

A Demographic Overview of Metropolitan Pittsburgh

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The consequences that accompany demographic change typically are diffuse and emerge only gradually. Cumulatively, they may shape a region's future, widening or narrowing margins for policy action. The Pittsburgh region (like metropolitan Cleveland and Cincinnati) is in the process of transforming itself from an older industrial region to one with an increasing presence of new high-tech industry. However, a distinctive combination of demographic influences operating over several decades has left an enduring imprint on the Pittsburgh regional economy.

This issue paper surveys the local demographic landscape in the Pittsburgh region and its variations across communities. It examines the tensions and imbalances that arise and identifies avenues for further focused research into the questions they pose. For the general reader, the paper assembles and interprets current data and locally conducted research touching on key influences affecting the region.

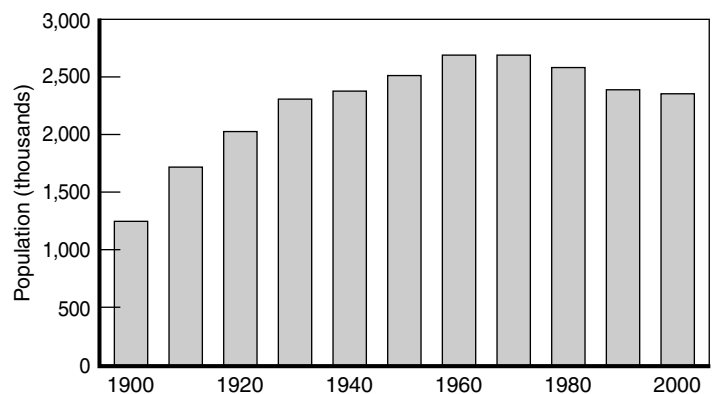
Any longtime resident of Pittsburgh knows that the gradual exodus of people from the region has long been a fact of life. The population has been shrinking for decades (see Figure 1), narrowing the region's internal demographic capacity for future population growth.

Today, many Pittsburgh residents are older and retired, and many young people have left. The prospect of continuing population decline—across much of the region and in many of its communities—has important consequences:

- As older workers retire, the number of young workers to replace them in the labor force may prove insufficient.

- As Pittsburgh's college graduates move away, expanding businesses may look beyond this region for a workforce suited to their future needs.
- Fluctuating enrollment levels in the public schools will leave particular schools underutilized or understaffed.
- Retirees on fixed incomes may pressure local government to cap or reduce local property taxes even as the local tax base itself shrinks.
- Elderly family members who strive to continue living independently may need assistance to do so.

Such demographically driven concerns are not confined to Pittsburgh; they are unfolding across the country. The following demographic realities are fundamental to understanding Pittsburgh's demographic situation.



SOURCE: Federation for American Immigration Reform, 2001, www.fairus.org.

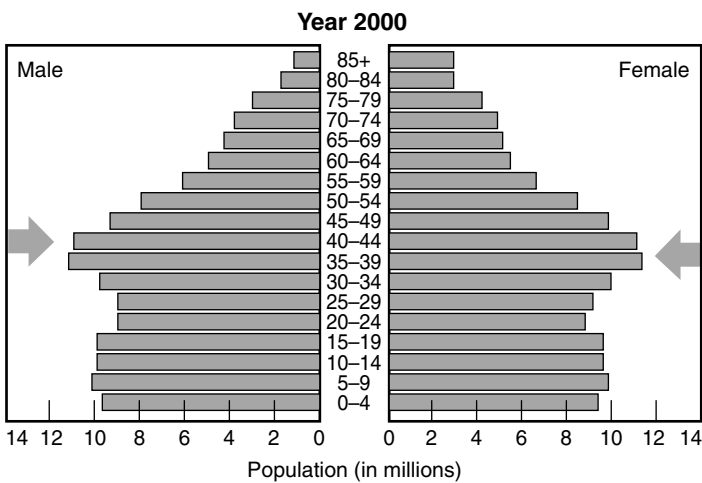
Figure 1—Historical Trend in Metropolitan Pittsburgh's Population

FOUR DEMOGRAPHIC TRUTHS ABOUT THE FUTURE

Further Population “Aging” Is in Store

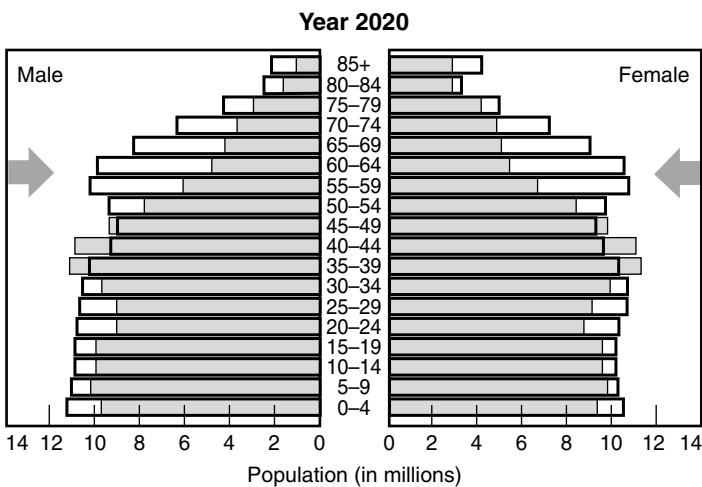
The first—and surest—demographic truth is that the population will grow older. Nationally, the number of people over age 55 will swell, whereas the number of people in their 30s and 40s will shrink. The age distributions shown in Figure 2 illustrate these points.

The top panel in Figure 2 shows how the U.S. population was distributed by age in 2000, with children (0–4) at the base and the elderly (85+) on top. Today’s population is characterized by a striking unevenness that is attributable to the 1950s baby boom being followed by the 1970s baby bust—the familiar “pig passing through the python.” Viewed over time, that legacy of unevenness translates



SOURCE: U.S. Census Bureau, *International Data Base* (based on national data).

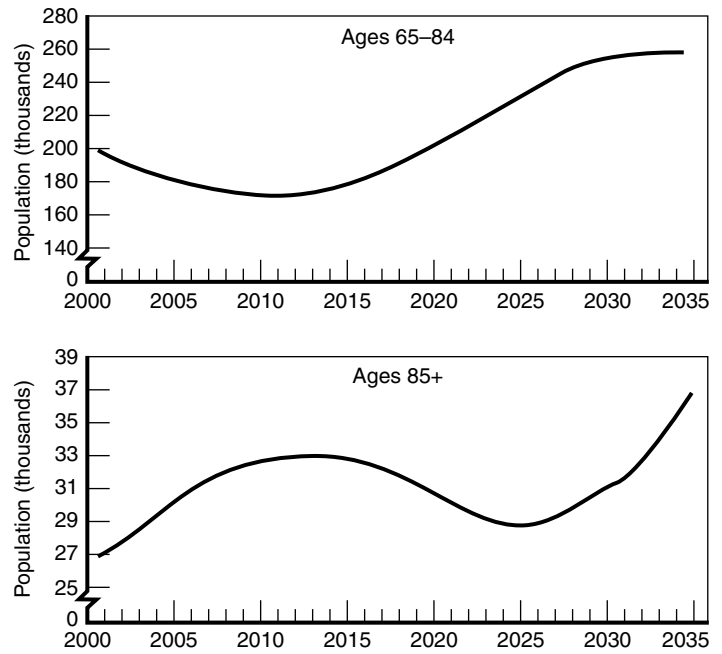
NOTE: Arrows indicate the approximate age range of large baby boom cohorts born after 1946.



SOURCE: U.S. Census Bureau, *International Data Base* (based on national data).

NOTE: Arrows indicate the approximate age range of baby boom-induced growth, 2000–2020.

Figure 2—A Maturing Age Distribution



SOURCE: Center for Social and Urban Research, University of Pittsburgh.

Figure 3—Projected Future Number of Younger and Oldest Elderly, Allegheny County

into a dynamic process of expanding and contracting numbers within different age ranges. By 2020 (Figure 2, bottom panel), the process will have reached the stage shown in the white outline. Notice the increases under age 35, the absolute declines in the 35–49 age range, and the massive increase above age 55.

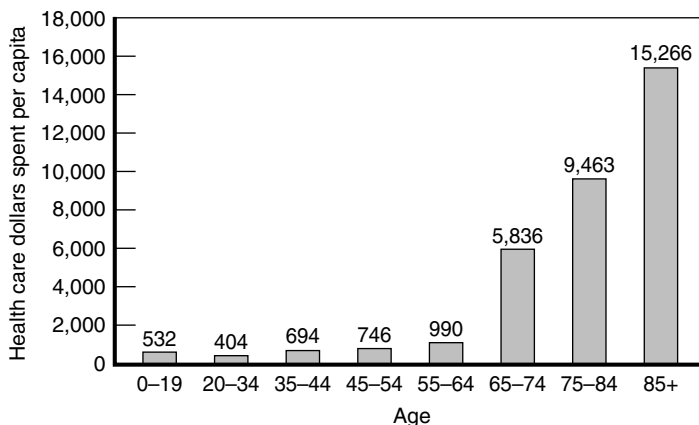
In metropolitan Pittsburgh, the aging of the population is more advanced than in most other regions. Presently, 18 percent of the area’s residents are 65 or older (compared with 12 percent nationally); and 30 percent of all area households have at least one member who is 65 or older (compared with 23 percent nationally).

In the future, the number of seniors in certain age groups will fluctuate markedly and in opposite directions, echoing out-migration flows in prior decades (see Figure 3). Allegheny County exemplifies the distinctive pattern ahead. In just the next ten years, the number of persons 85 or older—the “oldest old”—will increase, from about 28,000 to 33,000. During that same period, though, the number of persons 65 to 84 years old will decline noticeably, only to rise thereafter. In short, demographic forces will push in opposite directions: The “oldest old” will become more numerous even as persons ages 65 to 84 become less numerous.

The demographic peaks and valleys apparent in Figure 3 foreshadow peaks and valleys—for home health care, assisted living, and other locally delivered services—as these future trends unfold. Within the entire

elderly population, the small but expanding number of persons over age 85 will accentuate distinctive types of needs in particular places. In many of Allegheny County's 128 municipalities, elderly couples and surviving spouses living on fixed retirement incomes will intensify social service needs; particular communities may lack the scale and the fiscal capacity to meet those needs. The recent closure of several large nursing and senior care homes in the area (reportedly prompted by declining admissions) only complicates matters.¹

As the needs of the elderly and their family caregivers find political expression, public budgetary priorities will be affected.² For health care especially, the expanding 85-and-older segment of the age distribution will intensify demands on public spending. At those ages, per-capita expenditures on health care by all levels of government combined are two to three times what they are for persons in their late 60s and early 70s (see Figure 4).



NOTE: Data based on Diane Lim Rogers, Eric Toder, and Landon Jones, *Economic Consequences of an Aging Population*, Washington, D.C.: The Urban Institute, 2000, Table 5.

Figure 4—Government Health Care Expenditures Per Capita in 1997

The first demographic truth, then, is that large cohorts of future elderly—notably persons 85 or older—figure prominently in Pittsburgh's future. Inevitably, their health care needs will absorb an increasing share of public budgets and intensify the need for assistance in their communities. Localized manifestations of population aging are unfolding across the region:

- Within the City of Pittsburgh, people 65 or older constitute one-fourth or more of the noninstitutionalized

population in the Central Lawrenceville, Oakwood, Swisshelm Park, and Windgap neighborhoods.

- While 16 percent of households in metropolitan Pittsburgh have at least one member aged 75 or older, that percentage reaches 25–28 percent in the boroughs of Braddock Hills, Versailles, and Bridgeville (Allegheny County) and in the townships of Harmony and Vanport (Beaver County).

One distinctive aspect of this phenomenon is the way older persons in Pittsburgh have come to be concentrated in neighborhoods over time. Most of Pittsburgh's elderly persons have *grown old* here, not *moved* here in old age (as in, say, Phoenix). After World War II, the settlement of new neighborhoods typically was "lumpy." That is, neighborhoods tended to fill up with new residents over relatively brief time spans, so that particular generations happened to predominate within particular neighborhoods. Suburbs that housed newly settled young families in the late 1940s and 1950s are still inhabited by some of the same family members who have aged in place. Such neighborhoods retain some of their original "single-generation" look to this day, and as younger people have moved away, the older ones who remain account for a gradually increasing percentage of all neighborhood inhabitants.

A new visible manifestation of such aging in place is the "naturally occurring retirement community" (NORC)—existing buildings and neighborhoods not planned or intended for older people, but where older adults have stayed on after younger people left. A NORC may refer to a specific apartment building, or a street of old single family homes. What defines a NORC is residential persistence: that is, residents who have stayed in their homes or apartments for many years, and evolved into a senior community. Incipient NORCs are now discernible in particular locales—for example, a six-block neighborhood in the Bethel Park area, where 41 percent of the 748 residents are 65 or older.³ NORCs offer novel opportunities to help prolong independent living in old age. In other cities, these naturally occurring concentrations of elderly citizens have proven to be suited to centralizing supportive services to elderly residents.⁴

³This six-block neighborhood is defined by Allegheny County Census tract 4753.01 (block group 1).

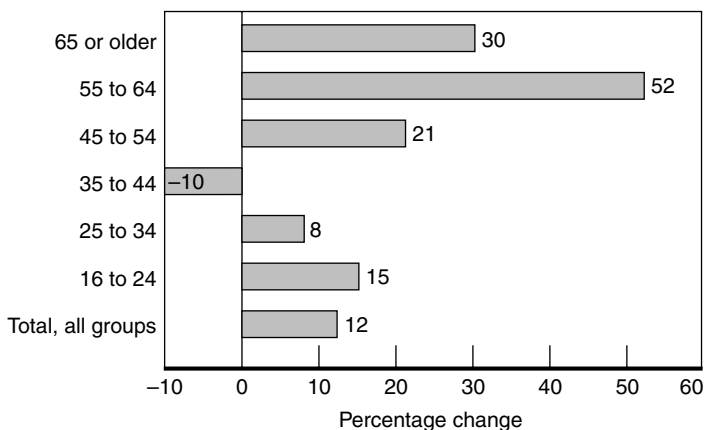
⁴In some cities (such as New York and Chicago) "NORC" is an official designation, and these communities receive funding for nursing visits, social activities, transportation, and other senior services. In New York, the Co-op Village Senior Care Program provides on-site supportive services to the elderly residents of this large NORC, enabling frail, isolated, and often homebound seniors to remain in their own homes.

¹See "St. Joseph Nursing Home to Close," *Pittsburgh Post Gazette*, August 3, 2002.

²See Ronald Lee and John Haaga, "Government Spending in an Older America," *PRB Reports on America*, Washington, D.C.: Population Reference Bureau, Inc., 2002.

Younger Workers Will Be Relatively Scarce

A second and related demographic truth about the future concerns the regional workforce. Over time, the changing age distribution shown in Figure 2 will transform labor markets by causing the number of workers at specific ages to expand or contract. Nationally, the number of workers in their late 50s and early 60s is projected to increase by 52 percent this decade; the number in their late 30s and early 40s, by contrast, will shrink by 10 percent (see Figure 5).



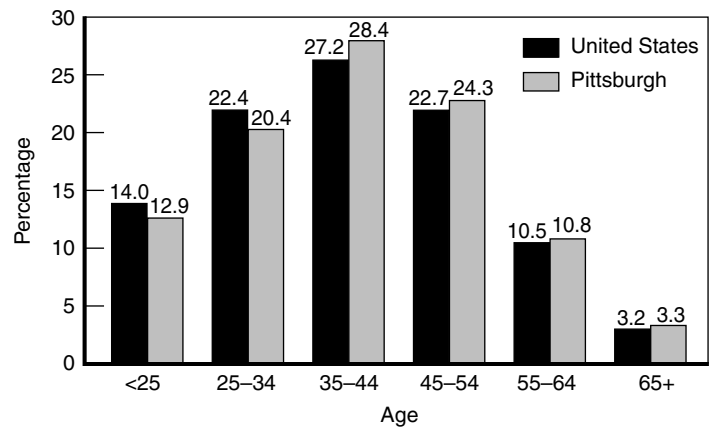
SOURCE: Bureau of Labor Statistics, U.S. Department of Labor.

Figure 5—Projected U.S. Labor Force Changes by Age, 2000–2010

National labor markets normally accommodate these changing balances—and especially any shortages—through a combination of increased labor force participation, increased productivity, and immigration. Regional and local labor markets adapt more readily through domestic migration, although shortages may arise and persist.

The distinctive age structure of Pittsburgh’s current workforce will shape the region’s future labor supply. Relative to the nation as a whole, proportionally more of the region’s current workforce is concentrated in the 35-and-older age ranges; proportionally fewer workers are under age 35 (see Figure 6). More specifically, the percentage of workers aged 25–34 (20.4 percent) is markedly less than the corresponding percentage of workers 35–44 (28.4 percent). That is, for every 100 of the latter, in 2000 there were only 72 workers aged 25–34 in the region to fill their shoes by 2010. (The nation as a whole faces a less severe imbalance: 82 workers 25–34 per hundred workers 35–44.)

This age imbalance traces back to the national baby boom and baby bust sequence, which commenced in 1946. But Pittsburgh’s migratory loss of young adults during the mid-1980s complicates the future outlook. What will be the consequences of this age imbalance? Might the Pittsburgh region run short of young workers?



SOURCE: Census 2000 Supplemental Survey PUMS, compiled by Center for Social and Urban Research, University of Pittsburgh.

Figure 6—Distribution of Civilian Labor Force by Age in 2000: Pittsburgh and the United States

According to some, the answer is yes. They forewarn of a “silent crisis” that threatens regional prosperity as baby boomers retire and fewer young adults are available to replace them. Under one set of assumptions, by 2008 the region will have approximately 125,000 more jobs to be filled than available workers.⁵ Such a shortage could place the region at a competitive disadvantage.

Others take issue with such dire forecasts. They cite evidence of resilience, which calls into question the assumption that high levels of past out-migration would persist even as jobs remain unfilled.⁶ Were a labor shortage to develop, local wages would increase and unfilled jobs would retain many young workers who might otherwise have moved away.

Whether or not Pittsburgh faces the prospect of a future labor shortage turns on a key demographic factor: the migration of prime-age workers to and from the region. The question is: How does a regional economy poised for future growth retain and attract young workers in sufficient numbers to fuel this potential growth? The mere perception that young workers may be in short

⁵See Center for Competitive Workforce Development, Duquesne University, *New Americans and the Future of Pittsburgh: International Communities and Regional Economic Development*, September 2002; and Center for Competitive Workforce Development, Duquesne University, unpublished table titled “2008 Job Gap for Pittsburgh Region/Southwest Pennsylvania,” referring to nine-county Southwest Pennsylvania.

⁶Frank Giarratani, Vijai Singh, and Christopher Briem, “Dynamics of Growth and Restructuring in the Pittsburgh Metropolitan Region,” in Ulrich Hilpert, ed., *Regionalization of Globalized Innovation Locations for Advanced Industrial Development and Disparities in Participation*, New York: Routledge, forthcoming. Such resilience is evidenced in the fluctuating trend of net migration. Out-migration from the region slowed markedly in the late 1980s and early 1990s. In 1992, the region registered a net influx of migrants (reversing a decades-long trend). Later in the 1990s, out-migration resumed, although at a more moderate pace than in the mid-1980s.

supply, or that a tightening labor market threatens rising local wages for workers in their 20s and 30s, could place the region at a competitive disadvantage. Expanding businesses may prefer to locate elsewhere to access an existing pool of workers suited to their future needs. In today's economy, good jobs follow good people, not just the other way around.

Young People Will Move Toward Economic Opportunity

It is a well-established truth that a freely mobile population continually rearranges itself geographically to answer the changing needs of the national economy. The notion that personal success is achievable just as readily beyond as within one's native region is deeply ingrained in the American psyche. The economies of rapidly growing regions are like huge magnets, gathering and directing young people on the move to locales of expanding employment growth. The persistent "pull" of economic opportunities will continue to lure people—especially prime-age workers—away from areas where jobs are dwindling and toward places where workers are needed. That is a given in a geographically mobile society.

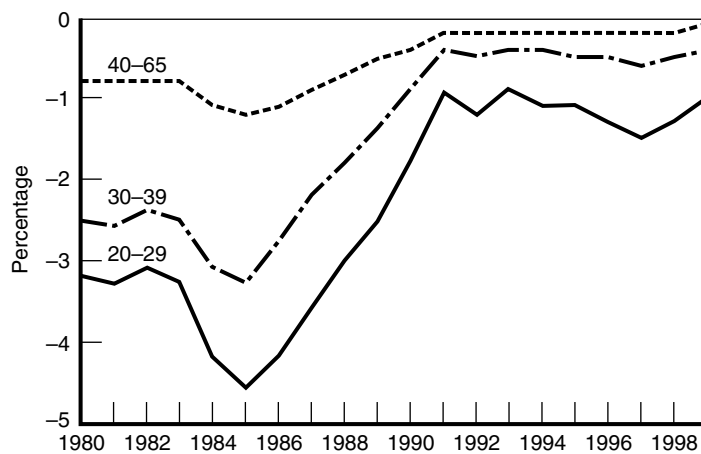
For decades, greater Pittsburgh has nearly always been on the sending end of this process. The number of native-born young adults who pursue their fortunes elsewhere far exceeds the number of newcomers to the region. The Pittsburgh region suffered its most severe net out-migration during the 1980s, when net population losses peaked at upward of 50,000 annually in the aftermath of large-scale economic restructuring and rising labor force productivity in steel production. In those years, the region was losing 3 to 4 percent of its prime working-age population (people in their 20s and 30s) each year.⁷ This large exodus of people in the prime working ages amounted to a permanent loss of the region's human capital.⁸

More recently, though, the exodus has become smaller (see Figure 7). In the 1990s, people moving away from greater Pittsburgh have outnumbered newcomers to the region by only a narrow margin.⁹ Not only has out-migra-

⁷See *Pittsburgh Economic Quarterly*, University Center for Social and Urban Research, University of Pittsburgh, Fall 2001, p. 3.

⁸No less noteworthy than the *number* of people who move away may be the *type* of people who move away. As a general rule, more highly educated people move more readily than those with less education, which implies some degree of adverse self-selection where net out-migration persists. Nevertheless, metropolitan Pittsburgh ranks among the top ten metropolitan areas in terms of one key indicator of education: Fully 85 percent of its adult population in 2000 had at least a high school diploma, comparable to such other metropolitan areas as Austin, Tex., and Raleigh-Durham-Chapel Hill, N.C. See Census 2000.

⁹See *Pittsburgh Economic Quarterly*, University Center for Social and Urban Research, University of Pittsburgh, June 2000, p. 2, and Fall 2001, p. 3. See also Christopher Briem, *Population Migration in the Pittsburgh Region: Update for 1999-2000*, Center for Social and Urban Research, University of Pittsburgh, December 2001.

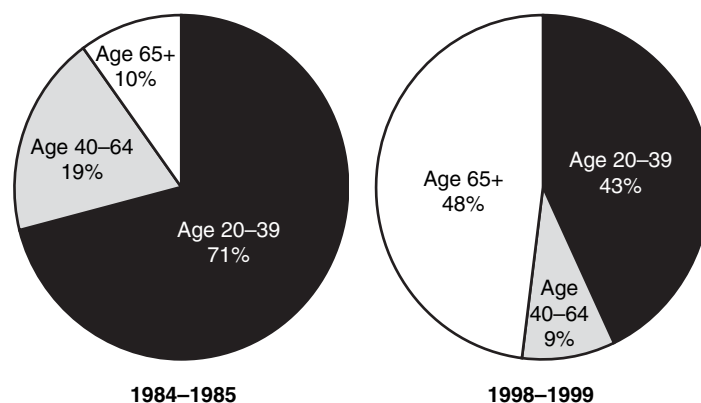


SOURCE: Pittsburgh REMI Model, University Center for Social and Urban Research, University of Pittsburgh.

Figure 7—Estimated Annual Percentage Loss Through Net Migration for Selected Age Groups, Pittsburgh Metropolitan Area, 1980–2000

tion narrowed to a trickle (compared with the mid-1980s) but the loss of young adults (popularly known as Pittsburgh's "brain drain" migration) has largely abated. Among those moving away, persons aged 20–39 account for only 43 percent of the region's now modest net out-migration, compared with 71 percent in the mid-1980s (see Figure 8).

The flows of migration to and from the region, then, are dynamic and responsive to the changing landscape of local opportunities. For a brief period in the early 1990s, Pittsburgh actually enjoyed a modest net influx of population. But, on average, more migrants depart from than move to the Pittsburgh region. Pittsburgh nevertheless can and does attract newcomers: The metropolitan area registered a net influx of 1,841 persons from abroad seeking permanent residence in the United States during the most recent period reported (2000–2001).



SOURCE: *Pittsburgh Economic Quarterly*, University Center for Social and Urban Research, University of Pittsburgh, June 2000.

Figure 8—Age Profile of Net Out-Migration from Metropolitan Pittsburgh, Mid-1980s Versus Late 1990s

The question here is: How can the Pittsburgh region advance its interests *within* the marketplace of the geographically mobile—that is, convince prime-age workers, with skills that Pittsburgh’s employers need, to pursue their fortunes in *this* region.

Immigrants Will Bring New Growth to Many Areas of the Nation

America is once again awash in new arrivals, just as it was a century ago. The sharply rising influx of immigrants since 1965 has brought many newcomers from abroad to California, New York, Florida, and Texas. Now, immigration flows are branching out beyond these “entry port” states, drawn principally by employment opportunities.

Foreign-born migrants are finding their way to specific metropolitan areas—Boston, Chicago, Detroit, Philadelphia—and other destinations favored by foreign-born migrants more than native-born interstate migrants.¹⁰ Indeed, were it not for a positive influx of foreign-born persons, some metropolitan areas (e.g., Hartford and Detroit) would have registered little or no population growth during the 1990s (see Table 1). Curiously, immigrants on the move find their way to such out-of-the-way places as Dodge City, Kan.; Amelia, La.; and Magnolia, N.C.

Table 1—Comparison of Native-Born and Foreign-Born Migration Contributing to Population Change in Selected Metropolitan Areas, 1990–2000

Metropolitan Area	1990–2000 Growth Attributable to		
	“Out of State” Native Born ^a	Foreign Born ^b	Total Growth ^c
Boston	1.6%	3.5%	6.5%
Buffalo	-1.3%	-0.1%	-1.6%
Chicago	-0.4%	6.7%	11.1%
Detroit	-1.9%	2.3%	5.2%
Hartford	-1.9%	1.7%	2.2%
Indianapolis	4.7%	2.4%	16.4%
Philadelphia	0.4%	2.4%	5.0%
Pittsburgh	0.6%	0.2%	-1.5%
Rochester	-0.2%	0.9%	3.4%

SOURCE: William H. Frey, *Census 2000 Reveals New Native-Born and Foreign-Born Shifts Across the U.S.*, Ann Arbor, Mich.: University of Michigan, Population Studies Center Research Report No. 02-520, August 2002, Appendix Table F.

^a1990–2000 change in number of out-of-state native-born residents, expressed as a percentage of the 1990 metropolitan area population.

^b1990–2000 change in number of foreign-born residents, expressed as a percentage of the 1990 metropolitan area population.

^c1990–2000 percentage change in total population of the metropolitan area (which also includes growth in number of residents born in the same state).

¹⁰See William H. Frey, *Census 2000 Reveals New Native-Born and Foreign-Born Shifts Across the U.S.*, Ann Arbor, Mich.: University of Michigan, Population Studies Center Research Report No. 02-520, August 2002.

Pittsburgh as well may be emerging as a favored destination. Increasingly, recent newcomers are finding their way here, joining the far more numerous foreign-born populations that settled here early in the 20th century. As of 2000, Pittsburgh’s population included 24,938 recently arrived foreign-born residents (i.e., persons who immigrated to the United States within the past ten years)—almost twice as many as a decade before. Mirroring a national trend, the majority of these foreign-born newer arrivals tend to settle in suburban communities outside the City of Pittsburgh.

This small but expanding trickle of newcomers from abroad illustrates Pittsburgh’s capacity to attract people on the move. Like other industrial cities (e.g., Fort Wayne and Detroit), Pittsburgh evidences the natural comparative advantages a more affordable region can offer to international newcomers: economic opportunity and an improved quality of life.

It has been asserted (by the noted economist Julian Simon) that immigrants are the world’s “self-selected strivers”—typically industrious, hard-working, and often entrepreneurial individuals. In pursuing personal fortunes beyond their own regions of birth, immigrants will often strengthen the fortunes of the communities where they settle. Even an old factory town like Utica, N.Y., illustrates how an influx of recent immigrants from Bosnia, Vietnam, and the former Soviet Union can provide new young workers and budding entrepreneurs who launch new businesses.

IMPLICATIONS OF DEMOGRAPHIC CHANGE

Demographic shifts resemble deep ocean currents: They generate motion that is gradual, steady in direction, and enduring in effect. For the Pittsburgh region, those effects have broad implications and pose questions that could be addressed through focused research:

- The large and increasing proportion of extreme elderly among the region’s residents will intensify local service and assistance needs. Certain neighborhoods, as noted above, are evolving naturally into de facto retirement communities populated by elderly residents who continue to live independently. These naturally occurring concentrations of elderly citizens are suited to the centralized delivery of services that help prolong independent living.¹¹ What specific neighborhoods offer these emerging opportunities? What types

¹¹For the elderly in such communities, much of the needed assistance will be routine daily services that can sustain independent living cost-effectively. Here, economies of scale will be critical for the coordinated delivery of home health care, adult day care, and other services (e.g., Meals on Wheels) to prolong independent living. Many modes of service delivery are more cost-effective where the recipients are clustered densely in multi-unit housing and on adjacent city blocks.

of services are needed? How can economies of scale be achieved?

- Ongoing regional out-migration has narrowed the region's internal demographic capacity for future population growth. The demographic crosscurrents of births and deaths have reversed: On a regionwide basis, deaths now outnumber births¹²—a demographic condition known as *natural decrease*. There is no immediate prospect that natural *increase* will resume, owing to the relatively few people of reproductive age who remain, compared with the considerable number of elderly in the population. What long-term public fiscal strategies can maintain local fiscal balance in communities with stable or decreasing populations?
- Industries based on intellectual capital thrive on the ample availability of well educated workers, especially those in their prime working ages. The prospect of imbalances in the region's labor force fosters concern that the Pittsburgh regional economy is missing the next generation of young workers it needs. With many workers long since gone or soon to retire, and few younger workers present to replace them, is a future labor shortage in prospect? Will unassisted labor market adjustments resolve imbalance in Pittsburgh? Although neither question can be answered with certainty, the dilemma here poses other answerable questions: How can the region convince prime-age workers, with skills that Pittsburgh's employers need, to pursue their fortunes in *this* region? What variants of targeted recruitment and scholarship programs might be most effective in retaining and acquiring skilled younger workers—from among the “best and brightest” students in residence; from among the sizable ranks of Pittsburgh's former residents;¹³ and from among the many immigrants pursuing opportunities across the nation?¹⁴

CONCLUSIONS

Pittsburgh is an extraordinary metropolitan region in contrary respects: Its future has been shaped by an uncommon confluence of demographic forces. Yet it possesses an uncommon set of resources with which to enhance local prosperity. It is a region without population growth but with a healthy concentration of intellectual capital industries, a high level of innovation in biotechnology-related and pharmaceutical industries, first-rate colleges and universities, financial holding offices, college student enrollments that fuel higher education earnings and employment, and other potential contributors to economic growth.¹⁵

Pittsburgh's demographic situation need not detract from its inherent strengths. The region can respond to the hidden ebb and flow of demographic change rather than merely reacting to its consequences as they materialize. Demographic shifts may be gradual and largely unnoticed, but they are readily knowable and, for the most part, foreseeable. The prospective number of first-graders in school in 2008, for example, is directly knowable from the number of births in 2002. The number of city employees likely to retire and draw pensions in each forthcoming year is knowable from the age structure of a city's present-day workforce. The changing fraction of property tax payers in a particular community is foreseeable from local 2000 Census data.

Strengthening responsiveness to regional demographic change means recognizing the consequent realities and potential opportunities accompanying that change. This overview of Pittsburgh's regional demographic situation draws attention to both the realities and the opportunities and poses specific questions in need of further focused research.

¹²See *Pittsburgh Economic Quarterly*, University Center for Social and Urban Research, University of Pittsburgh, Summer 2001.

¹³Young adults drawn back to Pittsburgh at particular junctures in their careers offer a promising possibility—for example, those who will be graduating from college, completing medical, postdoctoral, or other professional internships; or who must chart a new course in the wake of corporate layoff elsewhere.

¹⁴Two possibilities—which are already being pursued on a statewide basis through Pennsylvania's New Economy Technology Scholarship Program—are aggressive corporate recruitment efforts and targeted scholarship programs. The latter are aimed at retaining graduating students in the state. Recipients of these scholarships must agree to work full-time in Pennsylvania following graduation, one year for each year of scholarship support. See *Pittsburgh Economic Quarterly*, University Center for Social and Urban Research, University of Pittsburgh, Summer 2001, p. 2.

¹⁵See “Technology Innovation—New Patents,” *Pittsburgh Economic Quarterly*, University Center for Social and Urban Research, University of Pittsburgh, Fall 2001, p. 2. “Intellectual capital” industries are those with a high proportion of high-wage, nonproduction occupations (Sabina Deitrick, “Industrial Change in Pittsburgh,” in Ralph Bangs, ed., *The State of the Region: Economic, Demographic, and Social Conditions and Trends in SWPA*, Pittsburgh: University Center for Social and Urban Research, Chapter 2). During 1999, education (other than local public schools) generated over \$1.2 billion in earnings in the Pittsburgh region (see *Pittsburgh Economic Quarterly*, University Center for Social and Urban Research, University of Pittsburgh, Summer 2001, p. 2).

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