University of Pittsburgh

March 2013

Pittsburgh Economic Quarterly

University Center for Social and Urban Research

Inside This Issue

Population Change in Southwestern Pennsylvania 2010-2012

By Christopher Briem

The population of the 7-county Pittsburgh Metropolitan Statistical Area (MSA) grew by 0.2 percent since April of 2010 according to the population estimates released in March by the U.S. Census Bureau. Total regional population as of July 1, 2012, is estimated to be 2,360,733, up from 2,356,285 on April 1, 2010, the reference date for the 2010 decennial census. The current definition of the Pittsburgh MSA includes seven counties in Southwestern Pennsylvania including: Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, and Westmoreland. Figure 1 depicts annual population changes for the Pittsburgh MSA since 2000. The period between July 1, 2011, and July 1, 2012, represents the third continuous year the region has experienced an annual population increase.

Annual population estimates are typically calculated for 12 month periods ending on July 1 of each year. These estimates are based on the population enumerated in the most recent decennial census modified by annual estimates of the major components of demographic change: natural population change and population migration. Natural population change results from the difference in rates of births and deaths. For more information on how these population estimates are compiled, see the section on the methodology the Census Bureau uses to produce annual population estimates.

Both Table 1 and Figure 2 break down the components of demographic change impacting individual counties in Southwestern Pennsylvania since April 2010, a 27 month period. In addition to the seven counties that currently comprise the Pittsburgh MSA, data for Indiana, Lawrence, and Greene counties in Southwestern Pennsylvania are also included. While all counties in southwestern Pennsylvania experienced natural population decline, migration impacts varied across the region. Within the MSA only Armstrong County lost population due to migration since 2010. Outside of the MSA, but within Southwestern Pennsylvania, Indiana,

continued on page 2

Steel City Codefest Recap

By Robert Gradeck

UCSUR helped to organize the first ever Steel City Codefest, held February 23-24, 2013, at Google's Bakery Square offices in Larimer. Approximately 100 Codefest participants had 24 hours to turn available public information into an application that benefits area residents, visitors, and businesses. Participants had a great time working on their submissions, sharpening their skills, building new tools for the community, and meeting like-minded Pittsburghers.

Steel City Codefest was sponsored by PowerUp Pittsburgh and the Urban Redevelopment Authority of Pittsburgh. Partners also included the City of Pittsburgh, Google Pittsburgh, Bakery Square, MAYA Design, and Carnegie Mellon University's Traffic 21 project. PowerUp is a collaborative initiative between Pitt, CMU, the Mayor's Office of the City of Pittsburgh, and the Allegheny Conference.

The 20 submissions provided proof that skilled residents are able to build useful tools leveraging publicly accessible data. Through events like the Steel City Codefest, the PNCIS Users Conference, the Brown Bag Speakers' Series, and the Open Data Working Group, UCSUR is working to build interest in the open sharing of public information. Staff at UCSUR helped to plan the

continued on page 7

Population Change in Southwestern Pennsylvania 2010-2012

continued from page 1

Lawrence, and Greene counties each lost population due to migration, in addition to experiencing natural population decline.

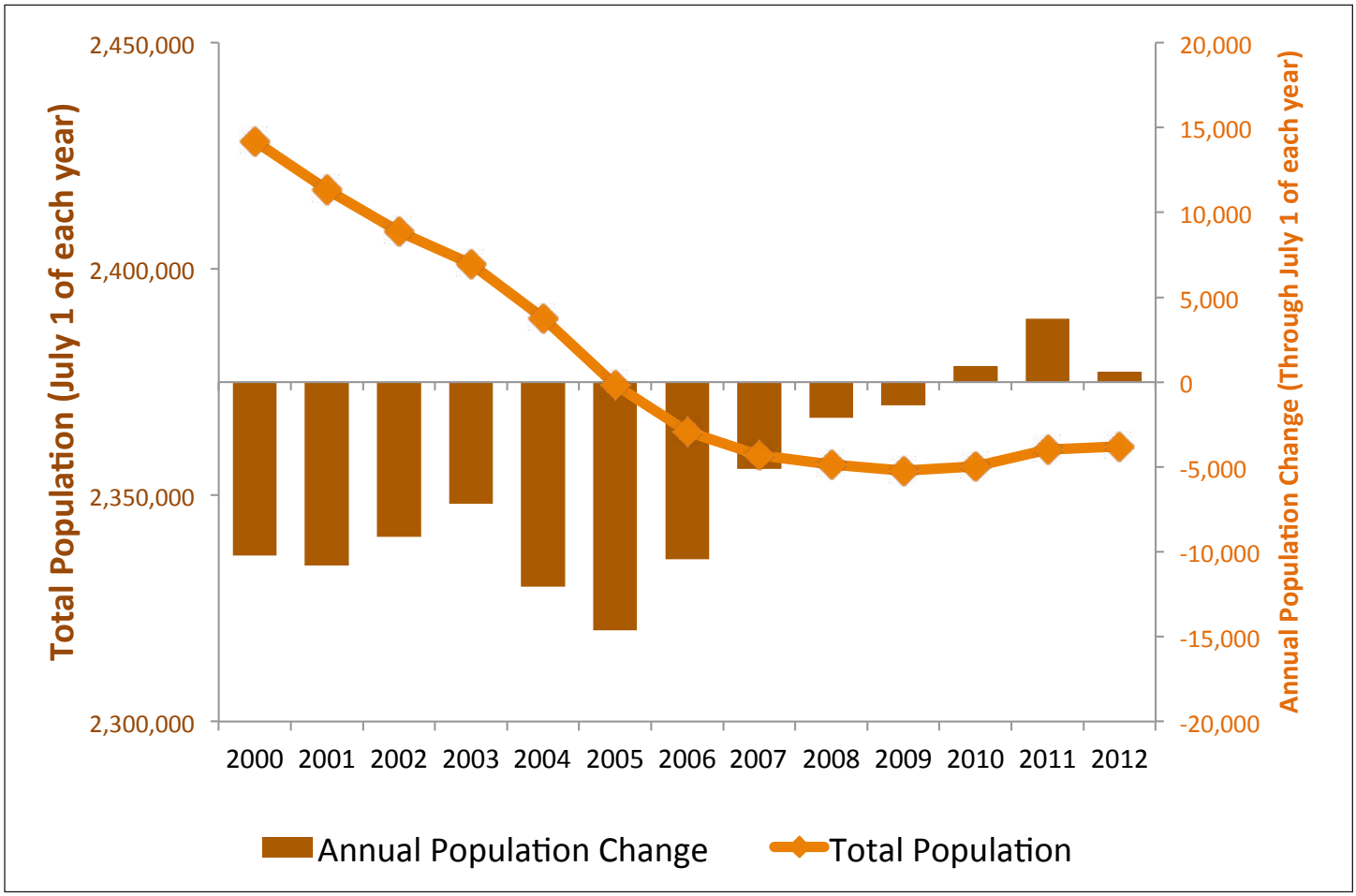
Figure 3 benchmarks the rate of natural population change in the Pittsburgh MSA over the most recent 12 month period compared to each of the 25 largest MSAs in the United States. Natural population change is calculated as a proportion of each region's population in 2010. The Pittsburgh region remains one of only a few large metropolitan areas experiencing natural population decline with the number of deaths exceeding births each year. The region's natural population decline reflects the region's older age demographic. The Census Bureau's American Community Survey (ACS) estimates 17.3 percent of the Pittsburgh MSA population was comprised of those age 65 and over in 2011, compared to the national average of 13.8 percent. Modest population increase for the region resulted from net migration exceeding the rate of natural population decline.

The Census Bureau produces separate estimates of net population changes due to domestic and international migration flows, respectively. Domestic migration is the movement of people within the United States while international migration results from the movement of permanent residents into the United States from other countries. Figure 4 compares the current rate of domestic migration impacting the Pittsburgh MSA, again compared to the 25 largest MSAs. Pittsburgh's modest rate of positive domestic migration ranks 15th among these regions.

Figure 5 benchmarks the current rate of international immigration into the Pittsburgh MSA compared to the 25 largest MSAs. International migration contributes to population gains for the region. The rate of international immigration continues to

continued on page 4

Figure 1. Total Population and Annual Population Change Pittsburgh MSA – 2000 to 2012



Census Bureau Annual Population Estimation Methodology

Each year, the Census Bureau's Population Estimates Program (PEP) produces updated estimates of the population for the nation, states, counties, cities, and towns. Demographic components of population change (births, deaths, migration) are produced at the national, state, and county levels of geography. Additionally, housing unit estimates are produced for the nation, states, and counties. Current population estimates begin with a base population derived from the most recent decennial census compiled as of a reference date of April 1, 2010. This base population is adjusted for demographic events (births, deaths, domestic migration, and international migration) in the population during a specified time period. These intercensal estimates are produced annually until the following decennial is completed.

Population estimates released in March of 2013 included county level estimates for the population through July 1, 2012. Annual population estimates are typically calculated for 12 month periods ending on July 1 of each year. The 2010 decennial census counted the resident population in the United States as of April 1, 2010. An additional estimate of population change is produced for the three month period between April 1, 2010 (the reference date for the decennial census), and July 1, 2010 (the reference date for annual population estimates). The latest population estimates reflect population changes over the 27 month period from April 1, 2010, through July 1, 2012.

The population estimates program also produces municipal level population estimates, which have been produced by a variety of methods in recent years. Comparable 2012 population estimates for individual municipalities are expected to be released in May 2013.

The primary demographic components of population change are migration and natural population change. The U.S. Census Bureau estimates population changes based migration flows, along with birth and death records collected by the National Center for Health Statistics (NCHS), a program of the Centers for Disease Control and Prevention (CDC). Migration estimates are produced from multiple sources. Migration for the population under age 65 is derived from data on federal income tax returns supplied by the Internal Revenue Service (IRS). Where an individual or household reports differing addresses over two years of IRS tax filings, population migration is imputed from the number of exemptions claimed on those filings. Migration for the population 65 and over is estimated from Medicare enrollment data for each county with data from the Centers for Medicare and Medicaid (CMS).

International immigration is estimated using data from the Census Bureau's American Community Survey (ACS) program, the Puerto Rico Community Survey (PRCS), and other sources. The Census Bureau also incorporates separate data on the movement of federal workers provided by federal agencies.

An additional residual population change is calculated for results from changes that cannot be attributed to any specific demographic component of population change. These changes result from the incorporation of accepted challenges and special censuses into the population estimates or application of population controls to estimates for lower levels of geography.

Summarized from: Methodology for the United States Resident Population Estimates by Age, Sex, Race, and Hispanic Origin and the State and County Total Resident Population Estimates (Vintage 2012): April 1, 2010 to July 1, 2012. Online: www.census.gov/popest/methodology/2012-nat-st-co-meth.pdf

Population Change in Southwestern Pennsylvania 2010-2012

continued from page 2

rank low compared to all other large metropolitan regions. International immigration nonetheless represents the majority of net migration into the Pittsburgh MSA. Between July 1, 2011, and July 1, 2012, total net migration into the region is estimated to be a population gain of 4,454. Of that gain, 2,655 or just under 60 percent derived from international immigration. Over the period, net domestic migration into the Pittsburgh MSA was estimated to account for a population gain of 1,799.

While significant that population migration has turned positive for the Pittsburgh region, the overall rate of population growth remains modest. Ongoing natural population decline and low rates of international immigration continue to limit the rate of overall population gains, even as the region continues to experience population gains from migration.

Additional data on the latest population estimates is available on UCSUR's Pittsburgh Urban Blog at: www.ucsur.pitt.edu/thepub.php

Table 1. Demographic Components of Population Change, April 1, 2010 to July 1, 2012

County/Region	April 2010 Population	Natural Population Change #	Natural Population Change %[a]	Total Net Migration[b] #	Total Net Migration % [a]	Total Population Change[c] #	Total Population Change % [a]	July 2012 Population
Allegheny	1,223,348	-1,307	-0.1%	+8,120	0.7%	+5,990	+0.5%	1,229,338
Armstrong	68,941	-397	-0.6%	-160	-0.2%	-531	-0.8%	68,409
Beaver	170,539	-718	-0.4%	+530	0.3%	-294	-0.2%	170,245
Butler	183,862	-107	-0.1%	+1,201	0.7%	+1,108	+0.6%	184,970
Fayette	136,606	-1,115	-0.8%	+244	0.2%	-946	-0.7%	135,660
Greene	38,686	-166	-0.4%	-445	-1.2%	-601	-1.6%	38,085
Indiana	88,880	-9	0.0%	-634	-0.7%	-668	-0.8%	88,218
Lawrence	91,108	-455	-0.5%	-771	-0.8%	-1,237	-1.4%	89,871
Washington	207,820	-1,065	-0.5%	+2,010	1.0%	+896	+0.4%	208,716
Westmoreland	365,169	-2,503	-0.7%	+1,008	0.3%	-1,775	-0.5%	363,395
7 Pittsburgh MSA[d]	2,356,285	-7,212	-0.3%	+12,953	0.5%	+4,448	+0.2%	2,360,733
10 County Region	2,574,959	-7,842	-0.3%	+11,103	0.4%	+1,942	+0.1%	2,576,907
Pennsylvania	12,702,379	+37,311	0.3%	+37,133	0.3%	+61,157	+0.5%	12,763,536

Source: Census Bureau Population Estimates Program

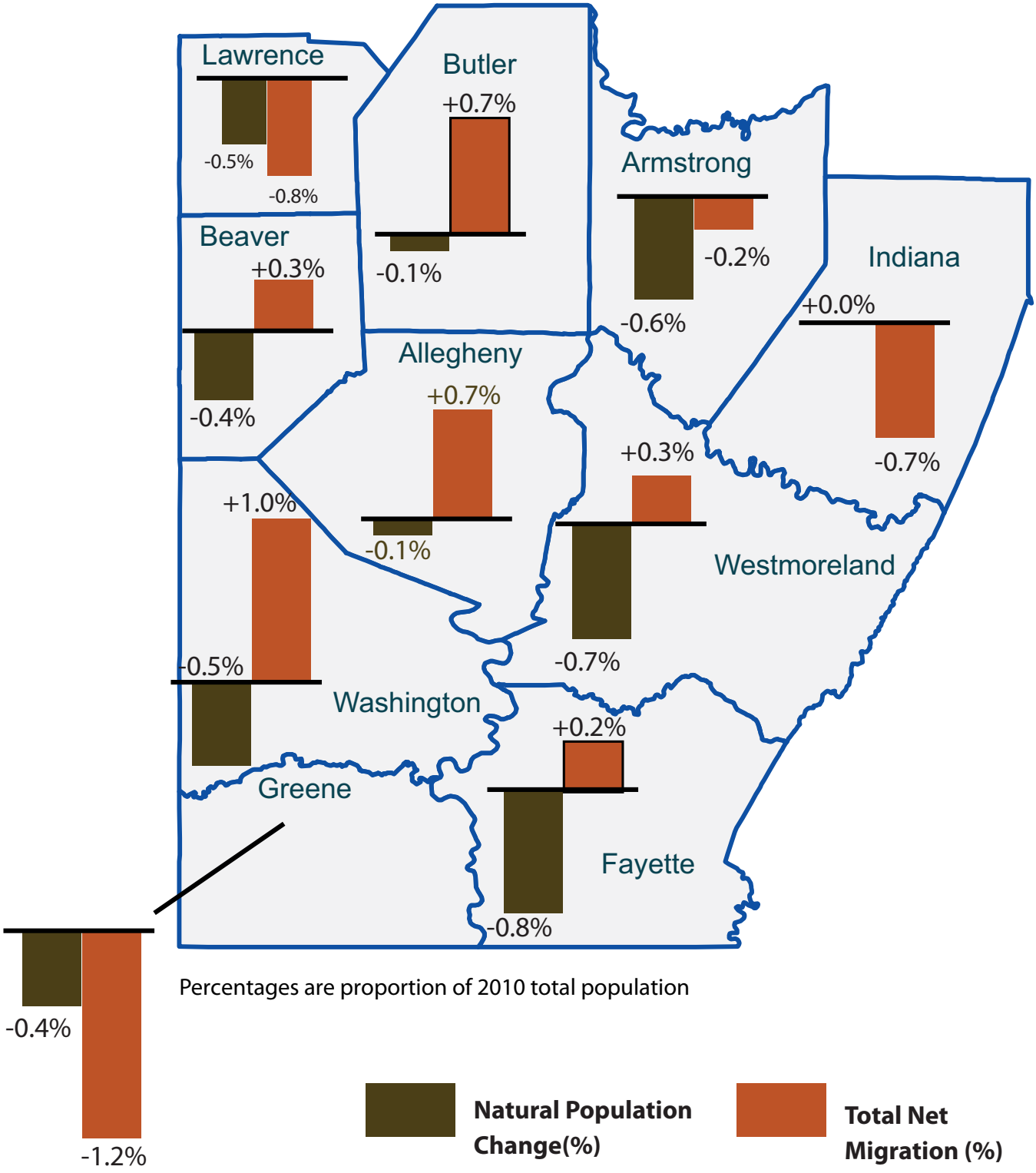
[a] Percentage is calculated as a proportion of total population in each county or region in 2010.

[b] Total net migration includes both net domestic migration and net international migration.

[c] Total population change includes an additional residual not shown here (see box on methodology).

[d] The Pittsburgh MSA currently includes the Pennsylvania counties of Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, and Westmoreland.

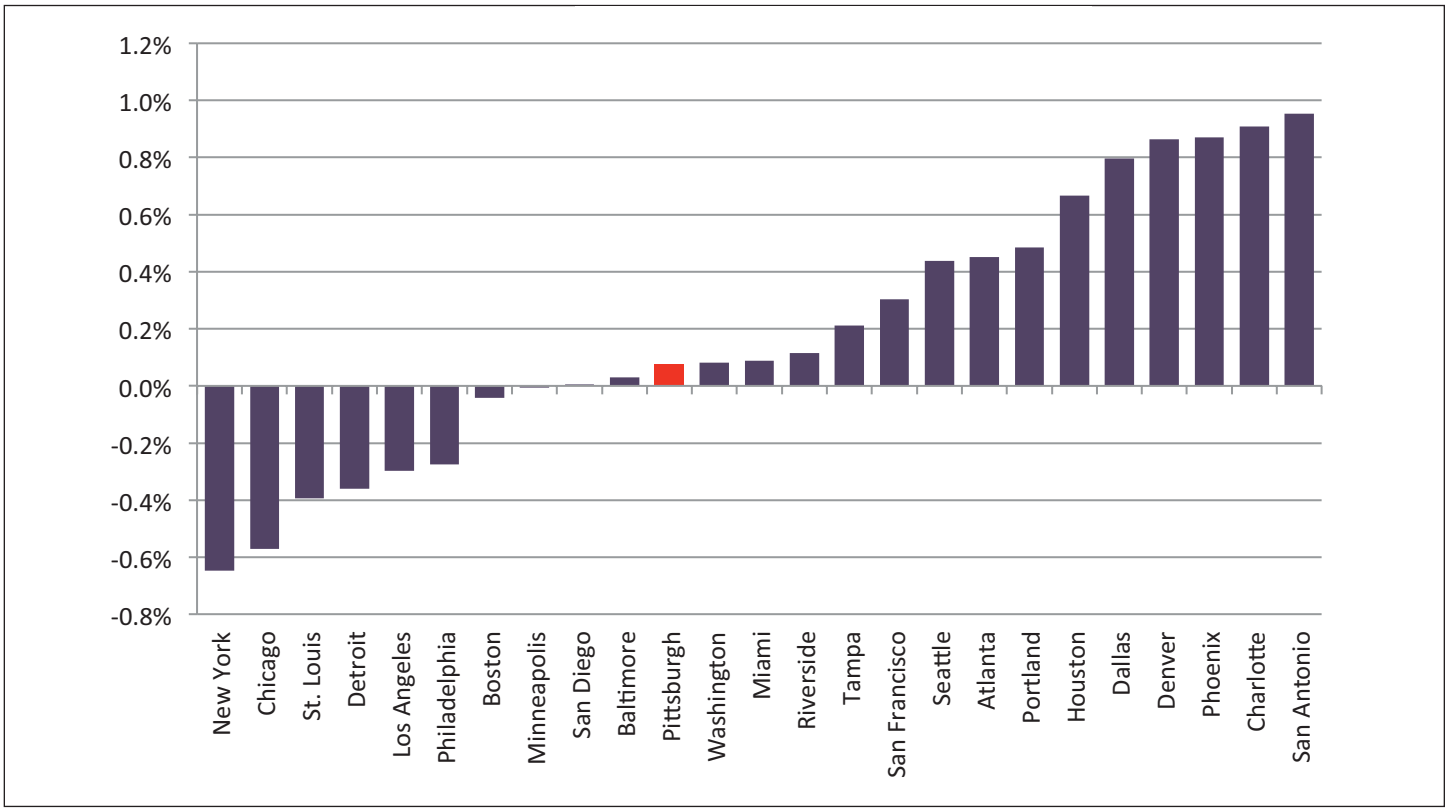
Figure 2. Demographic Components of Population Change, Southwestern Pennsylvania Counties - April 1, 2010 to July 1, 2012 (27 months)



continued on page 6

Figure 3. Estimated Natural Population Change (July 1, 2011 to July 1, 2012) as Proportion of Total Population-25 Largest Metropolitan Statistical Areas

Figure 4. Estimated Net Domestic Migration (July 1, 2011 to July 1, 2012) as Proportion of Total Population-25 Largest Metropolitan Statistical Areas



Steel City Codefest Recap

▪▪▪ *continued from page 1*

event; prepared and documented data; solicited ideas from the community; and served as coach. Sabina Deitrick of UCSUR also served as a judge at the event. UCSUR is continuing to work with participants and community partners that can help the teams fully implement their ideas.

Each member of the Codefest's three winning teams took away a Google Nexus 7 Tablet as a prize. The winning apps include:

ParkIt: Allows users to pay for parking in the city using their mobile devices. The app would provide reminders when a meter is set to expire, provide an estimate of the number of available spaces, and also would allow merchants to validate customer parking costs.

OpenDataPgh: An open data platform providing government and citizens with a place to share data in an open framework. The tool also makes data easy to use through an interactive app generator.

Enlightened: Allows users to compare their energy usage habits with others. Sharing this type of information will raise awareness of energy conservation and provide moneysaving ideas to users.

For more information and to view the full list of apps created at the Steel City Codefest, please see the Steel City Codefest Web site at www.steelcitycodefest.com.

A member of the Whoa, Buddy! team shows off their app on a custom-built giant computer.

At the codefest, many teams worked for 24 straight hours on their app.

The ParkIt app provides an easy way to pay for parking in Pittsburgh.

The Steel City Redd Up app can help keep Pittsburgh beautiful.

University of Pittsburgh

University Center for Social and Urban Research
3343 Forbes Avenue
Pittsburgh, PA 15213

Recent Publications by the University Center for Social and Urban Research

Hazelwood Neighborhood Profile 2010 (10/12)
Young Adults Report (8/12)
The Pittsburgh Regional Quality of Life Survey (7/12)
Who Moves to Lawrenceville and Why? (5/12)
Migration Trends in the Pittsburgh Region: Update (12/11)
City of Pittsburgh Neighborhood Profiles –American Community Survey, 5-Year Estimates, 2005-2009 (6/11)
Incorporating Mt. Oliver Borough's Data in the PNCIS: Project Summary and Lessons Learned (7/11)
Foreclosure in South Pittsburgh's Hilltop and Effective Responses (7/11)
City of Pittsburgh Neighborhood Profiles – Census 2010 Summary File 1 (SF1) Data (7/11)
Allegheny County Population Health in Black and White, Volume Two, Black Papers on African-American Health (8/11)
Estimating the Supply and Demand of Affordable Housing in Allegheny County (3/11)
Impacts of Vanpooling in Pennsylvania and Future Opportunities (2010)
Social Return on Investment Case Study Analysis: Community Human Services and The Union Project (1/09)
The Nonprofit Sector: An Economic and Community Asset (1/09)
EEO Employment Data for Allegheny County and the Pittsburgh Region (2/08)
Gender Wage Disparity in the Pittsburgh Region (12/07)
The Impact on Nonprofit, Large Landowners on Public Finance in a Fiscally Distressed Municipality: A Case Study of Pittsburgh, Pennsylvania (11/07)
The Impact of the University of Pittsburgh Cancer Institute and UPMC Cancer Centers on the Pittsburgh Regional Economy (10/07)

Subscription Form

Please send me the Pittsburgh Economic Quarterly

Name

Address

E-mail

Mail to: University of Pittsburgh
University Center for Social and Urban Research
3343 Forbes Avenue
Pittsburgh, PA 15213

Or fax: 412-624-4810

University of Pittsburgh
University Center for Social and Urban Research
3343 Forbes Avenue
Pittsburgh, PA 15213

Phone: 412-624-5442
Fax: 412-624-4810
E-mail: ucsur@pitt.edu
Web site: www.ucsur.pitt.edu
Twitter: twitter.com/ucsur

The University of Pittsburgh is an affirmative action, equal opportunity institution. Published in cooperation with the Department of University Marketing Communications. UMC89910-0413