

A REPORT FROM

---

# POLICY MATTERS OHIO

---

THE STATE OF  
WORKING OHIO  
2004

AMY HANAUER

**POLICY MATTERS OHIO** is a non-profit, non-partisan policy research institute dedicated to researching issues that matter to Ohio's working families. We seek to broaden the debate about economic policy in Ohio by providing Ohio's citizens, reporters and policy makers with essential tools to participate in public discussion. Ultimately, we believe that a broader debate will lead to a stronger and more just society. Other areas of inquiry for Policy Matters have included economic development, education, taxes, job growth, and unemployment. Funding for the institute comes primarily from the George Gund Foundation. Special funding for presentations on the State of Working Ohio is generously provided by the St. Ann Foundation. If you are interested in having Policy Matters present to your organization, please contact us at 216-931-9922

## **AUTHOR**

Amy Hanauer is Executive Director of Policy Matters Ohio. She has a Master's in Public Administration from the University of Wisconsin-Madison and a Bachelor of Arts from Cornell University. This is the sixth year that she has written or co-written a version of the State of Working Ohio. For Policy Matters, she has also researched tax policy and corrections policy. Hanauer can be reached at [ahanauer@policymattersohio.org](mailto:ahanauer@policymattersohio.org).

## **ACKNOWLEDGEMENTS**

We are grateful to both the St. Ann Foundation and the George Gund Foundation for support for this report. Jeff Chapman and Sujana Vasavada at the Economic Policy Institute provided much of the data analysis for this report. Matthew Zeidenberg at the University of Wisconsin-Madison's Center on Wisconsin Strategy also kindly provided additional data analysis, for which we are extremely grateful. Policy Matters Ohio interns Philip Wallach and Rajeev Khurana contributed substantially to this report. I benefited from discussion with or review by Zach Schiller, Pam Rosado, Christine Haley Medina, Jeff Miller, George Zeller, Jon Honeck and Mark Cassell. Any errors are the responsibility of the author. Thanks, as always, to Max and Katrina Cassell.

Policy Matters Ohio  
2912 Euclid Avenue  
Cleveland, OH 44115  
216-931-9922 (phone) 216-931-9924 (fax)  
[www.policymattersohio.org](http://www.policymattersohio.org)

TABLE OF FIGURES & TABLES

Table 1.1:	Educational attainment, Ohio residents age 25 & over, by race & sex, 2002	9
Figure 1.1:	Educational attainment, Ohio residents age 25 & over, by race, 2002	9
Table 2.1:	Employment by demographic group, Ohio 2003	10
Figure 2.1:	Ohio employment, 1979 – 2003	11
Figure 2.2:	Ohio employment, January 2001 – July 2004	11
Table 2.2:	Nonfarm payroll employment by U.S., Ohio, & neighboring states, 1979 – 2003	12
Figure 2.3:	Composition of Ohio’s nonfarm employment, January 1990	12
Figure 2.4:	Composition of Ohio’s nonfarm employment, May 2004	12
Figure 2.5:	Manufacturing Percentage of total nonfarm employment in Ohio	13
Figure 2.6:	Ohio employment percentage changes, May 2000 to May 2004	14
Table 2.3:	Job growth 2000 – 2003, manufacturing & other, Ohio & neighboring states	14
Table 2.4:	Unemployment and underemployment by demographic group, Ohio 2003	15
Figure 2.7:	Ohio unemployment rate	16
Figure 2.8:	Underemployment rate, Ohio, 1994 – 2003	17
Figure 2.9:	Part-time for economic reasons share, Ohio, 1994 – 2003	17
Figure 2.10:	Long-term unemployment share, Ohio 1994 – 2003	18
Figure 2.11:	Ohio unemployment by race	18
Figure 2.12:	Unemployment and underemployment in black and white, Ohio 2003	19
Figure 2.13:	Rate of union membership, Ohio and U.S., 1983 and 2003	19
Figure 3.1:	Median wages and income, 1979 – 2003	20
Figure 3.2:	Median hourly wage: Ohio and the U.S. 1979 – 2003	20
Table 3.1:	Low, median, and high wage, U.S., Ohio, and neighboring states	21
Figure 3.3:	Median wage, Ohio and neighbors, 1979 – 2003	21
Figure 3.4:	Median wages in Ohio, male and female	22
Table 3.2:	Ohio median wages, by gender & race, 2003	22
Figure 3.5:	The race gap in wages, 1979 – 2003	23
Figure 3.6:	The race gap, Ohio men, 1979 – 2003	23
Figure 3.7:	Education boosts earnings, but not equally: wage change, education, & race, 2003	24
Table 3.3:	Ohio wages, by race & education, 2003	25
Table 3.4:	Learning & earning: Ohio wages by education & gender, 2003	25
Table 3.5:	The union premium, Ohio hourly wages, 2003	26
Figure 3.8:	Hourly wages for union * non-union, by race & gender, 2003	26
Figure 3.9:	Ohio median household income, 1984 – 2003	27
Figure 3.10:	Ohio’s median income for 4-person families, 1991 – 2002	28
Figure 4.1:	Ohio’s wages by decile, 1979 and 2003	29
Table 4.1:	Inequality in Ohio and the U.S., 1979 – 2003	30
Table 4.2:	U.S. households: mean income for each fifth and top 5%	30
Figure 4.2:	Ohio vs. U.S. percentage change in real wages, 1979 – 2003	31
Figure 4.3:	Living below poverty line, children and all, Ohio, 1979 – 2003	32
Figure 4.4:	Percentage of children & all below 200% of poverty line, Ohio, 1979 – 2003	33
Figure 4.5:	Ohioans lacking health care coverage, 1987 – 2003	33
Figure 4.6:	Retirement benefits, Ohio and U.S., 3-year moving averages	34
Figure 4.7:	State and local taxes as a share of total family income, 2002	34

## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY</b> . . . . .	<b>4</b>
<b>I. INTRODUCTION</b> . . . . .	<b>8</b>
<b>II. EMPLOYMENT AND UNEMPLOYMENT</b> . . . . .	<b>10</b>
CHANGE IN PAYROLL EMPLOYMENT . . . . .	10
WORKFORCE COMPOSITION . . . . .	12
UNEMPLOYMENT . . . . .	15
UNDEREMPLOYMENT . . . . .	16
BLACK AND OUT OF WORK . . . . .	18
UNIONIZATION . . . . .	19
<b>III. WAGES AND INCOME</b> . . . . .	<b>20</b>
PINK AND BLUE COLLARS: MEDIAN WAGE BY GENDER . . . . .	22
THE COLOR OF MONEY: BLACK AND WHITE WAGES IN OHIO . . . . .	22
EARNING AND LEARNING . . . . .	24
EDUCATION PAYS FOR MEN AND WOMEN. . . . .	25
A MORE PERFECT UNION: WAGES AND UNIONIZATION. . . . .	26
HOUSEHOLD INCOME . . . . .	26
<b>IV. INEQUALITY AND POVERTY</b> . . . . .	<b>29</b>
WAGE INEQUALITY . . . . .	29
POVERTY . . . . .	32
BENEFITS . . . . .	33
PENSIONS . . . . .	33
TAXATION . . . . .	34
<b>V. CONCLUSION</b> . . . . .	<b>35</b>
<b>APPENDIX</b> . . . . .	<b>38</b>

## EXECUTIVE SUMMARY

Ohio's labor market faces serious challenges as we adjust to a changing economy. *The State of Working Ohio 2004* documents some of the trends facing Ohio workers. Findings include:

*Employment: Ohio lost a large number of jobs during the national recession between March and November 2001, and continued to lose jobs during the recession's aftermath, especially in the high-paying manufacturing sector. Percentage job loss in Ohio has been worse than in all but two other states, and is much worse than that seen in the aftermath of previous recessions.*

- ◆ Ohio lost 234,000 jobs between peak average annual employment (5.625 million jobs) in 2000 (5.625 million jobs) and average annual employment in 2003 (5.391 million jobs). This percentage job loss was worse than the nation's, than all but two other states, and than seen after previous recessions.

- ◆ Ohio posted meager job gains through July 2004, when the state still had 217,000 fewer jobs than when the recession began in March 2001. This 3.9 percent drop was greater than in all states except Massachusetts and Michigan. At this point after the early 1990s recession started, 63,500 Ohio jobs had been created, a 1.3 percent increase. The state added 19,700 jobs since the end of 2003. At that rate it would take more than six years to reach pre-recession levels.

- ◆ The manufacturing sector still employs nearly one in six Ohio workers but its share of the workforce has plummeted by 29 percent, from 21.7 percent of the state's jobs in 1990 to 15.4 percent by 2004. Other strong sectors here are trade, transportation and utilities (19.4 percent of workers); government (14.8 percent); and education and health (13.7 percent). Education and health, professional and business services and leisure and hospitality have recently gained a share of the state's workforce.

*Unemployment: Unemployment and underemployment have risen in Ohio, particularly for African Americans and workers with less education.*

- ◆ The unemployment rate for Ohio workers was 6.1 percent in 2003, up from historic lows in the late 1990s, but not as high as levels seen after previous recessions. Of unemployed workers, 20.9 percent were idled for 26 weeks or more, the highest level in more than a decade.

- ◆ Underemployed describes those who are unemployed (looked for a job in previous month), 'part-time for economic reasons,' 'discouraged' (looked for a job in previous year but not in previous month because they lack prospects), or 'conditionally interested' (want work but face a barrier such as child care or transportation). Ohio's 2003 underemployment rate was 10.4%, the highest since the statistic began being measured, and up from a low of 6.8% in 2000.

- ◆ African-American unemployment in Ohio saw a startling 63% increase in two years, from 7.4% in 2001 to 12.1% in 2003, and was twice the level facing white workers (5.4 percent).

*Wages: Ohio's median wage fell in 2003 and is now below the national median. Wage gaps between women and men have narrowed since the 1980s, but disparities between black and white workers have grown.*

- ◆ In 2003, Ohio's year-end median wage was \$13.14 an hour, lower than any of the previous four years and lower than the \$13.44 rate of 1979, but higher than the median wage levels seen between 1980 and 1998. A full-time, year-round worker at this wage would earn \$27,300. The median wage peaked at \$13.51 in 2000.

- ◆ Ohio's median wage had been more than \$1.00 an hour above the national median wage in 1979, in inflation-adjusted 2003 dollars. By 2003, Ohio's \$13.14 median wage was below the national median (\$13.62).

◆ In the past few years, Ohio's median wage has fallen while that of lower-wage neighbors has increased. Ohio's median wage had been second highest among neighboring states in 1979. Wages fell in Ohio and bordering states during the 1980s, but Ohio, Michigan and Pennsylvania still consistently posted higher median wages than West Virginia, Indiana and Kentucky. Among adjacent states, in 2003 Indiana outpaced Ohio in median wage for the first time.

◆ Men continue to out-earn women in Ohio. The 2003 median hourly women's wage of \$11.57 was 78.3 percent of the men's wage of \$14.78. Hourly wage rates understate the difference between male and female earnings, because men work more hours. The 78.3 percent of a man's wage that women earned in 2003 was up from 60.5 percent as much in 1979. Much of the narrowing gap is due to the 9.6 percent drop in men's inflation-adjusted median wage, but women's wages also increased by 17 percent.

◆ The median white worker made \$13.58 an hour in 2003 while the median black worker earned \$11.18 an hour, about 82.3 percent as much. For men, the disparity was greater, with black men earning \$11.52 an hour, just 75.9 percent of what white men earned (\$15.18). Black women earned \$11.04 an hour, 93.6 percent of what white women earned.

*Education and Unionization: Those with more education earn substantially more and workers in unions have higher wages with fewer gender and race disparities. But unionization rates are falling and Ohio is not keeping pace with the nation in college attainment.*

◆ While Ohioans were more likely than others in the nation to have high school diplomas in 2002 (84.7 percent of Ohio adults and 82.7 percent of U.S. adults have a high school diploma), we lagged in graduation from college (28.6 percent of Ohio adults and 32.7 percent of U.S. adults have at least a community college degree), at a time when higher education is increasingly necessary to ensure family supporting wages. White Ohioans are also more than 50 percent more likely to have completed a degree beyond high school than black Ohioans.

◆ Education increases wages, regardless of race and gender. White high school graduates earned 29 percent more than dropouts while black graduates earned 23.8 percent more than dropouts. White and black college graduates earned 131.7 and 123.8 percent more respectively than those who hadn't finished high school – well more than twice as much in hourly earnings.

◆ Although education boosts wages, at every educational level black workers continue to earn less than white workers. For those without a high school diploma, blacks earned \$8.54 an hour, 96 percent of what white non-graduates earned (\$8.89) in 2003. For those with a college degree or more, blacks earned \$19.11 an hour, 91.5 percent of what whites earned (\$20.89).

◆ Both men and women benefit from increased education – college graduates of both genders earned 132 percent more than high school dropouts. However, even controlling for education, disparities between men and women's hourly earnings persist. Women with a high school diploma (\$10.03) earned only slightly more per hour than male high school dropouts (\$9.88). Women with some college earned \$11.75, \$2.38 less per hour than men with the same education, and less even than men with just a high school degree. Women college graduates earned \$19.11, \$3.78 less than men at the same education level.

◆ Union membership has plunged in Ohio and the nation over the past twenty years. In 2003, just one in six of Ohio's workers were unionized (16.7 percent), down from one in four (25.1 percent) in 1983. Ohio's unionization rates were still well above the national average, which was one in five in 1983 and just one in eight (12.9 percent) in 2003.

◆ Non-unionized workers made less than three-fourths of what unionized workers earned hourly in 2003. For African Americans and women, benefits of unionization were even greater. Black workers not in a union earned 69.4 percent of what unionized black workers earned each hour. Women without unions earned 72.6 percent of what unionized women earned in 2003.

*Income, Inequality, Poverty and Basic Needs: Ohio household and family income rose in the 1990s and have declined since the year 2000. Wage and income inequality have grown substantially over the past several decades. Rates of health insurance coverage and employer-provided retirement have declined and poverty rates remain high.*

◆ Ohio's real median household income grew slightly in 2003, although the growth between 2002 and 2003 was not statistically significant. Median household income was \$43,520 in 2003, up slightly from \$42,662 in 2002. The level was below the previous peak of \$45,891 in 2000 and comparable with levels from 1998 and 1999.

◆ Ohio's inflation-adjusted median income for four-person families dropped after 1998 and had not regained the \$67,637 peak reached that year as of 2002 (most recent available). Prior to 1998, four-person family income had grown steadily since 1991. In 2002, median four-person family income was \$65,399, more than \$2200 below its peak in the late 1990s, but still \$10,000 above 1991 levels.

◆ Ohio wages grew more unequal between 1979 and 2003, with workers in the bottom 60 percent of the earnings spectrum seeing real wage erosion or stagnant wages. Workers at the tenth percentile earned \$6.99 an hour in 1979 and \$6.91 an hour in 2003. Earnings growth remained essentially non-existent through the 60<sup>th</sup> percentile worker, who earned \$15.20 per hour in 1979 and \$15.37 per hour in 2003. In contrast, the 90<sup>th</sup> percentile wage grew from \$23.59 an hour in 1979 to \$28.05 an hour in 2003. Wages at the 90<sup>th</sup> percentile are now more than four times greater than wages at the 10<sup>th</sup> percentile, up from 3.4 times greater in 1979 and 3.9 times greater in 2002. Wages at the 90<sup>th</sup> percentile are now more than twice those at the median, up from 1.76 times as much in 1979. Still, wage inequality is not as extreme in Ohio as it is in the U.S.

◆ National household income data showed much greater inequality among the top ten percent of earners (state data is unavailable). In 2003, the top five percent of households earned an average of \$253,239, more than \$100,000 more per year on average than the top 20 percent (which includes the top five percent). Disparities have spiked over the past thirty years. While the top five percent of households made 15.7 times as much as the bottom 20 percent in 1973, those highest income families earned more than 25 times as much as the bottom 20 percent in 2003 on average.

◆ In 2003, more than one in ten Ohioans (10.9 percent) and about one in six Ohio children (16.5 percent) were below an official poverty line that is described by many as much lower than is required for subsistence. In 2004, the poverty line for a family of three is \$15,260 and for a family of four is \$18,850.

◆ Nearly one in eight Ohioans (12.1 percent) was without health insurance at some point in 2003, the highest level since this percentage began being tracked in 1987.

◆ The percent of employees receiving retirement benefits from their workplace slid in Ohio between the three years around 1980 and the three years around 1990. Since then, retirement benefits have stabilized, with 53.1 percent of Ohio workers receiving such coverage, down from 58.7 percent around 1980. The current rate exceeds levels in the U.S. as a whole, where less than half of workers receive retirement benefits from their workplace.

The American and Ohio economies have undergone extensive change in the past few decades and will likely continue to change. As of 2003, many Ohio workers are not benefiting from those changes. In the last few years, jobs have been lost and not replaced. Over a longer trend, inequality has increased, gaps between black and white workers have widened, and median wages have not grown. Understanding how the Ohio economy affects our working families is the first step toward helping Ohio workers begin benefiting from economic change.

### **A note on this report**

The appendix describes data sources and methodology, and defines various terms and formulas used in this report. This brief box is meant to give readers a context for some of the data addressed in this report.

Most studies examine averages. We choose instead to focus primarily on medians (though we devote some space to examining averages). The median is the midpoint in a sample – in a group of 101 workers, the median earns more than 50 of the workers and less than 50 of them. We find medians more meaningful because averages can be distorted dramatically upward by a few high earners. As the joke goes, when Bill Gates walks into a bar, the average income increases exponentially, but the typical drinker hasn't gained a penny. For more on differences between averages and medians go to:

<http://www.policymattersohio.org/saywhat1.html>.

There are many ways to look at worker well-being: annual family income, annual household income, weekly wages and hourly wages. We devote most of the report to hourly wages. We chose this variable because income can include substantial non-wage earnings, and is thus a measure of things other than job quality. Also, income fluctuates along with hours worked – if a family of four with one earner has the stay-at-home parent return to work, their family income may almost double, but the hourly wage has not changed. Understanding what is happening to hourly wages is an important way of assessing how people putting in the same number of hours are doing over time. Hours of work have increased in recent years – both with individuals putting in more hours and with families having more workers. This is sometimes a good thing (giving women more control over their finances, for example), and sometimes a challenge (removing a stay-at-home parent and thereby increasing child care and housekeeping costs, possibly increasing family stress, and reducing parents' time with their children, for example).

While wage income is important to track, looking at it alone can understate inequality. Wealthier families have more non-wage income from investments, and investment income is more unequally distributed than wage income.

“Real” dollars are dollars that are adjusted for inflation. Nominal dollars are not adjusted. We adjust all dollar values to 2003 dollars, unless otherwise noted. Adjusting for inflation makes it much easier to make accurate comparisons between years and describes what real change has been. We use the CPI-U-RS series to do this adjustment. See the appendix for more on this series.

Along with medians, we have several tables and figures that divide the workforce into five, ten or 100 equal parts, called “quintiles”, “deciles” or “percentiles”. In any sample, there are 100 percentiles, ten deciles and five quintiles. When we say a worker is at the tenth percentile (first decile), we mean that she earns more than ten percent of all workers. The twentieth percentile or second decile earns more than 20 percent of workers and so on. The first quintile earns more than twenty percent of all workers, the second quintile earns more than forty percent of workers. Dividing the workforce like this is a good way to examine equity and inequity in compensation, among other things.

Terms related to unemployment and underemployment are defined in the text and in the Appendix. We use the Current Population Survey of the U.S. Census to gather data on wages, unemployment, and poverty. This is the best and most recent source available for these measures. We use the Current Employment Statistics (CES) survey, sometimes called the establishment survey, to determine levels of payroll employment. The CPS does ask about employment, but it surveys a fraction of the workers covered by the CES, and is more volatile and less reliable for that statistic. For more on the difference between these surveys, see the Appendix.

## I. INTRODUCTION

Ohio has often been described as a microcosm of the nation. During this election year, much has been made of Ohio's status as a battleground state. The fact that no Republican presidential candidate has ever won without carrying Ohio has been cited countless times in the national and local media.

But Ohio and the nation have diverged in many ways in recent years. While the country's overall population has grown, Ohio's growth has tapered off. While Asian and Latino populations have grown nationally (to 3.96 and 13.5 percent of the population, respectively), these communities remain smaller in Ohio.<sup>1</sup> The industrial sectors that are growing or shrinking in Ohio are similar to those growing and shrinking nationally, but manufacturing job loss has hit this region harder, and manufacturing still dominates this state compared to other places. The information sector, which some elsewhere have seen as a panacea, has not prospered here. The national economy has begun to emerge from the recession that started in 2001, although the job recovery nationally has been weak. But in Ohio, signs of recovery are fewer and further between – as of July 2004 the state still had 217,000 fewer jobs than it had when the recession began in March 2001 according to the Current Employment Statistics (CES) survey.

If in certain ways Ohio seems to be falling behind, in other areas the state still out-performs the nation. We have higher rates of pension and health coverage, higher rates of unionization, a strong manufacturing sector, and better levels of high school graduation. Housing prices are more affordable than in many places. Inequality is not as extreme here, in part because top Ohio earners don't approach the levels in some wealthier states, but in part because our poverty is slightly lower than the nation's. There are many things that make Ohio an excellent place to live and work.

As of 2003, Ohio had more than 11.1 million residents. Demographically the population was 86 percent white, 12 percent African American, 2 percent Asian and 2 percent Hispanic (of any race).<sup>2</sup> The population was fairly evenly divided between men (49 percent) and women (51 percent). More than three-fourths (77.4 percent) of residents lived in urban areas, while 22.6 percent lived in rural communities according to the 2000 census. The per capita income in 2003 in the state was \$29,944, which ranked 25<sup>th</sup> among the 50 states according to the Bureau of Economic Analysis. More than 1.3 million people, 12.1 percent of the population, lived under the official federal poverty line during 2003.

Of Ohio residents aged 25 and over, 14 percent lacked a high school degree in 2002. More than a third (37.7 percent) ended their education with a high school diploma, meaning that a majority (53 percent) of Ohio adults had no education beyond high school in 2002. Another 18.4 percent completed some education beyond high school, but did not get a college degree. More than one-fourth (28.6 percent) of Ohio adults had at least an associate's or college degree in 2002. Educational attainment was nearly identical for men and women (men complete college and graduate school at slightly higher rates). Compared to the country as a whole, Ohio adults were more likely to have completed high school but less likely to have completed college in 2002. More than 2.9 million people in Ohio households were enrolled in school at the K-12, college or university level according to the 2003 American Community Survey. Table 1.1 below displays educational attainment for Ohio adults from various demographic groups and for U.S. adults of all demographic groups combined. For some of the categories in this table, 2003 data is available, but to do a consistent comparison we used 2002 data, which was available for all of the groups in the table below.<sup>3</sup>

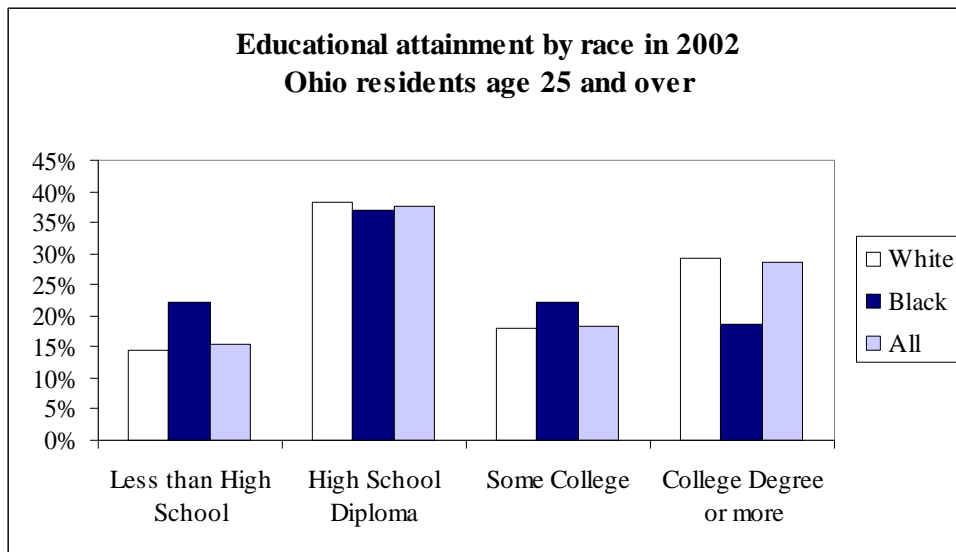
Table 1.1

Educational attainment, U.S. and Ohio residents age 25 and over, by race and sex						
	All US residents (2003)	All OH residents (2002)	Ohio Men (2002)	Ohio Women (2002)	White Ohioans (2002)	Black Ohioans (2002)
Less than High School	16.4%	15.3%	15.5%	15.1%	14.4%	22.1%
High School Diploma	29.8%	37.7%	36.8%	38.5%	38.2%	37.1%
Some College	20.3%	18.4%	18.1%	18.7%	18.1%	22.3%
Associate's, college, or graduate degree	33.5%	28.6%	29.6%	27.7%	29.3%	18.5%

Source: American Community Survey (ACS) 2002 detailed tables

Educational attainment continues to vary significantly by race in Ohio, with white residents finishing high school and college at much higher levels. Closing this education gap could do a lot to improve the well-being of black Ohioans, and to reduce inequality between blacks and white families in the state. Figure 1.1 below shows the level of educational attainment of black and white adults over age 25 in the year 2002.

Figure 1 .1



Source: ACS 2002 detailed tables

## II. EMPLOYMENT AND UNEMPLOYMENT

In 2003, 67.4 percent of Ohioans over the age of sixteen were in the labor force, either working or unemployed. The unemployment rate was 6.1 percent, above historic lows seen in the late 1990s, but still much lower than peak levels seen after some previous recessions. There continued to be differences in the way that different demographic groups experienced the Ohio labor market in 2003. A higher percentage of men than women participated in the labor market, whites participated at slightly higher rates than African Americans, and higher levels of education were uniformly associated with greater labor force participation and a higher employment-to-population ratio. Table 2.1 displays labor force participation and employment to population ratios for Ohio for 2003.

Table 2.1

Employment by demographic group, Ohio 2003		
	Labor Force Participation Rate	Employment to Population Ratio
<b>All workers</b>	67.4%	63.3%
Male workers	74.5%	69.7%
Female workers	61.0%	57.4%
Difference	13.5%	12.3%
<b>Age</b>		
16-24 yrs	69.0%	60.3%
25-54 yrs	84.1%	79.9%
55+ yrs	35.1%	33.7%
<b>Race / ethnicity</b>		
White	67.4%	63.8%
African-American	65.1%	57.2%
<b>Education</b>		
Less than H.S.	44.7%	38.0%
High school	65.4%	61.1%
Some college	75.0%	71.3%
B.A. or more	80.0%	77.6%

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

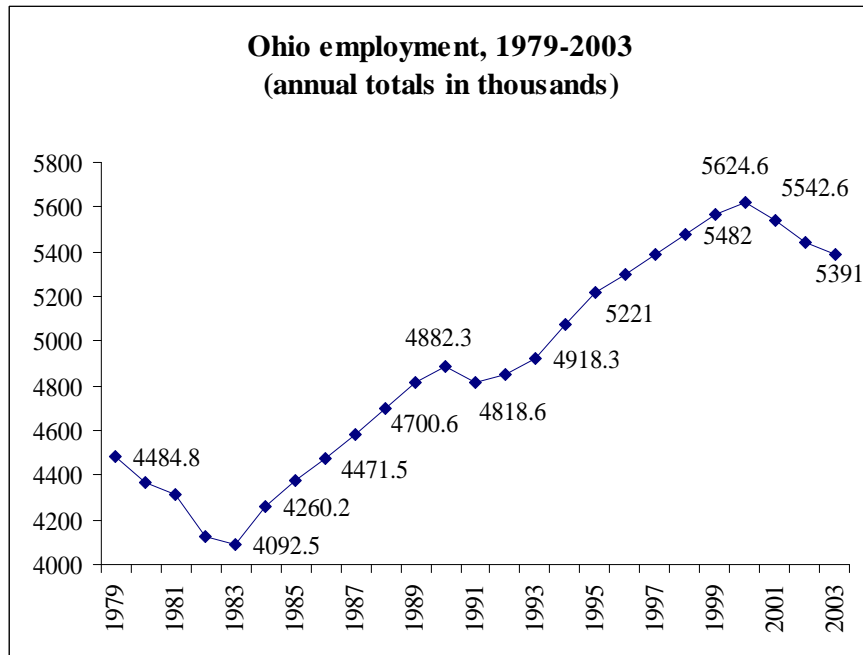
this point after the early 1990s recession started, 63,500 jobs had been created in Ohio, or an increase of 1.3 percent. The state has gained 19,700 jobs since the end of 2003. If job growth in the state continues at the same rate, it would take more than six years to regain the jobs lost since the recession began. Note that the numbers below differ from those above because above are annual averages while below are monthly totals.

### Change in payroll employment

The number of jobs in Ohio grew between 1979 and the year 2000 from 4.485 million positions in 1979 to a high of 5.625 million jobs in 2000. While employment declined during the recessions of 1982 and 1991, after those recessions the number of jobs began growing much more quickly than during the current recession's aftermath. Since 2000, the number of jobs has fallen each calendar year, to 5.391 million jobs by the end of 2003, as depicted in Figure 2.1 on the next page.

More recently, as the nation has seen some modest jobs recovery, Ohio has continued to post losses or meager gains each month. Although this report is meant principally to chart longer-term trends, because of the interest in this data, which is measured monthly, Figure 2.2 below shows the recent trend in Ohio job creation. As of July 2004, Ohio had 217,000 fewer jobs than it had when the recession officially began in March 2001. That represents a decline of 3.9 percent, a drop greater than in any other state except Massachusetts and Michigan. At

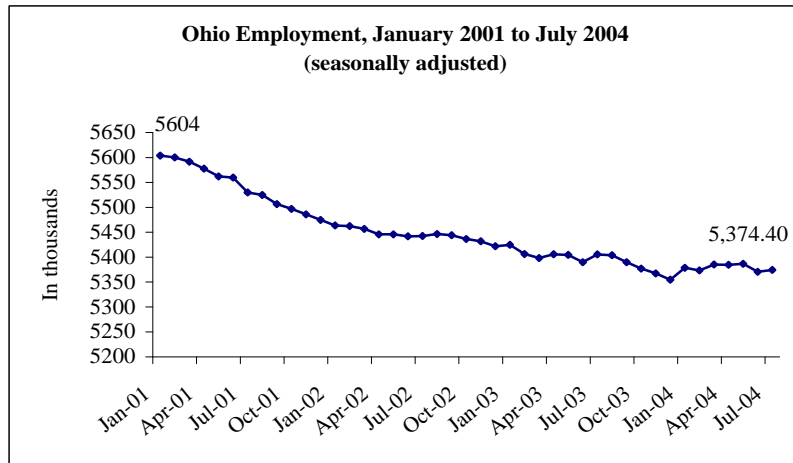
Figure 2.1



Source: U.S. Department of Labor, Bureau of Employment Statistics, Current Employment Statistics survey

The nation still has fewer jobs than it had at the beginning of the recession. Overall between 2000 and 2003 the country lost 0.5 percent of its non-farm payroll positions each year. In calendar year 2004 the decline has halted, but job gains have been quite modest by historical standards and have been much too small to keep up with growth in the working age population. Ohio's job loss since the recession began has been particularly stark: 1.4 percent of the state's payroll employment has vanished each year since 2000. Among all states in the country, only Michigan and Massachusetts have had equal or more annual percentage job loss than Ohio. Table 2.2 on the following page shows the annual average job growth during several different periods between 1979 and 2003, for the U.S., Ohio and neighboring states. The table is sorted by annual percentage job loss between 2000 and 2003, but all of Ohio's neighbors also lost jobs between 2000 and 2001. During prior periods in the table, all of which are longer periods of time, every state consistently saw job gains, with the exception of West Virginia between 1979 and 1989.

Figure 2.2



Source: Current Employment Statistics (CES) survey

Table 2.2

Non-farm payroll employment by U.S., Ohio and neighboring states, 1979-2003 (in thousands)												
	1979	1989	1995	2000	2001	2003	Average annual percentage change					
							1979-89	1989-2000	1995-2000	2000-01	2000-03	
<b>US</b>	89,932	108,014	117,298	131,785	131,826	129,931	1.8%	1.8%	2.4%	0.0%	-0.5%	
MI	3,637	3,922	4,274	4,674	4,556	4,412	0.8%	1.6%	1.8%	-2.5%	-1.9%	
<b>OH</b>	<b>4,485</b>	<b>4,818</b>	<b>5,221</b>	<b>5,625</b>	<b>5,543</b>	<b>5,391</b>	<b>0.7%</b>	<b>1.4%</b>	<b>1.5%</b>	<b>-1.5%</b>	<b>-1.4%</b>	
IN	2,236	2,479	2,787	3,000	2,933	2,897	1.0%	1.7%	1.5%	-2.2%	-1.2%	
KY	1,245	1,433	1,643	1,825	1,804	1,783	1.4%	2.2%	2.1%	-1.1%	-0.8%	
PA	4,806	5,139	5,253	5,691	5,683	5,602	0.7%	0.9%	1.6%	-0.2%	-0.5%	
WV	659	615	688	736	735	726	-0.7%	1.6%	1.4%	-0.1%	-0.4%	

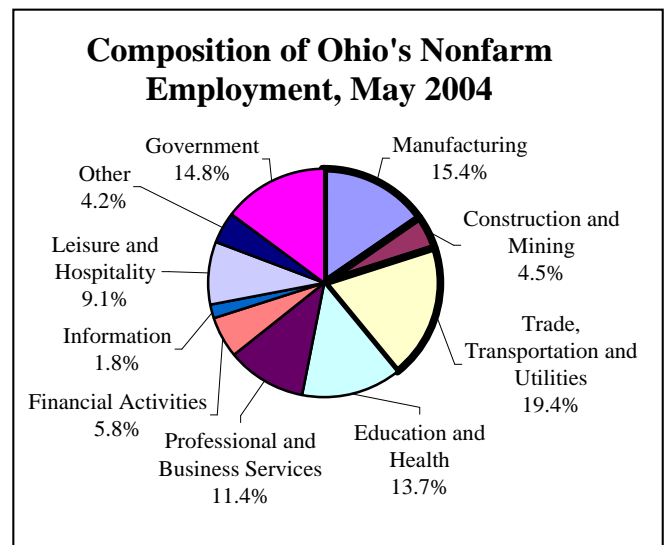
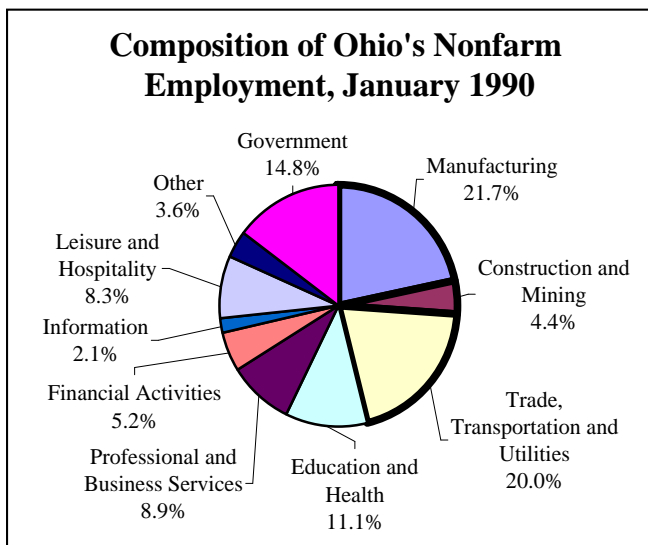
Source: EPI analysis of CES data.

### Workforce Composition

Ohio’s labor market is dominated by four sectors: trade, transportation and utilities (which employs 19.4 percent of Ohio’s workers); manufacturing (15.4 percent); government (14.8 percent); and education and health (13.7 percent). Professional and business services (11.4 percent) and leisure and hospitality (9.1 percent), rank 5<sup>th</sup> and 6<sup>th</sup> among the new North American Industry Classification System (NAICS) codes in number of Ohio workers that they employ. Financial activities (5.8 percent), construction and mining (4.5 percent), information (1.8 percent) and other sectors (4.2 percent) each employ less than six percent of the state’s workforce.

This workforce composition represents a dramatic change from earlier times. Just 14 years ago, in 1990, manufacturing employed 21.7 percent of the state’s workforce, as the pie chart below on the left shows. Since then, the education and health sector has gained as a share of the state’s workforce, as have professional and business services and leisure and hospitality. Remaining sectors have not grown or have contracted. The pie charts below depict the share of the state’s economy devoted to the different sectors in 1990 and 2004.

Figures 2.3 and 2.4

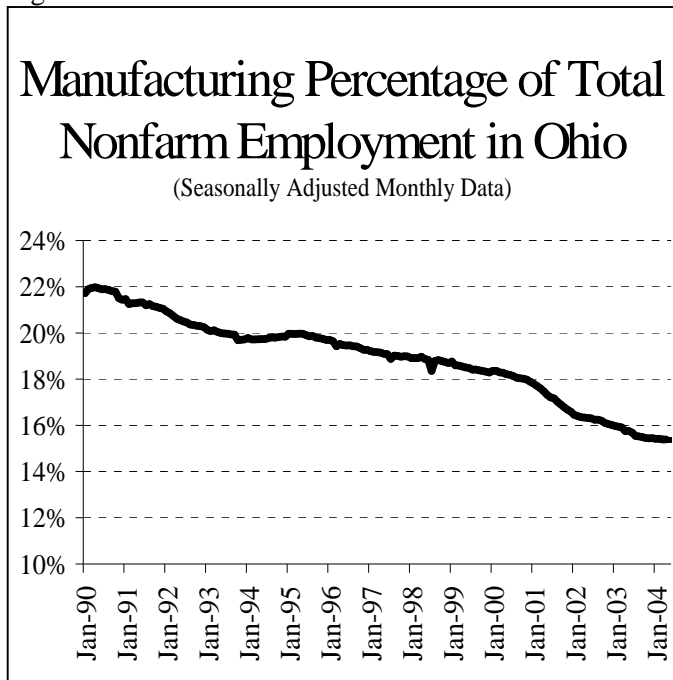


Source: EPI analysis of CES data

The U.S. has experienced a loss of manufacturing jobs over the last fourteen years, which has accelerated since 2000, with expanded international trade, the recession, and the weak jobs recovery. Nationwide, manufacturing jobs fell by 16.4 percent in the last four years and by 32.5 percent in the last fourteen, from 16.3 percent of the nation's jobs in January 1990 to 11.0 percent of the country's jobs in May 2004.

In Ohio, the drop from 21.7 percent of the state's jobs to 15.4 percent represents a 29 percent decline in the manufacturing share of the state's positions between 1990 and 2004. Because manufacturing was and remains such a large portion of the Ohio economy, the manufacturing exodus has affected Ohio more than other states, even though the degree to which manufacturing fell as a portion of the economy was actually smaller in Ohio than in the nation. Further, Ohio failed to gain as much employment in other sectors as some states did. Figure 2.5 below shows the percentage of total Ohio employment that was in the manufacturing sector between 1990 and 2004.

Figure 2.5



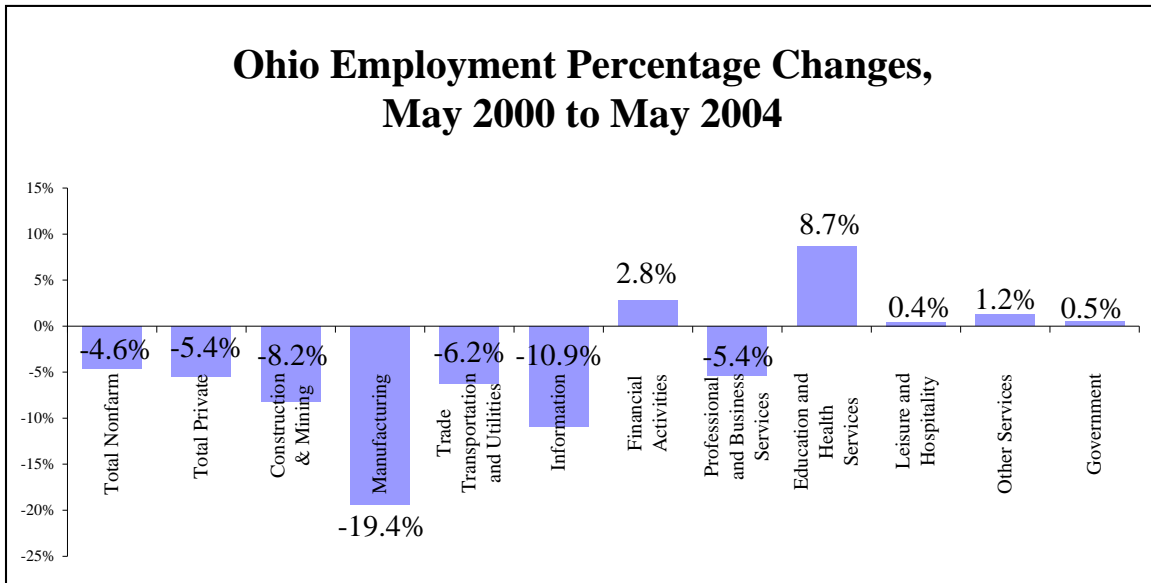
Source: EPI analysis of CES data

the percentage of total Ohio employment that was in the manufacturing sector between 1990 and 2004.

In absolute numbers, Ohio lost 4.6 percent of its payroll employment between May 2000 and May 2004. Only five sectors [financial activities (2.8 percent), education and health services (8.7 percent), leisure and hospitality (.4 percent), other services (1.2 percent) and government (.5 percent)] have added jobs in Ohio in the last four years and four of those sectors grew by less than three percent. Only education and health services added a significant percentage of jobs during this period. In contrast, six NAICS sectors lost jobs, all shedding more than five percent of their positions.

Manufacturing and information were particularly hard-hit, shedding 19.4 and 10.9 percent of their positions respectively. In all, nearly 200,000 of the state's manufacturing jobs were lost over the four years. Figure 2.6 shows the relative growth in different sectors in Ohio.

Figure 2.6



Source: EPI analysis of CES data

Ohio and neighboring states suffered disproportionately in this recession, because of the dominant role that manufacturing plays in their economies and because of both structural changes and cyclical issues facing manufacturing. Both Michigan and Indiana have a larger share of their employment devoted to manufacturing than Ohio does, but all of Ohio’s neighbors exceed the U.S. average in their manufacturing share, as Table 2.3 below shows. The U.S., Ohio, and all of Ohio’s neighbors saw large declines in manufacturing employment between 2000 and 2003.

Although manufacturing job loss was part of Ohio’s problem, Ohio differed from the U.S. and from some of its neighbors in that this state also saw overall job loss in all other industries combined. Michigan had a similar experience (with larger losses in both manufacturing and other sectors than Ohio). The combination has meant that both Michigan and Ohio saw much larger overall percentage job loss than the U.S. as a whole over this period.

Table 2.3

Job growth 2000-2003, manufacturing and other industries, Ohio and neighboring states					
	Manufacturing share of total payroll employment, 2000	Manufacturing share of total payroll employment, 2003	Change in payroll employment, 2000-03		
			Manufacturing	All other industries	Total
<b>U.S.</b>	<b>13.1%</b>	<b>11.2%</b>	<b>-15.9%</b>	<b>0.8%</b>	<b>-1.4%</b>
IN	22.1%	19.8%	-13.7%	-0.5%	-3.4%
KY	17.0%	14.9%	-14.2%	0.2%	-2.3%
PA	15.2%	12.8%	-17.0%	1.2%	-1.6%
<b>OH</b>	<b>18.2%</b>	<b>15.7%</b>	<b>-17.3%</b>	<b>-1.2%</b>	<b>-4.2%</b>
MI	19.2%	16.5%	-18.9%	-2.5%	-5.6%
WV	10.3%	8.9%	-14.8%	0.3%	-1.3%

Source: EPI analysis of BLS data

### Unemployment

The official Ohio unemployment rate was 6.1 percent in 2003, more than 50 percent higher than the lows achieved in 2000, but much lower than rates seen after previous recessions. During the 2004 calendar year the rate came down slightly, to a 5.9 percent seasonally adjusted rate in July 2004. Of those who were unemployed in 2003, an unusually high percentage (20.9 percent) had been unemployed for more than 26 weeks and were considered long-term unemployed. Although Ohio's long-term unemployment rate in 2003 was the highest it had been in a decade, the long-term unemployment rate in the U.S. and in all neighboring states except Kentucky was worse than it was in Ohio in 2003.

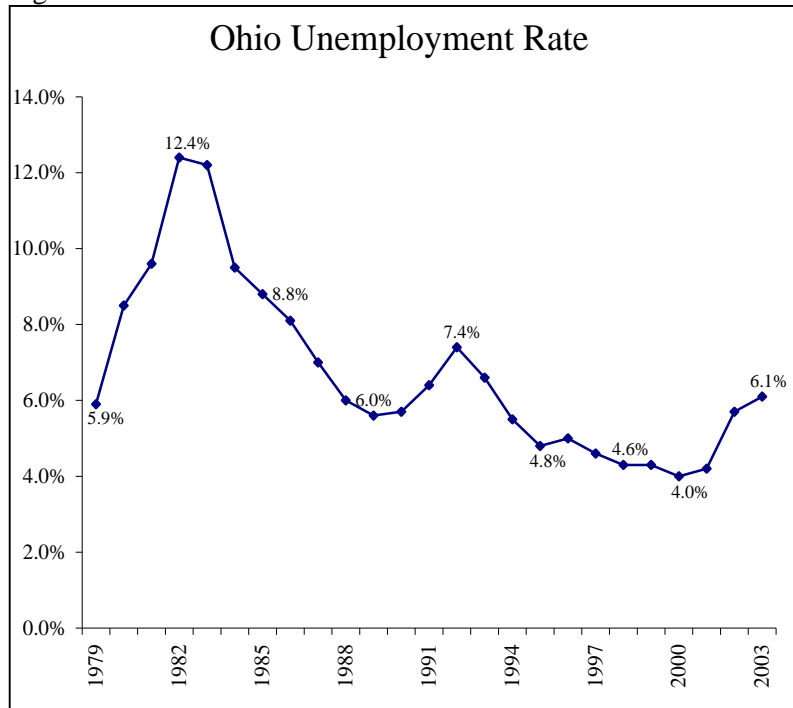
The unemployment rate was slightly greater for men than for women and was more than twice as high for black as for white workers. Unemployment was five times higher for those without a high school degree as for those with at least a Bachelor's degree. Individuals are considered underemployed if they are part-time for economic reasons, unemployed, discouraged (meaning they have looked for a job in the past year but not in the past month because they don't believe they'll find one), or conditionally interested (meaning they want a job but face a barrier such as child care or transportation problems). Underemployment, which includes unemployment and other measures of labor market distress (see next page for detailed definition), was much higher for black workers and for those with less education and black workers were nearly twice as likely to be in part-time jobs for economic reasons. Table 2.4 displays rates of unemployment and underemployment by age, race, gender and education.

Table 2.4

<b>Unemployment and underemployment by demographic group, Ohio 2003</b>				
	Unemployment rate	Long-term unemployment share	Under-employment rate	Part-time for economic reasons share
<b>All workers</b>	6.1%	20.9%	10.4%	13.9%
Male workers	6.5%	23.1%	10.7%	19.2%
Female workers	5.8%	18.3%	10.1%	10.5%
Difference	0.7%	4.8%	0.6%	8.7%
<b>Age</b>				
16-24 yrs	12.6%	(a)	20.5%	14.0%
25-54 yrs	5.1%	27.5%	8.7%	15.9%
55+ yrs	4.1%	(a)	7.3%	8.2%
<b>Race / ethnicity</b>				
White	5.4%	21.2%	9.2%	12.7%
African-American	12.1%	17.4%	19.0%	22.2%
<b>Education</b>				
Less than H.S.	15.0%	16.9%	22.6%	12.5%
High school	6.6%	23.9%	11.6%	18.4%
Some college	5.0%	17.2%	8.7%	12.0%
B.A. or more	3.0%	26.7%	5.2%	10.2%

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

Figure 2.7



Source: EPI analysis of CPS data

Ohio’s overall unemployment rate has fluctuated with the business cycle since 1979, although this recession did not reach the extremely high levels of unemployment seen in the early 1980s, when official Ohio unemployment reached a high of 12.4 percent of the workforce. In the year 2000, Ohio’s official unemployment rate reached an all-time low of 4.0 percent, although most analysts agree that there may have been measurement flaws that made the rate lower than actual unemployment was at that time<sup>4</sup>. In calendar

year 2003, Ohio’s overall unemployment rate reached 6.1 percent, still lower than the 7.4 percent level in the early 1990s recession. The unemployment rate in Ohio grew in 2002 and 2003, even though the nation was considered to be in an economic recovery, illustrating the weakness of the job recovery in Ohio (although sometimes unemployment can increase when discouraged workers begin looking for work again). Figure 2.7 shows the trend.

### Underemployment

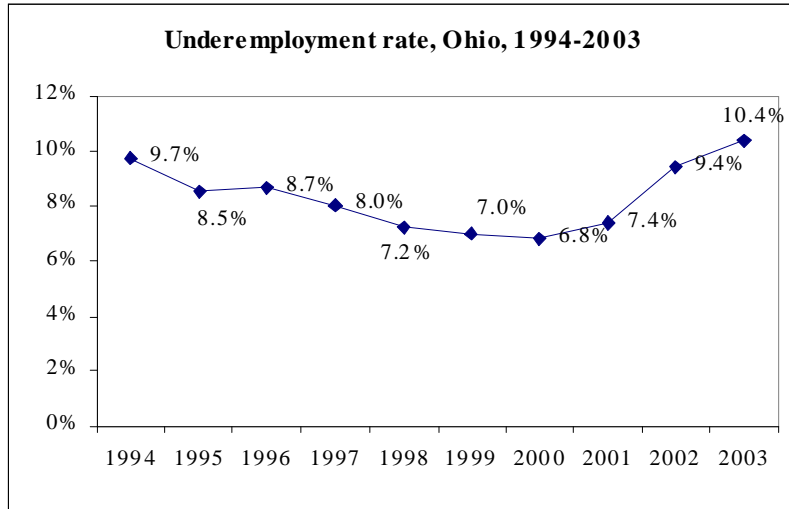
To be officially unemployed, workers must be actively seeking employment and not have any job. This definition leaves out many people who are struggling to find appropriate employment. To reflect this, in 1994 the census bureau began tracking the rate of underemployment and the percent of the unemployed who have been unemployed for more than 26 weeks.

Underemployment is defined by the Bureau of Labor Statistics (BLS) as including the unemployed, the involuntarily part-time, discouraged workers who’ve stopped looking for work, and conditionally interested workers who want to work but can’t because of child care, transportation or other problems. The term may not mean what someone thinks -- it does not include those employed in occupations other than those for which they’re trained (such as a physician working as a medical assistant), temporary workers, or others who one might casually describe as underemployed.

While unemployment in the state has risen, the level of underemployment reflects a far greater rate of labor market distress than the official unemployment rate. Ohio’s underemployment rate in 2003 was 10.4%, the highest since this statistic began being measured, and up from a low of 6.8% in 2000. Figure 2.8 below shows the overall rate of underemployment from the first year that this category was measured through the end of 2003.<sup>5</sup>



Figure 2.8

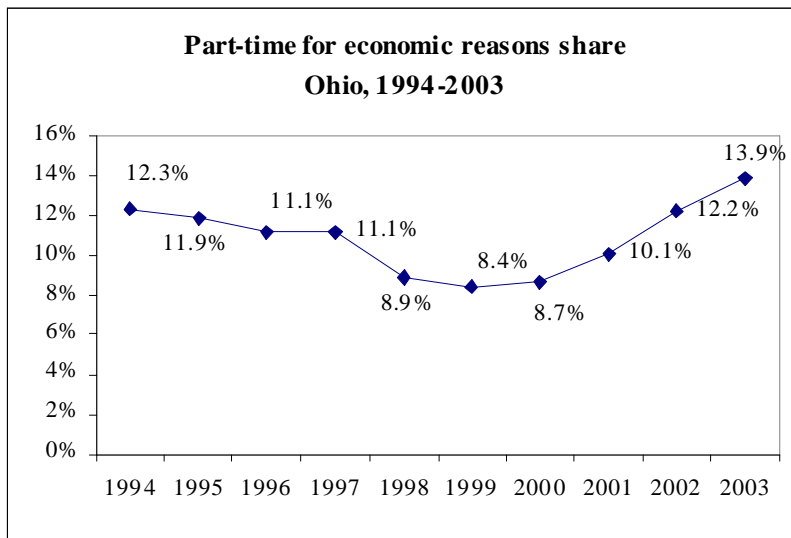


Source: EPI analysis of CPS data

The percent of part-time workers who were part-time for economic reasons<sup>6</sup> rose to its highest point (13.9 percent) since this measure began being tracked. This measure is important because it captures some workers who are not officially employed but are actively seeking a job that will better allow them to support themselves or their families. The statistic is calculated by dividing the number of workers who are part-time for economic reasons by the overall number of part-time workers.

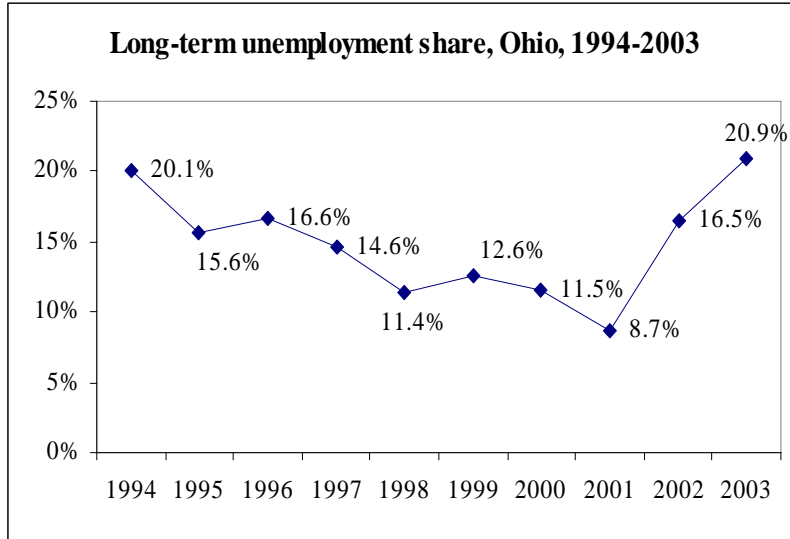
Finally, the share of unemployed workers who were unemployed for more than 26 weeks reached its highest point in more than a decade in 2003, at 20.9 percent. That percentage has declined during calendar year 2004. This statistic is important because in most states, including Ohio, regular unemployment benefits are paid for only 26 weeks. During recessions and their aftermaths the federal government usually provides extended unemployment benefits. The government did so during 2002 and 2003 but these benefits expired for the new long-term unemployed at the end of 2003 and have not been reinstated. The percentage is calculated by dividing the number of workers who've been unemployed for more than 26 weeks by the number of workers who are unemployed. Figure 2.10 shows the long-term unemployment share for the years 1994 through 2003.

Figure 2.9



Source: EPI analysis of CPS data

Figure 2.10



Source: EPI analysis of CPS data

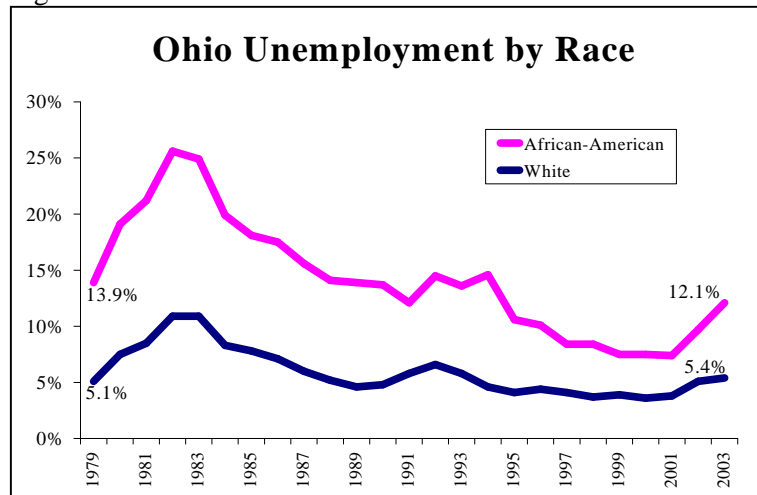
**Black and out of work**

African-American workers have always experienced much higher rates of unemployment than white workers in Ohio. However, during periods of very low unemployment, as in the late 1990s, the rates start to converge as unemployment declines for both sets of workers. In the recessions in the early 1980s, the early 1990s, and 2001, unemployment climbed for all workers, but climbed much more steeply for black workers.

Recently, black unemployment in Ohio saw a startling 63% increase in two years, from 7.4% in 2001 to 12.1% in 2003. By 2003, black unemployment was at twice the rate of unemployment experienced by white workers (5.4 percent). Figure 2.11 shows the trend of unemployment by race between 1979 and 2003.

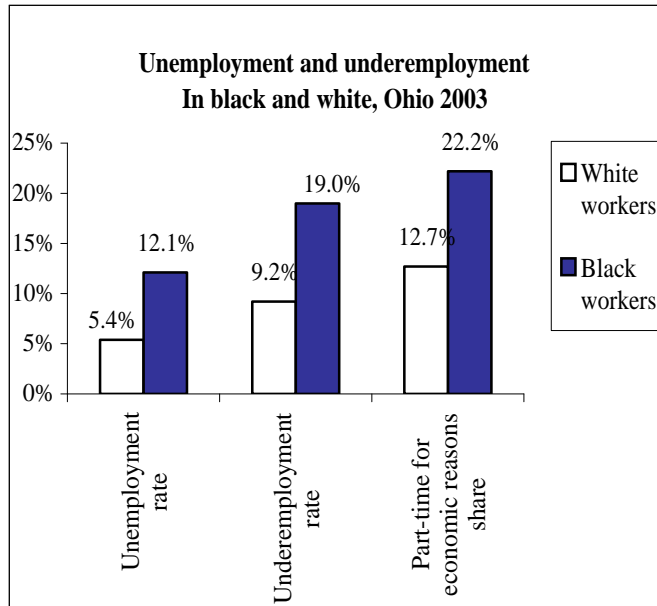
In addition to having more than twice the rate of unemployment, black workers experienced underemployment at higher rates than white workers in Ohio in 2003. More than twice as many black workers (19.0 percent) as white workers (9.2 percent) were considered underemployed in Ohio in 2003. While the percentage of part time white workers (12.7 percent) who were part time for economic reasons had risen in Ohio, 22.2 percent of black part-time workers were available and willing to work full time but unable to find a full-time job. Underemployment also rose more steeply from a higher starting point for black workers, spiking 50 percent between 2001 and 2003, from 12.7 percent to 19 percent. Figure 2.12 below shows unemployment and underemployment for white and black workers in Ohio.

Figure 2.11



Source: EPI analysis of CPS data

Figure 2.12



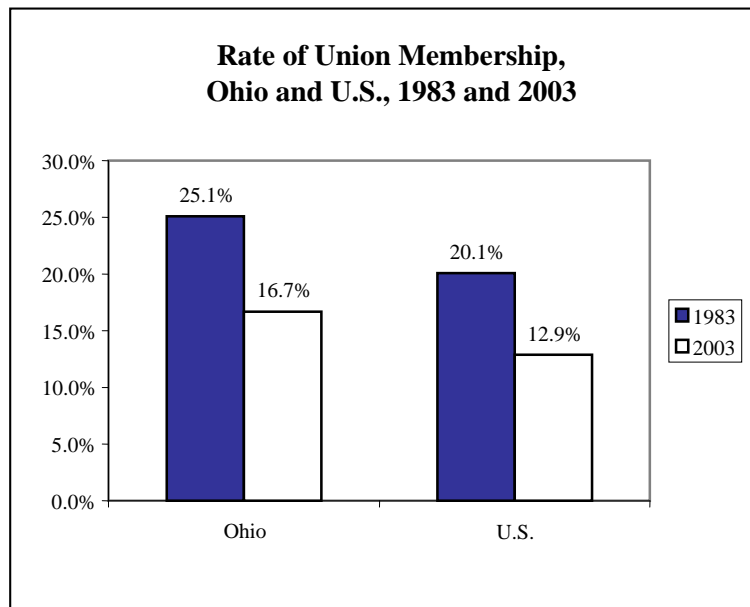
Source: EPI analysis of CPS data

When discussing employment disparities by race, it is also important to recognize the degree to which incarceration varies by race in Ohio. Incarcerated adults are not considered part of the labor force and are not counted as unemployed. However, incarcerated adults are not working and not contributing to their families' well-being. Because African-American men are substantially more likely to be in prison, this affects the black community to a much greater extent. Approximately 6.0 percent of black men were in prison in 2001 in Ohio, compared to about 0.6 percent of white men.<sup>7</sup>

### Unionization

Union membership has consistently declined in Ohio and in the nation over the past twenty years. In 2003, just one in six of Ohio's workers were unionized (16.7 percent), down from one in four (25.1 percent) in 1983. At both points, Ohio's unionization rates were well above the national averages, which were one in five in 1983 and just one in eight (12.9 percent) in 2003. Figure 2.13 below depicts unionization levels in 1983 and 2003 in Ohio and the U.S.

Figure 2.13

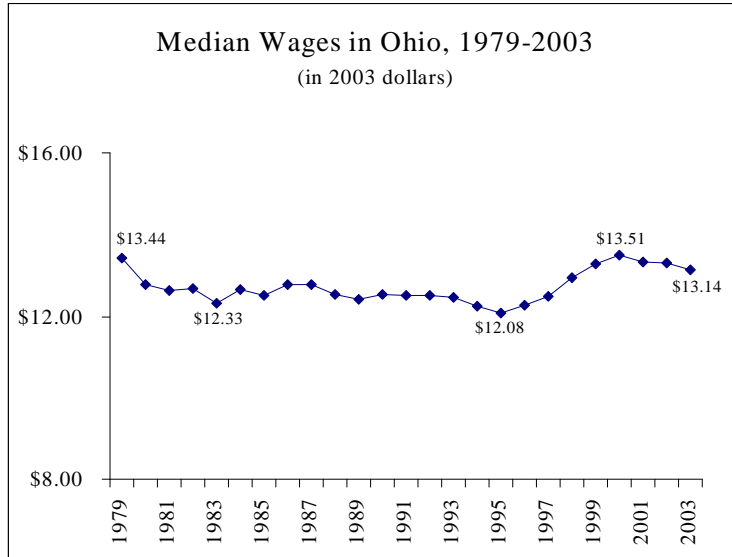


Source: Bureau of Labor Statistics

### III. WAGES AND INCOME

In 1999, Ohio's median wage finally climbed above \$13.25 an hour (inflation-adjusted 2003 dollars), for the first time in 20 years. The median wage peaked at \$13.51 in the year 2000 and has stagnated or fallen slightly since then. In 2003, the year-end median wage was \$13.14 an hour, lower than any of the previous four years and lower than the \$13.44 rate of 1979, but higher

Figure 3.1



Source: Economic Policy Institute analysis of Current Population Survey data

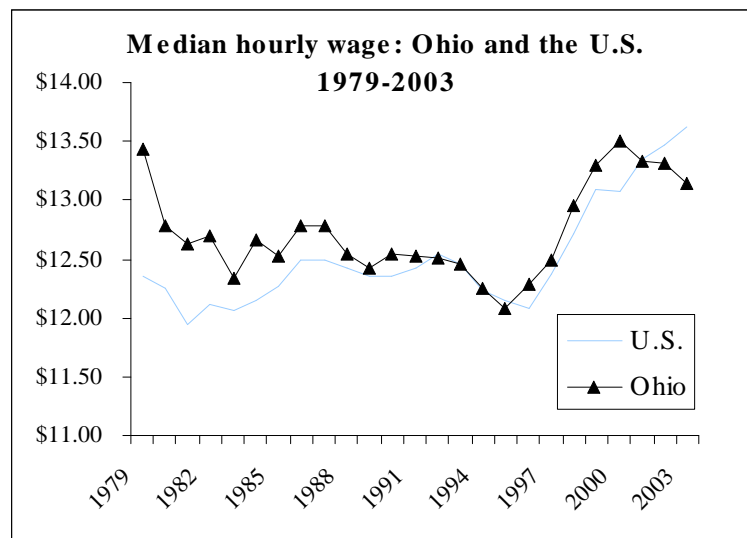
than the median wage levels seen between 1980 and 1998. This wage equates to just over \$27,000 in annual earnings for full-time, year-round workers. Workers today are more educated and more productive than workers were in 1979, yet they earn less per hour and less in a year. Figure 3.1 shows the trend since 1979.

Ohio's median wage was more than \$1.00 an hour above the national median wage in 1979, in inflation-adjusted 2003 dollars. By the mid-1990s, real median wages had dropped in both Ohio and the nation, but the

fall was more precipitous in Ohio. In the late 1990s, wages rose in both the state and the nation, with Ohio again gaining an edge on the nation in median wage. But by 2003, Ohio's median wage had again fallen to \$13.14 an hour and was below the national median (\$13.62). Figure 3.2 shows the fluctuation since 1979 in Ohio and the nation's median wage.

The median wage equates to the 50<sup>th</sup> percentile – half of all workers earn less and half earn more. Dividing the workforce into ten equal parts creates a sense of the distribution of wages. The 10<sup>th</sup> percentile worker earns more than ten percent of all workers, the 20<sup>th</sup> more than 20 percent of workers and so on. In 2003, Ohio's median wage was lower than that of Michigan, Pennsylvania, Indiana and the U.S. as a whole. The twentieth percentile wage

Figure 3.2



Source: EPI analysis of CPS data

in Ohio (\$8.42) was also below that of Michigan, Pennsylvania and Indiana, but it was roughly equal to the U.S. level for the 20<sup>th</sup> percentile (\$8.46). The 80<sup>th</sup> percentile wage in Ohio was lower than the nation's, but higher than neighboring states except Michigan and Pennsylvania. Tables that look at the 10<sup>th</sup> and 20<sup>th</sup> percentile worker give a sense of how very low- and low-wage Ohioans fare, compared to the 80<sup>th</sup> and 90<sup>th</sup> percentiles, which are high- and very high-wage. Table 3.1 shows low, median and high wages for Ohio and neighbors.

Table 3.1

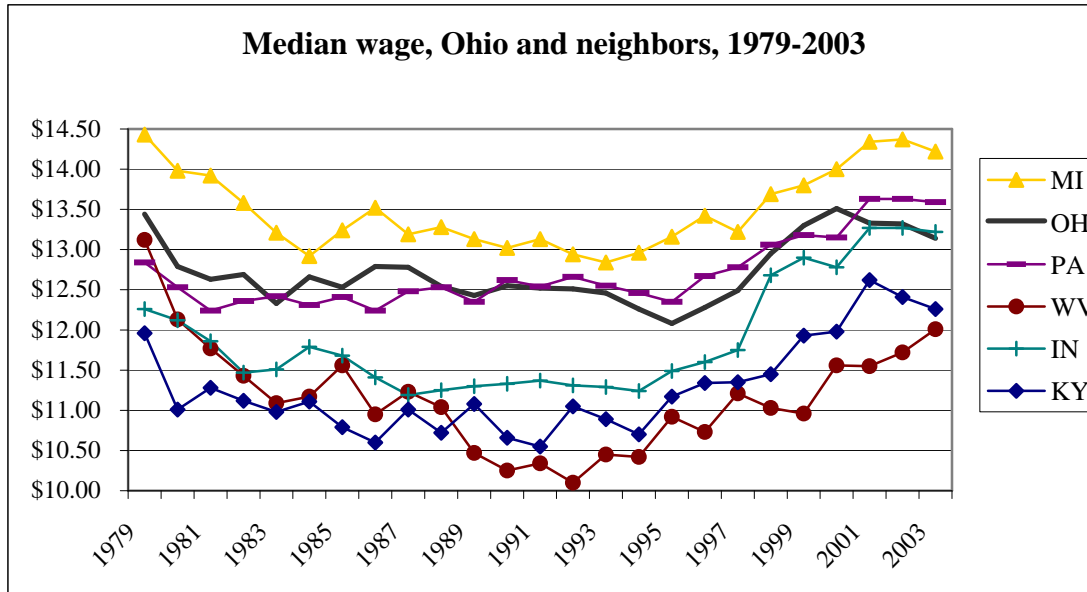
<b>Low, Median and High Wage, U.S, Ohio and neighboring states</b>			
<b>(2003 dollars)</b>			
	20 <sup>th</sup> percentile	50th percentile (Median)	80th percentile
<b>U.S.</b>	<b>\$8.46</b>	<b>\$13.62</b>	<b>\$23.14</b>
Michigan	\$8.90	\$14.22	\$23.95
Pennsylvania	\$8.76	\$13.59	\$23.01
Indiana	\$8.77	\$13.22	\$21.34
<b>Ohio</b>	<b>\$8.42</b>	<b>\$13.14</b>	<b>\$22.03</b>
Kentucky	\$8.08	\$12.26	\$19.78
West Virginia	\$7.47	\$12.01	\$19.75

Source: Economic Policy Institute analysis of Current Population

In 1979, Ohio's median wage was the second highest among neighboring states. The median wage in all of the states bordering Ohio fell during the 1980s, and Ohio was no exception. However, throughout the 1980s and early 1990s, Ohio's neighbors were bunched into two distinct groups as Figure 3.4 shows, with Michigan, Ohio and

Pennsylvania posting higher wages, while West Virginia, Indiana and Kentucky had lower median wages. Since then, Ohio's median wage has fallen while Indiana's has increased. By 2003, Indiana had slightly outpaced Ohio in median wage for the first time.<sup>8</sup>

Figure 3.3



Source: EPI analysis of CPS data

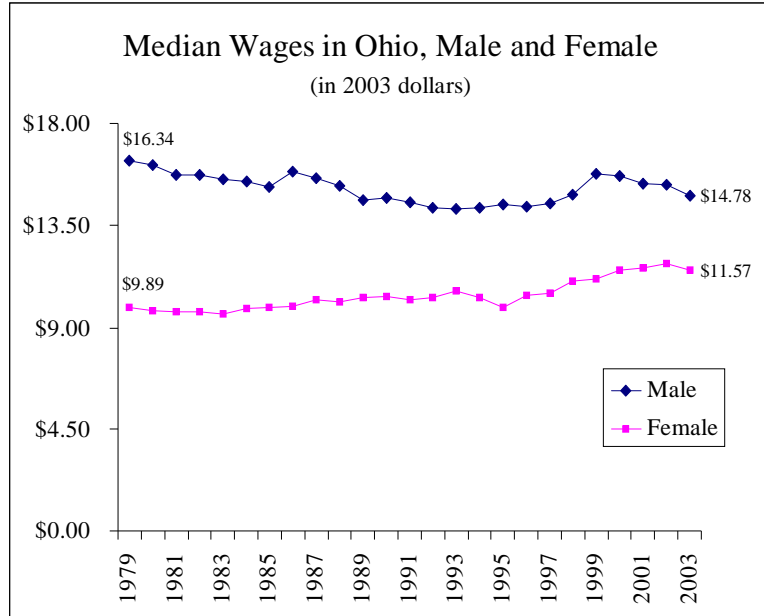
**Pink and blue collars: median wage by gender**

Men continue to earn more than women in Ohio, with a 2003 median hourly male wage of \$14.78, compared to a median female wage of \$11.57. This amounted to a women’s wage that was 78.3 percent of the men’s wage.<sup>9</sup> Studying the hourly wage rate understates the difference between male and female earnings, because women are more likely to work part-time and to take time off for child bearing and parenting. A recent study looking at fifteen years of earnings for a national sample of workers found that the average woman earned just 44 percent of what the average man in the sample earned during the entire fifteen years.<sup>10</sup>

Even when looking just at hourly pay, women earn less than men, although the gap has narrowed. The 78.3 percent of a man’s dollar that Ohio women earned hourly in 2003 was up from 60.5 percent as much in 1979. Much of the narrowing gap is due to a decline in men’s inflation-

adjusted median wage, which fell from \$16.34 in 1979 to \$14.78 in 2003, a 9.6 percent decline. But women’s wages also rose significantly, particularly in the late 1990s, from \$9.89 in 1979 to \$11.57 in 2003, a 17 percent increase. Figure 3.5 portrays real median hourly wages for Ohio women and men between 1979 and 2003.

Figure 3.4



Source: EPI analysis of CPS data

**The color of money: black and white wages in Ohio**

The median white worker made \$13.58 an hour in 2003 while the median black worker earned \$11.18 an hour that year, about 82.3 percent as much. For men, that disparity was greater with black men earning \$11.52 an hour, just 75.9 percent of what white men earned (\$15.18). Women saw much less of a race disparity in 2003, with black women earning \$11.04 an hour, 93.6 percent of what white women earned.

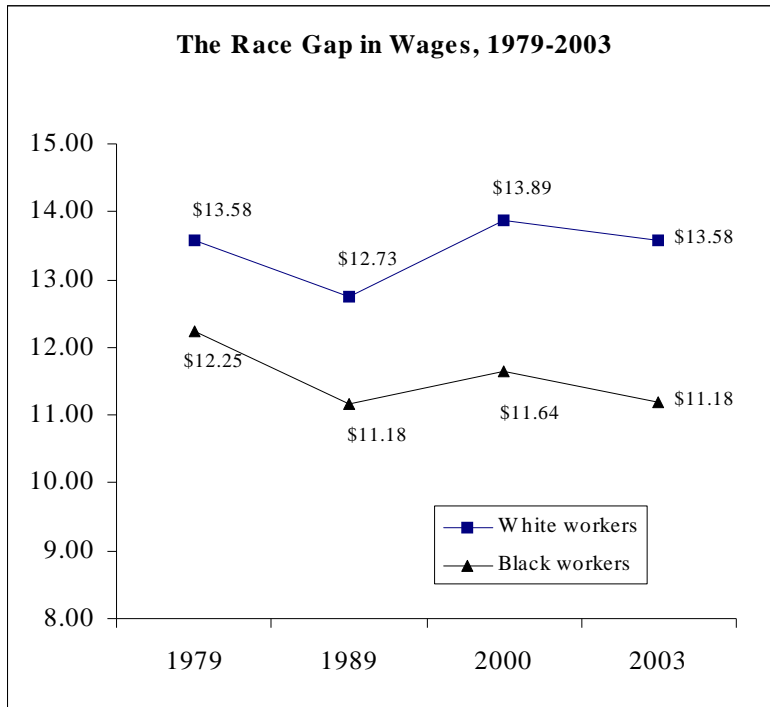
Table 3.2

Ohio Median Wages by Gender and Race, 2003			
	White wage	Black wage	Black wage as percent of white wage
All workers	\$13.58	\$11.18	82.3%
Men	\$15.18	\$11.52	75.9%
Women	\$11.80	\$11.04	93.6%

Source: EPI analysis of CPS data

A large part of the gap between black and white worker wages is due to differences in educational attainment. Over the past thirty years, workers with less education have seen large declines in their real wage rates. African-Americans are less likely to attend superior K-12 schools, less likely to graduate from high school and less likely to complete college. At the same time as our labor market

Figure 3.5



Source: Center on Wisconsin Strategy (COWS) analysis of CPS data.

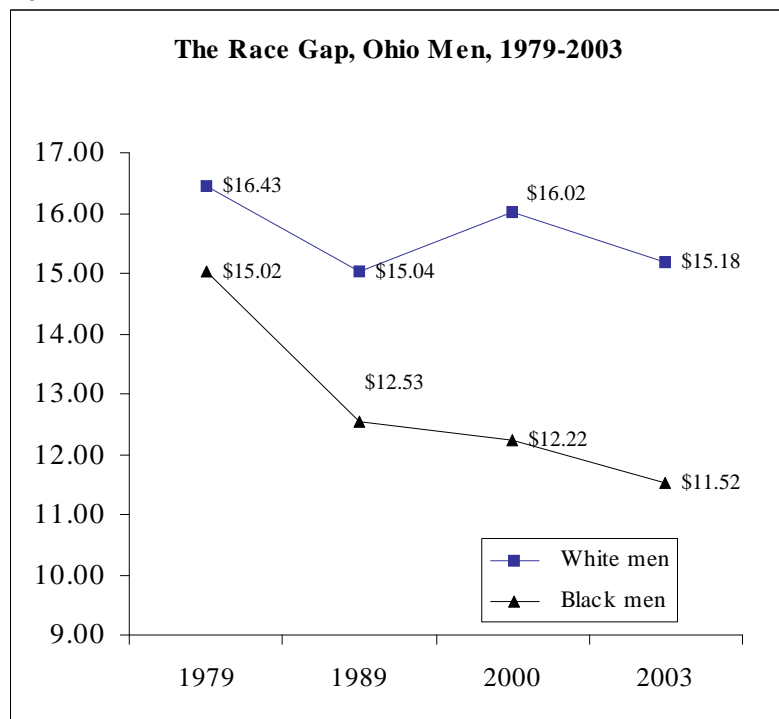
white worker wages. For example, between 1979 and 1989 white wages dropped \$0.85 while black wages fell by \$1.07 from a lower starting point. Between 1989 and 2000, white wages rose by \$1.16 while black wages rose by just \$0.46. Finally, between 2000 and 2003, white wages fell by \$0.31, while black wages dropped by \$0.46 per hour in Ohio.

Most of the race gap in wages is due to disparities between what African American and white men earn. Racial disparities for men are much larger than those faced by women. Figure 3.6 to the right shows that black men's wages have continued on a downward path between 1979 and 2003. White men's wages showed a recovery in the late 1990s, ending up \$1.00 per hour higher in 2000 than in 1989. In contrast, black men's wages were actually lower in 2000 than in 1989, despite the

has reduced options for those with less education, some policy shifts have made it more difficult to obtain higher education.<sup>11</sup>

As Figure 3.6 (left) shows, the race gap in Ohio has grown since 1979. White worker wages are now identical to their 1979 level in inflation-adjusted terms. Black workers, however, earn more than \$1.00 an hour less than they did in 1979. This disparity is due to the fact that in good times white wages have risen more than black wages and in bad times black worker wages have plunged more than

Figure 3.6



low unemployment and tight labor markets of the late 1990s.

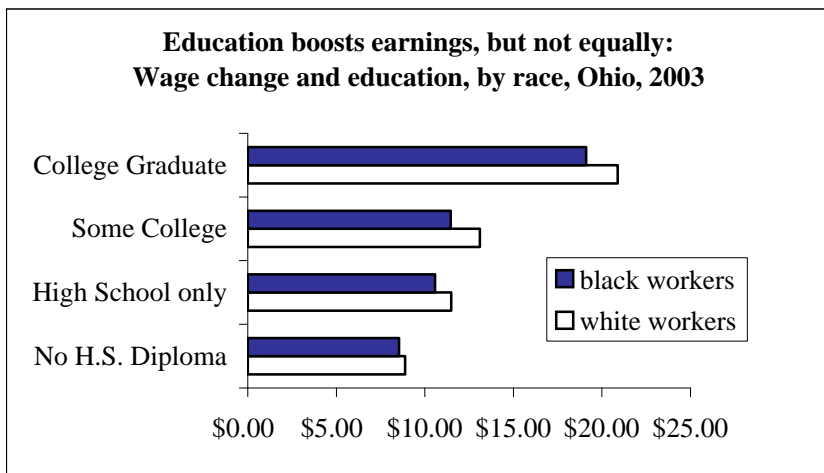
**Earning and learning**

Education had a significant impact on earnings for both black and white workers, but at every educational level black workers continued to earn less than white workers. For those without a high school diploma, blacks earned \$8.54 an hour, 96 percent of what white non-graduates earned (\$8.89). Blacks with just a high school degree earned \$10.57 an hour, 92.1 percent of the \$11.48 that whites with just a high school degree earned in Ohio. African Americans with some college but no degree earned \$11.46 an hour, 87.5 percent of the \$13.10 that whites at the same education level earned in an hour. Finally, for those with at least an associate’s or bachelor’s degree, blacks earned \$19.11 an hour, 91.5 percent of what whites with a college degree or more pulled in (\$20.89). There could be a

variety of reasons for the continued disparity even when controlling for education – whites may have attended more prestigious colleges or majored in more lucrative fields – but there is no denying that the disparity persists. See Figure 3.8 for a graphic depiction of the race gap and the boosts for additional education.

Although racial disparities persisted within educational categories, education raises wages for both racial groups. White workers with high school diplomas saw a 29 percent boost in wages compared to those without diplomas. Whites with some college saw another 14 percent wage increase, and those with college or more got nearly a 60 percent boost in wages compared to those with 1-3 years beyond high school. All told, white workers with a college degree or more earned 135 percent more than their counterparts who’d not finished high school – well more than twice as much in hourly earnings. Table 3.2 provides detailed information on race and education in Ohio.

Figure 3.7



Source: COWS analysis of CPS data

Table 3.3

<b>Ohio wages by race and education, 2003</b>					
	No H.S. Diploma	High School only	Some College	College Graduate	Percent boost: H.S. dropout vs. college or more
White	\$ 8.89	\$ 11.48	\$ 13.10	\$ 20.89	
Boost from previous educational category		29.1%	14.1%	59.5%	135.0%
Black	\$ 8.54	\$ 10.57	\$ 11.46	\$ 19.11	
Boost from previous educational category		23.8%	8.4%	66.8%	123.8%

Source: COWS analysis of CPS data.

African American workers experienced similar earnings boosts when they completed additional education. A black high school graduate earned 23.8 percent more than a black high school dropout. Blacks with some college earned 8.4 percent more than those with just a high school degree. Those with a college degree or more earned 66.8 percent more than those with 1-3 years beyond high school. And black college graduates earned 123.8 percent more than black high school dropouts, again well more than doubled hourly earnings. As Table 1.1 showed, a majority of all Ohio workers (53 percent) and a larger majority of black workers (59.2 percent) have just a high school diploma or less.

#### **Education pays for men and women**

Both men and women benefit from increased education. However, even controlling for education, disparities between men and women’s hourly earnings persist. Women with a high school diploma (\$10.03) earned only slightly more per hour than male high school dropouts (\$9.88). Women with some college earned \$11.75, \$2.38 less per hour than men with the same education, and less even than men with just a high school degree. Women college graduates earned \$19.11, \$3.78 less than men at the same education level. As mentioned earlier, comparing only hourly earnings can understate the earnings gap between men and women. Table 3.3 shows how women and men at different educational levels fare in the workplace.

Table 3.4

<b>Learning and earning: Ohio wages by education and gender, 2003</b>					
	No H.S. Diploma	High School only	Some College	College Graduate	Percent boost: H.S. dropout vs. college or more
Male	\$ 9.88	\$ 13.23	\$ 14.13	\$ 22.89	
Boost from previous educational category		33.9%	6.8%	62.0%	131.7%
Female	\$ 8.23	\$ 10.03	\$ 11.75	\$ 19.11	
Boost from previous educational category		21.9%	17.2%	62.6%	132.2%

Source: COWS analysis of CPS data

While women continued to earn less than men at every educational level, education still had enormous returns for both male and female workers. Female high school graduates earned 21.9 percent more than female high school dropouts. Women with some college earned 17.2 percent more than those with just a high school degree. Women with a BA earned 62.6 percent more than women with just 1-3 years beyond college. In all, college or more meant 132 percent more in hourly earnings than not completing high school.

Men’s wage boosts for additional education were comparable to those of women – a 33.9 percent boost for completing high school, an additional 6.8 percent hike for getting some college, and a 62.6 percent hourly raise for finishing or going beyond college. In all, men who had finished college also earned 132 percent more than those who had not finished high school.

**A more perfect union: wages and unionization**

Although unionization has declined, being in a union continues to result in higher wages for workers of all demographic groups. Non-unionized workers as a whole made less than three-fourths of what unionized workers earned hourly in 2003. For African-American workers and women, the benefits of unionization were even greater. Black workers who were not in a union earned 69.4 percent of what unionized black workers earned each hour. Women who were not unionized earned 72.6 percent of what unionized women earned in 2003.

Table 3.4 (right) shows the difference in wages for various demographic groups in Ohio in 2003.

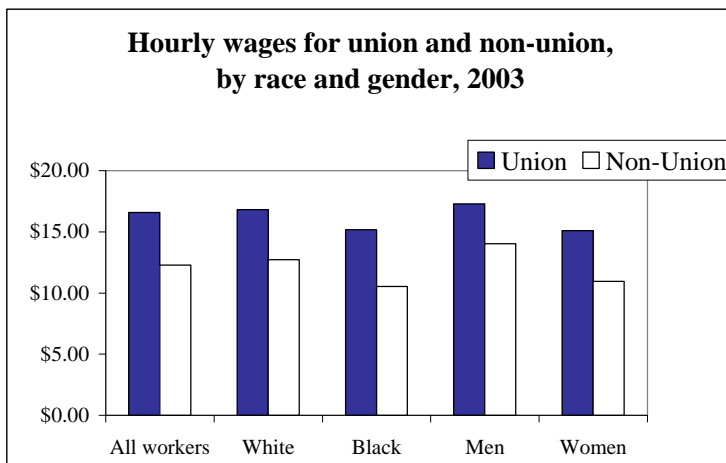
Figure 3.9 below shows graphically how unionized workers out-earn non-unionized workers, regardless of demographic group. This analysis does not consider other benefits that are more common among those in a union, such as increased likelihood of having a pension, increased health care coverage, representation in the case of unfair dismissal or other grievances, and clearer rules on job advancement.

Table 3.5

<b>The union premium, Ohio hourly wages, 2003</b>			
	Union	Non-union	Non-union as percent of union
All workers	\$16.59	\$12.29	74.1%
White workers	\$16.83	\$12.73	75.6%
Black workers	\$15.18	\$10.53	69.4%
Men	\$17.29	\$14.03	81.2%
Women	\$15.09	\$10.96	72.6%

Source: COWS analysis of CPS data

Figure 3.8



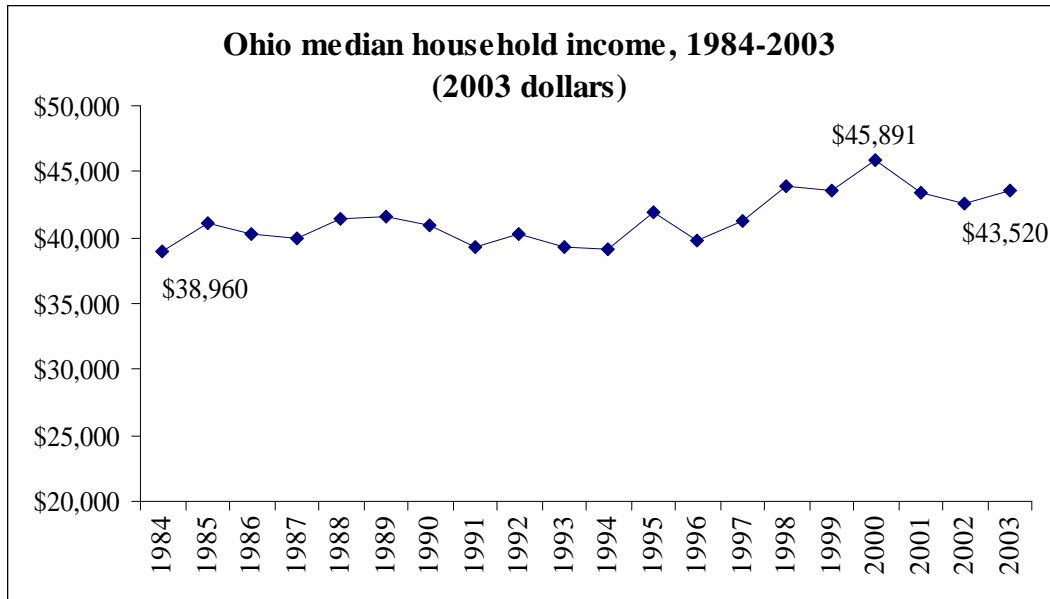
Source: COWS analysis of CPS data

**Household Income**

Ohio’s real median household income grew slightly in 2003, although the growth between 2002 and 2003 was not statistically significant. Median household income was \$43,520 in 2003, up slightly from \$42,662 in 2002. The level was below the previous peak of \$45,891 in 2000 and comparable with levels from 1998 and 1999. Median household income is \$4560 higher than it was in 1984 in part because families are working more hours. *The State*

of *Working Ohio 2003* found that between 1979 and 2000, married couple and single-parent families each increased their work hours by more than 18 percent, to 3,737 work hours for married-couple families and 1,862 hours for single-parent families. Figure 3.10 shows the household income trend since 1984.

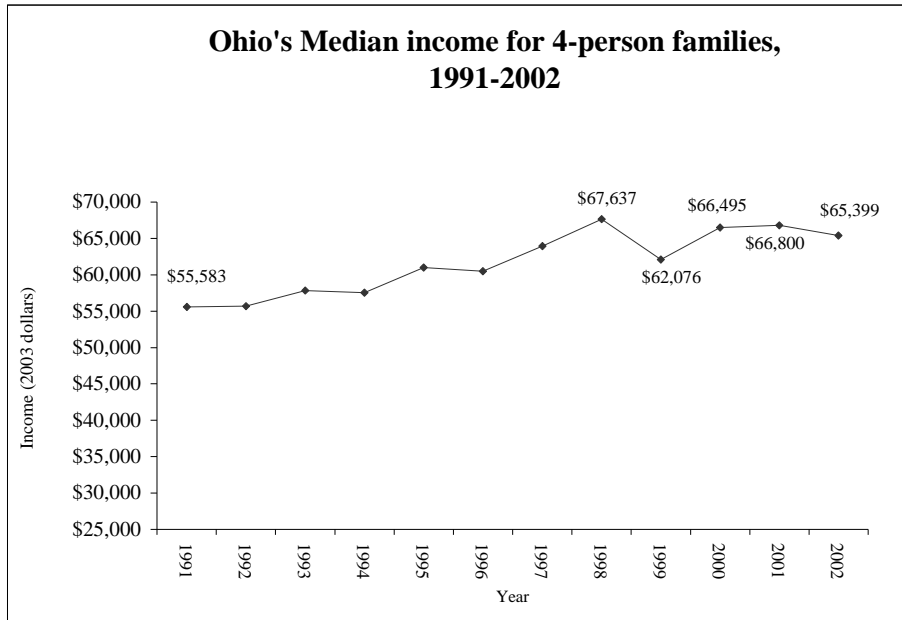
Figure 3.9



Source: U.S. Census Bureau historical income tables

Ohio’s inflation-adjusted median income for four-person families dropped after 1998 and had not yet regained the \$67,637 peak reached in that year as of 2002 (2003 data not yet available). But prior to 1998 four-person family income had grown steadily since 1991. Overall, it grew by nearly \$10,000 between 1991 and 2002, a healthy 17 percent increase that has endured despite the last four years of stagnation. In 2002, median four-person family income was \$65,399, more than \$2200 below its peak in the late 1990s. Four-person family income differs from median household income because it is more likely to measure the income of families with two adults – increasingly two working adults. Over the course of the 1980s and 1990s, much of that growth had been due to increases in hours worked by families – the median family increased its work hours by more than 18 percent between 1979 and 2000. Figure 3.11 on the next page shows the changes in four-person family income from 1991 to 2002, in inflation-adjusted 2003 dollars.

Figure 3.10



Source: EPI analysis of U.S. Census Bureau data

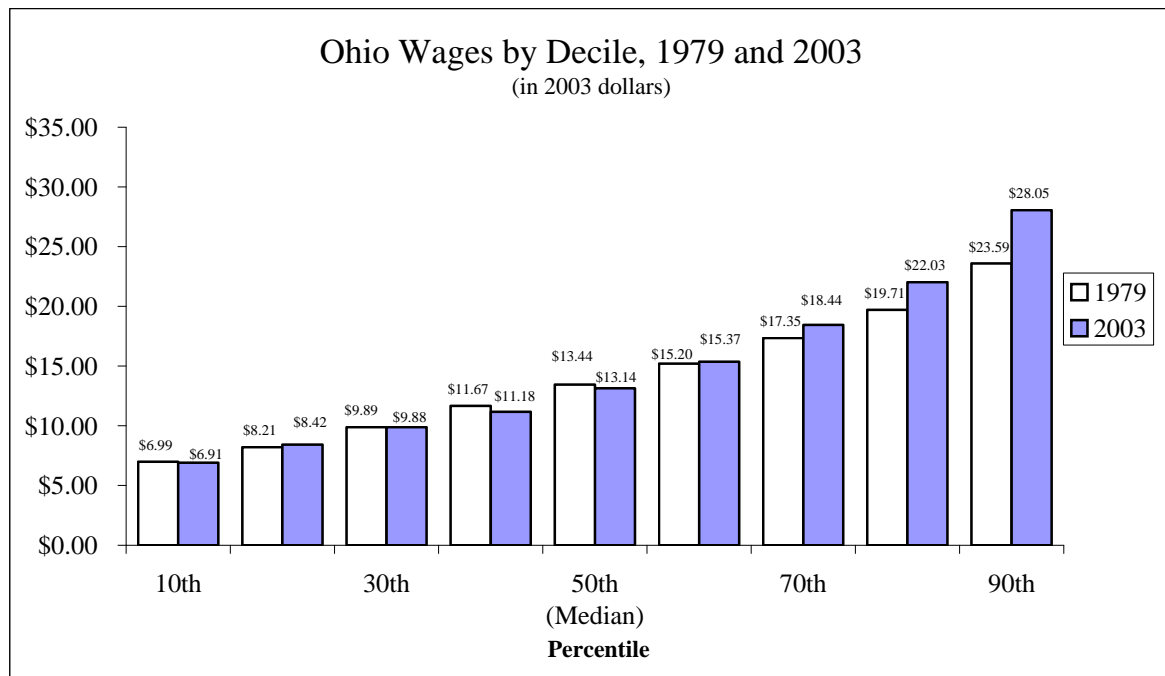
## IV. INEQUALITY AND POVERTY

### Wage Inequality

Ohio wages grew more unequal between 1979 and 2003, with workers in the bottom 60 percent of the earnings spectrum seeing real wage erosion or stagnant wages. Only workers at the 70<sup>th</sup>, 80<sup>th</sup> and 90<sup>th</sup> percentiles and above saw real wage growth during this period. As Figure 4.1 shows, workers at the tenth percentile had no wage growth, earning \$6.99 an hour in 1979 and \$6.91 an hour in 2003 (all wage numbers are in 2003 dollars). Earnings growth remained essentially non-existent through the 60<sup>th</sup> percentile worker, who earned \$15.20 per hour in 1979 and \$15.37 per hour in 2003. For the 70<sup>th</sup>, 80<sup>th</sup> and 90<sup>th</sup> percentiles, workers saw at least a \$1.00 an hour wage increase over the 24-year period studied. Those in the 90<sup>th</sup> percentile of earnings saw their wages grow from \$23.59 an hour in 1979 to \$28.05 an hour in 2003, in real dollars. Those at the 90<sup>th</sup> percentile now earn more than four times what those at the 10<sup>th</sup> percentile earn, up from 3.4 times as much in 1979 and up from 3.9 times as much in 2002.

Those at the 90<sup>th</sup> percentile now earn more than twice as much as those at the median, up from 1.76 times as much in 1979. Figure 4.1 shows the disparity and the shifts since 1979.

Figure 4.1



Source: Economic Policy Institute analysis of Current Population Survey data

The growth in wage inequality has persisted through expansions and contractions in Ohio's economy. For example, those at the 90<sup>th</sup> percentile earned 3.37 times what those at the 10<sup>th</sup> percentile earned in 1979, 3.98 times as much in 1998, and 4.06 times as much in 2003 in Ohio. The difference between the 80<sup>th</sup> and 20<sup>th</sup> percentiles has not grown quite as steeply as that between the 90<sup>th</sup> and 10<sup>th</sup>, although it has trended upwards. In 1979, those at the 80<sup>th</sup> percentile earned 2.4 times as much per hour as those at the 20<sup>th</sup> percentile, in 1998 it had risen to 2.63 times as much, and by 2003 the 80<sup>th</sup> percentile earned 2.62 times as much as the 20<sup>th</sup>, essentially the same as it had been five years earlier.

As Table 4.1 below shows, while disparities between top and bottom earners have increased in Ohio and the U.S., inequality remains higher in the nation as a whole than it does in Ohio, in large part because of higher earnings toward the top of the spectrum. In the U.S. the 90<sup>th</sup> percentile earns 4.39 times what the 10<sup>th</sup> percentile earns, up from 3.48 times as much in 1979.

Wage inequality is not as extreme in Ohio as it is in the United States. In 2003 nationally, those at the 90<sup>th</sup> percentile earned 4.39 times as much per hour as those at the 10<sup>th</sup> percentile, and the 80<sup>th</sup> percentile brought in 2.74 times as much as the 20<sup>th</sup>. Since our earliest data point in 1979, wage inequality has been persistently more extreme in the nation than in Ohio, whether measuring the 80/20 or the 90/10 disparity, primarily because wages at the top of Ohio's spectrum are not as high as those at the top of the national distribution.

Table 4.1

<b>Inequality in Ohio and the U.S., 1979-2003</b>		
	80 <sup>th</sup> percentile wage divided by 20 <sup>th</sup> percentile wage	90 <sup>th</sup> percentile wage divided by 10 <sup>th</sup> percentile wage
Ohio, 1979	2.40	3.37
Ohio, 1998	2.63	3.98
Ohio, 2003	2.62	4.06
U.S., 1979	2.50	3.48
U.S., 1998	2.70	4.27
U.S., 2003	2.74	4.39

Source: EPI analysis of CPS data

National data showed much greater inequality among the top ten percent of earners, although state data does not allow close examination of that disparity. In 2003, the top five percent of households earned an average of \$253,239, more than \$100,000 more per year on average than the top 20 percent (which includes the top five percent). Disparities between the highest-income households and middle or low-income households have grown substantially over the past thirty years. While the top five percent of households made 15.7 times as much as the bottom 20 percent in 1973, those highest income families earned more than 25 times as much as the bottom 20 percent in 2003 on average. Table 4.2 below divides U.S. households into fifths and also breaks out earnings for the top five percent of U.S. households.

Table 4.2

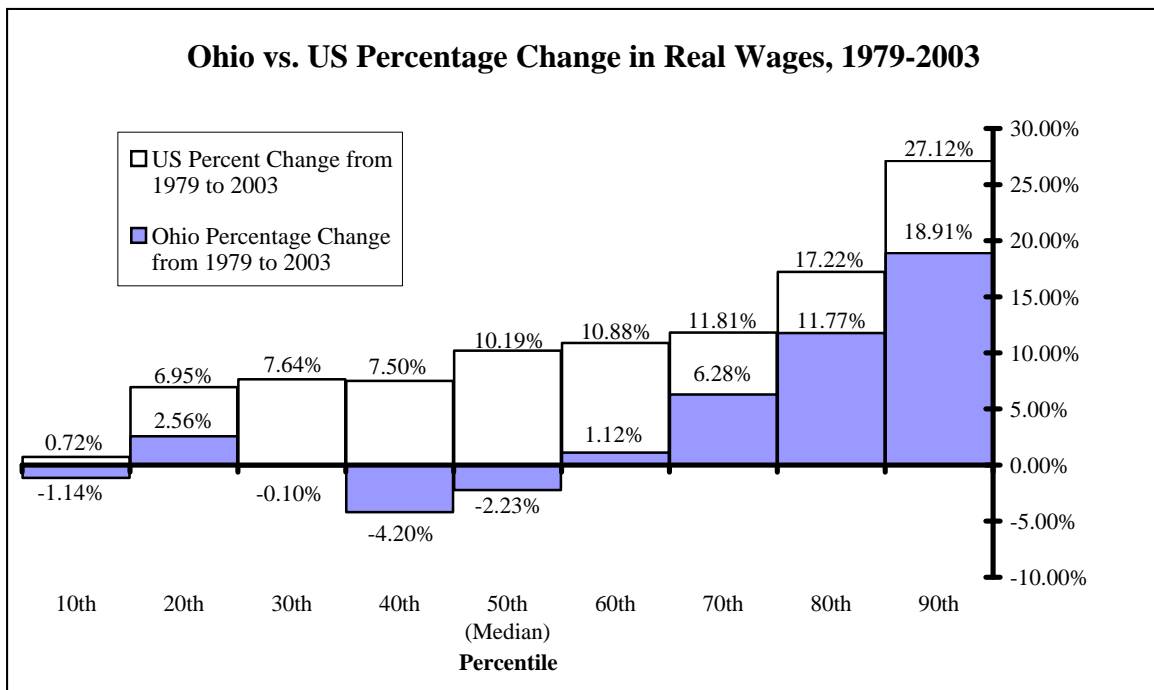
<b>US Households: Mean Income for Each Fifth and Top 5%</b> (in 2003 dollars)							
Year	Lowest fifth	Low-middle fifth	Middle fifth	High middle fifth	Highest fifth	Top 5%	Top %/ Lowest 20%
1973	\$9,210	\$22,831	\$37,305	\$53,630	\$95,113	\$144,949	15.7
1983	\$9,179	\$22,420	\$36,979	\$55,485	\$100,402	\$147,079	16.0
1993	\$9,292	\$23,388	\$39,203	\$60,925	\$126,933	\$217,860	23.4
2003	\$9,996	\$25,678	\$43,588	\$68,994	\$147,078	\$253,239	25.3

Source: U.S. Census Bureau historical income tables

Since the year 2000, income inequality has been at an all-time high, with the top fifth of households earning about 50% of aggregate income and the top five percent earning in excess of 20 percent of all income, according to the Census Bureau.

Across the earnings spectrum, Ohio has lagged behind the U.S. in change in inflation-adjusted wages between 1979 and 2003. Nationally, at every decile, inflation-adjusted wages have grown over this 24-year period, although they've grown much more slowly for those below the median. In Ohio, real wages have declined for most workers at or below the median (except the 20<sup>th</sup> percentile-wage worker), while they've grown for workers above the median. But whether wages have declined, stagnated or grown in Ohio at different deciles, they've grown by greater amounts nationally. For example, wages declined by 1.1 percent at the tenth percentile in Ohio and grew by 0.7 percent at the tenth percentile nationally. At the median, Ohio wages fell by 2.2 percent while national wages grew by 10.2 percent. And at the 90<sup>th</sup> percentile, Ohio wages grew by 18.9 percent but national wages grew by 27.1 percent. This much larger growth at the top income levels nationally is responsible for the greater growth in inequality nationally. Figure 4.2 depicts the difference in hourly wage change at every decile nationally and in Ohio.

Figure 4.2

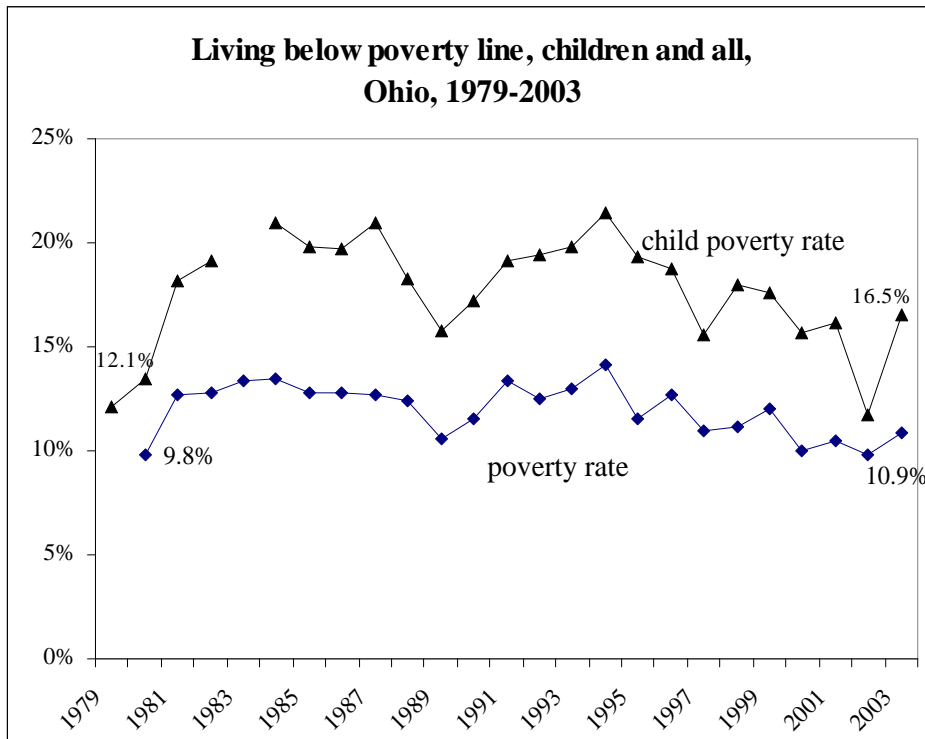


Source: Economic Policy Institute analysis of Current Population Survey data

**Poverty**

Official rates of poverty and child poverty are lower than one might expect given the problems with Ohio’s labor market. In 2003, 10.9 percent of all Ohioans and 16.5 percent of Ohio children lived below the official poverty line, according to the CPS.<sup>12</sup> Both the poverty rate and the child poverty rate rose between 2002 and 2003, although the increase in Ohio’s poverty rate was just barely statistically significant. The increase in child poverty was dramatic, but it seems likely that there may have been some measurement error in 2002, which showed an anomalous dramatic drop in poverty. 2003 levels were slightly above but comparable to levels in 2001 and 2000. Both poverty and child poverty were also higher than they had been in 1979 and 1980, at the beginning of this series. Annual fluctuations aside, more than one in ten Ohioans (10.9 percent) and about one in six Ohio children (16.5 percent) were living below an official poverty line that is described by many as vastly below what is required for subsistence. In 2004, the poverty line for a family of three is \$15,260 and for a family of four is \$18,850. Figure 4.3 shows poverty and child poverty rates between 1979 and 2003. The 1983 data point is missing for child poverty.

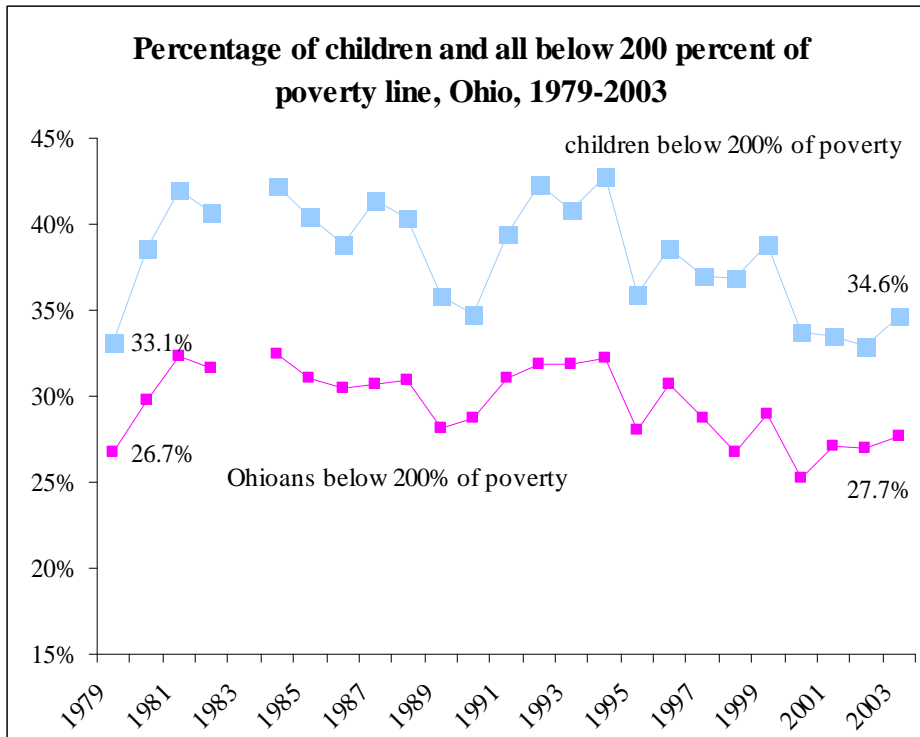
Figure 4.3



Source: U.S. Census Bureau historical poverty tables

Because the poverty line is so low, researchers like to track the number of individuals and children living below twice the official poverty line. Many government programs use twice the poverty line as a measure of need and of eligibility for assistance. More than 34 percent of children and more than 27 percent of all Ohioans lived below this modest threshold in 2003. For a family of three, this would equate to a family income of \$30,520. Figure 4.4 below shows the change in percentage of Ohioans below 200 percent of the poverty line between 1990 and 2003. The 1983 data point is missing for both indicators. Both measures rose slightly between 2002 and 2003, although neither increase was statistically significant.

Figure 4.4



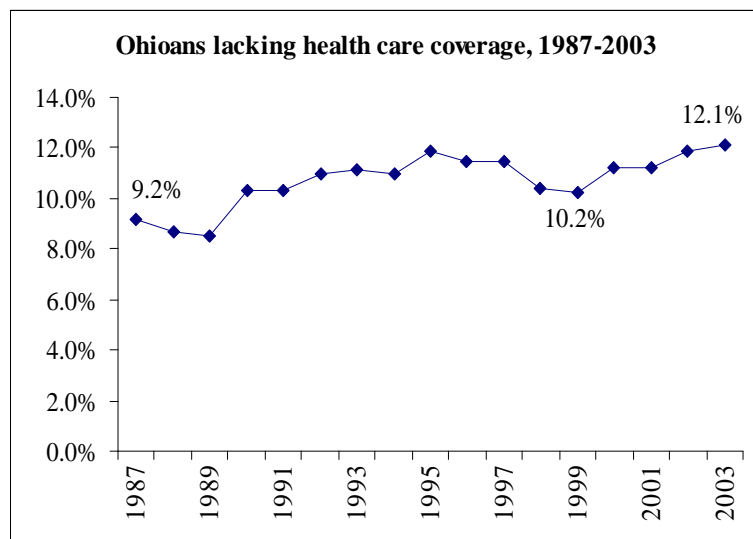
Source: U.S. Census Bureau, CPS

**Benefits**

Wages are one important measure of job quality. Provision of benefits such as health insurance and retirement contributions is another. Nearly one in eight Ohioans was without health insurance at some point in 2003, the highest level since this percentage began being tracked in 1987. In all 12.1 percent of Ohio residents went without health coverage last year. Figure 4.5 displays this trend, from 1987 to 2003.

Figure 4.5

Health insurance is primarily provided by private firms in the United States, except for very poor and elderly citizens who are eligible for Medicaid or Medicare. In 2003, the percentage of workers covered by employer-sponsored plans in Ohio fell slightly to 68.4 percent.



Source: U.S. Census Bureau

**Pensions**

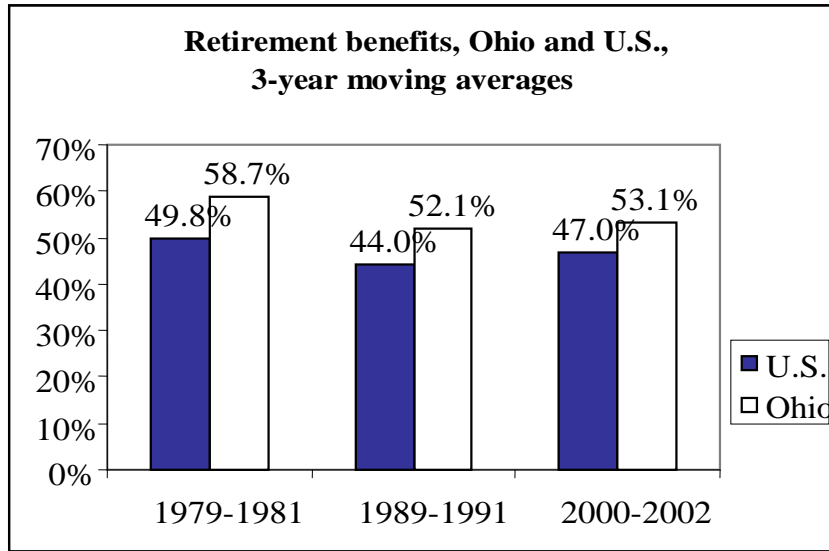
The percent of employees receiving retirement benefits from their workplace declined dramatically in Ohio between the three years around 1980 and the three years around 1990.

Since then, retirement benefits have stabilized, with 53.1 percent of Ohio workers receiving such coverage, down from 58.7 around 1980. The current rate exceeds levels in the U.S. as a whole, where less than half of workers receive retirement benefits from their workplace.

**Taxation**

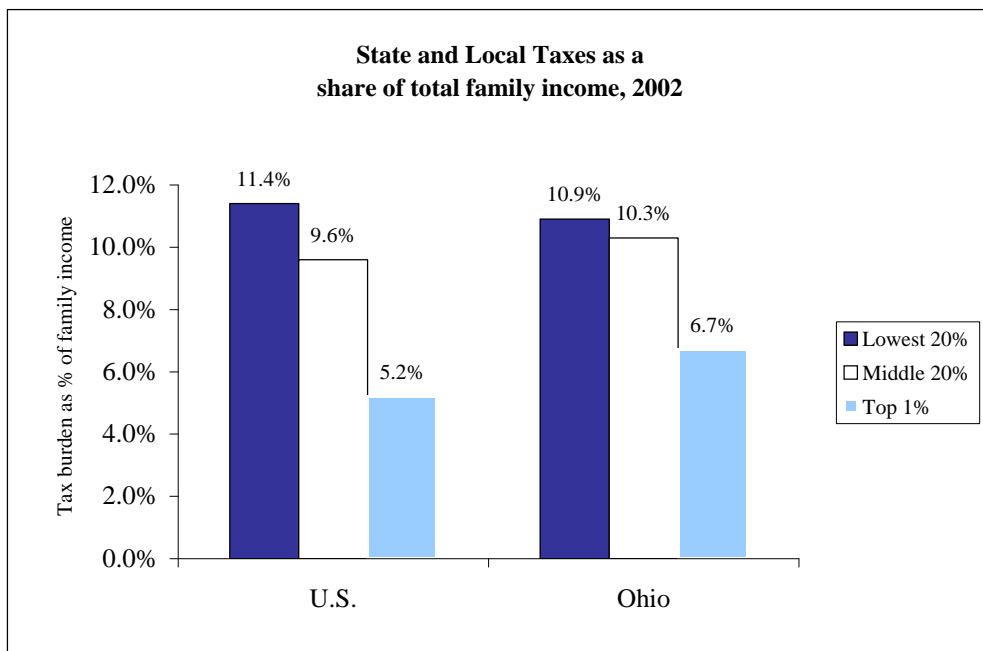
In all U.S. states combined and in Ohio, the top-earning one percent of families pay a much smaller share of their income in state and local taxes than do families in the middle or at the bottom of the earnings spectrum. In Ohio and all states combined, the middle twenty percent also pay a smaller share than do families at the bottom of the earnings spectrum, making the overall state and local tax system regressive. Much of this is due to reliance on sales taxes – low- and middle-income families spend more of their income than do the wealthy, so they pay larger proportions in sales taxes. In Ohio, the top one percent of earners pay just 6.7 percent of their earnings in taxes, while the middle twenty percent devotes 10.3 percent and the bottom twenty percent pays 10.9 percent. Figure 4.7 shows the disparity.

Figure 4.6



Source: EPI analysis of CPS data

Figure 4.7



Source: EPI and Institute on Taxation and Economic Policy

## V. CONCLUSION AND RECOMMENDATIONS

Ohio's labor market has changed dramatically over the past few decades and is struggling to find its footing in the aftermath of the 2001 recession. We believe that work should be valued, that equality is worth striving for, that African Americans should have expanded access to education and good jobs, that our strong manufacturing tradition should evolve and survive, and that Ohio's citizens should gain the skills and education that will help them prosper in a changed economy. *The State of Working Ohio 2004* shows how we are not living up to all of those goals and values.

We've lost jobs both during the 2001 recession and during its aftermath. The job loss has been worse than in the nation as a whole – indeed worse than in all but two other states. The recovery cannot yet be described as a recovery for jobs – in fact as of July 2004 we still had more than 100,000 fewer jobs than when the recession officially ended and more than 200,000 fewer than when it began. Manufacturing continues to employ one in six Ohio workers, but the sector has lost much of its workforce. Unemployment, while not approaching levels seen in past recessions, has risen, particularly for African American workers and those with less education. Our median wage has fallen in real dollars and has dropped below the national median. Gaps between black and white worker wages have grown. One bright spot: disparities between women and men's hourly earnings continue to narrow, although they remain wide. Workers with more education earn substantially more than those with less formal schooling, and workers in unions have higher wages with smaller gaps for race and gender. But unionization levels are falling in Ohio. Ohio residents are much more likely to finish high school and college than in the past, but our college attainment lags behind the nation's. Family and household incomes have grown over the long term, but are now below peak levels before the recession. Wage and income inequality have skyrocketed in the past few decades. Employer-provided retirement and health care have declined, and poverty remains high.

If we are to have an economy that works for all Ohioans, substantial changes are needed. We could list dozens of changes – and in past years we've made different suggestions. Here, we limit ourselves to ten recommendations that would improve the health of our economy. Others might disagree with this prescription. We welcome a vigorous debate about what could best benefit workers. But continuing on our current course is not an option. The following ten points outline the approach we favor.

1. **Provide Public Goods:** Firms can profit on a high road of high wages, high productivity, high skills and high quality, or a low road that competes primarily by trying to lower labor costs, cheapen working conditions and avoid environmental standards. Government can make the high road easier to tread by maintaining adequate levels of taxation so that high-quality infrastructure and education can be maintained. A March 2004 study by economist Robert Lynch showed that having plentiful, high-quality public services contributes to economic growth and development, even if higher taxation is needed to provide it. To read the study, go to: [http://www.epinet.org/content.cfm/books\\_rethinking\\_growth](http://www.epinet.org/content.cfm/books_rethinking_growth).
2. **Excel in Education:** The foundation of a high road is an educated workforce. Education increases wages, and in an economy that seems likely to continue to change, educated workers are more flexible. We under-invest in higher education, and our K-12 funding system has repeatedly been found unconstitutional because resources are allocated so unequally. A profound shift is needed. A blue ribbon task force is charged with determining exactly what is needed to ensure an excellent education to all students (including those with special needs or impoverished backgrounds) and provide that funding. It should embrace that charge. Early

childhood education, early intervention, professional development and smaller class sizes are proven reforms that work and must be implemented in Ohio. College must be made more affordable if we are to meet the demands of the new economy.

3. **Raise the Floor:** We can close off the low road by making it harder for firms to compete by paying the lowest possible wages, not providing benefits, and pushing off some of their costs on to the public sector. A first step is increasing the state minimum wage, as thirteen other states and the District of Columbia have done. The federal level of \$5.15 applies in Ohio – a hopelessly inadequate wage that would leave most families well below the poverty level even with a full-time, year-round worker.
4. **Target Development:** To help pave the high road we should be smart with limited economic development dollars. Development subsidies should be reserved for high-road companies: those that pay higher wages than others in their sector; provide employer-paid health insurance and retirement plans; have unions or at least vow not to fight unionization; maintain strong environmental standards; and train, retain and promote their workers. Local governments should join together to create “no-poaching” agreements, to reduce the likelihood that companies can force municipalities to compete to lower their taxes.
5. **Maintain Manufacturing:** Manufacturing is this region’s historic strength and still employs one in six Ohio workers. Maintaining manufacturing is crucial to our region’s economic vitality. The firms most likely to stay in the U.S. and in Ohio produce innovative, customized, specialized products that need to be produced close to markets and that require more highly skilled, highly trained, productive workers. To promote this approach, we should encourage collaboration between firms, government, unions and community colleges. One concrete suggestion: push the federal government to restore funding for the Manufacturing Extension Partnership, which provides management consulting to help small and medium-sized manufacturers produce innovative, high-quality products while minimizing environmental problems. The Bush administration moved to eliminate funding, which Congress partially restored at less than one-third of previous levels. The funding should be restored. State and local governments should also recognize that many of the new market needs in our economy will involve increasing our energy efficiency. Understanding how Ohio production capacity and Ohio workers can be converted to clean energy is a way that we can create jobs while increasing our nation’s energy independence.
6. **Trade Fairly:** Changes in trade policy are responsible for a significant portion of the manufacturing job loss we’ve experienced since 1995. In our international trade agreements, many environmental, labor, human rights, health and safety standards were relegated to side agreements and poorly enforced. Side agreements should be fully enforced and strengthened. New agreements must place these standards at the forefront. Finally, we must acknowledge the extent to which some workers and communities are damaged by trade agreements, and take steps to assist those workers in transitioning to new employment and those communities in maintaining jobs and infrastructure.
7. **Support other Sectors:** In other sectors, particularly the growing service sectors, we should encourage higher skills, higher productivity and higher wages. Some methods: ensure that all government-supported projects use prevailing wage standards in construction, help employers figure out how to create career ladders between lower-paying and higher-paying positions, and understand and be prepared for the occupational changes that will result from technological change in our economy.

8. **A Healthy Economy:** Our privatized system of health insurance impedes hiring because employers are reluctant to bear the health insurance costs of new employees. At the same time, it relegates many people to a precarious life with no insurance coverage. It impedes risk-taking as workers with pre-existing conditions hesitate to seek new jobs because they worry about coverage denial. And it costs more than systems in other countries that guarantee coverage as part of citizenship. In short, the system is bad for our health and bad for our economy. Both federal and state government should be pressured to adopt universal health care systems that will lower the cost of hiring new workers and guarantee that citizens have access to basic health care.
9. **Tax Fairly:** Wages at the top of the earnings spectrum have increased in recent years, while those at the bottom have stagnated or declined. Yet lower-income households pay a larger share of their income toward state and local taxes. Ohio should implement a state Earned Income Tax Credit to compensate for this, and should put in place efforts to ensure that more eligible Ohio families claim the federal Earned Income Tax Credit. This existing credit helps equalize the relative tax burden between lower and higher-income households with children.
10. **Stop Sprawl:** Suburban sprawl is a problem for the economy for several reasons. It depletes resources from the central city and ends up requiring more overall resources, as infrastructure needs to be put in places that don't currently have it. It wastes land in the city, which is left idle while greenfields are developed. It hurts the environment, reducing greenspace, wetlands and other natural areas essential to a healthy ecosystem. It wastes energy, requiring people to drive greater distance and making public transportation impossible. Government policy promotes sprawl in many ways – by allowing and even subsidizing building on greenfields, by failing to remediate brownfields, by neglecting public transportation and subsidizing ever-widening roads and highways, by having school funding priorities that make cities and inner ring suburbs less appealing to parents, and by not doing more to maintain central city infrastructure. A thorough review and reform of these policies is in order.

Ohio can take advantage of a changing economy, or let that economy take advantage of us. De-industrialization in the 1980s, expanded trade policies in the 1990s, the recession in 2001 and the very weak recovery since then have all taken their toll on Ohio. Neither the business nor the political leadership of the state has reacted in ways that strengthen Ohio's economy and help Ohio workers prosper. It is time to change course.

## APPENDIX

This appendix describes data sources, defines terms used, explains data choices and defines some formulas used in the State of Working Ohio 2004.

### Sources:

**Current Population Survey Outgoing Rotation Group:** The source for wage statistics is the Current Population Survey Outgoing Rotation Group (CPS-ORG). Analysis was conducted on the CPS by the Economic Policy Institute (EPI) and the Center on Wisconsin Strategy (COWS). The CPS is a monthly survey of over 60,000 households nationwide. Each household is in the sample for 2 periods of 4 months each, with 8 months in between. In the fourth month of each 4-month period, households are in the outgoing rotation group (ORG) and are asked an additional set of questions pertaining to wage and hour information. See *State of Working America, 2002/2003, Appendix B* for a thorough description of the enhancements EPI and COWS perform to make the CPS-ORG data more usable."

The sample is wage earners ages 18-64, employed in the private or public sector (not unincorporated self-employed), with weekly hours and wages within the valid range (see *State of Working America, 2002/2003, Appendix B* for a discussion of the valid range)."

The **Current Employment Statistics (CES)** survey of payroll records covers over 400,000 businesses on a monthly basis and provides detailed industry data on employment, hours, and earnings of workers on nonfarm payrolls for the nation.

Differences between the CPS and the CES: The two main measures of employment levels—the payroll survey or CES and the household survey or CPS—have shown different trends and levels in employment since the recession began in March 2001. For many indicators, we must use the CPS, because the CES does not track them. This includes level of unemployment, wage levels, and differences in wages by demographic group. We have used the CPS in the SOWO whenever it is the best measure of the variable we are measuring.

The following summarizes EPI briefing paper #148 ([http://www.epinet.org/content.cfm/briefingpapers\\_bp148](http://www.epinet.org/content.cfm/briefingpapers_bp148)) For job creation and number of jobs, the payroll survey provides a more accurate picture than the household survey. It is significantly larger (with a sample size 600 times greater), it is benchmarked annually to unemployment insurance tax records and it is less likely to be subject to large revisions or misreporting.

Nonpartisan government experts agree that the payroll survey employment numbers are more reliable than those from the household survey. The household survey is a sample survey of about 60,000 households conducted by the U.S. Census Bureau for the Bureau of Labor Statistics (BLS). Its sample, based primarily on the U.S. Census, is designed to reflect the entire civilian non-institutional population. The payroll data are collected from employers' payroll records of about 400,000 individual worksites. This information is gathered by the BLS from a sample based on the unemployment insurance tax records. Both the household survey and payroll survey data are collected for the week of each month containing the 12th of that month. Some reasons why experts prefer the payroll survey include:

- The payroll survey samples 400,000 business establishments, an average of 40 million jobs each month; in September 2003, 40.5 million jobs were sampled. In contrast, the household survey samples only 60,000 households, representing fewer than 70,000 workers. In September 2003, employment estimates were based on a sample of 67,804 workers. Thus, the payroll survey sample covers 600 times as many workers as the household survey.

- The payroll survey employment estimates are benchmarked to the unemployment insurance tax records. This yearly process anchors the payroll employment numbers to the comprehensive count of all nonfarm payroll employment. The household survey, on the other hand, is benchmarked only once a decade to the decennial census, resulting in a less precise employment measurement than the payroll survey.
- Large revisions and misreporting are also less likely for the payroll than for the household employment numbers. In recent years, the household survey has undergone far more extensive revisions than the payroll survey, particularly with respect to population estimates. In January 2003, an additional 576,000 jobs were added.
- The household survey's smaller sample size contributes to the increased variability in its employment estimates. The household survey is extremely volatile, indicating its inadequacy for analyses of month-to-month employment trends.
- Statistical agencies use the payroll survey for measuring employment trends and for other analyses of economic conditions. For instance, the Bureau of Economic Analysis (BEA) uses employment, hours, and wages from the payroll survey to estimate gross domestic product (GDP) for service industries, and the BLS relies on payroll employment and hours (supplemented with self-employment from the household survey) to estimate productivity. The strengths of the household survey are in measurements that the payroll survey is not set up to do, such as the unemployment rate, self-employment, the employment-to-population ratio, occupations, and breakdowns by demographic. While the household survey is useful for measuring this type of economic information, the payroll survey is a much better tool for measuring employment levels and trends.

Both the Congressional Budget Office and the Bureau of Labor Statistics have commented on their preference for the payroll survey numbers over the household survey numbers.

## NAICS

With the release of May 2003 data on June 6, 2003, the CES National Nonfarm Payroll series underwent a number of changes. The basis for industry classification changed from the 1987 Standard Industrial Classification System (SIC) to the 2002 North American Industry Classification System (NAICS). In addition, the sample redesign was completed for the remaining private sector industries. The CES series also incorporated concurrent seasonal adjustment. Lastly, the federal government series was revised slightly in scope and definition. The changes to the NAICS codes were designed to better capture the growing information and service sectors and to account for the reduction in percentage of employment devoted to manufacturing. For more on difference between SIC and NAICS, go to <http://bls.gov/ces/cesnaics.htm>

## Terms

**Civilian labor force:** persons 16 and over in the civilian non-institutional population who are either employed or unemployed.

**Civilian non-institutional population:** persons 16 years of age and older residing in the 50 States and the District of Columbia who are not inmates of institutions (for example, penal and mental facilities, homes for the aged), and who are not on active duty in the Armed Forces.

**Conditionally interested persons:** marginally attached to the labor force, but not in the labor force for reasons other than discouragement (for example people who want a job but aren't looking because of child care problems).

**Discouraged workers:** want and are available for a job and have looked for work sometime in the past 12 months (or since the end of their last job if they held one within the past 12 months), but are not currently looking because they believe there are no jobs available or there are none for which they would qualify. Not in the labor force.

**Employed:** Persons 16 years and over in the civilian non-institutional population who, during the reference week, (a) did any work at all (at least 1 hour) as paid employees, worked in their own business, profession, or on their own farm, or worked 15 hours or more as unpaid workers in an enterprise operated by a member of the family, and (b) all those who were not working but who had jobs or businesses from which they were temporarily absent because of vacation, illness, bad weather, childcare problems, maternity or paternity leave, labor-management dispute, job training, or other family or personal reasons, whether or not they were paid for the time off or were seeking other jobs. Each employed person is counted only once, even if he or she holds more than one job. Excluded are persons whose only activity consisted of work around their own house (painting, repairing, or own home housework) or volunteer work for religious, charitable, and other organizations.

**Full-time workers:** employed for 35 or more hours in the reference week .

**Long-term unemployed:** have been unemployed for more than 26 weeks.

**Marginally attached workers:** not in the labor force; want and are available for work, and have looked for a job sometime in the prior 12 months (or since the end of their last job if they held one within the past 12 months), but were not counted as unemployed because they had not searched for work in the four weeks preceding the survey. Note: discouraged workers and conditionally interested workers are a subset of the marginally attached.

**Not in labor force:** 16 years and over in the civilian non-institutional population. Neither employed nor unemployed in accordance with the definitions contained in this glossary.

**Part-time workers:** were employed fewer than 35 hours in the reference week.

**Part-time workers for economic reasons:** Sometimes referred to as involuntary part time, this category refers to individuals who gave an economic reason for working 1 to 34 hours during the reference week. Economic reasons include slack work or unfavorable business conditions, inability to find full-time work, and seasonal declines in demand. Those who usually work part time must also indicate that they want and are available for full-time work to be classified as part-time for economic reasons.

**Reference week:** The calendar week, Sunday through Saturday, that includes the 12th day of the month has been defined as the reference week. The actual survey is conducted during the following week, the week containing the 19th day of the month.

**Unemployed:** 16 years and over; had no employment during the reference week , were available for work, except for temporary illness, and had made specific efforts to find employment sometime during the 4-week period ending with the reference week. Persons who were waiting to be recalled to a job from which they had been laid off need not have been looking for work to be classified as unemployed.

**Formulas for labor market statistics:**

Labor force participation rate is equal to the civilian labor force divided by the civilian non-institutional population, age 16 and over.

Employment to population ratio is equal to all those employed divided by the civilian non-institutional population, age 16 and over.

Unemployment rate is equal to the unemployed divided by the civilian labor force.

Long-term unemployment share is equal to the long-term unemployed divided by the unemployed.

Underemployment rate is equal to the unemployed plus marginally attached workers plus part-time for economic reasons all divided by the civilian labor force and the marginally attached workers added together.

Part-time workers share is equal to part-time workers divided by the employed.

Part-time for economic reasons share is equal to part-time for economic reasons divided by part-time workers.

## **Inflation**

In most popular discussions, the Consumer Price Index for All Urban Consumers (CPI-U) often called simply the CPI, is used to adjust dollar values for inflation. However, some analysts hold that the CPI-U overstated inflation in the late 1970s and early 1980s by measuring housing costs inappropriately. The methodology for the CPI-U from 1983 onward was revised to address these objections. Other changes were introduced into the CPI in the mid 1990s, but not incorporated into the historical series. Not all agree that these revisions are appropriate. We chose not to use the CPI-U so as to avoid any impression that this report overstates the decline in wages and understates the growth in family incomes over the last few decades. Instead of the CPI-U, we adjust dollar values for inflation using the CPI for all urban, rural and suburban consumers (CPI-U-RS). This index uses the new methodology for housing inflation over the entire 1967-2001 period and incorporates the 1990s changes into the historical series. The CPI-U-RS is now used by the Census Bureau in appendices to its presentations of real income data. Versions of the *State of Working Ohio* prior to 2003 used the CPI-U to deflate and inflate past wage data. Wages from 1979 and the 1980s listed in old SOWO reports will therefore differ from wages in this version of the *State of Working Ohio*.

---

<sup>1</sup> Of course there are vibrant Latino and Asian communities in some cities, but Asians and Hispanics of any race each comprise just 2 percent of Ohio's population. Only 3 percent of Ohioans are foreign-born and only 6 percent spoke a language other than English in their home, according to the 2003 American Community Survey.

<sup>2</sup> American Community Survey, 2002 summary tables, United States Census.

<sup>3</sup> Updated, more detailed education statistics were available for 2003 from the American Community Survey for the state of Ohio for all workers combined. These reflected increased levels of educational attainment and broke out the college and graduate category. However, they were not available by race and gender. These new 2003 numbers indicated that 8 percent of Ohio adults have a graduate degree, 15 percent have a bachelor's degree, 7 percent have an associate's degree, 19 percent have some college, 37 percent have a high school degree only and 14 percent did not complete high school. Because these updated numbers did not allow for comparison between racial and gender categories, we used the previous year's data in the table, but the new findings imply that Ohio residents are headed in the right direction in increasing their educational attainment.

<sup>4</sup> The job loss data from the survey of establishments (CES) describe a more troubled economy than the unemployment data from the CPS survey of individuals. Generally the CES is considered more reliable (see Appendix). Critics have argued that the CPS consistently undercounts unemployed individuals. A front-page *Wall Street Journal* article from June 4, 2001 argued that the CPS may undercount manufacturing employment and distressed Appalachian communities, both of which would make the unemployment rate (as well as other variables) look better than reality. Despite these very real concerns, the CPS is the best and most recent data available on unemployment nationally and statewide.

<sup>5</sup> The statistic is calculated by adding together the unemployed, discouraged workers, conditionally interested workers and involuntarily part-time workers, and dividing that by the civilian labor force plus conditionally interested and discouraged workers.

<sup>6</sup> Part time workers are those who work fewer than 35 hours a week. Part-time for economic reasons, sometimes called "involuntary part-time", refers to workers who give an economic reason such as slack work, inability to find full-time work, unfavorable business conditions, business cycle, or seasonal decline as their reason for being part time. To be in this category, workers must indicate that they want and are available for full-time work.

<sup>7</sup> According to the July 2001 Institutional Census Report of the Ohio Department of Rehabilitation and Corrections (<http://www.drc.state.oh.us/web/Reports/InstCens2001.pdf>), there were 19,450 white men and 21,703 black men in prison in Ohio. According to the 2000 Census, there were 2,984,702 white men and 360,076 black men between the ages of 18 and 65 living in Ohio in 1999.

<sup>8</sup> Charles Warren of the Indiana Institute for Working Families attributes the increase in Indiana's median wage after 1997 to an increase in manufacturing employment.

<sup>9</sup> In August 2004, the census bureau released information showing that between 2002 and 2003, median annual earnings for full-time year-round U.S. women workers shrank by 0.6 percent, to \$30,724, while men's earnings remained unchanged, at \$40,668, leading to an increase in the gender pay gap, the largest backslide since 1991. This report uses median hourly earnings for all workers, as opposed to median annual earnings for full-time year-round workers. Although both statistics are interesting measures of a gender wage disparity, they are two different statistics for two different groups of workers, so it is not surprising that they will sometimes go in different directions.

<sup>10</sup> *Still a Man's Labor Market: The Long-Term Earnings Gap*, a 2004 study by the Institute for Women's Policy Research, examined a sample of randomly chosen people between 1983 and 1998. They found that 96 percent of women and 99 percent of men worked for at least one year during that 15-year period. The working women worked an average of twelve of those fifteen years. But more than half of the women spent at least a year out of the labor force during the period, only 25 percent of the women worked full time for all 15 years, and the average woman in the sample worked 1,498 hours a year, compared to 2,219 for the average man. Over the entire 15-year period studied, the average woman in the sample earned just 44 percent of what the average man in the sample earned, in part because of taking time off, in part because of working fewer hours, in part because of discrimination, and in part because the interruptions resulted in permanent reductions in hourly pay.

<sup>11</sup> For example, between 2002 and 2003 tuition at public two-year institutions in Ohio increased eight percent in non-adjusted dollars, which was significantly higher than the rate of inflation. Tuition at public universities in Ohio increased 17 percent, also well above inflation rates.

<sup>12</sup> Some critics argue that the census and the CPS undercount poverty. George Zeller, a researcher with the Council on Economic Opportunities in Greater Cleveland (CEOGC) found that the unduplicated count of children who were both in poverty and receiving public assistance in Ohio was larger than the estimated overall number of children in poverty according to the 2000 census. Since some children living under the poverty line do not receive public assistance, it is clear, then, that the census estimate was too low. The CPS is benchmarked to the census. Others have argued that the CPS undersamples Appalachia (see earlier endnote).



POLICY MATTERS OHIO IS A NON-PROFIT, NON-PARTISAN POLICY RESEARCH INSTITUTE DEDICATED TO RESEARCHING ISSUES THAT MATTER TO OHIO'S WORKING FAMILIES. WE SEEK TO BROADEN THE DEBATE ABOUT ECONOMIC POLICY IN OHIO BY PROVIDING OHIO'S CITIZENS, REPORTERS AND POLICY MAKERS WITH ESSENTIAL TOOLS TO PARTICIPATE IN PUBLIC DISCUSSION. ULTIMATELY, WE BELIEVE THAT A BROADER DEBATE WILL LEAD TO A STRONGER AND MORE JUST SOCIETY. OTHER AREAS OF INQUIRY FOR POLICY MATTERS HAVE INCLUDED ECONOMIC DEVELOPMENT, EDUCATION, TAXES, JOB GROWTH, AND UNEMPLOYMENT. FUNDING FOR THE INSTITUTE COMES PRIMARILY FROM THE GEORGE GUND FOUNDATION. SPECIAL FUNDING FOR PRESENTATIONS ON *THE STATE OF WORKING OHIO* IS GENEROUSLY PROVIDED BY THE ST. ANN FOUNDATION.

2912 EUCLID AVENUE • CLEVELAND, OH 44115 • 216-931-9922  
[HTTP://WWW.POLICYMATTERSOHIO.ORG/](http://www.policymattersohio.org/)