



# The Keystone Research Center

The Keystone Research Center (KRC) was founded in 1996 to broaden public discussion on strategies to achieve a more prosperous and equitable Pennsylvania economy. Since its creation, KRC has become a leading source of independent analysis of Pennsylvania's economy and public policy.

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## OVERVIEW

The national recession ended in November 2001 after beginning in March of the same year. Only one of 11 U.S. recessions since World War II was shorter. Yet despite its brief duration, the recession's effects on working people have lasted longer than those of almost every other recession in the last six decades.

As of July 2004, 32 months after the end of the recession, the number of jobs nationwide had not yet recovered to the level of March 2001, when the recession began. Except after the first of the two back-to-back recessions of the early 1980s, there has never before been a recession since World War II in which employment was not higher 32 months into an economic expansion than at the beginning of the previous recession.

Pennsylvania's working people, like those of the nation as a whole, continue to suffer from job market problems that began during or after the 2001 recession. Indeed, Pennsylvania's economic recovery has taken longer and been even weaker than that of the nation as a whole.

### Job Losses and Unemployment

The number of jobs in the state recovered more slowly after the 2001 recession than after most previous recessions since World War II and more slowly than in the United States as a whole. Manufacturing, crucial to Pennsylvania's economic fortunes, has been especially hard-hit.

- In July 2004 Pennsylvania had 81,300 (1.4 percent) fewer jobs than it had when the recession started. The entire United States had 0.9 percent fewer jobs than when the recession started.
- Pennsylvania has gained jobs only in the four months March through June 2004, losing jobs in July, while the nation has gained them every month since September 2003.
- The state's 1.6 percent job loss from calendar year 2000 through calendar year 2003 was the fourth worst of any comparable period since World War II. Only in the periods following the 1957-58 recession (when the state lost 3.4 percent of its jobs between the pre-recession jobs peak and the second year after the end of the recession), the "double-dip" recessions of 1980-82 (3.1 percent loss), and the 1953-54 recession (2.1 percent loss) did Pennsylvania have larger percentage job losses than it had from 2000-2003. By the second year after the end of five of the 10 recessions since World War II, the state had gained jobs since its pre-recession or early-recession peak.
- The number of jobs has dropped more dramatically compared to the number of people who want jobs, measured by the change in Pennsylvania's working-age population. This population grew by an estimated 1.7 percent since March 2001. In July 2004 Pennsylvania was 181,000 jobs short of the number of jobs needed to keep pace with the expansion of the working-age population since March 2001.
- Manufacturing job loss has been especially severe. As of July 2004 Pennsylvania had 151,600 fewer manufacturing jobs than at the start of the recession, a 17.9 percent loss. In contrast, the nation as a whole lost 14.9 percent of its manufacturing jobs during this

time and the state lost only 7.7 percent of its manufacturing jobs during a comparable time period after the recession of the early 1990s.

- Although the state's unemployment rate has been lower since March 2001 than during or after the last two recessions, it was still 5.3 percent in July of this year, 0.1 percentage points higher than at the end of the 2001 recession and 1.3 percentage points higher than at the beginning of the recession. By 32 months after the end of each of the last two recessions the unemployment rate was at or below its level at the end of the recession.

## Job Quality

By several measures the quality of Pennsylvania's jobs has declined in recent years.

- Pennsylvania's inflation-adjusted median hourly wage fell slightly in 2003 to \$13.59, 4 cents per hour below its level in both 2001 and 2002 and 3 cents per hour below the national median wage.
- Pennsylvania men's wages fell from \$15.50 in 2000 and \$15.67 in 2001 to \$15.21 in 2003.
- The wages of low-wage workers (defined as those who earn more than 10 percent of workers and less than 90 percent of workers) declined from \$7.12 per hour in 2001 and \$7.09 per hour in 2002 to \$7.07 per hour in 2003.
- The average wage of production workers in Pennsylvania manufacturing was lower in July 2004 than in July of any of the three previous years. At \$15.08, it was nearly a dollar per hour below the average U.S. manufacturing wage of \$16.05 per hour.
- Since the beginning of the recession in Pennsylvania, sectors with lower wages have added jobs and sectors with higher wages have lost jobs. The nonagricultural industries whose wages exceeded the statewide average annual wage in 2002 lost a total of 5.3 percent of their jobs, while those whose wages were below the statewide average increased their employment by 2.9 percent.
- The share of workers employed part-time for "economic reasons" is one measure of the economy's ability to generate full-time work for all who want it. Although lower than in the nation as a whole, this percentage rose from 10.2 percent in 2000 (before the recession) to 11.9 percent in 2003. The national jump was much larger, from 10.8 percent to 14.7 percent.
- From 1999 to 2003 (the most recent year for which data are available) the number of Pennsylvanians without health insurance jumped 40 percent, from 989,000 to 1.38 million. The uninsured increased from 8.3 percent to 11.4 percent of the state's population. Both the number and share of Pennsylvanians without health insurance were higher in 2003 than in any year since 1987, the earliest year for which comparable Census data on health coverage are available.

- Poverty in Pennsylvania increased substantially since 2000 and 2003, especially for children. The share of children in poverty increased from 11.6 to 15.5 from 2000 to 2003, a jump of one third. From 2002 to 2003, the share of children in poverty increased from 13.8 percent to 15.5 percent. The share of adults in poverty increased from 8.5 percent to 10.5 percent between 2000 and 2003.

## Wage Gaps

Some wage gaps have widened in Pennsylvania since 2000 and others have narrowed slightly. The state has made long-term progress in narrowing the gender wage gap but gaps between top and bottom earners and between African Americans and whites remain much larger than in 1979.

- The wage gap between high- and low-wage earners in Pennsylvania narrowed slightly in 2003 but remained higher than in 2000 and much higher than in the late 1970s. In 2003 high-wage earners earned 426 percent of what low-wage earners did, down slightly from 431 percent in 2002 but up dramatically from 335 percent in 1979.
- The wage gap between men and women in Pennsylvania has been narrowing slowly, but this has come about partly because men's wages have fallen. In 2003 women earned 80 cents per hour for every dollar earned by men, up from 79 cents in 2002 and 71 cents in 1989.
- African Americans of both sexes generally received smaller raises (or suffered larger wage cuts) than their white counterparts during most of the period from 1979-2003. In 2003 black men earned 79 cents per hour for every dollar earned by white men, down from 86 cents in 1979. In 2003 black women earned 88 cents for every dollar earned by white women, down from 98 cents in 1979.

## Regional Differences

The effects of the recession and its aftermath have differed across the state's regions.

- Wages in metropolitan Philadelphia rose by nearly 1 percent in 2003 and wages in the smaller metropolitan areas of southern Pennsylvania (Allentown-Bethlehem-Easton, Reading, Harrisburg-Lebanon-Carlisle, Lancaster, and York) were up by 0.3 percent. But in metropolitan Pittsburgh and a "rest of the state" region consisting of non-metropolitan areas and smaller metropolitan areas wages fell by about 2 percent.
- Most of Pennsylvania's metropolitan areas lost jobs from 2000-2003 but Altoona, Harrisburg-Lebanon-Carlisle, and suburban Philadelphia (although not the City of Philadelphia or the entire metropolitan area) gained jobs. Allentown-Bethlehem-Easton's employment remained unchanged.
- The decline in manufacturing jobs was especially severe in the state's smaller metropolitan areas, where manufacturing is even more important to the local economy than it is statewide.

## Public Policy Barriers and Solutions

Much of the blame for Pennsylvania's and the nation's slow jobs recovery lies with federal economic policy. The tax cuts that Congress enacted in 2001 and 2003 were generally tilted toward high-income taxpayers. Because high-income households save a larger percentage of their tax cuts than do low- and middle-income households, the tax cuts of 2001 and 2003 failed to stimulate the economy as much they would have if they had provided greater proportional tax relief to the less well off.

Federal policy has done little to stem the loss of manufacturing jobs. The value of the dollar remains high by historical standards, putting U.S. manufactured products at a competitive disadvantage. And U.S. trade agreements with low-income countries do not contain enforceable labor standards and other mechanisms to ensure that wages rise as these countries attain much higher productivity levels.

Federal policy has also failed to raise the wages of low-wage earners. The federal minimum wage has not been increased since 1997. Since then the minimum wage has lost 8 percent of its purchasing power while productivity increased by 22 percent. And the work requirements in the federal welfare reform law pushed large numbers of people into the low-wage job market, slowing the growth of wages at the bottom.

At the state level in Pennsylvania, government has taken some steps to make the state a better place for working people.

- Following a governor's economic summit held in March, the Rendell Administration has begun to develop a manufacturing policy based on supporting companies to compete in higher-end markets more insulated from international price and wage pressures.<sup>1</sup> A repositioning of this kind will take time and patience to yield results visible in the aggregate manufacturing job and wage numbers. This repositioning is nonetheless essential if the state is to slow down the long-term decline of manufacturing jobs and improve the quality of the jobs that remain. This repositioning is especially crucial for many of Pennsylvania's smaller metropolitan areas and rural regions. In these regions, manufacturing still accounts for about one out of five jobs and remains the backbone of the middle class.
- The Rendell Administration has initiated a comprehensive reform of the state's workforce programs.<sup>2</sup> The goals of this plan include:
  - linking workforce development more tightly with the skill needs of Pennsylvania's critical economic clusters, in significant part through the creation of industry training partnerships;
  - raising educational attainment, including by making postsecondary occupational training more accessible to older workers;
  - building new industry-linked career pathways that expand opportunity for workers.

This plan incorporates the core recommendations of a January 2003 KRC report on workforce development and is at the cutting edge of U.S. efforts at the state level to implement strategic workforce programs.<sup>3</sup>

- The legislature and governor agreed on an economic stimulus package that will put over \$2 billion into community revitalization, business investment, and site preparation and infrastructure.<sup>4</sup> The stimulus program will create additional demand for goods and services in the Commonwealth. Unfortunately, no law currently ensures that economic stimulus dollars will be targeted at the communities, industry clusters, and public investments most likely to generate public benefits. In the past, as documented by KRC research, grants and loans from the Pennsylvania Department of Community and Economic Development have been distributed in a haphazard manner.<sup>5</sup>

Although too recent to have had an impact on the economic statistics in this report, the state's new manufacturing, workforce, and economic stimulus policies will contribute to job and wage growth in the years ahead, if sustained and deepened.

But the state could and should do even more than this. Unless public policy stimulates the economy further, the state's recovery is not likely for several years to make up for the 170,600-job shortfall built up since March 2001 relative to the size of Pennsylvania's working-age population. And economic growth alone cannot solve the problems of growing numbers of low-quality jobs and huge wage gaps between rich and poor Pennsylvanians.

In pointing to areas in which the state can do more, this report does not present a comprehensive blueprint. Instead it highlights options that link directly with the labor market problems documented in this year's *State of Working Pennsylvania* as well as options supported by KRC research published in the last year. Pennsylvania should:

- Raise the wages of Pennsylvania's lowest-paid workers by joining twelve other states (including neighboring Delaware) and the District of Columbia in raising its minimum wage above the federal level of \$5.15 per hour.<sup>6</sup> If the state does not act, local governments should enact their own minimum wages, as San Francisco, California; Santa Fe, New Mexico; and Madison, Wisconsin have done.
- Help retain Pennsylvania jobs by strengthening preferences for Pennsylvania- and other U.S.-made goods and services.
- Establish rules to ensure that economic development dollars create good jobs in the places that most need them.
  - Require disclosure of job quality, financial assistance per job (from all sources of state and local assistance), the site of the location where business assistance will be used, and the land-use characteristics of the site. (Comprehensive disclosure recommendations are outlined in a KRC report on business subsidy programs written for the Brookings Institution<sup>7</sup>.)
  - Establish standards for wages and benefits that ensure that the companies receiving assistance pay well above the minimum wage and decently by the

standards of their respective industries. The state should also limit total assistance per job and strengthen provisions that require companies to pay back money when they fail to deliver on job and wage promises.

- Direct economic stimulus, other state and local economic development subsidies, and tax breaks to older, higher-unemployment communities. For example, the General Assembly intended tax increment financing (TIF) districts to attract new businesses into blighted urban areas by giving generous tax breaks. Too often TIFs are now misused to promote development in upscale outlying areas, on farmland, even on trout streams. TIFs should be restricted to redeveloping, reusing, or revitalizing previously developed industrial or commercial property. Similarly, business subsidies and capital budget outlays should strengthen incentives for “infill” projects in abandoned industrial space and shopping centers.
- Increase state investment in the formation of multi-employer industry partnerships that bring together employers, unions, local governments, and community organizations, usually within a local area, to solve important problems facing employers and workers within an industry.<sup>8</sup> Multi-employer partnerships can address common skill, marketing, and employee benefit needs. Partnerships can also promote learning about job retention, organizational practices, and innovation in ways that benefit every member in circumstances where individual employers may lack the economic incentive or knowledge to acquire such information on their own.

Just two of the many such partnerships already operating in Pennsylvania are:

- the Southwestern Pennsylvania Partnership on Aging (SWPPA) which promotes high-quality care and better jobs in long-term care;
- the Building Trades Apprenticeship Initiative in Reading which helps urban youth to obtain the academic and practical skill needed to enter building trades apprenticeship programs.<sup>9</sup>
- Enact personal exemptions that eliminate state and local income and wage taxes on the first part of income. Modifying the state constitution to permit personal exemptions was part of a comprehensive state tax reform package put forward by a “PA21” business-labor tax project in a report released in April.<sup>10</sup> With no change in total tax revenue, personal exemptions combined with a higher flat income tax rate would make it possible to reduce the taxes paid by Pennsylvania’s low- and middle-income households. Such a shift would also increase federal income tax deductions claimed by higher-income taxpayers who itemize federal deductions. Both shifting the tax burden away from low- and middle-income taxpayers and increasing federal income tax deductions claimed by Pennsylvanians would stimulate the Pennsylvania economy.

Implementing these policy proposals would help wipe away the effects of the recession on Pennsylvania’s working people. Over the longer term they would improve economic opportunity, help more families become self-sufficient, boost Pennsylvania’s economy, and strengthen Pennsylvania’s cities and other older communities.

## INTRODUCTION

*The State of Working Pennsylvania 2004* paints a statistical portrait of the economic status of Pennsylvania's workers, families, and communities. It maps Pennsylvania's performance on such indicators of well-being as wage levels, wage inequality, unemployment, and job growth.

This year's report begins with a review of job, unemployment, and wage trends since the beginning of the 2001 recession. It compares Pennsylvania's performance since that time with its performance in similar time periods during and after past recessions.

The report displays most data over time, permitting current performance to be compared to that of the past. To put Pennsylvania's economic circumstances in broader perspective the report also compares the state's economy to that of the nation and sometimes to those of neighboring states.

Throughout the report dollar values are adjusted for inflation and expressed in 2003 dollars (i.e., the buying power of wages at 2003 prices) unless otherwise noted. For inflation adjustments the report uses the CPI-U-RS, a consumer price index developed by the Bureau of Labor Statistics.<sup>11</sup>

In analyzing trends during and after recessions the Keystone Research Center usually reports monthly data from the beginning of the recession through the 32nd month after the end of the recession. July 2004, the last month for which data were available before this report went to press, was the 32nd month after the end of the 2001 recession. Monthly data are seasonally adjusted unless otherwise noted. Where monthly data are unavailable KRC reports annual data.

In analyzing longer-term trends the report compares 2003 with 2002, 2000, 1995, 1989, and 1979. For Pennsylvania 1995 was the end of an extended period of wage decline and stagnation. Changes since 1995 make it possible to see how much wages have recovered since they started trending upward again. The years 1979, 1989, and 2000 were each high points in the business cycle. The year 1979 was also about the time that wages began to decline from their post-World War II peak.

## PENNSYLVANIA JOB MARKET IN THE RECESSION AND AFTER

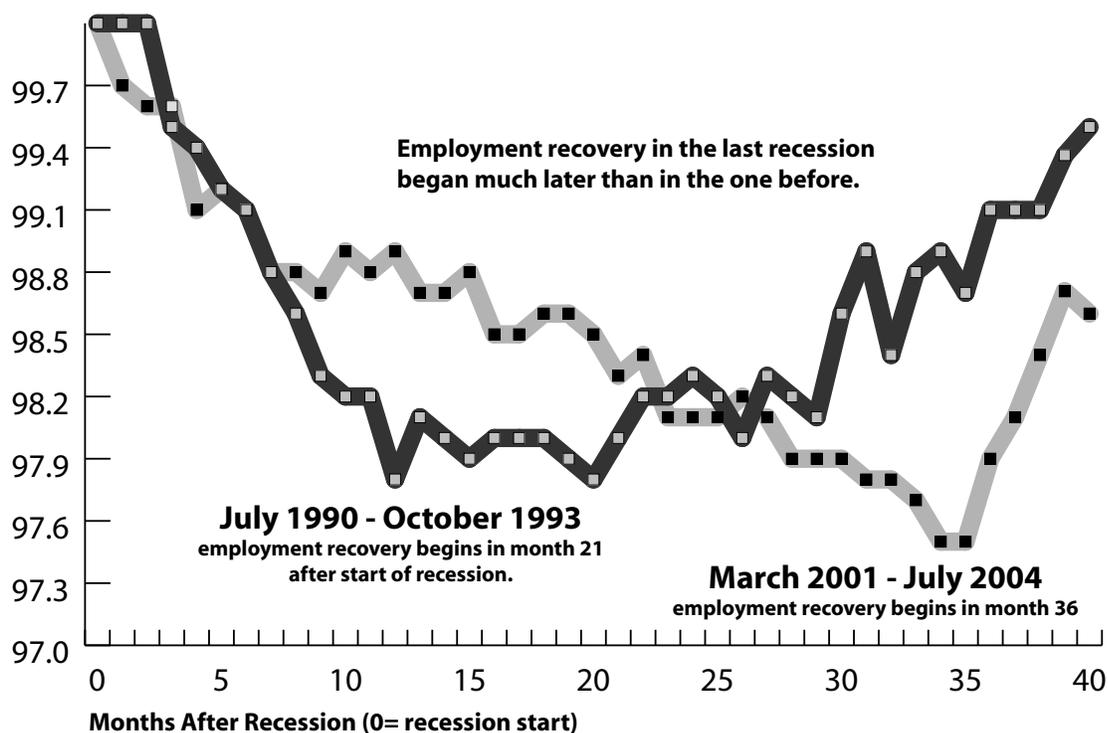
The recession that began in March 2001 officially ended eight months later in November of that year. Of the 11 recessions since World War II, only one was shorter than this one and three others were the same length. But despite its brief duration the 2001 recession continued to affect the working people of Pennsylvania and the nation long after it ended. In July 2004, 32 months after the end of the recession, Pennsylvania's job market, like that of the United States as a whole, was still in worse health than when the recession started.

This section takes an in-depth look at jobs, unemployment, the labor force, and wages in Pennsylvania from March 2001 through July 2004. To the extent that data permit, it compares Pennsylvania's recent economic performance with its performance during earlier periods of recession and recovery as well as with the performance of the U.S. as a whole since March 2001. It uses monthly data where possible.

### A Long, Slow Jobs Recovery

From the beginning of the recession in March 2001 until February 2004, when Pennsylvania employment reached its most recent low point, the state lost 142,300 jobs. Pennsylvania then gained jobs every from March through June before losing jobs again in July. In July employment was 61,000 jobs higher than in February but still 81,300 jobs lower than when the recession started.

**Figure 1. Pennsylvania Employment Index in Two Recessions**  
(100 = Employment at recession start)



Note: Recession dating from National Bureau of Economic Research.

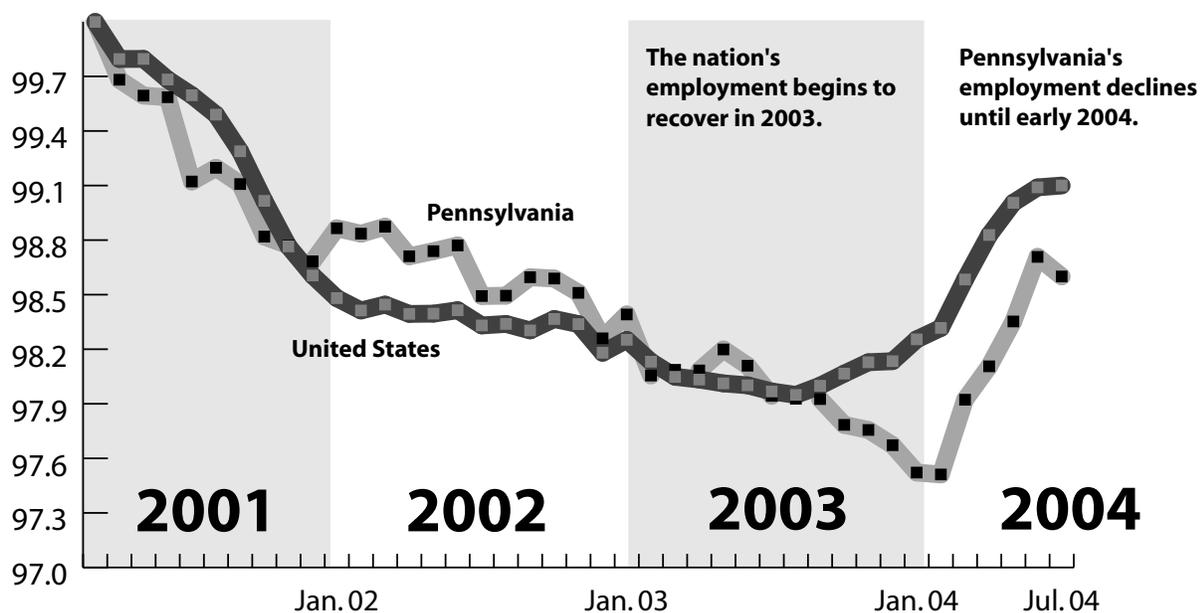
Source: Keystone Research Center (KRC) analysis of Current Employment Statistics (CES) and Pennsylvania Department of Labor and Industry (PDLI) data.

The state's jobs recovery has taken longer than the recovery after the recession of the early 1990s (Figure 1). The most recent job trough (lowest point after the start of the recession) came in February 2004, 35 months after the recession began and 27 months after it ended. After the 1990-91 recession there were two (equal) job troughs. The latter of these came 20 months after the recession began and 12 months after it ended.

The recent recovery has also been shallower than the one that followed the 1990-91 recession (Figure 1). By the 32nd month after the end of the 2001 recession Pennsylvania had 1.4 percent fewer jobs than when the recession began and 0.2 percent fewer than when it ended. By the 32nd month after the end of the early 1990s recession the state had only 0.5 percent fewer jobs than when the recession began and 0.9 percent more than when it ended.

Pennsylvania's recent jobs recovery also started about five months later and was shallower and (as of July) less sustained than that of the nation as a whole (Figure 2). The nation's most recent job trough came in August 2003, six months before Pennsylvania's. By July 2004 employment in the U.S. as a whole was 0.9 percent lower than at the start of the recession (March 2001), while employment in Pennsylvania was 1.4 percent lower.

**Figure 2. Employment in the United States and Pennsylvania, March 2001 to July 2004 (100 = Employment at recession start)**



Note: Recession dating from National Bureau of Economic Research.  
Source: KRC analysis of CES data.

### Small Job Losses in Recession...

In terms of job losses measured on an annual basis<sup>12</sup> the 2001 recession and its aftermath were not severe compared to earlier periods. Between the year 2000, when annual employment in Pennsylvania reached its high point before the 2001 recession, and 2003, when it reached its lowest level since the recession began, Pennsylvania lost 89,100 jobs, or 1.6 percent of its jobs. This percentage job loss from the pre-recession (or, in some cases, early-recession) jobs peak year to the

subsequent low-point (trough year) was the lowest of any recession since World War II (Table 1).

### But Jobs Performance 2000 to 2003 4<sup>th</sup>-Worst Since World War II

But the recent recession and its aftermath look much worse when the job change from the peak until the second calendar year after the end of the recession is considered (Table 1). By this measure the state's job performance through 2003 was the 4<sup>th</sup>-worst of any comparable period since World War II.

Only in the periods following the 1957-58 recession (when the state lost 3.4 percent of its jobs between the peak and the second year after the end of the recession), the "double-dip" recessions of 1980-82 (3.1 percent loss), and 1953-54 recession (2.1 percent loss) did Pennsylvania have larger job losses than it had from 2000-2003. By the second year after the end of five of the 10 recessions since World War II, the state had gained jobs since its pre-recession or early-recession peak.

**Table 1. Pennsylvania Employment Change in Recession Periods Since 1945**

Recession	Peak Year to 2 Years After Recession Ended	Peak Year to Trough Year
1945	6.7%	-3.1%
1948-1949	3.0	-4.6
1953-1954	-2.1	-5.6
1957-1958	-3.4	-4.8
1960-1961	-0.6	-2.2
1969-1970	0.6	-1.9
1973-1975	1.1	-1.7
1980-1982	-3.1	-5.9
1990-1991	-0.9	-1.8
2001	-1.6	-1.6

Note: Peak year is the year during or immediately before the recession when employment was highest. Trough year is the year during or within two years after the end of the recession when employment was lowest.

Source: Keystone Research Center (KRC) analysis of Current Employment Statistics (CES) data.

### Manufacturing Job Losses More Severe than in Early 1990s

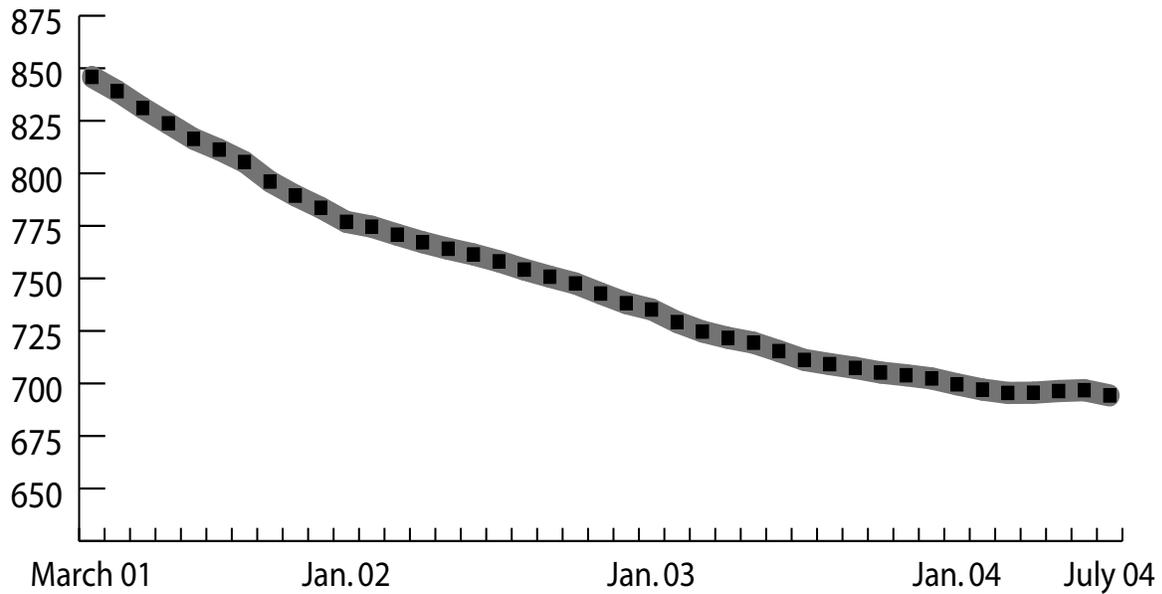
Figure 3 shows the number of manufacturing jobs in Pennsylvania, month by month, since the beginning of the 2001 recession. Figure 3 compares the state's manufacturing job losses during the first 40 months after the 2001 recession began with those during the first 40 months after the early 1990s recession began.

From March 2001-July 2004 Pennsylvania lost more manufacturing jobs, and a greater percentage of its manufacturing jobs, than it did during the comparable period of the early 1990s. According to data from federal Current Employment Statistics (CES) and the Pennsylvania Department of Labor and Industry (PDLI), manufacturing employment fell by 151,600 jobs, or 17.9 percent, since the start of the most recent recession. According to CES data, Pennsylvania's manufacturing employment fell by 72,800 jobs, or 7.7 percent, during the same period of time after the onset of the early 1990s recession.

Pennsylvania's manufacturing job losses during and after the 2001 recession were also more severe than those of the nation as a whole. Figure 4 compares Pennsylvania's manufacturing job losses with those of the entire United States during this period. The state's loss of 17.9 percent of its manufacturing jobs from March 2001-July 2004 exceeded the nation's loss of 14.9 percent. State and national trends in manufacturing jobs during and after the recession were very similar until 2003, when the nation began to lose manufacturing jobs at a slower rate than Pennsylvania.

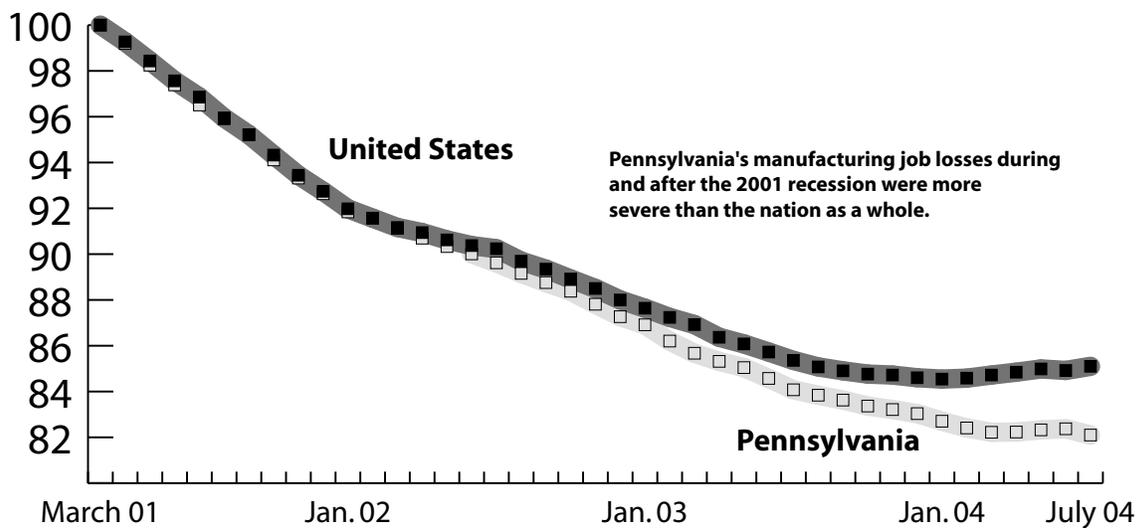
In early 2004 both Pennsylvania and the nation experienced small increases in manufacturing employment for the first time since July 2000. Pennsylvania's gains occurred only in April and May

**Figure 3. Pennsylvania Manufacturing Employment, March 2001 - July 2004  
(in thousands, seasonally adjusted)**



Source: KRC analysis of CES and PDLI data.

**Figure 4. U.S. and Pennsylvania Manufacturing Employment Index  
March 2001 - July 2004 (100 = employment at recession start)**



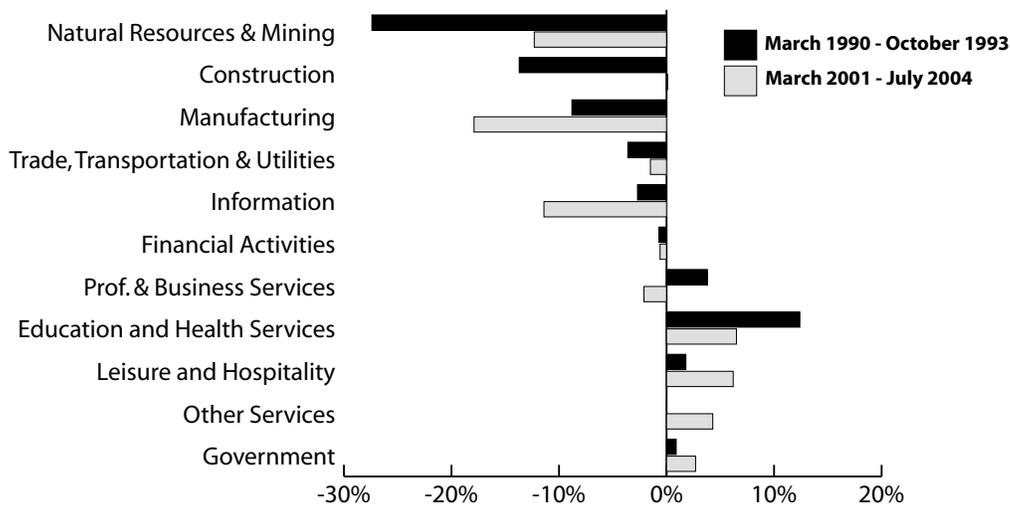
Source: KRC analysis of CES data and PDLI data.

and were more than wiped out by subsequent losses. The U.S. as a whole saw gains from February through May and then lost jobs in June before gaining them again in July.

## Low-Wage Industries Gain Jobs, High-Wage Industries Lose Jobs

From March 2001-July 2004 Pennsylvania lost jobs in manufacturing, information, natural resources and mining, trade/transportation/utilities, and professional and business services. It gained jobs in other major industries, with the greatest percentage gains coming in education and health services and leisure and hospitality (Figure 5). Overall the nonagricultural industries whose wages exceeded the statewide average annual wage in 2002 lost 5.3 percent of their jobs, while those whose wages were below the statewide average increased their employment by 2.9 percent (Figure 6).<sup>13</sup>

**Figure 5. Percent Change in Employment by Industry in Pennsylvania, March 1990 - October 1993 and March 2001 - July 2004**



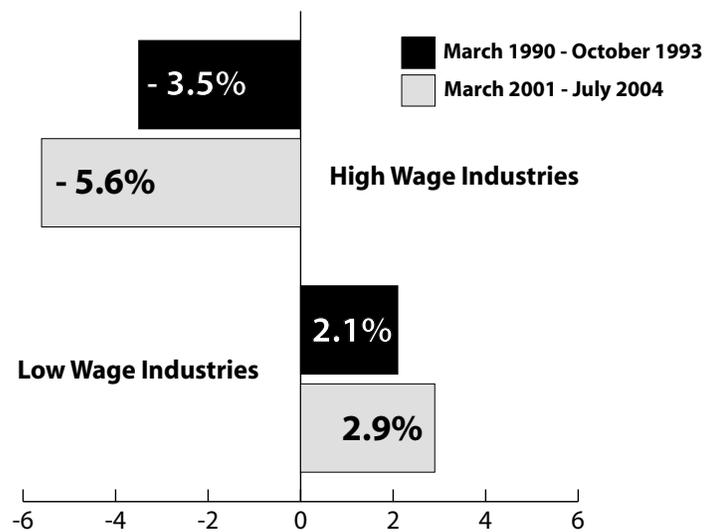
Source: KRC analysis of CES data.

Of course there are high-wage jobs in low-wage industries and low-wage jobs in high-wage industries. But these data suggest that the quality of the jobs added in Pennsylvania since the onset of the 2001 recession was lower than that of the jobs that were lost.

Pennsylvania's job losses during and after the early 1990s recession were more broadly based than those that occurred since March 2001. From July 1990-November 1993 Pennsylvania lost jobs in natural resources and mining, construction, manufacturing, trade/transportation/utilities, information, and financial activities. It gained jobs in education and health services, professional and business services, leisure and hospitality, and government but only education and health services experienced a job gain of more than 4 percent (Figure 5).

From July 1990 to November 1993 the state lost jobs in high-wage industries and gained them in low-wage industries (Figure 6). But both the low-wage industry job gains and the high-wage industry job losses were smaller in percentage terms than during the more recent period. This suggests that the quality of the state's new jobs was lower than that of the jobs it lost after the onset of the 1990-91 recession. But the difference in quality between jobs gained and jobs lost was not as great as since the beginning of the 2001 recession.

**Figure 6. Percentage Change in Employment in High- and Low-Wage Industries\*, March 1990 - October 1993 and March 2001 - July 2004**



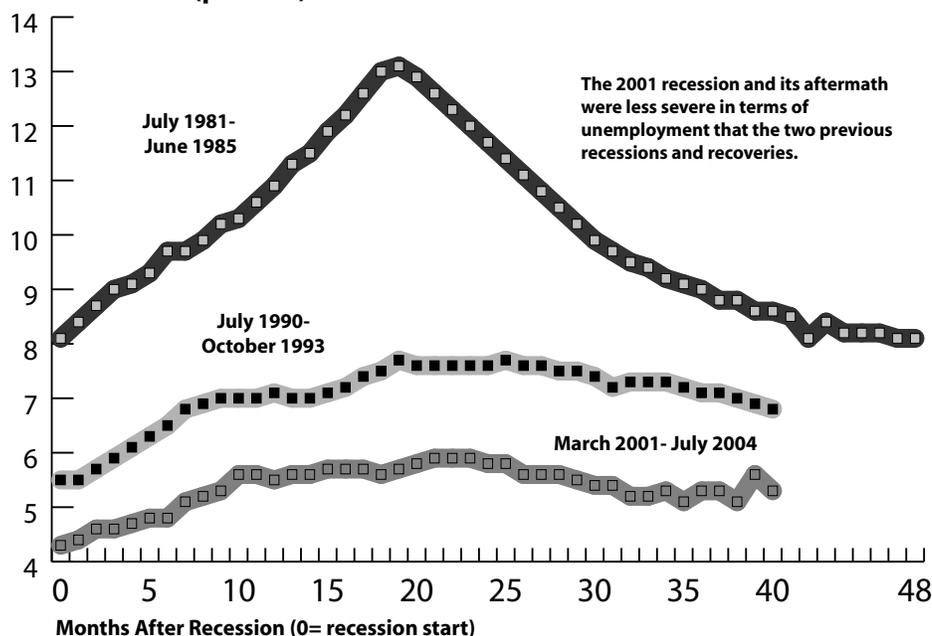
\* KRC classified industries as high- or low-wage based on whether their 2002 Pennsylvania average annual wages, calculated from BLS Quarterly Census of Employment and Wages data, were greater than or less than the statewide 2002 average annual wage (calculated from the same source). By this criterion construction, manufacturing, information, financial activities, professional and business services, and public administration were high-wage industries, while natural resources and mining, trade/transportation/utilities, education and health services, leisure and hospitality, and other services were low-wage industries.

Source: KRC analysis of CES data.

## Unemployment Lower Than In Previous Recessions But Recovery Taking Longer

The 2001 recession and its aftermath were less severe in terms of unemployment than the two previous recessions and recovery periods. Unemployment rates were lower in every month during and after the most recent recession than they were in comparable periods during and after the 1990-91 and 1981-82 recessions (Figure 7).

**Figure 7. Pennsylvania Unemployment Rate in Three Recessions and Recoveries (percent)**



Note: Recession dating from National Bureau of Economic Research.

Source: KRC analysis of Bureau of Labor Statistics (BLS) Local Area Unemployment Statistics (LAUS).

From March 2001-July 2004 Pennsylvania's unemployment rate averaged 5.4 percent, compared with 7 percent from July 1990-November 1993 and 10 percent from July 1981-July 1985.

Unemployment also increased less during and after the most recent recession than it did during and after the two previous ones. The difference between the highest and lowest unemployment rates during the March 2001-July 2004 period was 1.6 percentage points, compared with 2.2 percentage points during July 1990-October 1993 and 5 percentage points during July 1981-July 1985.

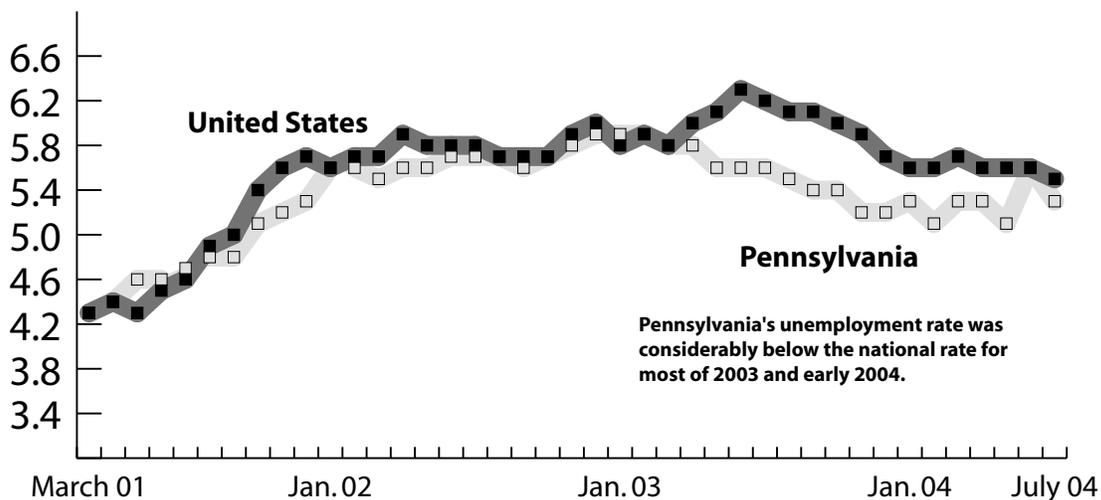
But the unemployment rate is taking longer to recover this time around. By 32 months after the end of each of the two previous recessions Pennsylvania's unemployment rate had returned to or fallen below where it was in the month the recession ended and remained at or below that level for more than six subsequent months. In July 2004, though, 32 months after the beginning of the 2001 recession, the state's unemployment rate, 5.3 percent, was 0.1 percentage points higher than in November 2001.

During the first two years after the start of the 2001 recession Pennsylvania's unemployment rate was usually at or slightly below the national unemployment rate, but it was considerably below the national rate for most of 2003 and early 2004 (Figure 8).

The trend was similar for the state and national rates. The state's unemployment rate trended upward from 4.3 percent in March 2001 to a high of 5.9 percent in December 2002-February 2003. It trended downward to 5.1 percent in May 2003 before rising back to 5.6 percent in June of this year and then dropping to 5.2 percent in July.

The national unemployment rate peaked later than the state's but at a higher level. It trended upward from 4.3 percent in March 2001 to a high of 6.3 percent in June 2003 and then trended downward to 5.6 percent by the beginning of 2004. The national unemployment rate remained nearly unchanged at either 5.6 percent or 5.7 percent from December 2003-June 2004 and then fell slightly to 5.5 percent in July.

**Figure 8. U.S. & Pennsylvania Unemployment Rate, March 2001 - July 2004**



Source: KRC analysis of CES and PDLI data.

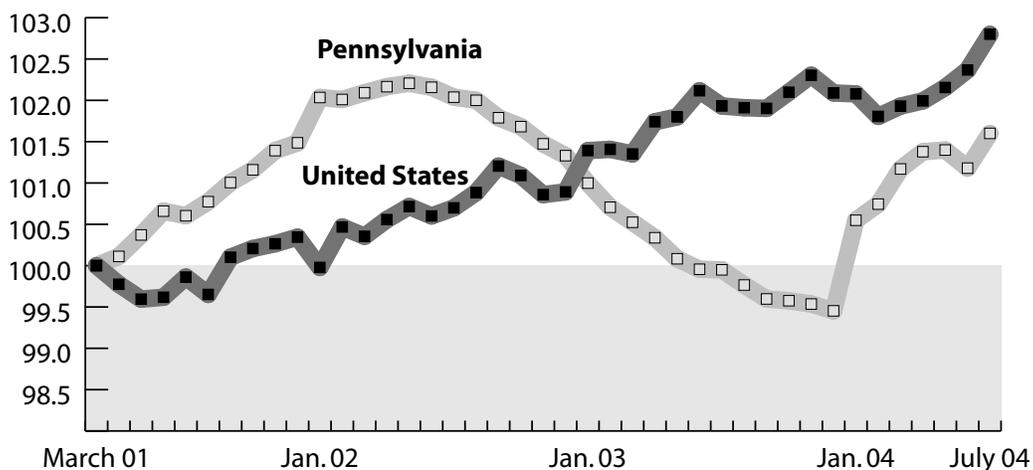
## Pennsylvania Labor Force Recovery Slower than Nation's and than in Early 1990s

By itself the unemployment rate paints an incomplete picture of the amount of slack in the job market. The official definition of the unemployment rate is the number of unemployed workers (defined as people out of work who are looking for jobs) as a percentage of the labor force (defined as the sum of the numbers of employed and unemployed people). Discouraged workers—people who want and are available for work but who have given up looking for jobs—are counted as being out of the labor force rather than as being unemployed. Therefore, a decline in the size of the labor force during or after a recession may indicate a growing number of discouraged workers.

If enough people become discouraged and drop out of the labor force then the unemployment rate may fall even as more slack develops in the job market. On the other hand, as the economy improves some discouraged workers eventually begin looking for jobs again and the labor force then grows.

From the beginning of the 2001 recession until the middle of 2002 the Pennsylvania labor force grew faster than that of the nation as a whole (Figure 9). From mid-2002 through the end of 2003, though, the state's labor force fell, eventually dropping below its level at the beginning of the recession. Many Pennsylvanians may have become discouraged and given up looking for jobs during this time. At the same time the national labor force continued to grow. In early 2004 the state's labor force then grew rapidly before falling slightly in June and rebounding in July. Despite Pennsylvania's rapid labor force growth in the first half of 2004 the state's labor force was only 1.6 percent higher in July 2004 than in March 2001, while the nation's labor force was 2.8 percent higher.

**Figure 9. U.S. and Pennsylvania Labor Force Index, March 2001 - July 2004 (100 = Labor Force at recession start)**



Note: Recession dating is from National Bureau of Economic Research.  
Source: KRC analysis of BLS LAUS data.

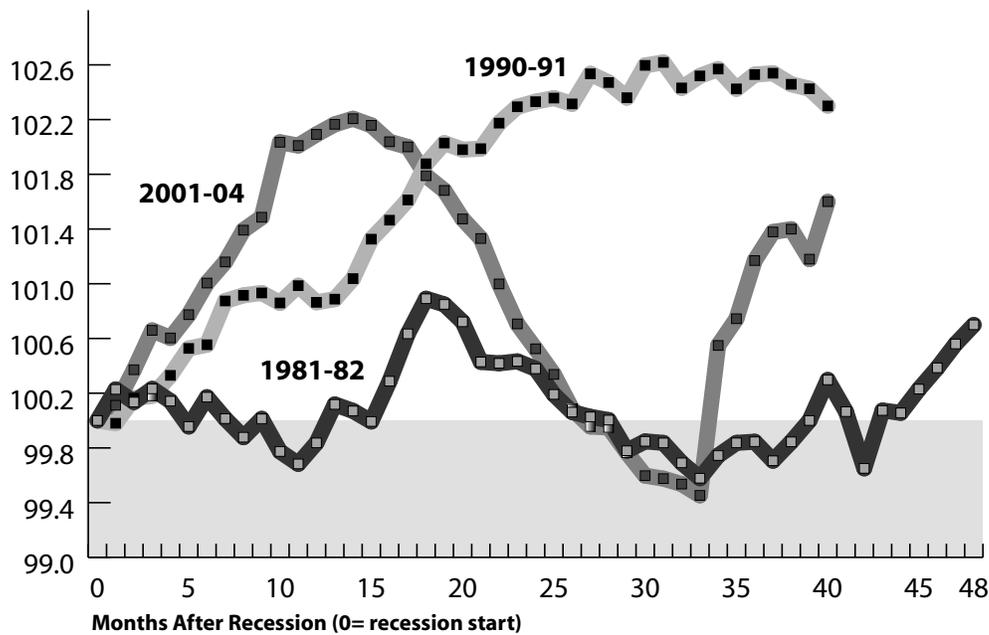
Figure 10 compares the Pennsylvania labor force during and after the recessions of 2001, 1990-91, and 1981-82. After the 2001 recession the state's labor force recovered more slowly than after the early 1990s recession but more rapidly than after the 1981-82 recession. The labor force never fell during or after the early 1990s recession. Thirty-two months after that recession ended the labor force was 2.3 percent higher than when the recession began. During and after the 1981-82 recession the labor force did not fall or rise by as much as it did after March 2001. Thirty-two months after

that recession ended the labor force was only 0.7 percent higher than when that recession began.

## Since March 2001, Jobs 181,000 Short of Keeping Pace with Working-Age Population

One way to measure the adequacy of job growth is to compare it with the growth of the working-age population. The growth of this population is a rough measure of the growth in the number of people who want jobs. It has the advantage of not being influenced by hard-to-interpret movements of people in and out of the labor force.

**Figure 10. Pennsylvania Labor Force Index in Three Recessions and Recoveries (100 = Labor Force at recession start)**



Note: Recession dating from National Bureau of Economic Research.  
Source: KRC analysis of BLS LAUS data.

Using population-growth estimates developed by the economic forecasting firm Economy.com, the Economic Policy Institute (EPI) reports that the Pennsylvania working-age population (ages 20-64) grew by 1.7 percent between the start of the recession and July 2004. This compares with a 1.3 percent decline in the number of jobs over the same period. (The EPI data are online at [www.jobwatch.org/20040820state\\_job\\_growth\\_pop\\_growth.pdf](http://www.jobwatch.org/20040820state_job_growth_pop_growth.pdf).) If the rate of job growth since the recession began had kept up with the rate of working-age population growth, Pennsylvania would have had approximately 181,000 more jobs in July 2004.

## Pennsylvania Manufacturing Wages Lower

Recent national reports have highlighted the stagnation of the inflation-adjusted wages of non-supervisory workers in the U.S. economy. The only available data on Pennsylvania non-supervisory workers in 2004 are for the average hourly earnings of production workers in manufacturing. Because these data are not seasonally adjusted the only comparisons that can be made since the

beginning of the 2001 recession are those for the same month in different years.<sup>14</sup>

Pennsylvania manufacturing workers lost ground since July 2002 and had lower earnings this July than in any July since the recession started (Table 2). Their average earnings in July 2004 were \$15.08 per hour. This was 12 cents per hour lower than in July 2003, 30 cents per hour lower than in July 2002, and 13 cents per hour lower than in July 2001. (All these dollar amounts are expressed in 2004 dollars using an estimated value for the 2004 CPI-U-RS.)

**Table 2. Average Hourly Earnings of Production of Non-Supervisory Workers in Pennsylvania and U.S. Manufacturing (2004 dollars)\***

	<b>July 2001</b>	<b>July 2002</b>	<b>July 2003</b>	<b>July 2004**</b>
U.S.	15.58	15.83	15.93	16.02
Pennsylvania	15.21	15.38	15.20	15.08

\*Inflation adjustments are based on an estimated CPI-U-RS for 1994 provided by EPI. \*\* Preliminary data subject to revision. Source: KRC analysis of CES data.

Comparably measured hourly earnings in manufacturing nationwide, unlike in Pennsylvania, did not fall since July 2001 and were 47 cents per hour higher in July 2004 than in July 2001. In July 2004 average hourly earnings in all U.S. manufacturing were \$16.02, 97 cents per hour higher than in Pennsylvania.

## JOB QUALITY, 1979-2003

Wages and salaries account for about three-quarters of family income on average. They account for an even larger share of the incomes of middle- and low-income families. Wages are, therefore, a major determinant of living standards for most families and a key influence on income inequality. This section examines trends in wage levels and wage inequality from 1979 through 2003.

As in previous editions of *The State of Working Pennsylvania* this edition focuses much of its analysis on the median wage. The median is the wage earned by the person whose wage falls exactly in the middle of the wages of all workers. Median wage earners earn more than half of all workers and less than the other half. The median wage is the best measure of a typical worker's wage.

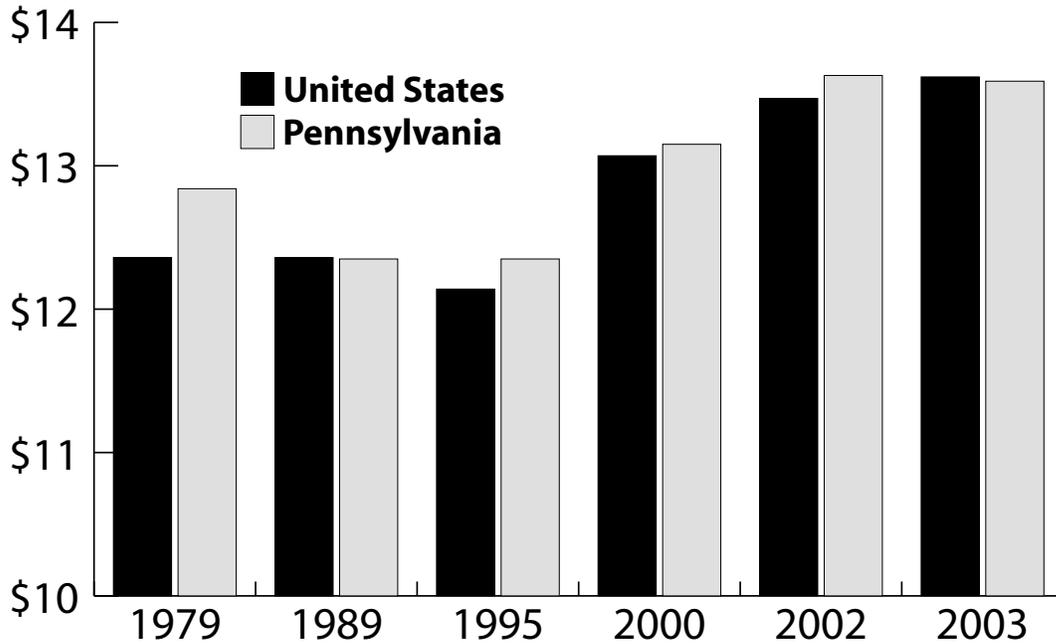
### Pennsylvania Wages Down Since 2002

After falling from 1979-1989, stagnating from 1989-1995, and rising substantially from 1995-2000 and 2000-2002, Pennsylvania's inflation-adjusted median hourly wage fell by four cents per hour from 2002-2003 (Table 3 and Figure 11). Although the state's median wage continued to rise during and shortly after the 2001 recession and remains higher than it was in 2000 (the year before the recession began), last year's wage decline could be a result of the long period of job market slack that began during the recession and continued until earlier this year.

	All Workers		Men		Women	
	PA	U.S.	PA	U.S.	PA	U.S.
1979	\$12.84	\$12.36	\$15.97	\$15.55	\$9.75	\$9.74
1989	12.35	12.36	14.44	14.46	10.20	10.57
1995	12.35	12.14	14.40	13.94	10.64	10.69
2000	13.15	13.07	15.50	14.89	11.26	11.61
2002	13.63	13.47	15.34	15.17	12.10	12.16
2003	13.59	13.62	15.21	15.04	12.16	12.18
<b>Percent Change</b>						
1979-2003	5.8%	10.2%	-4.8%	-3.3%	24.7%	25.1%
1989-2003	10.0	10.2	5.3	4.0	19.2	15.2
1995-2003	10.0	12.2	5.6	7.9	14.3	13.9
2000-2003	3.3	4.2	-1.9	1.0	8.0	4.9
2002-2003	-0.3	1.1	-0.8	-0.9	0.5	0.2
Source: Economic Policy Institute (EPI) analysis of Current Population Survey (CPS) data.						

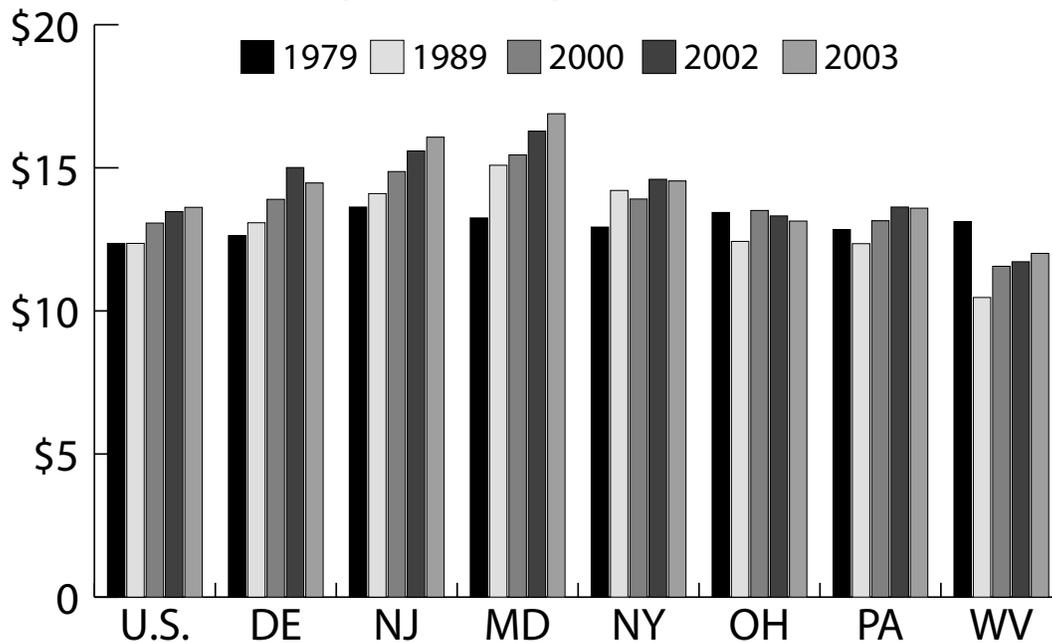
Pennsylvania's wage performance in the last year lagged behind that of the nation as a whole in both wage levels and wage growth. During most of the period since 1979 Pennsylvania's median wage was higher than that of the nation as a whole but in 2003 it was three cents per hour below the national median. And while Pennsylvania's median wage fell from 2002-2003 the national median wage rose by 15 cents per hour.

**Figure 11. Median Wage in United States & PA in Selected Years (2003 dollars)**



Source: Economic Policy Institute (EPI) analysis of Current Population Survey (CPS) data.

**Figure 12. Median Wage in PA & Surrounding States in Selected Years (2003 dollars)**



Source: EPI analysis of CPS data.

Over the long term Pennsylvania's median wage generally has not grown as rapidly as that of the United States as a whole. Comparing the 2003 median wage with those of 1979, 1989, 1995, 2000, and 2002, Pennsylvania's median wage rose by a smaller percentage than the national median in each case.

Compared with neighboring states Pennsylvania ranks in the middle in terms of wage levels and recent wage growth (Figure 12). In 2003 Pennsylvania's median wage of \$13.59 per hour was lower than the median wages in New Jersey (\$16.89 per hour), Maryland (\$16.07 per hour), New York (\$14.54 per hour), and Delaware (\$14.47 per hour), but higher than those of Ohio (\$13.14 per hour) and West Virginia (\$12.01 per hour).

Pennsylvania workers were not alone in experiencing wage cuts in 2003. Among neighboring states, Delaware, Ohio, and New York also saw declines in median wages, and all these declines were greater in percentage terms than Pennsylvania's. The median wage rose in 2003 in New Jersey, Maryland, and West Virginia.

### **Men's Wages Fall, Women's Rise in Recession and Its Aftermath**

The slack job market during and after the recession took a greater toll on men than on women in Pennsylvania. Table 3 shows that men's wages fell by 14 cents per hour in 2003. They fell by 46 cents, from \$15.67 to \$15.21, between 2001 (not shown in the Table) and 2003.

Women's wages rose by 84 cents per hour from 2000-2002 and by an additional six cents per hour in 2003. Nationwide, men's wages also fell in 2003 (although they rose from 2000-2002, unlike in Pennsylvania), and women's wages also increased steadily since 2000.

Over the long term women's wages grew more rapidly than men's in every period shown in Table 3. From 1979-2003 Pennsylvania men's wages fell by nearly 5 percent while women's wages rose by nearly 25 percent. From 1989-2003 Pennsylvania men received a raise of just over 5 percent while women received a raise of more than 19 percent. The nationwide patterns were similar.

As a result of these changes the wage gap between men and women has narrowed considerably over the last three decades. The data shown in Table 3 mean that in 1979 Pennsylvania women earned 61 cents per hour for every dollar their male counterparts earned. By 1989 this figure increased to 71 cents and in 2003 it was 80 cents.

### **Wages Up Only for White Women and Black Men**

From 2000-2003 and 2002-2003 white women and African American men were the only race-sex groups in Pennsylvania whose wages increased (Table 4). White women received raises of 10.1 percent from 2000-2003 and 1.8 percent from 2002-2003, while black men's wages rose by 6.4 percent from 2000-2003 and an extraordinarily high 11.1 percent from 2002-2003. White men's wages were lower in 2003 than in 2000 and were unchanged from 2002-2003. Black women's wages in 2003 were 3 percent higher than in 2000 but 5.5 percent lower than in 2002.

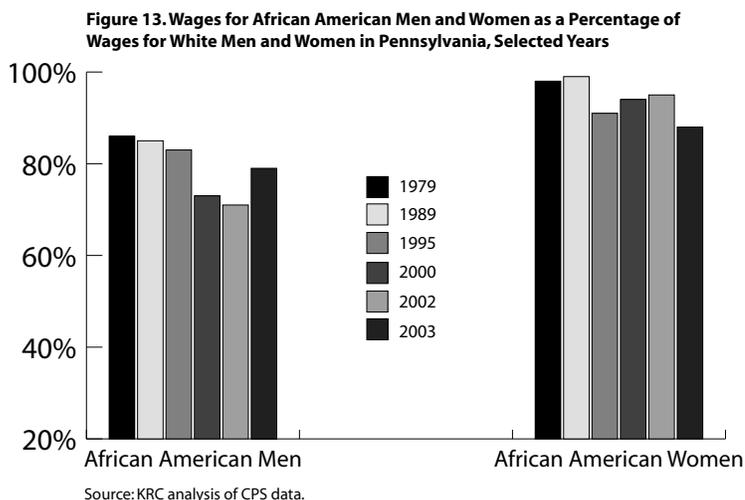
These recent patterns for whites are consistent with long-term trends but for African Americans they are very different. Comparing 2003 with 1979, 1989, and 1995, white women received substantially larger percentage raises than white men in each case. (From 1979-2003 white men's wages declined

Table 4. Median Hourly Wages in Pennsylvania by Race and Sex, 1979-2003 (2003 dollars)											
	1979	1989	1995	2000	2002	2003	Percent change				
							1979-2003	1989-2003	1995-2003	2000-2003	2002-2003
<b>WHITE</b>											
Men	\$16.44	\$14.47	\$14.38	\$16.02	\$15.92	\$15.92	-3.1%	10.0%	10.7%	-0.6%	0.0%
Women	9.86	10.17	10.79	11.35	12.27	12.50	26.8	22.9	15.9	10.1	1.8
<b>BLACK</b>											
Men	14.09	12.28	11.99	11.75	11.25	12.50	-11.3	1.8	4.3	6.4	11.1
Women	9.63	10.09	9.83	10.68	11.64	11.00	14.3	9.1	11.9	3.0	-5.5

Source: KRC analysis of CPS data.

by about 3 percent while white women’s wages rose by nearly 27 percent.) In contrast, comparing 2003 with each of these years before 2000, African American women received much greater percentage raises than their male counterparts. (From 1979-2003 black men’s wages fell by more than 11 percent while black women’s wages rose by just over 14 percent.)

Racial wage differences have generally gotten larger over the long term for both men and women (Figure 13). In 1979 black men earned 86 cents per hour for every dollar earned by white men. This figure fell to 71 cents by 2002 and rose to 79 cents in 2003, still below its 1979 level. In 1979 black women earned 98 cents per hour for every dollar earned by white women. This figure was 95 cents in 2002 and 88 cents in 2003. The growing racial wage gaps are due to the fact that African Americans of both sexes generally received smaller raises (or suffered larger wage cuts) than their white counterparts during most of the period from 1979-2003.



### Women With Some College Education Make Greatest Wage Gains

During the 1980s and early 1990s Pennsylvania workers with more formal education generally received larger raises. Women with less than a high school diploma and, to some extent, men with less than a college degree actually suffered large wage cuts from 1979-2003 and 1989-2003 (Table 5 and Figure 14). For example, men with no high school diploma took wage cuts of nearly a third from 1979-2003, men with high school diplomas but no further schooling took cuts of about 14 percent, and women without high school diplomas took a 10 percent cut. At the same time, wages rose by more than a third for men and women with graduate degrees.

But after 2000 this pattern changed. Men with some college but no bachelor’s degree (including those with associate degrees) saw their wages fall after 2000, as they had until 1995. But women in

Table 5. Median Hourly Wages in Pennsylvania by Education Level, 1979-2003 (2003 dollars)											
	1979	1989	1995	2000	2002	2003	Percent change				
							1979-2003	1989-2003	1995-2003	2000-2003	2002-2003
<b>MEN</b>											
No HS Diploma	\$14.56	\$12.18	\$10.67	\$9.61	\$10.23	\$9.95	-31.6%	-18.3%	-6.7%	3.5%	-2.7%
HS Diploma	15.73	13.32	13.19	13.35	13.55	13.50	-14.2	1.3	2.4	1.1	-0.4
Some College	15.50	14.33	14.38	14.57	14.32	13.85	-10.6	-3.3	-3.7	-4.9	-3.3
College Graduate	19.61	19.70	20.17	22.59	22.42	22.60	15.3	14.7	12.0	0.0	0.8
Postgraduate	21.62	24.25	26.85	28.24	31.15	28.85	33.4	18.9	7.4	2.2	-7.4
<b>WOMEN</b>											
No HS Diploma	8.34	7.88	7.49	7.48	7.67	7.50	-10.0	-4.8	0.1	0.3	-2.2
HS Diploma	9.39	9.31	9.53	10.07	10.23	10.38	10.5	11.5	8.9	3.0	1.5
Some College	10.07	10.74	10.34	11.11	11.44	12.00	19.1	11.7	16.0	8.0	4.9
College Graduate	13.22	14.33	15.77	17.46	17.18	17.30	30.9	20.8	9.7	-0.9	0.7
Postgraduate	15.90	18.62	22.03	21.62	22.46	21.63	36.1	16.1	-1.8	0.0	-3.7

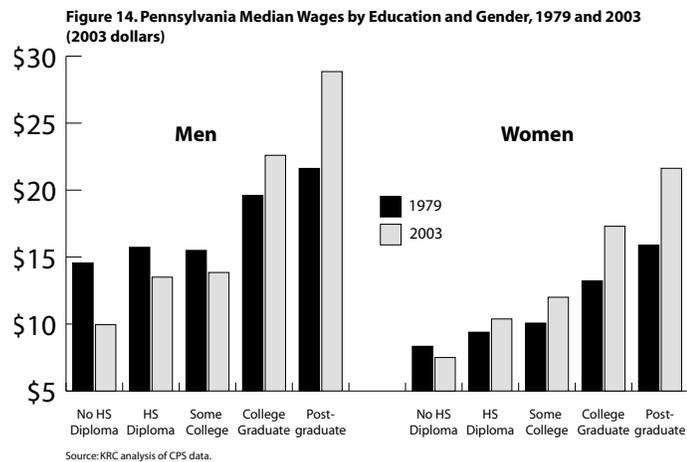
Source: KRC analysis of CPS data.

this educational category consistently received the largest percentage raises of any group of women or men during all periods since 1995. Their wages rose by 16 percent from 1995-2003, by 8 percent from 2000-2003, and by nearly 5 percent from 2002-2003.

Both men and women at the educational extremes generally had wage losses or relatively small wage gains in recent years. From 2002-2003 men without high school diplomas saw their wages fall by nearly 3 percent, while women in this educational category took wage cuts of more than 2 percent. Men with postgraduate education suffered a wage decline of more than 7 percent from 2002-2003, while their female counterparts took a wage cut of nearly 4 percent.

These recent changes have not yet had much effect on educational wage gaps, which remain much greater than they were in the 1970s and 1980s. For

example, men with postgraduate schooling earned 2.9 times as much as those with no high school diploma in 2003, up from 1.5 times as much in 1979 and twice as much in 1989. Women with postgraduate schooling earned 2.9 times as much as those with no high school diploma in 2003, up from 1.9 times as much in 1979 and 2.4 times as much in 1989.



## Wage Gap Between Top and Bottom Narrows Slightly

Wage progress for working people means not only decent wage increases for typical workers but also a narrowing of the gap between top and bottom earners. To assess Pennsylvania's progress in reducing wage inequality we examine the wages of high-wage earners (defined here as those who earn more than 90 percent of all workers and less than the other 10 percent) and low-wage earners (those who earn more than 10 percent of all workers and less than the other 90 percent).

Table 6 shows that wage inequality in Pennsylvania—measured by the ratio of the wages of high wage-earners to those of low wage-earners—grew dramatically during the 1980s and early 1990s, changed very little from 1995-2000, rose to a new high in 2002, and then fell back to just above its 1995 level in 2003.

In 1979 high-wage earners earned 335 percent of what their low-wage counterparts earned. This wage gap increased to 424 percent in 1995 and 431 percent in 2002 before falling back to 426 percent in 2003. The wage gap in the nation as a whole showed a similar pattern except that it fell from 1995-2000 (when Pennsylvania's gap continued to grow) and rose in 2003 (when Pennsylvania's gap narrowed).

The increase in wage inequality in Pennsylvania during the 1980s came about because high-wage earners received raises while moderately low-wage earners took wage cuts. From 1979-1989 high-wage earners in Pennsylvania received a raise of 94 cents per hour while low-wage earners' wages fell by 90 cents per hour.

<b>Table 6. Hourly Wages of High- and Low-Wage Earners in Pennsylvania and the United States, 1979-2003 (2003 dollars)*</b>						
	<b>High-Wage Earners</b>		<b>Low-Wage Earners</b>		<b>High-Wage Earners' Wage as a Percent of Low-Wage Earners' Wage</b>	
	<b>PA</b>	<b>U.S.</b>	<b>PA</b>	<b>U.S.</b>	<b>PA</b>	<b>U.S.</b>
1979	\$23.59	\$24.15	\$7.04	\$6.94	335%	348%
1989	24.53	25.94	6.14	5.96	400	435
1995	26.18	26.80	6.18	6.07	424	442
2000	28.54	29.12	6.75	6.74	423	432
2002	30.58	30.52	7.09	7.03	431	434
2003	30.11	30.70	7.07	6.99	426	439
<b>Percent Change</b>						
1979-2002	27.6%	27.1%	0.4%	0.7%		
1989-2002	22.7	18.4	15.1	17.3		
1995-2002	15.0	14.6	14.4	15.2		
2002-2003	-1.5	0.6	-0.3	-0.6		
<p>*High-wage earners are defined here as those who earn more than 90 percent of all workers and less than the other 10 percent, and low-wage earners are defined as those who earn more than 10 percent of all workers and less than the other 90 percent. Source: KRC and EPI analysis of CPS data.</p>						

After 1995 the wages of both high- and low-wage workers increased but the wage gap continued to grow during the early 1990s and from 2000-2002 because high-wage earners received larger percentage raises than low-wage earners. In 2003 both high- and low-wage earners took wage cuts but the wage gap narrowed because high-wage earners' wage fell by a greater percentage than low-wage earners' wage. From 2001 to 2003 low-wage earners saw their wages fall from \$7.12 per hour to \$7.07 per hour.

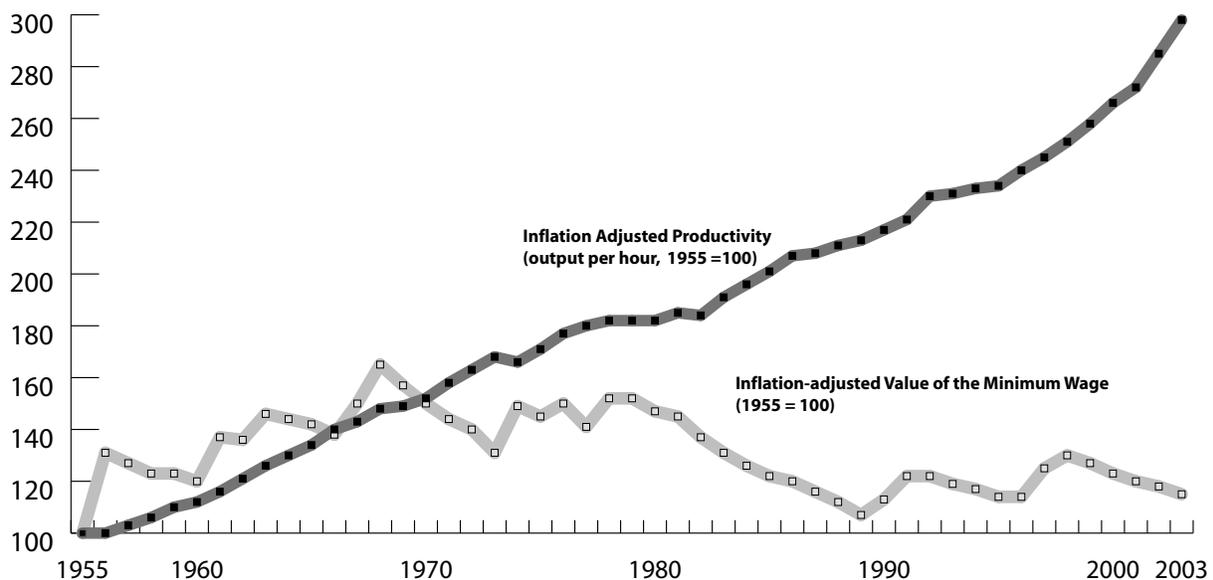
Over the last three decades the result of all these wage changes has been a substantial gain for high-wage earners and wage stagnation for low-wage earners. In 2003 low-wage earners received only 3 cents per hour, or 0.4 percent, more than they did in 1979. In contrast, high-wage earners' wage was \$6.52 higher, or nearly 28 percent higher, in 2003 than in 1979.

### Gap Between Minimum Wage and Productivity Continues to Grow

The federal minimum wage, last increased to \$5.15 per hour in 1997, has continued to decline in relation to both the cost of living and productivity (the dollar value of goods and services produced per hour worked). (The state minimum wage has been the same as the federal minimum wage during this time and has, therefore, not helped to slow the erosion of minimum wage-earners' wages.) From 1997-2003 the minimum wage lost 8 percent of its purchasing power while productivity increased by 22 percent. From 2002-2003 the minimum wage lost 2.5 percent of its purchasing power while productivity grew by 4.6 percent.

Until about 1970 the inflation-adjusted minimum wage generally kept up with rising productivity (Figure 15). After that, and especially after 1979, the minimum wage lost value (except for short periods in the late 1980s and mid-1990s when Congress raised it) even while productivity continued to grow. The gap between the inflation-adjusted minimum wage and productivity is now at its highest level in at least 49 years. If the U.S. Congress does not raise the minimum wage or if Pennsylvania does not raise its minimum wage above the federal level then the story is likely to be the same next year.

**Figure 15. Inflation-Adjusted Minimum Wage and Productivity Index, 1955 - 2003**



Source: KRC analysis of BLS productivity data and federal minimum wage data.

## Wages Rise in Philadelphia and Southern Metro Areas, Fall in Rest of State

Since 1989 wages in metropolitan Philadelphia and southern metropolitan Pennsylvania (a region that combines the metropolitan areas of Allentown-Bethlehem-Easton, Reading, Harrisburg-Lebanon-Carlisle, Lancaster, and York) have increased steadily, even during the 2001 recession and its aftermath (Table 7). The Philadelphia area has always had the highest median wage among the four regions shown in Table 7. With the exception of 2000-2003, the Philadelphia area also had the fastest rate of wage growth during the time periods shown in Table 7. Metropolitan Philadelphia's median wage in 2003 was \$15.38 per hour, about 13 percent higher than in 1989, about 2 percent higher than in 2000, and nearly 1 percent higher than in 2002.

Median Wage	Philadelphia Metro*	Pittsburgh Metro	Southern Metro**	Rest of State
1979	\$13.22	\$14.67	N/A	N/A
1989	13.61	11.93	\$12.54	\$11.46
1995	13.78	12.89	13.07	10.79
2000	15.06	13.14	13.09	11.44
2002	15.24	14.32	13.71	12.27
2003	15.38	14.00	13.75	12.00
Percent change				
1979-2003	16.3%	-4.6%		
1989-2003	13.0	17.3	9.7%	4.7%
1995-2003	11.6	8.6	5.2	11.2
2000-2003	2.1	6.6	5.1	4.9
2002-2003	0.9	-2.2	0.3	-2.2
*Entire Philadelphia PMSA including New Jersey. ** Southern Metropolitan Pennsylvania combines the metropolitan areas of Allentown-Bethlehem-Easton, Reading, Harrisburg-Lebanon-Carlisle, Lancaster, and York.				
Source: KRC analysis of CPS data.				

The southern metropolitan region's wages, although much lower than those in the Philadelphia area, followed a similar pattern but generally rose less rapidly. This region's median hourly wage in 2003 was \$13.75, nearly 10 percent higher than in 1989, about 5 percent higher than in 2000, and 0.3 percent higher than in 2002.

Metropolitan Pittsburgh and the rest of the state seem to have suffered more from the job market slackness that lingered after the 2001 recession, although their wages were higher in 2003 than in 2000. Wages in those two regions rose steadily from 1989-2002 but then fell in 2003. In 1989 and 1995 metropolitan Pittsburgh had the third-highest median wage among the four regions analyzed here; after 1995 it moved up to second-highest, outpacing the southern metropolitan region.

Despite wage growth in the 1990s that continued until 2002, metropolitan Pittsburgh has never recovered from a precipitous \$2.74 per hour wage drop that occurred from 1979-1989, a period

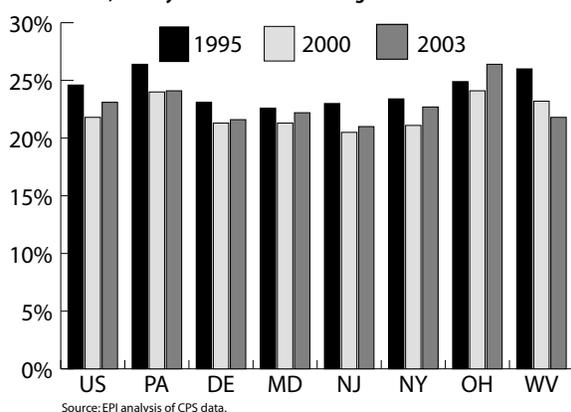
when the region lost most of its steel industry. The Pittsburgh region's median hourly wage in 2003 was \$14.00, nearly 5 percent lower than in 1979, about 17 percent higher than in 1989, nearly 7 percent higher than in 2000, but about 2 percent lower than in 2002.

Wages in the rest of the state have long been the lowest among the four regions. They grew relatively rapidly during the late 1990s, almost matching metropolitan Philadelphia's wage growth rate from 1995-2003, but their growth slowed during the recession and was reversed in 2003. The median hourly wage in the rest of the state in 2003 was \$12.00, nearly 5 percent higher than in 1989 and 2000 but about 2 percent lower than in 2002.

### Part-Time Work Grows During Recession and Aftermath

Although not all part-time jobs are bad jobs, the share of workers who work part-time is one indicator of the quality of jobs. By this measure Pennsylvania's jobs improved considerably during the late 1990s economic expansion but then worsened slightly after 2000. (Longer-term comparisons are not possible because comparable data on part-time employment are not available for 1979 or 1989.)

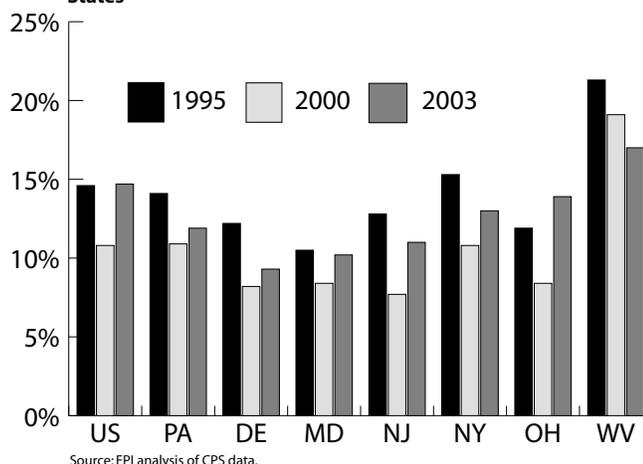
**Figure 16. Percent of Workers Working Part Time in the United States, Pennsylvania and Surrounding States**



The percentage of Pennsylvania workers working part-time (defined as less than 35 hours per week) fell from 26.4 percent in 1995 to 24 percent in 2000 and then rose slightly to 24.1 percent in 2003. The nation as a whole and all of Pennsylvania's neighboring states except West Virginia experienced a similar decline in part-time work in the late 1990s followed by an increase from 2000-2003 (Figure 16). The percentage of Pennsylvania workers working part-time in 2003 was higher in Pennsylvania than in the nation as a whole (23.1 percent) and higher than in all the neighboring states except Ohio.

Looking at the percentage of part-time workers who work part-time because they are unable to obtain full-time jobs is a way of measuring the economy's ability to generate enough work for all who want it. These workers, commonly referred to as working "part-time for economic reasons," usually make up a declining share of part-timers during economic expansions and a rising share during recessions. Pennsylvania, all of its neighboring states, and the nation as a whole followed this pattern since 1995, but Pennsylvania did not experience as sharp an increase in the percentage working part-time for economic reasons

**Figure 17. Percent of Workers Working Part-Time for "Economic Reasons" in the United States, Pennsylvania and Surrounding States**



as the nation as a whole did after 2000 (Figure 17). In Pennsylvania this percentage fell from 14.1 percent in 1995 to 10.2 percent in 2000 and then rose to 11.9 percent in 2003. Nationwide it fell from 14.6 percent in 1995 to 10.8 percent in 2000 before climbing back to 14.7 percent in 2003.

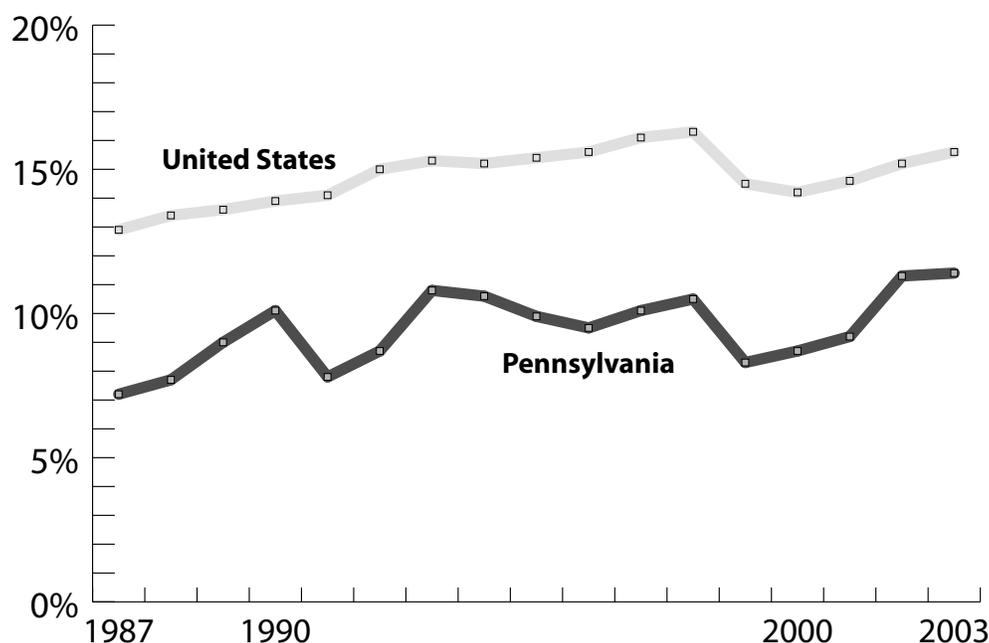
The share of workers working part-time for economic reasons was lower in Pennsylvania than in the nation as whole in 2003. It was lower in Pennsylvania than in the neighboring states of West Virginia, New York, and Ohio, but higher than in New Jersey, Delaware, and Maryland.

### Employer-based Health Insurance Drops and the Number of Uninsured Rises

The share of Pennsylvanians covered by employer-based health insurance fell sharply between 2000 and 2003, from 70 percent to 64.9 percent (Table 8). The share of Pennsylvanians with employer-based health insurance remained above the U.S. level of 60.4 percent in 2003. (The most recent data on health insurance coverage were collected in March 2004 and cover the year 2003. They include all people regardless of age or employment status. People with employer-based health insurance include family members covered by the employer-based plan of a spouse, parent, guardian, or partner.)

The number and share of Pennsylvanians without any health coverage at all rose substantially in recent years. Between 1999 and 2003 the number of Pennsylvanians without health insurance jumped 40 percent, from 989,000 to 1.38 million. The share of Pennsylvanians without health insurance increased to 11.4 percent in 2003 from 8.3 percent in 1999 (Table 8 and Figure 18). Both the number and share of Pennsylvanians without health insurance were higher in 2003 than in any year since 1987, the earliest year for which comparable U.S. Census data on health coverage are available.

**Figure 18. Percent of Population Without Employer-Based Health Insurance in the United States and Pennsylvania, 1987 - 2003**



Note: The data displayed in this figure are for all people regardless of age or employment status.  
Source: U.S. Census Bureau health insurance data online at <http://www.census.gov/hhes/hlthins/historic/hihist4.html>

<b>Table 8. Health Insurance Coverage* in Pennsylvania and the United States, 1987-2002</b>						
	<b>Percent with Employer-based Coverage</b>		<b>Number of People without Health Insurance</b>		<b>Percent Not Covered by Health Insurance</b>	
	<b>Pennsylvania</b>	<b>United States</b>	<b>Pennsylvania (thousands)</b>	<b>United States (thousands)</b>	<b>Pennsylvania</b>	<b>United States</b>
1987	68.8%	62.1%	844	31,026	7.2%	12.9%
1988	68.9	61.9	936	32,680	7.7	13.4
1989	67.9	61.6	1,088	33,385	9.0	13.6
1990	65.0	60.4	1,218	34,719	10.1	13.9
1991	67.7	59.7	954	35,445	7.8	14.1
1992	66.1	57.9	1,042	38,641	8.7	15.0
1993	62.0	57.1	1,303	39,713	10.8	15.3
1994	66.4	60.9	1,268	39,718	10.6	15.2
1995	66.7	61.1	1,196	40,582	9.9	15.4
1996	67.7	61.2	1,133	41,716	9.5	15.6
1997	67.8	61.4	1,209	43,448	10.1	16.1
1998	67.0	62.0	1,248	44,281	10.5	16.3
1999**	67.6	63.3	989	40,228	8.3	14.5
2000**	70.0	63.6	1,047	39,804	8.7	14.2
2001	68.7	62.6	1,119	41,207	9.2	14.6
2002	66.5	61.3	1,380	43,574	11.3	15.2
2003	64.9	60.4	1,384	44,961	11.4	15.6

\* The data in this table refer to all people regardless of age or employment status. The number of people with employer-based health insurance reported includes family members who are covered by the employer-based plan of a spouse, parent, guardian, or partner.

\*\*The Census source reports two different numbers for 2000 and three different numbers for 1999. The table reports the number for each year that the Economic Policy Institute judges most similar to other years in the series.

Source: U.S. Census Bureau health insurance data online at <http://www.census.gov/hhes/hlthins/historic/hihist4.html>

## Poverty Rises Sharply

New data released by the U.S. Census Bureau in August, 2004, show that poverty increased substantially since 2000 and since 2003, especially for children. (Poverty data is on-line at [www.census.gov/hhes/poverty/histpov/hstpov21.html](http://www.census.gov/hhes/poverty/histpov/hstpov21.html)). The share of children in poverty increased from 11.6 to 15.5 percent from 2000 to 2003, a jump of one third. From 2002 to 2003, the share of children in poverty increased from 13.8 percent to 15.5 percent. The share of adults in poverty increased from 8.6 to 10.5 percent between 2000 and 2003. Poverty in Pennsylvania is down from its 1995 levels of 18.1 percent for children and 12.2 percent for adults.

## EMPLOYMENT TRENDS, 1979-2004

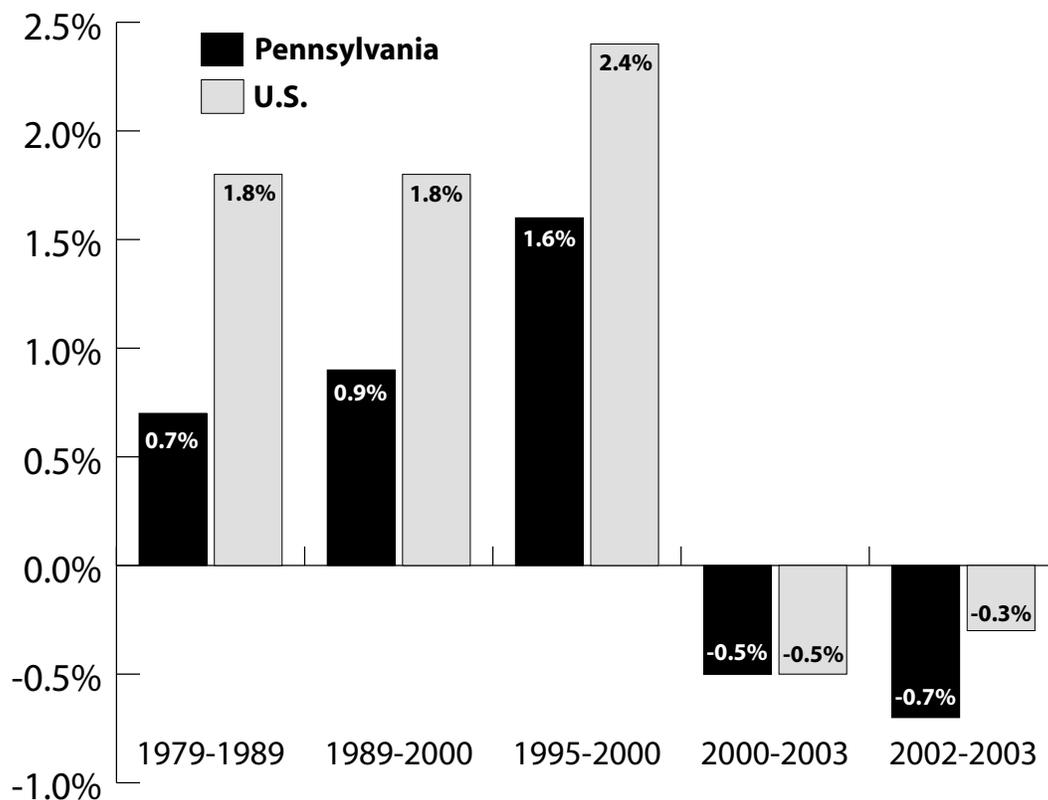
This section reports trends in job growth, overall and within major industries. Job growth is an important indicator of economic strength. More rapid job growth means that fewer workers leave the state to find jobs, more workers move into the state, and more people who are already in Pennsylvania are able to find work. But job growth is not the only indicator of the state's economic health. Job quality matters at least as much as the number of jobs. Rapid job growth that consisted largely of low-wage jobs that do not offer pensions or affordable health coverage would not be desirable.

### Pennsylvania Job Growth Still Lags Behind Nation as a Whole

The number of jobs in Pennsylvania rose by 16.6 percent from 1979-2003, while the number of jobs in the nation as a whole increased by 44.5 percent. Pennsylvania ranked 49<sup>th</sup> among all states and the District of Columbia in job growth during this period.

Yet Pennsylvania's job growth rate gradually increased until the recent recession, slowly improving Pennsylvania's performance relative to other states and the entire U.S. (Figure 19). Pennsylvania job growth averaged 0.7 percent per year from 1979-1989, 0.9 percent per year from 1989-2000, and 1.6 percent from 1995-2000. The state then lost jobs at an average rate of 0.5 percent per year from 2000-2003 and lost 0.7 percent of its jobs from 2002-2003. Pennsylvania had about 5.6 million jobs in 2003, 39,000 fewer than in 2002 and 89,000 fewer than in 2000.

**Figure 19. Annual Average Percent Change in Non-Farm Employment in Pennsylvania and the United States in Selected Periods**



Source: KRC and EPI analysis of CES data.

Pennsylvania's average annual job growth ranking improved from 44<sup>th</sup> during 1979-1989 and 1989-2000 to 41<sup>st</sup> during 1995-2000 to 29<sup>th</sup> during 2002-2003 (when the state lost jobs at about the same rate as the entire U.S.) before slipping back to 40<sup>th</sup> from 2002-2003.

### Erie and Reading Lose Jobs Fastest Since Recession Began; Altoona, Harrisburg, and Philadelphia Suburbs Gain

The fortunes of different regions of the state have varied greatly, even during the recession and the slack labor market that followed it. Among the state's metropolitan areas Erie and Reading lost jobs at the fastest average annual rate during 2000-2003 and those two regions, along with Sharon, lost the highest percentage of jobs in 2003. Altoona, Harrisburg-Lebanon-Carlisle, and suburban Philadelphia (although not the City of Philadelphia or the entire metropolitan area) actually gained jobs. Allentown-Bethlehem-Easton's employment remained unchanged during both periods (Table 9).

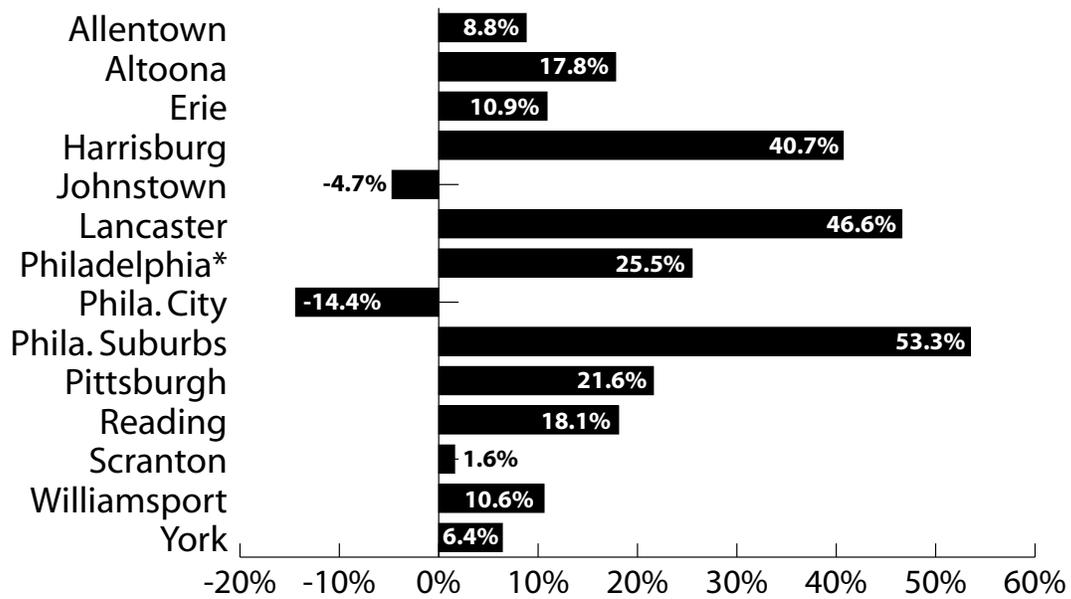
Long-term job growth also varied greatly among regions (Figure 19). Employment in the Lancaster

	1979-2000	1989-2000	1995-2000	2000-2003	2002-2003
Allentown	0.4%	1.2%	2.2%	0.0%	0.0%
Altoona	0.7	1.3	1.4	0.5	0.7
Erie	0.7	1.4	1.3	-1.6	-1.4
Harrisburg	1.6	1.4	1.6	0.3	0.1
Johnstown	-0.1	0.8	0.3	-0.8	-0.1
Lancaster	1.8	1.6	2.2	0.1	-0.4
Philadelphia (all PMSA including NJ)	1.1	0.6	1.9	0.1	-0.1
Pittsburgh	1.0	1.1	1.4	-0.5	-1.1
Reading	1.0	1.0	1.6	-1.5	-1.9
Scranton	0.2	0.8	1.1	-0.8	0.1
Sharon	NA	1.3	1.9	-0.7	-1.8
State College	NA	1.6	1.7	0.6	-1.1
Williamsport	0.6	0.5	1.1	-1.1	0.0
York	0.4	1.0	1.5	-1.0	-0.7

Source: KRC analysis of CES data.

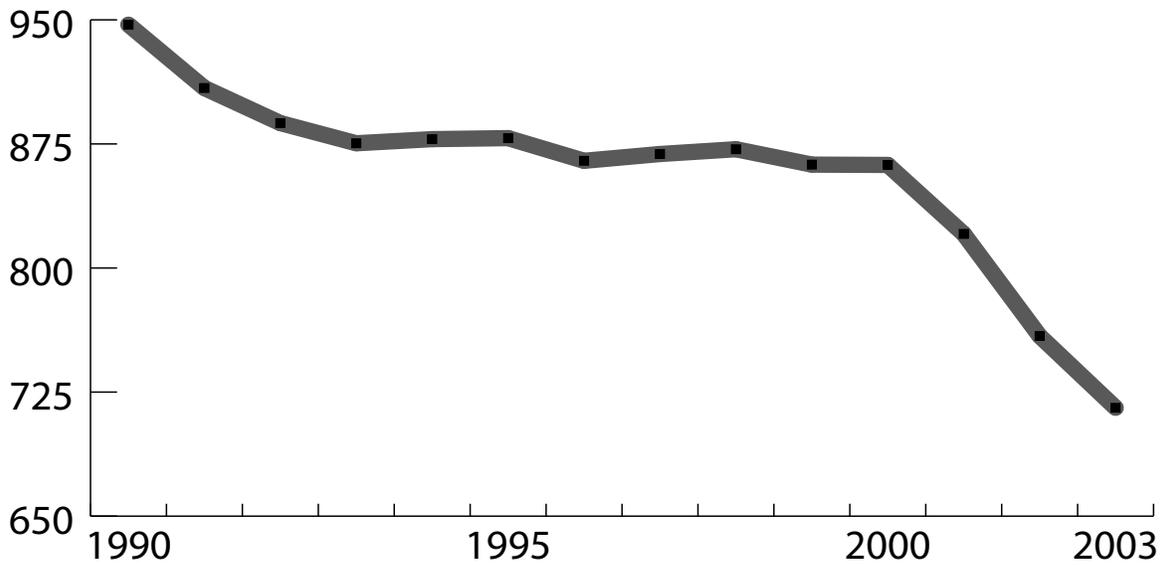
and Harrisburg-Lebanon-Carlisle metropolitan areas grew by more than 40 percent from 1979-2003, and the Philadelphia suburbs had a job gain of more than 50 percent. On the other hand, the City of Philadelphia lost more than 14 percent of its jobs during that time and Johnstown lost nearly 5 percent, while employment in Scranton, York, and Allentown-Bethlehem-Easton increased by less than 10 percent.

**Figure 20. Percent Change in Non-Farm Employment in Pennsylvania Metropolitan Areas , 1979-2003**



\* Entire Philadelphia PMSA including New Jersey.  
 Source: KRC analysis of CES data. Data not available for period for Sharon or State College MSAs.

**Figure 21. Pennsylvania Manufacturing Employment, 1990-2003 (in thousands, seasonally adjusted)**



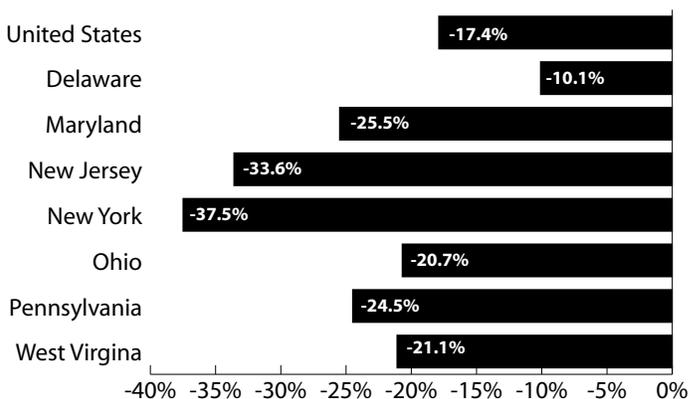
Source: KRC analysis of CES data.

## State Loses More Than 230,000 Manufacturing Jobs Since 1990

Except for transitory gains in 1994-95 and 1997-98, Pennsylvania lost manufacturing jobs in every year from 1990-2003 (Figure 21). (This is the longest period for which comparable annual data are available.) During the entire 1990-2003 period the state lost 231,600 manufacturing jobs, of which 146,800 were lost since 2000.

Between 1990 and 2003 Pennsylvania lost 24.5 percent of its manufacturing jobs. This was the ninth-highest rate of manufacturing job loss among all states. Pennsylvania lost a much greater proportion of its manufacturing jobs than the nation as whole, which lost 17.9 percent of its manufacturing jobs during that time. Compared to those of neighboring states Pennsylvania's rate of manufacturing job loss was lower than those of New York, New Jersey, and Maryland but higher than those of Delaware, West Virginia, and Ohio (Figure 22).

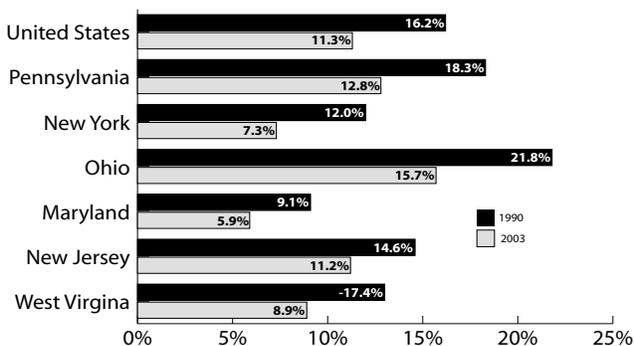
**Figure 22. Percent Change in Manufacturing Employment in the United States, Pennsylvania, and Surrounding States, 1990-2003**



Source: KRC analysis of CES data.

Despite Pennsylvania's enormous long-term loss of manufacturing jobs, manufacturing remains important to the state's economy. In 2003, 12.8 percent of Pennsylvania's jobs were manufacturing jobs. This percentage exceeded the national average of 11.2 percent and put Pennsylvania 16<sup>th</sup>-highest among all states in the percentage of its jobs that were in manufacturing. (Pennsylvania's manufacturing job percentage in 1990 was 16.2 percent, 15<sup>th</sup>-highest among all states.) Pennsylvania's manufacturing job percentage in 2003 was higher than those of all its neighboring states except Ohio (Figure 23).

**Figure 23. Manufacturing Employment as a Percent of Total Employment in the United States, Pennsylvania, and Surrounding States, 1990 and 2003**



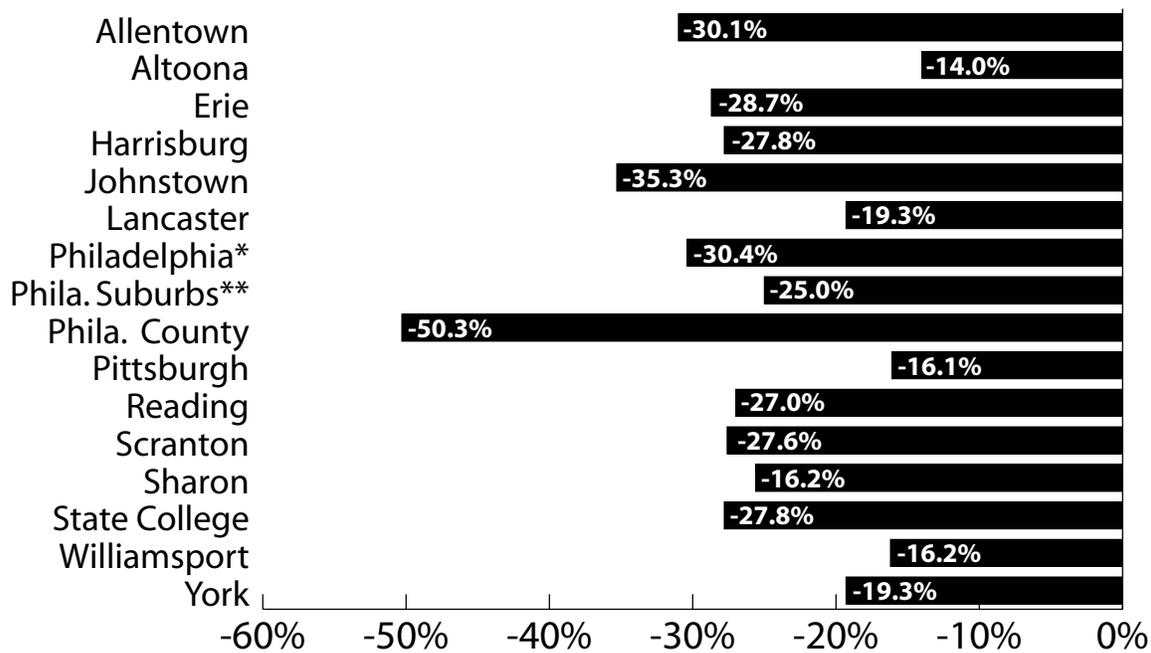
Source: KRC analysis of CES data.

### Small Metro Areas Hit Hardest By Manufacturing Job Losses

Pennsylvania's smaller metropolitan areas (all metropolitan areas other than Philadelphia and Pittsburgh) suffered even more than

the state as a whole from losses of manufacturing jobs. From 1990-2003 all twelve of the state's smaller metropolitan areas lost manufacturing jobs. Eight of the twelve lost greater percentages of their manufacturing jobs than did the state as a whole, as did the City of Philadelphia and the entire Philadelphia metropolitan area (Figure 24). Among the smaller metropolitan areas the greatest percentage losses of manufacturing jobs occurred in Johnstown (which lost 35.3 percent of its manufacturing jobs) and Allentown-Bethlehem-Easton (31 percent loss). The Philadelphia

**Figure 24. Percent of Manufacturing Jobs Lost in Metropolitan Areas in Pennsylvania, 1990-2003**



\* Entire Philadelphia PMSA including New Jersey.

\*\* Including New Jersey.

Source: KRC analysis of CES data.

**Table 10. Manufacturing Employment in Pennsylvania Metropolitan Areas (thousands)**

	1990	1995	2000	2002	2003	Percent Change 1990-2003	Percent of Total Employment 2003
York	48.7	47.4	45.8	41.4	39.3	-19.3%	23.5%
Williamsport	14.8	13.2	13.7	12.8	12.4	-16.2	23.3
Lancaster	58.1	56.8	56.3	50.2	46.9	-19.3	20.6
Reading	44.4	42.8	41.5	35.2	32.4	-27.0	19.7
Erie	35.5	34.2	33.4	27.7	25.3	-28.7	19.5
Sharon	12.1	11	11.2	9.6	9	-25.6	18.2
Scranton	60.6	54.1	52.6	45.5	43.9	-27.6	15.7
Allentown	60.4	54.2	51.2	45.5	41.7	-31.0	14.5
Altoona	10.0	10.2	10.3	8.8	8.6	-14.0	14.0
Johnstown	13.9	13.1	12.2	9.8	9	-35.3	10.4
Harrisburg	49.3	45.5	41.4	36.6	35.6	-27.8	9.7
Pittsburgh	127.3	119.8	126.3	112.3	106.8	-16.1	9.6
Philadelphia (all PMSA including NJ)	320.1	276.2	267	235.8	222.8	-30.4	9.3
State College	7.9	8.1	8.1	6.6	5.7	-27.8	8.0

Source: KRC analysis of CES data.

metropolitan area lost 30.4 percent of its manufacturing jobs and the city of Philadelphia lost more than half of its manufacturing jobs.

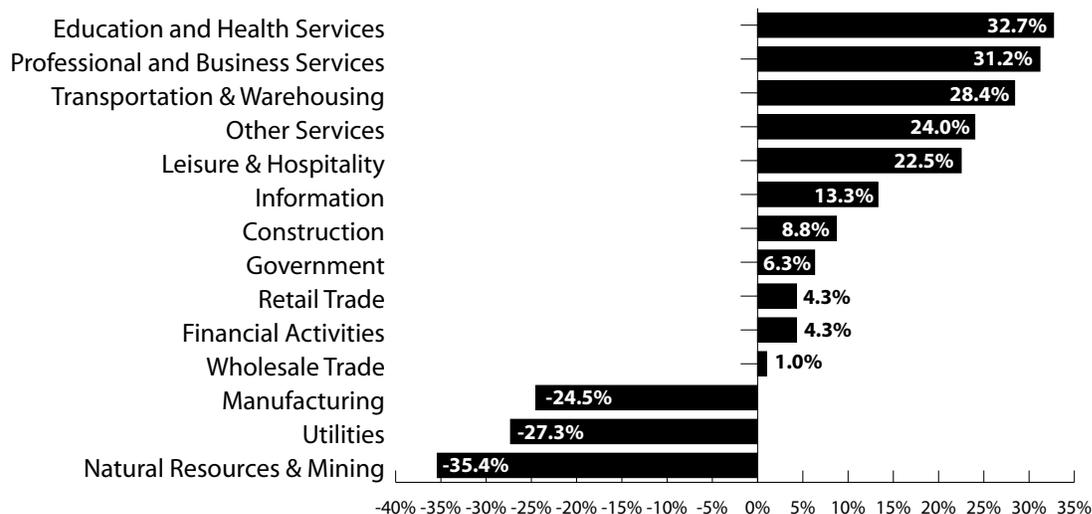
Despite these losses manufacturing remains even more important to the state's smaller metropolitan areas than it does to the state as a whole (Table 10). In 2003 manufacturing made up a larger percentage of jobs in nine of the twelve small metropolitan areas than in the state as a whole. Manufacturing was especially important in York (where it accounted for 23.5 percent of all jobs, compared with 12.8 percent of all jobs in the entire state), Williamsport (where 23.3 percent of all jobs were in manufacturing), and Lancaster (20.6 percent in manufacturing).

The Pittsburgh and Philadelphia regions, which have more diversified economic bases than the state as a whole, were less dependent on manufacturing than was the state as a whole. The same was true of Harrisburg and State College, each of which depends relatively heavily on a major non-manufacturing industry.

### State Employment Shifts From Goods To Services

From 1990-2003 Pennsylvania lost jobs in three traditionally high-wage industries. The state lost 35.4 percent of its jobs in natural resources and mining, 27.3 percent of its jobs in utilities, and 24.5 percent of its manufacturing jobs. The state gained jobs in all other industries (Figure 25). The greatest percentage job gains came in a combination of high- and low-wage industries: education and health services (32.7 percent increase), professional services (31.2 percent), transportation and warehousing (28.4 percent), other services (24.0 percent), leisure and hospitality (22.5 percent), and information (13.3 percent).

**Figure 25. Percent Change in Employment for Major Industries in Pennsylvania, 1990-2003**



Source: KRC analysis of CES data.

Of the 432,000 jobs that the state gained from 1990-2003, about 241,000 were in education and health services and about another 142,000 were in professional and business services. This means that almost nine out of every 10 jobs created in the state between 1990 and 2003 were in these two industries.

As a result of these shifts the state had much higher percentages of its jobs in education and health services and professional and business services and a much lower percentage of its jobs in manufacturing in 2003 than in 1990 (Table 11).

<b>Table 11. Average Annual Employment by Industry in Pennsylvania, 1990-2003 (thousands)</b>						
	<b>1990</b>	<b>2003</b>	<b>Percent change</b>		<b>Percent of total employment</b>	
					<b>1990</b>	<b>2003</b>
Education and Health Services	736.8	978.1	32.7	241.3	14.3%	17.5%
Professional and Business Services	455.4	597.6	31.2	142.2	8.8	10.7
Transportation and Warehousing	152.3	195.6	28.4	43.3	2.9	3.5
Other Services	209.8	260.2	24.0	50.4	4.1	4.6
Leisure and Hospitality	382.7	468.9	22.5	86.2	7.4	8.4
Information	108.9	123.4	13.3	14.5	2.1	2.2
Construction	225.5	245.1	8.7	19.6	4.4	4.4
Government	699	743.2	6.3	44.2	13.5	13.3
Retail Trade	634.9	662	4.3	27.1	12.3	11.8
Financial Activities	324.1	337.9	4.3	13.8	6.3	6.0
Wholesale Trade	224.5	226.8	1.0	2.3	4.3	4.0
Manufacturing	947.1	715.5	-24.5	-231.6	18.3	12.8
Utilities	41.4	30.1	-27.3	-11.3	0.8	0.5
Natural Resources and Mining	27.7	17.9	-35.4	-9.8	0.5	0.3
<b>TOTAL</b>	<b>5170.2</b>	<b>5602.2</b>	<b>8.4</b>	<b>432</b>	<b>100.0</b>	<b>100.0</b>
Source: KRC analysis of CES data.						

## ENDNOTES

<sup>1</sup> This plan embraces the need to anchor manufacturing revitalization in regional industry clusters and allocates \$5 million to support the creation of manufacturing workforce partnerships. KRC recommended these approaches in the *State of Working Pennsylvania 2003*, online at [www.keystoneresearch.org](http://www.keystoneresearch.org), and in earlier documents going back to the first KRC report, *The State of Working Pennsylvania 1996*.

<sup>2</sup> Pennsylvania Department of Labor and Industry. *Workforce Development in Pennsylvania: Investing in Competitiveness, Creating Opportunity* (Harrisburg: Pennsylvania, 2004). This document was distributed in conjunction with the Industry Partnership Tour of Deputy Secretary for Workforce Development Sandi Vito, week of August 2, 2004.

<sup>3</sup> Chris Benner, Stephen Herzenberg, and Kelly Prince, *A Workforce Development Agenda for Pennsylvania's New Governor: Building the Infrastructure of a Learning Economy* (Harrisburg: Keystone Research Center, January 2003). This paper is online at [www.keystoneresearch.org](http://www.keystoneresearch.org).

<sup>4</sup> For more details on the economic stimulus, see [www.issuespa.net/articles/7701/a](http://www.issuespa.net/articles/7701/a) discussion and [www.newpa.com/news5.html](http://www.newpa.com/news5.html).

<sup>5</sup> Dennis Bellafiore, Stephen Herzenberg, Megan Myer, and Allan Rothrock, *Economic Development Subsidies: Do They Fuel Sprawl?* (Harrisburg: Keystone Research Center 2004), pp. 33-35. This paper is online at [www.keystoneresearch.org](http://www.keystoneresearch.org).

<sup>6</sup> States with minimum wages above the federal level are Maine, Vermont, Massachusetts, Rhode Island, Connecticut, Delaware, Illinois, Washington, Oregon, California, Alaska, and Hawaii, plus the District of Columbia.

<sup>7</sup> Bellafiore et al., *Economic Development Subsidies: Do They Fuel Sprawl?*

<sup>8</sup> For more on partnerships focused on workforce and organizational issues, see Benner et al., *A Workforce Development Agenda*.

<sup>9</sup> The SWPPA example is described in Stephen Herzenberg, John Alic, and Howard Wial, "Toward a Learning Economy. *Issues in Science and Technology*, Winter 1998-99, XV:2. For other examples, see Benner et al., *A Workforce Development Agenda* and Keystone Research Center, *The Pennsylvania High Road Partnerships Report*, forthcoming, fall 2004.

<sup>10</sup> Ernst and Young LLP, Keystone Research Center, and the Pennsylvania Economy League, Inc., *Pennsylvania 21<sup>st</sup> Century Tax Policy Project* (Harrisburg: Business-Labor Tax Project of the Allegheny Conference, Pennsylvania AFL-CIO, and Pennsylvania Business Roundtable, 2004). This paper is online at [www.keystoneresearch.org](http://www.keystoneresearch.org). In recent policy debates the idea of introducing personal exemptions to Pennsylvania state and local income and wage taxes was first introduced in Howard Wial, *A Real Tax Cut for Pennsylvania's Middle Class* (Harrisburg: Keystone Research Center, 1999).

<sup>11</sup> For additional information on the CPI-U-RS see <http://www.bls.gov/cpi/cpirsdc.htm>.

<sup>12</sup> Job losses are measured on an annual basis in this section because seasonally adjusted monthly

employment data for Pennsylvania are not available for years before 1990.

<sup>13</sup> Throughout this section KRC classified industries as high- or low-wage based on whether their 2002 Pennsylvania average annual wages, calculated from BLS Quarterly Census of Employment and Wages data, were greater than or less than the statewide 2002 average annual wage (calculated from the same source). By this criterion construction, manufacturing, information, financial activities, professional and business services, and public administration were high-wage industries, while natural resources and mining, trade/transportation/utilities, education and health services, leisure and hospitality, and other services were low-wage industries.

<sup>14</sup> Data for years before 2001 are not available.