

# PITTSBURGH ECONOMIC QUARTERLY

University Center for Social and Urban Research

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## THE NONPROFIT SECTOR IN THE CITY OF PITTSBURGH

By Christopher Briem and Sabina Deitrick

The nonprofit sector in the Pittsburgh metropolitan area represents an important component of the regional economy. In the Pittsburgh region, three of the top five employers are nonprofit organizations, including UPMC, the region's largest employer with nearly 30,000 employees. West Penn Allegheny Health System and the University of Pittsburgh are ranked fourth and fifth. The federal government and state government are ranked second and third.

The nonprofit sector can be difficult to analyze at the local level using readily-available secondary data. However, special data sets can be used to get a more detailed picture of the nonprofit sector in the city and region. UCSUR works with the Pennsylvania Center for Workforce Information and Analysis to have access to establishment data for employment and payroll, ES-202 data. UCSUR combined ES 202 data with IRS nonprofit data from the IRS Business Master File (BMF), available from the National Center for Charitable Statistics

at the Urban Institute in Washington, DC. Matching BMF data with ES 202 data produced employment and average monthly wages by major industry group for the commercial, government, and nonprofit sectors.

Though important for the regional economy, the nonprofit sector plays a more prominent role in the City of Pittsburgh compared to the rest of the region. A good proportion of the region's nonprofit sector is physically located in the central city of Pittsburgh.

In 2004, the nonprofit sector in the City of Pittsburgh averaged 74,243 jobs. Nearly 25 percent of the city's employment is in the nonprofit sector. This compares to 10.3 percent in the rest of the region and 11.5 percent in Pennsylvania (see Figure 1). Thus, the City of Pittsburgh contains 50 percent of the region's nonprofit sector employment, with the remainder nearly evenly divided between the rest of Allegheny County and the other six counties in the region (see Figure 2).

*continued on page 2*

## Forecasting the Pennsylvania Economy

By Christopher Briem

Population in Pennsylvania is projected to increase by 16.2 percent over the coming two decades. At the same time, employment in the state is projected to increase by 15.8 percent and the size of the statewide economy is projected to increase by 40 percent. These are the main results of a projection of the Pennsylvania economy based on the REMI Model.

An important research initiative of the Urban and Regional Analysis

Program at the University Center for Social and Urban Research (UCSUR) has been the use and maintenance of the Pittsburgh Regional Economic Modeling, Inc. (REMI) Model. This large, detailed econometric model was developed by REMI. The REMI Model is used to assist area researchers and policymakers in the development and evaluation of local policy initiatives through regional forecasts and policy impact simulations. In addition to a REMI Model calibrated for use in

Southwestern Pennsylvania, UCSUR uses a separate REMI Model calibrated to the Pennsylvania economy for statewide analysis.

Presented here is the baseline forecast of the REMI Model for the Pennsylvania economy. A baseline forecast uses historical demographic and economic data to project future conditions. Like all such projections, it is heavily dependent on historical patterns in the economy and does not account for future changes that deviate

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## THE NONPROFIT SECTOR IN THE CITY OF PITTSBURGH (CONT.)

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Just two industries, not surprisingly, account for the vast majority of nonprofit jobs in the City of Pittsburgh. In 2004, educational services and health care and social assistance made up 83 percent of total nonprofit jobs in Pittsburgh. Of these, health care and social assistance alone, with an average of 43,460 nonprofit jobs in 2004, comprised 58 percent of the city's nonprofit workers.

Reflecting this concentration of the region's largest nonprofits, particularly in the healthcare and educational arenas, nonprofit workers

in the City of Pittsburgh are more likely to work in very large organizations (greater than 1,000 employers) than commercial sector workers (see Figure 3). Very large nonprofit organizations employed 58.2 percent of all nonprofit workers in the City of Pittsburgh in 2004.

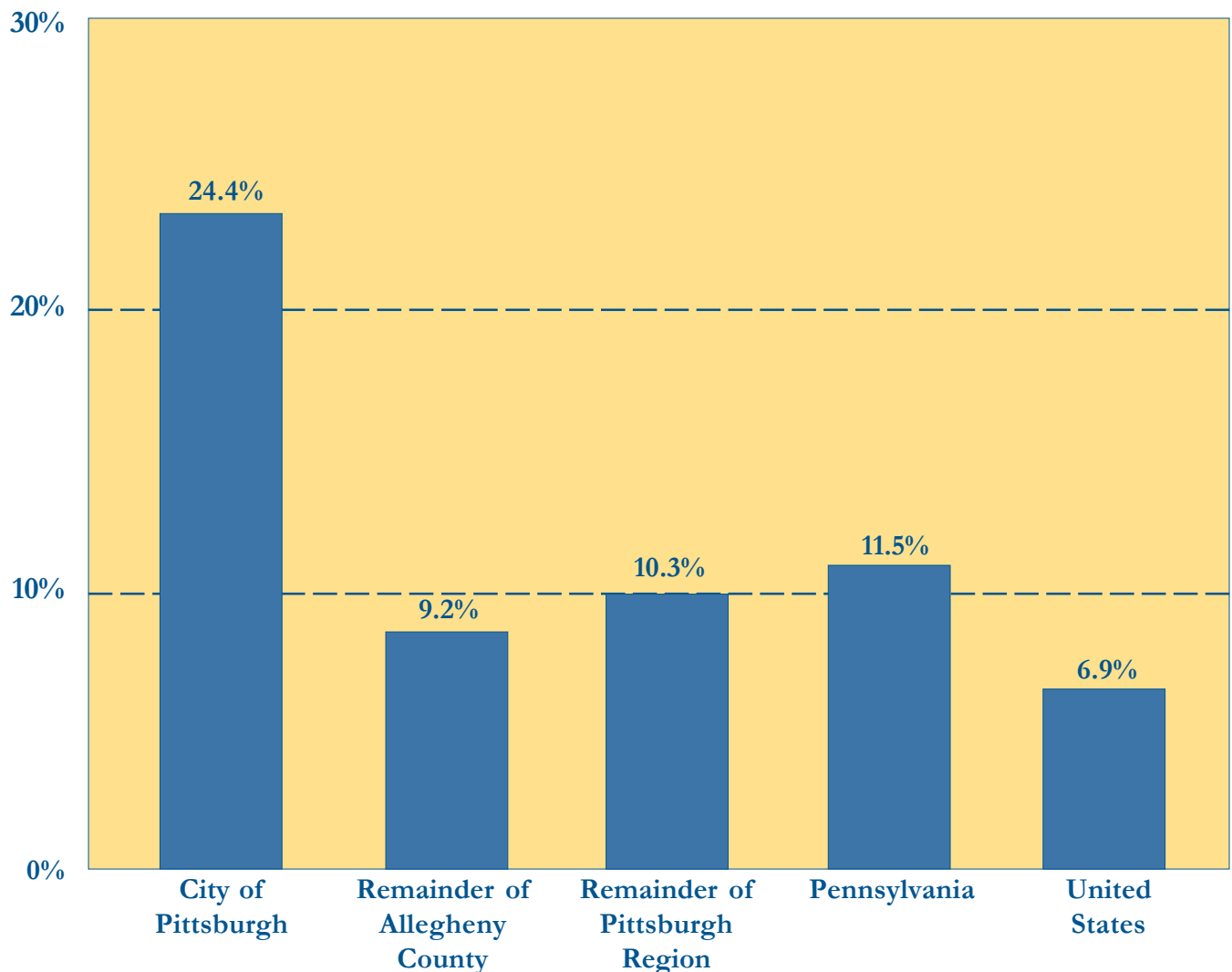
For the private sector, just under 10 percent of these workers were employed in very large companies. Small firms with employment under 100 workers employed 51 percent of private, commercial sector workers. In the nonprofit sector, small organizations

(employment less than 100 workers) employed just 18 percent of nonprofit workers.

Not surprisingly, in the City of Pittsburgh, which houses many of the region's federal and state offices, along with Allegheny County and City of Pittsburgh government offices, 55 percent of government workers were employed in very large organizations.

The nonprofit sector's cumulative payroll in 2004 reached \$3 billion. But the nonprofit sector by major industry category pays lower wages, on average, compared to its counterpart

**Figure 1. Nonprofit Sector Share of Total Employment, 2004**



in the commercial sector in Pittsburgh.

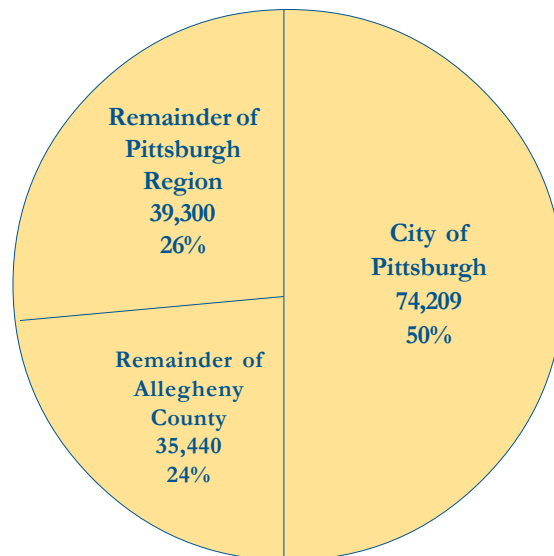
In just two industry categories did average monthly wages in the nonprofit sector exceed average monthly wages in the for-profit commercial sector – administrative and support and other services. Average monthly wages between the nonprofit and commercial sectors were nearly equal in the largest nonprofit sectors — educational services and health care and social

assistance. The gap in average monthly wages between the commercial and nonprofit sectors was largest in the arts, entertainment and recreation; construction; professional, scientific and technical services; and the real estate, rental and leasing industry.

The nonprofit sector in the city of Pittsburgh and the Pittsburgh region represents a major force for the

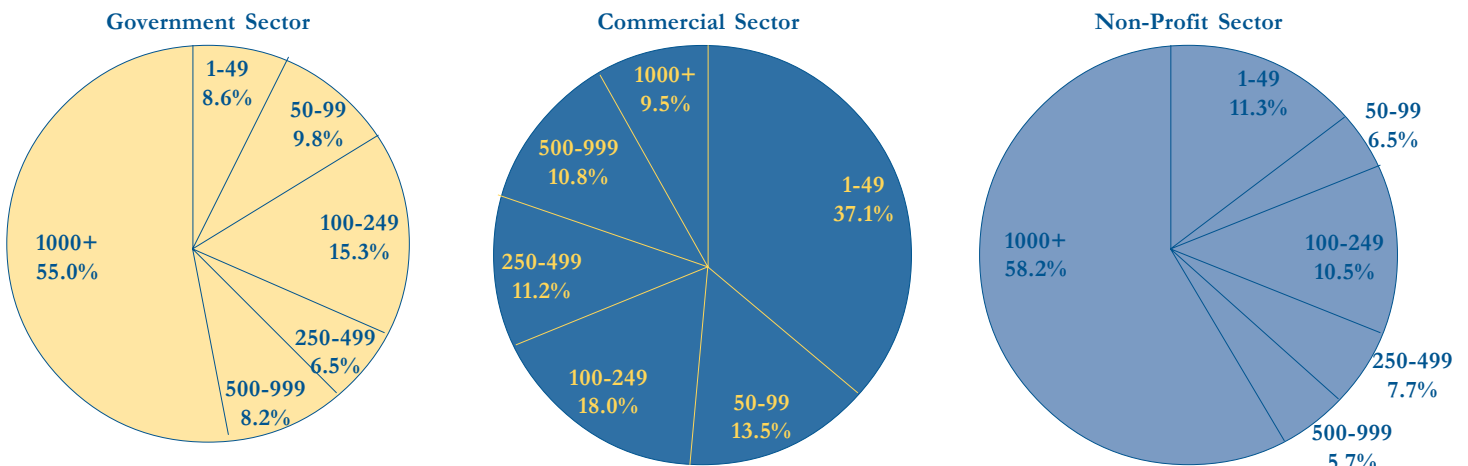
economy. In coming issues of *PEQ*, we will continue to present new research on the region’s nonprofit sector.

**Figure 2. Distribution of Nonprofit Sector Employment Within the Pittsburgh Region, 2004**



Source: UCSUR, University of Pittsburgh

**Figure 3. Distribution of Employment by Size of Establishment-City of Pittsburgh, 2004**



Source: UCSUR, University of Pittsburgh

## FORECASTING THE PENNSYLVANIA ECONOMY (CONT.)

*continued from page 1*

significantly from these patterns. The REMI Model weighs recent trends to better capture future trends. Alternative forecasts can be generated based on inputting alternative assumptions into the model.

Analyzing the state economy is different from looking at a specific metropolitan region. Regions across Pennsylvania are bound by common tax and fiscal policies implemented at the state level. Unlike metropolitan areas, which are typically defined by the degree of economic integration across a specific region, states are defined by historical borders that do not necessarily reflect patterns of economic activity. In that sense, the Pennsylvania economy represents a collection of distinct metropolitan and rural economies across the Commonwealth. Some of these regions are far more integrated with nearby regions in other states than with other parts of Pennsylvania.

REMI estimates that the Pennsylvania economy in 2005 can be measured as \$525 billion in Gross Regional Product (GRP). GRP is a local counterpart of the nation's gross domestic product (GDP), which is a measure of economic value-added production. Measured at the state level, GRP is also called Gross State Product (GSP). Adjusted for inflation, GRP for Pennsylvania is projected to increase by 46.8 percent between 2005 and 2025.

Total output is a measure of economic production that typically exceeds GRP. Economic output is the gross output of Pennsylvania enterprises and exceeds GRP by the value of intermediate inputs purchased from out of state. A subset of output—exports—represents the output of Pennsylvania firms that is sold outside the state, whether elsewhere within the U.S. or internationally. Of Pennsylvania's \$906 billion in total output in

2005, REMI estimates that \$303 billion is production that is sold elsewhere in the U.S. International exports are estimated to account for \$57 billion of Pennsylvania output annually.

REMI projects total population in Pennsylvania will increase from 14.7 to 17.1 million between 2005 and 2025, an increase of 16.1 percent. Pennsylvania has been experiencing slow but positive population growth since 1986. The projected population growth for the state is moderate compared to national levels but does represent faster growth than has been typical in recent decades. Pennsylvania's total population is estimated to have grown by 5.6 percent between 1985 and 2005.

Though total employment is projected to increase by 15.8 percent between 2005 and 2025, the state's labor force is projected to increase by 12.9 percent over the same period. Changing patterns of labor force

### Summary of Pennsylvania Baseline REMI Forecast, 2005-2025

	2005	2015	2025	Change	2005-2025
Total Employment (1,000s)	8,409	9,270	9,740	1,331	15.8%
Gross Regional Product*	525	666	770	246	46.8%
Personal Income*	515	879	1,387	872	169.3%
Output*	906	1,266	1,523	617	68.1%
Exports to Rest of U.S.*	303	418	494	191	63.1%
International Exports*	57	101	150	93	162.0%
Avg Annual Compensation Rate	47	72	102	55	118.0%
Population (1,000s)	14,695	15,592	17,069	2,374	16.2%
Labor Force (1,000s)	7,487	8,102	8,455	968	12.9%

\* Billions of 2006\$

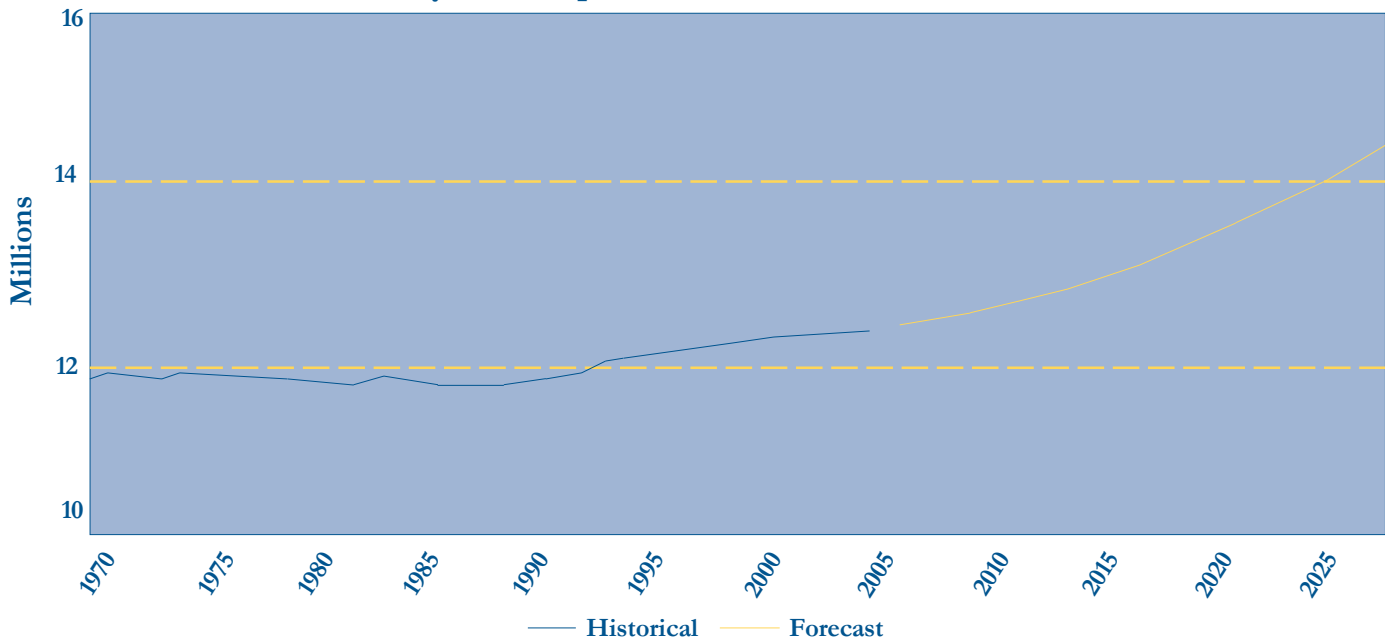
participation and demographic shifts are primarily responsible for the statewide labor force growing less than population and employment between 2005 and 2025.

Looking at specific industries, the health care and social assistance sector

is predicted to have the fastest growth rate over the coming two decades, increasing by 71.8 percent between 2005 and 2025. Health care is also the industry with largest projected increase in the total number of jobs with a projected increase of over 664,000 jobs

in the coming two decades. The largest decrease in jobs comes from manufacturing industries, which are projected to decrease by 114,285 jobs between 2005 and 2025.

**Pennsylvania Population and REMI Forecast, 1970-2025**



**Projected REMI Employment by Industry-Pennsylvania, 2005-2025**

	2005	2015	2025	Change 2005-2025	
Forestry, Fishing, Other	19,555	14,904	13,428	-6,127	-31.3%
Mining	22,362	16,665	17,336	-5,026	-22.5%
Utilities	29,823	28,474	28,181	-1,642	-5.5%
Construction	404,735	440,776	489,913	85,178	21.0%
Manufacturing	663,625	565,639	549,340	-114,285	-17.2%
Wholesale Trade	248,011	228,445	195,375	-52,636	-21.2%
Retail Trade	846,108	890,602	819,825	-26,283	-3.1%
Transportation, Warehousing	249,130	279,721	307,476	58,346	23.4%
Information	132,472	142,181	142,016	9,544	7.2%
Finance, Insurance	357,041	368,098	357,994	953	0.3%
Real Estate, Rental, Leasing	188,070	213,591	231,529	43,459	23.1%
Professional, Technical Services	442,599	476,525	502,010	59,411	13.4%
Management of Companies	68,601	66,026	62,212	-6,389	-9.3%
Administration Waste Services	349,572	428,951	474,522	124,950	35.7%
Educational Services	263,541	345,025	413,349	149,808	56.8%
Health Care, Social Assistance	925,032	1,274,813	1,589,299	664,267	71.8%
Arts, Entertainment, Recreation	140,294	169,302	171,797	31,503	22.5%
Accommodation, Food Services	452,003	508,298	494,355	42,352	9.4%

## PITTSBURGH NEIGHBORHOOD AND COMMUNITY INFORMATION SYSTEM LAUNCHED

By Sabina Deitrick and Robert Gradeck

The University Center for Social and Urban Research at the University of Pittsburgh and Carnegie Mellon University's Center for Economic Development announced a new partnership for data and neighborhood information with the City of Pittsburgh. The Pittsburgh Neighborhood and Community Information System (PNCIS) is now available at [www.pghnis.pitt.edu](http://www.pghnis.pitt.edu).

The PNCIS is a set of interactive, on-line data and mapping tools to collect and analyze information at different geographic scales, from Census tracts to property levels.

The PNCIS is a hybrid application of Geographic Information Systems (GIS) and web technologies that provide demographic, economic, social, property, and planning information to community stakeholders in a spatial context.

The PNCIS consists of three parts:

- **Pittsburgh Community Information System:** This is a secure site with City of Pittsburgh administrative data to analyze real estate and property data to improve neighborhood conditions.
- **Pittsburgh Neighborhood Data-place:** This allows the user to command queries and download large public datasets, such as the U.S. Census, election results, and property and housing data related to Pittsburgh neighborhoods.

- **Map Hub:** This links to Map Hub, which provides users the opportunity to access Pittsburgh maps and integrate neighborhood information into their own map design.

The PNCIS ascribes to the goals of the National Neighborhood Indicators Partnership: "To further the development and use of neighborhood-level information systems in local policymaking and community building" ([www.urban.org/nnip](http://www.urban.org/nnip)).

The concept of developing a community information system at the University Center for Social and Urban Research (UCSUR) started in the 1980s, when University of Pittsburgh researchers began experimenting with various sets of government and social data to assist decisionmaking in the areas of crime prevention and neighborhood improvement.

As a hub for community information and applied research, UCSUR continued to hone the concept of improving neighborhoods by improving the analytic view of the community. UCSUR later teamed with the Pittsburgh Community Reinvestment Group through the Vacant Property Working Group to combat rising vacancies in the City of Pittsburgh.

Today, PNCIS represents an extensive university-government-community partnership. UCSUR has teamed with Carnegie Mellon University's Center for Economic Development, the City of Pittsburgh, Allegheny County, Pittsburgh Partner-

ship for Neighborhood Development, and other area organizations to collect and clean the data and develop the system.

The beta version of the project was launched in this summer. Community and government users are being trained on the system throughout the fall.

The PNCIS project team works with partners to understand and demonstrate the value of this information to address critical issues throughout our Pittsburgh neighborhoods. Funding to develop the system has come from numerous sources, including the universities, local foundations, and banks. Customized projects can be developed for specific users. The project seeks additional funding to continue to update information, add new data sets, and expand its geographic boundaries.

*For more information, contact Sabina Deitrick ([sdeitrick@ucsur.pitt.edu](mailto:sdeitrick@ucsur.pitt.edu)) or Robert Gradeck, Project Director at the Center for Economic Development at Carnegie Mellon University ([rgradeck@andrew.cmu.edu](mailto:rgradeck@andrew.cmu.edu)).*

## UCSUR at Center of New Regional Indicator Site

By John G. Craig, Jr.

The Pittsburgh Regional Indicators project, which was described in the March 2006 issue of *PEQ* (“The Southwestern Pennsylvania Indicators Consortium” by John Craig) went online September 15, 2006 with an array of indicators and a new name, PittsburghToday (see [www.pittsburghtoday.org](http://www.pittsburghtoday.org)).

There are several features of the site that are worth investigation. The technology permits users to compare Pittsburgh with other places in the U.S. and also compare counties within the Pittsburgh region with one another. Another feature is the site’s different descriptions of Pittsburgh, with the 22-county “Pittsburgh Region” being a new and unique measure designed to call greater attention to the role that eastern Ohio and West Virginia play in this area’s affairs. Clicking on “Defining Regions” is a particularly good starting point in understanding the site’s approach. The other introductory sections are also helpful in that regard.

To test out the technology, click a topic area such as “Demographics” or “Economics.” The screen will show a brief description of what is included in the topic, a snapshot of Pittsburgh’s status, and two icons. These show the configuration of the Pittsburgh region that is being used for the material and a map of the cities with which Pittsburgh is being compared. Next, click on a sub-topic such as “Population” in Demographics or “Jobs” in Economics and experiment with the different options. You will be able to look at 10-year trends as well as the latest numbers for both Pittsburgh and the comparison cities, along with the counties that make up the Pittsburgh region.

The launch has been a quiet one because there are many holes to be filled and text to be added. Indicators on the Arts, Education, Environment, Public Safety, and Sustainability are not complete, and additional measures for Demographics, Economics, Government, Health, Housing, and Transpor-

tation are in various stages of development. More important is the absence of the icon program that will permit the user to have access to the data itself so the basis of what is being presented is transparent. There will soon be a “Data” icon on each card along with one for “Interactive Charts.” When the mail server is in place, communication will be easier and friendlier.

That said, because this is a beta operation, it would be very helpful – and much appreciated – if the criticism is robust and the suggestions for improvement plentiful. As the project states: “The goal of the site is to spark a more informed civic discourse about the future course of the Pittsburgh region. By painting an accurate statistical picture of life here, we hope to stimulate a discussion of where we are, and where we hope to go.”

*For more information, contact John Craig ([jrcraig@ucsur.pitt.edu](mailto:jrcraig@ucsur.pitt.edu)).*

## Students on Urban and Regional Projects

This fall, the following talented group of students will be working on urban and regional projects at UCSUR.

**Elizabeth (Liz) Accetta** a 2<sup>nd</sup> year student in the policy research and analysis program in the Graduate School of Public and International Affairs (GSPIA) and will finish her Master of Public Administration degree in April 2007. Liz came to GSPIA after finishing her BA in Economics at the University of Nevada at Las Vegas. This past summer, she interned in the Allegheny County Department of Human Services and plans to pursue her PhD in Economics after graduation. Liz is working on the Pittsburgh Community and Neighborhood Information System under the HUD New Directions grant.

**Andrew Aurand** is completing his PhD in GSPIA. His dissertation is

entitled, “Is Smart Growth Smart for Low-Income Households?” He is completing work on the Large Landowners project for the Lincoln Institute for Land Policy and the Regional Indicators Project, directed by John Craig.

**Aurica Balmus** began the International Development degree program at GSPIA this fall. She received her BA in Political Science and History from Bethany College. She will be working on the Pittsburgh Research Project, a new initiative at UCSUR to bring together faculty, resources, and research around common themes of interest in the Pittsburgh region.

**Sungsoo Hwang** is a doctoral student in GSPIA, working on his dissertation, “Leveraging Partnership Networks for IT Innovation: How to Build Effective Neighborhood

Information Systems.” He is also working on the Pittsburgh Community and Neighborhood Information System. Sungsoo received an NSF Doctoral Dissertation Improvement Research grant for 2006-07.

**Kristin Rucinski** is a 1<sup>st</sup> year student in the School of Social Work, working as an intern through the Legislative Office of Research Liaison (LORL) in the Pennsylvania House of Representatives in Harrisburg. She received her BSW from Slippery Rock University. Kristin will be involved in planning a university-community partnership conference and event, sponsored by LORL in Harrisburg in the spring.

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- |   |  |
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| Allegheny County Economic Trends (12/05)                                | 2002 User Survey For The Pennsylvania Allegheny Trail Alliance (3/03)        |
| Allegheny County Housing and Socio-Demographic Trends (12/05)           | Diversity Among Elected Officials in the Pittsburgh Region in 2002 (2/03)    |
| Disabilities in Southwestern Pennsylvania (10/04)                       | Black Papers on African American Health in Allegheny County (9/02)           |
| Women's Benchmarks Reports (4/04)                                       | African American and Women Board Members in the Pittsburgh Region (11/01)    |
| Black-White Benchmarks Reports (3/04)                                   | The State of the Environment in Allegheny County: Land, Water and Air (3/01) |
| Diversity Within and Among Nonprofit Boards in Allegheny County (10/03) |  |
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