

## University of Pittsburgh

# Pittsburgh Economic Quarterly

University Center for Social and Urban Research

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# Major Survey Examines Diversity in the Workplace and Community

by Douglas Heuck and Jeffery Fraser

In January 2016, the Regional Workforce Diversity Indicators Initiative released a survey looking at attitudes and behaviors regarding diversity-related issues in the workplace and Pittsburgh community. The 54-question online survey of more than 3,500 regional residents found that views on diversity often broke down on racial lines.

The Initiative was forged by a number of partners and led by UCSUR's PittsburghTODAY and Vibrant Pittsburgh, and the survey was conducted by UCSUR's Survey Research Center in August and September 2015.

The survey asked a variety of workplace-related questions about the importance of diversity in the region, the commitment of employers to hiring and advancing racial and ethnic minorities, and the impacts of race and ethnicity on wages and promotions

It also asked respondents to give their views on how welcoming the Pittsburgh region is, how diverse their

neighborhoods are, how easy or difficult it is to find friends in the region, and how often they invite someone of another race and ethnicity into their homes. Key findings are summarized below.

#### Workplace

A growing number of area employers see value in increasing the diversity of their workforce and, in an increasingly diverse world, the more diverse the region, the more appeal it holds for companies looking to relocate or expand and also appeals to new workers moving into the region.

More than 77 percent of respondents said their employers have policies, practices, and goals that address diversity, and over 82 percent of respondents completed training on diversity issues.

Nonetheless, according to the survey results, half

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# A Primer on Energy Efficiency: Challenges and Opportunities

by Michael Blackhurst

In response to concerns about the environmental, health, and energy security implications of fossil fuel consumption, stakeholders at all levels—including individuals, large corporations, and policymakers—have a growing interest in energy efficiency. This article briefly describes why many stakeholders are interested in energy efficiency, reviews some of the major challenges to advancing efficiency, and highlights opportunities for the Pittsburgh region.

Energy efficiency refers to using less energy to provide the same energy service. For example, a more efficient dishwasher provides the same sanitation service as a less efficient model; it just uses less energy. Similarly, insulating your home means using less energy for thermal comfort as less heat escapes your home as waste.

Energy efficiency relies on technological improvements to reduce energy use. In contrast, conservation relies on behavior change to reduce energy use, such as turning out lights, taking shorter showers, or reducing the temperature setting on your thermostat in winter. While the research on the net effects of efficiency is far from settled, an overwhelming majority of studies identify short-term benefits to increasing energy efficiency. The most cited benefit is that efficiency improvements save consumers and businesses money, where many efficiency improvements could payback their investments in two to 10 years.

There are broader potential benefits of efficiency as well. Reducing energy demands means reducing energy produced, which can lead to environmental, health, and energy security benefits when displacing fossil fuel consumption. Other potential benefits include improving the efficacy of renewable energy sources and storage, increasing real estate values, increasing household affordability, and reducing the construction, operating, and maintenance costs for conventional energy systems.

The long-standing energy efficiency challenge has been how to realize those benefits, as many barriers limit achieving feasible and sensible efficiency improvements.

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#### Major Survey Examines Diversity in the Workplace and Community

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the respondents described their employer as being very committed to hiring minority workers, with another 29.3 percent moderately committed. Less than 42 percent of respondents viewed their employers as being very committed to advancing and promoting minority workers.

Asian workers were the most likely of minorities to feel their employers were very committed to recruiting a generally diverse workforce and to feel their employers were very committed to promoting racial and ethnic minorities at work.

Do workers themselves see value in a diverse workforce? Overall, 68 percent of all residents surveyed strongly agreed that there is value in a diverse workplace. But an opinion gap existed along racial lines: 80 percent of minorities strongly agreed that a diverse workplace is valuable compared with less than fewer than 64 percent of white workers.

Such gaps continued along other sociodemographic lines. Survey respondents with higher levels of education were much more likely to see value in a diverse workforce than those with just a high school degree.

Between men and women, there were differences in the perception of the value of having a very diverse workplace. More than 71 percent of women strongly agreed that there is value in diversity in the workplace compared to slightly less than than 60 percent of men with the same ranking.

Similar differences were found among gay, lesbian, and bisexual respondents, compared to heterosexual respondents in rating the value of a very diverse workforce. Some 82 percent of gay, lesbian, and bisexual workers strongly agreed that it does matter while only 67 percent of heterosexual workers felt the same way.

And, finally, younger workers aged 25–34 were the least likely of any age group to see employers as being very committed to hiring minorities, promoting and advancing minority workers, and recruiting a generally diverse workforce.

Regardless of how employees valued diversity, less then than 30 percent of workers described their workplace as very diverse. Between races, there was a significant difference in the survey results: White workers were almost twice as likely as minorities to describe their workplace as very diverse.

Differences in survey responses by race continued in a number of other workplace areas. Minorities were much less likely to hold their employer's commitment to diversity in high regard. For example, 55 percent of White workers surveyed felt their employer was very committed to hiring minorities compared to 34 percent of minority respondents.

#### **Job Sectors**

How workers view diversity in the workplace and region can vary significantly depending on the industry sector in which they work. Workers in local industry sectors with high minority representation were more likely than those employed in low-minority sectors to feel their employer is very committed to hiring minorities and recruiting a diverse workforce, regardless of their race and ethnicity.

White workers in sectors where minority representation is high were the most likely of all employees surveyed to give their employers high marks for hiring minorities, recruiting a diverse workforce, and promoting and advancing minorities.

Racial and ethnic minorities in sectors where minority representation is high were the most likely to strongly agree that a diverse workforce has value. The least likely to feel that way were White workers in industry sectors where minority representation is low.

Minorities in sectors where minority representation is high were the most likely to see their race or ethnicity as a disadvantage.

The highest rate of job satisfaction was found among White workers in industry sectors where minority representation is low. More than 53 percent say they are very satisfied with their job. The lowest job satisfaction was found among racial and ethnic minorities in sectors where minority representation is high. Only 32 percent were very satisfied with their job and more than 20 percent are dissatisfied.

#### Community

Race and ethnicity divided opinions on how important it was to live in a diverse neighborhood. It was very important for more than 47 percent of minority respondents, but less than a quarter of White respondents reported the same level of importance. Only 19 percent of minority residents reported that it was very easy to find people to socialize with.

Across respondents, minority residents, more highly educated residents, and gay/ lesbian residents were more likely than others surveyed to see greater value in living in a diverse neighborhood but less likely to view Southwestern Pennsylvania as a place that welcomes racial and ethnic diversity. One of the more striking differences in perspective was seen in whether residents would recommend the Pittsburgh region as a place to live. Some 70 percent of White respondents reported "definitely yes," they would recommend the region, but only 17 percent of African Americans surveyed made a "definitely yes" recommendation, with an additional 41 percent as "probably yes" in that recommendation.

And, though Southwestern Pennsylvania is currently the destination of the current foreign-born residents, the region can't count on a definite endorsement as a place to live from these current residents. Less than 50 percent of foreign-born respondents reported that they would definitely recommend the region as a place to live, compared to 61 percent of U.S.-born residents who would.

What emerges from the Pittsburgh Regional Diversity Survey is a complex portrait of a region and its workers and their views on diversity. Ultimately, Southwestern Pennsylvania is a region where nearly 90 percent of the survey respondents would definitely or probably recommend the region as a place to live—although those numbers, like many others, are significantly different when viewed through the lens of race and ethnicity.

The Pittsburgh Regional Diversity Survey is available at pittsburghtoday.org/pittsburgh-regional-diversity-survey.html.

#### A Primer on Energy Efficiency: Challenges and Opportunities

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Building owners have historically been more reluctant than expected to make voluntary energy efficiency investments, even for profitable investments with payback periods of less than two years. The argument is that "transaction costs"—the time to find the right appliance, hire a contractor, or complete paperwork—add to the real and perceived cost of efficiency. Other noted barriers include decision uncertainty and limited access to the capital needed for upgrades.

There are also barriers caused by "split incentives," which highlight situations where the costs and monetary benefits of efficiency are split across different parties. For example, owners of rental property do not generally realize the potential monetary savings of efficiency. Similarly, property sellers and builders often have limited incentive to invest in efficiency, and, as a result, real estate transactions are made with incomplete information regarding building operating costs.

Beyond building owners, energy utilities generally have a natural disincentive to encourage efficiency, as efficiency reduces demand for their services. Exceptions to this disincentive occur when utilities must choose between investing in new power supply infrastructure or increasing efficiency. Appliance and lighting manufacturers have also been reluctant to invest in efficiency improvements given that building owners tend to underinvest in products that exceed minimum energy codes.

All of these so called "market failures" call for policy interventions that encourage the adoption of sensible efficiency technologies. The economically efficient approach varies depending on the type of market failure being addressed. For example, the classical approach to reducing environmental externalities is to monetize those externalities and increase the price of energy accordingly, thereby reducing consumption. In contrast, the preferred approach to overcoming information barriers is to provide consumers with proper information about their choices.

Since economically efficient approaches have historically been intractable, a tremendous number of "second best" efficiency policy interventions have been tried. There are policies that address non-price approaches to overcoming energy efficiency technology adoption barriers (see Table 1). These vary significantly in complexity, administrative capacity, and the type of instrument used to encourage adoption.

For example, education and outreach programs have been administered to overcome information gaps and are relatively simple and inexpensive; however, they have demonstrated mixed success as the average consumer generally resists efficiency upgrades. Monetary incentives, such as providing rebates to consumers that adopt a technology, are more common but require a dedicated revenue stream and administrative capacity.

Table 1: Overview of Various Approaches to Increase Adoption of Energy Efficient Technologies

Instrument	Policy	Example(s)				
	Education and outreach	Energy efficiency training and educational materia				
Increase awareness	Above code labels	Energy guides, Energy Star label.				
	Disclosure	Energy audit, integrate building operating costs into real estate transactions ("greening the MLS"), energy use disclosure.				
Command and control	Standards	The U.S. Department of Energy sets efficiency standards for most appliances. Models not meeting the new standard cannot be sold in the United States.				
	Building codes	On average in Pennsylvania, adoption of the 2015 International Energy Conservation Code is expected to reduce energy costs per dwelling by \$8,000 over 30 years.				
	Mandatory curtailment	Pennsylvania's Act 129 required utilities to reduce total and peak energy consumption or pay fines.				
	Mandatory audit	Some municipalities require an audit when a building is sold (at transfer of title) or when filing certain construction permits.				
Monetary incentive	Rebates and grants	Duquesne Light offers homeowners a \$24 rebate for replacing an older refrigerator with an Energy Star model.				
	Tax breaks	In 2007, 2009, and 2010 the Internal Revenue Service offered tax credits for upgrading windows.				
	Financing	Property Assessed Clean Energy financing allows building owners to finance efficiency upgrades.				
	Rate reduction	A few energy utilities offer a rate reduction contingent upon specified efficiency upgrades.				
Nonmonetary incentive	Accelerated permit review	While not common for energy efficiency, municipalities perform accelerated reviews for other purposes.				
	Building rating systems	Leadership in Energy and Environmental Design, Passive House.				

#### A Primer on Energy Efficiency: Challenges and Opportunities

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These approaches also highlight different opportunities for policy actors based upon their jurisdiction. For example, the federal government promulgates minimum energy efficient performance standards (minimum code) for energy using technologies, whereas local governments typically administer building codes.

How widespread are energy efficiency programs? While comprehensive statistics describing historical energy efficiency programs are unavailable, the Database of State Incentives for Renewables & Efficiency (DSIRE) summarizes high-level administrative characteristics for around 3,000 energy efficiency programs in the United States.

A majority of existing programs use rebates that cover multiple types of technologies. On average, rebate programs (count=1,940) cover approximately three technologies (6,175/1,940). The most common rebates cover heating, ventilation, and air conditioning systems (count=1,449) and appliances (count=1,103).

Nationally, energy efficiency programs are primarily administered by utilities (count=1,840), states (count=760), and local government (count=260). Data describing revenue sources are less complete. A majority of programs administered by utilities are administered by user fees, which are typically nominal fees paid monthly by all customers. Funding for state programs is more diverse but generally comes from general revenue, "benefits funds" (system benefits charge, public benefits funds) collected from consumers and paid by utilities and bonds. The limited information reported for municipalities indicate most local programs are funded by short-term grants.

Building owners in Pittsburgh have a number of incentive programs available, which include eight programs each for the commercial and residential sectors (see Table 2). With the exception of Duquesne Light's rebate programs, all programs covering Pittsburgh are administered at the state and federal level and use grant, loans, or a tax break as incentives. These programs do not reflect the city of Pittsburgh's recent voluntary goal of reducing energy consumption in city-owned facilities by 50 percent by 2030.

While these programs and commitments are helpful, the national landscape demonstrates that there are additional opportunities to advance sensible energy efficiency investments at the local level. Some counties and local governments have taken advantage of efficiency policy instruments that naturally align with their existing administration of property titles, building codes, construction permitting, and inspections. For example, many cities now require audits or above code energy efficiency improvement to receive building permits for renovations and additions. Similarly, many counties require energy audits when a property is sold.

A few cities with rental registries have addressed the landlord-tenant split incentive approach by mandating rental properties meet or exceed building code standards or by requiring owners to share the estimated costs of utilities with potential tenants.

Broader energy disclosure laws are gaining popularity. Over a dozen U.S. cities require energy disclosure for larger commercial buildings. Austin, Texas, requires disclosure for all buildings greater than 10,000 square feet, but 50,000 is more common, as in Philadelphia, Pa., Washington D.C., New York, N.Y., and Minneapolis, Minn.

These approaches may seem punitive and become politically sensitive without community support. Rebates may be more tractable and, all else equal, are generally effective in spurring adoption given their immediate monetary benefit to consumers and administrative simplicity. The existing rebates available in Pittsburgh are generally low and cover few end uses relative to those available elsewhere.

While they do require monetary appropriations to sustain a program, local governments could profile existing rebates at key touchpoints with building owners, such as when reviewing a permit or when owners sell a property. For example, Duquesne Light offers homeowners a \$250 rebate for an energy audit, which could significantly educate homeowners with respect to efficiency opportunities.

Nationally, the real estate community has also become increasingly interested in providing energy use efficiency and data to buyers, a process generally referred to as "greening the MLS," the Multiple Listing Service. Currently, most property transactions occur with little or no information regarding efficiency and respective building operating costs, thus reducing the value of efficiency upgrades. While these programs are nascent, they do provide an economically efficient approach to increasing efficiency investments.

Given the complexity of administering energy efficiency programs, there exists a broader need to ensure energy efficiency programs are coupled with robust measurement and verification. Measurement and verification programs include collecting the approach building level data needed to track the program impact on both adoption and consumption. Too often, programs are funded without any foresight given to evaluation. Measurement and verification data are rare but increasingly important as efficiency has become an integral part of our energy, environmental, and public health policy.

Increasing energy efficiency can be more complicated than conventional municipal services that rest upon clearer standards informed by, for example, engineering principals or regulatory requirements. However, there is increasingly proper motivation and precedent for energy efficiency programming. This article in no way covers all opportunities, but profiles some that could be advanced in Pittsburgh.

Table 2. Energy Efficiency Incentive Programs for Pittsburgh Building Owners, 2015

Program Name	Incentive Type	Sector	Administration	Appliances and Equipment	HVAC	Building Envelope	Lighting	Whole Building	Major Eligibility Restriction
Small Business Advantage Grant Program	G	С	S						less than 100 employees
Alternative and Clean Energy Program	G, L	С	S						
High-performance Green Schools	G	С	S						
Energy-efficient Commercial Buildings Tax Deduction	Т	С	F						
Department of Energy Loan Guarantee	L	С	F	Not specified					
Qualified Energy Conservation Bonds	L	С	F	Not specified					
Duquesne Light Commercial and Industrial Energy Efficiency Program	Rb	С	U						
High-performance Buildings Incentive	L	C, R	S						Small business/ individuals
FHA PowerSaver Loan Program	L	R	F						
Residential Energy Efficiency Tax Credit	Т	R	F						
Fannie Mae Green Initiative	L	R	F						Multifamily (less than 4 units)
Energy-Efficient Mortgages	L	R	F	Not specified					
Weatherization Assistance Program	G	R	F						Low income households
Duquesne Light Residential Energy Efficiency Program	Rb	R	U						
G=Grant, L=Loan, T=Tax basis, Rb=Rebate		R=Residential, C=Commercial			S=State, F=Federal, U=Utility				

Shading indicates that the program (indicated by row) covers the end use (indicated by column).

**Correction**: UCSUR would like to note that the following was corrected from the printed version of the December 2015 issue of Pittsburgh Economic Quarterly and is now correct online at ucsur.pitt.edu/wp-content/uploads/2016/02/peq\_2015-12.pdf. In early 2014, policymakers deemed several wet weather proposals noncompliant. A lesser expensive gray infrastructure plan at \$2 billion did not meet wet weather goals, while a more expensive \$3.8 billion plan did not meet affordability requirements. As a result, policymakers directed regional sewer authorities to consider a stronger green infrastructure.

## **Advancing Entrepreneurship in the Mon Valley**

by Sabina Deitrick

The University of Pittsburgh Center for Social and Urban Research (UCSUR), in partnership with the Institute for Entrepreneurial Excellence (IEE), has conducted a series of trainings in entrepreneurship and small business development for prospective and early entrepreneurs focused on or based in the Mon Valley.

This project has been funded by the Economic Development Administration of the U.S. Department of Commerce to promote new business formation and development in distressed regions.

As we reported previously in PEQ (June 2015), the Pittsburgh region presents its own set of challenges for new business formation and development. Using data from 2011, we compared the ratio of new establishments to total establishments and found that the Pittsburgh region ranked last in this ratio among the 30 largest metropolitan regions in the country. That result echoed another index estimating entrepreneurial activity and new business development in U.S. regions, the Kauffman Index of Start Up Activity, developed by the Kauffman Foundation. For the 2015 Kauffman Index, the Pittsburgh region ranked 40th among the 40 largest regions in their index work.

Nonetheless, over the past two years, under the program Advancing Entrepreneurship in the Mon Valley, we can make several observations about expanding levels of entrepreneurship and small business development in the area.

There is a growing pool of prospective business owners in the Mon Valley seeking start-up assistance and guidance, along with existing Mon Valley entrepreneurs and small business owners with focused needs for business growth.

With a combination of programs such as the Start-Up Track, the Existing Businesses Tract, and individualized consulting for entrepreneurs at any stage of business development, Advancing Entrepreneurship in the Mon Valley has assisted small business owners and prospective entrepreneurs over the past two years. All services are offered free of charge and participants are not limited in the number of programs attended or the number of consulting sessions.

Through these efforts, 235 individuals participated in programs focused on early-stage business development and over 100 business owners gained from individualized consulting sessions with IEE staff.

How comparable are these new and prospective small businesses to existing small businesses in the Mon Valley? For the research portion of Advancing Entrepreneurship in the Mon Valley, we examined small business data for the Mon Valley region as a whole.

Over the period from 2011 through the first half of 2014, 2,766 new firms formed in the Mon Valley. Many of the new firms started were concentrated in the areas closest to the river and closest to the city of Pittsburgh (see Figure 1).

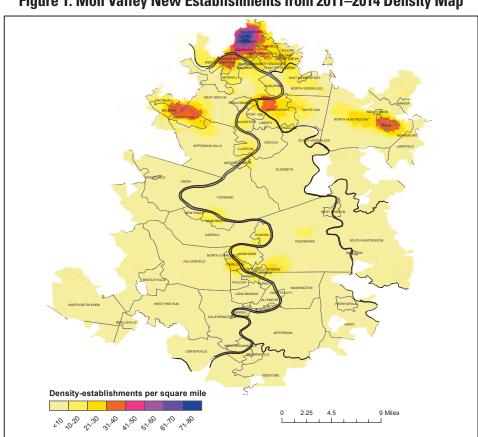
Not surprisingly, most new firms started in the Mon Valley during this period were locally serving small enterprises, as distinguished from more entrepreneurial "innovation-driven enterprises," as described by Kauffman Foundation research. Over the 2011–2014 period, more than 2,700 new firms formed in the Mon Valley. The largest share, 19 percent, were in the health care and social assistance industry group.

Among the new firms formed in this period, an additional 44 percent were in the industry groups of retail trade, construction, other services (includes personal care services, automatic repair and maintenance, and private household services), and accommodation and food services.

As with health care, these firms are also mainly locally serving, rather than innovation-driven industries. These new firms are also clustered closest to the city of Pittsburgh and in a few larger communities throughout the mid-Mon region.

How well did new firms in the Mon Valley succeed? This can be determined by examining firm entry and exit rates from 2010–2014 (first half). Firm entry rates are computed as new firms beginning operations in a given year divided by the total number of firms from the preceding period. Exit rates are firms that

Figure 1. Mon Valley New Establishments from 2011–2014 Density Map



cease operations in a given year year divided by the number of firms in existence in the same year.

We compared exit and entry rates of new firms in the Mon Valley to regional and U.S. averages and found that new firm entry rates in the Mon Valley approached U.S. figures for years 2011–2013 and exceeded Pittsburgh regional averages for those years. Exit rates were less than the U.S. average in 2011 but exceeded firm exits rates for both the U.S. and Pittsburgh region for both 2012 and 2013.

Were firm exit rates in the Mon Valley tied to location or possibly other factors? While we did not model a possible relation for this, the sectoral composition of Mon Valley new businesses may, in part, explain those exit rates.

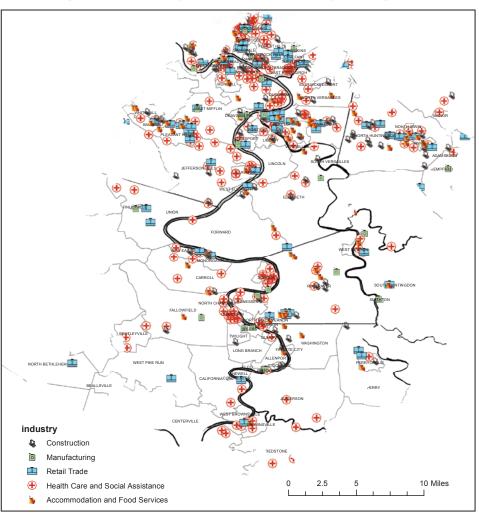
Examining one year, 2013, we found that 33 percent of the new firms that formed in the Mon Valley were in the health care and social assistance sector, and within this sector, nearly two-thirds were in individual and family services. These were small firms engaged in nonresidential social service provision to individuals and families, including services for the elderly and persons with disabilities.

During this period under the Affordable Care Act, there were major shifts in funding processes and reimbursements, where numerous microscale businesses could not compete or lacked the organizational and financial capacity to grow in the newly managed care environment. Many small firms merged or were bought out; in others, owners went to work for other companies. This may, in part, explain the abrupt increase in the exit rate.

Despite the impacts of shifts in health care provision, of the nearly 800 new firms formed in the Mon Valley in 2011, 60.1 percent were still in business in 2014, a fairly standard rate of survival for new business formations.

Participants in Advancing Entrepreneurship in the Mon Valley mirror the locally serving, small business development occurring in the Mon Valley in the 2010s, with program participants engaged in similar lines of sectoral development. The project has worked with many partners in the Mon Valley, including the Mon Valley Initiative, the Human Services Center Corporation, the Steel Valley Enterprise Zones, and the Enterprise Zone Corporation of Braddock. Over the years and many initiatives, these partners are beginning to spur expanded new development in the Mon Valley. For more information, please see monvalleyentrepreneur.pitt.edu/.

Figure 2. Mon Valley New Establishments by Industry 2011



## Urban and Regional Brown Bag Seminar Series Spring 2016 Calendar of Events

University of Pittsburgh University Center for Social and Urban Research (UCSUR)

Both presentations begin at noon and take place at UCSUR (3343 Forbes Avenue, across from Magee-Womens Hospital of UPMC). Please RSVP to swpa@pitt.edu or visit ucsur.pitt.edu/events/brown-bag-seminar for more information.

### **2016 Spring Presentations**

Operating the Game-theoretic National Interstate Economic Model: A Numerical Example of Aviation Cyber Security *Friday, April 15, 2016* 

JiYoung Park, PhD
Associate Professor, Department of Urban and Regional Planning,

University at Buffalo, the State University of New York.

Exacting a Pound of Flesh: How Neighborhood Environments Contribute to Childhood Food Insecurity and Obesity Friday, May 20, 2016

Anna Maria Santiago, PhD Professor, School of Social Work, Michigan State University Senior Editor, *Journal of Community* Practice



**University Center for Social and Urban Research** 3343 Forbes Avenue
Pittsburgh, PA 15260

#### Recent Publications by the University Center for Social and Urban Research

State of Aging in Allegheny County (6/14)

Hilltop Housing Market Analysis (2013)

Report on Undergraduate Withdrawal with an Emphasis on Freshman Withdrawal after the First Term: 2007–08 to 2012–13 (2013)

Marcellus Shale Series (2012-2013)

Pittsburgh Today & Tomorrow: The Facts and the Future of Our Region (ongoing)

The Pittsburgh Regional Environment Survey (2013)

The STEM Gap (2013)

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, 200<u>5–2009 (6/11)</u>

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 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)

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#### University of Pittsburgh

University Center for Social and Urban Research 3343 Forbes Avenue Pittsburgh, PA 15260

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

## Pittsburgh Economic Quarterly

Editor

Sabina Deitrick

**Assistant Editor** Anna Aivaliotis

#### University Center for Social and Urban Research Director

Richard Schulz

#### Urban and Regional Analysis Director

Sabina Deitrick

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