# PITTSBURGH ECONOMIC QUARTERLY

**University Center for Social and Urban Research** 

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# Living Arrangements of the Elderly in Pittsburgh

By Christopher Briem

rends in the concentration of elderly residents living in local communities have resulted in the creation of "Naturally Occurring Retirement Communities" (NORCs). NORCs are specific geographic areas where a large concentration of older people have "aged in place" and now live, although the housing there was not necessarily built for seniors. Issues concerning "aging in place" link senior services to housing, two areas traditionally addressed separately by both public policy and service organizations.

The Pittsburgh region has a disproportionate concentration of elderly compared to the nation. In 2000, 17.1 percent of residents in the Pittsburgh region were 65 or older, compared to 12.4 percent in the U.S. The

dispersion of elderly residents is not uniform across the region. There exist many subareas within the region that have high concentrations of non-institutionalized elderly residents that could be considered NORCs.

The living arrangements for elderly residents of the region range from assisted living to shared housing with other family members to a growing number of elderly who live alone or with an elderly spouse. These elderly-only households reflect not only a desire among some elderly to "age in place" and remain in their homes of many years, but also a flow of return migration as older elderly return after residing in more traditional retirement communities elsewhere (see December 2004 *PEO*).

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### COMPREHENSIVE PLANNING AND AFFORDABLE HOUSING

By Andrew Aurand

ffordable housing remains a persistent problem across the U.S. and regionally, as well. Though the Pittsburgh region continues to develop outward, much of the new residential development is oriented toward higher income households. New housing development in the region is generally not meeting the needs of lower income households. This article examines some relationships among affordable housing and key elements of comprehensive planning.

Within the Pittsburgh region, Allegheny County began a process of comprehensive planning in the fall of 2005. The plan, called "Allegheny Places," is expected to be a general policy guide for development, conservation, and economic initiatives throughout the county (Allegheny County 2007; see also *PEQ*, June, December 2006). It is guided by two sets of principles. The first set consists of general planning principles of redirecting development and public investments to existing urban areas, encouraging mixed use neighborhoods, promoting higher density, maximizing the use of existing infrastructure, and preserving environmental resources, such as undeveloped land. The second set consists of equitable development principles to insure all households, regardless of income, have equal access to decent affordable housing, attractive neighborhoods, good paying jobs, public transit, public amenities such as parks, and high performing schools (Allegheny County 2007).

This article discusses the integration of two significant issues which are included in comprehensive plans, as in the one undertaken by Allegheny County.

The first concern is the availability of decent affordable housing for households of all incomes. The poorest

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### COMPREHENSIVE PLANNING AND AFFORDABLE HOUSING (CONT.)

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households are those most unlikely to find affordable housing. In Allegheny County, for instance, the supply of affordable housing does not meet the demand for the lowest income renters. These households are categorized as "extremely low income" by the U.S. Department of Housing and Urban Development and earn less than 30 percent of the area's median household income. Using data from the U.S. Census Bureau, there were estimated to be 4,550 more extremely lowincome renter households in Allegheny County than rental units affordable to them in 2000. There is no reason to believe the situation has improved over the past seven years.

The second concern is the rapid consumption of land by new

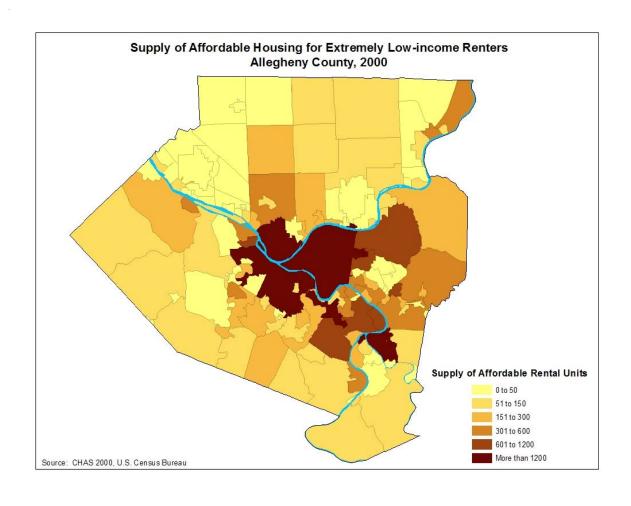
development. According to the Brookings Institution, the Pittsburgh region experienced a 42.6 percent increase in its amount of developed land from 1982 to 1997.

At the same time, its population declined by 8 percent. To slow the consumption of undeveloped land, an alternative development scenario would promote higher density development in existing communities and in areas with existing infrastructure while preserving undeveloped land in other areas.

The impact of these two general planning principles, land preservation and higher density, are interconnected with regard to their impact on the supply of affordable housing for extremely low-income renter households.

Efforts to preserve undeveloped land may increase the cost of housing, exacerbating the lack of affordable units. As land supply is constrained, the prices of developed or developable land may increase. Meanwhile, the cost of a housing unit primarily consists of the cost of the structure and the cost of the land on which the unit sits. Therefore, an increase in developed land prices likely result in higher housing prices.

Higher residential density may be a means by which housing prices can be kept in check while undeveloped land is preserved. As compared to lower density, higher density provides a greater supply of housing units on any given area of land, and, generally, the amount of developed land per



housing unit is lower. Therefore, an increase in land prices will likely not have as dramatic of an effect on housing prices. As a result, most comprehensive plans encourage or require an increase in residential density in addition to the preservation of open space.

In the Portland, Oregon, region, for example, twenty-six municipalities are required to allow new development to occur at higher density targets than would otherwise be permitted and at least half of new residential development to be multi-family units. At the same time, urban growth boundaries preserve undeveloped land outside of specified areas.

Higher residential density can be realized in two ways. The first way is to reduce the size of yards. In the Portland region, residential density increased from 4 dwelling units per acre to 10 in one county between 1960 and 2000. But, similar to the nationwide trend, the size of individual homes also increased.

The average floor space of single-family homes increased from 1,500 square feet to 2,200 square feet, according to University of Maryland Center for Smart Growth Research. These figures indicate that increasing residential density does not imply a decrease in average home size.

The second way to achieve higher density is to increase the variety of housing types as an alternative to exclusively single-family home developments.

Townhomes and multi-unit structures, such as apartment buildings and condominiums, concentrate housing units on a given area of land. These units, by their very nature, result in higher residential densities. Because these units are typically smaller than single-family homes, an affordable rental unit for an extremely low-income renter household is more likely found attached and multi-unit housing structures than among the stock of single-family homes.

The two planning goals of increasing residential density and reducing the consumption of undeveloped land may not have positive consequences for the supply of affordable rental units. At worst, the supply of affordable rental units could become even more limited if undeveloped land is preserved, but density is increased simply by a reduction in the size of yards surrounding large single-family homes.

On the other hand, if a planning goal includes both higher density, as well as an increase in the diversity of housing types to include smaller units in multi-unit structures, there is a greater possibility of addressing the need for more affordable rental units.

My recent research makes this case. I tested the impact of both general residential density and the type of housing on the supply of affordable rental units in the neighborhoods of Portland, Seattle, Baltimore and Philadelphia. I tested these relationships in neighborhoods throughout each region, as well as in each central city.

In each model, the supply of extremely low-income rental units in a neighborhood was better explained by the presence of multi-unit structures than by a general measure of residential density which ignored the type of housing in the neighborhood. In the regions of Portland and Seattle, the general measure of residential density was statistically insignificant, while the proportion of housing in multi-unit structures was associated with a greater supply of affordable units.

Slightly different results were found in the regions of Baltimore and Philadelphia. Higher residential density, in general, was associated with a greater supply of affordable units, as was the proportion of housing in structures of 2 to 4 units. However, a model including both multi-unit structures and general density was slightly better at explaining the supply of affordable units than a model

including only general density. Similar results were obtained when I only examined neighborhoods in the central city of each region.

These results suggest that Allegheny County's comprehensive plans must not only address residential density, but should do so in a manner that addresses the type of housing developed to achieve higher density. Individual municipalities are likely to have an adversity to multi-unit housing, which explains why few local comprehensive plans specifically state the type of housing which should be encouraged to achieve higher density.

New, high quality single-family dwellings are more likely to attract higher-income households, which brings greater fiscal benefits, than multi-family units, which are more likely to attract lower income households, as writers such as Myron Orfield have noted. Many municipalities, for this reason, implement restrictions which prevent multi-unit structures.

Local municipalities in Allegheny County are not required to create their own local comprehensive plan nor follow the county's. However, "Allegheny Places" reveals the county's vision for future development, includes encouraging which municipalities to adopt higher density development. Allegheny County and other counties undergoing a comprehensive plan should also make efforts to encourage municipalities to build different housing types, which, in addition to increasing density, may provide a supply of housing units that extremely low-income households are more likely to afford.

Andrew Aurand recently completed his PhD in the Graduate School of Public and International Affairs at the University of Pittsburgh. He can be reached at: agast8@pitt.edu. Page 4 December 2007

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Typically, a NORC is a concentrated area within a municipality or even a specific part of a residential neighborhood. A NORC can be an apartment or condominium complex, subsidized government housing originally for people of all ages, single family housing, or a combination of several of these types of housing in the same geographic area.

Older residents of the City of Pittsburgh are more likely to live alone, compared to older residents in the region or nation, on average (see Table 1). Within the City of Pittsburgh, 25.1 percent of the population age 60-64 lived alone in 2000, compared to 17.4 percent across the Pittsburgh Metropolitan Statistical Area (Metro SA) and 16.4 percent for both Pennsylvania and the nation. For older elderly groups, the proportion of residents age 85 and older who lived alone in 2000 increased to 38.1 percent within the City of Pittsburgh.

Elderly households are highly likely to be owners and not renters (see Table 2). For households with a householder age 60-84, over 80 percent are owner occupied across the United States, with a slightly higher percentage for the Pittsburgh region (82.0 percent). In the City of Pittsburgh, we find a lower proportion of elderly who are homeowners than the region and nation (69.6 percent), since urban residents are more likely to be renters than suburban residents, in general.

Owner occupied housing units with elderly householders are also likely to have no mortgage payments (see Table 3). Typically, the household has paid off their mortgage. For the Pittsburgh region, 46.1 percent of householders between the ages of 60-64 reported having mortgage payments

Table 1. Percent of Population Living Alone or in Group Quarters, by Age Group, 2000

	Age Group			
	60-64	65-85	85+	
United States	16.4%	24.5%	34.6%	
Pennsylvania	16.4%	25.7%	33.6%	
Metro SA	17.4%	27.0%	34.9%	
City of Pittsburgh	25.1%	31.9%	38.1%	
Group Quarters				
	60-64	65-85	85+	
United States	1.1%	3.2%	19.5%	
Pennsylvania	1.5%	4.1%	23.3%	
Metro SA	1.3%	3.9%	21.7%	
City of Pittsburgh	2.6%	3.6%	17.2%	

Table 2. Percent of Occupied Housing Units that are Owner Occupied, by Age Group, 2000

-	Age of Householder				
	60-64	65-74	75-84	85 and older	
United States	80.2%	80.9%	76.6%	65.3%	
Pennsylvania	82.4%	81.6%	75.3%	64.8%	
Pittsburgh Region (MSA)	82.0%	81.7%	75.9%	65.8%	
City of Pittsburgh	69.6%	70.2%	67.5%	59.9%	
Source: Compiled from Census 2000 Special Tabulation on Aging					

Table 3. Percent of Owner-Occupied Housing Units with a Mortgage, by Age Group, 2000 Housing Units with a Householder 60 Years and Over

	Age of Householder			
	60-64	. 65-74	75-84	85 and olde
United States	57.0%	36.4%	19.9%	12.7%
Pennsylvania	47.1%	27.3%	13.9%	9.7%
Pittsburgh Region (Metro SA)	46.1%	26.5%	12.8%	9.9%
City of Pittsburgh	52.1%	30.8%	17.9%	13.5%
Source: Compiled from Census 200	0 Special To	abulation on A	lging	

on their home. That proportion drops for older householders with only 9.9 percent of regional homeowners age 85 and over reporting having any mortgage payments on their homes. The city and region's figures show older homeowners less likely to have mortgage payments than the U.S. average.

Many of the region's elderly live in communities and neighborhoods with high concentrations of seniors. Among municipalities, in Allegheny County, several communities have a quarter or more of their residents age 65 or over (see Table 4). Among these communities and the City of Pittsburgh are neighborhoods (identified by Census block group) with a third or more of residents who are age 65 and over and not living in an institutionalized setting.

Identifying NORCs has important public policy implications. Service delivery organizations benefit from understanding the concentrations of senior residents in a neighborhood or municipality and their housing needs. Targeted "aging in place" strategies can have neighborhood, as well as individual, components. Community development corporations and other neighborhood-based organizations can

address senior-related housing issues, along with other housing issues, in their communities. For the present and the future, community-based housing providers and social service providers will need to work together to address the occurrence and needs of NORCs, improve aging in place strategies, and help to enhance quality of life for our region's seniors.

Table 4. Allegheny County Municipalities with Largest Share of Age 65 and Over Residents, 2000 (percent)

<u>Municipality</u>	Percent
Sewickley Heights	28.2%
Braddock Hills	28.2%
South Versailles	26.9%
Versailles	26.6%
Cheswick	26.6%
Wilkins	25.7%
Bridgeville	25.6%
Collier	25.3%
Oakmont	25.1%

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## Update on the Pittsburgh Regional Indicator Project

By John Craig

The Pittsburgh Regional Indicator project broke new ground October 28. It began publishing new indicators on air quality that are updated hourly.

This new work is part of a comprehensive environmental report that is available online at www.pittsburghtoday.org.

The indicators measure two air pollutants, ozone and PM 2.5. PM 2.5 refers to small particles, or particulate matter, which are less than 2.5 micrometers in diameter.

PM 2.5 is fine particulate matter caused by all kinds of combustion, with coal-fired power plants and vehicle exhaust being particularly significant producers. Ozone is created when chemical emissions react to sunlight.

The indicators are reported on an hourly, daily and yearly basis on the web site. In addition to time, the readings are also presented contextually by comparing Pittsburgh readings with national standards and comparable readings from 14 other benchmark cities.

The challenge in producing these indicators is twofold. There is a need to respect federal standards under which a region is judged based on the worst air quality readings at the worst location in the region, but there is a concurrent responsibility to give the citizen a sense about the average quality of the air he is breathing on an average day.

Further complicating the challenge, as the EPA points out on its website, "air pollution levels measured in the vicinity of a particular monitoring site may not be representative of the prevailing air quality of a county or an urban area."

The Indicator project uses PM 2.5 data from seven regional monitoring sites that report continuously on an hourly basis.

Ozone readings from five regional monitoring sites are continuously reported during the ozone "season": April 1 to September 30 in Pittsburgh.

In addition to these indicators that measure what Pittsburgh's average air is like and how it compares to the average readings in 14 other cities, the project publishes a second set of indicators on the highest ozone and PM 2.5 numbers from Pittsburgh and the 14 other cities. All data are available as part of the EPA AirNow web report.

Summary results to date from the project:

- Average ozone readings in Pittsburgh have been getting better over the past ten years. Pittsburgh ranks in the middle when it comes to national and benchmark city readings on ozone.
- Though the highest ozone readings in Pittsburgh have been improving, they remain well above average for benchmark cities. Only

- Philadelphia, Charlotte, and Kansas City reported higher readings in 2006.
- Small particulate matter, PM 2.5, remains a major problem for the Pittsburgh region. Only Charlotte had a higher average reading in 2006 than Pittsburgh among the 14 benchmark cities in the project.
- For PM 2.5 readings, Pittsburgh ranks second worst in the nation, behind only Riverside, California. It ranks worst for PM 2.5 among the project's 14 benchmark cities by a significant margin.
- The Liberty Monitor near the Clairton Coke Works is the source of the most significant PM 2.5 negative readings. But when the Liberty Monitor readings are averaged with readings from nine other monitoring stations in this region, the regional reports are still high: 6th worst among the nation's 40 largest cities.
- Because PM 2.5 is airborne, local and national scientists attribute part of Pittsburgh's air quality problems, apart from Clairton, to coal powered electrical generation plants in eastern Ohio and neighboring West Virginia.

### Pennsylvania Geospatial Policy Symposium

On Wednesday, October 3<sup>rd</sup>, the Pennsylvania Geospatial Policy Symposium was held in Harrisburg to promote the importance and use of geospatial data and analysis to our state's public officials.

Sponsored by Speaker of the Pennsylvania House of Representatives Dennis M. O'Brien and co-sponsored by the Legislative Office of Research Liaison (LORL) and Penn State, the conference spanned issues and problems where understanding geography and the location of people and places are central for government action and policymaking.

As the conference materials point out, over 80 percent of government data is geographic, referencing something by location.

The state contains leading geospatial firms and academic institutions engaged in geospatial research. But government coordination, data

standardization, and data sharing often face barriers. How to bring the state's resources together over important questions regarding data governance, access, and coordination were the key themes of the symposium.

The Pittsburgh Neighborhood and Community Information System (PNCIS, see *PEQ* March 2007), a joint project of UCSUR, Pittsburgh Partnership for Neighborhood Development, Carnegie Mellon and the City of Pittsburgh, was prominently featured in the symposium's first panel "A Showcase of Geospatial Applications Impacting Public Policy: The Southwest Pennsylvania Experience."

Sungsoo Hwang, a doctoral student in the Graduate School of Public and International Affairs and UCSUR student assistant, along with Tracy Soska of the School of Social Work, presented the PNCIS to show how neighborhood-level information in local decision making is happening in the city of Pittsburgh.

The rest of the panel continued themes around spatial data on Southwestern Pennsylvania. Ravi Sharma and Bambang Parmanto of the University's Graduate School of Public Health presented a web-based GIS system they developed to analyze and display public health data for research and administration.

Kirk Brethauer presented information from the Southwest Pennsylvania Commission, the region's metropolitan planning organization, on geospatial techniques to address landuse, transportation, and other regional planning challenges

The symposium concluded with a discussion led by former Wyoming Governor Jim Geringer and Director of Policy and Public Sector Strategies, Environmental Systems Research Institute, at ESRI.

# WE WISH YOU A HAPPY HOLIDAY SEASON AND ALL THE BEST FOR THE NEW YEAR!

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### **UCSUR**

### University of Pittsburgh

121 University Place Pittsburgh, PA 15260 Phone: 412-624-5442 Fax: 412-624-4810 Email: ucsur@pitt.edu

On the Web www.ucsur.pitt.edu

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