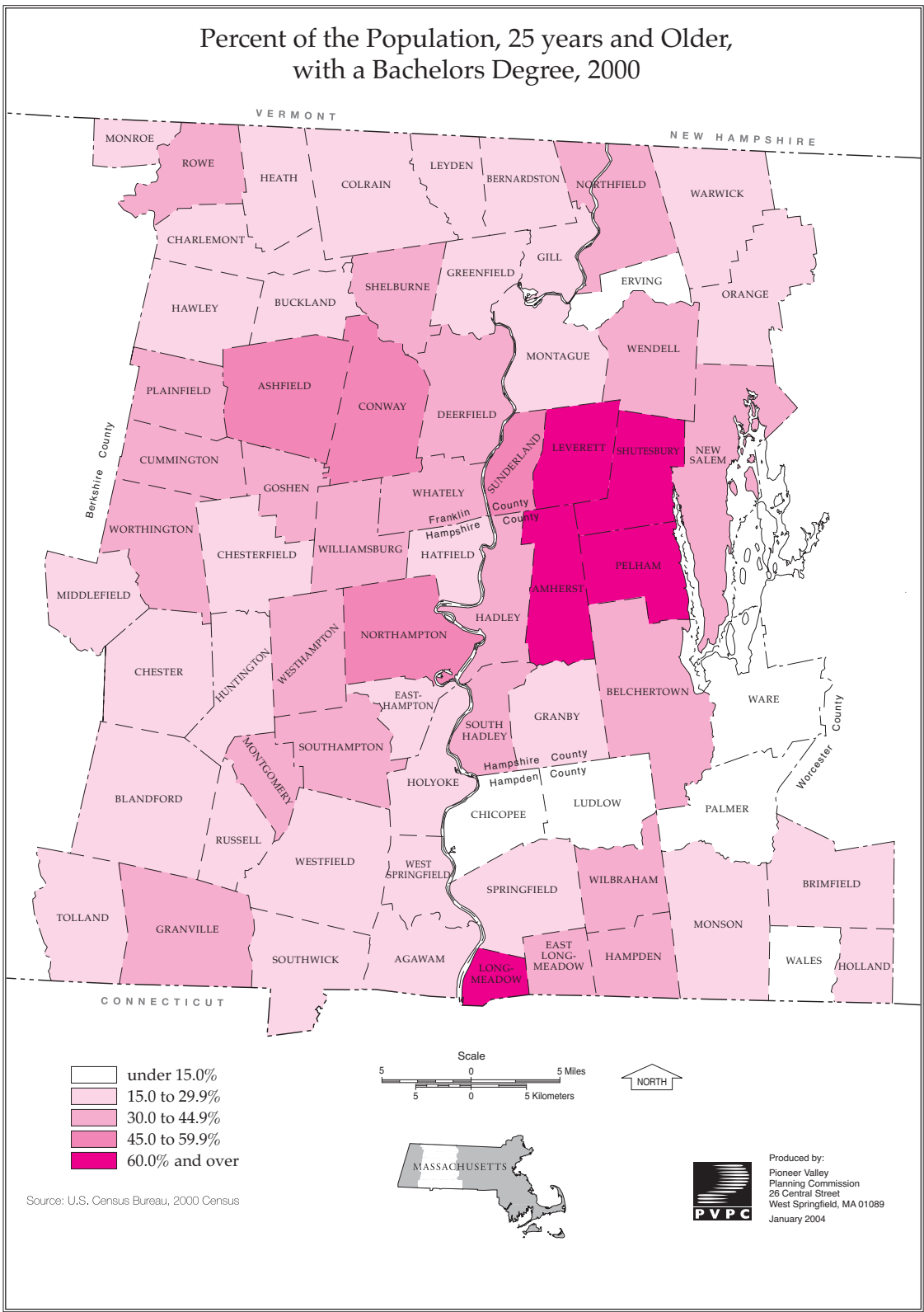
Overall, communities surrounding the town of Amherst, home to the University of Massachusetts and in close proximity to all of Hampshire County’s Five College consortium, had the highest rates of educational attainment—not surprising given the large numbers of faculty and graduate students living in these communities. Amherst (68.7 percent), Leverett

(65.0 percent), Shutesbury (62.7 percent), Pelham (60.8 percent), and Longmeadow (60.7 percent) had the highest percentages of people with bachelor’s degrees. Longmeadow, located about 30 miles southwest of Amherst, is the only community outside the Amherst area with over 60 percent of adults having a bachelor’s degree. At the opposite end of the spectrum, fewer than 15 percent of adults have a bachelor’s degree in six of the region’s communities, including Chicopee, Erving, Ludlow, Palmer, Wales, and Ware. Interestingly, these are either small urban communities (Chicopee, Ludlow, Palmer, and Ware) or rural areas (Erving and Wales). While Holyoke and Springfield are the region’s economically poorest cities, they do not have the smallest percentages of college graduates.



Source: U.S. Census Bureau, 1990 and 2000 Census

Percent of the Population, 25 years and Older, with a Bachelors Degree, 2000



Amherst	68.7%
Leverett	65.0%
Shutesbury	62.7%
Pelham	60.8%
Longmeadow	60.7%
Sunderland	50.5%
Conway	46.9%
Ashfield	46.5%
Northampton	46.1%
Wilbraham	44.4%
Wendell	41.1%
Cummington	40.3%
Hadley	40.2%
New Salem	39.5%
Williamsburg	39.4%
Whately	37.6%
Shelburne	37.0%
Worthington	36.3%
Deerfield	35.4%
Westhampton	34.9%
Montgomery	33.6%
South Hadley	32.9%
East Longmeadow	32.8%
Hampden	32.4%
Belchertown	31.5%
Granville	31.3%
Southampton	31.3%
Plainfield	30.8%
Northfield	30.8%
Rowe	30.1%
Goshen	30.1%
Tolland	29.9%
Heath	29.5%
Charlemont	29.0%
Hatfield	28.9%
Middlefield	28.1%
Gill	27.9%
Brimfield	27.9%
Leyden	26.4%
Blandford	25.8%
Pioneer Valley	25.2%
Buckland	25.2%
Warwick	25.0%
Chesterfield	24.9%
Colrain	24.7%
Greenfield	24.2%
Westfield	24.2%
Easthampton	24.0%
Hawley	23.2%
Granby	23.0%
Monson	22.5%
West Springfield	21.6%
Agawam	21.4%
Southwick	21.4%
Huntington	20.2%
Holland	19.8%
Bernardston	19.5%
Montague	19.0%
Chester	17.4%
Russell	17.3%
Holyoke	16.9%
Monroe	16.7%
Orange	15.9%
Springfield	15.4%
Wales	14.8%
Ludlow	14.8%
Ware	13.6%
Palmer	13.5%
Chicopee	12.3%
Erving	11.6%

Source: U.S. Census Bureau, 2000 Census

Produced by:
 Pioneer Valley
 Planning Commission
 26 Central Street
 West Springfield, MA 01089
 January 2004



HEALTH AND SAFETY

Health and safety indicators speak very personally to not only our quality of life, but also to our physical well-being. Indicators ranging from major cardiovascular disease deaths to teen suicides address how well we are able to take care of ourselves and one another physically and emotionally. Some issues, like health insurance coverage, can be addressed or improved only through systemic or institutional changes; others, like motor vehicle fatalities, have as much to do with our own behaviors as with systemic forces. Hospitalizations

related to asthma speak to the environmental quality of our region, while the infant mortality rate is often used as a catchall indicator for the overall healthiness of our communities.

In general, trends suggest that the physical health of our region's residents is improving. Health insurance covers the vast majority of adults, the number of reported new AIDS cases is down, cancer and cardiovascular disease fatalities are down, and asthma hospitalizations have diminished. Infant mortality rates have declined, even dropping below the state rate in 2002. However, on the safety side, our region is doing worse than in the recent past. Though public safety spending and motor vehicle fatalities have remained stable, crime and teen suicides are increasing.

<i>Indicator</i>	<i>Summary</i>	<i>Rating</i>
Health Insurance Coverage	The percentage of adults without health insurance of any kind dropped between 1998 and 2000 (before recent state cuts).	B
New AIDS Cases	The number of newly diagnosed cases of AIDS has dropped almost steadily since 1993.	B
Cancer and Cardiovascular Disease Deaths	Mortality rates from cancer and cardiovascular disease have declined since 1994, though regional rates remain above those of the state.	B
Asthma	Dropping throughout most of the 1990s, asthma hospitalizations have slid upwards since 1998.	B
Public Safety Spending	Spending on public safety has increased slowly, but regional per capita spending is well below that of the state.	C
Infant Mortality	Infant mortality rates are down in the region and dipped below the state rate in 2000.	A
Motor Vehicle Fatalities	Though somewhat higher than in the state as a whole, the motor vehicle fatality rate in the region held steady between 1994 and 2001 for all adults and dropped for teenagers.	C
Crime	Though rising in some years and falling in others, overall crime rates in the region have ticked upwards since 1985.	D
Teen Suicides	Teen suicide rates fluctuate widely from year to year but show a slight increase in the region from 1994 to 2001.	D



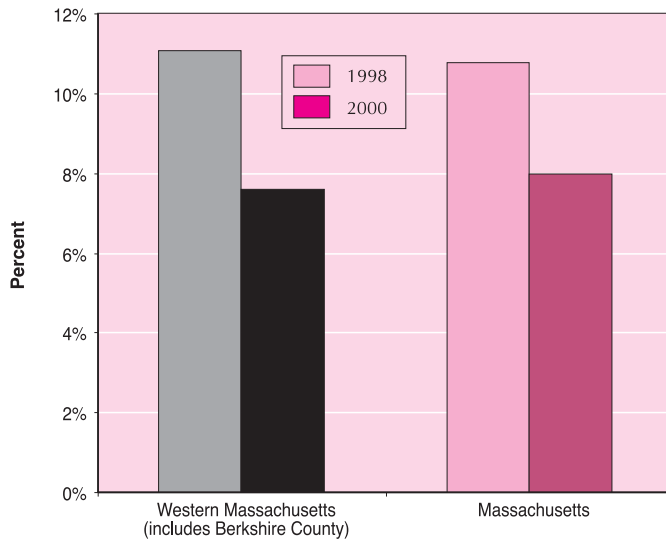
Health Insurance Coverage

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 percent of all adults between the ages of 19 and 64 who do not have any form of health insurance (whether private or public) is reflected in this indicator.¹² Due to limitations of the available data, Berkshire County is included here with the Pioneer Valley.

Positively, between 1998 and 2000, the percentage of non-elderly adults in western Massachusetts without health insurance declined from 11.1 percent to 7.6 percent. This decrease represents a 31.5 percent change, outpacing the percent decline of adults without insurance in Massachusetts (from 10.8 to 8.0 percent, or 25.9 percent) during these same years.

Percent of Non-elderly Adults without Health Insurance, 1998 and 2000



Source: Massachusetts Division of Health Care Finance and Policy
 Note: Non-elderly Adults are defined as individuals between the ages of 19 and 64.

New AIDS Cases

Because AIDS (Acquired Immune Deficiency Syndrome) is largely a preventable disease, the percentage of new 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 AIDS, this indicator also serves as a partial proxy for the prevalence of drug use in our region.

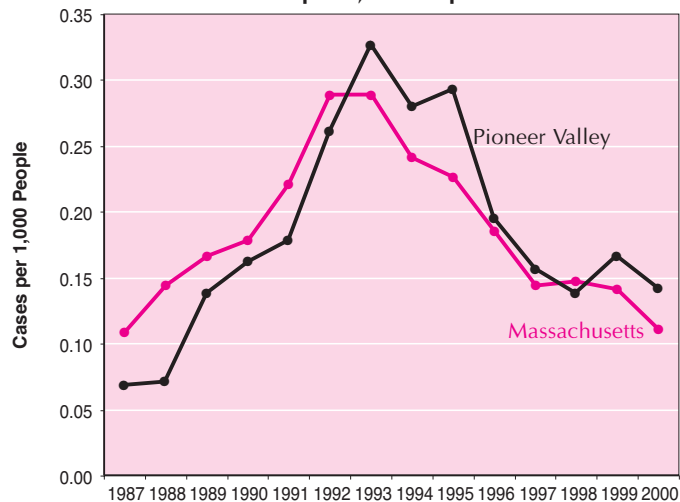


This indicator reflects the number of persons newly diagnosed each year with AIDS per 1,000 people in the population as a whole.

Both the Pioneer Valley and Massachusetts experienced an increasing rate of new AIDS cases from 1987 through 1993, when the rate of new cases peaked. The Pioneer Valley had fewer new AIDS cases per 1,000 people than Massachusetts before 1993, but the rate of increase for the Pioneer Valley was higher. This higher rate of increase is significant because after the 1993 peak, the Pioneer Valley had a higher rate of new cases per 1,000 people than Massachusetts in most years. Between 1987 and 1993, the number of new AIDS cases in the Pioneer Valley per 1,000 people increased by nearly five times. By comparison, the Massachusetts rate of new AIDS cases per 1,000 people increased by only 2.7 times over that same period. At its highest point in 1993, the Pioneer Valley had 0.326 newly diagnosed AIDS cases per 1,000 people, or 221 total new cases. Since 1993, prevention efforts seem to have had a positive effect, and in 2000 there were only 0.143 new cases of AIDS in the Pioneer Valley per 1,000 people (less than half the rate of 1993).

Because of the small numbers involved and confidentiality reasons, it is not possible to determine rates of new AIDS cases per 1,000 people for every community in the Pioneer Valley. However, the data indicates that their occurrence is heavily concentrated in Hampden County. Between 1987 and 2000, the incidence of newly reported AIDS cases never rose above 0.15 new cases per 1,000 people in Franklin or Hampshire counties. In contrast, except for 1987 and 1988, the rate in Hampden County never fell below 0.15 cases per 1,000. During the regional peak in 1993 for newly diagnosed AIDS cases, Hampden County saw 0.44 new cases per 1,000 people (or nearly one case for every 2,000 people per year), while Franklin and Hampshire counties saw 0.01 and 0.14 cases per 1,000, respectively. In other words, in 1993 Hampden County was experiencing 44 times more new AIDS cases than Franklin County per capita and three times more new AIDS cases than Hampshire County per capita. As of 2000, Hampden County was home to 0.21 new AIDS cases per 1,000 people, 21 times the rate of Franklin and Hampshire counties.

Incidence of Newly Diagnosed AIDS Cases per 1,000 People



Source: Massachusetts Department of Public Health, MassCHIP



Cancer and Cardiovascular Disease Deaths

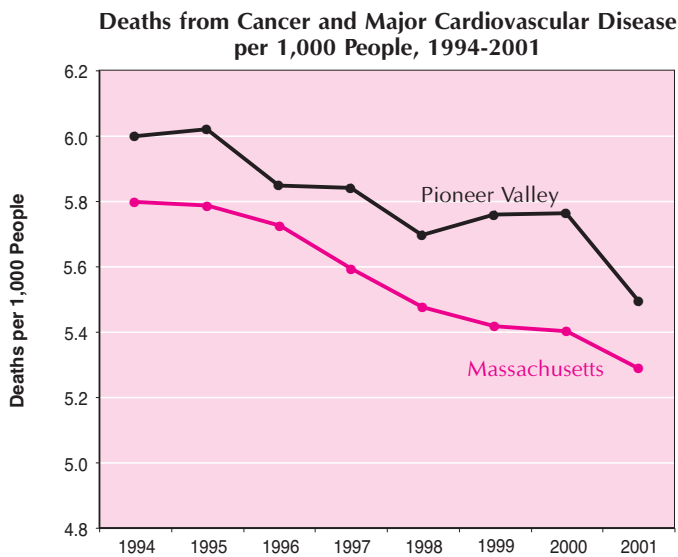
Because cancer and cardiovascular diseases are leading causes of death, this indicator contributes to our understanding of the overall life expectancy of the population. More specifically, because there are many links between these causes of death and lifestyle choices such as nutrition and exercise, changes in the mortality rate from these conditions may also point to changes in the overall health and fitness of the population. However, because the impact of behavioral shifts (such as a healthier diet) may take years, if not decades, to appear in the trend, recent trends should not be over-interpreted by explanations relying on recent changes in behavior. Medical advancements which prevent death or prolong life also contribute to changes in the death rate from cancer and cardiovascular disease.

This indicator reflects the annual number of people who died as a result of cancer or major cardiovascular disease for every 1,000 people. Major cardiovascular diseases include various forms of heart disease, hypertension, atherosclerosis, and other heart conditions.

Overall, the mortality rate from cancers and cardiovascular diseases is declining both for the Pioneer Valley and Massachusetts. The number of deaths per 1,000 people in the Pioneer Valley dropped from 6.0 in 1994 to 5.5 in 2001, a decline of 8.3 percent. During that same period the rate for Massachusetts dropped by a similar 8.6 percent, from 5.8 to 5.3 deaths per 1,000 people. However, the Pioneer Valley has a persistently higher rate of fatalities from cancer and cardiovascular diseases than Massachusetts as a whole—3.8 percent higher in 2001.

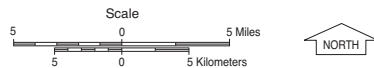
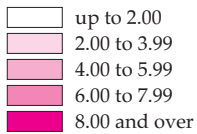
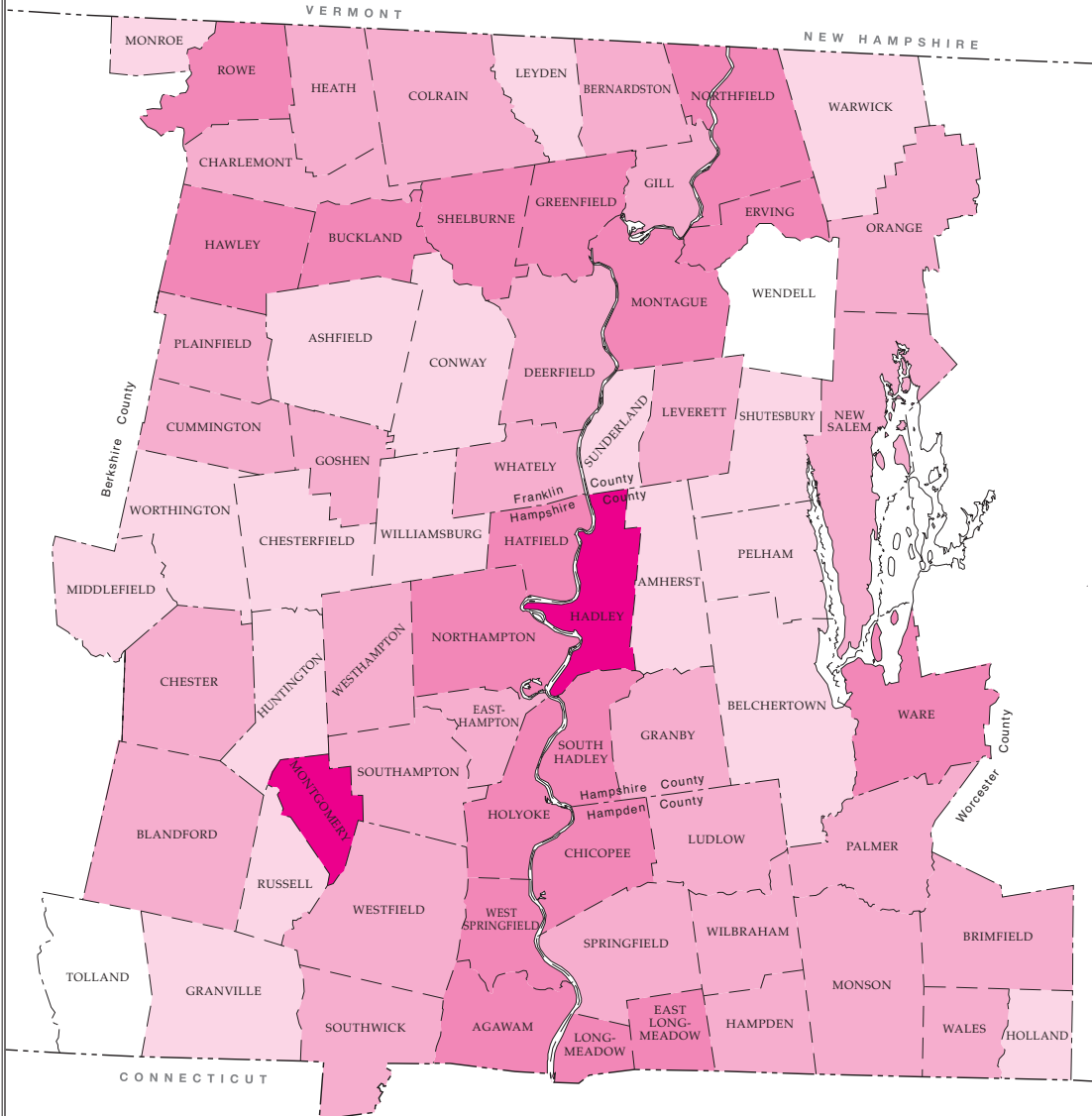
Between 1999 and 2001, on average, Montgomery and Hadley had the highest rates of death from cancer and cardiovascular diseases (at 8.3 and 8.2 deaths per 1,000 people, respectively)

among communities in the Pioneer Valley. Greenfield and Holyoke also had rates in excess of 7.0 deaths per 1,000 people per year. At the opposite end of the spectrum, two of the region's smallest communities, Wendell and Tolland, had fatality rates below 2.0 deaths per 1,000 from 1999 to 2001. Other communities with lower than average fatality rates from cancer and cardiovascular diseases include Amherst, Holland, Leyden, Shutesbury, Sunderland, and Warwick. Differences between communities can in part be explained by different average ages within a community, because a community with a higher percentage of elderly people would be expected to have higher fatality rates from cancer and cardiovascular disease.



Source: Massachusetts Department of Public Health, MassCHIP

Average Annual Deaths from Cancer and Major Cardiovascular Disease Per 1,000 People, 1999-2001



Source: Massachusetts Department of Public Health, MassCHIP.

Because this is not age adjusted, communities with older populations will have higher fatality rates from cancer and cardiovascular disease.

The three year average is used to account for low numbers in small towns.



Produced by:
Pioneer Valley
Planning Commission
28 Central Street
West Springfield, MA 01089
January 2004

Montgomery	8.31
Hadley	8.20
Greenfield	7.93
Holyoke	7.62
Hatfield	7.50
Chicopee	7.18
East Longmeadow	7.08
Longmeadow	7.00
Erving	7.00
Hawley	6.91
Ware	6.76
Shelburne	6.67
South Hadley	6.67
Agawam	6.62
Buckland	6.56
Montague	6.55
Rowe	6.53
Northfield	6.52
West Springfield	6.39
Northampton	6.26
Easthampton	5.96
Colrain	5.86
Whately	5.86
Orange	5.81
Heath	5.77
Palmer	5.76
Westfield	5.69
Pioneer Valley	5.67
Bernardston	5.59
Brimfield	5.54
Wilbraham	5.42
Ludlow	5.23
Springfield	5.13
Wales	4.96
Deerfield	4.93
Westhampton	4.91
Southwick	4.87
Hampden	4.78
Gill	4.71
Southampton	4.70
Charlemont	4.68
Cummington	4.52
Plainfield	4.50
Chester	4.48
Blandford	4.39
New Salem	4.34
Goshen	4.32
Leverett	4.23
Granby	4.19
Monson	4.18
Belchertown	3.97
Russell	3.96
Granville	3.93
Conway	3.85
Middlefield	3.77
Pelham	3.74
Ashfield	3.68
Monroe	3.68
Williamsburg	3.36
Huntington	3.34
Chesterfield	3.06
Worthington	2.85
Holland	2.63
Leyden	2.58
Shutesbury	2.51
Sunderland	2.29
Warwick	2.19
Amherst	2.01
Tolland	1.60
Wendell	0.99



Asthma

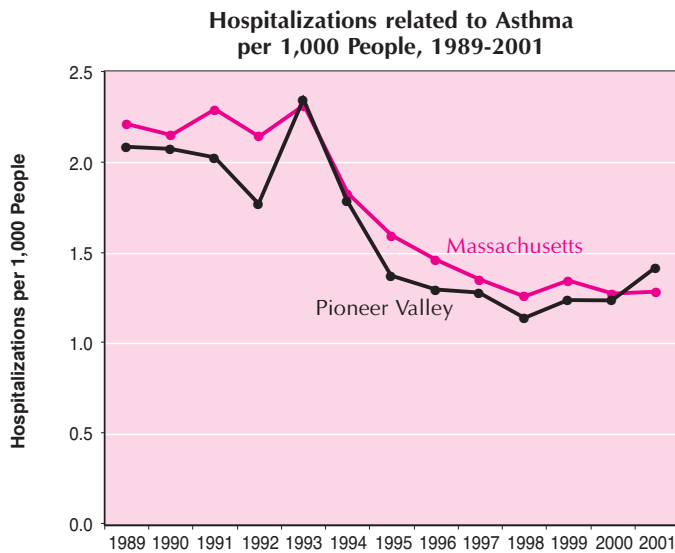
Asthma is closely related to environmental quality, including everything from air quality to the presence of mold in older residential structures. This indicator, therefore, measures the impact of our living environment on our health and well-being. An increase in asthma hospitalizations would likely indicate an increase in problematic environmental conditions. However, because such factors as rapid changes in weather can also trigger asthma, some year-to-year changes may be related to differing seasonal weather patterns.

The number of people admitted to the hospital as a result of asthma or asthma-induced complications is represented in this indicator by the number of hospitalizations per 1,000 people.

Overall, the number of asthma-related hospitalizations in the Pioneer Valley has declined and the Pioneer Valley has had fewer hospitalizations than Massachusetts per 1,000 people. During the 1990s, asthma hospitalizations in the Pioneer Valley peaked at 2.3 hospitalizations per 1,000 people in 1993. Between 1993 and 1998, asthma hospitalizations in the Pioneer Valley dropped by 47.8 percent to 1.2 hospitalizations per 1,000. Since 1998, asthma hospitalizations have been slowly increasing in the Pioneer Valley, to 1.4 hospitalizations per 1,000 people in 2001 (up 16.7 percent from 1998). The Pioneer Valley's rate of asthma hospitalizations was below that of the state for 11 of the 13 years from 1989 to 2001.

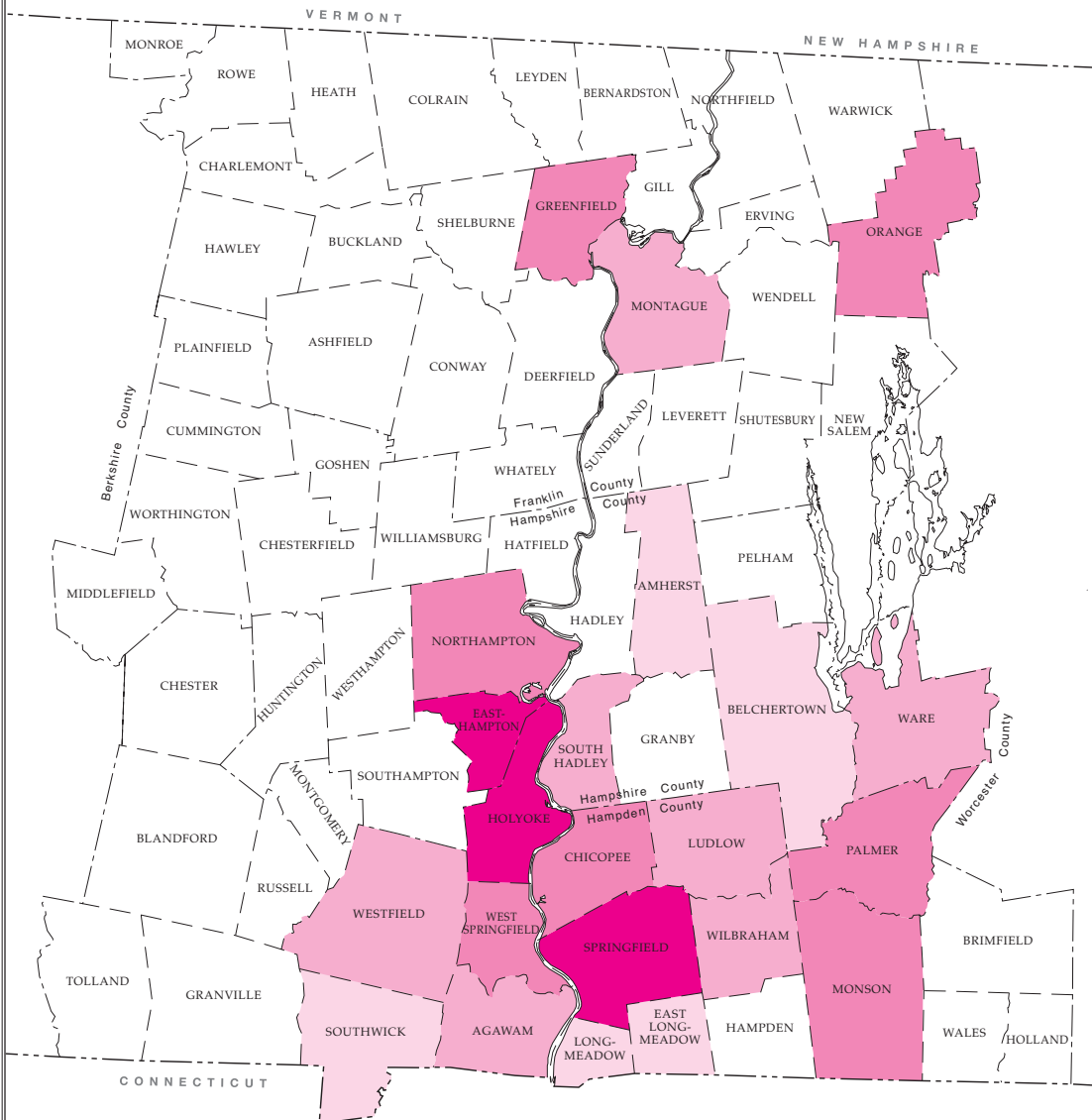
Unsurprisingly, because of the presence of greater pollution and older housing stock, the highest rates of asthma hospitalizations between 1999 and 2001 were found in Springfield and Holyoke, with 2.5 and 2.3 hospitalizations per 1,000 people per year, respectively. Other communities with rates in excess of the regional average between 1999 and 2001 (1.3 per 1,000) are communities that are home to significant manufacturing operations (Chicopee,

Easthampton, and Palmer). As with other indicators, data is suppressed for confidentiality reasons, so reports of 0.0 can be interpreted as low rates as opposed to zero occurrences.

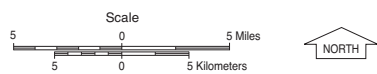


Source: Massachusetts Department of Public Health, MassCHIP

Average Annual Asthma Related Hospitalizations Per 1,000 People, 1999-2001



No data
 up to 0.49
 0.50 to 0.99
 1.00 to 1.49
 1.50 and over



Source: Massachusetts Department of Public Health, MassCHIP.
 The three year average is used to account for low numbers in small towns.
 In some cases, data was not made available to protect confidentiality.

Produced by:
 Pioneer Valley
 Planning Commission
 28 Central Street
 West Springfield, MA 01089
 January 2004

Springfield	2.49
Holyoke	2.26
Easthampton	1.69
Palmer	1.46
Chicopee	1.31
Pioneer Valley	1.30
Northampton	1.24
Monson	1.05
Greenfield	1.03
Orange	1.01
West Springfield	1.00
Ludlow	0.82
South Hadley	0.81
Montague	0.76
Wilbraham	0.67
Westfield	0.65
Agawam	0.63
Ware	0.51
East Longmeadow	0.49
Southwick	0.49
Amherst	0.33
Belchertown	0.31
Longmeadow	0.24
Ashfield	0.00
Bernardston	0.00
Blandford	0.00
Brimfield	0.00
Buckland	0.00
Charlemont	0.00
Chester	0.00
Chesterfield	0.00
Colrain	0.00
Conway	0.00
Cummington	0.00
Deerfield	0.00
Erving	0.00
Gill	0.00
Goshen	0.00
Granby	0.00
Granville	0.00
Hadley	0.00
Hampden	0.00
Hatfield	0.00
Hawley	0.00
Heath	0.00
Holland	0.00
Huntington	0.00
Leverett	0.00
Leyden	0.00
Middlefield	0.00
Monroe	0.00
Montgomery	0.00
New Salem	0.00
Northfield	0.00
Pelham	0.00
Plainfield	0.00
Rowe	0.00
Russell	0.00
Shelburne	0.00
Shutesbury	0.00
Southampton	0.00
Sunderland	0.00
Tolland	0.00
Wales	0.00
Warwick	0.00
Wendell	0.00
Westhampton	0.00
Whately	0.00
Williamsburg	0.00
Worthington	0.00



Public Safety Spending

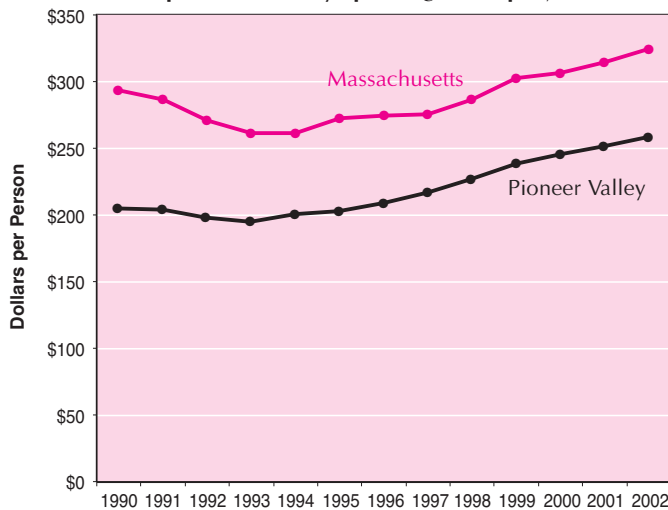
The amount of money being spent on public safety is an important comparative measure that illustrates the extent to which one community or region compared to another has the municipal resources to provide adequate protection and safety to residents. It is important to understand, however, that many factors influence the need for public safety services—population density, income, job opportunities, and population age, to name only a few.

The amount of money spent annually by municipalities on police and fire services, along with other public safety efforts, per capita, is reflected in this indicator. The dollar amounts are adjusted for inflation to 2002 dollars.¹³

Since the decline in spending during the early 1990s, the Pioneer Valley region has increased its public safety spending per capita. Between 1993 and 2002, per capita municipal public safety spending increased by 32.8 percent, from \$195 per capita in 1993 to \$259 per capita in 2002. However, the region spends considerably less per capita on public safety than does Massachusetts as a whole. In 1993, Massachusetts spent 34.4 percent more per capita than the Pioneer Valley; by 2002, this gap narrowed, and Massachusetts spent only 25.4 percent more per capita than the Pioneer Valley.

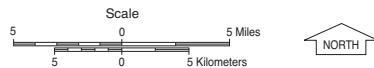
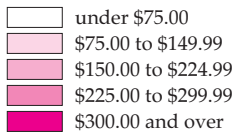
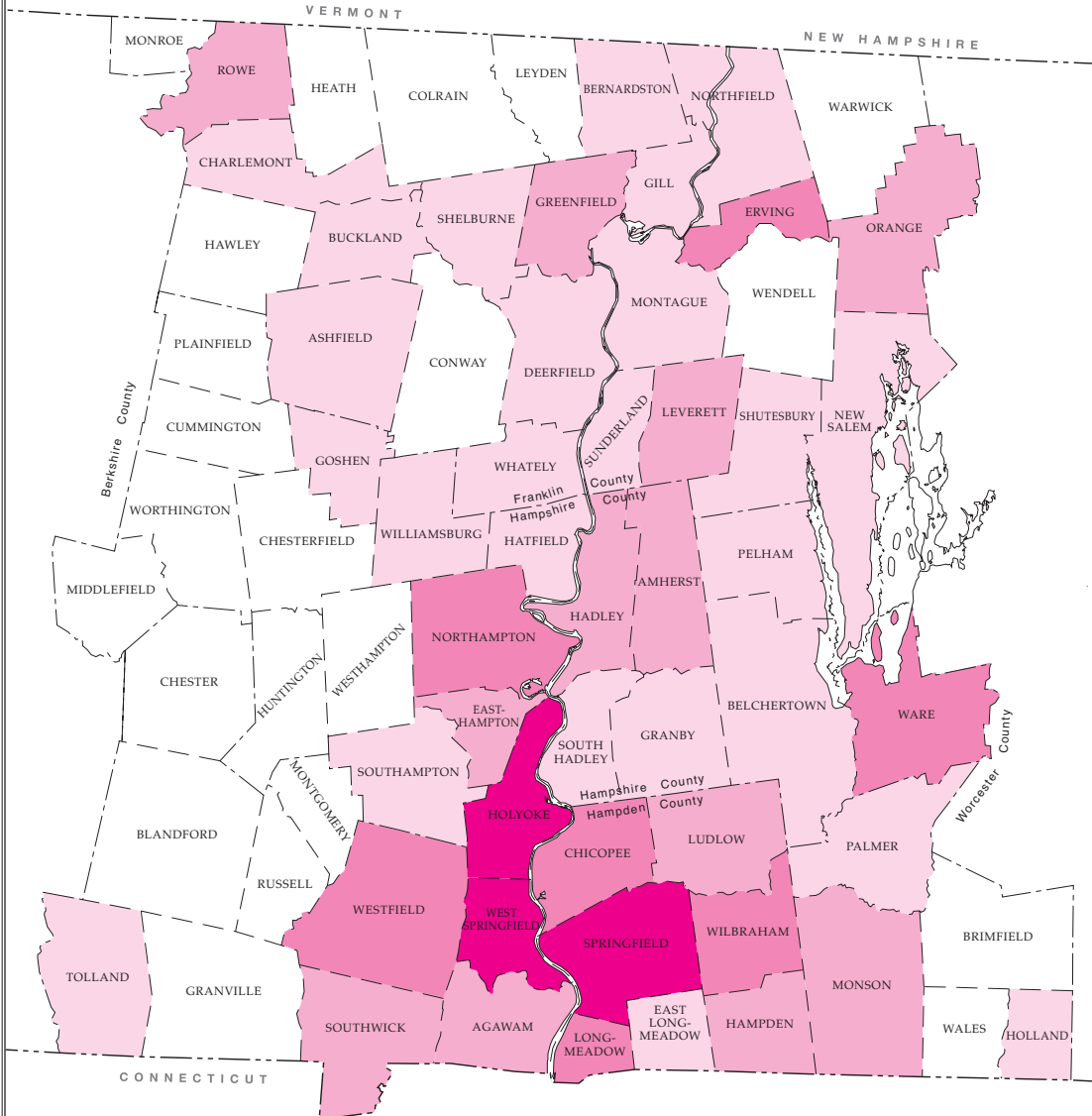
In the 2002 fiscal year, Holyoke and Springfield spent the most money per capita on public safety at \$425 and \$422 per capita, respectively. Given that these two communities have the highest crime rates in the Pioneer Valley, it is unsurprising that they spend more than other communities on public safety. Chicopee and West Springfield also spend significant amounts per capita on public safety—\$270 and \$311, respectively. The region’s smallest communities, many of which do not have full-time police or fire departments, spent the least per capita on public safety. For example, in fiscal year 2002, Chesterfield spent only \$39 per capita and Monroe spent only \$33 per capita on public safety.

Municipal Public Safety Spending Per Capita, 1990-2002



Source: Massachusetts Department of Revenue, Division of Local Services

Municipal Public Safety Spending (police, fire, and other) Per Capita, FY 2002



Source: Massachusetts Department of Revenue, Division of Local Services.

At the time of production only FY 2001 data was available for Chester, Hatfield, Middlefield, Montgomery, and Worthington. These values were adjusted for inflation.



Produced by:
Pioneer Valley
Planning Commission
28 Central Street
West Springfield, MA 01089
January 2004

Holyoke	\$424.81
Springfield	\$421.62
West Springfield	\$310.72
Chicopee	\$269.51
Pioneer Valley	\$258.63
Erving	\$254.98
Wilbraham	\$247.46
Northampton	\$245.66
Longmeadow	\$242.89
Westfield	\$235.35
Ware	\$226.07
Greenfield	\$218.86
Rowe	\$217.27
Easthampton	\$217.01
Agawam	\$212.41
Amherst	\$196.78
Hadley	\$188.43
Ludlow	\$187.32
Orange	\$179.19
Hampden	\$166.56
Southwick	\$163.44
Monson	\$156.38
Leverett	\$151.86
East Longmeadow	\$149.42
Montague	\$141.19
Southampton	\$138.45
Granby	\$135.80
Belchertown	\$129.86
Gill	\$126.78
Charlemont	\$124.64
Pelham	\$121.66
Bernardston	\$121.39
Palmer	\$120.08
South Hadley	\$114.25
Sunderland	\$109.07
Goshen	\$106.18
Holland	\$103.64
Deerfield	\$99.62
Tolland	\$99.44
Ashfield	\$95.57
Northfield	\$94.42
Whately	\$87.32
Shutesbury	\$86.55
New Salem	\$85.57
Buckland	\$79.88
Hatfield	\$78.48
Williamsburg	\$78.11
Shelburne	\$77.37
Brimfield	\$65.88
Granville	\$62.99
Blandford	\$62.00
Conway	\$61.61
Huntington	\$60.00
Heath	\$53.64
Chester	\$52.68
Leyden	\$51.83
Wales	\$51.82
Russell	\$51.03
Plainfield	\$50.97
Worthington	\$50.67
Wendell	\$48.55
Hawley	\$43.88
Colrain	\$42.42
Cummington	\$41.85
Westhampton	\$41.30
Montgomery	\$40.45
Chesterfield	\$39.38
Warwick	\$36.20
Middlefield	\$35.60
Monroe	\$33.39



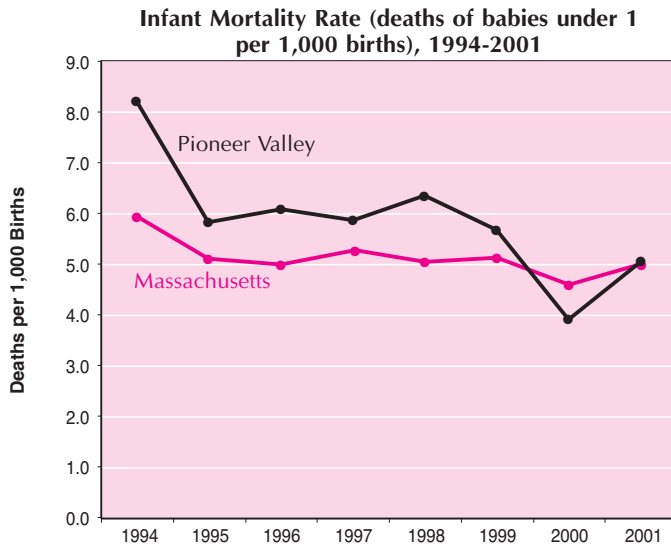
Infant Mortality

The infant mortality rate is less a reflection of infant health than a reflection of overall community conditions. The infant mortality rate is a widely recognized indicator of the state of public health within a community. High infant mortality rates mean a community is struggling to provide for the most basic needs of its population.

This indicator reflects the number of children who die each year before their first birthday for every 1,000 live births in the same year.

Between 1994 and 2001, the Pioneer Valley has made enormous progress in reducing infant mortality rates. From a high of 8.2 deaths per 1,000 births in 1994, the infant mortality rate dropped to a low of 3.9 in 2000, a decline of 52.4 percent. However, between 2000 and 2001, the infant mortality rate climbed to 5.1, a one-year increase of 30.8 percent. Relative to Massachusetts, the Pioneer Valley has tended to have higher infant mortality rates, but in 2001 the rate for the Pioneer Valley was 15.2 percent lower than that of Massachusetts (3.9 compared to 4.6 deaths per 1,000 births).

Because of data confidentiality, it is not possible to report the infant mortality rate for individual towns; however, Hampden County had the highest infant mortality rate in the Pioneer Valley (for the years 1999 to 2001) with 5.4 deaths per 1,000 live births. This is 38.5 percent higher than the 3.9 rate for Hampshire County and 92.9 percent higher than the 2.8 rate for Franklin County. This is unsurprising given the relationship between infant mortality and income and the concentration of the region's lowest-income communities in Hampden County.



Source: Massachusetts Department of Public Health, MassCHIP

Motor Vehicle Fatalities

Motor vehicle fatalities are an important indicator because they illustrate both the safety of our roadways and the safe practices of the people driving on them. Considering the role of alcohol and excessive speed in causing motor vehicle fatalities, this indicator reflects the extent of unsafe driving within the region. We separate out the age group between 15 to 19 years old to understand how effectively teenagers are learning and practicing safe driving. This more detailed evaluation is also relevant because motor vehicle fatalities are one of the leading causes of death for this group. The 15- to 19-year-old age group was selected because it reflects those teenagers who are most likely to be driving themselves or to be riding with another teenager (as opposed to the 11- to 14-year-old age group, which is more likely to be riding with parents).

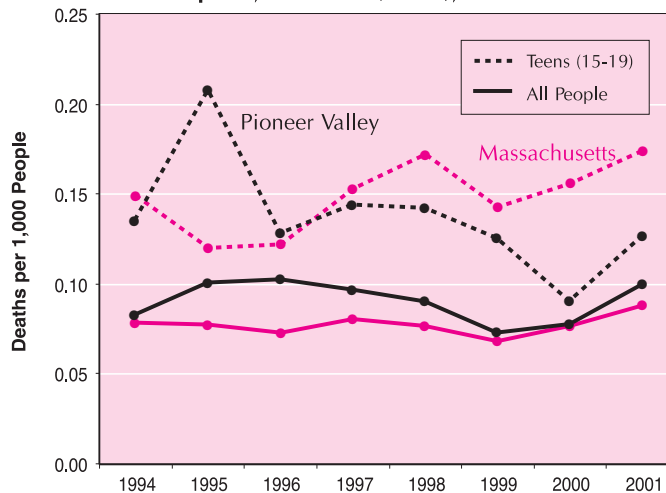


This indicator presents two sets of information: the total number of motor vehicle fatalities per 1,000 people in the population and the number of 15- to 19-year-olds killed in motor vehicle incidents per 1,000 people of the same age in the region.

Overall, the rate of motor vehicle fatalities per 1,000 people in the Pioneer Valley remained fairly stable from 1994 through 2001, fluctuating between 0.07 and 0.10 fatalities per 1,000 people. Between 1994 and 2001, the motor vehicle fatality rate for the Pioneer Valley was higher every year than for Massachusetts as a whole. The largest gap of .03 occurred in 1996, with the Pioneer Valley having 0.10 fatalities per 1,000 people compared to 0.07 for Massachusetts.

Among teenagers, the motor vehicle fatality rates in the Pioneer Valley and Massachusetts were much higher than for the general population. For example, in 1998, the motor vehicle fatality rate among teenagers in the Pioneer Valley was 0.14 deaths per 1,000 teenagers, 56 percent higher than the rate for the whole population of the Pioneer Valley. Positively, the teenage motor vehicle fatality rate dropped by 35.7 percent between 1994 and 2000. However, this decline was almost completely erased by a 44.4 percent increase between 2000 and 2001. In general, for six of eight years between 1994 and 2001, the teenage motor vehicle fatality rate in the Pioneer Valley was lower than that of Massachusetts as a whole.

Motor Vehicle Fatalities per 1,000 People and per 1,000 Teens (15-19), 1994-2001



Source: Massachusetts Department of Public Health, MassCHIP



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 becoming the victim of a crime. For example, a property crime rate of 20 incidents per 1,000 people would indicate that, in an average year, one out of every 50 people will be the victim of a crime (1,000/20=50).

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.

Between 1985 and 2000, violent crime in the Pioneer Valley slowly increased. While there have been periods of declining violent crime rates (including between 1992 and 1995 and again between 1997 and 2000), the overall trend has been an increase. With an initial rate of 3.95 at the start of the study period, violent crimes increased to 7.11 per 1,000 people in 2000. However, the 2000 rate reflects a 44.5 negative percent change from the 16-year high of 12.8 violent crimes per 1,000 people recorded in 1997.

The rate of property crimes in the Pioneer Valley has followed a cyclical pattern of rising and falling every four to six years. As with the overall trend in violent crimes, property crimes also display an increasing trend. Nevertheless, between 1997 and 2000, the number of property crimes per 1,000 people dropped 27.5 percent, from 35.84 to 25.99 crimes per 1,000 people.

For a number of the smallest communities in the Pioneer Valley, the State Police Crime Reporting Unit does not report data because the number of crimes is too few. This does not mean that communities with 0.0 crime rates have no crime or low crime, but that the data are not available. The highest rates of violent crime per 1,000 in the Pioneer Valley can be found in Springfield (14.89 per 1,000), Greenfield (12.44 per 1,000), Holyoke (10.34 per 1,000), Monson (10.29 per 1,000), and Montague (10.13 per 1,000). Of communities that

report crime data, rural areas has some of the lowest rates of violent crime including Bernardston (0.93 per 1,000), Brimfield (0.60 per 1,000), Charlemont (0.74 per 1,000), and Westhampton (0.68 per 1,000).

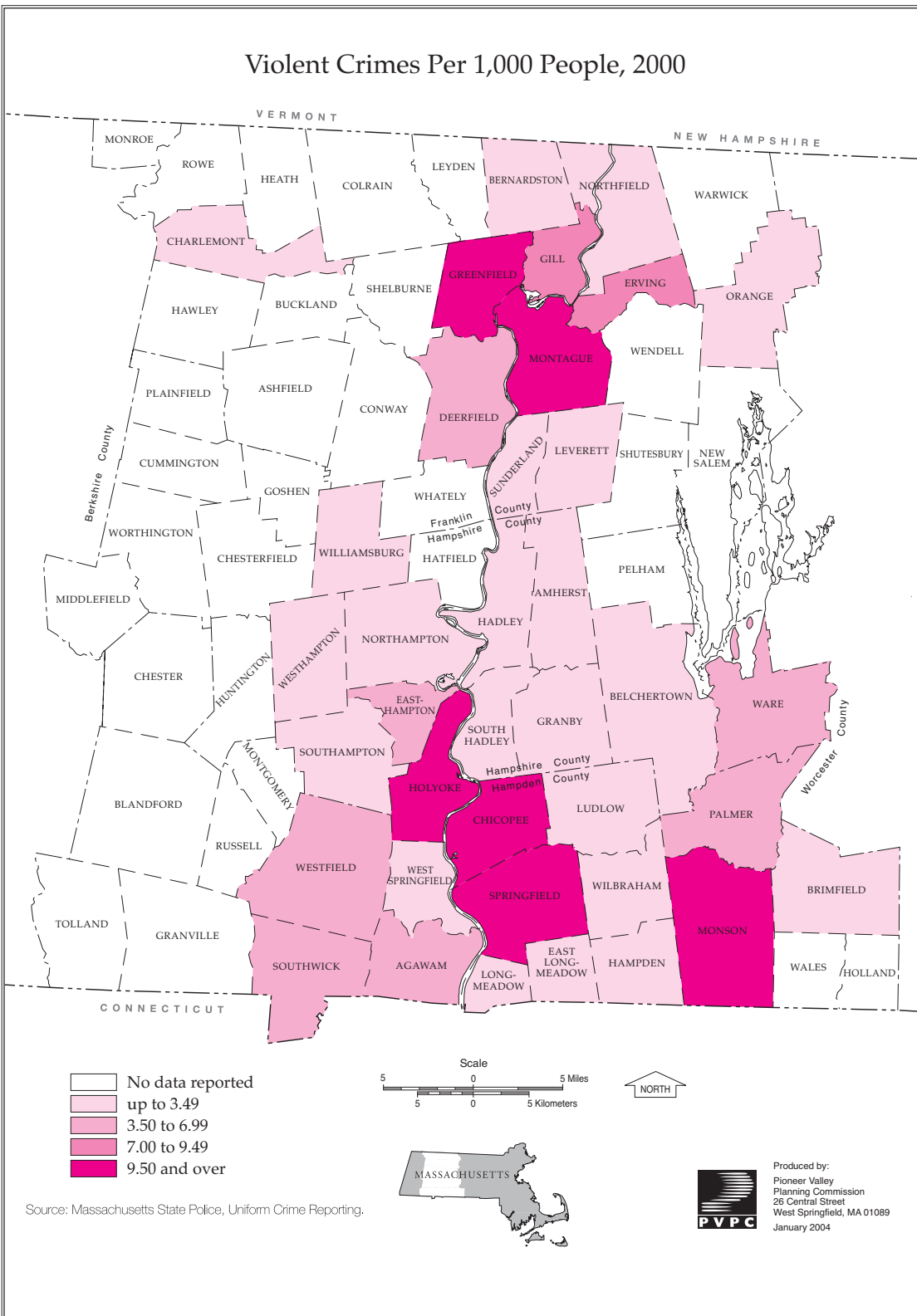
The highest rates of property crime are found in the region’s urban core of Springfield (51.5 per 1,000) and Holyoke (52.7 per 1,000). This is a substantial number and translates to 1 in 20 residents of these cities experiencing a property crime per year. However, one rural and two suburban communities also have significantly high property crime rates including Hadley (33.0 percent), Northfield (30.2 per 1,000), and West Springfield (26.0 per 1,000). The lowest rates of property crime are found in the region’s rural communities including Brimfield at 2.1 per 1,000, Warwick at 4.0 per 1,000, Westhampton at 1.4 per 1,000, and Whately at 3.8 per 1,000.

Reported Violent and Property Crimes per 1,000 People, 1985-2000



Source: Massachusetts State Police, Uniform Crime Reporting

Violent Crimes Per 1,000 People, 2000

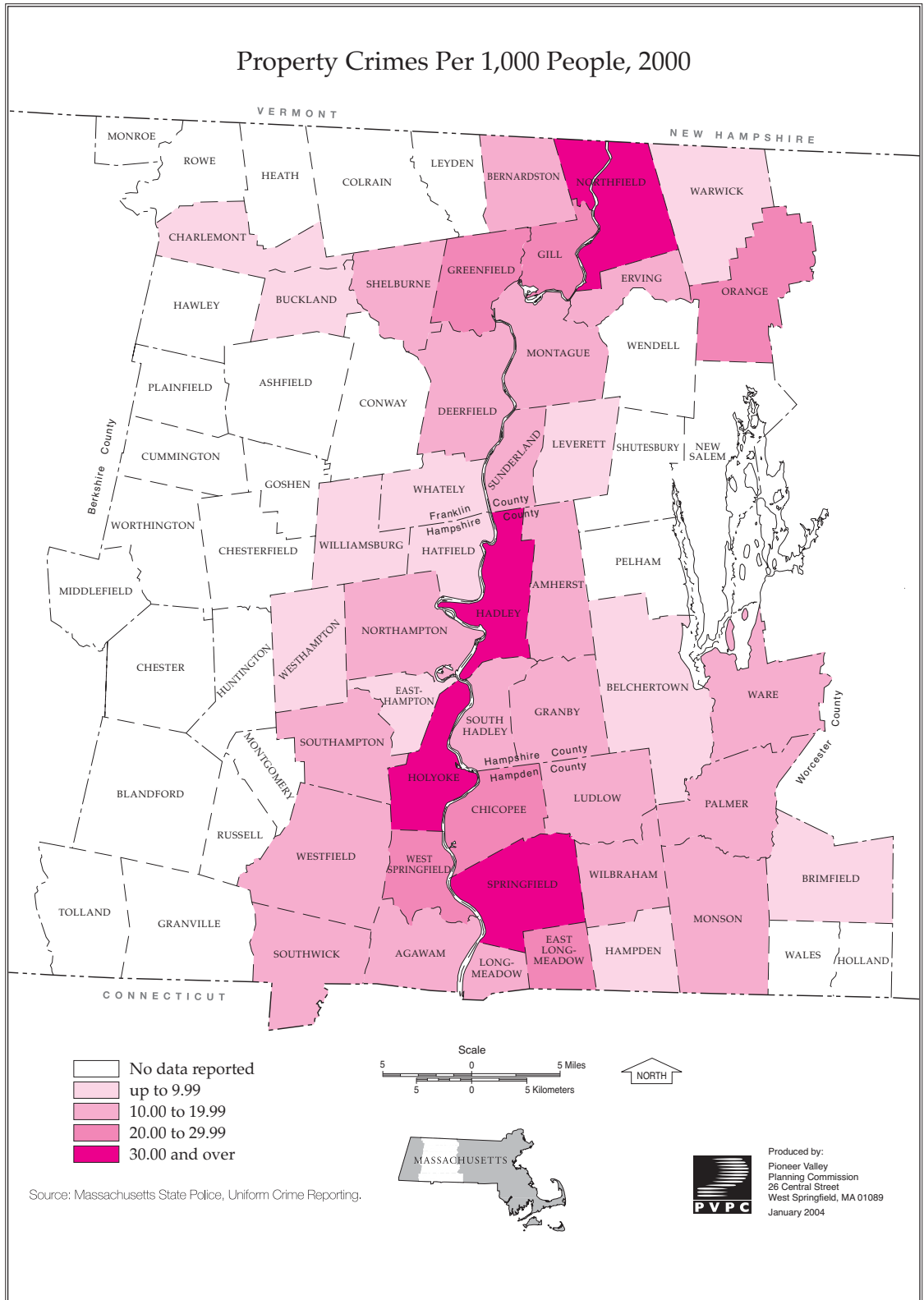


Springfield	14.89
Greenfield	12.44
Holyoke	10.34
Monson	10.29
Chicopee	10.15
Montague	10.13
Erving	8.86
Gill	8.07
Pioneer Valley	7.11
Westfield	6.81
Southwick	6.56
Easthampton	6.31
Agawam	6.08
Deerfield	4.84
Palmer	4.40
Ware	4.22
West Springfield	3.37
Orange	3.19
Northfield	3.05
Granby	2.94
Hadley	2.92
Sunderland	2.91
Southampton	2.60
Williamsburg	2.47
Ludlow	2.40
Belchertown	2.39
East Longmeadow	2.34
Northampton	1.62
Amherst	1.55
Hampden	1.55
South Hadley	1.22
Wilbraham	1.11
Bernardston	0.93
Charlemont	0.74
Westhampton	0.68
Leverett	0.60
Brimfield	0.60
Longmeadow	0.13
Ashfield	-
Blandford	-
Buckland	-
Chester	-
Chesterfield	-
Colrain	-
Conway	-
Cummington	-
Goshen	-
Granville	-
Hatfield	-
Hawley	-
Heath	-
Holland	-
Huntington	-
Leyden	-
Middlefield	-
Monroe	-
Montgomery	-
New Salem	-
Pelham	-
Plainfield	-
Rowe	-
Russell	-
Shelburne	-
Shutesbury	-
Tolland	-
Wales	-
Warwick	-
Wendell	-
Whately	-
Worthington	-

Note: Data unavailable for select municipalities

Holyoke	52.74
Springfield	51.51
Hadley	32.96
Northfield	30.16
Greenfield	27.85
West Springfield	25.99
Pioneer Valley	25.99
Gill	23.48
East Longmeadow	23.48
Chicopee	22.74
Orange	20.48
Deerfield	19.58
Northampton	19.50
Bernardston	19.49
Palmer	17.20
Monson	16.51
Amherst	16.14
Westfield	16.02
Ludlow	14.99
Agawam	14.60
Montague	14.49
Erving	14.31
Shelburne	14.09
Granby	14.02
Southwick	13.92
Ware	13.70
Wilbraham	13.14
Sunderland	12.71
Charlont	11.78
South Hadley	11.69
Longmeadow	11.39
Southampton	10.58
Hampden	8.12
Buckland	8.04
Easthampton	7.00
Belchertown	6.86
Hatfield	6.46
Leverett	6.01
Williamsburg	5.77
Warwick	4.00
Whately	3.81
Brimfield	2.10
Westhampton	1.36
Ashfield	-
Blandford	-
Chester	-
Chesterfield	-
Colrain	-
Conway	-
Cummington	-
Goshen	-
Granville	-
Hawley	-
Heath	-
Holland	-
Huntington	-
Leyden	-
Middlefield	-
Monroe	-
Montgomery	-
New Salem	-
Pelham	-
Plainfield	-
Rowe	-
Russell	-
Shutesbury	-
Tolland	-
Wales	-
Wendell	-
Worthington	-

Property Crimes Per 1,000 People, 2000



Note: Data unavailable for select municipalities

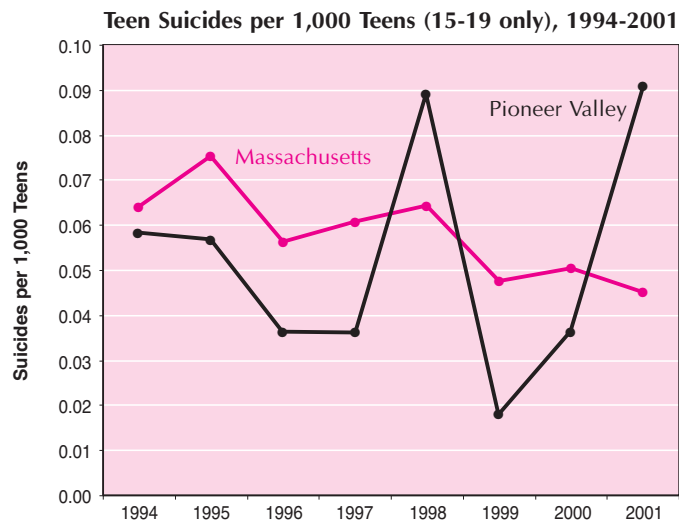
Teen Suicides

Adolescence is a challenging period of life and development, so difficult for some teenagers that they turn to suicide. The number of teenagers committing suicide, in proportion to their population, is an important indicator of how effectively our families, schools, churches, and other institutions are meeting the social, mental, and emotional needs of teenagers.



This indicator reflects the number of 15- to 19-year-olds who commit suicide per 1,000 between these ages.

Positively, the actual number of teen suicides is small. In part because of the small numbers involved, the teen suicide rate fluctuates considerably over time. Generally, the teen suicide rate in the Pioneer Valley appears consistent, neither declining or increasing, despite two significant spikes in 1998 and 2001. The teen suicide rate for Massachusetts, however, declined steadily between 1994 and 2001, dropping from 0.064 suicides per 1,000 teenagers in 1994 to 0.045 suicides per 1,000 teenagers in 2001, representing a drop of 29.7 percent. Because the rate for Massachusetts dropped while the rate for the Pioneer Valley held steady, the Pioneer Valley lost ground relative to the state as a whole.



Source: Massachusetts Department of Public Health, MassCHIP



ECONOMIC SECURITY

Perhaps less personal than health and safety, but no less important, is the economic security of the region's residents. Though economic security might include many sub-categories, we elected to focus on two: financial security and housing. Financial security addresses how much money households in the region have, whether they are impoverished, and the ability of individuals to earn a living. On the other hand, housing security addresses the ability of residents to

own a home, the single most common and accessible means of creating personal wealth that can be transferred to the next generation. In many ways, these indicators are vital to our quality of life because they illustrate whether or not people can afford to live and thrive in our community.

Overall, our region's financial security is trending downwards as household income has declined and poverty rates have increased. However, the region's unemployment rate has reached new lows in recent years, a positive indicator for people's ability to earn a living. Housing security is very positive in our region as homeownership is affordable, more people are owners, and there are increasing numbers of affordable housing units.

<i>Indicator</i>	<i>Summary</i>	<i>Rating</i>
Household Income	Adjusted for inflation, median household income declined from 1990 to 2000 and the region lags behind the state by nearly \$10,000 per year.	D
Poverty	The poverty rate increased from 1990 to 2000, increased by a larger amount than for Massachusetts, and remains more than three percentage points higher than the state rate.	F
Unemployment	Though unemployment rates increased between 2000 and 2002, due to the recession, they increased less than the state as a whole and in 2002 the region's rate was below the state rate for the first time in a decade.	B
Housing Affordability	With the exception of a few communities, the Pioneer Valley is an affordable place to live for most residents.	B
Home Ownership	From 1990 to 2000, the percent of housing units that are owner-occupied increased and the rate in the region is higher than that of the state as a whole.	A
New Low-Income Housing Units	Though varying widely, the use of the Low Income Housing Tax Credit (LIHTC) to develop new affordable housing units appears to be increasing the share of all affordable housing in the region.	B



Household Income

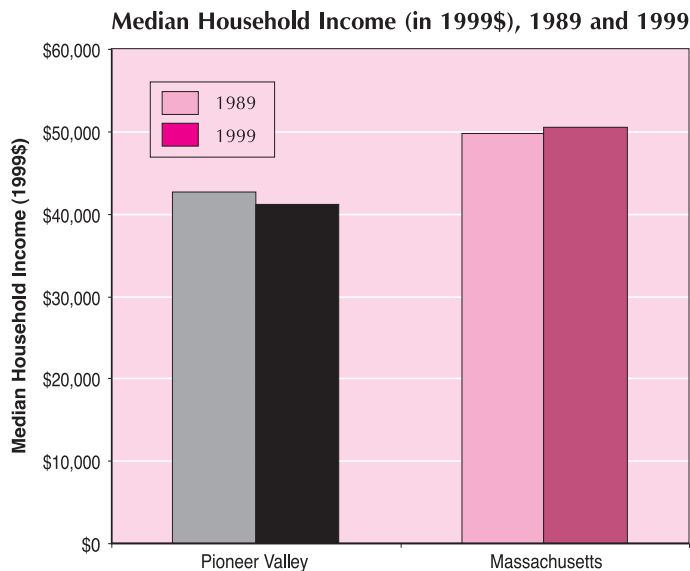
Because it represents how much money a precisely middle-income household receives in a year, median household income is common indicator of household finances. Unlike measuring average (or mean) income, which can be elevated by the presence of a very few wealthy households, the median reflects the true 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 (non-cash entitlement benefits are excluded).

From 1989 to 1999, the median household income, after adjusting for inflation, decreased slightly in the Pioneer Valley from \$42,679 to \$41,207, a decline of 3.4 percent. Influenced by the much higher cost of living and wage scale in the eastern half of the state, the median household income for all of Massachusetts was about \$50,000 in both 1989 and 1999. A trend of negative income growth in the 1990s for middle income households is striking at a time of unprecedented national economic growth. While the economic boom may have provided jobs, these employment opportunities did not, at least for middle income residents of the Pioneer Valley, translate into increased economic security.

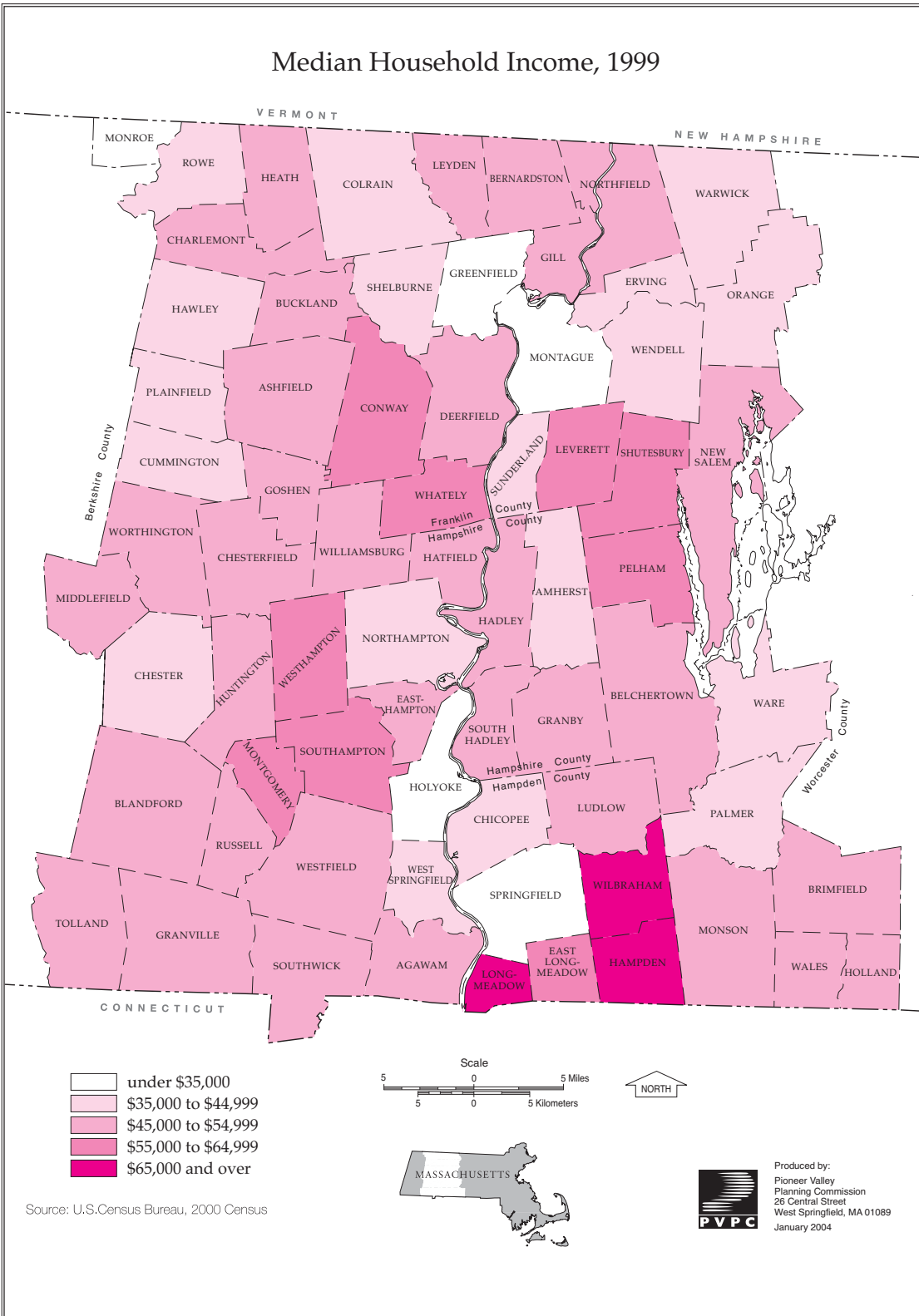
Significant differences in median household income exist across the Pioneer Valley. The eight communities with the lowest median household income, in order from the lowest, were (in

1999) Monroe, Springfield, Holyoke, Greenfield, Montague, Chicopee, Orange and Ware. This list includes both urban and rural areas, but no traditional suburbs. The lowest median household income in the region was \$25,500 in Monroe, while the highest median household income was \$75,461 in Longmeadow. Other communities with high median household incomes were Hampden, Wilbraham, Leverett, East Longmeadow, Southampton, Pelham, and Shutesbury, most of which are suburban bedroom communities surrounding the region's urban core.



Source: U.S. Census Bureau, 1990 and 2000 Census

Median Household Income, 1999



Longmeadow	\$75,461
Hampden	\$65,662
Wilbraham	\$65,014
Leverett	\$63,203
East Longmeadow	\$62,680
Southampton	\$61,831
Pelham	\$61,339
Shutesbury	\$60,438
Westhampton	\$60,089
Montgomery	\$59,063
Whately	\$58,929
Conway	\$56,094
Granby	\$54,293
Granville	\$53,148
Tolland	\$53,125
Worthington	\$53,047
Blandford	\$52,935
Ashfield	\$52,875
Belchertown	\$52,467
Southwick	\$52,296
Holland	\$52,073
Monson	\$52,030
Hadley	\$51,851
Middlefield	\$50,938
Gill	\$50,750
Heath	\$50,536
Leyden	\$50,385
Hatfield	\$50,238
Brimfield	\$50,181
Deerfield	\$49,764
Goshen	\$49,583
Agawam	\$49,390
Northfield	\$49,141
Chesterfield	\$49,063
Huntington	\$48,958
Wales	\$48,906
New Salem	\$48,688
Williamsburg	\$47,250
Ludlow	\$47,002
South Hadley	\$46,678
Russell	\$46,600
Charlemont	\$46,548
Buckland	\$45,833
Bernardston	\$45,259
Westfield	\$45,240
Easthampton	\$45,185
Wendell	\$43,846
Chester	\$43,816
Cummington	\$42,250
Warwick	\$42,083
Shelburne	\$42,054
Rowe	\$41,944
Northampton	\$41,808
Palmer	\$41,443
Pioneer Valley	\$41,205
West Springfield	\$40,266
Colrain	\$40,076
Erving	\$40,039
Amherst	\$40,017
Hawley	\$38,125
Plainfield	\$37,250
Sunderland	\$37,147
Ware	\$36,875
Orange	\$36,849
Chicopee	\$35,672
Montague	\$33,750
Greenfield	\$33,110
Holyoke	\$30,441
Springfield	\$30,417
Monroe	\$25,500



Poverty

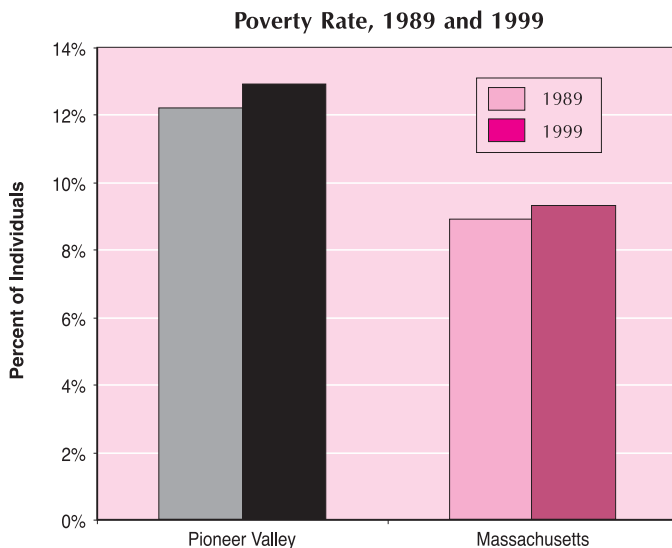
Poverty rates are an important indicator of what portion of a community’s population likely lacks the necessary resources to provide for themselves or their families. Furthermore, poverty rates are very valuable as a comparative tool, allowing the identification of particular neighborhoods or communities 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 who are living in households with incomes that fall below the federal poverty line. The poverty line was created in the mid-1960s based on the cost of food and what proportion of family income is spent on that cost. While the threshold is adjusted over time and is dependent on family size and age, it is increasingly thought to understate the extent of poverty. In 1989 and 1999, the poverty threshold for a family of four with two children under 18 was \$12,575 and \$16,895, respectively. The threshold in 1999, \$16,895, reflects a very low level of income given that a low-cost one-bedroom apartment in western Massachusetts will typically rent for more than \$7,000 per year.¹⁴

The poverty rate in the Pioneer Valley increased from 12.2 percent in 1989 to 12.9 percent in 1999, while the poverty rate statewide increased from 8.9 percent to 9.3 percent during the same period. While the Massachusetts poverty rate rose by about as much as that of the Pioneer Valley, the region’s poverty rate remained, in 1999, over three percentage points higher than that of Massachusetts.

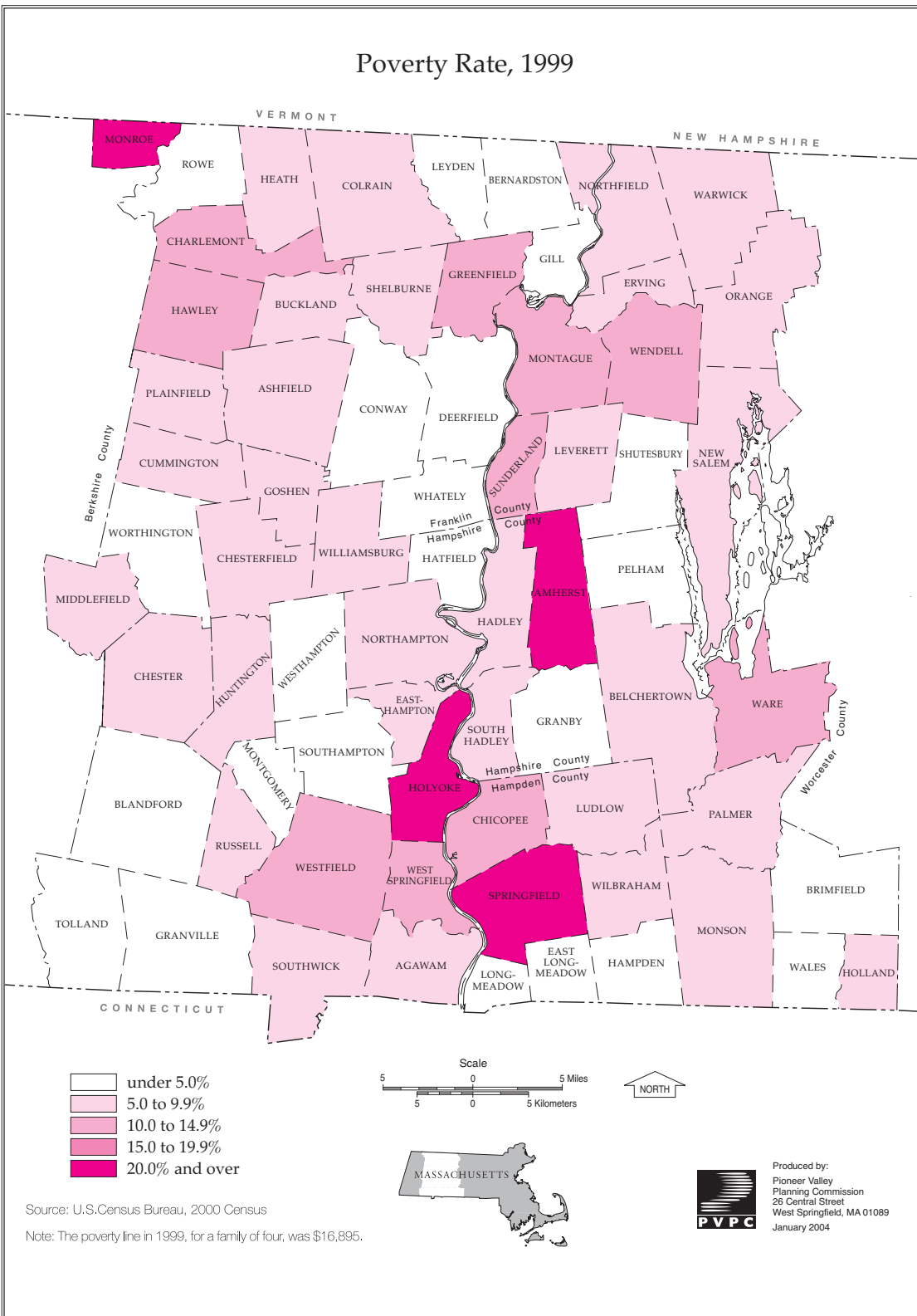
Those communities that had a poverty rate above 13 percent in 1999 included Holyoke, Springfield, Monroe, Amherst, Hawley, Sunderland, Greenfield, and Montague. The inclusion of college students who live off-campus in these statistics may have influenced the presence of Amherst and Sunderland in this list.¹⁵ As one would expect, many of these

communities also had the lowest median household incomes in 1999. Eight communities had poverty rates below three percent, including Longmeadow, Granby, Hampden, Southampton, Hatfield, Rowe, Montgomery, and Whately.



Source: U.S. Census Bureau, 1990 and 2000 Census

Poverty Rate, 1999



Holyoke	26.4%
Springfield	23.1%
Monroe	21.8%
Amherst	20.2%
Hawley	14.2%
Sunderland	14.0%
Greenfield	14.0%
Pioneer Valley	13.1%
Montague	13.1%
Chicopee	12.3%
West Springfield	11.9%
Westfield	11.3%
Ware	11.2%
Charlton	10.4%
Wendell	10.2%
Shelburne	9.9%
Northampton	9.8%
Heath	9.4%
Russell	9.0%
Easthampton	8.9%
Middlefield	8.6%
Warwick	8.0%
Plainfield	8.0%
Palmer	7.9%
Goshen	7.9%
Orange	7.8%
Ashfield	7.6%
Holland	7.3%
Hadley	6.9%
Buckland	6.9%
Colrain	6.8%
Erving	6.7%
Cummington	6.6%
Ludlow	6.4%
New Salem	6.3%
Southwick	6.1%
Belchertown	5.9%
South Hadley	5.9%
Chester	5.8%
Huntington	5.8%
Chesterfield	5.7%
Agawam	5.6%
Monson	5.6%
Williamsburg	5.5%
Leverett	5.4%
Wilbraham	5.1%
Northfield	5.0%
Pelham	4.9%
Leyden	4.7%
Deerfield	4.5%
Gill	4.4%
Brimfield	4.4%
Bernardston	4.4%
Tolland	4.2%
Shutesbury	3.8%
Westhampton	3.5%
Wales	3.5%
Conway	3.5%
Worthington	3.5%
East Longmeadow	3.4%
Blandford	3.4%
Granville	3.4%
Whately	3.0%
Montgomery	2.9%
Rowe	2.8%
Hatfield	2.8%
Southampton	2.4%
Hampden	2.2%
Granby	2.2%
Longmeadow	2.1%

Source: U.S. Census Bureau, 2000 Census
 Note: The poverty line in 1999, for a family of four, was \$16,895.

Produced by:
 Pioneer Valley
 Planning Commission
 28 Central Street
 West Springfield, MA 01089
 January 2004



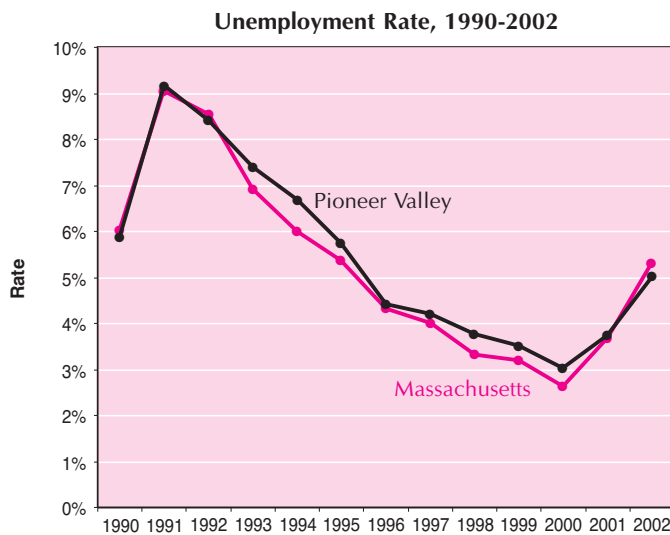
Unemployment

The unemployment rate, produced by the U.S. Bureau of Labor Statistics, is the percentage of people in the region's 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 rate is 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 are financially insecure because they do not have a job.

The overall trends in the Pioneer Valley and Massachusetts between 1990 and 2002 follow similar patterns and are somewhat equivalent. The unemployment rate in the Pioneer Valley, however, was slightly higher than the rate in Massachusetts from 1993 to 2000. In 1991, during a severe economic recession, the rate of unemployment in the Pioneer Valley and Massachusetts soared to 9.1 percent as employers closed and laid off thousands of workers. Positively, a trend of steadily declining unemployment rates began in 1992, reaching a low of 3.0 percent and 2.6 percent in 2000 for the Pioneer Valley and Massachusetts, respectively. Since 2000, as the economy has taken another turn downward, the unemployment rates for Massachusetts and the Pioneer Valley have risen to 5.0 percent in the Pioneer Valley and 5.3 percent in the state in 2002. It is worth noting that, since 2000, the Pioneer Valley has maintained a lower unemployment rate than Massachusetts as a whole, suggesting that the current economic recession affected the Pioneer Valley less severely than the state as a whole.

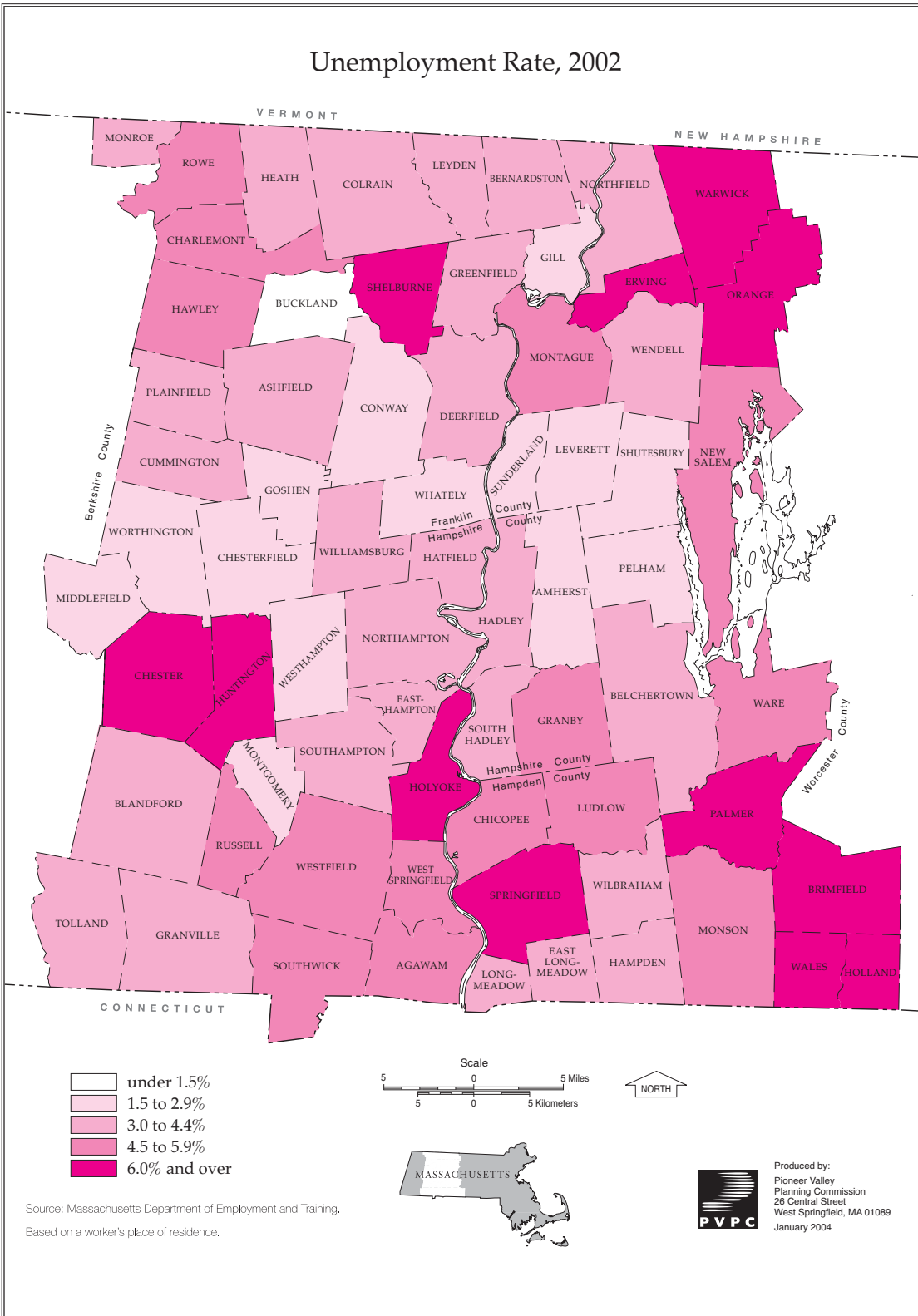
In 2002, levels of unemployment among community residents varied significantly across the Pioneer Valley. While the region's average unemployment rate in 2002 was 5.0 percent, the communities of Buckland, Leverett, Gill, Amherst, Goshen, Whately, Westhampton, and Chesterfield had unemployment rates of 2.5 percent or less. All these communities, with the exception of Amherst, are wealthier than the region as a whole (in terms of median household income). Communities with unemployment rates above 6.0 percent in 2002 included

Erving, Huntington, Palmer, Brimfield, Warwick, Shelburne, Wales, Holland, Chester, Holyoke, Orange, and Springfield. As with low median household income, high unemployment rates in the Pioneer Valley seem to be concentrated in either urbanized or rural communities, rather than in suburbs.



Source: U.S. Bureau of Labor Statistics,

Unemployment Rate, 2002



Springfield	7.4%
Orange	7.0%
Holyoke	6.9%
Chester	6.7%
Holland	6.5%
Wales	6.5%
Shelburne	6.4%
Warwick	6.3%
Brimfield	6.3%
Palmer	6.2%
Huntington	6.1%
Erving	6.1%
Monson	5.8%
Chicopee	5.8%
Russell	5.5%
Ludlow	5.3%
Ware	5.2%
Charlton	5.2%
New Salem	5.2%
Southwick	5.1%
Hawley	5.1%
Rowe	5.1%
West Springfield	5.1%
Pioneer Valley	5.0%
Agawam	4.9%
Westfield	4.8%
Montague	4.6%
Granby	4.5%
Greenfield	4.4%
Williamsburg	4.4%
Bernardston	4.3%
Blandford	4.1%
Hampden	4.1%
Cummington	4.0%
Hatfield	4.0%
Plainfield	4.0%
Monroe	3.9%
Easthampton	3.9%
Southampton	3.8%
Colrain	3.8%
Belchertown	3.8%
East Longmeadow	3.7%
South Hadley	3.6%
Wendell	3.5%
Wilbraham	3.5%
Heath	3.5%
Leyden	3.4%
Deerfield	3.3%
Ashfield	3.3%
Northfield	3.2%
Granville	3.1%
Hadley	3.1%
Northampton	3.0%
Longmeadow	3.0%
Tolland	3.0%
Pelham	2.9%
Worthington	2.9%
Montgomery	2.8%
Shutesbury	2.7%
Sunderland	2.7%
Conway	2.5%
Middlefield	2.5%
Chesterfield	2.5%
Westhampton	2.5%
Whately	2.4%
Goshen	2.1%
Amherst	1.9%
Gill	1.8%
Leverett	1.6%
Buckland	1.1%



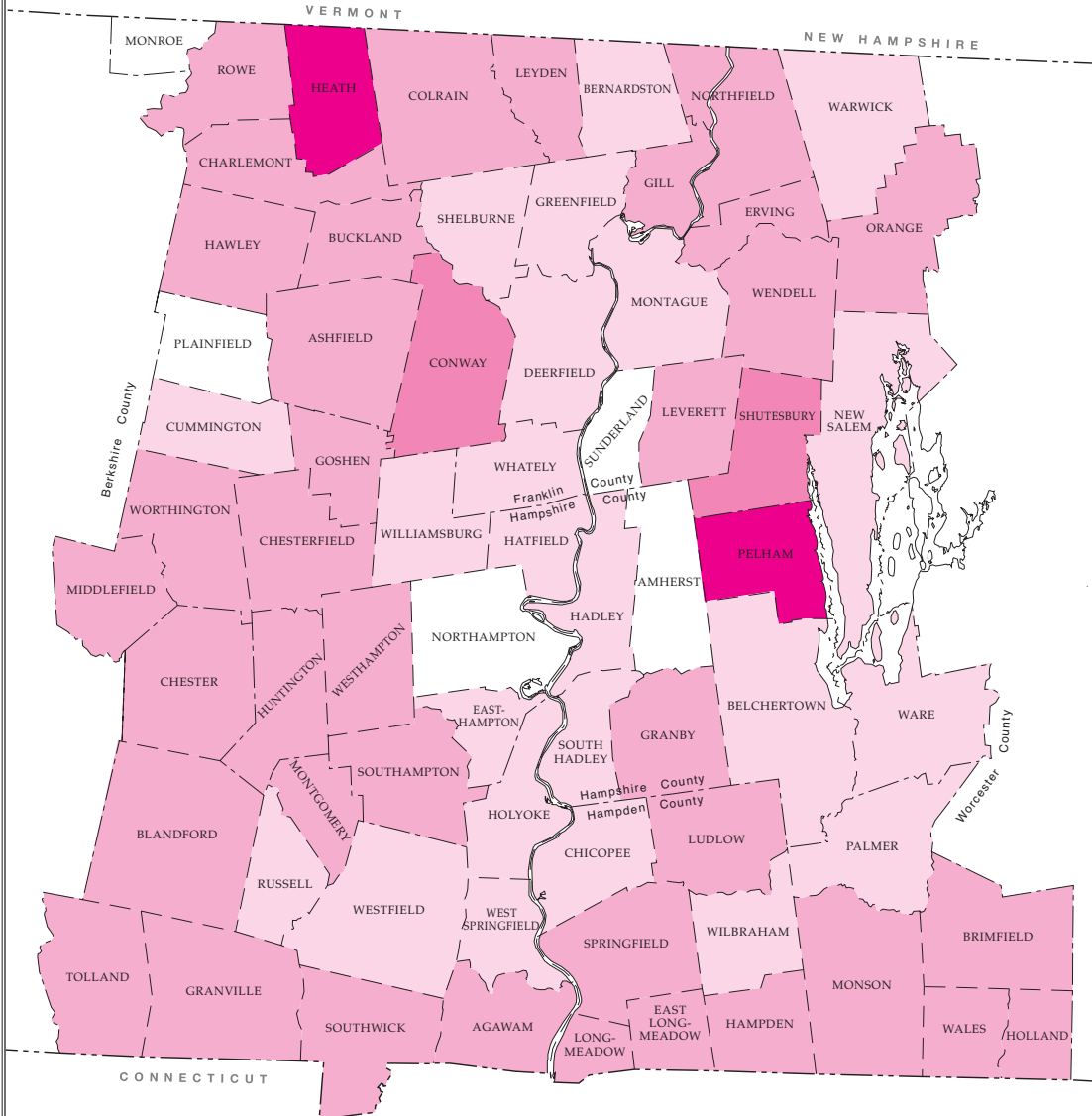
Housing Affordability

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.

In order to measure the relative affordability of housing, the median household income, also shown in the first economic security indicator and adjusted for inflation to 2002 dollars, is divided by the median price of single family homes in 2002 to provide a ratio of income to home price. The closer the ratio is to 1.0, the more affordable the community is for its own residents, and the closer the numbers are to 0.0, the less affordable the community is for its own residents.

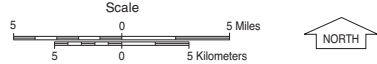
The community with the most affordable housing in relation to the median household income in 2002 was Heath, with an affordability ratio of 0.914. Heath ranks far above all other communities, as the next highest ratios were only 0.557 for Pelham and .507 for Conway. Sunderland, Monroe, Amherst, Plainfield, and Northampton, three of which are in close proximity to colleges and universities that may boost real estate prices, had the least affordable housing, with ratios below 0.25.

Median Household Income (1999 adjusted to 2002 dollars) as Percent of Median Single Family Home Price, 2002



Heath	91.4%
Pelham	55.7%
Conway	50.7%
Shutesbury	47.9%
Blandford	44.5%
Wales	44.2%
Leverett	44.0%
Holland	43.8%
Hawley	43.5%
Chesterfield	43.4%
East Longmeadow	43.3%
Granville	43.2%
Hampden	43.2%
Worthington	42.5%
Middlefield	41.7%
Tolland	41.6%
Monson	41.2%
Orange	41.0%
Ashfield	40.5%
Buckland	40.3%
Wendell	39.9%
Southampton	39.7%
Montgomery	39.5%
Colrain	39.5%
Northfield	39.4%
Gill	39.3%
Charlemont	39.1%
Goshen	38.7%
Southwick	38.3%
Granby	37.7%
Huntington	37.7%
Westhampton	37.2%
Erving	36.9%
Ludlow	36.8%
Chester	36.6%
Agawam	36.2%
Springfield	35.9%
Brimfield	35.5%
Leyden	35.3%
Rowe	35.1%
Longmeadow	35.0%
New Salem	34.7%
South Hadley	33.8%
Russell	33.7%
Hatfield	33.5%
Chicopee	33.4%
Palmer	33.3%
Deerfield	33.3%
Westfield	33.0%
Warwick	32.8%
Wilbraham	32.7%
Bernardston	32.3%
West Springfield	32.2%
Easthampton	32.1%
Montague	31.8%
Hadley	31.7%
Belchertown	31.6%
Ware	31.2%
Williamsburg	31.1%
Whately	30.4%
Holyoke	29.5%
Greenfield	29.1%
Cummington	27.8%
Shelburne	26.2%
Northampton	24.5%
Plainfield	23.9%
Amherst	21.0%
Monroe	20.2%
Sunderland	17.7%

least affordable under 25.0%
 25.0 to 34.9%
 35.0 to 39.9%
 40.0 to 49.9%
most affordable 50.0% and over



Source: U.S. Census Bureau, 2000 Census; The Warren Group; Pioneer Valley Planning Commission

Numbers closest to 100.0% reflect the most affordable communities and numbers closest to 0.0% reflect the least affordable communities. For Conway and Hawley the median price is for all sales recorded by the Warren Group, because no single family sales data was available.

Produced by:
Pioneer Valley
Planning Commission
28 Central Street
West Springfield, MA 01089
January 2004



Home Ownership

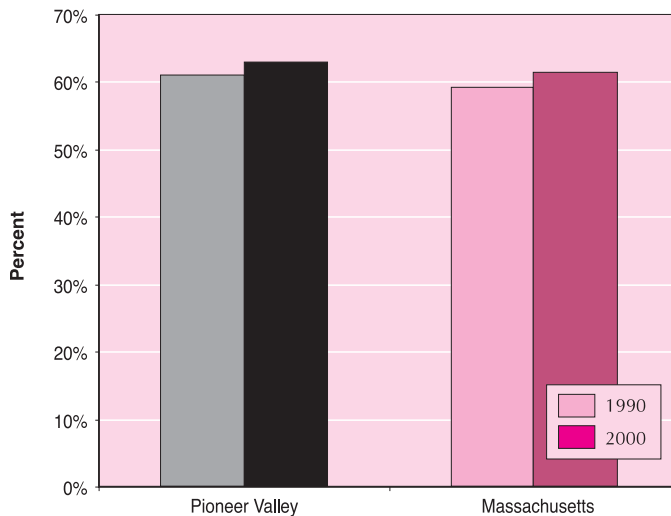
Home ownership is a significant indicator of economic security, because the primary financial investment for the vast majority of people in this country is their homes. Home ownership also strengthens communities by building a strong connection between people and the place they live. However, the downside of a high owner-occupancy rate is that rental options for young, old, or transitional populations are limited.

Home ownership is expressed as the percent of all housing units that are occupied by the property's owner.

In both 1990 and 2000, the Pioneer Valley had a higher percentage of housing units that were owner-occupied than Massachusetts as a whole by 1.9 and 1.4 percent, respectively. This is likely attributable to a less transient population and less demand for rental housing to accommodate college students. 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, indicating that home ownership is on the rise in the region.

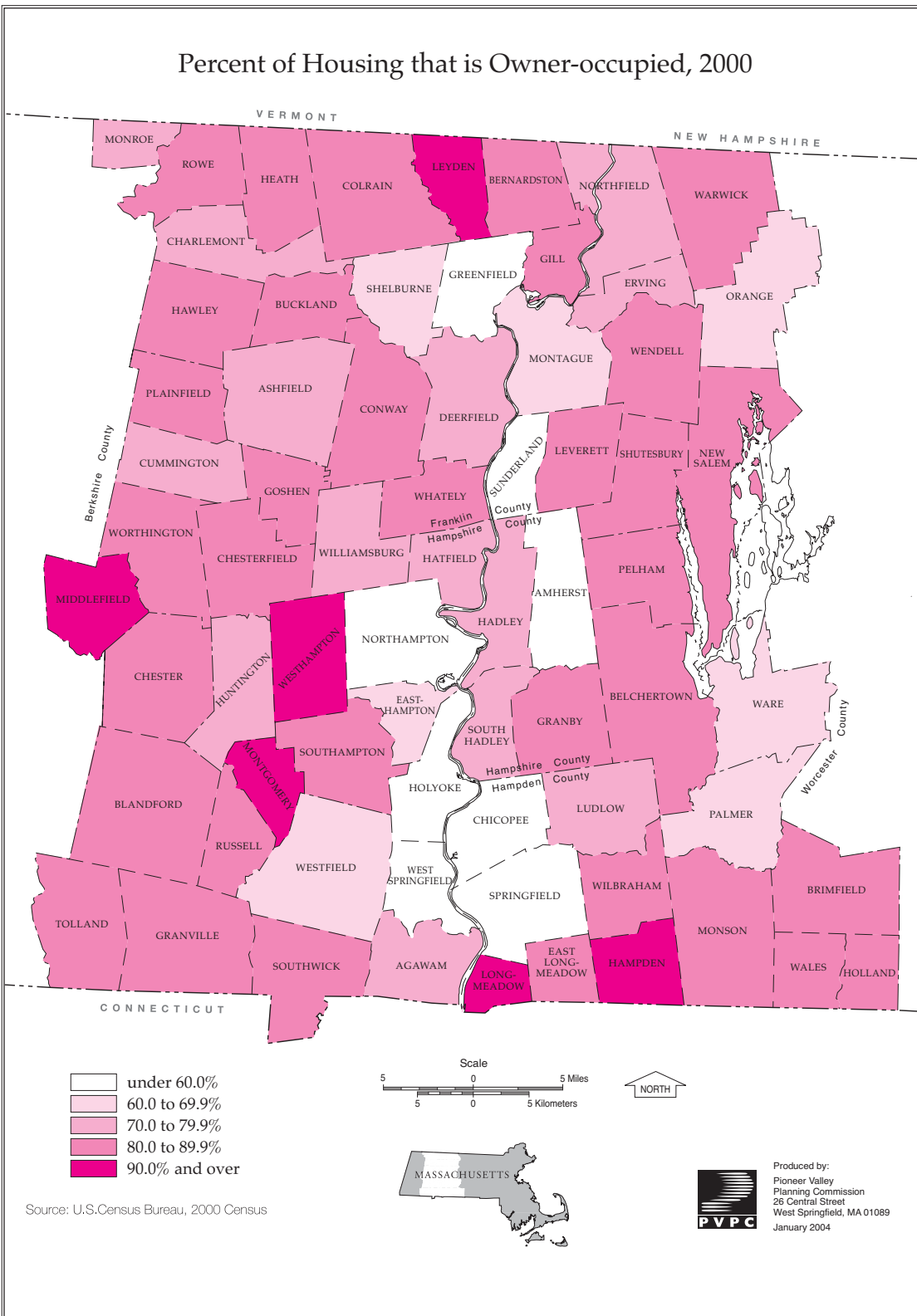
Communities with high levels of owner-occupancy (above 90 percent) include Montgomery, Westhampton, Middlefield, Longmeadow, and Hampden. At the other end of the spectrum, less than 50 percent of housing is owner-occupied in four of the region's communities: Amherst, Holyoke, Springfield, and Sunderland. The situation in Springfield and Holyoke is explained by the presence of many apartment buildings and numerous multi-family houses that are primarily occupied by renters, even if one unit is owner-occupied. The low owner-occupancy rate in Amherst and Sunderland results from the presence of large numbers of University of Massachusetts students living off campus in apartments.

Percent of Housing Units that are Owner-occupied, 1990 and 2000



Source: U.S. Census Bureau, 1990 and 2000 Census

Percent of Housing that is Owner-occupied, 2000



Montgomery	96.1%
Westhampton	94.5%
Middlefield	92.3%
Longmeadow	90.9%
Hampden	90.6%
Leyden	90.2%
New Salem	89.4%
Wilbraham	89.4%
Blandford	88.8%
Worthington	88.7%
Warwick	87.6%
Granville	87.6%
Brimfield	87.5%
East Longmeadow	87.5%
Goshen	87.2%
Southampton	87.0%
Chesterfield	86.8%
Holland	86.2%
Whately	85.9%
Heath	85.7%
Tolland	85.4%
Hawley	85.3%
Wendell	85.2%
Plainfield	85.1%
Wales	85.0%
Conway	85.0%
Granby	84.6%
Rowe	84.3%
Pelham	84.0%
Chester	83.9%
Colrain	83.8%
Shutesbury	82.6%
Russell	82.5%
Bernardston	81.8%
Southwick	81.4%
Belchertown	80.8%
Gill	80.6%
Monson	80.4%
Leverett	80.1%
Buckland	80.0%
Erving	79.1%
Monroe	78.6%
Northfield	78.0%
Ashfield	77.8%
Ludlow	77.5%
Huntington	76.5%
Cummington	75.2%
Hadley	74.8%
Williamsburg	74.8%
Deerfield	74.6%
South Hadley	74.0%
Agawam	73.6%
Hatfield	73.4%
Charlemont	72.6%
Westfield	67.8%
Orange	66.4%
Ware	65.6%
Palmer	65.6%
Pioneer Valley	63.1%
Shelburne	61.6%
Easthampton	60.7%
Montague	60.7%
Chicopee	59.3%
West Springfield	58.2%
Greenfield	53.9%
Northampton	53.5%
Springfield	49.9%
Amherst	45.0%
Sunderland	44.3%
Holyoke	41.5%

Source: U.S.Census Bureau, 2000 Census

Produced by:
Pioneer Valley
Planning Commission
28 Central Street
West Springfield, MA 01089
January 2004

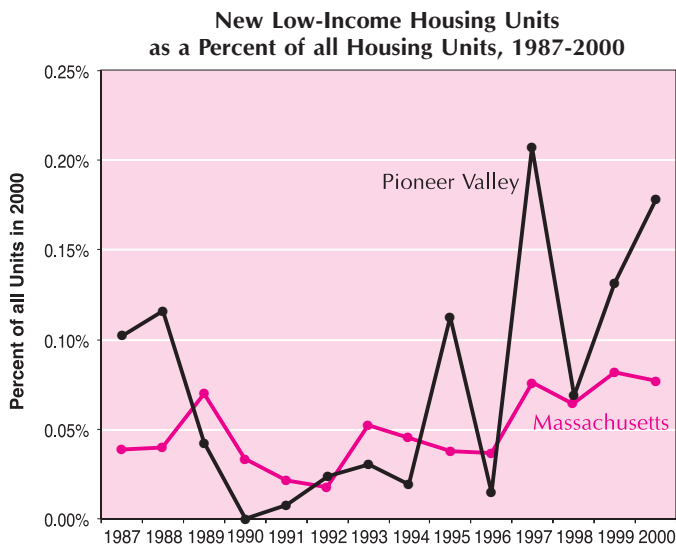


New Low-Income Housing Units

Affordable housing is necessary within any region to provide a quality place to live for low-income residents. The degree to which new affordable housing is being placed in service, as a share of all housing units, is a measure of the extent to which quality housing is increasingly available for those with limited income.

The percentage of all housing units that are newly created low-income housing units is calculated using the Federal Low Income Housing Tax Credit as a means of approximating the number of new low-income housing units put into service.¹⁶ The number of new housing units developed for each year between 1987 and 2000 is converted to a percentage of all housing units reported in the 2000 Census.

The number of new affordable housing units put into service varies widely from one year to the next in the Pioneer Valley. Overall, the trend indicates that a growing share of all housing units are developed or rehabilitated for low-income occupants. For example, in 1987, 0.10 percent of all housing units were new affordable units placed in service that year, while this number rose to 0.18 percent by 2000, an increase of 80 percent. Over the 14 years from 1987 to 2000, the peak of affordable housing development was in 1997, when 0.21 percent of all housing units were affordable units placed in service. Positively, for the four years from 1997 through 2000, the Pioneer Valley was putting more new affordable housing units into service, proportionately, than Massachusetts as a whole.



Source: U.S. Department of Housing and Urban Development
 Note: Based on Units Placed in Service Using the Low Income Housing Tax Credit.



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 region stands out in this area and is clearly providing a high quality of life in civics, arts, and recreation for

residents and visitors. Trends are positive in the region for every indicator related to the arts, and for most arts indicators the Pioneer Valley is doing better than the state as a whole. The region's nonprofits are experiencing increasing levels of support, although increases in municipal support for culture and recreation have not kept pace with the state as whole. Also, voter registration has climbed dramatically in the region over the last few years. The one area of declining trends is public libraries, where circulation of print materials has declined and average weekly hours are far below the state as a whole.

<i>Indicator</i>	<i>Summary</i>	<i>Rating</i>
Culture and Recreation Spending	Municipal culture and recreation spending has increased, but not as quickly as in the state as a whole.	C
Library Circulation	Circulation of print library materials has fallen steadily in the region from 1999 to 2002.	D
Library Hours	Average weekly library hours have held steady but are far below the average hours in Massachusetts as a whole.	D
Per Capita Nonprofit Support	Though lagging behind the state as a whole, per capita support for nonprofit organizations has steadily increased from 1992 to 2002.	B
Support for Student Participation in the Arts	In 2002, the region received far more support per student from the Massachusetts Cultural Council for student participation in the arts than the state as a whole.	A
Support for Artists	Per capita support for artists from the Massachusetts Cultural Council has generally increased and is well above the amount for the state as a whole.	B
Arts Institutions	There are prominent arts assets in at least 10 of the region's communities ranging from large to small.	B
Voter Registration	Registered voters as a percent of the population increased dramatically from 1994 to 2000.	A



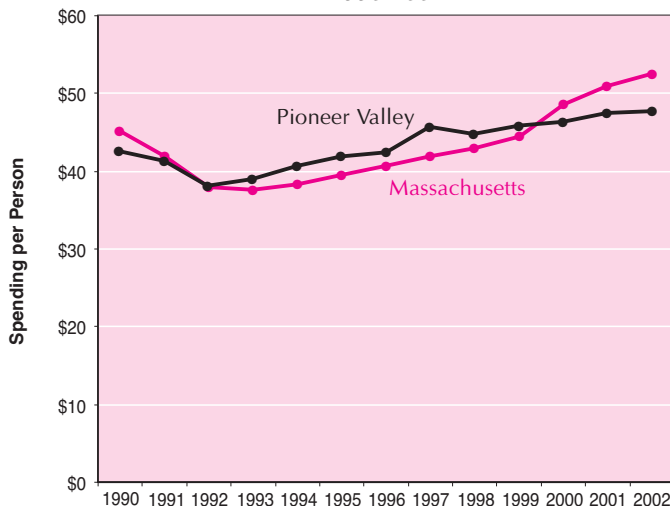
Culture and Recreation Spending

The degree of support local governments are able to and choose to 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).

The amount spent by municipalities in the Pioneer Valley on culture and recreation is 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.

In 1990, the amount that Massachusetts municipalities spent per capita on culture and recreation exceeded the amount spent by towns in the Pioneer Valley by about \$3. By 1992, however, the levels were about even, as both the state and the Pioneer Valley's communities had decreased the amount of spending per capita to \$38. From 1992 through 1998, spending slowly increased (though faster in the Pioneer Valley region than in Massachusetts), and in 1997 municipalities in the Pioneer Valley were spending \$46 per capita, compared to \$42 per capita by Massachusetts municipalities as a whole. Since 1998, the amount spent on culture and recreation by Pioneer Valley municipalities has remained fairly constant, increasing only \$2.8 per capita over the entire four-year period. In contrast, municipalities in Massachusetts as a whole began to increase their spending in 1998 with an overall increase of \$8.1 per capita from 1998 to 2002. By 2002, Massachusetts municipalities overall were spending \$5 more per capita than municipalities in the Pioneer Valley.

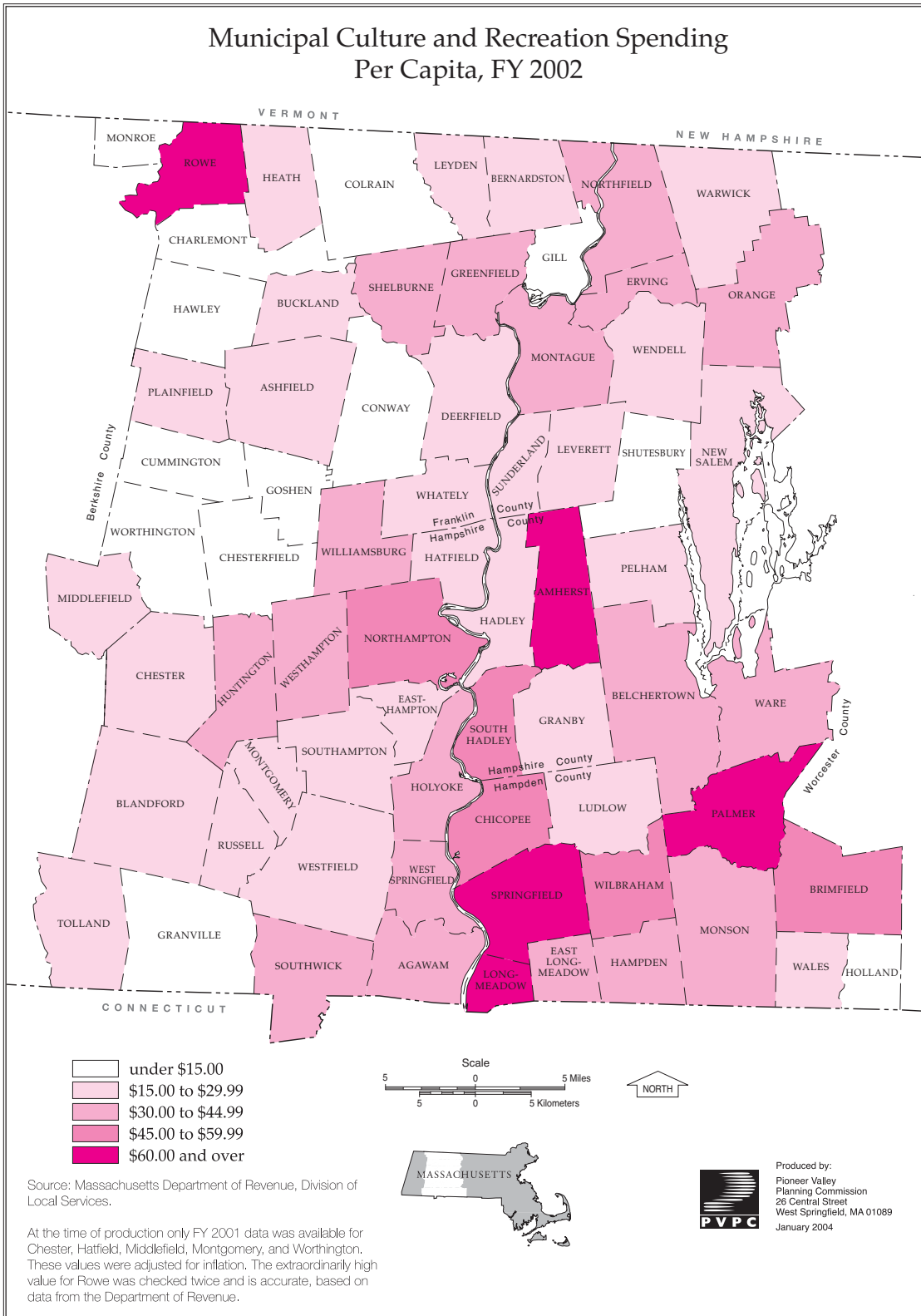
Municipal Culture and Recreation Spending Per Capita, 1990-2002



Average spending on culture and recreation by Pioneer Valley municipalities, in the year 2002, was \$48 per capita. A few municipalities spent quite a bit less per capita than the average: Conway (\$2.99), Hawley (\$4.51), and Worthington (\$6.81). On the other hand, a few communities spent substantially more than the regional average: Amherst (\$61.40), Longmeadow (\$79.81), Northampton (\$50.69), Palmer (\$78.62), South Hadley (\$53.96), and Springfield (\$77.21). The small town of Rowe spent an exceptional \$339 per capita on culture and recreation in 2002. While this seems anomalous, the town's 2001 spending figure was comparable and, therefore, it would appear that Rowe spends about four times more than the next highest town on culture and recreation per capita.

Source: Massachusetts Department of Revenue, Division of Local Services

Municipal Culture and Recreation Spending Per Capita, FY 2002



Rowe	\$339.13
Longmeadow	\$79.81
Palmer	\$78.62
Springfield	\$77.21
Amherst	\$61.40
South Hadley	\$53.96
Northampton	\$50.69
Brimfield	\$49.98
Pioneer Valley	\$47.65
Chicopee	\$46.86
Wilbraham	\$46.50
East Longmeadow	\$44.81
Monson	\$42.66
Southwick	\$40.39
Belchertown	\$40.14
West Springfield	\$39.59
Montague	\$39.28
Northfield	\$38.17
Hampden	\$37.46
Orange	\$34.82
Greenfield	\$34.33
Westhampton	\$33.48
Ware	\$32.90
Holyoke	\$32.60
Agawam	\$32.18
Shelburne	\$31.30
Erving	\$30.77
Williamsburg	\$30.46
Huntington	\$30.08
Deerfield	\$29.89
Blandford	\$29.69
Hatfield	\$28.83
Ashfield	\$28.19
Ludlow	\$27.40
Sunderland	\$26.85
Whately	\$25.46
New Salem	\$25.40
Russell	\$24.74
Easthampton	\$23.20
Buckland	\$22.93
Warwick	\$22.74
Hadley	\$22.50
Westfield	\$22.05
Montgomery	\$20.81
Pelham	\$19.64
Leyden	\$19.57
Wales	\$19.57
Granby	\$19.46
Bernardston	\$19.22
Plainfield	\$19.15
Leverett	\$19.10
Heath	\$18.15
Chester	\$18.15
Middlefield	\$17.30
Wendell	\$16.23
Tolland	\$16.21
Southampton	\$15.43
Holland	\$14.42
Charlemont	\$14.42
Granville	\$14.19
Chesterfield	\$13.84
Colrain	\$13.73
Gill	\$12.12
Shutesbury	\$11.97
Cummington	\$11.96
Goshen	\$11.94
Monroe	\$10.17
Worthington	\$6.81
Hawley	\$4.51
Conway	\$2.99

Source: Massachusetts Department of Revenue, Division of Local Services.

At the time of production only FY 2001 data was available for Chester, Hatfield, Middlefield, Montgomery, and Worthington. These values were adjusted for inflation. The extraordinarily high value for Rowe was checked twice and is accurate, based on data from the Department of Revenue.



Produced by:
Pioneer Valley
Planning Commission
26 Central Street
West Springfield, MA 01089
January 2004



Library Circulation

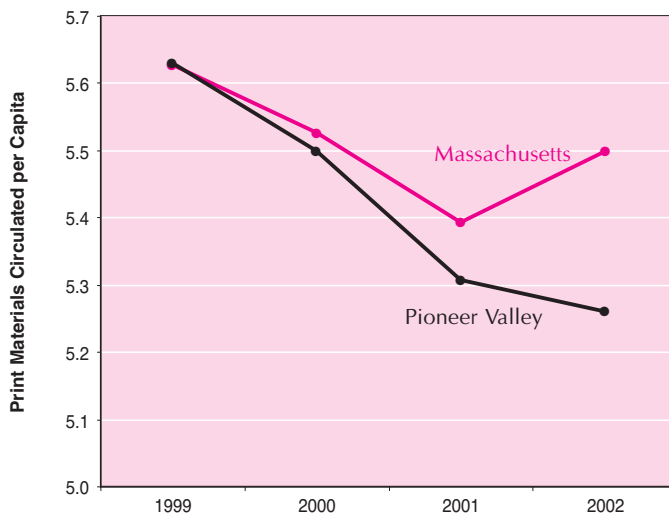
Public libraries serve as an important educational resource within most communities of the Pioneer Valley. The circulation volume per resident is an important measure of the extent to which the library is serving the needs of residents and to which the residents are taking advantage of educational opportunities within their community.

The total number of print materials circulated by a community's public library in a given year is divided by the total population of that community to calculate the average number of materials checked out from the library per person in the community.

In 1999, 5.63 books per capita were in circulation in the Pioneer Valley and in Massachusetts. After 1999, that number began to decline in both the region and the state, reaching their lowest point of the last four years at 5.26 books per capita in the Pioneer Valley in 2002 and 5.39 books per capita in Massachusetts in 2001. From 2000 through 2002, the gap in per capita circulation between the Pioneer Valley and Massachusetts widened in each year.

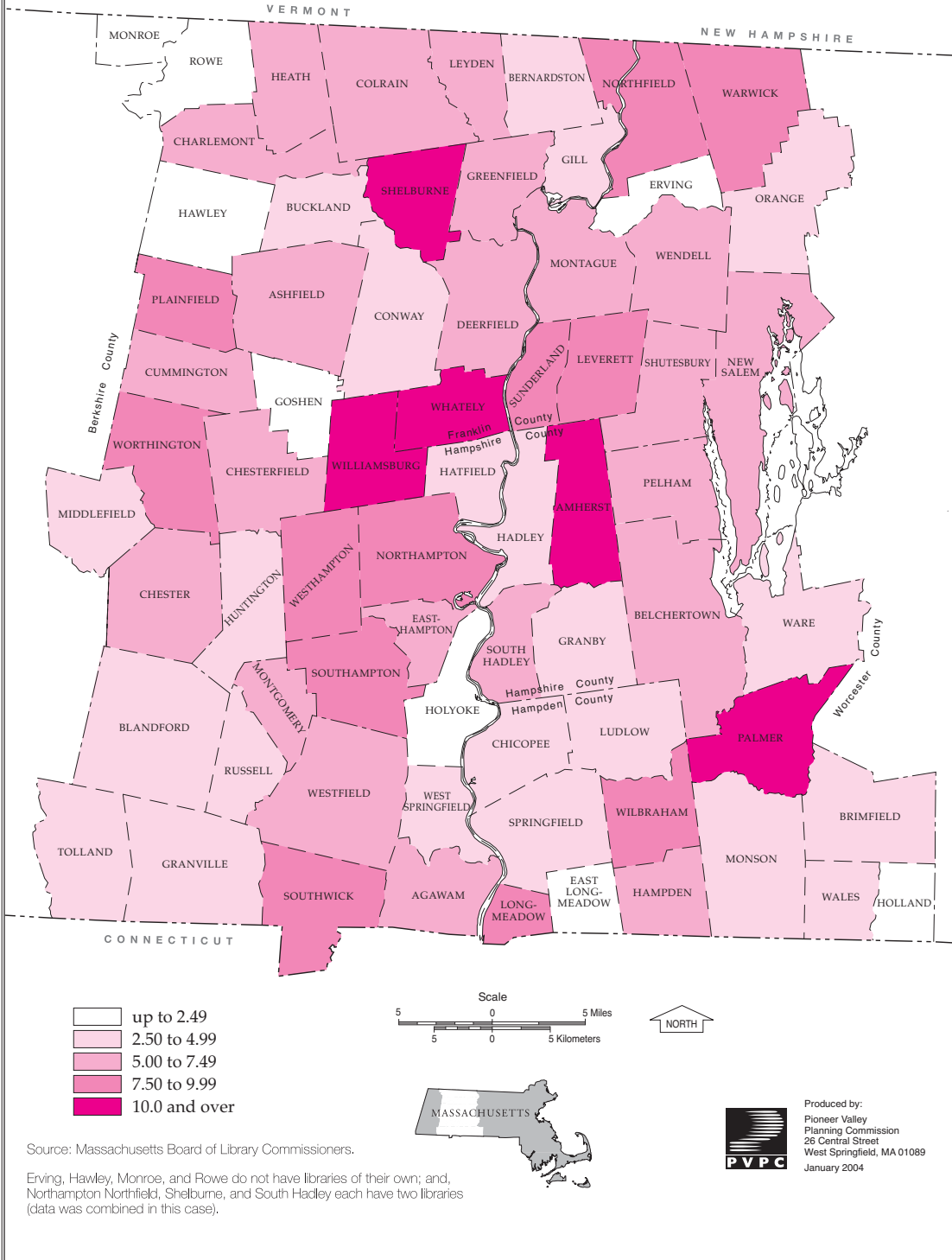
In 2002, the per capita rate of circulation of print materials for the public library in Williamsburg was 15.9 items per capita, the highest for any community in the Pioneer Valley. Other town or city libraries with high circulation rates in 2002 included Shelburne (12.2 per capita), Palmer (10.8 per capita), Whately (10.8 per capita), and Amherst (10.1 per capita). While several of the region's smallest communities have no public library, and, therefore, no circulation, two communities have libraries with very low per capita circulation rates: Holyoke (1.5 per capita) and Huntington (1.0 per capita).

Per Capita Circulation of Library Print Materials Annually, 1999-2002



Source: Massachusetts Board of Library Commissioners

Total Circulation of Print Library Materials Per Capita, 2001



Williamsburg	15.92
Shelburne	12.15
Palmer	10.81
Whately	10.77
Amherst	10.08
Worthington	9.93
Plainfield	9.82
Wilbraham	9.74
Northfield	9.63
Southwick	9.59
Northampton	9.19
Longmeadow	9.15
Warwick	8.43
Westhampton	7.86
Southampton	7.84
Sunderland	7.74
Leverett	7.70
East Longmeadow	7.15
Shutesbury	7.00
Ashfield	6.78
Heath	6.70
Montague	6.64
Charlemont	6.46
Leyden	6.42
Montgomery	6.29
South Hadley	6.29
Greenfield	6.21
New Salem	6.14
Pelham	6.03
Belchertown	5.96
Chesterfield	5.77
Hampden	5.63
Agawam	5.47
Deerfield	5.37
Wendell	5.35
Cummington	5.32
Pioneer Valley	5.31
Colrain	5.20
Chester	5.08
Easthampton	5.02
Westfield	5.01
West Springfield	4.94
Huntington	4.55
Bernardston	4.40
Granville	4.27
Orange	4.24
Conway	3.99
Springfield	3.94
Blandford	3.78
Hatfield	3.72
Middlefield	3.61
Monson	3.50
Ware	3.39
Buckland	3.29
Ludlow	3.20
Hadley	3.19
Wales	3.18
Chicopee	3.11
Russell	3.04
Brimfield	2.83
Tolland	2.75
Gill	2.59
Granby	2.53
Goshen	2.12
Holland	1.48
Holyoke	1.01
Erving	0.00
Hawley	0.00
Monroe	0.00
Rowe	0.00



Library Hours

This indicator is based on the assumption that, if public libraries are open more hours per week, the general public will have a greater opportunity to take advantage of the services and resources offered; therefore, it illustrates the relative accessibility of public libraries between communities and between the region and the state.

The total number of hours a library’s main branch was open for the year is divided by 52 weeks to determine the average number of hours per week a library’s main branch has been open. As a point of reference, a main branch library that is open from 9 a.m. to 5 p.m. from Monday through Friday would, using this calculation, appear as being open about 38.0 hours per week, because there are holidays that would keep a library closed about two of the year’s 52 weeks.

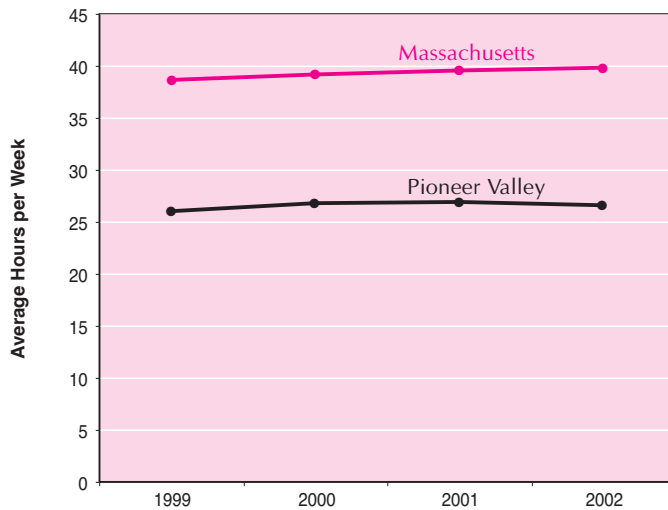
The average number of hours per week that main branch public libraries in the Pioneer Valley are open has remained almost constant over the four-year period from 1999 to 2002, at about 26 hours per week. The overall trend was a slight increase of 0.8 hours, from 26.1 hours per week in 1999 to 26.9 hours in 2001. During the period from 1999 to 2001, public libraries in Massachusetts as a whole have also had relatively constant hours between 38.7 and 39.8 hours per week. However, comparing the Pioneer Valley to Massachusetts, we find that the Pioneer Valley’s libraries are generally open about 12.5 hours fewer per week than libraries across Massachusetts. This may in part be a reflection of the Pioneer Valley’s many small towns that do not have the resources to keep a library open full-time.

In 2001, main branch libraries in the Pioneer Valley were open an average of 26.9 hours per week. Main branch libraries in 37 towns were open fewer hours on average per week than the

regional average, and in 27 town, the main branch library stayed open more than 26.9 hours on average per week. In 2001, main branch libraries in Massachusetts were open an average of 39.6 hours per week, and only 19 towns in the Pioneer Valley had libraries open more hours than the Massachusetts average.

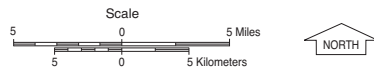
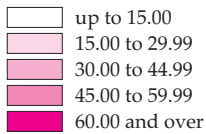
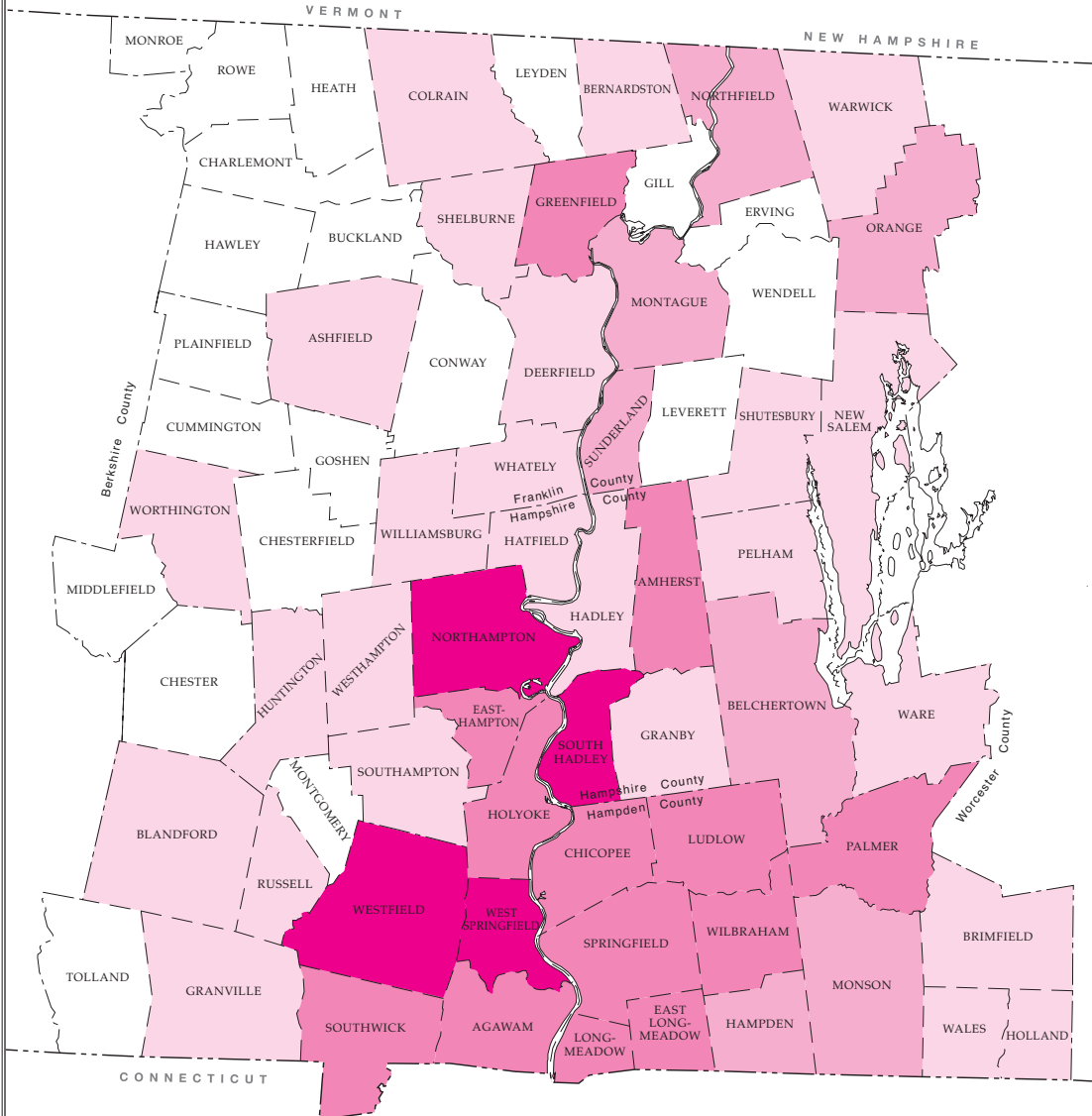
Northampton’s public library was open more than that of any other town in the Pioneer Valley, with 89.0 hours open in an average week.

Average Weekly Hours Open for Library Main Branches, 1999-2002



Source: Massachusetts Board of Library Commissioner

Average Hours Per Week Main Library Branch Was Open, 2001



Source: Massachusetts Board of Library Commissioners.

Erving, Hawley, Monroe, and Rowe do not have libraries of their own; and, Northampton, Northfield, Shelburne, and South Hadley each have two libraries (data was combined in this case).



Produced by:
Pioneer Valley
Planning Commission
28 Central Street
West Springfield, MA 01089
January 2004

Northampton	89.0
West Springfield	62.0
Westfield	61.5
South Hadley	60.9
Amherst	58.5
Agawam	57.9
Chicopee	57.0
Palmer	55.1
Springfield	54.2
Holyoke	53.5
Wilbraham	52.8
Longmeadow	50.5
East Longmeadow	50.3
Greenfield	48.8
Easthampton	48.1
Southwick	47.1
Ludlow	46.5
Monson	44.9
Belchertown	42.7
Sunderland	38.0
Orange	36.2
Hampden	33.9
Montague	33.8
Northfield	31.1
Shelburne	29.6
Ware	28.6
Granby	28.4
Hadley	28.0
Pioneer Valley	26.9
Deerfield	25.0
Williamsburg	24.3
Huntington	23.7
Wales	23.2
Southampton	23.0
Brimfield	22.6
Whately	21.7
Westhampton	20.7
Blandford	20.3
Worthington	19.4
Hatfield	19.2
New Salem	18.7
Shutesbury	18.2
Warwick	17.8
Russell	17.7
Pelham	17.7
Colrain	17.4
Holland	15.9
Bernardston	15.1
Granville	15.0
Ashfield	15.0
Buckland	14.9
Heath	14.6
Chesterfield	14.4
Wendell	14.2
Conway	14.0
Chester	14.0
Leverett	13.4
Montgomery	13.2
Leyden	11.5
Tolland	11.0
Middlefield	10.8
Plainfield	10.8
Charlemont	9.8
Goshen	9.8
Gill	9.6
Cummington	9.5
Erving	0.0
Hawley	0.0
Monroe	0.0
Rowe	0.0



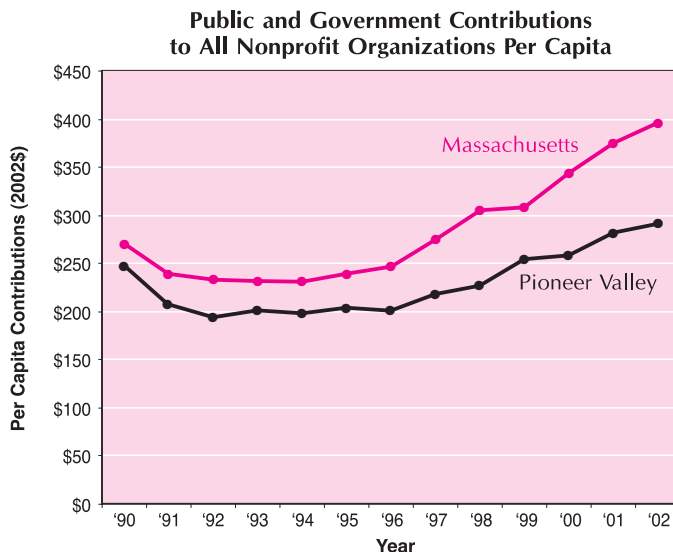
Per Capita Nonprofit Support

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 museums to drug treatment programs, 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.

Support for nonprofits per capita declined slightly from 1990 to 1991 and then remained fairly steady from 1991 to 1996, with average support during these years at \$201 per capita. Beginning in 1997, the amount of support for the nonprofit sector began to increase and, by 1999, the amount of contributions per capita exceeded by \$6 the amount contributed in 1990. In 2002, the amount of contributions per capita to nonprofit organizations in the Pioneer Valley reached \$291. Consistently, from 1990 through 2002, 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 very similar patterns in changing support for nonprofit organizations from 1990 to 1996, the gap between the amount contributed in Massachusetts and the amount contributed in the

Pioneer Valley began to widen at the end of that period. By 2002, the difference in per capita support for nonprofit organizations in Massachusetts and in the Pioneer Valley reached \$106.



Source: The Urban Institute, National Center for Charitable Statistics

Note: Education, health, medical, research, foreign affairs, and national religious nonprofits, as well as grantmaking foundations, were excluded from these figures because they tend to draw significant national support and are not necessarily focused on local issues.

Support for Student Participation in the Arts

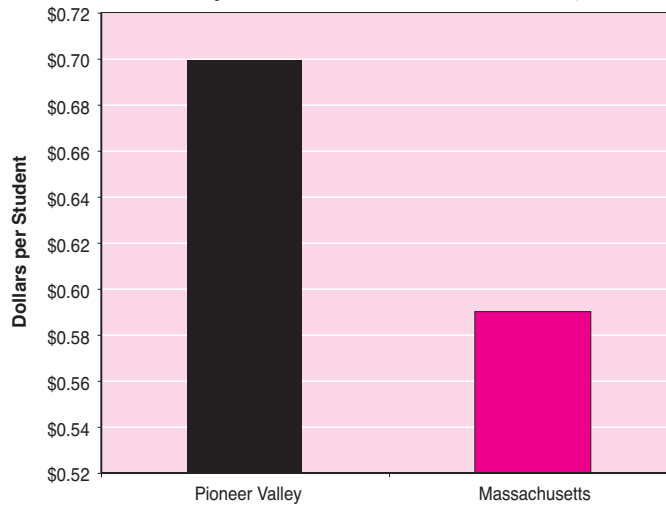
The Massachusetts Cultural Council allocates money to local cultural councils around the Commonwealth to help subsidize cultural events and programs for students enrolled in public school. These PASS grants are specifically designed to provide subsidies for students to participate in cultural programs that school districts could not otherwise afford; therefore, school districts that receive PASS grants are able to provide learning opportunities in the arts that are outside the traditional classroom setting. Given the limited resources available for arts education in many public schools, the extent of a school district's receipt of PASS grants is an indicator of the degree of exposure to the arts received by students within each community.

Schools must apply to the local cultural council for a grant and "the demand for such funds usually outpaces the available resources."¹⁷ The amount of money received by public school districts in the Pioneer Valley is divided by total enrollment to show the total dollar amount received per student in kindergarten through twelfth grade.

Overall, the Pioneer Valley received 70 cents per K-12 student from the Massachusetts Cultural Council in 2002, compared to 59 cents per student in Massachusetts as a whole. In other words, the Pioneer Valley's school districts received, in 2002, 18.3 percent more money per student than schools across Massachusetts.



Amount of Massachusetts Cultural Council Arts PASS Grants per Enrolled Public Student (K-12), 2002



Source: Massachusetts Cultural Council



Support for Artists

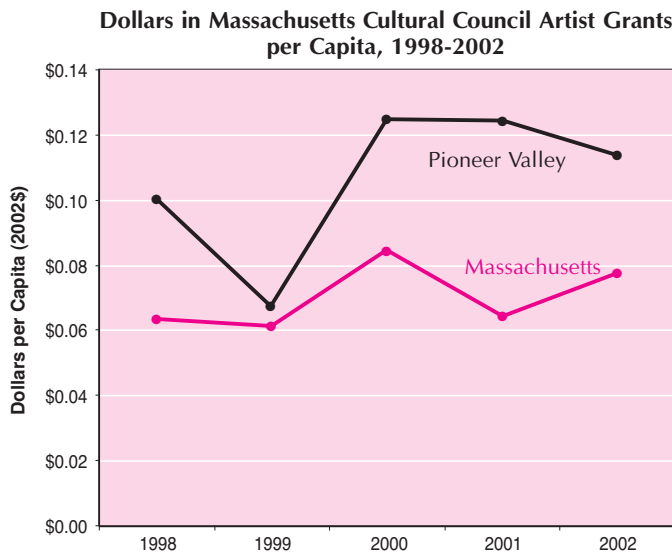
Arts and cultural activities are important to the quality of life in any community, and the presence of recognized artists in a community will likely increase the level and volume of art and cultural activities within that community. The Massachusetts Cultural Council provides grants to support the development 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.¹⁸

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 1998 to 2002, the Pioneer Valley received more dollars in artist grants per capita than Massachusetts as a whole. In 1998, the Pioneer Valley received 10 cents per capita from the Massachusetts Cultural Council. Although the amount decreased in 1999, the Pioneer Valley quickly rebounded and received about 12 cents per capita in both 2000 and 2001. Residents of Massachusetts overall did not receive more than eight cents per capita in artist grants during the same five-year period.

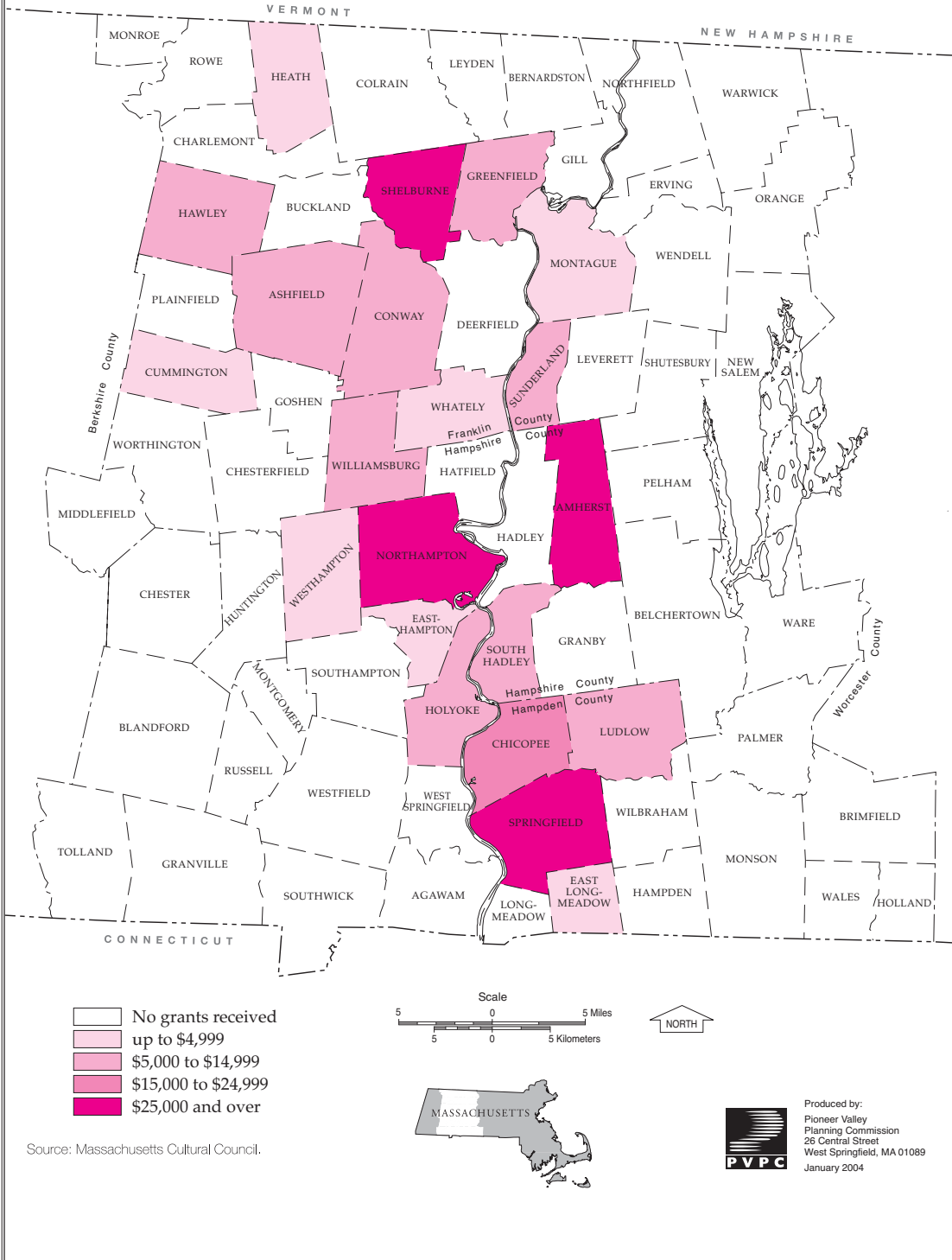
Between 1998 and 2002, established artists in the Pioneer Valley received \$295,200 dollars in grants, but no grants were given to artists in 48 of the region's 69 communities. In the 21 communities that were home to artists who received grants during this period, artists in 11

communities received less than \$10,000; artists in five communities—Greenfield, Hawley, Ludlow, Sunderland, and Williamsburg—received between \$10,000 and \$20,000; artists in Chicopee and Springfield received \$20,000 and \$27,000, respectively; artists in the small town of Shelburne received \$32,500; and artists in Amherst and Northampton, the center of arts activities in the region, received \$57,000 and \$104,500 in grants, respectively.



Source: Massachusetts Cultural Council

Total Amount of All Massachusetts Cultural Council Artist Grants by Community, 1998-2002



Northampton	\$104,500
Amherst	\$57,000
Shelburne	\$32,500
Springfield	\$27,000
Chicopee	\$20,000
Williamsburg	\$14,500
Sunderland	\$13,500
Greenfield	\$12,500
Hawley	\$12,500
Ludlow	\$12,500
Conway	\$9,500
Ashfield	\$7,500
Holyoke	\$7,500
South Hadley	\$7,500
Easthampton	\$2,000
Cummington	\$1,000
East Longmeadow	\$1,000
Heath	\$1,000
Montague	\$1,000
Westhampton	\$1,000
Whately	\$1,000
Agawam	\$0
Belchertown	\$0
Bernardston	\$0
Blandford	\$0
Brimfield	\$0
Buckland	\$0
Charlemont	\$0
Chester	\$0
Chesterfield	\$0
Colrain	\$0
Deerfield	\$0
Erving	\$0
Gill	\$0
Goshen	\$0
Granby	\$0
Granville	\$0
Hadley	\$0
Hampden	\$0
Hatfield	\$0
Holland	\$0
Huntington	\$0
Leverett	\$0
Leyden	\$0
Longmeadow	\$0
Middlefield	\$0
Monroe	\$0
Monson	\$0
Montgomery	\$0
New Salem	\$0
Northfield	\$0
Orange	\$0
Palmer	\$0
Pelham	\$0
Plainfield	\$0
Rowe	\$0
Russell	\$0
Shutesbury	\$0
Southampton	\$0
Southwick	\$0
Tolland	\$0
Wales	\$0
Ware	\$0
Warwick	\$0
Wendell	\$0
West Springfield	\$0
Westfield	\$0
Wilbraham	\$0
Worthington	\$0

Source: Massachusetts Cultural Council.

Produced by:
Pioneer Valley
Planning Commission
28 Central Street
West Springfield, MA 01089
January 2004



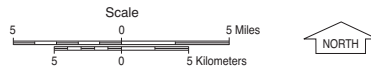
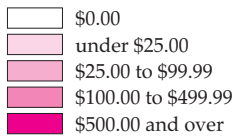
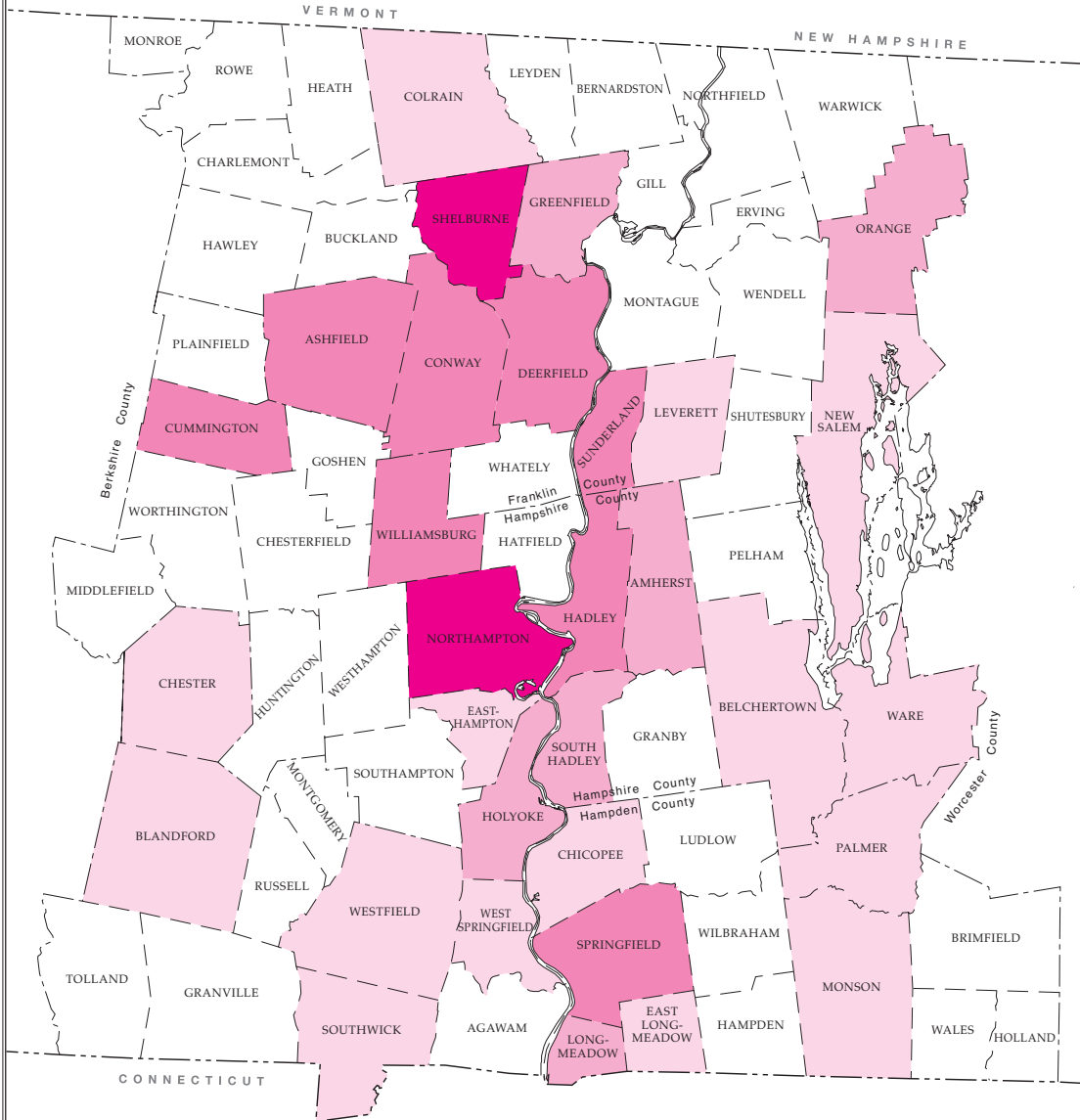
Arts Institutions

Art- and culture-related activities that are designed for a wide audience are often carried out by nonprofit organizations, and the total value of these organizations' assets is an indicator of the extent of art and cultural activities within a community.

The total assets of nonprofit organizations focused on the arts are combined by community and divided by the total population of each community to develop a measure of relative arts capacity by community. Organizations are included only if they are incorporated 501(c)(3) organizations, have a primary purpose focused on the arts (for example, colleges with art museums are not included because arts are not their primary purpose), and fall within certain categories: arts and culture awareness, arts in media and communications, visual arts, museums, performing arts, and arts services.

Northampton, largely recognized as the region's arts hub, has by far the most nonprofit art and cultural assets of any community in the Pioneer Valley, with \$864 in assets per resident. The smaller communities of Shelburne, Williamsburg, and Deerfield are also home to significant nonprofit art and cultural assets, with \$528, \$479, and \$460 in assets per resident. A number of other communities, such as Ashfield, Conway, Cummington, Hadley, Springfield, and Sunderland, have in excess of \$100 in nonprofit art and cultural assets per capita.

Asset Value of Arts, Culture, and Humanities Nonprofit Organizations Per Capita



Produced by:
 Pioneer Valley
 Planning Commission
 26 Central Street
 West Springfield, MA 01089
 January 2004

Northampton	\$864.01
Shelburne	\$527.90
Williamsburg	\$478.74
Deerfield	\$460.16
Sunderland	\$389.93
Cummington	\$176.36
Hadley	\$162.49
Springfield	\$162.10
Conway	\$139.07
Ashfield	\$136.14
Pioneer Valley	\$96.90
Amherst	\$87.06
Greenfield	\$53.68
Holyoke	\$47.89
Orange	\$45.17
Longmeadow	\$41.20
New Salem	\$32.71
South Hadley	\$30.02
Palmer	\$21.19
Ware	\$18.90
Monson	\$18.60
Belchertown	\$15.47
Chester	\$15.27
Southwick	\$15.25
West Springfield	\$13.61
Easthampton	\$6.78
Leverett	\$6.71
Westfield	\$6.67
Colrain	\$5.69
Blandford	\$1.75
Chicopee	\$1.22
East Longmeadow	\$0.43
Agawam	\$0.00
Bernardston	\$0.00
Brimfield	\$0.00
Buckland	\$0.00
Charlemont	\$0.00
Chesterfield	\$0.00
Erving	\$0.00
Gill	\$0.00
Goshen	\$0.00
Granby	\$0.00
Granville	\$0.00
Hampden	\$0.00
Hatfield	\$0.00
Hawley	\$0.00
Heath	\$0.00
Holland	\$0.00
Huntington	\$0.00
Leyden	\$0.00
Ludlow	\$0.00
Middlefield	\$0.00
Monroe	\$0.00
Montague	\$0.00
Montgomery	\$0.00
Northfield	\$0.00
Pelham	\$0.00
Plainfield	\$0.00
Rowe	\$0.00
Russell	\$0.00
Shutesbury	\$0.00
Southampton	\$0.00
Tolland	\$0.00
Wales	\$0.00
Warwick	\$0.00
Wendell	\$0.00
Westhampton	\$0.00
Whately	\$0.00
Wilbraham	\$0.00
Worthington	\$0.00

Source: The Urban Institute, National Center for Charitable Statistics.

Arts, culture, and humanities organizations includes only: arts councils, visual arts, museums, performing arts, historical societies, film, television, and radio. Organizations with a primary mission of higher education or recreation are not included.



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.

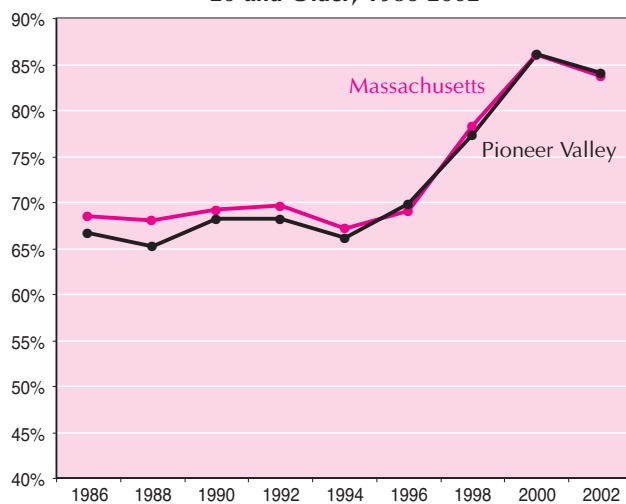
The number of registered voters is divided by the total population over the age of 19 to approximate the portion of the population that is registered to vote.¹⁹

Between 1986 and 2002, the percent of the adult population that was registered to vote in the Pioneer Valley increased from 66.6 percent in 1986 to 84.1 percent in 2002. This increase of 26.3 percent in voter registration rate exceeded the 22.2 percent increase in Massachusetts as a whole. In both the Pioneer Valley and Massachusetts, the voter registration rate was relatively stable from 1986 through 1996. Subsequently, between 1996 and 2000, it rose sharply, followed by a slight decline from 2000 to 2002. Generally, the Pioneer Valley's voter registration rates have been slightly below those of Massachusetts as a whole, but this was not the case in 1996 or 2002.

A number of communities in the Pioneer Valley, mostly small rural towns, have voter registration rates of 100 percent for the year 2002. Undoubtedly there are some anomalies in

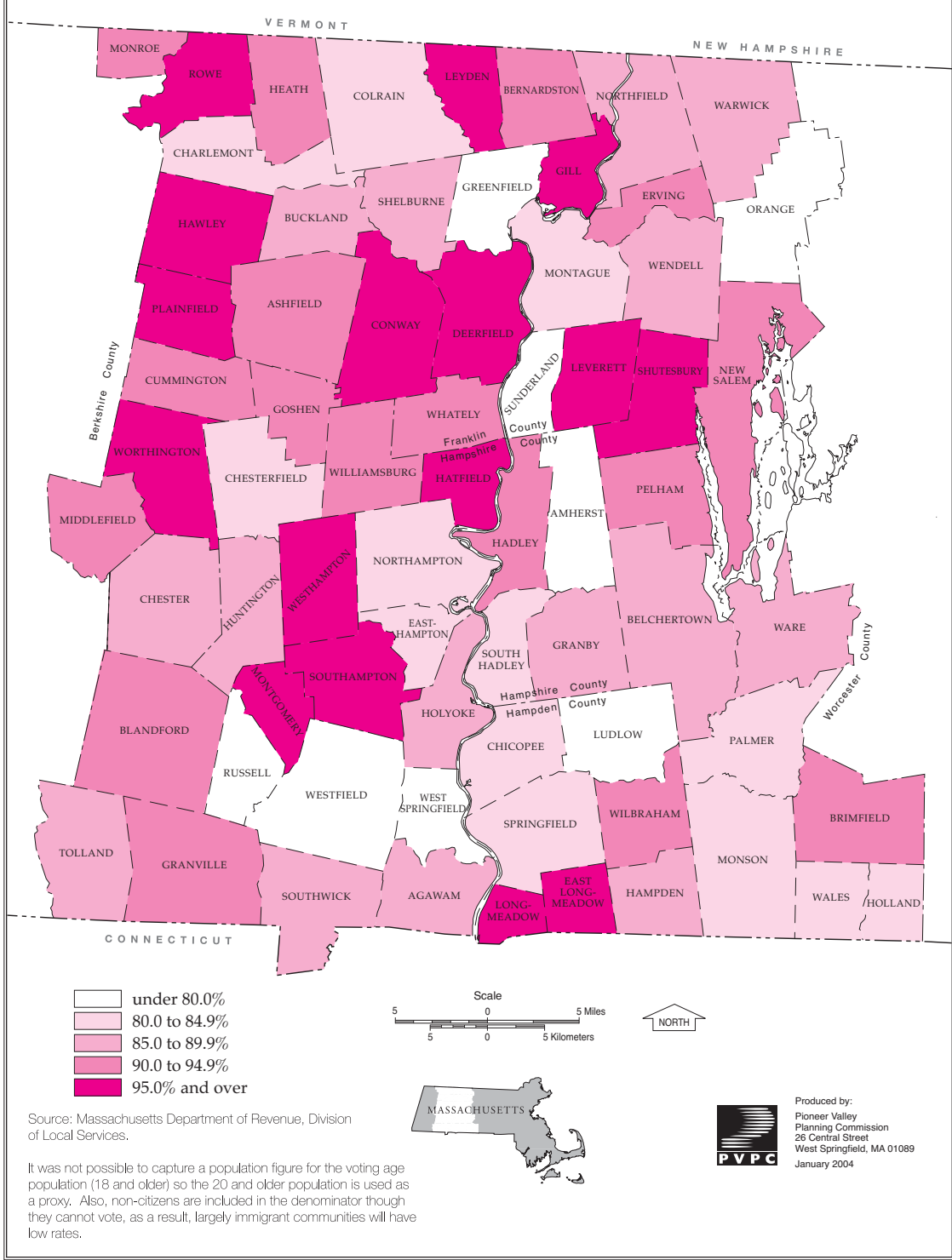
the data that leads to such high rates, but these communities very likely do have high levels of voter registration. The communities with a 100 percent voter registration rate in 2002 are Conway, Gill, Leverett, Leyden, Longmeadow, Plainfield, Rowe, Shutesbury, and Westhampton. Several communities in the region, particularly those with large student or immigrant populations, have the lowest voter registration rates. Amherst, Greenfield, Ludlow, Orange, Russell, Sunderland, West Springfield, and Westfield have voter registration rates in 2002 below 80.0 percent. Among these, Amherst and Sunderland have large international student populations, while West Springfield and Westfield are home to numerous recent immigrants from the former Soviet Union.

**Registered Voters as a Percent of the Population
20 and Older, 1986-2002**



Source: Massachusetts Department of Revenue, Division of Local Services

Registered Voters as a Percent of the Population 20 Years and Older, 2002



Conway	100.0%
Gill	100.0%
Leverett	100.0%
Leyden	100.0%
Longmeadow	100.0%
Plainfield	100.0%
Rowe	100.0%
Shutesbury	100.0%
Westhampton	100.0%
East Longmeadow	98.9%
Montgomery	98.1%
Hawley	97.8%
Deerfield	97.5%
Southampton	96.9%
Hatfield	95.3%
Worthington	95.2%
Wilbraham	94.7%
Williamsburg	94.6%
New Salem	94.0%
Monroe	93.9%
Pelham	93.5%
Heath	93.3%
Blandford	92.9%
Goshen	92.8%
Granville	91.7%
Erving	91.3%
Bernardston	91.2%
Hadley	91.1%
Whately	90.8%
Brimfield	90.6%
Middlefield	90.5%
Ashfield	90.3%
Cummington	90.2%
Huntington	89.8%
Northfield	89.6%
Agawam	89.4%
Ware	89.0%
Holyoke	88.8%
Ware	88.4%
Granby	88.3%
Shelburne	87.6%
Buckland	87.4%
Tolland	87.2%
Hampden	86.9%
Chester	86.7%
Southwick	86.6%
Wendell	86.0%
Belchertown	85.0%
Colrain	84.9%
Easthampton	84.5%
Pioneer Valley	84.1%
Chesterfield	83.8%
Palmer	83.7%
Northampton	83.6%
Springfield	82.9%
Holland	82.9%
Charlemont	82.2%
Chicopee	81.9%
Monson	81.4%
Wales	81.3%
South Hadley	81.2%
Montague	80.4%
West Springfield	79.2%
Orange	79.2%
Russell	78.8%
Greenfield	78.8%
Westfield	78.7%
Amherst	75.8%
Ludlow	74.6%
Sunderland	72.8%

Source: Massachusetts Department of Revenue, Division of Local Services.

It was not possible to capture a population figure for the voting age population (18 and older) so the 20 and older population is used as a proxy. Also, non-citizens are included in the denominator though they cannot vote, as a result, largely immigrant communities will have low rates.

NOTES ON METHODS AND SOURCES

Following are a series of notes on methods employed for presentation of some of the data contained in this report.

Dollar Figures – All dollar amounts contained in this report are adjusted for inflation to reflect “real dollars.” Except where otherwise noted, dollar figures are adjusted to be equivalent to 2002 dollars. Adjustments were made using the Consumer Price Index for all urban consumers in the Northeast region as provided by the U.S. Bureau of Labor Statistics.

Population – For any indicators that present information as a percent of total population or as a rate per 1,000 people, the population data used as a denominator comes from the Massachusetts Department of Public Health’s MassCHIP database. This data is derived from actual census counts for 1990 and 2000 and from estimates produced by the Massachusetts Institute for Social and Economic Research (MISER) for intervening years. Population data for 2001 and 2002 (not provided by MassCHIP) are taken from the U.S. Census Bureau’s population estimates that were released in 2003. These estimates only provide total population by municipality; therefore, for those indicators requiring a subset of the population (for example, 15- to 19-year-olds), we assume the same population growth rate for a subset as for the population as a whole and apply the growth rates to the actual count from 2000.

Confidential Data – For a number of indicators, particularly those developed using data from the Massachusetts Department of Public Health, we were not able to provide complete data at the municipal level because the numbers were so small for our region’s smallest towns that the data is suppressed by the Department of Public Health to protect confidentiality. Therefore, on those municipal maps where many towns are listed as zero, the reader should understand that this may be a result of suppressed data. When suppressions were particularly pronounced, we elected not to include a map rather than include a map with little useful information (for example, the incidence of new AIDS cases indicator does not include a map for this reason).

END NOTES

- ¹ In situations where there are fewer than five cases fitting a specific description, the Massachusetts Department of Public Health suppresses the actual number to protect the confidentiality of those individuals. Because many of the Pioneer Valley's communities are very small, there are numerous situations in which there are fewer than five cases. Therefore, a number of maps throughout this report will show 100 percent or zero percent for some communities; while this could be accurate, it is impossible to determine the actual number. In the case of prenatal care, there are far fewer pregnancies with inadequate prenatal care than with adequate care; therefore, the number of pregnancies for which there was inadequate prenatal care is often suppressed.
- ² Application of a linear trend line to the Pioneer Valley statistics indicates that the percent of all births that are very low birth weight rose by an average of 0.02 percentage points per year from 1989 to 2001.
- ³ MassCHIP (the source for this indicator) 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.
- ⁴ 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.
- ⁵ The rate of population growth in the Pioneer Valley between 2000 and 2002 was so small that combining data from 2000 and 2002 should be fairly accurate.
- ⁶ Massachusetts Department of Education, MCAS Overview: Frequently Asked Questions: How are test results used?, available at <http://www.doe.mass.edu/mcas/about1.html>.
- ⁷ The Massachusetts Comprehensive Assessment System (MCAS) is a standardized test administered to all children enrolled in the public school system in Massachusetts; at the third grade level, only the reading exam is administered. For the third grade reading exam, only three performance levels are used: proficient, needs improvement, and warning. Proficient is defined as: "Students at this level demonstrate a solid understanding of challenging subject matter and solve a wide variety of problems." (Massachusetts Department of Education, MCAS Overview: Performance Level Definitions, available at <http://www.doe.mass.edu/mcas/about1.html>.)
- ⁸ 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.
- ⁹ "Beginning with the Class of 2003, students will be required to pass the MCAS grade 10 tests in *English Language Arts and Mathematics* as one requirement for a high school diploma. Students will be given multiple opportunities, if necessary, to pass the tests. Students must also meet local graduation requirements for high school graduation, for example, completion of required coursework." (Massachusetts Department of Education, MCAS Overview: Frequently Asked Questions: How are test results used?, available at <http://www.doe.mass.edu/mcas/about1.html>).

- ¹⁰ Advanced is defined as: “Students at this level demonstrate a comprehensive and in-depth understanding of rigorous subject matter, and provide sophisticated solutions to complex problems.” Proficient is defined as: “Students at this level demonstrate a solid understanding of challenging subject matter and solve a wide variety of problems.” (Massachusetts Department of Education, MCAS Overview: Frequently Asked Questions: How are test results used?, available at <http://www.doe.mass.edu/mcas/about1.html>).
- ¹¹ The Massachusetts Department of Education provides far more accurate data on the percent of students who drop out by graduating classes. We are only suggesting this rough approximation to illustrate that the dropout rate data presented here is limited to a single academic year.
- ¹² The data are based upon a survey conducted by the Massachusetts Division of Health Care Finance and Policy.
- ¹³ Adjustment for inflation is done using the Consumer Price Index for all urban consumers in the Northeast region as provided by the U.S. Bureau of Labor Statistics.
- ¹⁴ According to the U.S. Census Bureau, the poverty thresholds “are intended for use as a statistical yardstick, not as a complete description of what people and families need to live.” The poverty rate, therefore, is a useful tool to compare change over time and compare across areas or groups of people. The U.S. Census Bureau’s explanation of how it measured poverty can be found at <http://www.census.gov/hhes/poverty/povdef.html>.
- ¹⁵ Because poverty rates are based on household data from the long form of the Census, dormitory-based students are not included in these statistics; however, college students living off campus are included.
- ¹⁶ “The Low Income Housing Tax Credit (LIHTC) was created by the Tax Reform Act of 1986. . . . Under the LIHTC program, 58 state and local agencies are authorized to issue federal tax credits for the acquisition, rehabilitation, or construction of affordable rental housing. . . . Since 1987—the first year of the program—the LIHTC has become the principal federal subsidy mechanism for supporting the production of new and rehabilitated rental housing for low-income households.” (Source: U.S. Department of Housing and Urban Development).
- ¹⁷ Description of the Massachusetts Cultural Council PASS Program available at <http://www.massculturalcouncil.org/programs/pass.html>
- ¹⁸ Description of Massachusetts Cultural Council Artist Grants, available at <http://www.massculturalcouncil.org/programs/artistgrants.html>.
- ¹⁹ Persons age 18 and 19 are excluded from the total population in this calculation because population data is provided in five-year age groups (e.g., 10 to 14, 15 to 19). We elected to exclude 18- and 19-year-olds rather than including 15-, 16-, and 17-year-olds. Therefore, voter registration rates represented here may be somewhat higher than in actuality. It should also be understood that non-citizens and others who are not eligible to vote are included in the total population for this indicator because there is no simple way to extract them from the totals.