

# PITTSBURGH ECONOMIC QUARTERLY

University Center for Social and Urban Research

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## GENDER WAGE DISPARITY IN THE PITTSBURGH REGION

By Sabina Deitrick

The experience of women in the workforce in the Pittsburgh region exhibits a significant gender wage gap between male and female workers. UCSUR's study, *Gender Wage Disparity in the Pittsburgh Region*, analyzes the difference between male and female wages in the Pittsburgh region by occupation and industry, controlling for variables such as experience, education, and job status.

In March 2004, the *Pittsburgh Economic Quarterly* (PEQ) article "Pittsburgh Women: Educated but Underemployed and Underpaid" highlighted results from UCSUR's Women's Benchmarks report based on the 2000 Census. The results showed that women in Pittsburgh typically faced a "gender wage gap" larger than most women in the nation. The current work analyzes the problem further and is funded by The Heinz Endowments.

The analysis of the gender wage gap begins with an understanding of women's role in the Pittsburgh economy

throughout the 20<sup>th</sup> century. Women in the Pittsburgh region historically had much lower rates of workforce participation than women nationally. Several reasons are given for this, including the dominance of heavy industries. The Pittsburgh economy was concentrated in manufacturing sectors related to steel and coal, which had much lower rates of female workforce participation nationally than manufacturing industries, such as apparel and textiles. The steel industry itself paid relatively high wages over the latter half of the century, thereby diminishing the need for other household income. The shift work schedule was also seen to diminish the likelihood of women entering the workforce because of the uncertainty it had on families. Finally, by choice, tradition, or the factors above, the region seemed to develop a culture of lower rates of female labor force participation.

The relatively lower rates of female labor force participation in Pittsburgh compared to the U.S. and other metropolitan areas continued almost to the end of the 20<sup>th</sup>

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## Allegheny County Economic Trends

Prepared for: *Allegheny Places, the Allegheny County Comprehensive Plan*

By Sabina Deitrick and Christopher Briem

The University Center for Social and Urban Research (UCSUR) has been part of the planning team for Allegheny Places, the Allegheny County Comprehensive Plan. Allegheny Places, led by the Allegheny County Department of Economic Development's Planning Division, is the first comprehensive plan for the County. The plan was

kicked off in March 2005 by the Allegheny County Chief Executive Dan Onorato and will conclude and be distributed in 2007.

Allegheny Places will establish a vision for the county and will serve as a general policy guide for future growth, economic development, land use, conservation, and community character. It will also provide a

framework for the strategic use of public resources to optimize quality of life in the county. It is the county's business plan and will inform capital budget decisions.

The June 2006 issue of *Pittsburgh Economic Quarterly* (PEQ) covered UCSUR's analysis of Allegheny County's demographic and housing trends, one of the baseline studies

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## GENDER WAGE DISPARITY IN THE PITTSBURGH REGION (CONT.)

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century (see *PEQ*, Summer 2003). The collapse of the region's steel industry and loss of tens of thousands of jobs in the 1980s acted as a push factor for women to enter the workforce. By the late 1990s, labor force participation rates of women in the Pittsburgh region mirrored national rates and even exceeded the national average for younger-to-middle-aged female cohorts.

Today, though women make up nearly half the region's workforce, they are concentrated at lower salary levels. At the lowest levels of annual earnings, women make up 60 percent or more of the full time, full year workers in the Pittsburgh region in each income category (see figure below). At the highest income levels, women are less than a quarter of the total full time, full year workers.

In 2000, full time, full year female workers in the Pittsburgh region

earned approximately 73 percent of male earnings, depending on their educational status. The gender gap by educational level was greatest for women with graduate degrees. They earned 71 percent of male earnings in 2000 in the Pittsburgh region. The gap was narrowest for women with the least amount of education. Women with less than a high school education earned 75 percent what comparable males earned.

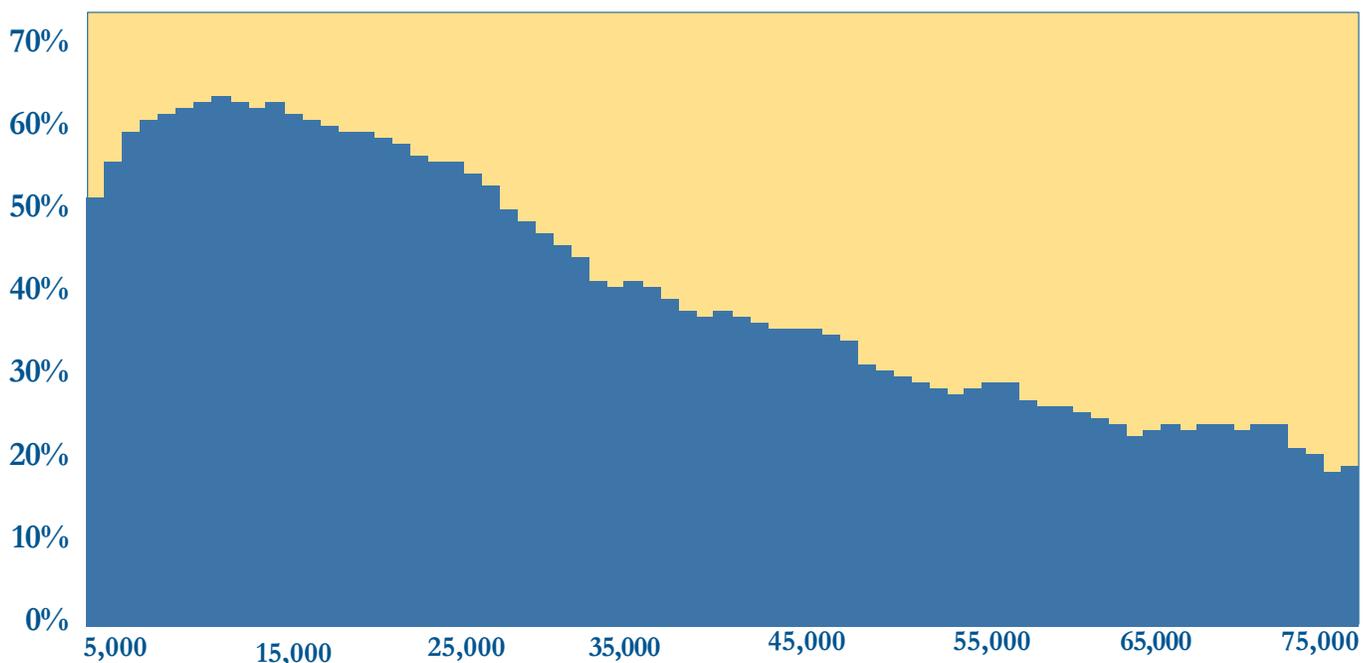
Particular occupational sectors stand out. Women in management occupations in the private sector in Pittsburgh do particularly poorly against both men in management jobs in Pittsburgh and against women in comparable management positions nationally. Women in private sector management jobs in Pittsburgh earn just 58 percent of men's earnings in private sector management jobs in Pittsburgh, and they earn just 90

percent of the national average for women's earnings in private sector management positions.

Furthermore, women in private sector management positions in Pittsburgh earn less than women in management positions in both the nonprofit and government sectors. For men in management positions in Pittsburgh, the private sector pays the most.

Women in management in the government sector do much better, both relative to men in Pittsburgh and other women nationally. Women in public sector management jobs earn 78 percent of men's earnings in Pittsburgh, the same relation of women's earnings to men's nationally. Their median earnings at \$44,400 per year are slightly better than the national median salary of \$43,800 for women employed in the public sector.

**Percentage of Workers Who are Female by Income Range  
Full Time Full Year Workers - Pittsburgh 2000**



*Compiled from 5% Pums, smoothed*

### Median Earnings, Management Occupation Group, Full-Time, Full-Year Workers, by Gender and Sector, Pittsburgh Region and U.S., 2000

Sector	Pittsburgh			United States			Pittsburgh to US	
	Female	Male	F/M Share	Female	Male	F/M Share	F/F	M/M
NonProfit	\$36,000	\$56,000	64.3%	\$40,000	\$54,000	74.1%	90.0%	103.7%
Commercial	\$35,000	\$60,000	58.3%	\$39,100	\$55,000	71.1%	89.5%	109.1%
Government	\$44,400	\$57,000	77.9%	\$43,800	\$56,000	78.2%	101.4%	101.8%
All Sectors	\$36,000	\$60,000	60.0%	\$40,000	\$55,000	72.7%	90.0%	109.1%

Interestingly, one area where women in the Pittsburgh region fare better than men regionally and women nationally is in farming. Female farmers in Pittsburgh, though small in number, earn more than male farmers in the region and more than women farmers nationally.

Women are also a larger share of farmers in the Pittsburgh region than women nationally, comprising almost 40 percent of the Pittsburgh region’s farmers, compared to less than 20 percent in the U.S. The reasons may be varied, including women’s relative financial success when they own their own business.

One of the main reasons for women’s relatively lower earnings is their concentration in specific occupations and industries. We compared the Pittsburgh region to the largest 100 metropolitan areas in the nation for occupational and industry segregation. If women and men are evenly dispersed across industries or occupations, the index shows total equality. If men and women are totally segregated, the industry or occupation index shows complete dissimilarity.

The indexes for Pittsburgh show relatively high levels of segregation by industry and occupation. Pittsburgh’s occupation index placed it as the 72<sup>nd</sup> most segregated region in the nation of the 100 largest metropolitan regions. For the industry segregation index, Pittsburgh ranked even lower at 81<sup>st</sup>. Five metropolitan regions ranked as the least segregated by gender on both

the occupation and industry segregation index: San Francisco, CA (lowest segregation index on both); Austin, TX; Washington, DC; San Diego, CA; and Honolulu, HI.

In general, by other analyses of the gender wage gap by education and metropolitan area, Pittsburgh ranks in the lower quarter or lower half on nearly all measures.

Metropolitan areas that show the most equality in wages by gender, include those above, many state capitals (Albany, NY; Boston, MA; Columbus, OH; Denver, CO; Hartford, CT; Madison, WI; Minneapolis-St. Paul, MN; Phoenix, AZ; Raleigh-Durham, NC; Sacramento, CA), the two largest regions in the nation (Los Angeles, CA and New York, NY), and some of the fastest growing regions in the nation, such as Atlanta, GA; Las Vegas, NV; and Seattle, WA.

The analysis found that state capitals and Washington, DC tend to pay women and men in similar jobs more equally with civil service and other employment requirements of governments. Also, growing regions are more likely to have lower gender wage gaps. Women fare better, salary-wise on average, in places with more rapid employment and population growth. Again, the Pittsburgh region’s slow growth shows up as a factor in its relatively greater wage gap by gender.

Why might the gender wage gap in Pittsburgh differ from the U.S. and other metropolitan regions? First, the

results found that part of the difference between Pittsburgh and the U.S. is explained by similar factors. Work experience, educational attainment, and occupation are important factors in explaining the gender wage gap in the U.S. *and* in the Pittsburgh region. The biggest difference, however, in the factors related to the gender wage gap between the U.S. and Pittsburgh region shows in industrial structure. Women in Pittsburgh are as likely to be concentrated in low paying *occupations* as women nationally, but they are more likely to be concentrated in low paying *industries* in Pittsburgh than in the U.S.

This research suggests that the legacy of Pittsburgh’s industrial past continues to affect where women work and the resulting gender wage gap. There are many institutions and agencies working to reduce the gender wage gap in the Pittsburgh region. This work highlights how far women have come in the Pittsburgh regional economy and raises the issues of how much more needs to occur for women to reach a level of equity in pay that parallels other metropolitan regions in the county and the U.S. as a whole.

*The final report, Gender Wage Disparity in the Pittsburgh Region, by Sabina Deitrick, Susan B. Hansen, and Christopher Briem, funded by the Heinz Endowments, will be available from UCSUR in January.*

## ALLEGHENY COUNTY ECONOMIC TRENDS (CONT.)

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developed for the plan. This issue will summarize UCSUR’s baseline analysis of economic trends.

Allegheny County’s economy shows strength and resilience in the aftermath of the region’s economic restructuring. Economic activity in Allegheny County is estimated to produce over \$77 billion in value added product in 2005. This value added production, called Gross Regional Product, accounts for over 72 percent of what is estimated to be a \$107 billion dollar Pittsburgh regional economy.

Allegheny County continues as the region’s major employment center. In 2003, 865,195 people worked in Allegheny County (see Figure 1). Though employment dropped slightly from a peak of 880,962 in 2001 (1.8 percent decline), recent employment levels are currently the highest in the county’s history. Though population has continued to disperse from the county for decades, Allegheny County continues to be a center for employment in the Pittsburgh region.

The legacy of Pittsburgh’s industrial past continues to impact Allegheny County’s economy today.

Comparing employment growth in Allegheny County with the U.S., Pennsylvania, and the Pittsburgh region (Pittsburgh Metropolitan Statistical Area, MSA) over each decade between 1970 and 2000, with a final comparison of employment growth between 2000 and 2003, shows the relatively slow growth in the County (see Figure 2). In each decade, employment in Allegheny County grew slower than both the United States and Pennsylvania, making Allegheny County a slow growing county in a relatively slow growing state. Over each decade, the county’s growth was less than half the U.S. average. Finally, in the recession between 2000 and 2003, employment in the county declined by a larger margin than the country, state, and region.

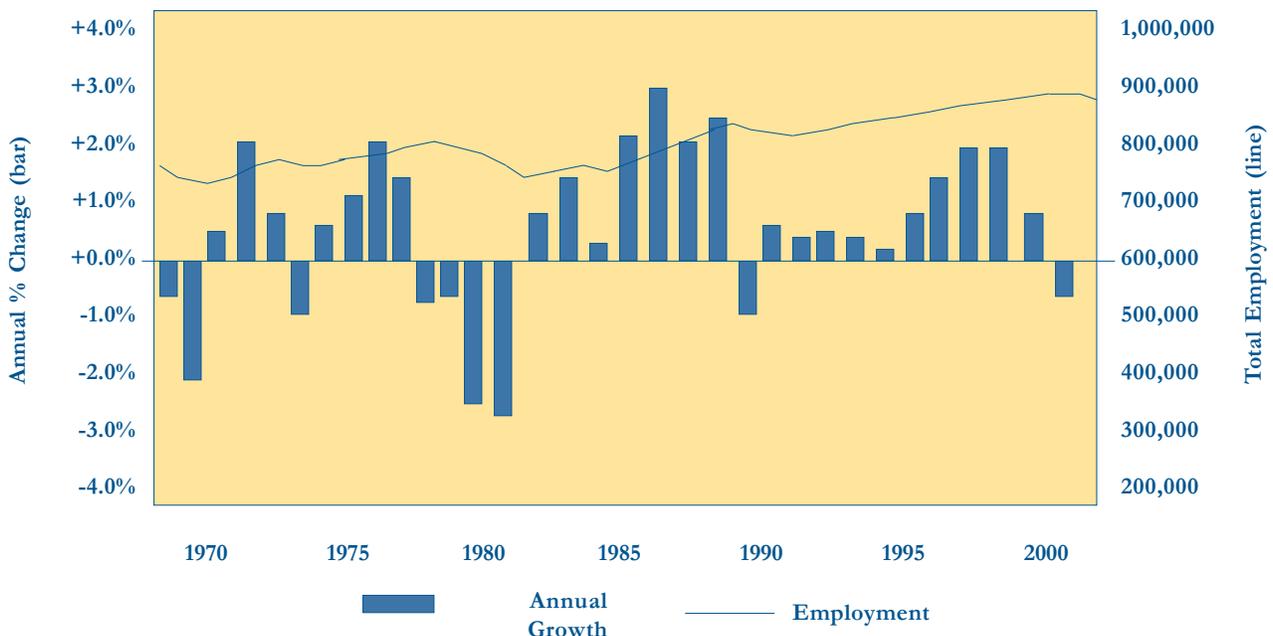
Low overall economic growth in recent decades has made it difficult for the region to overcome a persistent disparity in the economic condition of African Americans in both Allegheny County and the Pittsburgh region. Low employment and earnings levels for African Americans remains a feature of both Allegheny County and the

region. Median household income for African Americans in 2002 was \$22,130, or just 54 percent of the comparable median household income for the white alone population, which was \$40,858 (see Figure 3). Because 84 percent of the Pittsburgh region’s African American population lives in Allegheny County, the issue of racial disparity is concentrated in the county.

Allegheny County’s economy has shown signs of improvement, and by many measures, the local economy mirrors national economic structure more closely today than in the past. Unemployment in Allegheny County has averaged just under 5 percent since 2000, the lowest rate recorded in three decades. It remained below four percent for the next three years. Though the national economic expansion had produced even lower unemployment rates in some regions of the country, clearly the region was no longer suffering from the job destruction that it had experienced.

Today, health care is the county’s largest industry. In 2003, over 120,000 workers in Allegheny County were employed in the health care and social

**Figure 1. Employment and Employment Change in Allegheny County, 1970-2000**



Source: U.S. Department of Commerce, Regional Economic Information Systems

assistance sector, or 14 percent of the county’s employment. Retail trade and professional and scientific industries followed. The county is now specialized in services, such as education and health care. Though parts of the manufacturing sector remain important in the county, major segments of that industry have been lost. Changes in employment by industry show that the decrease in employment from 2001 to 2003 occurred largely in the construction and manufacturing industries, those hardest hit by the recent recession.

The industrial changes in the Pittsburgh region have caused significant changes in the composition of the local labor force. The labor force includes workers who are working and those actively seeking employment. The labor force in Allegheny County peaked at an average 667,100 in 1981. Like total employment, the labor force dropped during the 1980s, but increased steadily thereafter. The total number of workers in the county peaked again at an average 679,900 in 2002, a level higher than the county’s peak labor force during the steel era.

One of the more significant changes in the Allegheny County workforce has been the increase in the number of female workers in the county and the decline in the number of men in the labor force (see Table 1). Between 1971 and 2000, the number of men in the Allegheny County labor force decreased by 17.8 percent, while the number of women in the labor force increased by 13.9 percent. By 2000, women had become nearly half (48 percent) of the Allegheny County labor force. The major source for this increase was in prime-age females, those between 25 and 64, which increased by nearly 30 percent between 1971 and 2000.

As a regional employment center, the county draws workers from outside its border and from farther distances than in the past. In 2000, even though

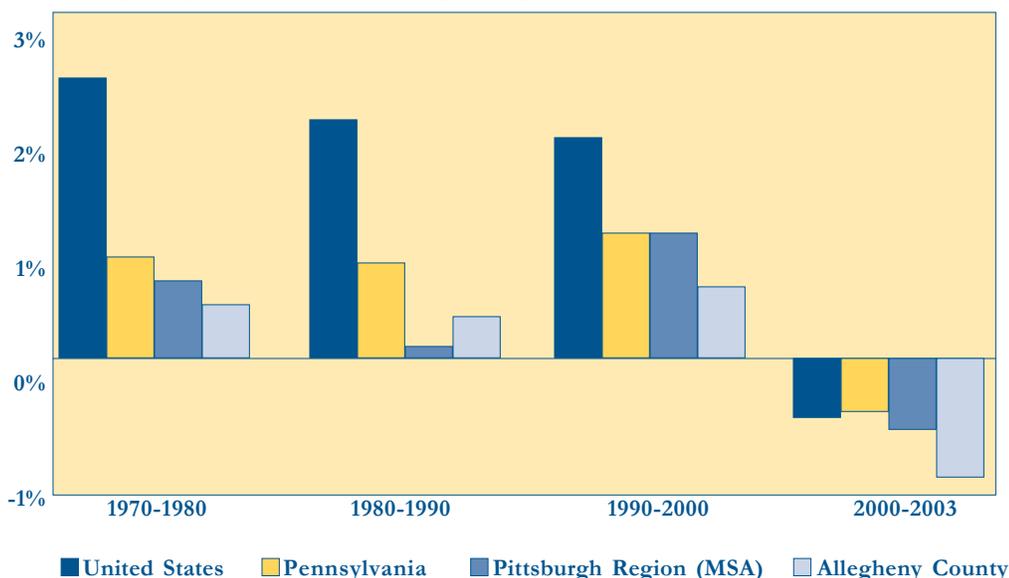
over 45,707 Allegheny County residents commuted to jobs located outside the county, a far larger number of workers residing outside County commuted into Allegheny County for employment. In 2000, over 143,000 workers commuted into Allegheny

County for work, more than double the 60,000 commuters into the county in 1970 (see Figure 4).

Most commuters into Allegheny County come from other parts of the Pittsburgh MSA. Westmoreland County had the largest number of

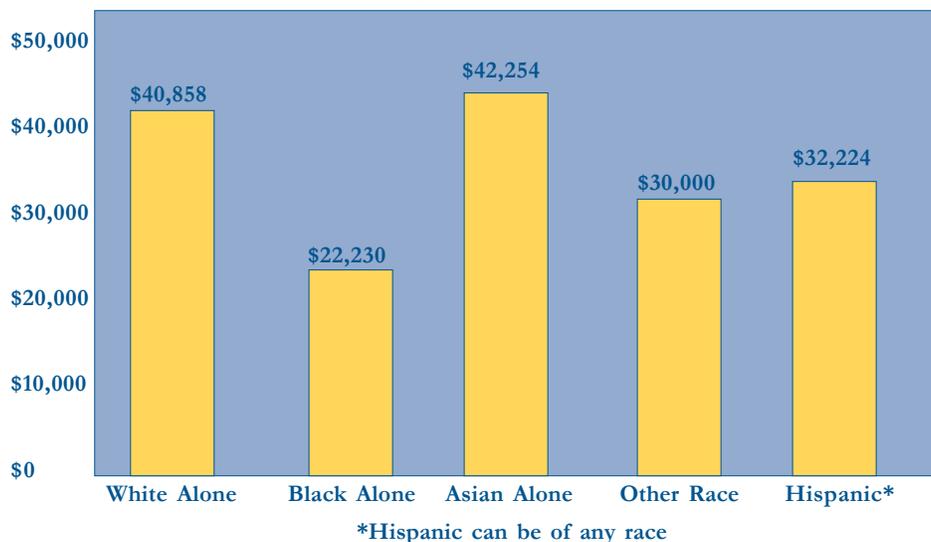
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**Figure 2. Average Annual Change in Number of Employed Workers, Allegheny County, Pittsburgh Region MSA, PA, and US, 1970-2003**



Source: U.S. Department of commerce, Regional Economic Information System

**Figure 3. Median Household Income by Race, Allegheny County, 2000**



Source: Census Bureau, Census 2000

**Table 1. Allegheny County Labor Force by Gender and Age Group, 1971-2000**

	1971	1980	1990	2000	Change 1971-2000	
Men 15-24	69,016	75,245	50,086	41,846	-27,170	-39.40%
Men 25-64	314,555	293,268	284,323	273,941	-40,614	-12.90%
Men 65+	15,255	12,072	12,430	11,936	-3,319	-21.80%
<b>Total</b>	<b>398,826</b>	<b>380,585</b>	<b>346,839</b>	<b>327,723</b>	<b>-71,103</b>	<b>-17.80%</b>
Women 15-24	62,782	71,687	48,963	41,910	-20,872	-33.20%
Women 25-64	185,818	210,627	237,678	241,149	55,331	29.80%
Women 65+	8,481	8,403	10,516	9,770	1,289	15.20%
<b>Total</b>	<b>257,081</b>	<b>290,717</b>	<b>297,157</b>	<b>292,829</b>	<b>35,748</b>	<b>13.90%</b>

Source: Pittsburgh REMI Model

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commuters to Allegheny County, with 43,536. Most of the commuters from Beaver, Butler, Washington, and Westmoreland counties live in the contiguous exurbs just along the county border. Many of these bordering municipalities have 50 percent or more of their resident workers commuting into Allegheny County for jobs.

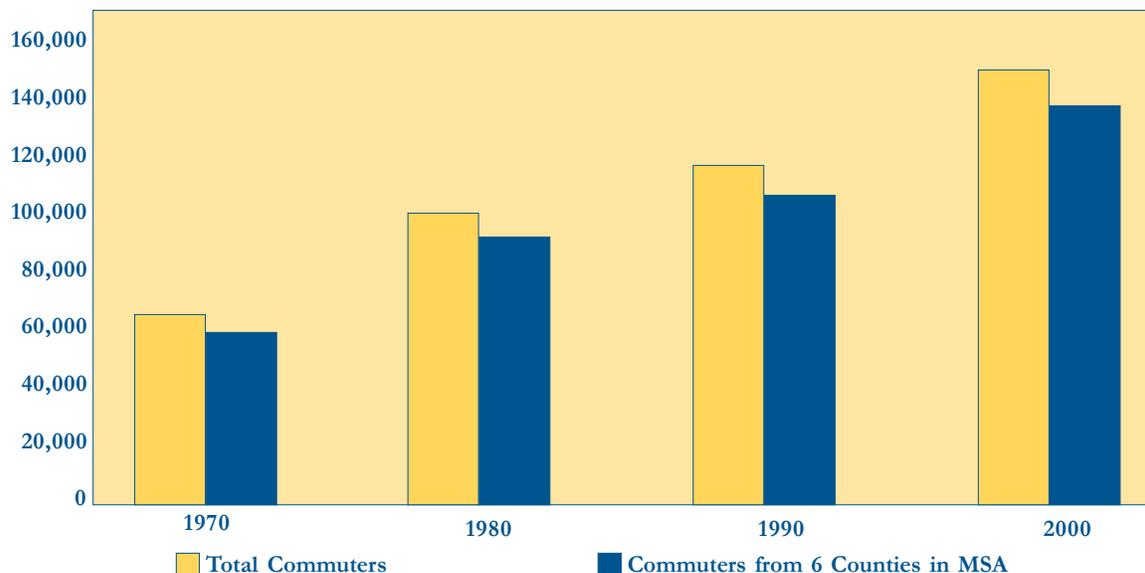
This article presents material from the economic background study for

Allegheny Places, the Allegheny County Comprehensive Plan. Allegheny County, despite relatively slow growth, has remained a regional center of employment, with larger numbers of workers and more people in its labor force than during its “steel era.” Significant shifts in women in the workforce and structural changes toward service industries have created an Allegheny County economy in the

early 21<sup>st</sup> century that more closely resembles the U.S. than in years of its recent past.

The full report can be viewed at: <http://www.alleghenyplaces.com/plan/existingConditions.asp>

**Figure 4. Commuters into Allegheny County, 1970-2000**



Source: Census Bureau, County to MCD Commuting Flows. Census 2000.

## Pittsburgh Region Sees Rising Unemployment for Black Women

by Audrey Murrell

Within our region, there is concern over the availability of qualified workers who can help to strengthen our regional economy. The discussion among key policymakers in our area focuses on topics such as the quality of available workers, out-migration patterns of younger workers in our region, and the impact of industry clusters on earning potential locally.

All important questions; all critical issues. However, data derived from the Current Population Survey (CPS) reveals a disturbing pattern in the unemployment rates by race and gender within the Pittsburgh region.

As detailed in the accompanying table, while the Pittsburgh region experienced a slight increase in the unemployment rate since 2000, that increase was greater for black females compared to any other group. Among those adults able and willing to work,

the rise in unemployment for black females was 4.8 percent (versus 3 percent for black males) whereas for white males unemployment rose only 0.9 percent (versus 0.7 percent for white females) between 2001 and 2005. Only for black females is the labor force participation hovering just around 50 percent during this four year comparison period. This means that regionally, we are underutilizing a key source of human capital as seen in the disparity in employment by race and gender.

According to a report by the Brookings Institution (Gottlieb 2004), “state and local economic development policymakers should consider shifting their emphasis from increasing the quantity of certain types of workers, toward embracing human capital development as a longer-term goal.” While this recommendations is true for most demographic groups represented

within our region, this recent analysis of CPS data suggests that our regional policy must concentrate on *both* quantity and human capital development, particularly for African American women.

As we examine and focus resources on the development of industry clusters and the recruitment of skilled workers, we also need to address the trends in unemployment among key demographic groups within this region. These data should stimulate dialogue within our region around critical issues, such as workforce development and job training, and how we can address both the economic and social barriers that appear to have a disproportionately negative impact on black women in our region.

*Audrey Murrell is Associate Professor at the Katz Graduate School of Business and Director of the Women in the Workforce program at UCSUR.*

### Unemployment Rate by Race and Gender, Pittsburgh Region Population Age 16 and Over

Unemployment Rate	Black Female	White Female	Black Male	White Male
1981 - 1985	25.2	9.4	25.6	12.2
1986 - 1990	13.2	5.3	17.7	7.5
1991 - 1995	12.1	5.4	15.4	7.3
1996 - 2000	9.3	3.8	14.4	4.7
2001 - 2005	14.1	4.5	11.4	5.6

*Source: These data were derived from the Current Population Survey (CPS) by Christopher Briem at UCSUR. The CPS is the monthly household survey conducted by the Bureau of Labor Statistics to measure labor force participation and employment. The data used are extracts from the CPS Annual Earnings File, also known as the Merged Outgoing Rotation Groups, obtained from the National Bureau of Economic Research (NBER). All data presented is for the population age 16 and over in the civilian population for the Pittsburgh region. The Pittsburgh region is defined for the then-current definition of the metropolitan statistical area.*

*Gottlieb, Paul D. 2004. “Labor Supply Pressures and the ‘Brain Drain’: Signs from Census 2000,” Brookings Institution, Washington, DC.*

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