

THE STATE OF

WORKING

PENNSYLVANIA

2003

David H. Bradley
Stephen A. Herzenberg
Peter R. Wiley

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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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TABLE OF CONTENTS

OVERVIEW	5
Wages Have Stagnated Again for Pennsylvania Workers and the State is “Growing Apart” Once More	5
Like the Rest of the Nation, Pennsylvania Has Experienced a “Job Loss” Recovery	5
Where Does Pennsylvania Go From Here?	7
INTRODUCTION	12
PENNSYLVANIA WAGE TRENDS	13
Wages Stagnate from 2001 to 2002	13
Pennsylvania Men’s Wages Fall, Women’s Wages Rise	13
Wages Up for White Women, Black Men, and Black Women	15
Most Education-Gender Groups Lose Ground	15
Wages Growing Apart Again in 2002	17
Minimum Wage-Productivity Gap Largest in Decades	19
Pennsylvania Wages Lag Across the Board in 2003	19
JOBS AND JOBLESSNESS	21
Pennsylvania Job Growth Trails U.S.	21
Job Growth Varies Across State	22
Pennsylvania’s Falling Employment	22
Is Unemployment Stabilizing in Pennsylvania?	22
Pennsylvania Labor Force Drops Sharply in 2003	24
Manufacturing Jobs Decline	26
Pennsylvania Industry Make-Up Shifts	26
Health Jobs Mushroom in 1990s	28
ENDNOTES	30

OVERVIEW

Every year since its founding in 1996, the Keystone Research Center (KRC) has published *The State of Working Pennsylvania*. While the form and specific focus of the report has varied from year to year, its broad objective has always been the same: to look beyond the aggregate statistics commonly used to gauge the health of the economy in order to document the condition of Pennsylvania's middle class and the structure of economic opportunity in the state. Our analysis has generally been focused on one core question: is our economy producing the broadly-shared prosperity long identified with fulfillment of the American Dream and our national values of liberty and equality?

The State of Working Pennsylvania 2003 differs from previous editions by being shorter and focused on two stand-out trends in current economic data bearing on quality of life for the state's middle class. This is also the first *State of Working Pennsylvania* written after a national recession and at the beginning of a new administration in the Commonwealth. For these reasons, this *State of Working Pennsylvania* serves as a baseline against which the progress of any new initiatives designed to help Pennsylvania return to robust economic growth might be measured.

Two economic circumstances stand out in the data examined for this year's report.

Wages Have Stagnated Again for Pennsylvania Workers and the State is "Growing Apart" Once More

The State of Working Pennsylvania 2002 reported that wages continued to rise and wage inequality continued to drop in Pennsylvania through 2001, in spite of the onset of recession in March of that year. By 2002, both trends – rising wages and declining wage inequality – had stopped. Pennsylvania wages are already beginning to lose what little ground they gained in the 1990s.

- Hourly earnings of middle-wage Pennsylvania earners declined by 1 cent per hour in 2002, compared to a rise of 12 cents per hour nationally. This follows a gain of 50 cents per hour from 2000 to 2001 in Pennsylvania.
- In the first six months of 2003, the median hourly wage in Pennsylvania was \$13.09, a drop of 56 cents, or 4.1 percent, from the first six months of 2002.
- Hourly earnings for low-wage Pennsylvania workers fell by 3 cents per hour from 2001 to 2002, compared to a rise of 8 cents per hour nationally. High-wage workers continued to gain in Pennsylvania, seeing an increase of \$1.24 per hour from 2001 to 2002, compared to a gain of 46 cents per hour nationally.
- After a decline from 1995 through 2001, wage inequality (the ratio of the hourly wage of high-earners to low-earners) is rising again in Pennsylvania, more so than nationally. With the exception of 1996, wage inequality in Pennsylvania is now at its highest level since 1979. In 2002, high-wage earners in Pennsylvania earned 4.32 times per hour more than low-wage earners, compared to 4.13 in 2001. While Pennsylvania once had one of the most equal wage distributions in the country, wage inequality is virtually the same today in Pennsylvania as in the United States as a whole. Pennsylvania has lost ground in this respect even as the nation's level of inequality has escalated.

Like the Rest of the Nation, Pennsylvania has Experienced a "Job Loss" Recovery

The national recession ended in November 2001. The current recovery is the first since 1945 in which the number of private sector jobs in the United States has actually contracted 20 months into an economic expansion. U.S. manufacturing alone has lost 1.2 million jobs since the end of the recession. Employment contraction has extended to nearly every sector of the economy, including those once heralded as the vanguard of a "new

economy.” The Silicon Valley of California, for example, lost 127,000 jobs between the first quarters of 2001 and 2002, or one out of every 11 jobs.¹ The service sector workforce has come under pressures once thought of as unique to cut-throat manufacturing. In 2003 IBM began active consideration of moving high-paying white-collar jobs overseas, citing estimates that some three million U.S. service jobs would be shifted overseas by 2015.²

Pennsylvania has followed the national pattern. Since the recovery started in November 2001, Pennsylvania has lost 20,400 jobs, making this a “job loss” recovery.

- During the 24 months beginning with the start of the recession (March 2001 – March 2003), private-sector payroll employment declined by 107,800 in Pennsylvania, or 2.2 percent of all private-sector employment.³ The good news, if you can call it that, is that Pennsylvania did roughly as badly in the early 1990s recession – only now has the national experience slipped back to the level of the Commonwealth’s trend-setting distress.
- Total non-farm payroll employment is down in Pennsylvania by 90,100, or 1.6 percent, since the start of the recession in March 2001 (March 2001 – July 2003).
- Manufacturing has been hit the hardest. From March 2001 to July 2003, Pennsylvania lost 118,200 (14 percent) manufacturing jobs. Since the economic recovery started in November 2001, Pennsylvania has shed 61,900 manufacturing jobs.

With the national economy sputtering, Pennsylvania’s short-term job creation ranking has actually improved relative to other states between 2001 and 2002. While the Commonwealth lost one out of every 200 jobs, 31 other states lost an even higher share. Long term, Pennsylvania’s employment creation record still

places it near the bottom – behind only West Virginia and New York from 1979 to 2002.

Over the long term, many jobs vanishing from the Pennsylvania economy – in manufacturing – are middle class, while growth sectors – health, hospitality, education – tend to include substantial lower-paying employment.

- From 1990 to 2002, Pennsylvania lost 183,600 manufacturing jobs.
- Employment in an amalgam of services grew by 345,500 (ambulatory health care, administrative services, food services, nursing and rehabilitation care, social assistance, and amusements and recreation).

Many workers who have lost jobs since the recession ended have found it difficult to find new employment in their former occupations at comparable wages. Stories about downwardly mobile workers living on savings and waiting for job recovery have become commonplace in business reporting on national employment trends.⁴ The escalating share of workers receiving unemployment insurance (UI) who exhaust their benefits before finding a new job suggests that these stories are more than anecdotal. In Pennsylvania, the UI exhaustion rate rose from 24.8 percent in 2000 to 35.0 percent in 2002. Also indicative of the uncertain labor market is the fact that in just seven months, from December 2002 to July 2003, the Pennsylvania civilian labor force declined by an astounding 125,000 – the third largest seven-month drop since seasonably adjusted data became available in January 1970.

Those new to the workforce also had difficulty finding work. College students graduating in 2003 faced what was reported to be the worst hiring slump in twenty years.⁵ In Pennsylvania, the inflation-adjusted median hourly wage for workers aged 21 to 25 years old fell from \$9.65 to \$9.00 from 2001 to 2002, the largest one-year drop since 1990. High schoolers looking for summer work faced stiff competition. Their unemployment rate

was the highest in a decade, with fewer employed than at any time in 55 years.⁶ In Pennsylvania, the share of workers aged 16 to 18 not in the labor force shot up to 51.1 percent in 2002 after falling to 45.5 in 2000.

The combination of declining wages and employment opportunities suggest that working Pennsylvanians face an uncertain future. In the absence of a significant and timely recovery in employment and wages, we should expect an increase in social stress and erosion of social capital such that recovery will be made all the more difficult.

Where Does Pennsylvania Go From Here?

The data reviewed here make clear that the current performance of the Pennsylvania economy is unsatisfactory. A close look at recent surveys of consumer confidence suggests that Americans are more and more worried about their economic future.⁷ What should the state government do, if anything, to change this situation?

One position might be that this is a short-term phenomenon: if we are patient, this view holds, the economy will soon deliver sufficiently robust growth. Counter to this view, when the national economy was stronger in the second half of the 1990s, economic opportunity for the Pennsylvania middle class improved very modestly. Without new policies, even if the macroeconomic picture improves, it is not clear that opportunity will automatically expand.

Two major policy approaches have dominated attempts to remedy Pennsylvania's economic maladies in recent years.

The first is to cut taxes, especially business taxes, on the assumption that this will stimulate business investment and growth. Just a few days ago, the Professor of Free Enterprise at Robert Morris University delivered an endorsement of the need to cut taxes and deregulate the economy in the

Patriot-News.⁸ Banging the drum for lower taxes is also a customary approach of many business associations to maintaining their membership, although that does not make it effective policy.

The second economic development approach most often discussed is to provide targeted tax breaks and subsidies, primarily to individual businesses.

A reformed tax system may, in fact, be part of a foundation for renewed prosperity. Indeed, the "PA21" Business-Labor Tax Project, in which major Pennsylvania business and labor organizations have participated, seeks a reasonable consensus around this very idea.⁹ Tax policy by itself, however, is unlikely to deliver job growth and even less likely to deliver economic opportunity.

With regard to subsidies to individual businesses, Pennsylvania has invested heavily under Democratic and Republican administrations – up to \$2.5 billion in the last 10 years with no clear return on that investment for the majority of Pennsylvanians. In a 2000 audit of economic development programs, the Legislative Budget and Finance Committee reported that Pennsylvania ranked fifth highest in per capita economic development funding. It spent nearly three times the per capita national average.¹⁰ Part of the challenge with using subsidies to lure large firms is that it is outdated. Such "anchor" firms no longer provide the share of jobs and the stability of career employment they once did. In a global economy, they also bargain hard to capture from localities most of the economic benefits of their new operations.

Is there a third option? Yes – and it has quietly been gaining momentum on which policymakers might build.

This "third way" positions the role of state government as investing in "public goods" essential to economic development that will not automatically emerge from the market. The

classic historic examples are public goods that serve business generally — such as education, transportation, the electric grid, and telecommunications (and certainly, a case can be made that Pennsylvania needs investment in these public goods today).

The less familiar way state government can invest in public goods is at the industry level – to help identify technology, modernization, and workforce initiatives that boost productivity and job quality in industry clusters. Without picking winners (unlike individual subsidies), this approach helps many Pennsylvania firms achieve high performance and builds a strong middle class.

Recognition of the importance of industry clusters to economic growth has been gathering support in Pennsylvania economic and workforce circles since the Ridge Administration. One of the reasons for quickening interest has been federal workforce legislation and a combination of planning requirements and seed funding that encourages analysis of how regional workforce initiatives can meet the needs of specific industries.

Whatever the origins, the shift to a focus on industry is aligned with cutting edge economic development practice nationally. Economists such as Harvard’s Michael Porter, MIT’s Michael Piore, Princeton’s Paul Krugman, and Penn State’s Amy Glassmeier have recognized that regional economic advantage today builds on concentrations of workers and firms whose knowledge feeds off one another.¹¹ Even in non-tradable, non-mobile service industries, regional workforce and modernization partnerships are a key means to improving performance.

In our view, scarce public funds should be used to leverage private workforce, best-practice, and technology investments that bolster industry-specific regional networks. Here are some

specific, practical ideas for action in Pennsylvania that build on the insights of this emerging, innovative, policy world-view.

1. Build Understanding of Industry Development to Guide State Government Policy. State regulation and funding too often take place uninformed by any big-picture view of the challenges and opportunities faced by particular industries. This is true, for example, in enforcing labor standards in low-wage firms, enforcing federal regulations in nursing homes, funding the health care system, and when the public sector acts as a consumer in the construction industry. To the extent that government is going to engage with the private sector, it should do so in a way that reinforces higher performance and the creation of better jobs. This is especially the case at a time in history when large gaps exist between best-practice firms in many industries and standard practice. Why not seek to spread best practice in conjunction with enforcing regulations, funding training, or cost-sharing technology development? The locations within state government where expertise on industry development should expand will vary with the industry. They include the Department of Community and Economic Development, a reforming workforce system which is engaging employers in industry clusters, and key regulatory agencies.

2. Launch the “Growing Faster” Industry Training Partnership Initiative. Pennsylvania practitioners are on the cutting edge of the national movement to shift workforce dollars to key industry clusters. This is a pivotal development because the market does not automatically generate the skills that cutting edge employers need to create good jobs and high performance. As is well known, firms are often reluctant to train workers in an unstable labor market because those workers may soon work for someone else. Industry cluster training partnerships that use scarce state dollars to leverage larger workforce investments by the

private sector can (a) increase investment in critical skills, (b) ensure that training actually meets industry needs, (c) oversee effective integration of mentoring and peer learning with classroom training, (d) help strengthen career ladders within and across firms, and (e) bring managers and other workers together to learn from one another. The resulting efficiencies, increased human capital investment, and learning can translate, over time, into higher productivity and better jobs.

As recommended in a KRC report commissioned by Governor Schweiker and endorsed by him to Governor Rendell, Pennsylvania should seed fund and strengthen promising high performance industry training partnerships through the “Growing Faster” initiative.¹² Partnerships should be supported in industries as diverse as manufacturing, health care, long-term care, early care and education, hospitality, transit, new media occupations, and clerical and information work. The state should also seed fund new apprenticeship and pre-apprenticeship programs in cooperation with industry training partnerships, with pre-apprenticeship beginning during school-to-career programs.

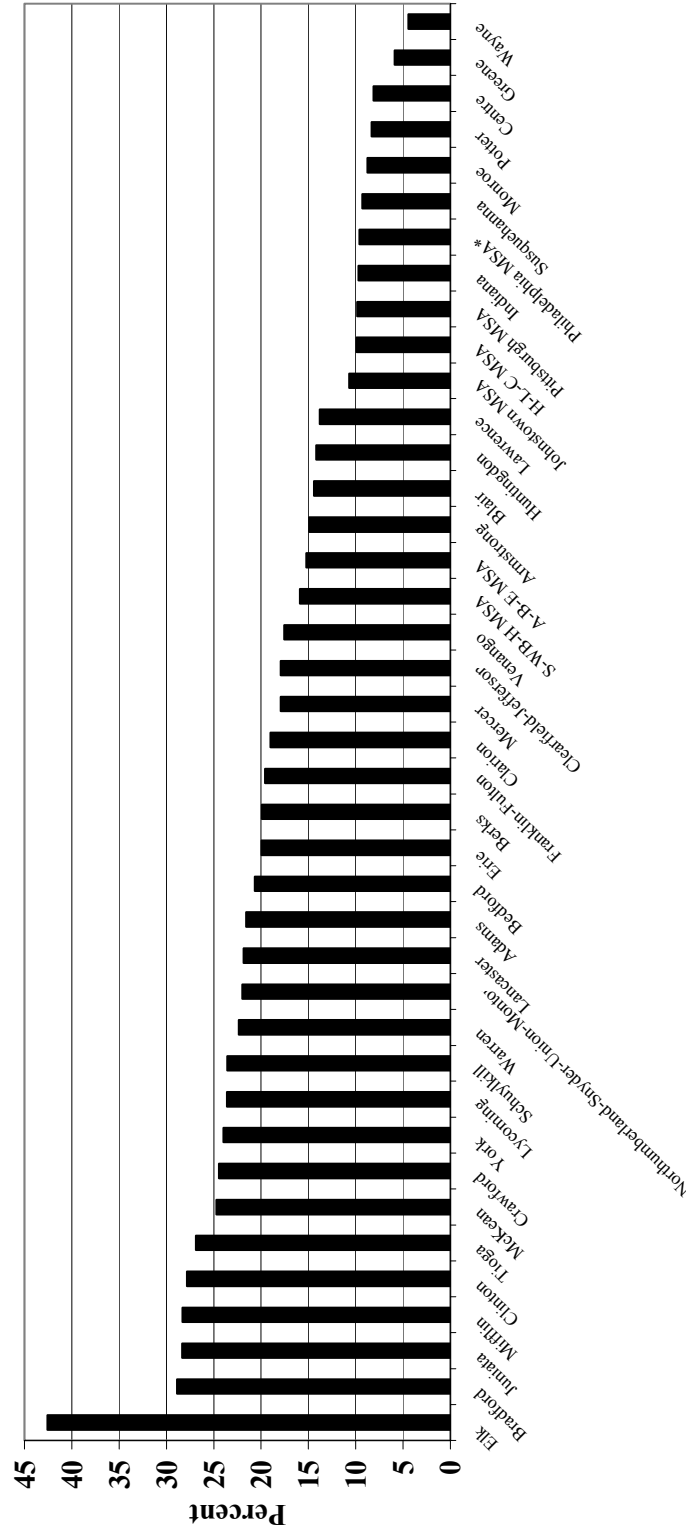
3. Implement an Agenda to Revitalize Manufacturing (ARM). Despite significant job loss in recent years, Pennsylvania’s manufacturing sector remains a substantial employer. In many rural counties, manufacturing employment remains upwards of 20 percent of employment and is still the heart of the middle class (Figure O1). Manufacturing also has a much larger job multiplier than services. We cannot simply wave manufacturing goodbye. But nor can we expect isolated firms to routinely make the transition to “high road” – high wage, high skill, engineering- and innovation-intensive – approaches that are the only way that Pennsylvania firms can flourish in today’s global economy.

In addition to manufacturing training partnerships, an ARM should include the following. (a) State-wide implementation of best-practice early warning and industrial retention programs, building on the experience of the Steel Valley Authority’s Strategic Early Warning Network (SEWN) in Western Pennsylvania.¹³ (b) Capital initiatives to bridge temporary needs of existing manufacturers and expand investment in the energy and environmental industries of tomorrow. The public role here stems from the need to help “make the market,” for example through a Renewable Portfolio Standard that requires utility producers to reach specified targets for reliance on renewable electricity. This enables pioneering companies to achieve economics of scale and can increase Pennsylvania’s chances of winning parts of large and growing global markets.

Specific capital initiatives should include expanding public pension fund investment in Pennsylvania and establishing financial incentives for Pennsylvania workers, residents, and communities to invest in Pennsylvania savings vehicles. The second option would draw on the model of the Labour-Sponsored Investment Funds in Canada (LSIFs) and the 1998 Kentucky Investment Fund Act. The Canadian LSIFs have pooled \$12 billion (Canadian) in new funds and now provide half of all venture capital in Canada.

4. Conduct a Cost-Benefit Analysis of Subsidy Programs that Serve Individual Businesses. To expand resources for industry initiatives, Pennsylvania should be able to cut back on programs that serve individual businesses but do not generate clear or substantial benefits. Using the data and expertise within the new monitoring division of DCED’s Center for Business Financing, the state should conduct a comprehensive assessment of current economic development programs, including the quality of jobs created through them and the extent to which companies actually deliver on job promises. A basic question analyzed should be the extent to

Figure O1. Manufacturing Employment as a Share of Total Employment in PA Metropolitan Areas and Counties, July 2003 (percent)



Note: Data for Philadelphia MSA includes five Pennsylvania counties and four New Jersey counties.
 Source: Keystone Research Center (KRC), based on Pennsylvania Department of Labor and Industry (PA DLI) data.

which programs currently subsidize low road (low-wage, high-waste, low-productivity) competitive strategies or “high road” ones (built on high-skill, low-waste, high-productivity jobs). The assessment should also address the extent to which economic development programs combat or exacerbate environmentally destructive sprawl. Programs evaluated should include all the grant and low-interest programs (e.g., the Pennsylvania Industrial Development Authority Program, Opportunity Grant Program, Infrastructure Development Program), the Keystone Opportunity Zone program, and the Ben Franklin and IRC support services.

The assessment should make recommendations regarding future state spending on subsidy programs, as compared to industry or broader initiatives that serve multiple firms. It should also make recommendations on the need for programs that serve individual firms to include stronger disclosure requirements, wage standards, clawback provisions (requiring that money be paid back when jobs or wages don’t materialize), and a justification in terms of whether the firm is part of an industry cluster that makes sense for Pennsylvania.

Owing to their hard experience with deindustrialization, Pennsylvanians, even more than other Americans, still wonder where the new good jobs will come from. This anxiety sometimes translates into a tendency to grasp at straws, to keep looking for the second coming of the steel industry, or to delude ourselves into believing that the *next* cut in business taxes will finally ignite economic growth.

A frank, empirical look at Pennsylvania’s new economy, including its older parts, suggests that the answer to where new good will jobs come from is almost mundane. First, those jobs will still come in significant part from manufacturing. Second, they must come increasingly from services. Changes in the structure of the U.S. and Pennsylvania economies over the last three decades mean there is no other choice. It is spade work perhaps, to put our heads down and establish the public-private cooperation necessary -- one industry at a time -- to create profitable firms and a strong middle class. But it is past time to stop worrying and start digging. The future of Pennsylvania depends on it.

INTRODUCTION

The State of Working Pennsylvania 2003 provides a statistical portrait of the economic status of Pennsylvania's workers, families, and communities. It maps Pennsylvania's performance on indicators of well-being such as wages, inequality, unemployment, and job growth. This year's report includes a detailed review of employment trends and an analysis of the effects of the 2001 recession in Pennsylvania.

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

Throughout the report, dollar values are adjusted for inflation and expressed in 2002 dollars (i.e., the buying power of wages at 2002 prices). For inflation adjustments, we use the CPI-U-RS, a consumer price index published by the Bureau of Labor Statistics (BLS).¹⁴

In analyzing trends, we ordinarily report figures for 2001 and 2002, but pay more attention to changes over longer periods of time. We compare 2002 primarily to 2001, 1995, 1989, and 1979. For Pennsylvania, 1995 was the end of an extended period of wage decline and stagnation. Changes from 1995 allow us to see how much wages have recovered since they started trending up again. Likewise, changes from 2001 show the effects of the recent recession. The years 1989 and 1979 were each high points in a business cycle. The year 1979 was also about the time that wages began to decline from their post-World War II peak.

In comparing employment trends by industry in Pennsylvania, we use data from 1990 through the present. In prior publications, we have reported figures from the 1970s or earlier. However, due to technical changes in the way the BLS collects industry employment data, comparable data are available back to 1990 only. While this limits our historical analysis, it also allows us to analyze employment trends through mid-2003 (see "Jobs and Joblessness in Pennsylvania" below for more detail on the BLS changes).

PENNSYLVANIA WAGE TRENDS

On average, wages and salaries account for approximately three quarters of family income. They account for an even higher share of middle- and low-income family income. Wages are thus a major determinant of living standards for most families and a key influence on income inequality. This section examines wage growth and wage inequality in Pennsylvania from 1979 through 2002.

As in previous *States of Working Pennsylvania*, we focus much of our analysis on the “median” earned by the person who falls exactly in the middle of all wage earners. Median wage earners make more than half of all workers and less than the other half of workers.

Wages Stagnate from 2001 to 2002

The inflation-adjusted median hourly wage in Pennsylvania fell between 1979 and 1989, remained flat from 1989 to 1995, and rose by \$1.21 from 1995 to 2001 (Table 1 and Figure 1). From 2001 to 2002, the median hourly wage in Pennsylvania stagnated again, dropping by 1 cent. As reported in *The State of Working Pennsylvania 2002*, despite the onset of recession in March 2001, the Pennsylvania median wage rose from 2000 to 2001 by 50 cents per hour – about \$1,000 annually for a full-time, full-year worker.

The median wage in Pennsylvania exceeds its 1979 level by 73 cents per hour and its 1989 level by \$1.21 per hour. Comparing Pennsylvania with the United States,

- Pennsylvania wages lost considerable ground in the 1980s while U.S. wages did not;
- Pennsylvania wages were flat in the first half of the 1990s while U.S. wages declined;
- from 1995 to 2000, U.S. wages caught up with Pennsylvania’s again;
- the recession hit U.S. wages harder from 2000 to 2001, as the median hourly wage rose by 50

cents in Pennsylvania but only 28 cents in the United States; and

- the median hourly wage is now 9 cents higher in Pennsylvania than in the United States.

By 2002, four of Pennsylvania’s neighboring states had substantially higher median wages than Pennsylvania, starting with New York at \$1.04 higher and ending with New Jersey at \$2.68 per hour more (Figure 2). From 2001 to 2002, Pennsylvania alone among its neighbors saw a decline (albeit small) in its median hourly wage.

(Below we show wage trends through the first half of 2003. Since this requires comparison with the first half of previous years, it is shown separate from Table 1.)

Pennsylvania Men’s Wages Fall, Women’s Wages Rise

Table 1 shows that Pennsylvania men’s wages took a hard hit from 2001 to 2002, declining by 30 cents per hour from \$15.29 to \$14.99. Median hourly wages for U.S. men were nearly flat from 2001 to 2002, rising by 5 cents. Pennsylvania and U.S. women saw similar small increases in median hourly wages from 2001 to 2002.

Looking at various periods since 1979, women’s wages have risen faster than men’s in each time span. Particularly striking is the 24 percent increase in Pennsylvania women’s median wage from 1979 to 2002, compared to the 4 percent *decrease* in Pennsylvania men’s median wage. This contrast closely follows the U.S. pattern.

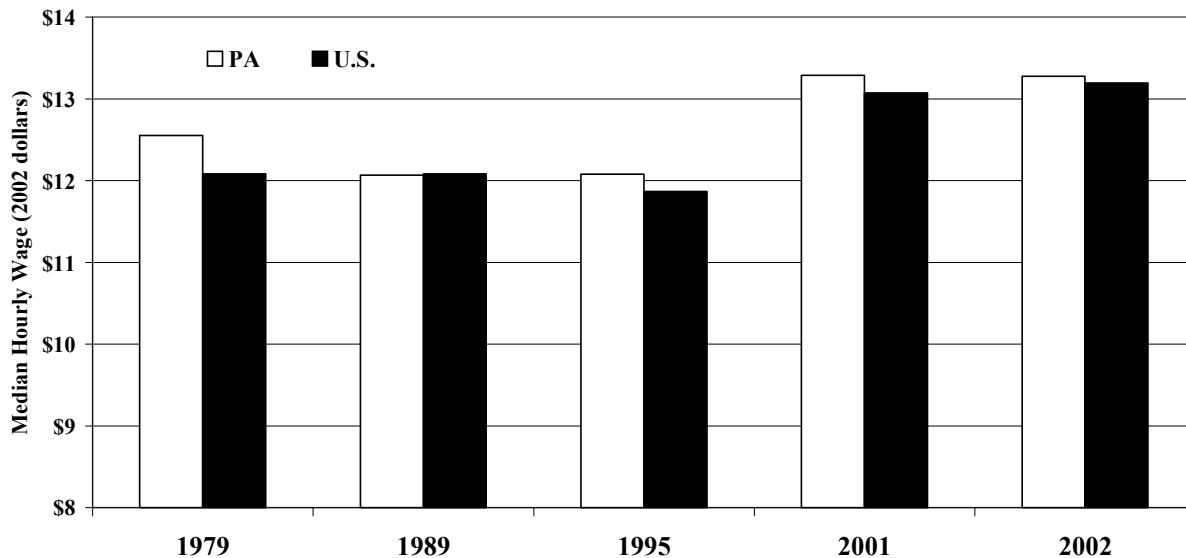
While the median wage for Pennsylvania men is now 62 cents per hour less than it was in 1979, the median wage for Pennsylvania women is \$2.28 per hour more. The male median wage remains \$3.18 per hour more than the female, the smallest gap for any of the years presented in Table 1.

Table 1. Median Hourly Wages in Pennsylvania and the United States, 1979-2002 (2002 dollars)

	All Workers		Men		Women	
	PA	U.S.	PA	U.S.	PA	U.S.
1979	\$12.55	\$12.08	\$15.61	\$15.20	\$9.53	\$9.52
1989	\$12.07	\$12.08	\$14.12	\$14.13	\$9.97	\$10.33
1995	\$12.08	\$11.87	\$14.08	\$13.62	\$10.40	\$10.45
2001	\$13.29	\$13.07	\$15.29	\$14.83	\$11.46	\$11.58
2002	\$13.28	\$13.19	\$14.99	\$14.88	\$11.81	\$11.89
Percent Change						
1979-2002	5.8	9.2	-4.0	-2.1	23.9	24.8
1989-2002	10.0	9.2	6.2	5.3	18.4	15.1
1995-2002	9.9	11.2	6.5	9.2	13.5	13.7
2001-2002	-0.1	0.9	-2.0	0.3	3.0	2.7

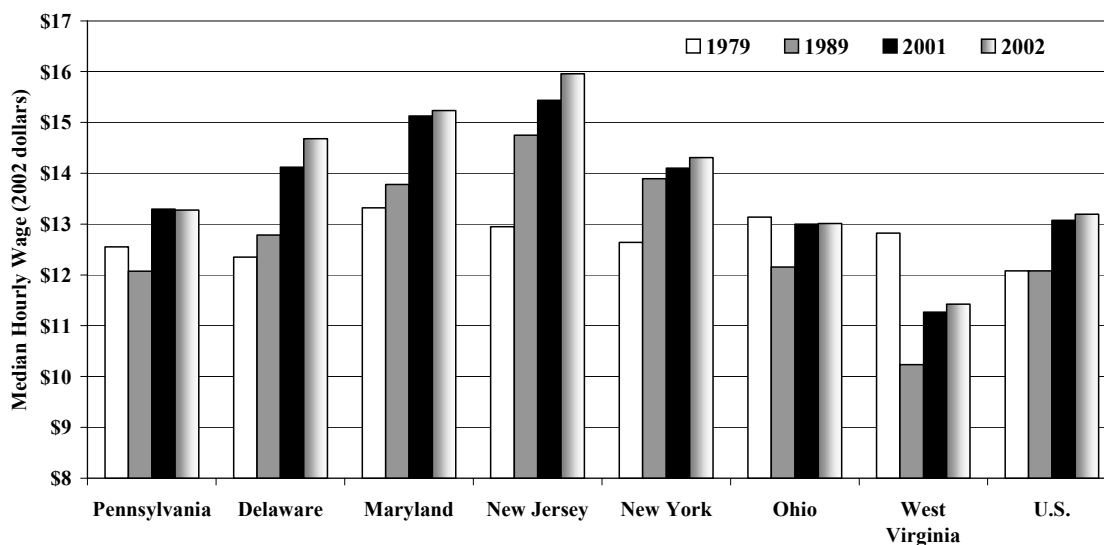
Source: Keystone Research Center (KRC), based on U.S. Census Bureau Current Population Survey (CPS) data.

Figure 1. After Growth in Late 1990s, Median Hourly Wage Stagnates in Pennsylvania



Source: KRC, based on CPS data.

Figure 2. Median Hourly Wages in Pennsylvania and Neighboring States, 1979-2002 (2002 dollars)



Source: KRC, based on Economic Policy Institute (EPI) tabulations of CPS data.

Wages Up for White Women, Black Men, and Black Women

Examining wages by race and sex shows that white women and African-American men and women saw wage increases in the past year, while white men experienced a pay decrease.

Looking over longer periods of time, the black male median wage in Pennsylvania is \$11 per hour now, a gain of 33 cents per hour from 2001 and a remarkable decline of \$2.77 per hour, or 20.1 percent, since 1979 (Table 2).

Over the long term, black women have fared much better than black men, experiencing a nearly \$2 per hour increase in their median wage since 1979 (Figure 3). The median wage for black women in Pennsylvania is now 38 cents per hour more than that for black men, compared \$4.36 per hour less in 1979.

The median wage for white women in Pennsylvania has increased by nearly 25 percent since 1979, to its current level of \$12 per hour. White Pennsylvania men have seen a decline in their median wage from 1979 to 2002 of 3.6 percent.

Most Education-Gender Groups Lose Ground

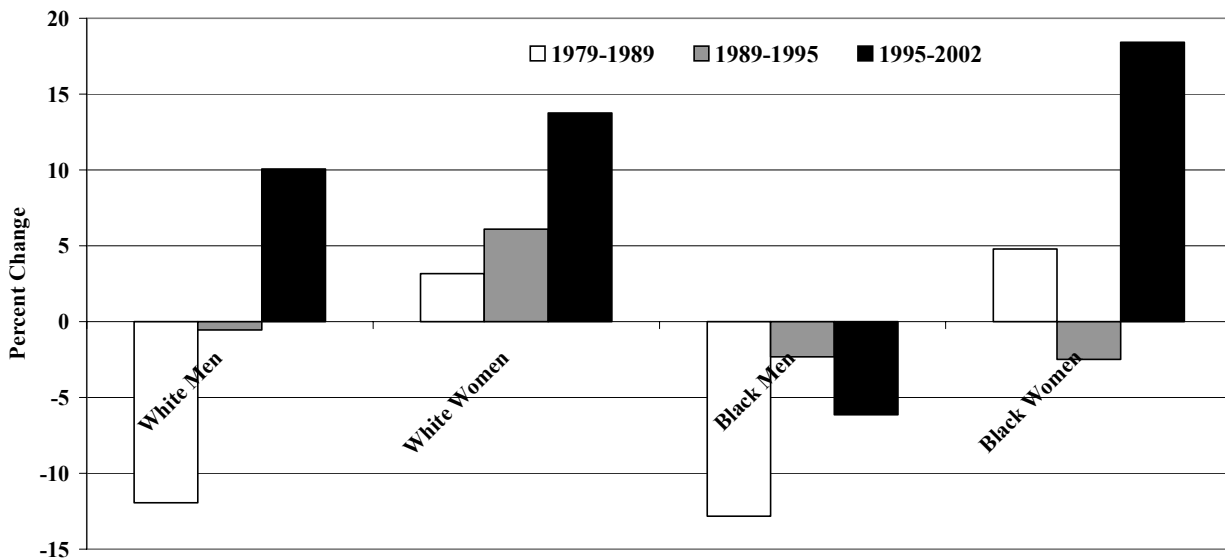
Median wages in Pennsylvania fell from 2001 to 2002 for six out of 10 educational attainment-gender combinations shown in Table 3. Pennsylvania men with a postgraduate degree saw the largest wage *increase* — 7.5 percent — in the past year. Interestingly, women with a postgraduate degree, along with men with 1-3 years of post-High School education, saw the largest declines in wages (over 6 percent).

**Table 2. Median Hourly Wages in Pennsylvania by Race and Sex, 1979-2002
(2002 dollars)**

	1979	1989	1995	2001	2002	Percent Change			
						1979-2002	1989-2002	1995-2002	2001-2002
WHITE	\$12.76	\$12.25	\$12.31	\$13.81	\$13.84	8.5	13.0	12.5	0.2
White Men	\$16.06	\$14.14	\$14.06	\$15.74	\$15.48	-3.6	9.5	10.1	-1.7
White Women	\$9.64	\$9.94	\$10.55	\$11.68	\$12.00	24.5	20.7	13.8	2.7
BLACK	\$11.47	\$10.85	\$10.90	\$10.67	\$11.00	-4.1	1.4	0.9	3.1
Black Men	\$13.77	\$12.00	\$11.72	\$10.67	\$11.00	-20.1	-8.3	-6.1	3.1
Black Women	\$9.41	\$9.86	\$9.61	\$10.46	\$11.38	21.0	15.4	18.4	8.8

Source: KRC, based on CPS data.

Figure 3. Change in Inflation-Adjusted Median Wage by Race and Sex in Pennsylvania in Three Periods (percent)



Source: KRC, based on CPS data.

**Table 3. Median Hourly Wages in Pennsylvania by Education Level, 1979-2002
(2002 dollars)**

	1979	1989	1995	2001	2002	Percent Change			
						1979-2002	1989-2002	1995-2002	2001-2002
MEN									
No HS	\$14.23	\$11.90	\$10.43	\$9.55	\$10.00	-29.7	-16.0	-4.1	4.7
HS	\$15.37	\$13.02	\$12.89	\$13.56	\$13.33	-13.3	2.4	3.4	-1.7
1-3 Yrs. Post-HS	\$15.15	\$14.00	\$14.06	\$14.85	\$13.87	-8.4	-0.9	-1.4	-6.6
College	\$19.16	\$19.25	\$19.72	\$22.02	\$21.92	14.4	13.8	11.1	-0.4
Postgraduate	\$21.13	\$23.70	\$26.25	\$28.33	\$30.45	44.1	28.5	16.0	7.5
WOMEN									
No HS	\$8.15	\$7.70	\$7.33	\$7.62	\$7.50	-7.9	-2.6	2.4	-1.6
HS	\$9.18	\$9.10	\$9.32	\$10.16	\$10.00	8.9	9.9	7.3	-1.6
1-3 Yrs. Post-HS	\$9.83	\$10.50	\$10.11	\$10.82	\$11.11	13.0	5.8	9.8	2.7
College	\$12.91	\$14.00	\$15.42	\$16.57	\$16.67	29.1	19.0	8.1	0.6
Postgraduate	\$15.54	\$18.20	\$21.54	\$23.63	\$22.00	41.6	20.9	2.1	-6.9

Source: KRC, based on CPS data.

Men with less than a high school education experienced small wage increases from 2001 to 2002. Since 1979, however, this (shrinking) group of Pennsylvania workers has seen a fall of nearly one-third in its real median hourly wage, from \$14.23 to \$10.00 (Figure 4).

Women with a high school degree or less saw their wages decline last year, a contrast to the second half of the 1990s. These two groups of women now earn \$10 per hour or less.

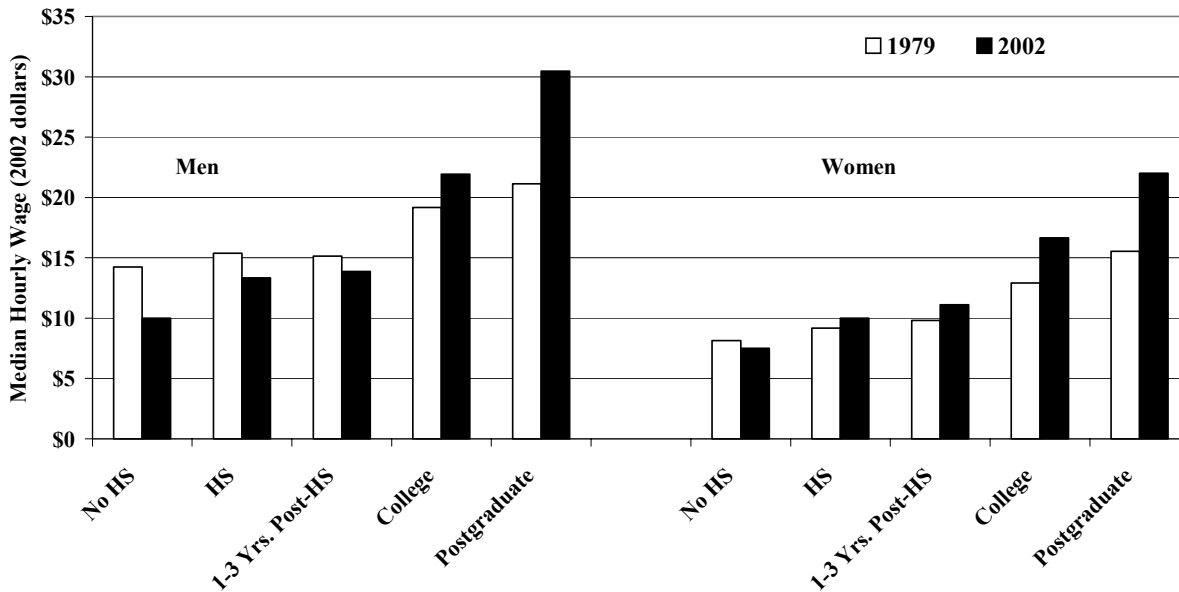
Wages Growing Apart Again in 2002

Just as wage trends can be examined by tracking the wages of middle-wage earners, they can also be examined by tracking high-wage and low-wage earners. Table 4 shows wages of “high-wage earners” (those earning more than 90 percent of all workers and less than the other 10 percent) and “low-wage earners” (those earning more than 10 percent of all workers and less than 90 percent).

Wage inequality – measured by the ratio of the wages of high-wage and low-wage earners – increased in the United States and in Pennsylvania from 1979 to 1995 (Table 4). From 1995 to 2001, wage inequality fell slightly in both the United States and Pennsylvania. The drop in Pennsylvania took place only in the 2000 to 2001 period. From 2001 to 2002, wage inequality spiked in Pennsylvania, erasing the narrowing of the wage gap in the late 1990s. With the exception of 1996, wage inequality in Pennsylvania is now higher than at any point since 1979.

Low-wage earners in Pennsylvania have seen a rise of 3 cents in their inflation-adjusted hourly wage since 1979. By contrast, high-wage earners in Pennsylvania experienced hourly earnings increases of \$6.82 per hour since 1979, about \$14,000 annually for a full-time worker.

Figure 4. Pennsylvania Median Wages by Education and Gender, 1979 and 2002 (2002 dollars)



Source: KRC, based on CPS data.

Table 4. Hourly Wages of High- and Low-Wage Earners in Pennsylvania and the United States, 1979-2002 (2002 dollars)

	High-Wage Earners		Low-Wage Earners		High-Wage Earners' Wage as a Percent of Low-Wage Earners' Wage	
	PA	U.S.	PA	U.S.	PA	U.S.
1979	\$23.06	\$23.60	\$6.88	\$6.78	335	348
1989	\$23.98	\$25.36	\$6.00	\$5.83	399	435
1995	\$25.60	\$26.20	\$6.05	\$5.93	423	442
2001	\$28.64	\$29.43	\$6.94	\$6.79	413	433
2002	\$29.88	\$29.89	\$6.91	\$6.87	432	435
Percent Change						
1979-2002	29.6	26.6	0.5	1.4		
1989-2002	24.6	17.9	15.2	18.0		
1995-2002	16.7	14.1	14.3	15.9		
2001-2002	4.3	1.6	-0.4	1.2		

Note: In this table, "high-wage earners" are defined as those who earn more than 90 percent of all workers and less than 10 percent of all workers. "Low-wage earners" are those who earn more than 10 percent of all workers and less than 90 percent.

Source: KRC, based on CPS data.

The drop in wage inequality from 2000 to 2001 in Pennsylvania reflected more rapid wage growth for low-wage earners than high-wage earners. With no increase in the minimum wage, however, gains for low-wage earners depend on a continuing tight labor market. With the loosening of the labor market in Pennsylvania and the United States from 2001 to 2002, low-wage earners lost ground slightly, while high-wage earners continued to gain ground (an increase of \$1.24 per hour from 2001 to 2002).

Minimum Wage-Productivity Gap Largest in Decades

Since its last increase in September 1997 to \$5.15 per hour, the federal minimum wage has lost value in real terms and has continued to decline relative to productivity (dollars of output per hour). Up until 1970 the value of the minimum wage kept pace with rising productivity (Figure 5). Since then, and especially after 1979, the minimum

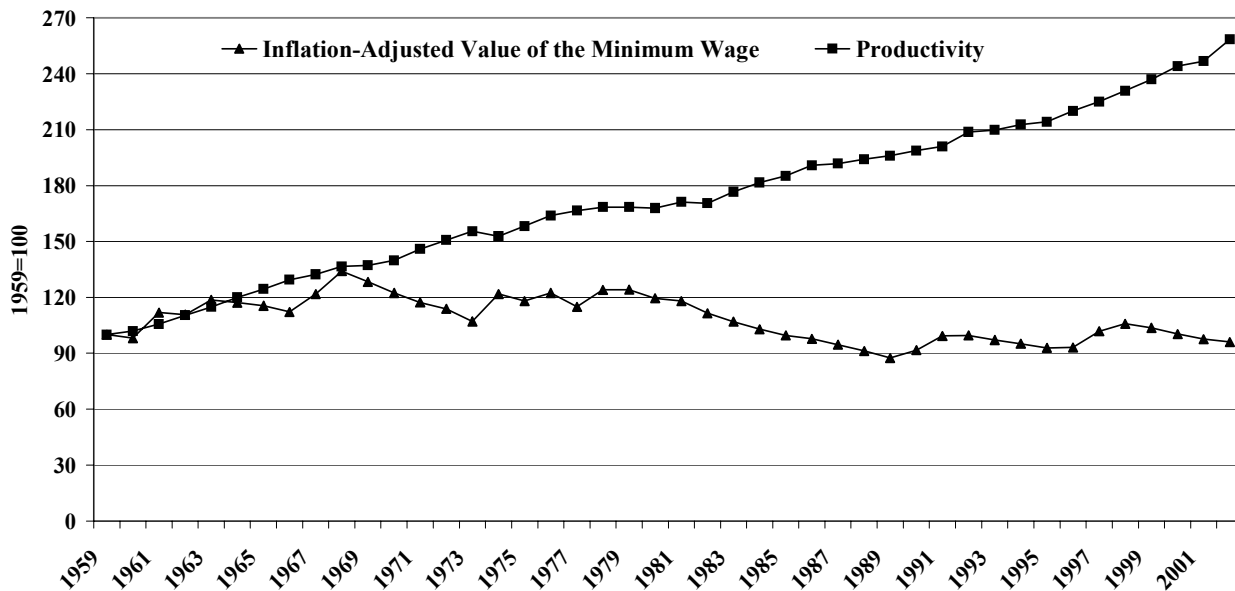
wage has lost value (with the exception of minor bumps in the late 1980s and in 1996-1998), while productivity has risen steadily.

The gap between the dollar value of the minimum wage and productivity (measured also in dollars per hour) in the United States is now at its highest level in at least five decades. The growth in the gap from 2001 to 2002 was the largest on record.

Pennsylvania Wages Lag Across the Board in 2003

We noted earlier that the wage stagnation present from 2001 to 2002 has continued into 2003. Table 5 shows the median hourly wages for Pennsylvania and U.S. workers in the first six months of each year 2000 to 2003.¹⁵ The median wage in Pennsylvania in the first six months of 2003 is the same as in the first six months of 2000. This means that middle-wage workers now earn the same as they did before President George W. Bush's administration began.

Figure 5. The Inflation-Adjusted Minimum Wage Falls While Productivity Rises, 1959-2002



Note: Productivity is output per hour in the business sector.

Source: KRC, based on BLS data.

Table 5. Hourly Wages of Median Wage Earners in Pennsylvania and the United States, 2000-2003 (first half 2003 dollars)

First Six Months	PA	U.S.
2000	\$13.09	\$13.02
2001	\$13.69	\$13.23
2002	\$13.65	\$13.47
2003	\$13.09	\$13.46
Percent Change		
2000-2001	4.6	1.6
2001-2002	-0.3	1.8
2002-2003	-4.1	-0.1

Source: KRC, based on EPI tabulations of CPS data.



JOBS AND JOBLESSNESS

This section reports trends in job growth, unemployment, manufacturing and other industries, and the labor force. Pennsylvania’s job growth performance has been in the bottom dozen states for most periods in the past two decades. The state’s relative job growth performance has been somewhat better in the past two years, despite heavy manufacturing job losses. After surpassing the U.S. rate in late 2002 and early 2003, the Pennsylvania unemployment rate has been below the national level for the past three months.

A recent change took place in the BLS industrial classification system from the Standard Industrial Classification (SIC) to the North American Industry Classification System (NAICS). The BLS discontinued its SIC data collection in December 2002, making consistent comparisons with partial year 2003 figures difficult. However, BLS converted employment data to NAICS back to 1990. Because the NAICS system better reflects recent employment trends (including greater detail in the growing service sector, for example), we use the NAICS system for most comparisons of employment trends.

Pennsylvania Job Growth Trails U.S.

Job growth partly reflects the age composition of the population, which is independent of the health of the economy. For that reason, slow job growth may not be cause for alarm. Nonetheless, job growth is also an indicator of economic strength. In a strong, stable economy, fewer workers leave the state in search of opportunity, more workers move into the state, and more workers who are already in Pennsylvania enter (or stay in) the labor force.

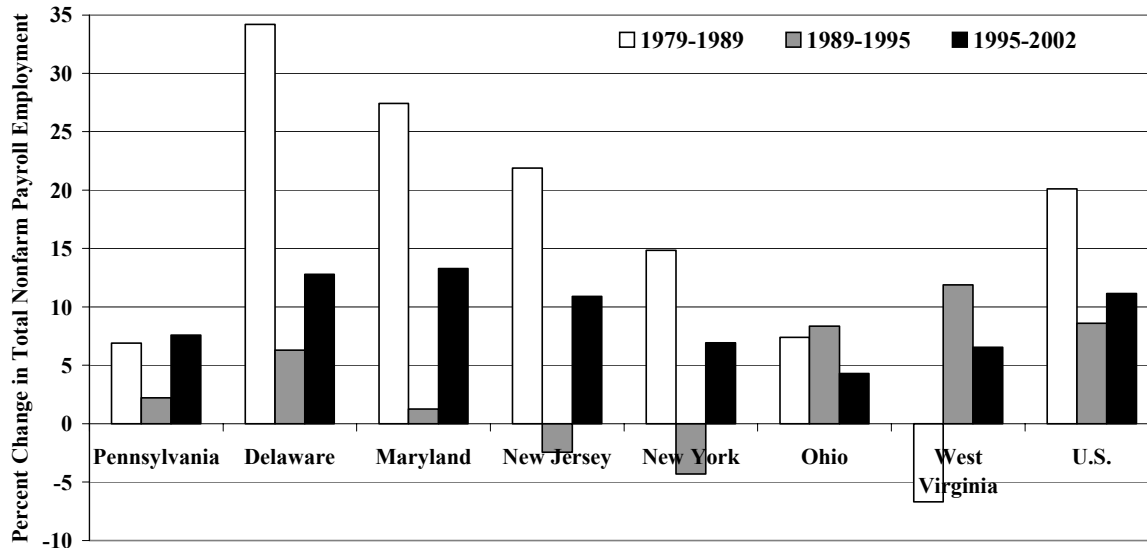
Pennsylvania job growth over the 1979 to 2002 period was about 40 percent of the U.S. level and ranked 48th in the country (Table 6). In three sub-periods – 1979 to 1989, 1989 to 1995, and 1995-2002 – job growth in Pennsylvania never reached more than 68 percent of the U.S. level (Figure 6).

We can also compare Pennsylvania’s rank in job creation to other states, as many others have done to support competing claims – e.g., that the state’s job growth performance is dismal or is improving.¹⁶ It turns out that the state’s job ranking varies depending on the period examined (Table 6).

Table 6. Employment Performance in Pennsylvania, 1979-2002

	1979-89	1979-95	1979-2002	1989-95	1989-2002	1995-2001	1995-2002	2000-2001	2000-2002	2001-2002
Percent Change in Nonfarm Payroll Employment	6.9	9.3	17.6	2.2	10.0	8.2	7.6	-0.2	-0.7	-0.5
PA’s Job-Growth Rank out of 50 States and D.C.	44	48	48	41	44	37	35	32	27	20
Source: KRC, based on BLS data.										

Figure 6. Change in Nonfarm Employment in Pennsylvania and Neighboring States in Three Periods (percent)



Source: KRC, based on BLS data.

Pennsylvania's job creation record looks worst over the 1979-2002 and 1979-95 periods; the Pennsylvania job record looks best in the past 18 months. Of the periods shown, only in those periods where national employment *decreases* does Pennsylvania's job-growth rank climb above 35th place.

While Pennsylvania's job-growth rank climbed to 20th from 2001 to 2002, Pennsylvania had 30,700 fewer jobs in 2002 than in 2001. Only nine states had positive job growth from 2001 to 2002.

Job Growth Varies Across State

Figure 7 shows employment growth in the two halves of the 1990s, and from 2001 to 2002, in each of Pennsylvania's 14 metropolitan areas and in Philadelphia and Allegheny counties.¹⁷

From 2001 to 2002, nine of 14 metropolitan areas and Allegheny County experienced job loss. Only

metropolitan Harrisburg, Lancaster, and State College saw employment increases of greater than one percent from 2001 to 2002.

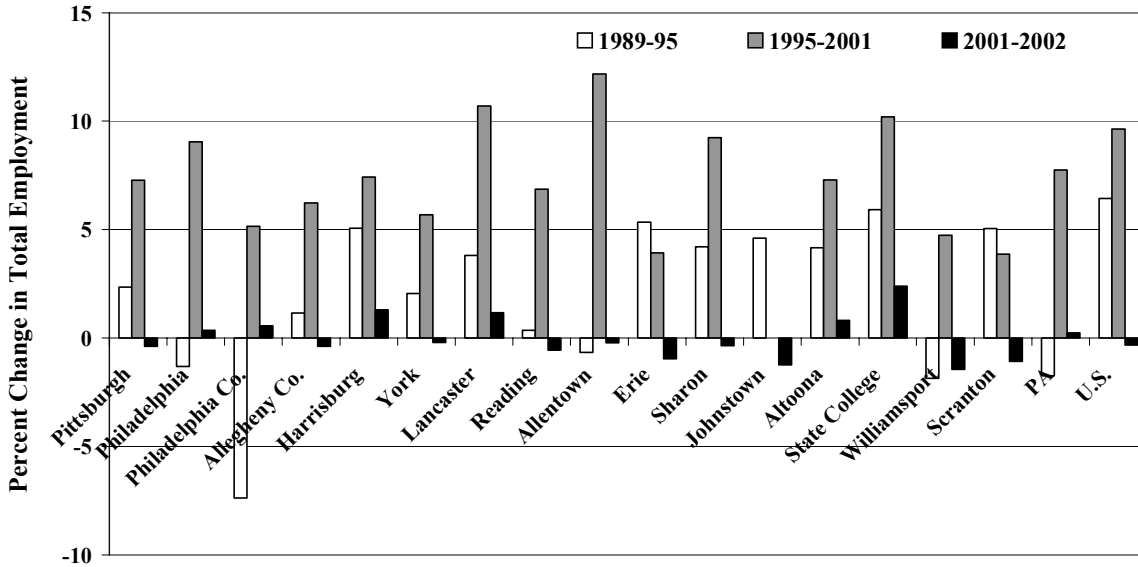
Pennsylvania's Falling Employment

Figure 8 shows that Pennsylvania has yet to return to its employment peak at the start of the recession in March 2001. From March 2001 to July 2003, employment declined by 90,100 in Pennsylvania.

Is Unemployment Stabilizing in Pennsylvania?

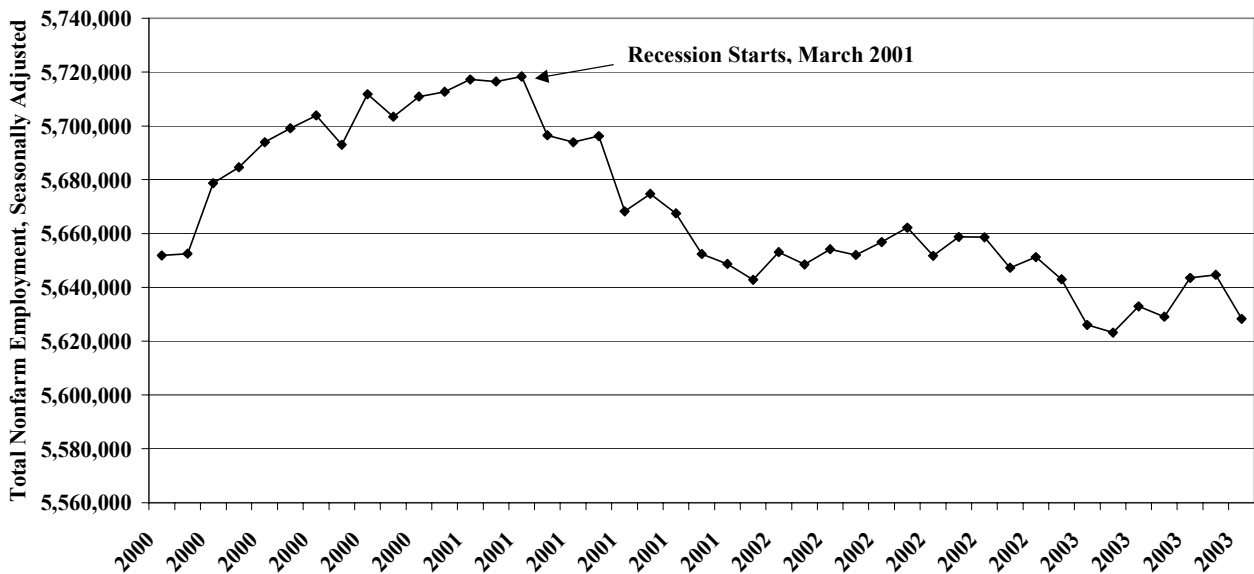
When the Pennsylvania unemployment rate reached 4 percent in March 2000, it was the lowest rate since January 1973. Since March of 2000, the unemployment rate in Pennsylvania has risen to 5.6 percent (Figure 9). U.S. unemployment was at its lowest point, 3.8 percent, in April 2000, and climbed to 6.2 percent in July 2003.

Figure 7. Change in Total Employment in 16 Pennsylvania Areas in Three Periods (percent)



Source: KRC, based on PA DLI data.

Figure 8. Payroll Employment in Pennsylvania, January 2000 - July 2003



Source: KRC, based on BLS data.

Figure 9 shows that the Pennsylvania unemployment rate has been below the U.S. rate for most of the past 12 months, with the exception of December 2002, and January and February 2003. The Pennsylvania unemployment rate hit its recent high point of 6.2 percent in February 2003. While the official unemployment rate has dropped from February to July 2003 by 0.6 percentage points, the share of workers has risen who are on extended unemployment (ordinarily more than 26 weeks) and thus exhaust their eligibility for unemployment insurance (UI) benefits. Table 7 shows that 35 percent of Pennsylvania workers on UI exhausted their benefits in 2002. This is below the U.S. exhaustion rate and in the middle of the states that surround Pennsylvania.

Pennsylvania Labor Force Drops Sharply in 2003

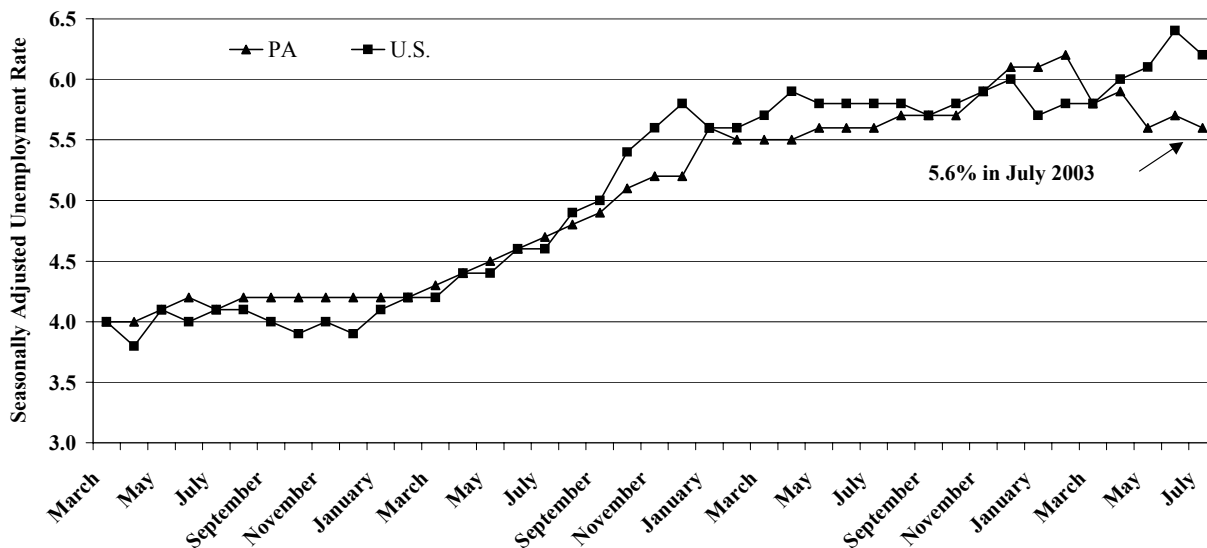
By itself, the unemployment rate paints an incomplete picture of the amount of slack in the job market. The official definition of the unemployment rate is the number of unemployed

workers (defined as those out of work but looking for a job) as a percentage of the labor force (defined as the sum of all employed plus unemployed). Given this definition, individuals who stop looking for work are said to be out of the labor force and not counted as unemployed. If enough people who had previously been unemployed leave the labor force, *the unemployment rate may go down even while job loss is occurring.*

After peaking in December 2002 at 6,320,000 people (the largest monthly labor force since seasonally adjusted data became available in January 1970), the Pennsylvania labor force has declined to 6,195,000 – a drop of 125,000 in seven months (Figure 10).

The current decline is the third largest seven-month drop since the data series started in 1970. The shrinking labor force indicates potential workers are discouraged by the employment prospects and thus are opting out of job searching altogether.

Figure 9. From a Low of 4 Percent in March 2000, PA Unemployment Rate Has Risen to 5.6 in July 2003 (percent)

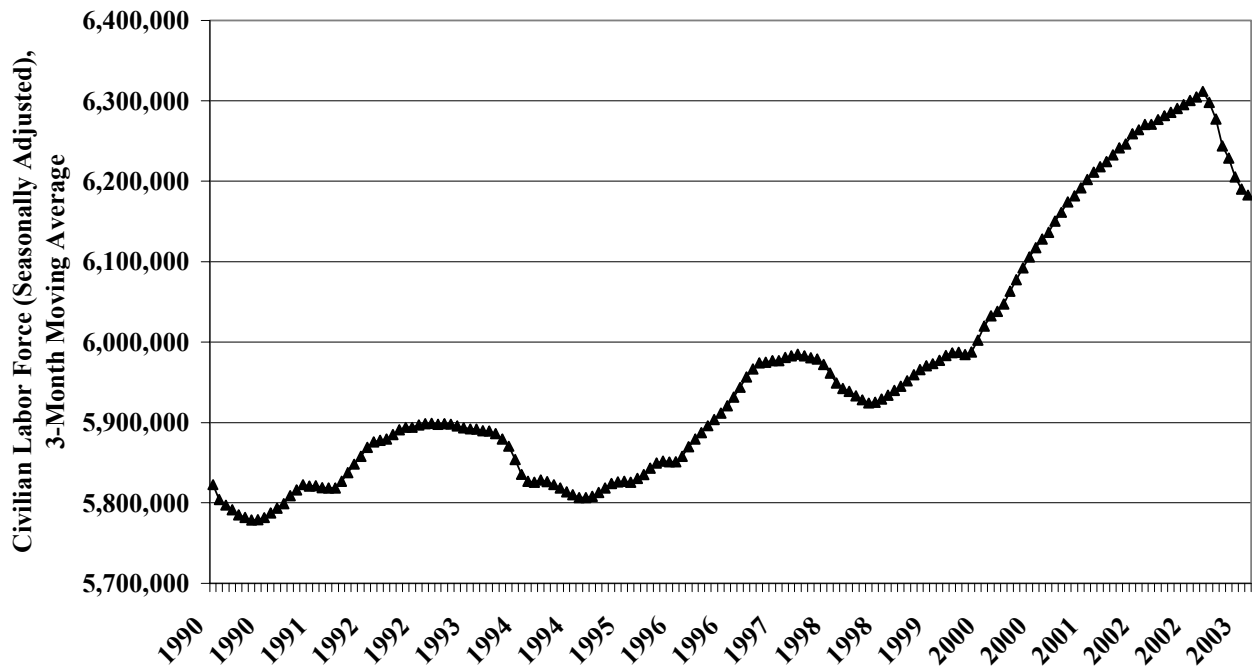


Source: KRC, based on BLS data.

Table 7. Unemployment Insurance Exhaustion Rates in Pennsylvania and Neighboring States, 1989-2002				
	1989	1991	2000	2002
Pennsylvania	23.2	30.9	24.8	35.0
Delaware	11.0	19.0	19.9	25.8
Maryland	23.1	36.7	27.5	35.8
New Jersey	36.0	50.7	44.4	58.2
New York	34.2	46.3	46.3	57.9
Ohio	22.0	27.0	22.0	35.1
West Virginia	22.2	27.2	19.1	24.1
U.S.	27.7	34.5	31.5	42.4

Source: KRC, based on EPI tabulations of BLS data.

Figure 10. PA Labor Force Declines Sharply in 2003



Source: KRC, based on PA DLI data.

Had the Pennsylvania labor force not contracted by 125,000 since December of last year, the unemployment rate would now be 7.6 percent rather than 5.6 percent.

Manufacturing Jobs Decline

In 1990, manufacturing employment accounted for more than 18 percent of total employment in Pennsylvania (Table 8), placing the state at 15th highest in the U.S. By 2002, manufacturing employment as a share of total employment had declined to 13.5 percent, moving Pennsylvania down one place to 16th. Pennsylvania’s manufacturing employment declined from 945,600 in 1990 to 762,000 in 2002, a loss of 183,600 jobs (Figure 11).¹⁸

From 1990 to 2002, Pennsylvania’s decline of 19.4 percent in manufacturing employment was the 12th largest in the United States. In absolute numbers, Pennsylvania’s loss of manufacturing jobs from 1990 to 2002 was third highest, behind New York and California, in total manufacturing job losses.

Pennsylvania Industry Make-Up Shifts

Figure 12 shows employment change in the 11 major sectors of the Pennsylvania economy since the start of the recession in March 2001. Since March 2001, seven sectors have lost jobs, while four have gained jobs.

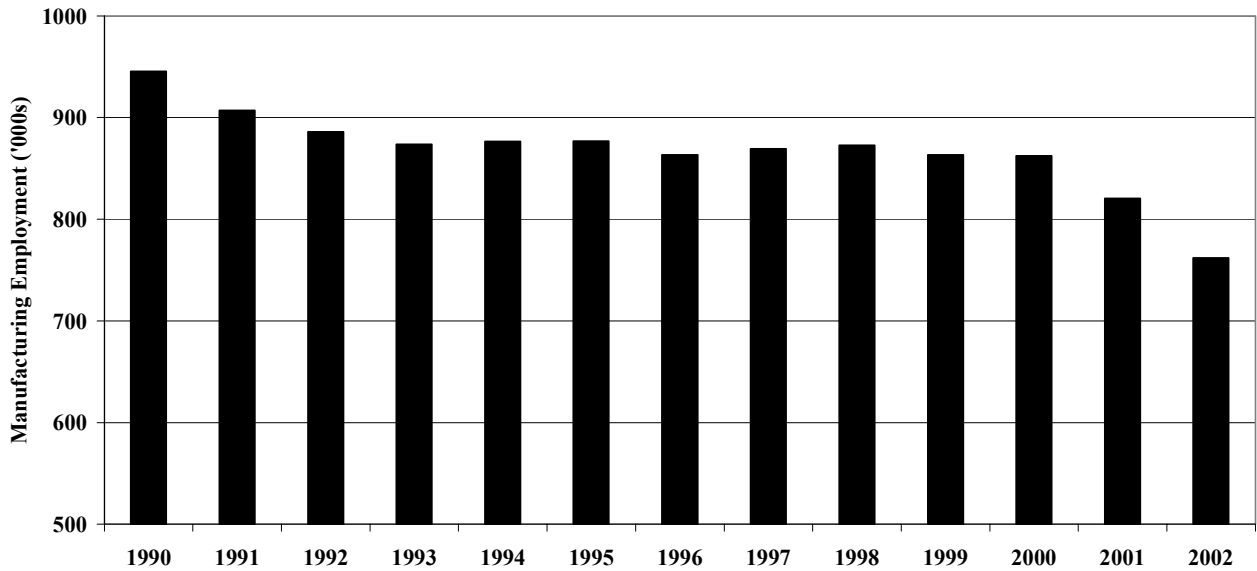
- Manufacturing employment in Pennsylvania has declined by 14 percent since the start of the recession in March 2001 (Figure 12). The 118,200 jobs lost in manufacturing represent the largest single drop (in percent and number of jobs) by far in employment of any sectors in this recession.
- The mining, information, trade, transportation, and utilities sectors have each experienced drops in employment of greater than four percent.
- Employment in education and health services has increased by 6.8 percent.
- Public administration has grown by 2.9 percent.

Table 8. Manufacturing Employment as a Share of Total Employment in Pennsylvania, Nearby States, and the U.S., 1990 – 2002

	1990	2002	Percentage Point Change 1990 – 2002
Pennsylvania	18.3	13.5	-4.8
Delaware	13.2	8.9	-4.3
Maryland	9.1	6.4	-2.7
New Jersey	14.6	9.2	-5.4
New York	12.0	7.7	-4.3
Ohio	21.8	16.3	-5.5
West Virginia	13.0	9.4	-3.6
U.S.	16.2	11.7	-4.5

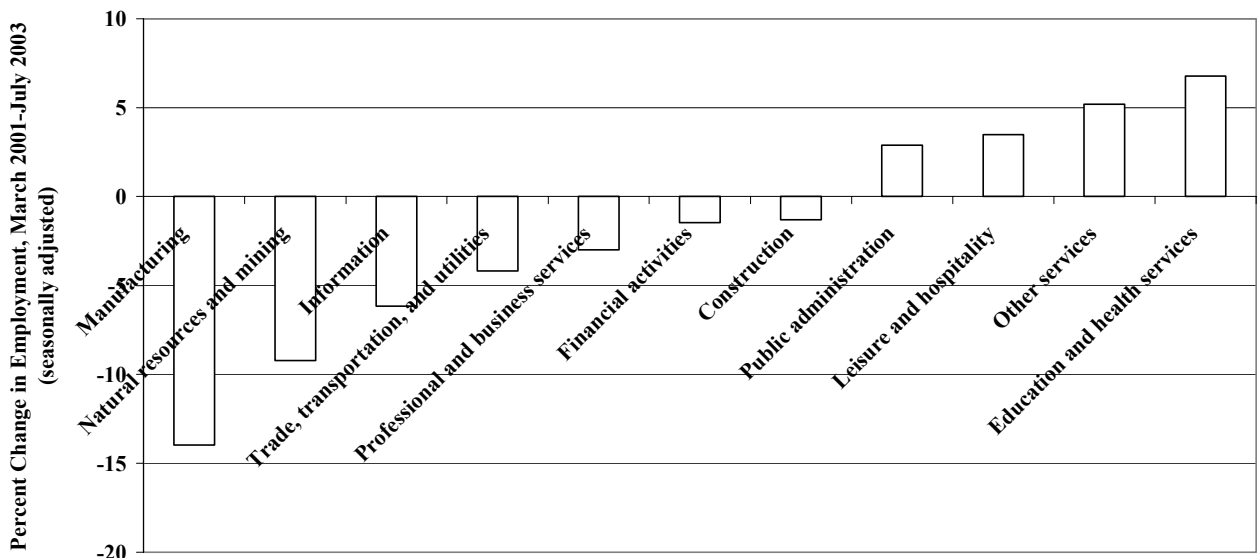
Source: KRC, based on BLS data.

Figure 11. Pennsylvania Loses Nearly 200,000 Manufacturing Jobs from 1990 to 2002



Source: KRC, based on BLS data.

Figure 12. Employment Change by Major Sector in PA Since Start of Recession (March 2001)



Source: KRC, based on BLS data.

Health Jobs Mushroom in 1990s

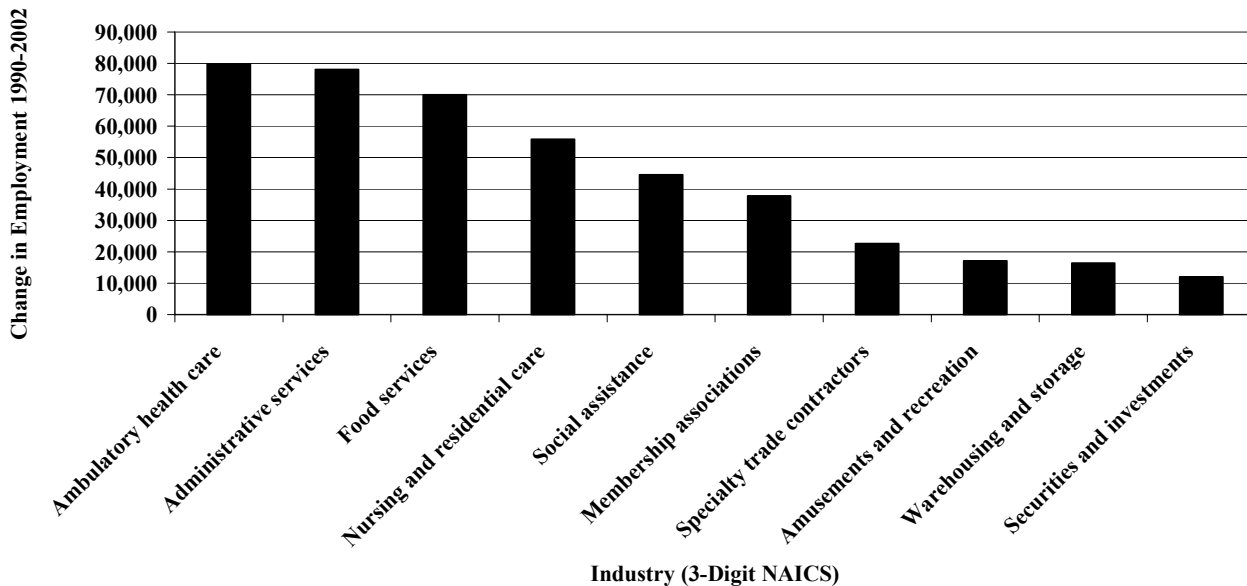
Figures 13 and 14 provide greater detail on the pattern of employment growth in Pennsylvania in the 1990s, examining trends in more narrowly defined industries.¹⁹

Of the five detailed industries adding the most jobs in Pennsylvania from 1990 to 2002, three are in the health care sector. Employment in ambulatory health care services, nursing and

residential care, and social assistance increased by 180,000 from 1990 to 2002. Employment in food services and administrative services grew by 148,100 in this period.

Of the 10 detailed industries with the largest job losses from 1990 to 2002, seven are in the manufacturing sector. Employment in apparel manufacturing declined by 72 percent, while primary manufacturing employment dropped by 35 percent.

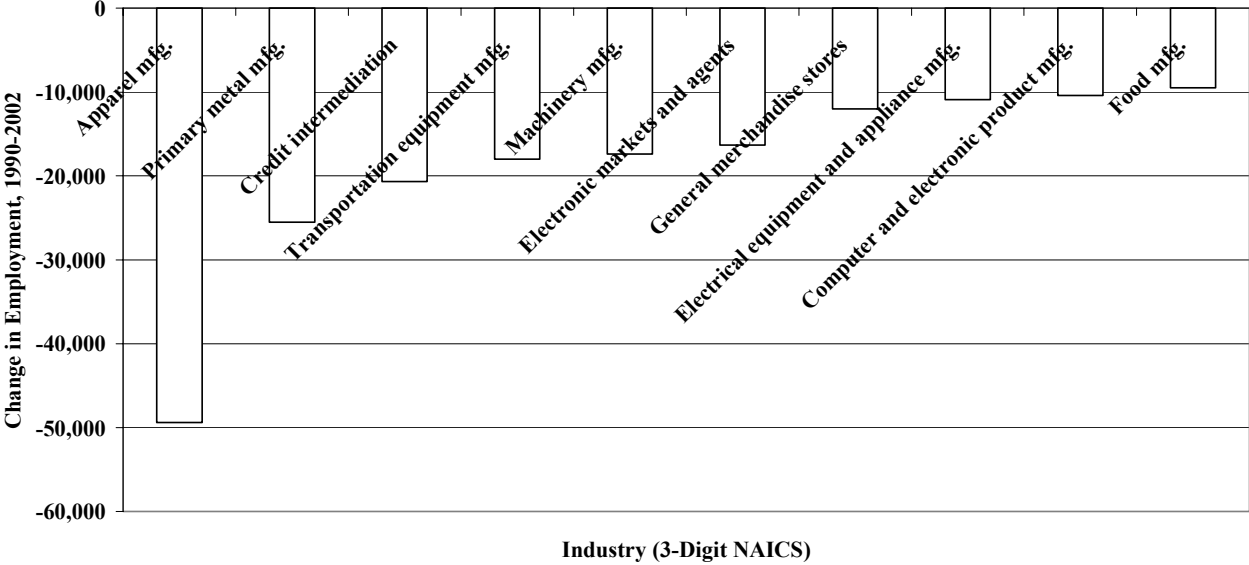
Figure 13. Top 10 Growth Industries in Pennsylvania, 1990-2002



Source: KRC, based on BLS data.



Figure 14. Top 10 Declining Industries in Pennsylvania, 1990-2002



Source: KRC, based on BLS data.

ENDNOTES

- ¹ Lawrence W. Fischer, “Job-Rich Silicon Valley has Turned Fallow, Survey Finds,” *New York Times*, January 20, 2003.
- ² Steven Greenhouse, “I.B.M. Explores Shift of White Collar Jobs Overseas,” *New York Times*, July 22, 2003.
- ³ Private-sector employment is more responsive to economic cycles than total nonfarm employment, which includes government employment. Since private-sector state employment data are not seasonally adjusted, we must use the same two months to make meaningful comparisons over time.
- ⁴ See, for example, “Commute to Nowhere” in the *New York Times Sunday Magazine* of April 30, 2003 that documented the experience of a \$300,000 a year IT professional who found reemployment at a Manhattan GAP retail store.
- ⁵ David Leonhardt, “Graduates Face Difficult Job Market,” *New York Times*. May 14, 2003.
- ⁶ Kate Zernke, “Teenagers Facing Hard Competition for Summer Jobs,” *New York Times*. July 14, 2003.
- ⁷ The Conference Board survey of consumer confidence released on August 26 showed consumer’s assessment of current economic conditions dipping to 61.6 from 63. The survey also showed that Americans are having a tough time finding jobs. Pedro Nicolaci da Costa “Survey: Consumers More Cheerful in August”, Reuters wire service as reported on msn.com, August 26, 2003
- ⁸ Ralph R. Reiland, “Taxes, pork meld to kill jobs in state,” *The Patriot-News*, August 25, 2003, A7.
- ⁹ Keystone Research Center has served as one of three organizations on the technical team for the PA21 Tax Project, along with the Pennsylvania Economy League and Ernst and Young.
- ¹⁰ Pennsylvania Legislative Budget and Finance Committee (PLFBC), *Department of Community and Economic Development Programs: A Performance Audit in Response to Act 1996-58* (Harrisburg: PLFBC, 2000), p. 192. This ranking was developed by LB&FC staff from NASDA survey data of state economic development agency expenditures for FY 1997-98 and U.S. Bureau of Census data.
- ¹¹ For one classic in an enormous literature, see Michael J. Piore and Charles F. Sabel, *The Second Industrial Divide: Possibilities for Prosperity* (New York: Basic Books, 1984).
- ¹² See Chris Benner, Stephen Herzenberg, and Kelly Prince, *A Workforce Development Agenda for Pennsylvania’s New Governor* (Harrisburg: Keystone Research Center, 2003), on line at www.keystoneresearch.org.
- ¹³ Keystone Research Center *Manufacturing Job Loss Threatens Vitality of Central Pennsylvania Counties* (Harrisburg: Keystone Research Center, June 2003).
- ¹⁴ For additional information on the CPI-U-RS, see <http://www.bls.gov/cpi>.
- ¹⁵ Wages reported in Table 5 for 2000 to 2002 will not match wages for these years reported elsewhere in this report because the data are only from the first six months of each year. In addition, the deflator used in Table 5, the CPI-U, differs from that used in other tables, the CPI-U-RS, because the CPI-U-RS is not available for half years.
- ¹⁶ For example, Pennsylvania Senator Vincent J. Fumo regularly posts Pennsylvania’s job-growth ranking (see http://www.fumo.com/Press_Releases/jobs8yrs1-13-03.htm).
- ¹⁷ Figures 6 and 7 are based on different data sets. While over the entire 1979 to 2002 period both data sets show a similar

change in Pennsylvania employment, the changes in sub-periods differ somewhat. Since our primary interest is in how job growth rates differ by region, the discrepancies between the two data sets are not a major concern.

¹⁸ Using the discontinued BLS data base with SIC industry codes, Pennsylvania had 12th highest share of manufacturing employment in 1979.

¹⁹ Data reported in Figures 13 and 14 are for the 3-digit NAICS level.

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