

**In Brief:
The Economy
Of the
Pioneer Valley Region
2000-2003**

March 2004

**Pioneer Valley Planning Commission
Regional Information Center**

Introduction

Recent economic data is easily found by opening the pages of a daily newspaper or by venturing to numerous websites announcing the latest economic indicators or trends. From consumer confidence to housing starts, national economic data exists in abundance; however, it can be difficult to synthesize and condense this fire hose of economic data into useful information for understanding the national economy. Perhaps more difficult is finding comparable economic indicators to evaluate the state of a region's economy.

This brief is meant to take a few economic indicators, for which there is regular data for the Pioneer Valley region, and report trends over the last four years in order to understand the recent course of the Pioneer Valley region's economy. There are many indicators that are not easily obtained for a region such as the Pioneer Valley, so this analysis is limited to a few very important indicators. Following are the indicators included and their respective sources.

| <u>Indicator</u> | <u>Source</u> |
|--------------------------------------|---|
| Unemployment rate | U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics |
| Total labor force | U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics |
| Total employment | U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics |
| Manufacturing employment | U.S. Bureau of Labor Statistics, Current Employment Statistics |
| Manufacturing average weekly wages | U.S. Bureau of Labor Statistics, Current Employment Statistics |
| Single-family home sales | The Warren Group |
| Median single-family home sale price | The Warren Group |
| Residential building permits | U.S. Department of Housing and Urban Development, State of the Cities Data System (SOCDS) |

Data in this brief is presented in three different formats as follows: 1) actual numbers; 2) percentages; and, 3) as an index value. The last format, index values, translates real numbers into a relative measure based on the real numbers from a fixed period in time (throughout this brief, all index values are based on the average values from the four quarters of 2001). Index values allow comparisons between regions of differing size, in this case it allows comparison between the Pioneer Valley region and the Commonwealth of Massachusetts as a whole. Dollar values throughout this brief are inflation adjusted into 2001 dollars using the Consumer Price Index for all urban consumers in the Northeast region.

Summary

Overall, based on indicators analyzed for this brief, the Pioneer Valley region outperformed the state as a whole through most of the last four years. Much of this period has been marked by a substantial recession that has had particularly dire consequences for government budgets and spending. Because the Pioneer Valley region did not equally benefit in the technology boom of the late 1990s, the region was to some degree insulated from the effects of the technology slide that triggered the latest recession. During years when the Boston area was shedding thousands of jobs, the Pioneer Valley region maintained level, if not growing, employment rolls. The housing in the Pioneer Valley region, as in the rest of the country, has remained a source of strength throughout the recession and sale prices for single-family homes increased sharply.

Unemployment

Between 2000 and 2003, the unemployment rate increased sharply in both the Pioneer Valley region and the Commonwealth of Massachusetts. Throughout 2000, at the peak of the nation's longest sustained period of economic growth, unemployment rates were remarkably low and

were higher in the Pioneer Valley region than in the state for every quarter. In the 4th quarter of 2000, unemployment rates of 2.6 percent for the region and 2.2 percent for the state reflected near full employment, but with the start of 2001, rates began to increase. By the 4th quarter of 2001, the unemployment rate of Massachusetts, at 4.1 percent, had surpassed that of the Pioneer Valley region, 3.7 percent. In every quarter of 2002, the Pioneer Valley region continued to have unemployment rates below those of the state, though they rose sharply to 5.0 percent in the 4th quarter of 2002, up

1.3 percentage points from the year before. In 2003 unemployment rates climbed still higher for the state and the region, reaching their highest points in the four-year period in the 1st quarter of 2003 at 6.1 percent for the Pioneer Valley region and 5.9 percent for Massachusetts. In the last two quarters of 2003, Pioneer Valley region unemployment rates remained above those of the state as a whole, but only by 0.2 percentage points in each case. Furthermore, the Pioneer Valley region's rising unemployment rates are largely a result of labor force growth in the region outpacing employment growth.¹



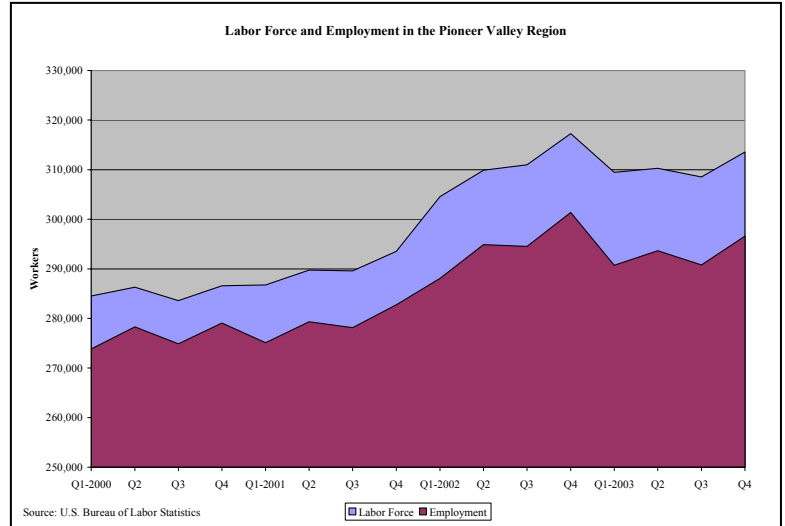
¹ Because the unemployment rate is the total number of people looking for work (who do not have work) divided by the total size of the labor force, if the labor force increases more quickly than employment, it has the effect of increasing the unemployment rate.

Labor Force and Employment

A region's labor force (the total of people working or looking for work) is one of its most important assets and a growing labor force is vital if a region is to successfully attract new businesses or support the expansion of existing businesses. For most quarters between 2000 and 2003, the Pioneer Valley region's labor force has grown. Overall, between the 4th quarter of 2000 and the 4th quarter of 2003, the Pioneer Valley region's labor force increased by 26,985 people, or 9.4 percent.² At its peak, the Pioneer Valley region's labor force reached 317,290 people in the 4th quarter of 2002.

Similarly, total employment in the Pioneer Valley region increased between 2000 and 2004. Overall, from the 4th quarter of 2000 until the 4th quarter of 2003, the Pioneer Valley region's employment increased by 17,536 people, or 6.3 percent.

Employment levels in the Pioneer Valley, like labor force size, peaked in the 4th quarter of 2002 at 301,368 workers.

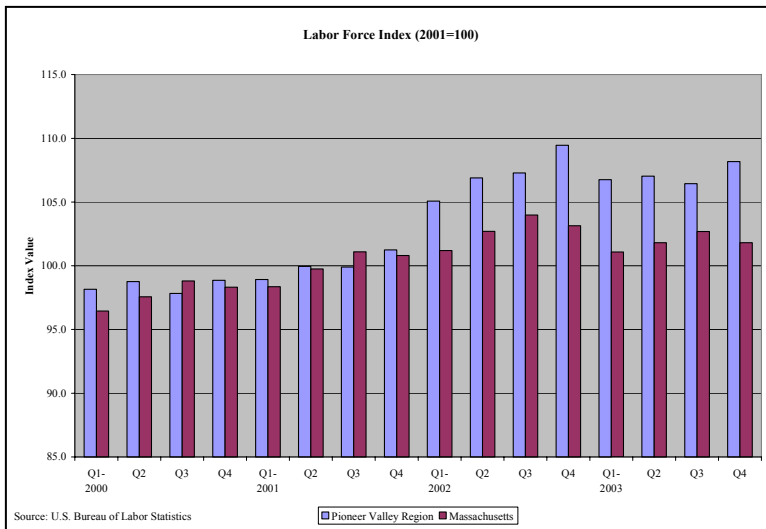


In order to compare the changes in total labor force or total employment in the Pioneer Valley region to the Commonwealth of Massachusetts as a whole, the numbers are translated into an index to account for the wide differences in the total population. The index is centered on a

benchmark, the average value for the four quarters of 2001, set at an index value of 100. Therefore, values above 100 indicate an increase over the average value for 2001 and values below 100 indicate a decrease over the average value for 2001.

From 2000 to 2003, the Pioneer Valley region's labor force index increased at a much faster rate than the index for the state as a whole. This trend particularly emerged beginning in 2002. For example, from 1st quarter 2002 to 1st quarter 2003, the Pioneer Valley region's labor force index rose by 1.6 percent, nearly double

the state growth rate of 0.9 percent. Over the entire period, from 4th quarter 2000 until 4th quarter

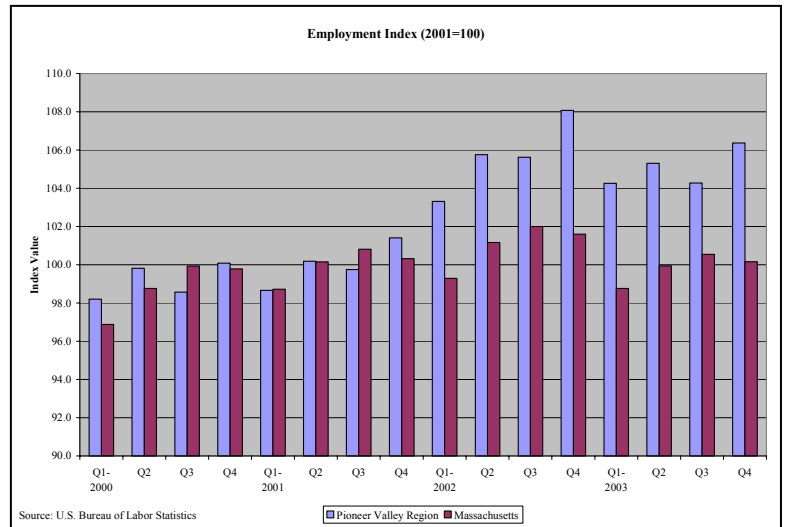


² Regional economic data like that used in this briefing is not seasonally adjusted; therefore, it is important when analyzing percent changes or growth to compare a particular quarter of one year to the same quarter in another year because there are seasonal patterns in most economic indicators. For example, the Holiday shopping season means that the 4th quarter of any given year will likely have much higher employment than the 1st quarter of the same year.

2003, the Pioneer Valley region's labor force index rose by 10.0 percent compared to only 3.4 percent for the state as a whole.

Applying the same index method to employment reveals a similar trend. With the exception of the 3rd quarter in 2000 and the 3rd quarter in 2001, employment in the Pioneer Valley region consistently exceeded employment in the state during this four-year period. The region's employment index increased by 5.9 percent from the 4th quarter of 2000 to the 4th quarter of 2003 when the state employment index rose by only 0.4 percent.

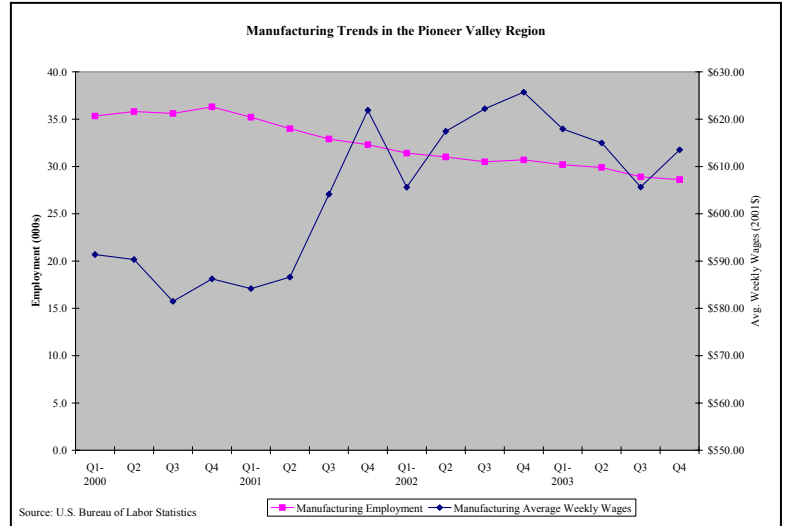
Over the past four years, the sizes of the region's labor force and employment base have increased dramatically and more quickly than in the Commonwealth of Massachusetts as a whole. These trends bode well for the region's economic future.



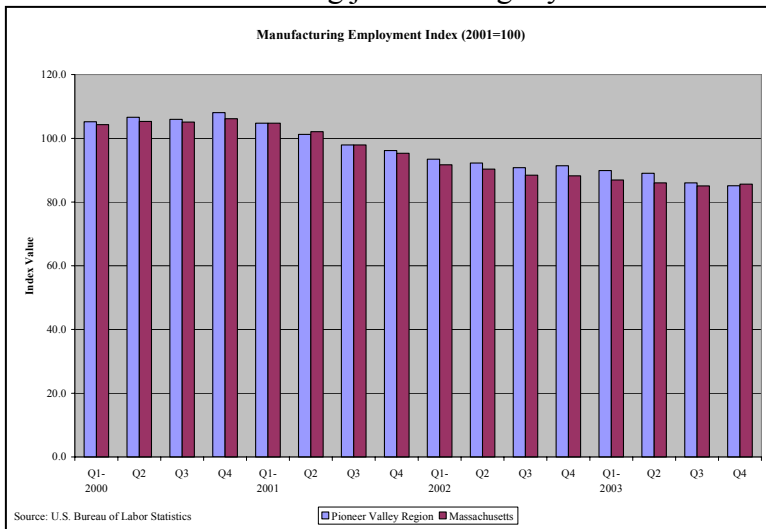
Manufacturing

Despite a slight increase in 2000, the number of people employed in manufacturing in the Pioneer Valley region declined over the last four years. From a peak of 36,300 manufacturing jobs in the 4th quarter of 2000, employment in the sector dropped to 28,600 jobs by the 4th quarter of 2003, a decline of 21.2 percent.

At the same time, average weekly wages in manufacturing have been trending higher (after controlling for inflation). The average weekly wages for manufacturing workers were at their lowest, \$581, in the 3rd quarter of 2000 and then soared to \$626, a 7.6 percent increase, by the 4th quarter of 2002. From there manufacturing wages have eroded slightly to \$614 in an average week in the 4th quarter of 2003 (down 1.9 percent from the previous year). That the loss of jobs in manufacturing is not accompanied by declining wages lends credence to the conclusion that manufacturing jobs in the Pioneer Valley region are lost as a result of efficiency gains, and as each worker produces more they can be paid a higher wage.



Reviewing the manufacturing employment index that compares the region to Massachusetts, it is evident that both have followed the same pattern, but the Pioneer Valley region appears to have lost manufacturing jobs at a slightly slower rate than the state as a whole in the last four years.

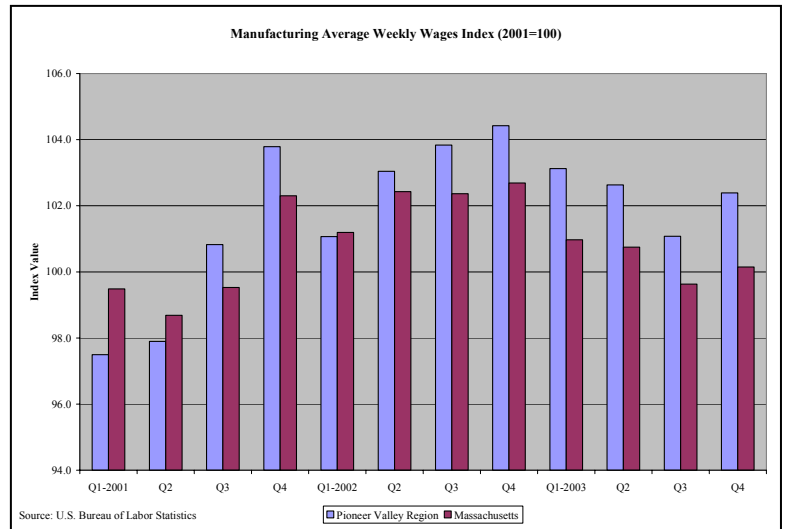


From the 1st quarter of 2000 until the same quarter in 2003, the Pioneer Valley region's manufacturing employment index dropped by 0.9 percent while the state's index dropped by 5.3 percent. When viewed in light of the labor force and employment index data, it appears that, despite increases in the size of the labor force and slight decreases in the number of manufacturing jobs, workers in the Pioneer Valley region are finding employment more readily than workers in the state as a whole. In the Pioneer Valley region, decreases in manufacturing employment do not appear to be driving

overall job losses; instead, other businesses and sectors appear to be growing quickly enough to offset manufacturing losses.

In all but three quarters from 2000 to 2003, the Pioneer Valley's manufacturing average weekly wage index was been higher than the same index for Massachusetts. The peak of the weekly

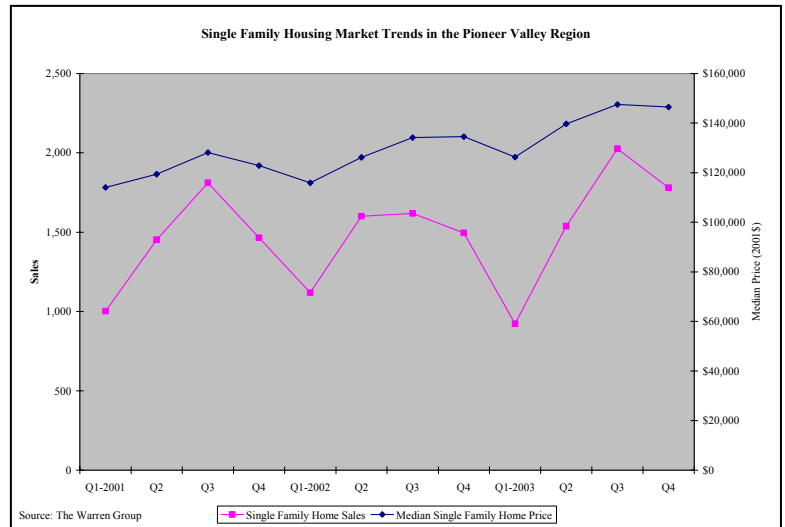
wage index for both the region and state was in the 4th quarter of 2002, when the Pioneer Valley region's wage index was 1.7 percent higher than that of Massachusetts. For this four year period, the average weekly wage in the Pioneer Valley region was higher than that for the state and increased at a much faster rate.



Existing Single-family Housing Market

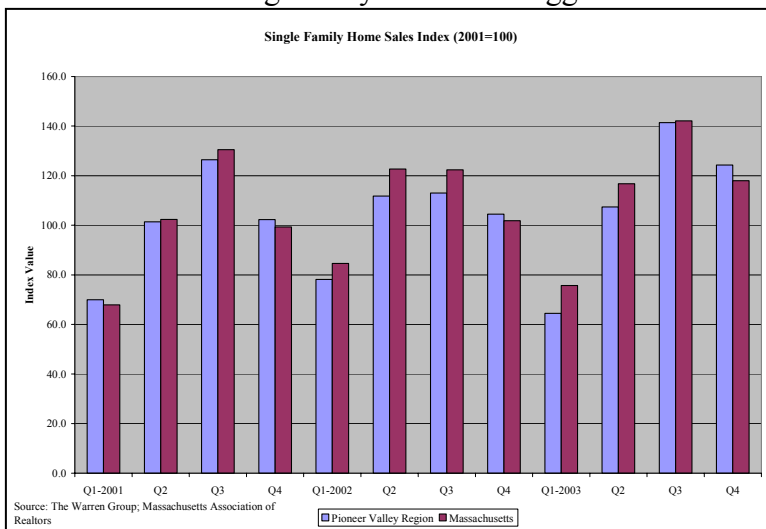
As the housing market is highly seasonal, the single-family housing market experienced some significant fluctuations in the number of single-family houses sold between 2001 and 2003. Quarters 2 and 3 are typically the strongest for home sales and that has been true in the Pioneer Valley over this three-year period. Using the 3rd quarter of each year as a comparison point, it is notable that total sales declined by 10.6 percent from 2001 to 2002 and then rebounded strongly and rose by 25.1 percent from 2002 to 2003.

The median sale price of a single-family home does not fluctuate as widely in response to seasons and overall the price of single-family homes has increased steadily over the last three years. At its lowest point, in the 1st quarter of 2001, the median sale price for single-family homes was \$114,056, but it rose by 28.4 percent to \$146,471 by the 4th quarter of 2003. Over the past three years, the peak single-family home price has been higher each year indicating a general trend of rising prices.



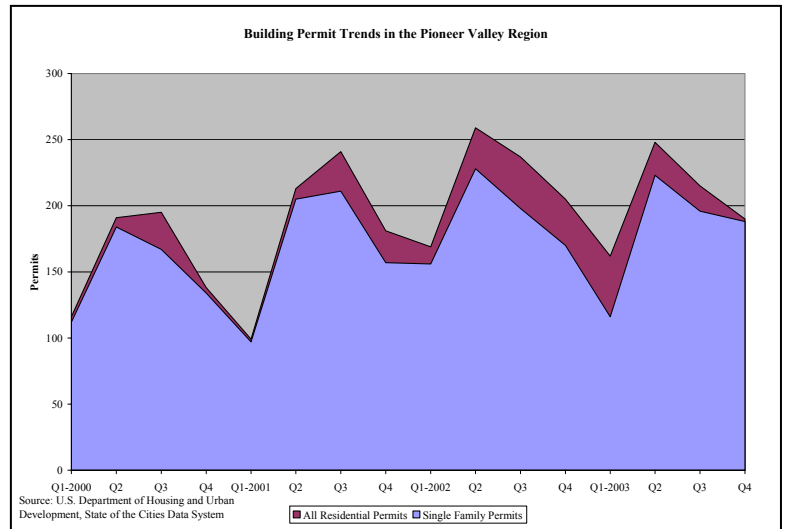
During this period, 2001 to 2003, the index of single-family home sales for both the state and the Pioneer Valley region increased slightly and at about the same rate, after accounting for seasonal shifts. Though many indicators suggest that the housing market has been more robust in the

eastern half of Massachusetts, the index of single-family home sales suggests that it has been equally vibrant in the Pioneer Valley.

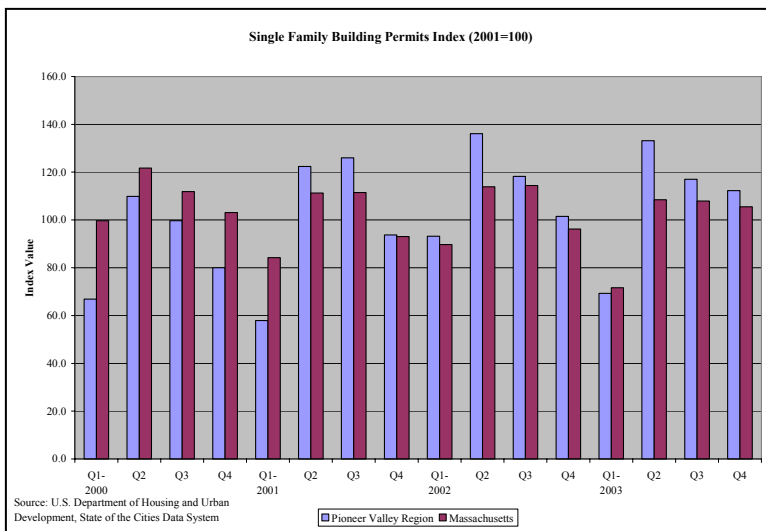


Residential Building Permits

Much like single-family home sales, data on building permits for new residential construction is highly seasonal. However, despite seasonal ebbs and flows, the number of single-family residential building permits issued in the Pioneer Valley region has been slowly increasing, suggesting a quickening pace of residential development. From the 2nd quarter of 2000 until the 2nd quarter of 2003, the number of single-family building permits issued rose by 21.2 percent, from 184 permits to 223 permits. The peak of single-family building during this four-year span was the 2nd quarter of 2002 when 228 single-family building permits were issued. The number of multi-family residential building permits issued is also rising steadily, and at a quicker pace than single-family permits.³ Between 1st quarter 2000 and 1st quarter 2003, the number of multi-family building permits issued rose from 4 to 46.



Despite the rapidly rising numbers of multi-family building permits, in the Pioneer Valley region between 2000 and 2003, the majority of all residential building permits were issued for single-family houses.



Comparing Pioneer Valley region residential building activity with the state as a whole reveals that for 10 of the 16 quarters between 2000 and 2003, the Pioneer Valley region's single-family building permit index was higher than the statewide index. Given the concerns in eastern Massachusetts about the limited availability of affordable housing, it is surprising that the Pioneer Valley has been more successful at increasing the rate of residential building. Significant increases in the issuance of residential building permits in the Pioneer Valley region could become a concern if development is

consuming significant quantities of open space or farmland.

³ Multi-family residential building permits is all residential building permits minus single-family permits.

The Pioneer Valley's Share of the State Economy

A general picture of the Pioneer Valley region's comparative economic success in the last four years may be gleaned from reviewing the region's overall percentage share of statewide totals in labor force, employment, manufacturing employment, single-family building permits, and all residential building permits. In all five categories, the Pioneer Valley region's share has increased to some degree between 2000 and 2003. For example, in the case of both labor force size and total employment, the Pioneer Valley region's share of the state total increased from 8.6 percent in the 4th quarter of 2000 to 9.1 percent in the 4th quarter of 2003. To some extent the Pioneer Valley region's gains are a result of the particularly significant negative impact of the recent economic recession on the Greater Boston area, but they also reflect the strength of the Pioneer Valley region's economy throughout the recession. Overall, the years from 2000 to 2003 have been positive for the region's economy as strength has been maintained in spite of difficult economic and fiscal times.

