# where we stand: community indicators for metropolitan philadelphia



mpip2006 metropolitan philadelphia indicators project a project supported by the william penn foundation and temple university

#### **Principals**

Carolyn Adams David Bartelt David Elesh Leonard LoSciuto Mark Mattson

#### **Household Opinion Survey**

David Elesh Kimberly Goyette Peter Mulcahy

#### **Project Coordination**

Joshua Freely

#### Research Assistance

Elisa Bernd Vincent Louis

#### **Project Advisory Committee**

C. Sean Closkey, The Reinvestment Fund Carol Collier, Delaware River Basin Commission Theodore Crone, Federal Reserve Bank of Philadelphia

Rob Ford, Towamencin Township

Howard Gillette, Jr., Rutgers University/Camden Joseph Gyourko, University of Pennsylvania

Representative Kate Harper, Pennsylvania General Assembly

Elizabeth Hersh, Housing Alliance of Pennsylvania

Robert Inman, University of Pennsylvania

Lynne Kotranski, Philadelphia Health Management Corporation

Brett Mandel, Philadelphia Forward

Janet Milkman, 10,000 Friends of Pennsylvania

Harriet Newburger, Bryn Mawr College Jeremy Nowak, The Reinvestment Fund

Brian O'Leary, Montgomery County Planning Commission

Keith Reeves, Swarthmore College

Rick Sauer, Philadelphia Association of Community Development Corporations

Richard Voith, Econsult Corporation

Steve Wray, Pennsylvania Economy League

# where we stand: community indicators for metropolitan philadelphia















mpip2006 metropolitan philadelphia indicators project a project supported by the william penn foundation and temple university

## acknowledgments

We gratefully acknowledge the many people who helped us refine our approach, frame our questions, and identify information sources. We wish particularly to acknowledge the William Penn Foundation, whose encouragement, advice, and support have sustained this project over three years. We are also heavily indebted to our Project Advisory Committee whose members are listed on the inside cover of this report. Many of them have individually consulted with us on various aspects of the report.

A special note of appreciation is due to Josh Freely, our indefatigable Project Coordinator, who oversaw our start-up and has kept our daily operation afloat for three years. Josh has tirelessly responded to the needs of every member of the project team. His unfailing good sense and can-do attitude have added immeasurably to the quality of the project and its value to users inside and outside the university.

The Urban Institute in Washington, D.C. continues to help the project by linking us to researchers around the country who are developing indicators in other metropolitan areas. At the Urban Institute, the National Neighborhood Indicators Partnership, led by Tom Kingsley, and the Culture, Creativity and Communities Program, directed by Maria Rosario Jackson, welcomed us as partners in their national networks, supplying guidance and data. Kathy Pettit at the Urban Institute has been helpful in sharing the experiences of several other cities in developing indicator reports, and has also been a great technical back-up on several data sets. Institute researcher Allison Cook helped us to understand the complexities of health insurance data analyzed in chapter 14 of this report.

An important contribution was made by the Center for Neighborhood Technology and Center for Transit Oriented Development in Chicago. They shared with us the methodology they have developed for their "housing and transportation affordability index," so that we could use this brand new methodology, still being tested in other metropolitan areas, to create indicators 7.3 and 7.4 in this report. We especially thank Peter Haas and Carrie Makarewicz of the Center for Neighborhood Technology for their help with this.

The survey component that is incorporated into this project would not have been possible without the strong contributions made by the Institute for Survey Research, especially Peter Mulcahy. Two other Temple administrators have been particularly helpful collaborators on the household survey that is incorporated into the project: Joseph McLaughlin, Assistant Dean of the College of Liberal Arts, and Michael Hagen, Director of the Institute for Public Affairs.

We appreciate the time and assistance of everyone who has participated with us, advised us, cautioned us, and cheered us on. We alone, however, take responsibility for the decisions reflected in the data and interpretations contained herein.

Carolyn Adams
David Bartelt
David Elesh
Leonard LoSciuto
Mark Mattson

#### introduction

As in prior years, this third edition of Where We Stand interprets conditions in communities across the greater Philadelphia region (defined as the central cities of Philadelphia and Camden plus the suburban counties of Bucks, Chester, Delaware and Montgomery in Pennsylvania, along with Burlington, Camden, Gloucester, and Salem in New Jersey). Included in this report are two types of information:

- (1) a set of social, environmental, and economic indicators portraying the quality of life in local communities
- (2) a household survey conducted in Fall 2005 by Temple's Institute for Survey Research which asked respondents across the region to evaluate the quality of life in their communities

In this year's edition, much of the focus is on change over time. Readers will find that many of the indicators show how recent conditions differ from those of the 1980s and 1990s. We track changes over recent decades because the longer view provides a different lens for interpreting community conditions than one normally finds in media reports. A more complete set of indicators showing current conditions, as well as change, is available in reports from prior years, accessible from our website, www.temple.edu/mpip. Just as comparing current conditions with past decades lends perspective to the analysis, so does comparing the Philadelphia region with other U.S. metropolitan areas. Therefore in numerous places, this report compares our region with eight other major metropolitan areas, four of which are flourishing

regions that may serve as models (Boston, Chicago, Minneapolis and Phoenix), along with two older industrial areas similar to ours (Detroit and Cleveland), and two regional competitors (Baltimore and Pittsburgh).

A special feature of this year's report is the inclusion of two sections contributed by collaborators at Temple University and the University of Pennsylvania. Research by Anita Summers and Joseph Gyourko at the Wharton School of the University of Pennsylvania underlies chapter 2, which explores how communities in our region exert regulatory controls over residential land development—a public issue of significance in a region where concerns about suburban sprawl are mounting. Another special section comes from Temple sociologist Kimberly Goyette. An expert on the sociology of education, Goyette designed a portion of this year's household survey and used the results to report in chapter 11 how residents of this region evaluate the quality of schools in their communities. We are grateful to these colleagues for their valuable contributions to our 2006 edition.

As in prior years, we will provide more detailed presentations of both maps and underlying data, as well as links to additional information sources at our website (www.temple.edu/mpip), which also makes available a copy of the survey instrument we used to assess household opinions about conditions in communities.

#### table of contents

- ii acknowledgments
- iii introduction
- 5 chapter 1: the region's communities
- 11 chapter 2: land-use regulations
- 19 chapter 3: diversity
- 25 chapter 4: family well-being
- 31 chapter 5: socioeconomic status
- 37 chapter 6: housing
- chapter 7: regional transportation
- 49 chapter 8: the regional economy
- chapter 9: government and taxes
- 61 chapter 10: education
- 67 chapter 11: school quality
- 73 chapter 12: environment
- 79 chapter 13: arts and culture
- 87 chapter 14: health
- 92 technical appendix and endnotes

## chapter 1 the region's communities

The Philadelphia region consists of more than five million residents, living in more than 350 separate cities, towns, townships, and boroughs, often in distinct communities and neighborhoods within those places. This year's report continues to focus on the changes in the population of these communities, variations in their housing densities, and where the region is experiencing increased building activity.

indicator 1.1: regional community variety

indicator 1.2: population change, 1980-2004

indicator 1.3: housing density

indicator 1.4: building permits, 1980-2004

indicator 1.5: leading development sites, 2000–2004

### indicator 1.1: regional community variety

As in prior years, we introduce our report with a map and description of the region's communities. We identify five types of communities: Urban Centers, Established Towns, Stable Working Communities, Middle Class Suburbs, and Affluent Suburbs (see Map 1.1). These category names reflect both the major defining characteristics of each group and some of the dynamics within each grouping. Communities that have the greatest concentration of population (density) dominate the Urban Centers category (Figure 1.1). Established Towns include many of the communities that are not so densely populated as the urban clusters, but typically have a distinctive "main street." The Stable Working Communities encompass a wide range of places. Middle Class Suburbs and Affluent Suburbs are less dense, but are distinguished from one another by income-related differences.

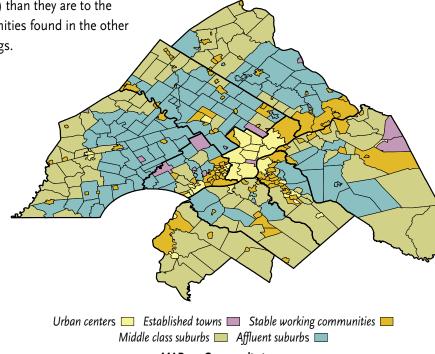
These community types are used in discussions of many of the indicators that follow in this re-

port. We remind readers that these categories are not meant to carry with them any normative meanings or to suggest that all communities within each group are identical to one another. Rather, communities in each category are more similar to each other (within the dimensions that we used in the cluster analysis) than they are to the communities found in the other groupings.

FIGURE 1.1: Population distribution by community type

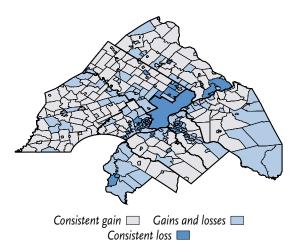
	Number of communities	Total population	Average population
Urban centers	33	1,518,672	46,020
Established towns	15	182,880	12,192
Stable working communit	i <b>es</b> 119	1,190,009	10,000
Middle class suburbs	89	817,059	9,180
Affluent suburbs	108	1,397,559	12,940

Source: U.S. Census, summary file 3, 2000.



MAP 1.1: Community types

### indicator 1.2: population change 1980-2004



MAP 1.2: Population change, 1980-2004

Sources: U.S. Census, summary file 3, 1980 and 2000.

The long trend of declining population in the densest and oldest communities of the Philadelphia metropolitan region is evident in Map 1.2. The map indicates both gains and losses over the 25 years between 1980 and 2004. While many communities have either consistently gained or lost population, in others population change occurred unevenly. Many of the Urban Centers have shown continual decreases; likewise, many of the less populated communities on the fringe of the region have seen consistent population increases.

In Figure 1.2a, we show how these population patterns vary across different communities.

FIGURE 1.2a: Population change by community type

	Change 1980–2004	Percent change
Philadelphia	-218,059	-12.9%
Urban centers	-30,782	-10.9
Established towns	3,059	2.4
Stable working communities	-9,537	-1.0
Middle class suburbs	157,893	22.5
Affluent suburbs	501,604	50.9

Sources: U.S. Census of Population and Housing, Person and Housing Unit Counts for Tracts and Minor Civil Divisions,1980; U.S. Census, summary file 3, 1990–2000; Population Estimates, 2000–2004.

Philadelphia and the remaining Urban Centers in the region lost the greatest proportion of population. (Philadelphia is not sub-divided into separate districts because the Census provides its annual estimates only for municipalities.) Established Towns showed modest growth, and Stable Working Communities showed a small aggregate decline. Affluent Suburbs grew dramatically, and Middle Class Suburbs expanded significantly as well.

Our comparison metropolitan areas also show variations in population change during the 2000-2004 time period. As Figure 1.2b indicates, both Pittsburgh and Cleveland continue to display net losses in their estimated population size. This year, perhaps because of changes in metropolitan area definitions, Boston evidenced a small loss

FIGURE 1.2b: Population change across comparison metropolitan areas, 2000–2004 <sup>1</sup>

<b>Baltimore</b> 86,219 3.4% 21,543	
	5
<b>Boston</b> -4,409 -0.1 -72,183	3
<b>Chicago</b> 219,851 2.9 -35,025	)
Cleveland -10,937 -0.5 -35,917	7
<b>Detroit</b> 40,608 0.9 -50,322	<u>,</u>
<b>Minneapolis</b> 147,389 5.0 40,050	)
<b>Philadelphia</b> 84,741 1.7 11,703	3
<b>Phoenix</b> 463,484 14.3 319,263	5
<b>Pittsburgh</b> -29,512 -1.3 -14,111	i

Sources: U.S. Census Bureau, Population Division, CBSA-EST2004-01; CBSA-EST2004-02; CO-EST2005-04-34; CO-EST2005-05-34.

as well.<sup>2</sup> Philadelphia continued its low-growth pattern, while Baltimore, Chicago, and Minneapolis were more robust in their growth. Phoenix showed dramatic growth, with a greater than 14 percent estimated increase from 2000 to 2004.

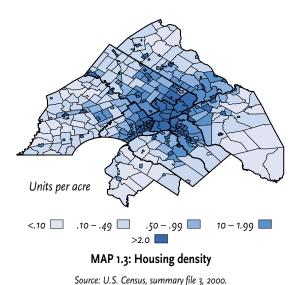
We also examined the relative role that in and out-migration played in these regions from 2000 to 2004. Boston's relatively small population loss masks a substantial out-migration occurring there. In contrast, Baltimore, Minneapolis, and Philadelphia showed modest in-migration gains, and Phoenix continued its robust in-migration pattern. Chicago, Cleveland, and Detroit each experienced out-migration patterns.

### indicator 1.3: housing density

Map 1.3 shows where the region's greatest concentrations of homes occur. While it mirrors population density, it also indicates more directly how housing varies across the region's communities. The high densities in Philadelphia, the region's Urban Centers and its oldest suburbs reflect their growth during a much more spatially limited period of regional development, when homes tended to be concentrated close to employment and retail concentrations, or along commuter rail lines. Later suburban development and the popularity of the single-family detached home led to a pattern of much lower density across suburban communities, with some of the communities on the periphery of the region reflecting very low density levels. Another pattern is also evident in this map: smaller communities, bounded by neighboring

population centers frequently have some of the densest housing concentrations in the region, an artifact of their limited options for open space.

In Figure 1.3a, the correspondence of housing and population densities to our community types is striking. Densities are at their height in the Urban Centers, followed by Stable Working Communities, Established Towns, Middle Class Suburbs and Affluent Suburbs. Population density is strikingly higher in the region's Urban Centers than in other communities. In our comparison regions, seen in Figure 1.3b, Philadelphia is the third most densely housed metropolitan area, behind Boston and Chicago. Phoenix's large geographic area and building styles account for its markedly lower density than the other regions.



Housing density/acre density/acre

Urban centers 3.3 15.4

Established towns 3.2 3.6

FIGURE 1.3a: Housing and population density by community type

 Urban centers
 3.3
 15.4

 Established towns
 2.2
 2.6

 Stable working communities
 2.7
 4.2

 Middle class suburbs
 .2
 .7

 Affluent suburbs
 .5
 1.5

Source: U.S. Census, summary file 1, 2000.

FIGURE 1.3b: Housing density
across comparison metropolitan
areas

Units/sq. mile
401.7
681.4
618.8
352.9
460.6
192.9
531.2
91.4
226.2

Source: U.S. Census, summary file 1, 2000.

## indicator 1.4: building permits, 1980-2004

Building permit data for the 25-year period between 1980 and 2004 indicate comparative residential development activity across the region. Last year's report focused on the locations of high residential development in the region, expressed as the ratio of building permits to the existing housing stock. This year in Figure 1.4a we provide an insight into the ways that different communities have experienced these developments over time.

Affluent Suburbs have averaged the largest volume of residential permits over the years, although it has fluctuated with the region's economic cycle. While Middle Class Suburbs show a somewhat less cyclical pattern, they have trended upwards in recent years, and Affluent Suburbs have turned downward. Philadelphia's decline in the 1990s has been replaced with a marked upturn since 2002, unlike other Urban Centers or Established Towns that show little new residential construction.

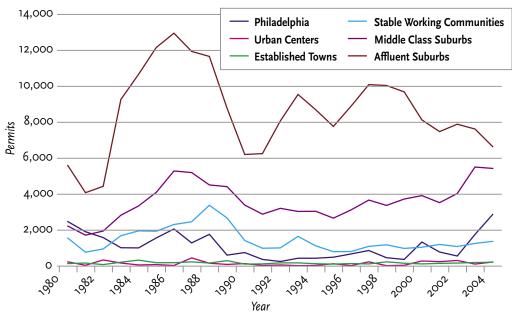


FIGURE 1.4a: Housing permits for community types

Source: U.S. Census Bureau, Housing Permit Data, 1980–2004.

Data presented in Figure 1.4b provide a measure of residential development activity in our comparison metropolitan areas. The cumulative number of residential permits issued between 2000 and 2004 is expressed as a proportion of permits to every 1,000 existing housing units. One group of metropolitan areas (Baltimore, Cleveland, Philadelphia, and Detroit) evidenced between 30 and 43 permits per 1,000 units. Boston and Chicago showed greater activity, and Minneapolis an even higher level of new residential development. Not surprisingly, Phoenix had the highest level of residential development activity over this same time period, with 145 permits for every 1,000 existing housing units.



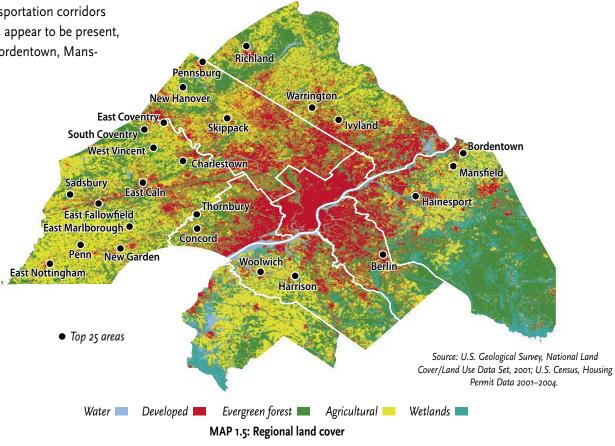
FIGURE 1.4b: Permits per 1,000 units (2000–2004) across comparison metropolitan areas

Source: The State of the Nation's Housing, 2005. Joint Center on Housing Studies, Harvard University, 2005.

### indicator 1.5: leading development sites, 2000-2004

The final indicator in this section highlights the top 25 residential building permit locations superimposed on our previously published map portraying satellite digital images of the ground cover of the region (see Map 1.5). Since the year 2000, the 25 most actively permitted areas have been located largely on the fringes of the developed communities or transportation corridors of the region. Two patterns appear to be present, as communities such as Bordentown, Mans-

field, Ivyland, Warrington, East Caln, Thornbury, and Concord appear to be located immediately adjacent to existing population centers. Many of the remainder of the communities appear to be developing in more rural locations closer to either forests or agricultural land.





A special report from the Samuel Zell/Robert Lurie Real Estate Center at the Wharton School of the University of Pennsylvania:

JOSEPH GYOURKO, Director and Bucksbaum Professor of Real Estate and Finance
ANITA A. SUMMERS, Director of Research and Professor Emeritas of Real Estate, and
Business and Public Policy

ALEX RUSSO, undergraduate student assistant in the Wharton School

This chapter examines the pattern of land-use regulatory control across the Philadelphia metropolitan area, and the relationships of the degree of control to a number of local socioeconomic characteristics.

indicator 2.1: degree of regulatory control

indicator 2.2: rules of residential land-use regulation

indicator 2.3: regulatory control and income

indicator 2.4: regulatory control and population

indicator 2.5: lot costs and socioeconomic character

indicator 2.6: lot costs and regulatory control

introduction mpip 2006

Land-use regulations have played a significant role in explaining the increase in house prices over the past quarter of a century across the country. Traditionally the price of land has accounted for only a small portion of housing costs but its share is growing substantially. This means that it is not demand alone that is accounting for the higher house values—the supply has become more inelastic. One possible explanation for the inelastic supply is the increased adoption of land-use regulations that limit building activity in local communities. Another is that we have run out of land.

It has been hard to sort out the explanation, because we have had very little direct knowledge of the local regulatory environment. Land-use regulations are largely under local control, and so are the data describing them. The Zell/Lurie Real Estate Center at the Wharton School of the University of Pennsylvania amassed a national database of these data from 2,649 communities (whose combined populations represent about 60 percent of the population in U.S. localities) and a Philadelphia database of almost all 382 communities (whose combined populations

represent about 90 percent of the region's population). (Note that unlike other sections of this report, this chapter adds Mercer County, New Jersey, to the other nine counties.) The correlates of these survey results were determined by combining them with a host of census data, measures of community pressure, and land-use regulatory activity in the executive and legislative branches of the state governments—and by constructing an index of residential land-use regulation that calibrates the degree of regulatory control in a locality.

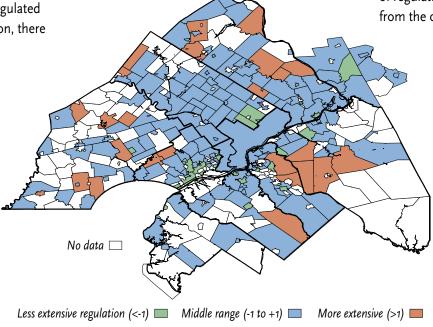
An index of residential land-use regulations was constructed for all the communities that replied to the survey. Ratings were calculated as the magnitude of regulation in relation to the average for all the jurisdictions in the Philadelphia region. The possible range was from -3 (the least extensive) to +3 (the most extensive). Zero is the average rating for all the surveyed communities. Jurisdictions with an index carrying a minus sign are less regulated than the region's average; those carrying a plus sign are more regulated than average. In the Philadelphia region, there

was only one community that had an index less than the measure of -2, and only four communities that had a highly regulated measure between +2.00 and +2.20.

Map 2.1 shows the regulatory magnitude measures across the Philadelphia region for all the communities that replied (the white ones did not respond). Clearly, most communities are in the

middle range (-1 to +1). The jurisdictions with the more extensive regulations (greater than +1) are shown in red, and the ones with the less extensive (less than -1) are shown in green.

One characteristic of the distribution is that in the Pennsylvania portion of the metropolitan area, the municipalities with the most extensive regulations are the most distant from Philadelphia; in the New Jersey portion, the magnitude of regulations is not associated with distance from the central city of the region.



MAP 2.1: Wharton Index of Residential Land-Use Regulation

Source: Zell/Lurie Real Estate Center Survey 2005; Wharton Residential Land-Use Regulation Index.

Figure 2.2a documents that it is a rarity for a community in the Philadelphia region to have any statutory limit on construction activity or the number of residential permits. Less than five percent of the communities report any limit on single-family permitting or construction, and less than six percent have any limit on multifamily. This is very close to the findings for the nation as a whole. These limits are not a significant tool for growth control in the country or in the Philadelphia area.

Binding statutory limits on permitting or construction may be rare, but density controls in the form of minimum lot size requirements are ubiquitous. Figure 2.2b indicates the replies to a question about whether the community had

minimum lot size requirements that developers had to meet—and, if so, what these minimums were. Overwhelmingly, density is controlled this way—over 90 percent of the communities had such a requirement. Communities often have multiple residential codes mandating different minimum lot sizes for different housing categories. More than half had areas with over one-acre minimums, and almost 50 percent had more than two-acre minimums. The New Jersey side results were somewhat lower than the Pennsylvania side results, but both have density controls that are higher than the national averages of those surveyed.

Beyond formal restrictions, other constraining requirements are in use, involving, for example,

developers sharing infrastructure costs or building affordable housing units. Figure 2.2c indicates the proportion of communities that have such requirements. The results for the New Jersey and Pennsylvania municipalities are shown separately. Most striking is the very large disparity in the proportion of communities enacting affordable housing requirements—74 percent on the New Jersey side, 13 percent on the Pennsylvania side. The national ratio is 19 percent. New Jersey, because of the strong requirements laid out in the New Jersey State Supreme Court's Mt. Laurel decisions, is an outlier. The Mt. Laurel decisions required New Jersey communities to meet a "fair share of the present and prospective need" for low and moderate income housing.

FIGURE 2.2a: Statutory limits on permits or construction activity

Number of	No limits
single-family permits	99.6%
single-family units	99.2
single-family dwellings	95.8
multi-family permits	97.5
multi-family units	97.5
multi-family dwellings	94.5

Source: Zell/Lurie Real Estate Center Survey, 2005.

FIGURE 2.2b: Minimum lot size restrictions

% having minimum lot size requirement	91%
If minimum requirements exist,	
< 1/2 acre minimum	71%
> 1/2 acre minimum	53
> 1 acre minimum	54
> 2 acre minimum	48

Source: Zell/Lurie Real Estate Center Survey, 2005.

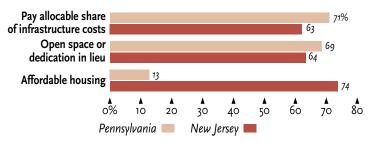


FIGURE 2.2c: Percentage of municipalities having other regulatory requirements

Source: Zell/Lurie Real Estate Center Survey, 2005.

#### indicator 2.3: regulatory control and income

On average, across the Philadelphia region (and across the nation), richer communities—communities with higher median household incomes in 2000—have more extensive regulations than average for the metropolitan area. Figure 2.3a shows that communities with an average median household income of \$58,000 have a less constrained land-use regulatory climate in the Philadelphia metropolitan area; communities with an average income of \$80,000 tend to be the most regulated in the region.

Another measure of income, the proportion of the population below the poverty line, shows similar results. The higher the proportion of very poor,

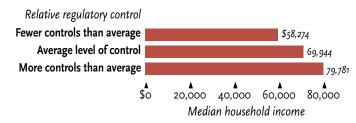


FIGURE 2.3a: Regulatory control and income

Sources: Wharton Residential Land-Use Index; U.S. Census, summary file 3, 2000.

the less the regulatory control (Figure 2.3b).

In sum, more affluent communities have relatively more land-use regulations. While direct causation cannot be decisively determined, it is reasonable to hypothesize this chain of reasoning: more affluence is associated with higher priced housing and with a number of preferences—environmental interests, lower density, and the desire to protect and enhance the value of this asset. Regulation of land-use is a major tool for responding to these preferences.

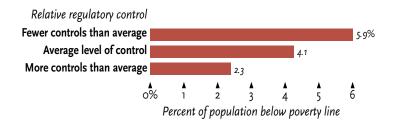


FIGURE 2.3b: Regulatory control and poverty Sources: Sources: Wharton Residential Land-Use Index; U.S. Census, summary file 3, 2000.

### indicator 2.4: regulatory control and population

mpip 2006

The relationship between the extent of regulation and population characteristics sheds light on the hypothesis that population pressures create land scarcity, land scarcity induces more land-use regulations, and together these contribute to the higher costs of the lot development component of housing values. In fact, in the Philadelphia region (and the country), this hypothesis is not borne out by the facts. Higher density places have relatively less

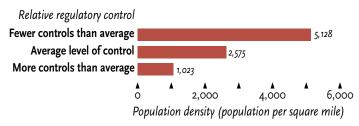


FIGURE 2.4a: Regulatory control and population density

Sources: Wharton Residential Land-Use Index; U.S. Census, summary file 3, 2000.

extensive regulation (Figure 2.4a), and the level of regulatory controls in higher population localities does not differ in any significant way from regulation in the smaller ones (Figure 2.4b).

Neither higher density nor higher population—both suggestive of pressures on land availability—is associated with relatively more extensive land-use regulation in the Philadelphia metropolitan area.

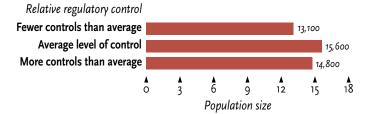


FIGURE 2.4b: Regulatory control and population

Sources: Wharton Residential Land-Use Index; U.S. Census, summary file 3, 2000.

#### indicator 2.5: lot costs and socioeconomic character

What are the characteristics of the municipalities that have experienced the largest increase in lot costs? If scarcity of land is a major factor, then we should find that the densest places are running out of developable land and are experiencing the largest increases in land development costs. Figure 2.5a indicates that this relationship does not prevail in the Philadelphia metropolitan area, nor does it in the U.S. as a whole. In fact, to the extent there is a relationship between lot development cost increases and density, that relationship is negative—the denser the population, the lower the cost increases.

The affluence of the residents of the community is, in contrast, clearly associated with lot development cost increases. Figure 2.5b shows this relationship. If these cost increases were compared with other measures of community wealth—house values, poverty, and educational achievement—the picture would be similar. Large community wealth is a major characteristic of communities that have experienced significant development cost increases.

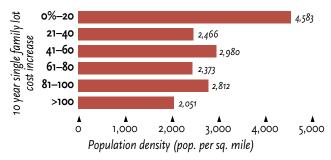


FIGURE 2.5a: Population density by change in single family lot cost

Sources: Zell/Lurie Real Estate Center Survey, 2005; U.S. Census, summary file 3, 2000.

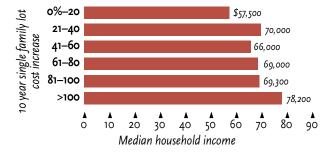


FIGURE 2.5b: Median household income by change in single family lot cost

Sources: Zell/Lurie Real Estate Center Survey, 2005; U.S. Census, summary file 3, 2000.

Lot development costs are associated with community wealth. Is the magnitude of land-use regulations—which, in effect, protect housing values—associated with lot development costs? Figure 2.6 depicts the positive association between these two measures. Communities experiencing higher lot development costs over the last ten years have more extensive regulations.

In sum, the votes for more land-use regulations are consistent with the desire to protect housing assets. They are, of course, also consistent with the desire to live less densely or to minimize environmental concerns. The

more affluent the population, the greater the development costs of the land, the greater the housing values, and the greater the extent of the land-use regulations. Other factors, of course, affect the degree of regulatory control in a particular community. The posture of the state judiciary to municipal control, the involvement of the executive and legislative branches at the state level, and the energy of community pressure groups all play a role. But the wealth of the community plays a significant role—and scarcity of land does not.

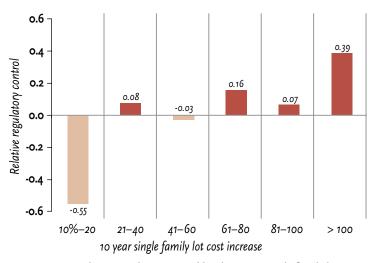


FIGURE 2.6: Relative regulatory control by change in single family lot cost

Sources: Zell/Lurie Real Estate Center Survey 2005; Wharton Residential Land-Use Regulation Index.



In previous editions of this report, we have documented the substantial movement into the suburbs by minority and immigrant households, noting the tendency of these groups to cluster in particular suburbs. In this edition, we turn from describing the differences between communities in their share of minority and immigrant residents, to look at how White and non-White households are distributed within communities. In addition, as debates continue at the national level about federal immigration policies, this section examines the contributions that foreign-born people have made to population growth in the region.

indicator 3.1: residential segregation dividing African-Americans from Whites

indicator 3.2: residential segregation dividing Latinos from Whites

indicator 3.3: residential segregation dividing Asians from Whites

indicator 3.4: contributions by immigrants to population growth

indicator 3.5: linguistically isolated immigrants

#### indicator 3.1: residential segregation dividing African-Americans from Whites

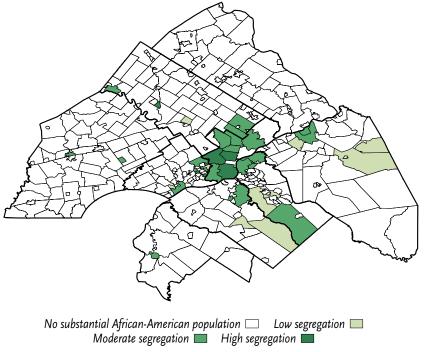
Researchers normally use a statistic known as the "index of dissimilarity" to measure the extent of residential segregation between two different population groups. For this indicator, as well as indicators 3.2 and 3.3, we use this index to represent the percentage of either group that would have to move to a different block within the community in order to achieve the same ratio of minority-to-majority population on each block as

the ratio prevailing in the community as a whole. We label communities with an index of .76 or more as having "High segregation," communities with an index of .51 to .75 as having "Moderate segregation," and communities with an index of .26 or lower as having "Low segregation."

In Map 3.1, we portray the index of dissimilarity only for the communities that were home to sub-

stantial African-American populations in 2000. We define "substantial" as at least 2,500 African-American residents comprising more than 10 percent of the community's total population. Rather than dispersing evenly throughout the suburbs, African-Americans have clustered in particular communities. With this indicator, we ask whether African-American residents are dispersed throughout the communities in which they live, or clustered disproportionately on separate blocks.

The map shows that the city of Philadelphia displays the most pronounced block-to-block segregation in the region, particularly the communities of lower North, West, and South Philadelphia, although a number of other sections of the city also show moderately high levels of segregation, as does the city of Camden. Moderately high levels of segregation are also observed in other older, urban centers like Chester, Coatesville, Pottstown, Burlington City, and Salem City. The map shows moderateto-high segregation in only a few of the more recently developed communities like Winslow Township in Camden County, or Deptford in Gloucester County. The other newer communities, built largely since 1960, exhibit lower levels of segregation.



MAP 3.1: Levels of segregation of Whites and African-Americans in municipalities with substantial African-American populations

Source: U.S. Census, summary file 3, 2000.

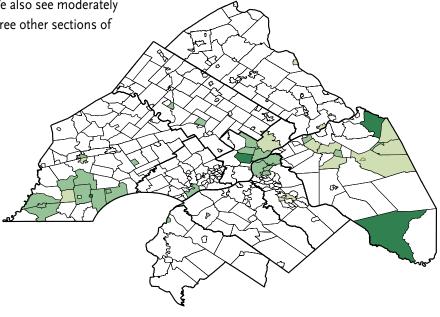
## indicator 3.2: residential segregation dividing Latinos from Whites

To portray the extent of block-to-block segregation dividing Latinos from Whites, Map 3.2 shows the communities in our region with substantial Latino populations. We define "substantial" as communities where Latinos comprised at least five percent of the total population in 2000.

Among those communities, the most pronounced segregation between predominantly White blocks and Latino blocks occurs in lower North Philadelphia. We also see moderately high segregation in three other sections of

Philadelphia as well as Camden. This same pattern prevails in a number of older, urban centers like Chester, Coatesville, Norristown, and West Chester.

On the western edge of the region, moderatelyhigh segregation exists in a group of municipalities in southern Chester County. This area is dubbed "the Mushroom Capital of the World,"



No substantial Latino population 

Low segregation Moderate segregation High segregation

MAP 3.2: Levels of segregation of Whites and Latinos in municipalities with substantial Latino populations

Source: U.S. Census, summary file 3, 2000.

because it produces almost half of the annual U.S. crop. The Mexican-American population has increased dramatically since the 1970s, when temporary migrants began traveling north to pick mushrooms. Many subsequently brought their families and settled in towns like Kennett Square and Toughkenamon. Signs of their presence include video rental stores featuring Mexican films and Mexican food outlets. Since we rely on census counts, it is likely that our numbers undercount this population. What is important for our purpose here is not the total number, but the extent to which Latino residents are living on separate blocks from White residents.

Numerous municipalities in heavily agricultural Burlington County also contain substantial populations of Latinos. By 2000, Latinos had grown to represent over four percent of the county's total population. The municipalities housing substantial numbers of Latinos differ in the extent to which the Latino and White populations are separated into different residential blocks. Their situations range from high levels of segregation in Chesterfield and Washington Townships; to moderately-high levels in Mount Holly, Wrightstown, and Edgewater Park; to low levels in Lumberton, New Hanover, North Hanover, Pemberton, Westampton, and Willingboro.

## indicator 3.3: residential segregation dividing Asians from Whites

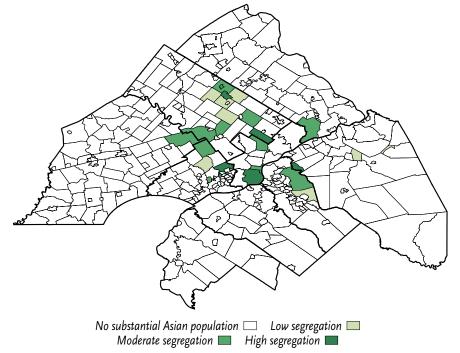
To portray the extent of block-to-block segregation dividing Asians from Whites, Map 3.3 shows the communities in our region with substantial Asian populations. We define "substantial" as communities where Asians comprised at least five percent of the total population in 2000. Many Asians have chosen to live in suburbs adjoining Philadelphia, particularly Cheltenham

and Bensalem to the northeast of Philadelphia, and Upper Darby and Marple near the western edge of the city. Farther out are concentrations at the intersections of Delaware, Chester, and Montgomery counties, in central Montgomery County and in Camden County.

Research has shown that Asian immigrants are more likely to disperse when their ability to speak

English is high; clustering occurs when their language skills are more limited.

Our findings suggest, although they do not conclusively prove, that there may also be an association between the income status of Asian households and their tendency to live separately from Whites. We found that five out of the eight communities exhibiting low levels of segregation were home to Asian households which. on average, earned higher incomes than their White neighbors (Eastampton, Marple Township, Towamencin, Upper Gwynned, and Voorhees). In contrast, only four (Bensalem, Cherry Hill, Maple Shade, and Plymouth) out of the 17 places showing high or moderately-high levels of segregation had Asian households whose incomes were higher than their White neighbors. In short, we see less segregation in communities where Asian households have incomes that are as high as, or higher than, neighboring Whites, possibly because Whites more readily accept higher-income minority households as neighbors.



MAP 3.3: Levels of segregation of Whites and Asians in municipalities with substantial Asian populations

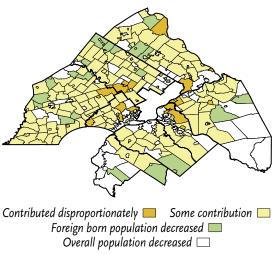
Source: U.S. Census, summary file 3, 2000.

## indicator 3.4: contributions by immigrants to population growth

We are seeing a change in the traditional image of suburbs as the home of families whose ancestors settled in the central cities of the U.S. and improved their economic circumstances sufficiently to allow succeeding generations to move out to the suburbs. Now many foreign-born immigrants coming into this region are moving directly into suburban communities. During the 1990s, suburban communities gained about 69,000 foreign-born residents, compared to a gain of only 36,000 in Philadelphia and Camden. As a result, a disproportionate share (60 percent) of the region's total foreign-born population now lives outside the cities of Philadelphia and Camden.

Map 3.4 breaks down the communities of the region according to whether foreign-born newcomers made extraordinary contributions to their popula-

tion growth during the 1990s (that is, where the increase in foreign-born persons accounted for all of the net population growth which the community experienced between 1990 and 2000, and in some cases the expansion of foreign-born populations even compensated for other population losses during the decade). This was the case in several communities at the edge of the core cities: in eastern Delaware County (Upper Darby, Marple, Nether Providence, and Swarthmore), and in Camden County (Pennsauken, Cherry Hill and Gibbsboro), as well as Cinnaminson and Palmyra (Burlington County) and Bensalem (lower Bucks County). Another prominent cluster of communities whose growth during the 1990s was attributable disproportionately to immigrants is seen at the intersection of Chester and Montgomery counties in the townships of Upper Merion, Plymouth, Tredyffrin and Malvern.



MAP 3.4: Foreign born contribution to population growth, 1990–2000

Source: U.S. Census, summary file 3, 2000.

FIGURE 3.4: Increase in foreign-born as percentage of total population growth in selected metropolitan areas, 1990–2000

	Increase in the number of foreign-born (A)	Increase in total population (B)	A as a percent of E
Baltimore	58,475	170,822	34 %
Boston	143,647	179,196	80
Chicago	540,897	861,910	63
Cleveland	14,620	48,802	30
Detroit	100,628	174,897	58
Minneapolis	122,251	429,972	28
Philadelphia	104,916	178,756	59
Phoenix	295,653	1,013,396	29
Pittsburgh*			

<sup>\*</sup>Pittsburgh is not included because the metro area lost population from 1990 to 2000.

Source: Audrey Singer in Alan Berubé, Bruce Katz, and Robert E. Lang, eds., Redefining Urban and Suburban America. Washington, D.C.: The Brookings Institution, 2005, vol. 2.

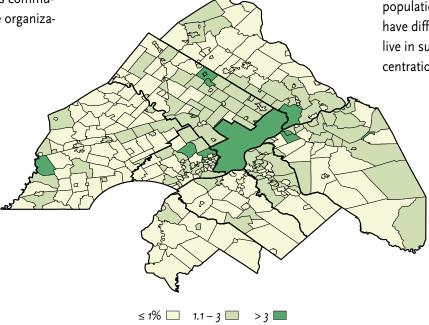
Figure 3.4 shows that from 1990 to 2000, the Philadelphia region made smaller gains in the number of foreign-born residents than did Boston, Chicago, Minneapolis, and Phoenix. Yet because Philadelphia's over-all population growth was modest during that decade, immigration contributed as large a proportion of total growth as in any of the other metropolitan areas except Boston and Chicago.

The term "linguistic isolation" refers to persons living in non-English speaking households in which no one who is 14 years old or older speaks English "very well." The U.S. Census includes a question that asks people to report how well they speak English. In the 2000 Census, 4.5 percent of the U.S. population was classified as linguistically isolated, up from 3.4 percent in 1990. This condition carries serious disadvantages. Many children in these households have trouble learning from teachers who do not speak their language, while adults face challenges communicating with health and other service organizations.

Map 3.5 shows the percentage of residents in each community who are linguistically isolated. It is perhaps surprising to see so many suburbs where at least a small proportion of the population falls into this category. We have traditionally thought of linguistic isolation as a condition among foreign-born populations within central cities, but not in suburbs. The assumption has been that those immigrant households choosing to move into suburbs are disproportionately the

ones who speak English well. However, with the increasing tendency of first-generation immigrants to settle in the suburbs, that assumption is less valid.

Outside Philadelphia in almost a dozen suburban communities, we see more than three percent of the population classified as linguistically isolated. With only one exception (West Fallowfield Township in western Chester County), they are all municipalities where foreign-born populations constitute more than 10 percent of the total population. It makes sense that immigrants who have difficulty speaking English would choose to live in suburbs where they find the largest concentrations of foreign-born residents.



MAP 3.5: Percentage of households that are linguistically isolated

Source: U.S. Census, summary file 3, 2000.



This year several of our indicators focus on changing household trends that are closely linked to community conditions and public services, such as the shrinking of household size and the aging of the baby boom generation. These large-scale social shifts are well studied at the national level, but not at the community level. The housing stock and transportation systems in most communities in this region were built in accordance with earlier demographic patterns that are rapidly being transformed. Planners and community leaders need to consider how local services and infrastructure can accommodate new social realities.

indicator 4.1: change in household size

indicator 4.2: ratio of children-to-elders

indicator 4.3: elderly living alone

indicator 4.4: baby boomer populations

indicator 4.5: safety

To a substantial degree, the expansion of the suburbs has been fueled not just by growth in the population numbers, but also by shrinkage in the average size of households. No longer are the suburbs dominated by two-parent families with children. Increasingly, household types associated with cities—like young singles, elderly people living alone, and single parents—are common in outlying communities.

Map 4.1 shows that in the vast majority of communities in the region, household size shrank from 1980 to 2000. Most communities lost an average of less than one-half person per household, but about 20 suburban municipalities lost more than one-half person per household. Only 15 communities in the entire region saw gains in household size during the two decades. A number of those gainers were communities that

had suffered significant population losses before 1980, but have since then attracted substantial Latino populations—for example, the Kensington section of Philadelphia, the city of Camden, and a group of suburbs located in southern Chester County.

The trend toward smaller non-family and single-parent households in the suburbs is not confined to the Philadelphia metropolitan area. Figure 4.1 shows, with the exceptions of Chicago and Phoenix, that every metropolitan area in this group had suburbs that were gaining households at a faster rate than they were gaining population.

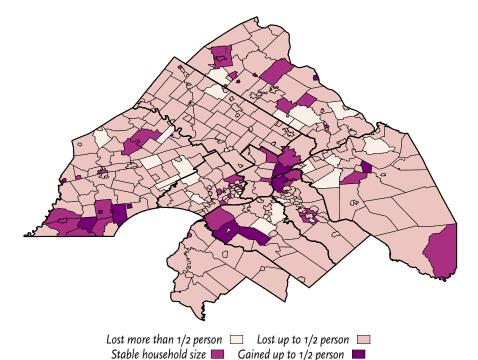


FIGURE 4.1: Percentage growth in the suburbs of selected metropolitan areas, 1990–2000

	Growth in population	Growth in households	Difference
Baltimore	16%	19%	+3%
Boston	7	10	+3
Chicago	16	16	0
Cleveland	4	9	+5
Detroit	8	13	+5
Minneapolis	21	25	+4
Philadelphia	7	11	+3
Phoenix	59	58	-1
Pittsburgh	0	4	+4

Sources: U.S. Census, summary file 3, 1990–2000.

MAP 4.1: Change in average household size, 1980-2000

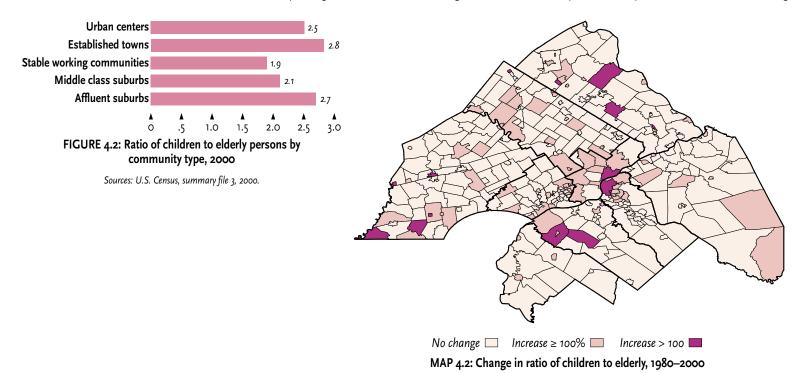
Sources: U.S. Census, summary file 3, 1980 and 2000.

#### indicator 4.2: ratio of children-to-elders

Comparing the number of children to the number of older persons in a community has been shown to distinguish communities likely to be growing from those that are not likely to grow. Figure 4.2 indicates that the lowest ratios are in Stable Working Communities. Many of these gained young families in the 1970s who stayed in place after their children left home. The highest ratios are in the Affluent Suburbs and Established Towns.

Map 4.2 shows how the ratio of children-to-elders changed in the communities of the region during the twenty-year period from 1980 to 2000. In those communities shaded darkly on the map, the child population gained in relation to the elderly population. We commonly think of the region's older cities as have aging populations. The media often portray Philadelphia, Camden, Chester, and some older suburbs adjoining the core cities in this light. However,

Map 4.2 makes the important point that these cities contain neighborhoods where the ratio of children-to-elders has increased in recent decades, both because these places have gained children and they have lost older residents. The increase in this ratio does not automatically improve the economic prospects of communities where it occurs, since children, as well as many elders, are outside the labor force and more dependent on public services than working adults.



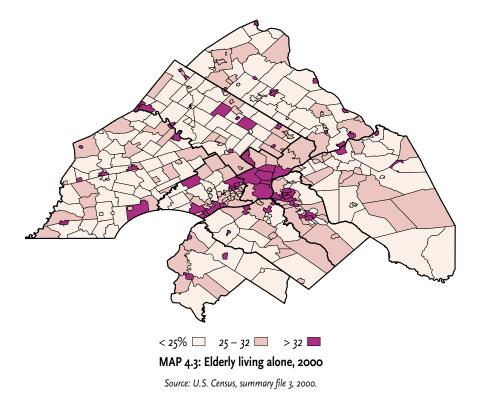
Sources: U.S. Census, summary file 3, 1980 and 2000.

Many people aged 65 and older who live by themselves prefer staying in their own homes as long as possible, despite the challenges of living alone. This desire raises important questions about how aging members of suburban communities on fixed incomes can manage to keep up their homes, pay rising tax bills, and continue to participate in social, cultural and community activities. When their homes need repairs, they face long delays because of a shortage of repair services. When they need to get to supermarkets and doctor appointments, it is often difficult to find home help or convenient transportation services. And should they ultimately want to sell the homes they own, they may find few affordable housing alternatives in their communities.

A positive message conveyed by Map 4.3 is that high percentages of the elderly who are living by themselves are located in some of the region's high-density, walkable communities. These include older Philadelphia neighborhoods, some older communities in Camden and eastern Delaware County, as well as older boroughs

like Bristol, Coatesville, Doylestown, and New Hope. Since some of these communities are lower-income, not all older residents remain there by choice. Some lower-income seniors have no other option but to stay in the homes they bought decades ago. Whether older residents live in the older boroughs by choice or necessity, higher density communities offer greater mobility to older citizens than do auto-dependent developments. The disadvantage of this pattern

of concentration is that the older communities need to provide more public and community services for the elderly even as their tax bases are stagnating. The map also shows, unfortunately, that the region has many suburban communities with less walkable development patterns where between one-quarter and one-third of all elderly residents live alone. In these areas, many older citizens face serious obstacles just to satisfy their daily needs.



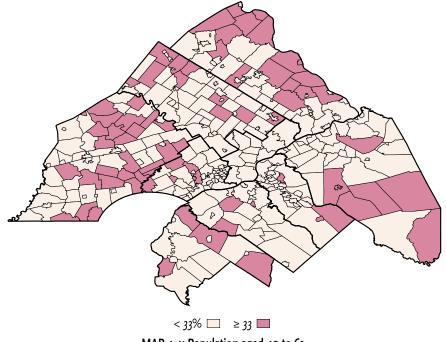
### indicator 4.4: baby boomer populations

If current growth trends among the elderly are raising concerns, even larger increases in the elderly population will occur as the so-called "baby boom" generation ages. "Baby boomers" are people born between 1946 and 1964; currently they are aged 42–60. This is the generation whose disproportionate numbers have for decades been placing heavy demands on services from education and health care to

housing and transportation. The news media have focused attention on the boomers' effects on national social programs like Social Security and Medicare. Less well known is the boomers' potential impact on local communities where they are clustered.

Although a significant minority of aging baby boomers are moving to age-restricted developments or to revitalized downtown areas, we can expect the majority of this generation to age in place, staying in their homes as long as possible. As Map 4.4 shows, that means baby boomers will be aging in many suburbs located outside the core communities of the region. Since baby boomer seniors will have raised fewer children than earlier generations, they will have more limited family networks to provide personal support and care. Their presence in the suburbs will create a need for more medical and social services. Since there is a marked gender imbalance among populations as they age, many of those services will have to be geared toward women.

Whereas Map 4.3 showed that a substantial proportion of today's elderly who live alone are located in older, higher-density boroughs and cities, that will not necessarily be the case for today's baby boomers who are clustered in the shaded areas on Map 4.4. By-and-large, these are not the high-density, walkable communities of the region. Thus, when aging boomers can no longer drive themselves to conduct daily activities, they will rely on transit services, both formal and informal. They may even lobby for more sidewalks. Although we cannot predict precisely what changes this population bulge will bring to the suburbs over the next three decades, communities would be well advised to begin preparing for the coming wave of aging and retirement.



MAP 4.4: Population aged 40 to 61

Source: U.S. Census, summary file 3, 2000.

#### indicator 4.5: safety

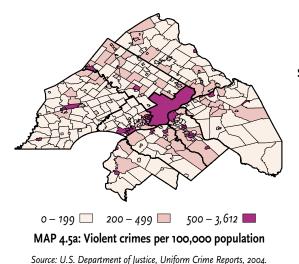
mpip 2006

Map 4.5a shows the distribution of violent crimes in the year 2004. (We added together four types of violent crime—murder and nonnegligent manslaughter, rape, robbery, aggravated assault—to get an index for violent crime.) National trends show violent crime rates declining since 1994, reaching the lowest level ever recorded in 2004. Still, urban residents across the nation were more likely than suburbanites to be victims.

This region follows the national pattern. As in prior years, the communities with the highest levels of violent crime were the cities of Philadelphia, Chester, and Camden, along with other older Urban Centers like Salem City, Burlington City, Norristown and Pottstown. Given this pattern, it is not surprising that residents of Philadelphia and the other Urban Centers express less satisfaction about their personal safety than do residents in the other community types. (Figure 4.5)

Property crime makes up slightly more than three-quarters of all crime in the United States. After declining for many years, property crime rates stabilized after 2002. Map 4.5b shows that property crime is more widely prevalent than violent crime. (We added together four types of property crimes—burglary, motor vehicle theft, larceny, and arson to get an index for property crime.) While this type of crime plagues a

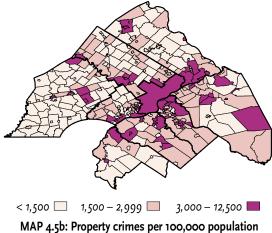
broader segment of the metropolitan area than does violent crime, it is nevertheless urban households that are the most vulnerable to property crime. One reason may be that property crime, regardless of the type, happened more often to those living in rented property than to persons living in their own homes. For example, nationally renters suffered almost twice the rate of motor vehicle theft as those who owned their homes. It is perhaps surprising to see a few Affluent Suburbs showing high levels of property crime. They include places like West Whiteland and Upper Merion, where major shopping malls and other commercial developments account for substantial shares of property crime.



Philadelphia Urban centers Established towns Stable working communities Middle class suburbs Affluent suburbs FIGURE 4.5: Percentage "completely satisfied" with their

personal safety in their neighborhood

Source: Temple University, Philadelphia Metropolita Area Survey, 2005.



Source: U.S. Department of Justice, Uniform Crime Reports, 2004.



The region's 353 municipalities not only exhibit the gamut of socioeconomic status, they often concentrate it powerfully within particular places. Using long-standing local control over land use, zoning, and housing codes, the region's municipalities often have sought to guide their development in ways that shape the distribution of socioeconomic status among and within them. In this chapter, we examine the distribution of household incomes within and across the region's communities.

indicator 5.1: low-income communities

indicator 5.2: high-income communities

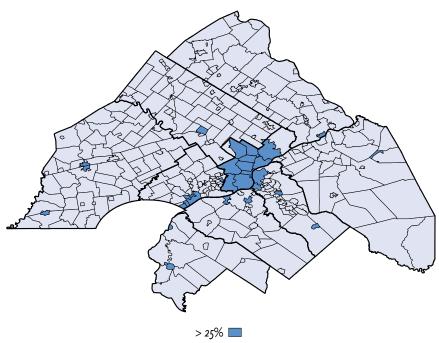
indicator 5.3: change in low-income households, 1990-2000

indicator 5.4: change in high-income households, 1990–2000

indicator 5.5: middle-income households

To measure the distribution of household incomes within the region's communities, we estimated the percentage of each community's households that fell within five income ranges representing the highest 20 percent, the next highest 20 percent, and so forth.

In Map 5.1, we show the 33 communities with a disproportionate share of households in the bottom 20 percent of the regional income distribution. We define "disproportionate share" as at least five percent more of the community's households in the lowest income range than would be expected on the basis of the regional household income distribution. Many of these communities are older centers of manufacturing which lost that

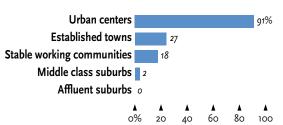


MAP 5.1: Communities with disproportionate share of low income households, 2000  $\,$ 

Source: U.S. Census, summary file 3, 2000.

source of employment. Figure 5.1a shows that 91 percent of Urban Centers have disproportionate household shares in the lowest income range. Only 27 percent of the Established Towns have disproportionate shares of households in the lowest income range, while the other community types have appreciably lower fractions.

How does the region compare to other metropolitan areas? Figure 5.1b shows that the Philadelphia region had the highest share of its households in the lowest income range in 1979 and the second highest share in 1999. While Philadelphia's rank improved slightly, the improvement was due to



the deterioration of Pittsburgh's distribution rather than an improvement in its own share.

FIGURE 5.1a: Percentage of communities with disproportionate share of low-income households

Source: U.S. Census, summary file 3, 2000.

FIGURE 5.1b: Percentage of households in lowest 20 percent of the national income scale in selected metropolitan areas, 1979 and 1999

	1979	1999		1979	1999
Baltimore	18 %	17%	Minneapolis	15%	13%
Boston	19	19	Philadelphia	20	20
Chicago	17	17	Phoenix	18	17
Cleveland	17	20	Pittsburgh	19	22
Detroit	17	17			

Source: Calculated from Alan Berubé and Thacher Tiffany. The Shape of the Curve: Household Income Distributions in U.S. Cities, 1979–1999. Washington, D.C.: The Brookings Institution, 2004.

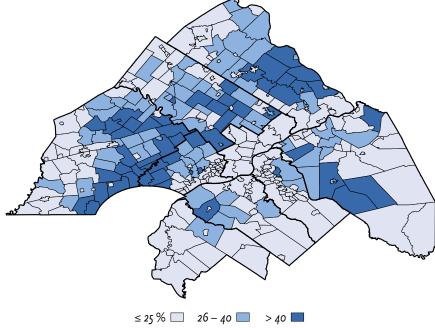
## indicator 5.2: high-income communities

While the suburbs are increasingly diverse, as these reports have documented, the fragmentation of the region into many, often small, suburban communities allows substantial segregation by income. Historically, suburban communities have used a wide variety of measures such as zoning, land use regulations, and housing codes to filter newcomers. In addition, the inadequacy of public transportation in many parts of the suburbs also has the effect of screening newcomers

by income, since many households in lower income groups lack access to automobiles.

For indicator 5.1, we defined communities with a disproportionate share of their households in the lowest income range as those in which more than 25 percent of households fell into the bottom 20 percent of the region's income scale. We labeled this "disproportionate" because it is at least five percent more than would be expected on the basis of the regional household income

distribution. If we use the same criterion here to identify those communities with more than 25 percent of their households in the highest income range, we capture a very large number of suburbs—four times as many as have disproportionate shares falling into the lowest income range. However, if we choose a definition that focuses on the truly wealthy communities—those where over 40 percent of households are in the top income range—we find a total of 54 communities. Map 5.2 shows that many of these communities lie along major roads such as the Pennsylvania Turnpike and U.S. 202, and Route 70 in New Jersey. These roads are notable for their access to major job centers within the region.



MAP 5.2: Communities with disproportionate share of high income households, 2000

Source: U.S. Census, summary file 3, 2000.

#### indicator 5.3: change in low-income households, 1990-2000

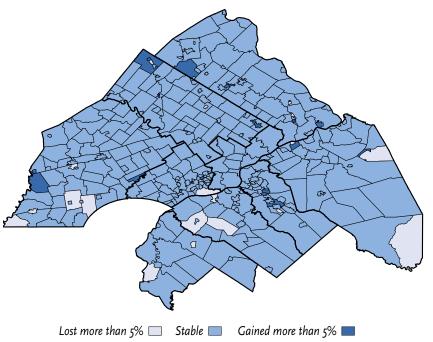
mpip 2006

Many communities have seen an erosion of incomes in the 1990s through an increase in the percentage of households whose incomes have fallen into the lowest 20 percent.

We focus here on communities which saw more than a five percent increase or decrease in their share of households in the bottom 20 percent over the decade. There are 18 communities where the share of households in the lowest

Although much has been made recently of the difficulties facing what have been termed "inner ring" suburbs, Map 5.3 reveals that it would be difficult to apply that characterization to these places; none borders the city, and although the farthest reaches of the metropolitan area. As a group, these communities are generally quite

income range grew, and all are in the suburbs. some might be termed "inner ring," others are at



MAP 5.3: Change in share of low income households, 1990-2000

Sources: U.S. Census, summary file 3, 1990 and 2000.

hetereogeneous in their population and housing characteristics.

The vast majority of the region's communities experienced little change in their share of households in the bottom income range. However, twenty communities saw an improvement in their income distribution by posting more than five percent reductions in their shares of households falling into the lowest income range. As Figure 5.3 shows, they began the decade with a median household income of only \$43,653, substantially lower than the other communities, and ended the decade having significantly closed the income gap. These communities had lower rates of prime age male unemployment and higher percentages of Latinos. Thus their improvement may be partially due to Latino immigration.

FIGURE 5.3: Median household income by change in percentage in lowest income range, 1990 and 2000

Change	1990*	2000
Lost more than 5%	\$43,653	\$56,489
Remained stable	56,039	58,109
Gained more than 5%	52,037	57,298

<sup>\*</sup>In 2000 dollars

Sources: U.S. Census, summary file 3, 1990 and 2000.

### indicator 5.4: change in high-income households, 1990-2000

In this section, we portray how the increasing skewness of the income distribution affected the concentration of the highest incomes in the region's communities during the 1990s. As in the prior section, we limit our attention to the communities in which there was more than a five percent change in the share of households in the highest income range.

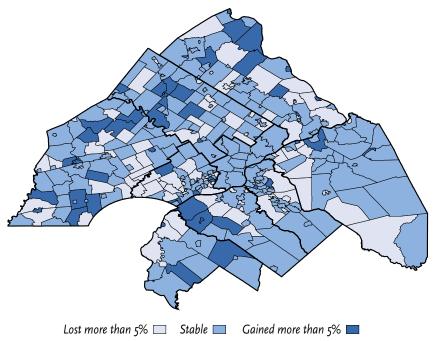
When all of the region's communities are examined, 51 saw an increase of more than five percent in their share of households in the top 20 percent of incomes, but almost twice that number, 99, had a decrease. Figure 5.4 shows that Stable Working Communities, Middle Class Suburbs, and Affluent Suburbs were roughly twice as likely to see a decrease in their shares in the highest income range as they were to experience an increase. In contrast, Urban Centers and Established Towns were more balanced—with losses and gains in shares in the highest income range that were similar.

Map 5.4 displays the locations of the communities which gained and lost shares in the highest income range. In Pennsylvania, the communities that saw growth in the highest income range appear to concentrate near three job centers: one around King of Prussia; a second along the Bucks County border with New Jersey, which gives access to the job centers around Princeton, NJ; and a third in southern Delaware and Chester counties, areas which are near the financial services hub around Wilmington, DE. In New Jersey, there is no clear pattern.

FIGURE 5.4: Percentage change in share of households in highest Income range, by community type

Change	Urban Centers	Established Towns	Stable Working Communities	Middle Class Suburbs	Affluent Suburbs
Lost more than 5%	18%	27%	23%	26%	36%
Remained stable	67	53	66	64	44
Gained more than 5%	15	20	11	10	19

Sources: U.S. Census, summary file 3, 1990 and 2000.

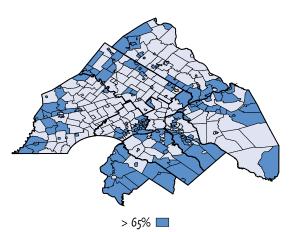


MAP 5.4: Change in share of high income households, 1990-2000

Sources: U.S. Census, summary file 3, 1990 and 2000.

The question we answer in this section is which of the region's communities are particularly hospitable to the middle class—households in the middle 60 percent of incomes that have not yet been discussed in this chapter. As in the other sections of this chapter, we focus on those communities in which there are five percent more households in this range than would be expected on the basis of the regional income distribution. Using this criterion, there are 172 communities with more than 65 percent of their households in the middle income range.

Map 5.5 displays these communities and they are notable for the number of them that lie at the fringes of the metropolitan area. However, there are many that are more central, especially running from Northeast Philadelphia through lower Bucks County, in eastern Delaware County, and along Route 422 in New Jersey. Figure 5.5a portrays these communities in terms of our community typology and it reveals that many are classified as Stable Working Communities and Middle Class Suburbs.



MAP 5.5: Communities with highest share of middle income households, 2000

Source: U.S. Census, summary file 3, 2000.

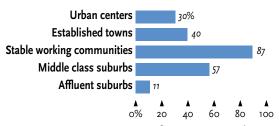


FIGURE 5.5a: Percentage of communities with disproportionate share of middle-income households

Source: U.S. Census, summary file 3, 2000.

How the middle class fared in the region as a whole relative to other metropolitan areas is shown in Figure 5.5b. Over two decades, the Philadelphia metropolitan area saw its middle class share remain essentially constant, if somewhat below the 6o percent that would be expected if it matched the national income distribution. In 1979, only three of the metropolitan areas in Figure 5.5b actually had shares as high as the national distribution, a number that increased to only four by 1999. The Philadelphia region ranked fourth in percentage in the middle class in 1979, but it dropped to sixth by 1999 because of the improvements in the economies of Chicago and Cleveland.

FIGURE 5.5b: Percentage of households in the middle 60 percent of the nation's income scale, in selected metropolitan areas, 1979 and 1999

	1979	1999
Baltimore	59%	58%
Boston	59	57
Chicago	56	59
Cleveland	57	61
Detroit	54	58
Minneapolis	60	61
Philadelphia	59	58
Phoenix	63	63
Pittsburgh	61	60

Source: Calculated from Alan Berubé and Thacher Tiffany. The Shape of the Curve: Household Income Distributions in U.S. Cities, 1979–1999. Washington, D.C.: The Brookings Institution, 2004.



Housing shapes daily life for the region's residents in four major ways: housing holds a central position in household budgets; it offers potential for improving household wealth when the value of housing grows; the housing conditions of communities both attract and repel potential residents; variations in demand for housing affect the property values of housing, and hence a community's tax base. Much of the force of housing's effects on daily life occur through home ownership, but many communities across the region also are witnessing increases in the stock of rental housing. The emphasis in this section is on trends in housing patterns, both within the Philadelphia region and across metropolitan regions.

indicator 6.1: change in rental housing

indicator 6.2: mortgage activity

indicator 6.3: change in average mortgage amount

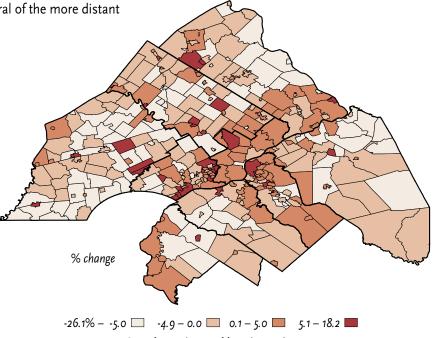
indicator 6.4: home improvement loans

indicator 6.5: sub-prime lending

Changes in housing affordability across lower and middle income households, combined with limited savings assets for younger households, have generated an increase in the percentage of households that rent, rather than own their homes. Map 6.1 indicates the changes over the 1980 to 2000 census period. Increases in the proportion of housing that is rented are particularly noticeable in the inner ring suburbs and across many of the older communities of the region. However, increases in rental housing are also present in several of the more distant

suburban communities of Chester, Montgomery and Bucks counties.

Fig. 6.1a presents the percentage of rental housing for our nine comparison metropolitan areas. The Philadelphia metropolitan area is lower than all but Detroit in the proportion of its households who rented in 1990, but it changed far less than the comparison metropolitan areas in the ten years since 1990. Holding rent dollars constant (see Figure 6.1b) there are only two



MAP 6.1: Change in rental housing, 1980–2000

Sources: U.S. Census, summary file 3, 1980 and 2000.

metropolitan areas that saw increases in the median rent level from 1990 to 2000; Chicago and Phoenix, both noted for population and household growth across the 10 years, also have seen rising prices in the rental housing market.

FIGURE 6.1a: Rental housing percentages for selected metropolitan areas, 1990 and 2000

1990	2000
36%	33%
44	41
41	35
35	32
30	28
31	28
30	30
37	32
31	29
	36% 44 41 35 30 31 30 37

FIGURE 6.1b: Median rent for selected metropolitan areas, 1990 and 2000

	1990*	2000
Baltimore	\$658	\$626
Boston	881	802
Chicago	660	669
Cleveland	545	545
Detroit	611	583
Minneapolis	644	641
Philadelphia	693	648
Phoenix	626	661
Pittsburgh	492	482

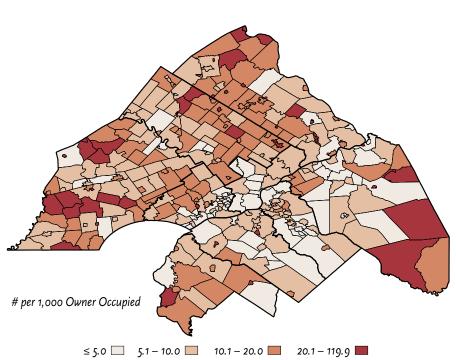
<sup>\*</sup> In 1999 dollars, adjusted by CPI

Sources: U.S. Census, summary file 3, 1990 and 2000.

### indicator 6.2: mortgage activity

Mortgage activity in a community is a good indicator of housing market vitality. By combining home mortgages over a five year period (2000 through 2004), it is possible to identify those parts of the region's housing market that are generating the most sustained activity. Map 6.2 presents this information in terms of loans per 1,000 owner-occupied housing units. Communities that we identified in last year's

report as generating the largest stock of new housing (in Chester, Montgomery, and Bucks counties, as well as in the distant communities of Burlington County) are the areas where the largest proportion of loans is seen. But substantial activity is also evident in communities with smaller footprints (e.g., Media, Swedesboro, Wenonah, and Rockledge). The strongest picture that can be seen is that the housing centers of



MAP 6.2: Mortgage loans per 1,000 owner-occupied units, 2000-2004

Sources: Federal Financial Institutions Examination Council, Home Mortgage Disclosure Act, Raw Data, 2000–2004.

the region—the communities with the greatest density of housing units (see discussion of housing density in chapter 1)—are the areas where some mortgage activity is present, but where the cumulative number of these loans is less.

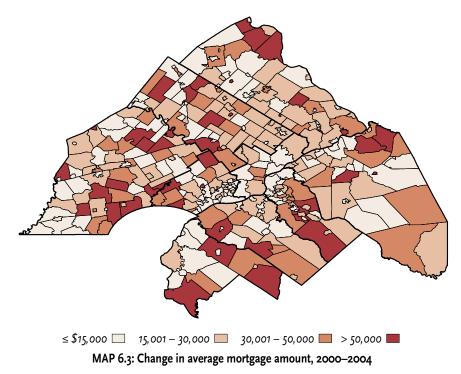
If the relative volume of mortgage loans is a guide to understanding regional housing preferences, then the implication of these data is that there is a preference for housing in comparatively newer communities in the region. This said, the continuing strength of suburban communities in immediately adjacent Montgomery County, and the evidence of significant levels of mortgage activity in Northeast and West Philadelphia, suggests that these areas are far from moribund. A similar level of activity exists in the Camden County suburbs adjacent to the city of Camden.

### indicator 6.3: change in average mortgage amount

An additional measure of housing market dynamics is the change in the price that houses are commanding in the market. The indicator used here is based on the average dollar amount of home mortgages over the five year time period 2000 to 2004, seen in Map 6.3. The communities with the greatest dollar appreciation are largely found in more distant suburbs of the region. Another trend is also visible, however, as some city of Philadelphia communities, as well

as some inner ring suburbs, are demonstrating appreciation between \$30,000 and \$50,000 per mortgage.

In Figure 6.3, the Philadelphia metropolitan area ties with Chicago in terms of the percentage change in home prices from 1984 through 2004. But both metropolitan areas fall far below the appreciation experienced in Boston, whose prices more than tripled over the same time period.



Sources: Federal Financial Institutions Examination Council, Home Mortgage Disclosure Act, Raw Data, 2000–2004.

In terms of the percentage change of median incomes, Philadelphia is the third most appreciating metropolitan area, trailing only Boston and Pittsburgh. A sense of whether the change in housing prices is outstripping the change in incomes of a region's residents is shown by the ratio of housing price change to income change. Here Boston, despite significant increases in income levels, is far and away the leader in terms of housing "strain" vis-à-vis income levels in the group of comparison regions. Philadelphia ranks just above the middle of this grouping, as Chicago and Detroit have higher price to income ratios.

FIGURE 6.3: Percentage changes in median sale price, median income, and price/income ratios for selected metropolitan areas, 1984–2004

	•		
	Price	Income	Ratio
Baltimore	216%	150%	1.5
Boston	318	165	1.9
Chicago	237	136	1.7
Cleveland	166	130	1.3
Detroit	234	143	1.6
Minneapolis	198	144	1.4
Philadelphia	237	157	1.5
Phoenix	118	115	1.0
Pittsburgh	147	157	0.9

Source: The State of the Nation's Housing, 2005. Joint Center on Housing Studies, Harvard University, 2005, Appendix W-6.

### indicator 6.4: home improvement loans

In last year's series of indicators, the pattern of home improvement loans indicated that the largest concentrations of loans (particularly for homes built prior to 1970) lay in the suburban communities immediately adjacent to Philadelphia and in some of the more distant suburban communities of the region. With this pattern in mind, we focus more specifically on the characteristics of home improvement lending activity by the MPIP community typology and by the age of the housing in the region's communities.

In Figure 6.4a, we can see that the percentage of all loans that are home improvement loans is almost twice as high in Urban Centers as it is in the Affluent Suburbs. The pattern for loan amounts is the reverse, as the average home improvement loan is only slightly more than \$20,000 in Urban Centers, while it exceeds \$56,000 in Affluent Suburbs, and over \$50,000 in

FIGURE 6.4a: Home improvement loans as share of all mortgages, by community type, 2000–2004

	Loans	Average Loan
Urban Centers	6.1%	\$20,429
Established Towns	3.1	50,459
<b>Stable Working Communities</b>	4.5	33,620
Middle Class Suburbs	4.3	41,244
Affluent Suburbs	3.3	56,164

Source: Federal Financial Institutions Examination Council, Home Mortgage Disclosure Act data, 2000–2004. Established Towns. While Figure 6.4a shows that home improvement lending in Urban Centers is a larger proportion of all mortgage lending in these markets, it is apparent that a lower average amount of improvement dollars accompanies these loans.

A somewhat similar pattern is also apparent when we examine home improvement activity by the age of housing (Figure 6.4b). We found that communities with housing built prior to 1950 have a higher percentage of their mortgage loans in the home improvement category (five percent of loans in pre-1950 communities compared to just over three percent in communities built largely during the 1990s). Nonetheless, home improvement loans in the oldest communities averaged a lower dollar amount (\$31,749) than those in the newest communities (\$55,427).

FIGURE 6.4b: Home improvement loans as share of all mortgages, by median age of housing

Median Age	Loans	Average Loan
> 50 years old	5.0%	\$31,749
40–50	4.4	35,863
30–40	4.4	43,313
20–30	3.9	47,408
10-20	3.1	51,602
< 10	2.7	55,427

Source: Federal Financial Institutions Examination Council, Home Mortgage Disclosure Act data, 2000–2004; U.S. Census, summary file 3, 2000.

A major concern among government and housing organization leadership in many of the region's communities is the degree to which home financing is subject to the strains of predatory lending and/or mortgage foreclosures. One of the leading indicators of these possibilities is the degree to which mortgages are financed by specialists in sub-prime lending—mortgages that are subject to higher interest rates by virtue of the increased risk that lenders often attach to individual borrowers or to communities with lower-valued housing. Map 6.5 presents the level of sub-prime loans as a percentage of all loans provided in each of the region's communities between 2002 and 2004. Communities that are in or near the Urban Centers of the region are areas in which sub-prime lending is a more significant component of the mortgage finance system. High levels are also present in many of the more exurban communities in the region, especially in Salem, Burlington and Camden counties.

Also related to sub-prime loan levels is the extent to which communities reflect differential levels of new demand—demand generated from migrants to the region who make housing choices among the many communities in the region. Sub-prime lending, in addition to reflecting weak credit records among borrowers or conditions of the housing stock, may also reflect weaker demand

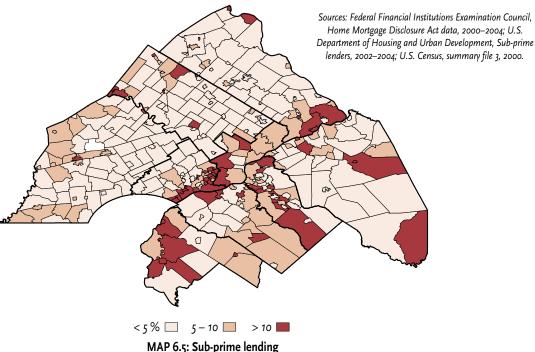
for housing, which adds to the risk perceived by lenders.

Figure 6.5 examines the variation in the levels of sub-prime loans by the degree to which communities experienced population increases due to in-migration from areas outside the Philadelphia area. As can be seen, the less a community attracts new households from outside the region, the greater the chance that sub-prime lending will occur. Communities in the lowest

20 percent of all places receiving new residents to the region are more than twice as likely to experience sub-prime lending in the financing of home purchases.

## FIGURE 6.5: Average percentage of sub-prime loans by migration level, 2002–2004

Fewest Migrants (lowest 20%)	9%
2nd quintile	7
Middle 20%	6
4th quintile	5
Most Migrants (highest 20%)	4



Sources: Federal Financial Institutions Examination Council, Home Mortgage Disclosure Act data, 2000–2004; U.S.

Department of Housing and Urban Development, Sub-prime lenders, 2002–2004.

### 42 housing



The transportation network of the region links communities of all types, and offers access to jobs, schools, commercial centers, and recreational or other amenities. The transportation system—the road and rail network—is an infrastructure directly involved with other regional indicators, especially the commute to work and the physical development and shifting population centers of the Delaware Valley. The focus of this year's report is on access to the regional rail system and the costs of transportation as they are related to where people live and their choice of the public transit system or private automobiles.

indicator 7.1: regional transportation network

indicator 7.2: commuter rail access

indicator 7.3: transportation costs: homeowners

indicator 7.4: transportation costs: renters

### indicator 7.1: regional transportation network

Map 7.1 indicates the major highways and commuter rail systems that are present in the metropolitan Philadelphia region. With two exceptions (the PATCO High Speed Line and the light rail River Line in New Jersey), the rail system was originally developed in the late 19th and early 20th centuries. Its layout reflects the era in which the city of Philadelphia was the major population and economic center of the region. The road network reflects the city's original importance as an industrial, commercial, and services center as well as the more recent pattern

of suburbanization of population. While many roads converge in Philadelphia, others (such as Rt. 202, Rt. 422, and I–295) primarily serve suburban communities. We will focus particularly on the commuter rail system in Indicator 7.2.

This transportation system serves a population that is taking longer to commute to work. As the information in Figure 7.1a indicates, Philadelphia, as well as each of the comparison metropolitan areas, has shown a noticeable increase in the percentage of people who spend over an hour commuting to work, from 6.3 percent in

1990 to 9.5 percent in 2000. Philadelphia ranks third among these metropolitan areas, with Chicago and Boston having greater percentages commuting over 60 minutes. In the case of Chicago, a part of the explanation may well lie in the use of public transportation or other means of commuting. As the information in Figure 7.1b suggests, Philadelphia and Chicago were the cities that used private automobiles least as their means of transportation to work.

FIGURE 7.1a: Percentage commuting more
than 60 minutes

	1990	2000	
Baltimore	*	*	
Boston	6.4%	9.9%	
Chicago	10.8	13.2	
Cleveland	3.5	4.7	
Detroit	4.6	6.6	
Minneapolis	2.9	4.2	
Philadelphia	6.3	9.5	
Phoenix	4.4	6.3	
Pittsburgh	4.8	6.9	

<sup>\*</sup>data unavailable

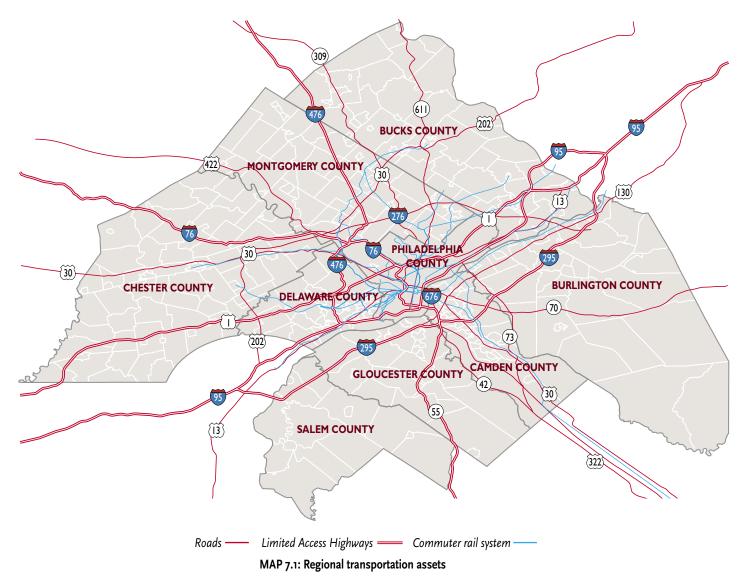
Sources: The State of the Nation's Housing, 2005. Joint Center on Housing Studies, Harvard University, 2005; U.S. Census, 2000 Minor Civil Division/County to Minor Civil Division/County Worker Flow files, 2003.

FIGURE 7.1b: Percentage using private automobile for work

	1990	2000
Baltimore	*	*
Boston	76.3%	73.7%
Chicago	72.6	69.0
Cleveland	84.6	81.1
Detroit	86.2	84.4
Minneapolis	81.5	78.6
Philadelphia	75.4	70.7
Phoenix	77.5	77.2
Pittsburgh	79.4	73.5

<sup>\*</sup>data unavailable

Sources: The State of the Nation's Housing, 2005. Joint Center on Housing Studies, Harvard University, 2005; U.S. Census, 2000 Minor Civil Division/County to Minor Civil Division/County Worker Flow files, 2003.



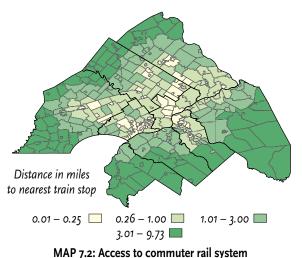
Source: Where We Stand: Community Indicators for Metropolitan Philadelphia. Metropolitan Philadelphia Indicators Project, 2005.

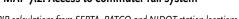
Distance and inconvenience are frequently discussed as reasons for the lack of use of public transportation, particularly in suburban communities that tend to use the regional rail system for their major public transportation needs. Measured by the distance from the geographic center of each of the region's communities to the closest regional rail station (see Map 7.2), a large number of the older suburbs are within 1 mile of a regional rail station. Those communities that are further from the city of Philadelphia and that have shown the greatest growth and ap-

preciation in housing values are those that have a longer distance to a rail station.

Figure 7.2a presents survey results regarding the availability and use of the public transit network. Public transportation systems are seen as accessible by a majority of all respondents, but are seen this way more strongly in the Urban Centers, Established Towns and Stable Working Communities of the region. Their regular use—at least one to three times a week or more—is much more evident in the Urban Centers and Established Towns of the region, although even

in these places, they are used by a minority of households. Nonetheless, it is interesting to note that usage is higher in Affluent Suburbs than in either Stable Working Communities or Middle Class Suburbs. Information presented in Figure 7.2b indicates that the hours lost because of traffic congestion are on the rise. Philadelphia has the lowest hours lost among the larger metropolitan areas, and only the smaller Cleveland and Pittsburgh areas show significantly lower numbers of lost hours.





Source: MPIP calculations from SEPTA, PATCO and NJDOT station locations.

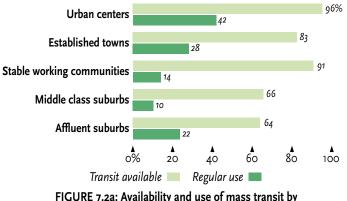


FIGURE 7.2a: Availability and use of mass transit by community type, 2005

Source: Temple University, Philadelphia Metropolitan Area Survey, 2005.

# FIGURE 7.2b: Annual hours delayed per automobile traveler, 1993 and 2003

	1993	2003
Baltimore	30	50
Boston	38	51
Chicago	42	58
Cleveland	10	10
Detroit	77	57
Minneapolis	30	43
Philadelphia	25	38
Phoenix	42	49
Pittsburgh	14	14

Source: Texas Transportation Institute, 2005 Urban Mobility Report.

### 46 regional transportation

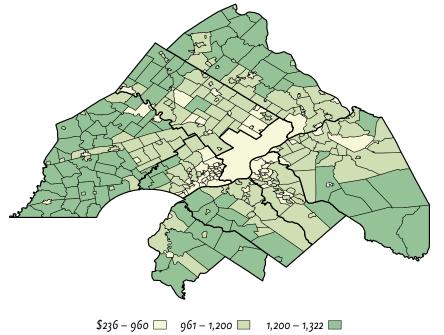
### indicator 7.3: transportation costs: homeowners

The preceding information raises an important issue: can we estimate the costs that households pay for transportation by virtue of their location and commuting preferences? This question is being systematically addressed by the Center for Neighborhood Technology (CNT) and the Center for Transit Oriented Development (CTOD), in partnerships with researchers at Virginia Polytechnic Institute and the Brookings Institution.<sup>4</sup> We have been able to arrange the extension of

their pilot work (done in Minneapolis) to the Philadelphia metropolitan area. The CNT/CTOD indicator estimates household specific transportation costs for each census tract, using known variations by housing tenure, household size, and income levels. It also estimates vehicle miles traveled (VMT) per automobile based on comparisons between the National Personal Transportation Survey and census tract characteristics. By aggregating these costs to the mu-

nicipal level, we are able to generate estimates of community wide transportation costs that "fit" the characteristics of these communities.

Map 7.3 presents the variation in monthly transportation costs for homeowners. What is apparent, especially by cross-referencing this map with Map 7.1, is that the lowest homeowner transportation costs are found in the Urban Centers of the region, and in those suburban communities with the densest public transportation links. These differentials in transportation costs are also apparent across our community typology, as Urban Centers average \$867 per household, while households in Middle Class Suburbs spend an average of almost \$300 per month more (See Figure 7.3).



MAP 7.3: Homeowner transportation costs per month

Source: Philadelphia PMSA Pilot Transportation Cost Estimates, ©2005 Center for Neighborhood Technology and Center for Transit Oriented Development.

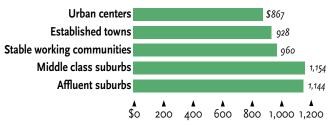
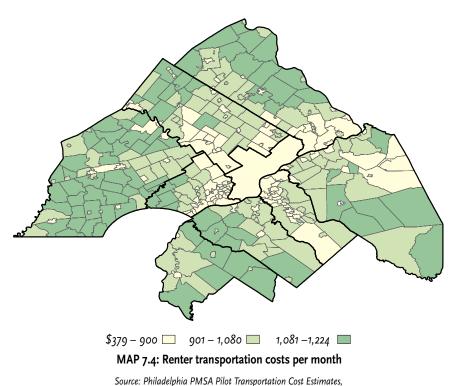


FIGURE 7.3: Average homeowner transportation costs per month, by community type

Source: Philadelphia PMSA Pilot Transportation Cost Estimates, © 2005 Center for Neighborhood Technology and Center for Transit Oriented Development.

Renter households, while affected by similar socioeconomic and demographic factors, show a different distribution of monthly transportation costs across the communities of the region, as seen in Map 7.4. Renter transportation costs are lower because of their higher use of public transportation and lower vehicle ownership rates. The distribution of lower cost

transit communities is spatially more extensive, reflecting the mass transit system seen in Map 7.1. The comparison of renter household transportation costs (Figure 7.4) across community types provides further evidence of the lower costs paid by renters overall, with the gap between the Urban Centers and Affluent Suburbs being slightly less than was seen for homeowner costs.



© 2005 Center for Neighborhood Technology and Center for Transit Oriented Development.

Urban centers \$753

Established towns 832

Stable working communities 845

Middle class suburbs 1,021

Affluent suburbs 1,025

\$0 200 400 600 800 1,000 1,200

FIGURE 7.4: Average renter transportation costs per month, by community type

Source: Philadelphia PMSA Pilot Transportation Cost Estimates, © 2005 Center for Neighborhood Technology and Center for Transit Oriented Development.

# chapter 8 the regional economy

As the Philadelphia regional economy has broadened the employment centers beyond traditional urban centers, understanding the different scale of opportunities and development is vital. In previous years we have depended upon annually issued data from the U.S. Census Bureau's Zip Code Business Patterns data base. This year we have turned to data collected from employers as a part of their worker's compensation filings with the states of Pennsylvania and New Jersey. These data allow a more precise indication of the employment of workers at locations within the communities of the region (discussed more completely in the Technical Appendix of this report). As in prior years, we focus on overall patterns of employment, as well as key employment sectors: manufacturing, the creative economy, educational and medical institutions ("eds and meds") and travel/tourism.

indicator 8.1: employment centers of the region

indicator 8.2: manufacturing employment

indicator 8.3: creative economy employment

indicator 8.4: eds and meds employment

indicator 8.5: travel and tourism employment

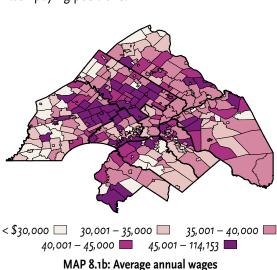
### indicator 8.1: employment centers of the region

Business locations and employment centers of the Philadelphia region have decentralized and organized around new centers in many suburban areas. Map 8.1a shows the top 25 overall employment centers of the region, indicating that the major job centers, based on address-specific data, are still concentrated in the city, and that the suburban clusters of greatest employment are either immediately adjacent to the city or are linked via such major transportation links as the Schuylkill Expressway, Rt. 202, I-95 and I-295. These 25 job centers represent 46 percent of all jobs in the region.

Using ES-202 data set (collected as a part of

well-paying positions. Top 25 job centers

MAP 8.1a: Regional employment centers Sources: PA and NJ Departments of Labor, ES202, 2004.<sup>5</sup> worker's compensation insurance), we can determine the distribution of compensation across the region. In Map 8.1b, the distribution of average wages across the region differs from that of jobs. As this map indicates, while some of the better paying jobs cluster in central Philadelphia and Camden, it is suburban locations that command the highest wages, especially along the Rt. 202 corridor in Montgomery and Chester counties, and in the job centers near Marlton and Mt. Laurel in Burlington County. Many of the communities associated with manufacturing decline along the lower Delaware River still maintain a core of relatively



Sources: PA and NJ Departments of Labor, ES202, 2004.

Figure 8.1 presents average wages across metropolitan areas, which suggest that Philadelphia falls in the middle of the comparison group, with Boston, Detroit, Chicago and Minneapolis generating higher average wages. These wage differences are very likely affected by metropolitan area specific variations in the cost of living. As chapter 6 shows, for instance, increases in the cost of housing in Boston have outstripped increases in income levels, suggesting that the wages paid in Boston are driven by differences in job types as well as costs of living.

#### FIGURE 8.1: Average annual wages by metropolitan area, 2004

Baltimore	\$41,815
Boston	52,976
Chicago	45,181
Cleveland	39,172
Detroit	45,798
Minneapolis	45,064
Philadelphia	45,008
Phoenix	38,816
Pittsburgh	37,821

Source: Bureau of Labor Statistics, Current Employment Statistics, 2005.

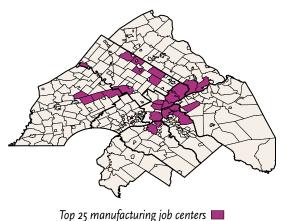
### 50 the regional economy

### indicator 8.2: manufacturing employment

The regional economy has strong historical roots in the manufacturing sector, and while this sector has shrunk in overall importance as a job generator, it retains particular importance for many communities in the Delaware Valley. The information presented in Map 8.2 suggests that the top 25 manufacturing employment centers (representing 47 percent of all manufacturing jobs) reflect both old and new regional trends. The clustering of manufacturing employment in older areas of Philadelphia, Camden, and along

the I–95 corridor in Northeast Philadelphia and Bucks County is a straightforward extension of the traditional manufacturing expansion that generated much of Philadelphia's regional economy through the 1960s. The impact of later development along the Rt. 202 corridor in Chester County, and the development of newer employment clusters in upper Montgomery, Camden, and Burlington counties suggest that some decentralization of manufacturing has occurred.

When we examine our comparison metropolitan areas for the share of employment accounted for by the manufacturing sector (Figure 8.2a), Philadelphia ranks lower in manufacturing share than all but Baltimore and Phoenix, with fewer than 1 in 10 jobs accounted for by this sector. Yet the importance of this sector's employment for the income base of regions is apparent in Figure 8.2b, where Philadelphia's average wage of \$56,750 places it third in the comparison group, behind Boston and Detroit.



MAP 8.2: Manufacturing employment

Sources: PA and NJ Departments of Labor, ES202, 2004.

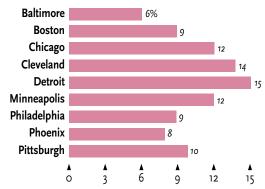


FIGURE 8.2a: Employment share by metropolitan area, manufacturing sector, 2004

Source: Bureau of Labor Statistics, Current Employment Statistics, 2005.

# FIGURE 8.2b: Average wages by metropolitan area, manufacturing sector, 2004

Baltimore	\$55,310
Boston	66,540
Chicago	51,280
Cleveland	48,920
Detroit	63,001
Minneapolis	55,723
Philadelphia	56,750
Phoenix	53,857
Pittsburgh	47,450

Source: Bureau of Labor Statistics, Current Employment Statistics, 2005.

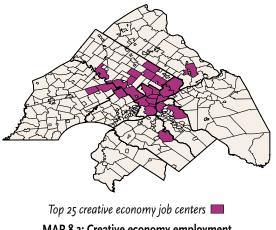
At a national level, there is a growing awareness that creative business activities, both in the arts and in other sectors of the economy, are an important component of city and regional economic bases. Based on Richard Florida's work on the rise of the creative class and its importance for urban communities, and extended by John Howkins' analysis of the components of a "creative economy,"6 we aggregated the employment data in more than a dozen types of businesses, including advertising, architecture, art, design, fashion, film, music and other performing arts, publishing, research and development, software,

TV and radio, and video games to estimate this aspect of the regional economy.

The employment centers across the region presented in Map 8.3 (with the top 25 employment centers representing 54 percent of the region's employment in this sector) reflect the overall pattern of regional employment concentrations seen earlier in Map 8.1. Philadelphia and the Rt. 202 corridor dominate as centers of employment, but there are clear signs that suburban employment centers in Montgomery County and in selected areas of New Jersey (e.g., Cherry Hill

and Washington Township, Gloucester County) are also sources of employment in this sector.

The comparison of employment share information for metropolitan areas is presented in Figure 8.3 (with the exception of Baltimore, whose information is aggregated by Florida into the broader Washington, DC metropolitan area). In this measure of the size of the creative class. Philadelphia's share of nearly one-third of the employees of the region (nearly one million, by Florida's estimate) places it slightly behind Boston and Minneapolis in employment share.



MAP 8.3: Creative economy employment

Sources: PA and NJ Departments of Labor, ES202, 2004.

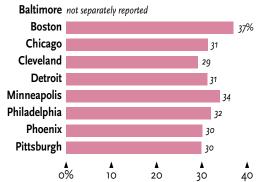


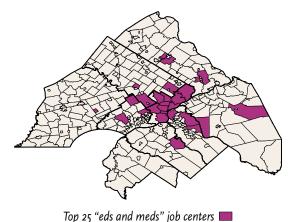
FIGURE 8.3: Employment share by metropolitan area, creative class sector, 2004

Source: Richard Florida. The Rise of the Creative Class, New York: Basic Books, 2002, pp. 368-369.

### indicator 8.4: eds and meds employment

We have included the education and medical sectors (the "eds and meds") in this year's report, as it represents an important employment and regional economy force Map 8.4 presents the top 25 centers of employment in this sector, which contain over 54 percent of the jobs in this sector. Philadelphia's centrality in this sector is immediately apparent, but is complemented by important suburban locales such as Radnor, Upper and Lower Merion, West Chester, Doylestown, Washington Township Cherry Hill, Voorhees, Marlton, and the Browns Mills area of Burlington County.

Compared to other metropolitan areas, Philadelphia ranks with Pittsburgh and slightly higher than Boston in the top tier of regional economy shares for this sector (Figure 8.4a). While an important employment sector, average wages trail the manufacturing sector. Philadelphia ranks third in the comparison of average wages, behind Boston and Phoenix (Figure 8.4b).



MAP 8.4: Education and medical employment

Sources: PA and NJ Departments of Labor, ES202, 2004.

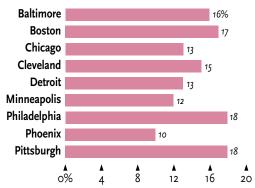


FIGURE 8.4a: Employment share by metropolitan area, educational and medical sector, 2004

Source: Bureau of Labor Statistics, Current Employment Statistics, 2005.

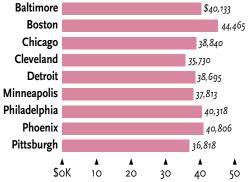


FIGURE 8.4b: Average wages by metropolitan area, educational and medical sector, 2004

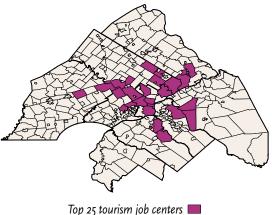
Source: Bureau of Labor Statistics, Current Employment Statistics, 2005

We continue to track travel and tourism employment in the region, given the importance of this sector in discussions of regional economic development. Map 8.5 indicates the locations of the top 25 job centers of the region, representing over 47 percent of the jobs in this sector. The geographic pattern of employment opportunities in this sector is similar to other employment patterns, in that communities within Philadelphia, and in adjacent suburbs, as well as some

along the Rt. 202 corridor, and highway-sensitive communities (I–95, I–295, NJ Turnpike) generate employment in this sector, likely through "convenience" firms (e.g., concentrations of hotels/motels and restaurants near turnpike and interstate highway interchanges).

In comparing Philadelphia to other metropolitan areas, it has the lowest share of employment in this sector (see Figure 8.5a). Phoenix and Pittsburgh have 10 percent of their employment in

this sector, while Philadelphia has eight percent. And while many tout this as an important sector for the regional economy, it is apparent from the information presented in Figure 8.5b that the wages paid in this sector trail other sectors of the economy. Philadelphia's average of slightly less than \$18,000 per year places it behind Boston, Phoenix and Chicago; the comparatively low annual salary level suggests that the seasonal and often part-time work in this sector will constitute an economic challenge for employees.



MAP 8.5: Travel and tourism employment

Sources: PA and NJ Departments of Labor, ES202, 2004.

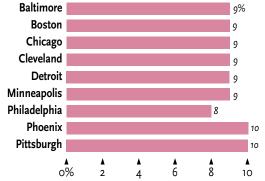


FIGURE 8.5a: Employment share by metropolitan area, leisure and hospitality sector, 2004

Source: Bureau of Labor Statistics, Current Employment Statistics, 2005.



FIGURE 8.5b: Average wages by metropolitan area, leisure and hospitality sector, 2004

Source: Bureau of Labor Statistics, Current Employment Statistics, 2005

# chapter 9 government and taxes

The cost of providing public services is steadily rising, prompting local governments to search constantly for increased revenues to pay for trash collection, water and sewer services, police and fire protection, street repairs, and amenities like parks and libraries. This section examines local government revenues, looking at the changing revenue picture in recent years, the differential tax burdens borne by residents in different parts of the region, and the allocations from the state governments in New Jersey and Pennsylvania that help to relieve local fiscal burdens.

indicator 9.1: change in municipal revenue

indicator 9.2: municipal debt

indicator 9.3: local tax burden

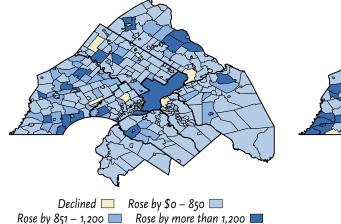
indicator 9.4: state aid to municipalities

### indicator 9.1: change in municipal revenue

In last year's edition, we showed the dollars available to pay for public services differed substantially in different parts of the region. This year, we look at the changes in municipal revenues during a recent five-year period. Map 9.1a shows changes from 1998 to 2003 in the total dollars per citizen that local officials in different municipalities had at their disposal to support local government services.

Not only wages, but also rapidly-rising fringe benefits, are driving up the cost to deliver public services at their current levels. However, the pattern in the region is not one of universal increases paralleling the rising consumer price index. Rather, Map 9.1a shows that the rate of change varied considerably across communities. A handful of communities actually experienced declines in the dollars available per person to pay for public services. The largest number of communities saw increases up to \$850 per person, but many municipalities had greater growth, including about two dozen local governments that increased their revenues more than \$1200 per person.

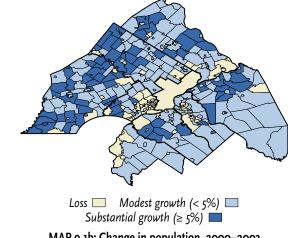
The big increases in revenues per person largely occurred in communities experiencing the most substantial population growth during this five-year period. Compare the revenue pattern



MAP 9.1a: Change in municipal revenue per person, 1998-2003

Sources: NJ Department of Community Affairs, 2002–2003; PA Department of Community and Economic Development, 2002–2003.

in Map 9.1a to the population growth pattern depicted in Map 9.1b. Many of the darkest areas in Map 9.1b (the communities that gained five percent or more in population between 2000 and 2003) are among the communities that showed substantial increases in revenue per person. Philadelphia is an exception; its revenues per person increased significantly even while its population shrank. (One reason is that the proportion of persons needing public services grows as populations diminish, so municipalities with declining populations inevitably see some rise in costs per person requiring higher



MAP 9.1b: Change in population, 2000–2003

Source: U.S. Census, Population Estimates Program, 2003.

revenues.) Comparing the two maps, we also see a handful of exceptional cases where high population growth was not associated with significant revenue increases per person (for example, Warrington and East Rockhill townships in Bucks County, and Oxford Borough at the western edge of Chester County). However, the most common pattern is for rapid population increases to produce not only higher costs in proportion to growing population numbers, but also higher costs per person. Rapid population increases typically drive up the need for revenues even faster than the rate of population increase.

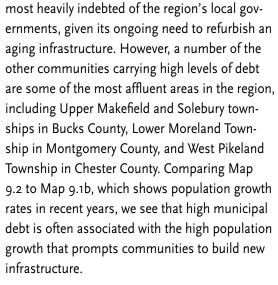
### 56 government and taxes

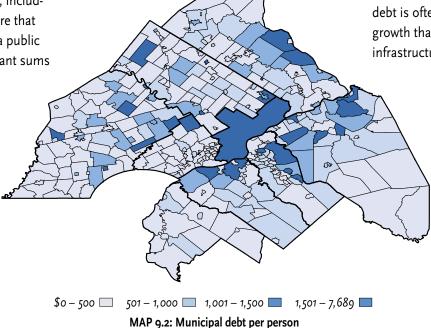
### indicator 9.2: municipal debt

Ever since the early days of the republic, local governments have borrowed money to finance large-scale public works like turnpikes, canals, and rail systems. These days, local governments continue to acquire debt for purposes such as constructing public buildings or extending water and sewer systems.

Municipalities typically have debt ceilings that limit their borrowing to a percentage of the assessed property value within their boundaries. To further restrain borrowing, most states, including Pennsylvania and New Jersey, require that elected officials gain voter approval in a public referendum before they borrow significant sums for public projects.

Map 9.2 shows the level of debt per person that is carried by the municipalities of the region. (Note that the map only takes into account "general obligation debt" which is repaid by annual allocations from municipal budgets. It does not include the sometimes-large amounts of additional borrowing by quasi-public agencies responsible for local projects and facilities.) It is predictable that Philadelphia ranks among the





Sources: NJ Department of Community Affairs, 2002–2003; PA Department of Community and Economic Development, 2002–2003. While the tax laws in Pennsylvania give local governments a wider range of local revenue sources to tax, compared with fewer tax options in New Jersey, real estate taxes comprise the single largest source of revenues for municipalities in both states (with the notable exception of Philadelphia, whose wage tax generates larger revenues than its property tax, and whose business taxes also produce significant sums).

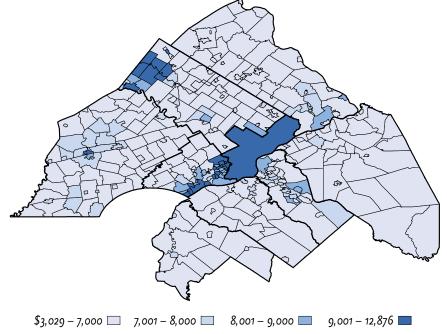
Maps 9.3a and 9.3b display the combined state and local tax burden that would be imposed by different municipalities on a hypothetical household

earning the median income for the region (\$51,980) and owning a house priced at the average market value for the region (\$174,044). To rule out one-year aberrations for municipalities, we averaged three years of data for 2001–2003. The difference between the two maps is that in the suburbs, Map 9.3a assumes the wage earners in this hypothetical household are employed outside Philadelphia, whereas Map 9.3b assumes those same suburban earners are employed in the city and therefore subject to Philadelphia's wage tax. In both scenarios, disproportionately high burdens are faced by residents of Philadelphia, along with a number of other communities near the Delaware River in Delaware County. Interestingly, the maps also identify a cluster of communities near the northern boundary of Montgomery County that bear high tax burdens in both scenarios.

When our survey asked households across the region whether they considered their tax bills high in comparison to the public services they received, the results showed that residents in Philadelphia and in the New Jersey

suburbs were far more likely than respondents in the Pennsylvania suburbs to see their tax bills as very high or high (Figure 9.3a). And yet neither Philadelphians nor New Jersey respondents expressed significant support for substituting fees for the taxes they now pay (Figure 9.3b). Households in the Pennsylvania suburbs were far more favorable about paying fees for services.

Concerning the fairness of different types of taxes, we found general agreement among Pennsylvanians about the drawbacks of property taxes; about half of the households in Philadelphia and the Pennsylvania

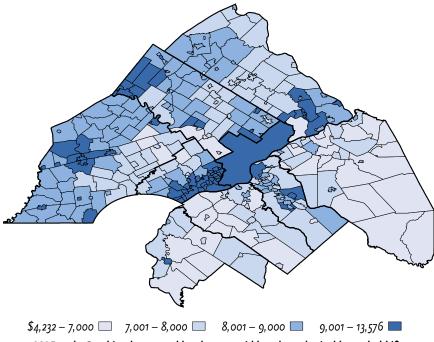


MAP 9.3a: Combined state and local taxes paid by a hypothetical household if suburban earners work outside of Philadelphia

Sources: U.S. Census, American Community Survey, 2004; NJ Department of Community Affairs, 2001–2003; PA Department of Community and Economic Development, 2001–2003. PA State Tax Equalization Board.

### indicator 9.3: local tax burden (con't)

suburbs think property taxes are unfair (Figure 9.3c). A somewhat higher proportion of New Jersey respondents label the property tax unfair. When it comes to paying taxes on wages, Philadelphians are far more likely than suburbanites on either side of the Delaware River to regard this tax as unfair. This is hardly surprising, since Philadelphians pay the highest wage tax. Suburbanites in both states express a higher tolerance for sales taxes than do Philadelphia residents.



MAP 9.3b: Combined state and local taxes paid by a hypothetical household if suburban earners work in Philadelphia

Sources: U.S. Census, American Community Survey, 2004; NJ Department of Community Affairs, 2001–2003; PA Department of Community and Economic Development, 2001–2003. PA State Tax Equalization Board.

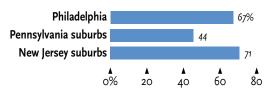


FIGURE 9.3a: Taxes for public services are Very High or High

Source: Temple University, Philadelphia Metropolitan Area Survey, 2005.

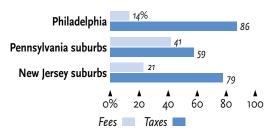


FIGURE 9.3b: Which is a fairer way to pay for public services: fees or taxes?

Source: Temple University, Philadelphia Metropolitan Area Survey, 2005.



FIGURE 9.3c: Think property taxes/wage taxes/sales taxes are unfair

Source: Temple University, Philadelphia Metropolitan Area Survey, 2005.

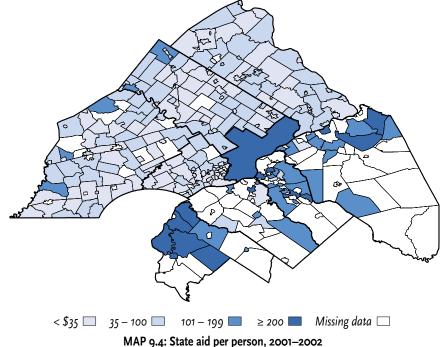
The dollars spent by local governments come not only from local taxes, but also from state government. To a significant degree, the transfer of state tax dollars down to local governments is justified by the idea that state distributions can help compensate for the inequalities in resources available to local governments. The tax base for generating municipal revenues differs dramatically from community to community. Older industrial cities and boroughs have suffered losses in households and businesses, both of which have moved to newer communities in search of better housing, schools, and safer communities. As a result of these losses, the value of taxable real

estate and business enterprise has not kept pace with the need for tax revenues. Often, spending needs are greatest where taxable resources are the most limited.

Map 9.4 portrays the amount of state aid per capita that flowed from Harrisburg and Trenton to local governments in the region in 2002, the most recent year for which these numbers were available. (Note that the state funding depicted in Map 9.4 is only for

municipal purposes; it does not include school district funding. The white spaces on the map cover areas for which information was unfortunately not available.) Clearly, the city of Philadelphia benefits from state aid at a higher level than do its neighboring suburbs. That is partly explained by the fact that Philadelphia functions as both a local government and a county, providing all the services that county governments provide, and receiving some state aid to help support county functions. (We note also that Philadelphia benefits from state law enabling it to levy a wage tax on commuters from surrounding suburbs.) Outside of Philadelphia, the map reveals

little evidence that Pennsylvania channels more aid toward poorer communities. In fact, some of the most affluent communities in the region located at the intersection of Delaware, Montgomery and Chester counties, received some of the larger allocations to the Pennsylvania suburbs. This is consistent with the findings of a recent analysis showing that Pennsylvania state aid does little to address inequalities between affluent and poor municipalities in the region.<sup>7</sup>



Source: U.S. Census, Census of Governments, 2002.



This section looks at both the problems faced by, and the strong efforts being made by, the school districts of the region. Unlike most other sections of this report, this one uses school districts as reporting units. Although the region contains 353 municipalities, its residents are served by 196 school districts whose boundaries do not necessarily coincide with the boundaries of municipalities. The good news in this section is that numerous school districts have substantially increased their investments in schools during the past five years, and even some of the less generously funded districts are attaining standardized test results above what would be expected of schools facing their challenges. Unfortunately, the news with regard to higher education remains decidedly mixed. Wide variations persist in the SAT scores achieved by college-bound seniors, and we observe dramatic differences in college attendance and completion rates in different parts of the region.

indicator 10.1: spending increases for schools

indicator 10.2: high value-added school districts

indicator 10.3: high school graduates attending college

indicator 10.4: SAT scores

This indicator tracks the increases in spending per pupil during a recent five-year period.

Spending by school districts differs significantly among the 196 school districts in our region.

Map 10.1 focuses on the changes in the dollar amount spent by different districts between 1999 and 2004. Chester County and the western half of Delaware County stand out as parts of the region where school spending has been increasing the most rapidly. This is not surprising, since they contain some of the fastest growing and most affluent communities in the region. The

three New Jersey counties of Camden, Gloucester and Salem show slower growth in school spending than do the Pennsylvania counties. Among the few New Jersey school districts experiencing increases of over \$3,000 per pupil are Camden City, Gloucester City, and Pemberton, three of the so-called "Abbott Districts" whose tax bases have been deemed insufficient to finance local schools. The state of New Jersey has allocated disproportionate aid to these districts.

Despite the fact that the New Jersey suburbs generally lagged behind the Pennsylvania sub-

urbs in spending increases during this period, New Jersey residents were more likely than those living in the Pennsylvania suburbs to say that the quality of the public schools in their communities had increased during the prior five years (Figure 10.1a). With respect to the amount of money currently being spent on local public schools, the majority of suburban households on both sides of the Delaware River described funding levels as "about right," but fully two-thirds of Philadelphians said "not enough" money is spent on their public schools (Figure 10.1b).

FIGURE 10.1a: Change in quality of schools over the past five years

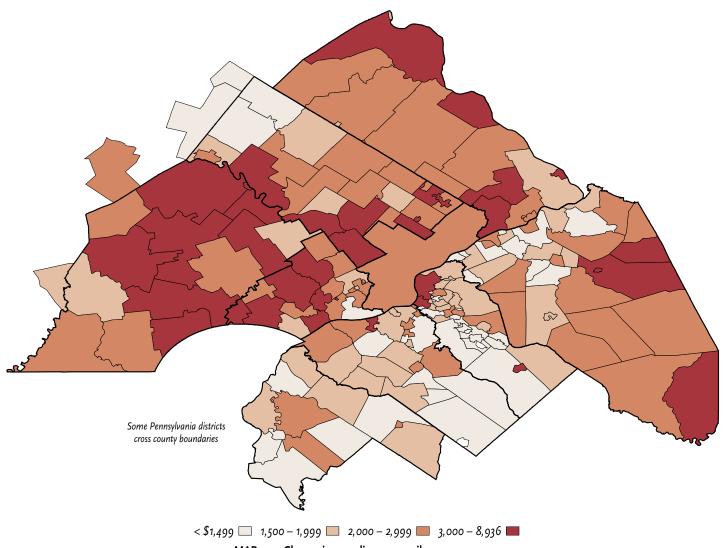
	Quality increased	Quality decreased	Quality stayed the same	, Don't know
Philadelphia	20 %	37 %	39 %	4 %
Pennsylvania suburbs	31	16	48	4
New Jersey suburbs	45	15	34	6

Source: Temple University, Philadelphia Metropolitan Area Survey, 2005.

FIGURE 10.1b: Amount of money spend on local public schools

	Too much	Not enough	About right	Don't know
Philadelphia	5 %	67%	24%	4%
Pennsylvania suburbs	25	18	54	4
New Jersey suburbs	23	21	52	5

Source: Temple University, Philadelphia Metropolitan Area Survey, 2005.



MAP 10.1: Change in spending per pupil, 1999–2004

Sources: NJ and PA Departments of Education, 1999–2004.

The scores earned by students on standardized tests are often directly related to the characteristics of the communities in which they are located. We know from prior research, for example, that schools serving communities with high rates of poverty are likely to produce lower test scores than schools serving more affluent populations. We also know that some school characteristics, like small class sizes, are associated with higher test scores.

To create this indicator, we conducted a statistical analysis which showed that when we use information about five basic characteristics of schools and communities (see Technical Appendix), we can predict 75 percent

of the variation in the share of 8th graders who are achieving passing scores on standardized reading and math tests. We then used those five characteristics to estimate the expected pass rate on standardized 8th grade reading and math tests for every school district in the region. We discovered a number of districts whose test scores exceeded what our statistical analysis predicted they would be able to achieve, given their school and community characteristics. Map 10.2 portrays those districts who can boast that the share of their 8th grade students earning passing grades on standardized reading or math tests exceeds the expected pass rate by 10 percentage points or more. We call these "high value-added districts."

The map shows that more districts exceeded expectations on standardized math tests than on reading tests. Five school districts have the distinction of exceeding their predicted performance on both reading and math tests:

Norristown and Pottstown in Montgomery County, Chester-Upland in Delaware County, Bristol Borough in Bucks County, and Quinton Township in Salem County. Note that the highest-scoring school districts in the region do not appear on Map 10.2 because their high scores are no more than one would expect from districts with their population and school characteristics.



MAP 10.2: School districts that exceeded by 10 percent or more their predicted pass rates on 8th grade reading and math tests, 2004

Source: NJ and PA Departments of Education, 2004.

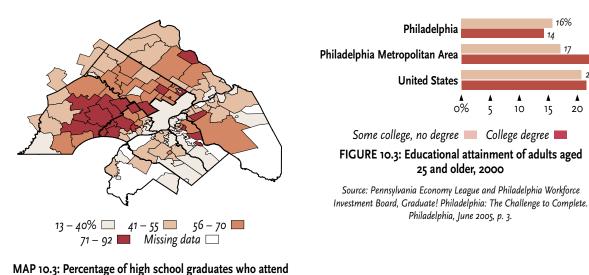
### indicator 10.3: high school graduates attending college

One way that parents and other community residents evaluate the quality of their local public schools is by the proportion of students who enter four-year colleges after completing high school. Indeed, Figure 11.1b in the next section of this report suggests that in the opinion of the respondents to our regional household survey, the percent of graduates enrolling in four-year colleges ranks as the single most important indicator of school quality.

Map 10.3 depicts the percent of students graduating from each school district who enrolled in four-year colleges. (Note that some areas in New

Jersey lack any color coding because their local public schools cover only the elementary grades, after which students are sent to consolidated high schools in other communities.) Map 10.3 shows the highest rates of college attendance among high school graduates from a cluster of affluent suburban communities spreading westward from the border that divides Chester and Delaware counties. Few districts in New Jersey produce the highest rates of college enrollment, the exceptions being Moorestown in Burlington County, and the Camden County districts of Berlin, Haddonfield, and Voorhees.

Within the last year, the Pennsylvania Economy League and the Philadelphia Workforce Investment Board have drawn attention to comparatively low rates of college completion as an issue that deserves more attention in the Philadelphia metropolitan area. As Figure 10.3 suggests, this is primarily a problem for the city of Philadelphia, where the share of the population that starts college, but does not finish a degree, is actually higher than the percentage earning college degrees. However, despite this problem in Philadelphia, college completion rates for the region as a whole compare favorably with the national average.



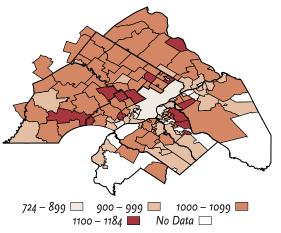
four year colleges

Sources: NJ and PA Departments of Education, 2003-2004.

indicator 10.4: SAT scores mpip 2006

Since it is taken by college-bound seniors across the nation, the SAT is used by college admissions officers to compare groups of students coming from schools with widely differing resources, educational programs, and grading practices. The test aims to measure students' skills in verbal reasoning, critical reading, and math problem solving. Map 10.4 shows the average combined scores for the verbal and quantitative portions of the SAT in each school district in our region. To make sure the scores were not reflecting only one-year aberrations for individual school districts, we averaged SAT scores over three succeeding test years, 2002–2004. Figure 10.4a documents a substantial gap in test scores

between the cities of Philadelphia and Camden and the rest of the metropolitan area. It would be a mistake, however, to assume that suburban high schools uniformly produce high test scores. Figure 10.4b illustrates the dramatic differences in SAT scores achieved at different high schools located within a single county. For students taking the SAT test in 2004, Figure 10.4b displays the point difference in the average combined Verbal/Math scores at the highest-scoring high school versus the lowest scoring high school. While the widest gap occurred in Philadelphia, we also see substantial gaps in Delaware and Camden counties. The smallest variation between the highest-scoring and lowest-scoring high schools was observed in Gloucester County.



MAP 10.4: Average combined SAT score, 2002–2004

Sources: NJ and PA Departments of Education, 2002-2004.

FIGURE 10.4a: Average SAT scores, 2002-2004

Verbal	Math	Combined verbal/math
409	419	828
379	384	763
500	509	1010
499	507	1006
506	518	1024
	409 379 500 499	409 419 379 384 500 509 499 507

Sources: NJ and PA Departments of Education, 2002–2004; College Board, 2002–2004.

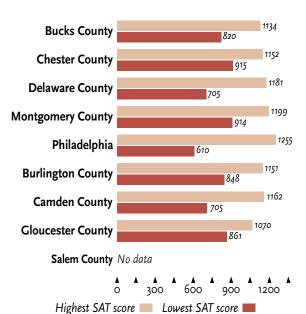


FIGURE 10.4b: Scoring difference between schools with the highest and lowest average combined SAT scores, 2004

Source: Philadelphia Inquirer, 2005 Report Card on the Schools, March 6, 2005.

### 66 education



KIMBERLY GOYETTE, Assistant Professor of Sociology, Temple University

School quality is important to residents of the Philadelphia Metropolitan region for several reasons. For families whose children are enrolled in the local school district, the quality of the schools affects their youngsters' experiences every day. Even for households without school-aged children, school quality may influence their community's future prospects, since well-regarded schools can attract residents to communities, raising the property values in those neighborhoods. Using the Philadelphia Metropolitan Area Survey of Fall 2005, this section reports on how the region's residents regard the quality of the schools in their community.

indicator 11.1: perceptions of school quality

indicator 11.2: influences on school choice

indicator 11.3: factors affecting the decision to change schools

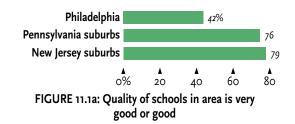
indicator 11:4: schools as a reason to choose a community

indicator 11:5: race and school choice

### indicator 11.1: perceptions of school quality

mpip 2006

Our survey asked all respondents in the nine county region (including those with school-aged children and those without children enrolled in schools) to evaluate the quality of the public schools in their area. The differences between the perceptions of Philadelphians and suburban respondents are striking. Over three-quarters of respondents in the Pennsylvania and New Jersey suburbs judged their area schools to be either "very good" or "good," while the comparable percentage in Philadelphia was more than 30 percentage points lower (Figure 11.1a).



Source: Temple University, Philadelphia Metropolitan Area Survey, 2005.

Families may use information about the quality of public and private schools in the area to make decisions about where to send their children to school. Because of this, it is important to understand the types of information that households use to judge school quality. Of the characteristics that may indicate a quality school, five stood out as the most frequently chosen indicators. Three involved patterns of achievement by students (going on to four-year colleges, getting jobs after graduation, passing standardized tests), while two focused on the delivery of instruction (small class size and up-to-date resources like textbooks and computers) (Figure 11.1b).

## FIGURE 11.1b: Characteristics that indicate school quality

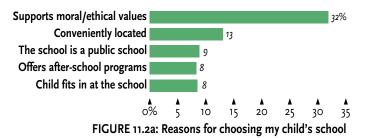
Students going on to 4-year colleges	24 %
Small class size	18
Up-to-date resources	18
Students getting jobs after graduating	10
Students passing standardized tests	9
Money spent per student	4
School curriculum	3
Well-kept school environment	3
Experienced teachers	2

Source: Temple University, Philadelphia Metropolitan Area Survey, 2005.

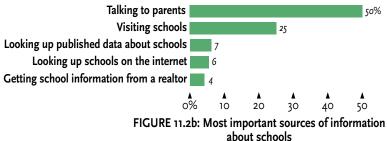
### indicator 11.2: influences on school choice

Families choose particular schools for their children for many different reasons in addition to school quality. When households with school-aged children were asked what additional factors influenced their choice of the school their children would attend, by far the most frequently chosen factor was the school's support for the moral or ethical values held by the family. Other factors that were mentioned often, although not nearly as often as the school's values, were its location, its status as a public school, its after-school programs, and a sense that one's own child would fit in at the school (Figure 11.2a).

Families may get information about schools in a variety of ways. However, Figure 11.2b shows that two sources are considered by far the most important sources by the respondents to our survey: other parents and school visits. It appears that despite massive efforts to give citizens access to published data about schools under the federal No Child Left Behind Act, published information remains far less influential than other ways of assessing schools.



Source: Temple University, Philadelphia Metropolitan Area Survey, 2005.



Source: Temple University, Philadelphia Metropolitan Area Survey, 2005.

### indicator 11.3: factors affecting the decision to change schools

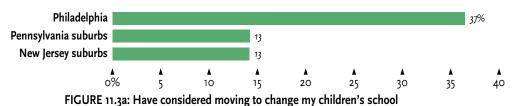
mpip 2006

Most families in the Philadelphia metropolitan area are satisfied enough with their children's schools not to consider moving in order to gain access to better schools. The responses reported in Figure 11.3a are consistent with the views of the quality of local schools expressed by our respondents in indicator 11.1 reported earlier. Given the extremely favorable assessment of school quality by suburban respondents in both Pennsylvania and New Jersey, it is not surprising that only 13 percent of suburban respondents had ever considered moving to secure a better

education for their youngsters. The less favorable perceptions of school quality expressed by Philadelphians mean they were far more likely to report they had considered moving to change their children's schools.

When we asked respondents whether they had ever in fact changed their children's schools because they felt the children were not thriving in their previous schools, the drop-off from the percentages reported in Figure 11.3a was considerable. Far fewer households had ever actually made such a move (see Figure 11.3b). Although

Philadelphians were more likely to want to change, they were less likely to have made a change. The most important reason given for not following through on a desire to change was because the children's situations improved in their present schools. However, other important reasons for not changing schools were that the households could not afford the tuition at alternative schools, they could not afford the cost of moving, or the children themselves had not wanted to change (Figure 11.3c).



Source: Temple University, Philadelphia Metropolitan Area Survey, 2005.

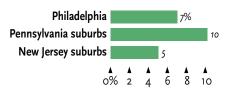


FIGURE 11.3b: Have changed my children's school

Source: Temple University, Philadelphia Metropolitan Area Survey, 2005.

#### FIGURE 11.3c: Reasons for not changing schools

Children's situation improved	40%
Could not afford tuition	22
Could not afford to move	11
Children did not want to move	6
Children were not accepted	3
Could not arrange transportation	3
Could not find better alternative	3

Source: Temple University, Philadelphia Metropolitan Area Survey, 2005.

#### indicator 11.4: schools as a reason to choose a community

The quality of a neighborhood's schools often has an impact on a family's decision to move to that particular community. That is certainly true of the residents of the Philadelphia metropolitan area. In Figure 11.4, we see that in the suburbs of Pennsylvania and New Jersey, nearly half of all respondents said the quality of schools had been a very important factor in their decision to move to the community in which they currently live. Only about a third of Philadelphia respondents reported that school quality had been a very important influence in where they chose to live. In our regional surveys of recent years, only safety and housing costs ranked higher than the quality of schools as reasons why people chose the communities where they live.

FIGURE 11.4: Schools as a reason to choose a community

	Very important	Important	Not very important	Not at all important
Philadelphia	31%	30%	10%	29%
Pennsylvania suburbs	46	25	14	14
New Jersey suburbs	50	18	11	19
Region as a whole	43	25	12	20

Source: Temple University, Philadelphia Metropolitan Area Survey, 2005.

To learn more about the effects of race on families' schooling decisions, we asked our respondents how likely they would be to send their own children to hypothetical schools that are safe and of high quality, but with different racial compositions within the student body. When our question described a hypothetical school as having an "equal balance of White, Black, and other minority children," households generally responded favorably. In both the city and suburbs, over 80 percent said they would either be likely or very likely to send their children to such a school (Figure 11.5).

Families were somewhat less positive about sending their children to schools with mostly White children. Those who live in Philadelphia appear to be the most willing to send their children to mostly White schools, followed by the New Jersey suburbs and the Pennsylvania suburbs. Interestingly, though, more Philadelphians than suburban respondents exhibited resistance to sending their children to mostly White schools. A larger share of Philadelphians said they were unlikely or

very unlikely to choose mostly White schools. (The reason why city respondents were more likely than suburbanites to both favor and disfavor mostly White schools is that Philadelphians were less likely than suburbanites to choose the neutral middle response among the 5 choices.)

Mostly Black schools appear the least popular of the three hypothetical types of schools. A greater percentage of Philadelphia households than of suburban households reported they would be very likely to send their

children to mostly Black schools. A higher percentage of respondents in the New Jersey suburbs reported being very unlikely to send their children to mostly Black schools than in either the Pennsylvania suburbs or the city of Philadelphia.

FIGURE 11.5: Likelinood of sending my	child(ren) to a	school with:
	Danneylyania	Now large

Philadelphia	Pennsylvania suburbs	New Jerseγ suburbs
White, Black, ot	her minority child	dren
62%	64%	47%
25	27	41
8	8	11
3	1	1
1	0	1
en		
37%	26%	31%
27	34	34
17	28	21
12	8	8
7	2	6
en		
26%	12%	16%
34	31	22
20	36	21
12	13	23
8	9	17
	FWhite, Black, ot 62% 62% 25 8 3 1 en 37% 27 17 12 7 en 26% 34 20 12	Philadelphia suburbs  FWhite, Black, other minority child 62 % 64 % 25 27 8 8 8 3 1 1 0  Pen  37 % 26 % 27 34 17 28 12 8 7 2  Pen  26 % 12 % 34 31 20 36 12 13

Source: Temple University, Philadelphia Metropolitan Area Survey, 2005.



Indicators of the region's environmental conditions suggest positive engagement with the protection of open space, but also some of the environmental pressures that can be expected in very large metropolitan areas. Signs of environmental awareness are present as states, counties, and communities provide for green space and for remediation of environmental damage. Our survey revealed evidence of environmental awareness as well. Signs of continuing environmental stress are evident, however, in both the level of hazardous wastes and airborne risks evident across the region. In this year's report, we document the association of vacant properties, lower incomes and lower home values in communities with flood zone and airborne risk exposures.

indicator 12.1: parks and protected lands

indicator 12.2: proximity to superfund and regulated disposal sites

indicator 12.3: flood zone impacts

indicator 12.4: airborne risk impacts

In chapter 1, an image of the Delaware Valley gained from satellite data indicated that the region, while significantly developed in terms of homes and businesses, had a substantial amount of green space interspersed with its built environment. One of the major reasons for this is seen in Map 12.1, which illustrates the region's combination of parks and protected lands, along with forested areas (both unprotected and protected) that helps maintain the mix of communities and open space. The mix of parks and protected lands provides an indication of the degree of engagement of the region's communities with environmental conservation.

One of the areas that we inquire about in our annual survey of the region's households deals with both environmental attitudes and behavior. In Figure 12.1a, we notice the same pattern as we have observed in prior years; while there is support from all sides of the region for the commitment of public resources (taxes) for the protection of the region's environment in general, there is less support for specifically protecting parks or farmland.

In Figure 12.1b we examine whether our survey respondents in our community types recycle or purchase recycled products. In Figure 12.1c we

examine the ways in which respondents engage environmental issues through political awareness or donations to environmental organizations. Respondents from Urban Centers were somewhat less likely to either recycle regularly or to purchase recycled products, although there was a strong predilection toward these activities across the community typology. When additional activities were surveyed (Figure 12.1c), a pattern similar to last year's report is evident, as examining the political positions of candidates received more positive responses than donating money to an environmental organization.

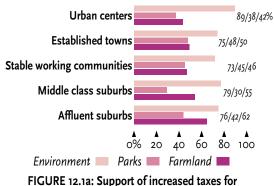


FIGURE 12.1a: Support of increased taxes for environmental issues by community type

Source: Temple University, Philadelphia Metropolitan Area Survey, 2005.

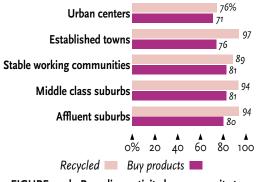


FIGURE 12.1b: Recycling activity by community type

Source: Temple University, Philadelphia Metropolitan Area Survey, 2005.

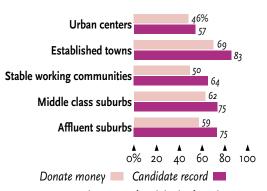
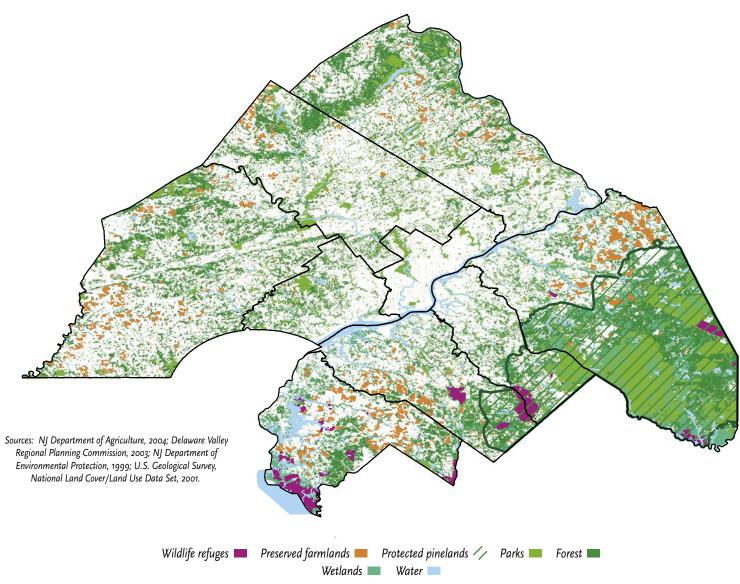


FIGURE 12.1c: Environmental activity in donating money to environmental causes, or checking political candidate records by community type

Source: Temple University, Philadelphia Metropolitan Area Survey, 2005.

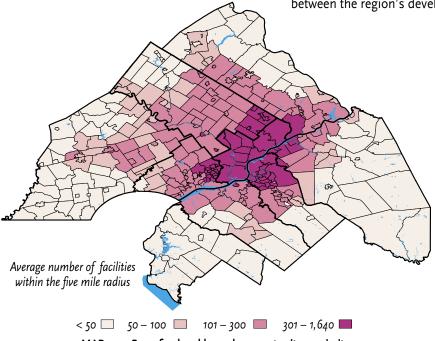


#### indicator 12.2: proximity to superfund and regulated disposal sites

A mature metropolitan area such as Philadelphia, with an industrial history involving many of the region's communities, has generated widespread hazardous or regulated waste treatment locations. In this year's report, we develop a measure of proximity to hazardous or regulated waste treatment locations for each of the region's communities. By drawing an imaginary five mile radius circle around the geographic center of each community, we were able to calculate the number of regulated hazardous waste facilities (hazardous waste storage, transporter, or generator sites) and add to them the number of Superfund sites. This simple measure provides a sense of which communities are most proximate to this particular environmental stressor.

Map 12.2 demonstrates the clear relationship between the region's development over time and

exposure to hazardous waste, as the communities with the highest number of facilities/sites in close proximity to them are clustered toward the center of the region. Figure 12.2 further breaks out the average number of facilities within the five mile radius, and points directly to the increased environmental stress experienced by many of the oldest communities of the region. While Urban Centers are clearly the most heavily affected, Established Towns and Stable Working Communities experience higher exposures than do Middle Class or Affluent Suburbs. The proximity of many of these communities to the most affected areas, and their exposure to between 92 and 117 regulated facilities and/or Superfund sites within a five mile buffer suggests that they share an exposure to the underlying environmental stress these facilities/sites represent.



MAP 12.2: Superfund and hazardous waste site proximity

Sources: U.S. Environmental Protection Agency, Resource Conservation and Recovery Act Data, March 2000; Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database and The National Priority List, August 2003.

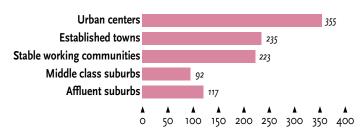


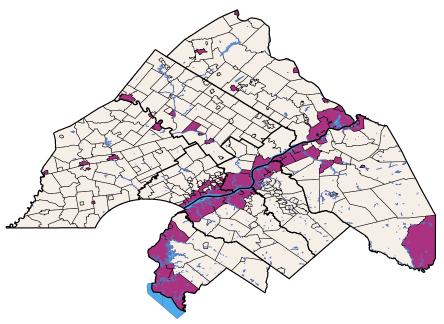
FIGURE 12.2: Average number of regulated facilities and Superfund locations within five-mile radius by community type

Sources: U.S. Environmental Protection Agency, Resource Conservation and Recovery Act Data, March 2000; Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database and The National Priority List, August 2003.

#### indicator 12.3: flood zone impacts

In last year's report we developed a flood zone map based on the FEMA 100 year floodplain data set. In this year's report we took the information from that map and looked for the communities that, on a percentage basis, had the highest amount of their land falling within this floodplain. Map 12.3 identifies the communities that fell above the 80th percentile in land within the FEMA floodplain. The 72 communities in this grouping had between 11 and 84 percent of their land area that fell within the flood zone (a detailed list is given in the Technical Appendix). Not unexpectedly, the bulk of these communities are located along the Delaware and Schuylkill Rivers, although locations along the many tributaries and wetlands of the region are evident as well.

In this year's report we use the underlying flood zone data to examine the ways in which floodplain location is associated with other socio-economic and housing characteristics. Figure 12.3 provides a profile of high flood zone communities that suggests that these locations have poorer households, lower value homes, and experience higher vacancy levels than the 80 percent of communities with lower flood exposure.



MAP 12.3: Communities with high percentage of land in flood zone

Sources: Federal Emergency Management Agency (FEMA) Q3 Floodplain Data, 1996 and sequels.

FIGURE 12.3: Community characteristics associated with flood zone risk

	Median income	Median value	Percent vacant
High	\$44,714	\$105,075	6%
Lower	60,318	158,088	4

Sources: U. S. Census, summary file 3, 2000; Federal Emergency Management Agency (FEMA) Q3 Floodplain Data, 1996 and sequels. Just as we used last year's floodplain indicator as a basis for considering environmental impacts on communities, we have extended our use of the Environmental Protection Agency's risk screening data to both further refine our understanding of where the greatest risk areas are, and to focus on community socioeconomic and housing characteristics associated with these risks. Map 12.4 presents the communities of the region that fall above the 90th percentile of Risk Screening Environmental Indicator (RSEI) scores, as well as those that fall between the 80th and 90th percentile (a detailed list is given in the Technical Appendix). Communities that had a strong industrial component to their economy (Philadelphia, Camden,

Coatesville, Norristown, and the Delaware River industrial suburbs in Delaware and Burlington Counties each stand out). It is also important to recognize that the northern reaches of Chester and Montgomery Counties are probably affected by the activities of older industries in the Reading area flowing into the region via prevailing winds.

Because the range of values for the RSEI indicator extends to extremely high levels, we broke out the highest decile from the 80th percentile to indicate the striking differences that emerge in median income, housing value and vacancy rate. In Figure 12.4, a general trend persists; as risk levels increase, income and housing values are lower, and the percentage of vacant housing increases.

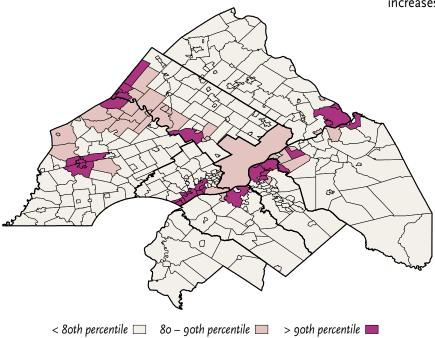


FIGURE 12.4: Community characteristics associated with airborne risk (RSEI)

	Median income	Median value	Percent vacant		
90th percentile risk	44,907	103,850	6 %		
80th percentile risk	\$51,127	\$125,811	5		
< 80th percentile risk	59,722	155,953	4		

Sources: U.S. Census, summary file 3, 2000; U.S. Environmental Protection Agency, RSEI, 2004.

MAP 12.4: High airborne risk levels

Source: U.S. Environmental Protection Agency, RSEI data, 2004.



# chapter 13 arts and culture

The region's cultural assets, increasingly considered important to the quality of life and the strength of the economy, have expanded significantly in the past decade. According to the Greater Philadelphia Cultural Alliance, the number of nonprofit arts and cultural groups in the city of Philadelphia and four Pennsylvania suburban counties nearly doubled from 1995 to 2005. So rapidly have their numbers increased that some arts advocates are debating whether the region can sustain so many new groups. This year's edition contributes to that discussion with information about assets, government funding, as well as levels of participation and political support for the region's cultural organizations.

indicator 13.1: assets of arts and culture organizations

indicator 13.2: arts, culture and kids

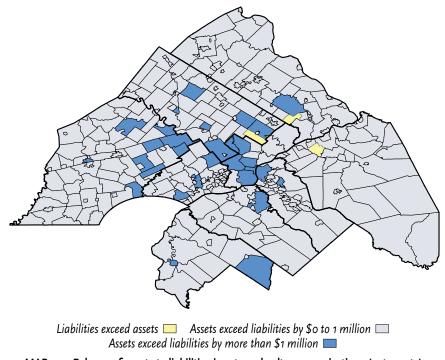
indicator 13.3: who attends exhibits and performances?

indicator 13.4: change in arts and culture employment, 1990-2000

indicator 13.5: federal and state funding for arts and culture

indicator 13.6: who is willing to support local arts and culture with taxes?

This indicator assesses the underlying financial health of the region's cultural sector as measured by the balance between the assets and liabilities that arts and culture organizations reported to the Internal Revenue Service in 2003. Assets include the various types of economic resources that these organizations had at their disposal, not only in the form of buildings and land but also budget surpluses they may have been able to generate—for example, by selling tickets, investing endowment funds, or leasing space in buildings they own. Liabilities are claims against those assets. Organizations do not survive over the long term if their assets do not exceed their liabilities.



MAP 13.1: Balance of assets to liabilities in arts and culture organizations (net assets)

Source: National Center for Charitable Statistics, 2003.

The work of museums, theaters, archives, libraries, historic houses, and many other cultural institutions is inseparable from the facilities they operate. According to the Nonprofit Finance Fund, "arts organizations are three times as asset-intensive as the American steel industry." They own and maintain millions of dollars worth of buildings that are crucial assets

for themselves and for the larger community, particularly in places seeking to boost their economies by creating cultural districts.

For cultural organizations, however, owning facilities brings with it certain liabilities. Nonprofit institutions responsible for physical structures often find it difficult to get the money to maintain them because they lack the collateral to borrow from traditional lenders. Furthermore, unless borrowing is kept within a group's financial capacity, debts may limit the group's ability to pay for ongoing programs.

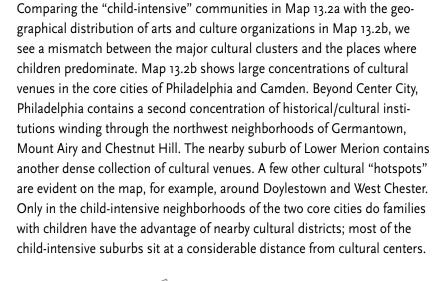
On Map 13.1, the communities showing the most favorable ratios of assets-to-liabilities are in Phila-

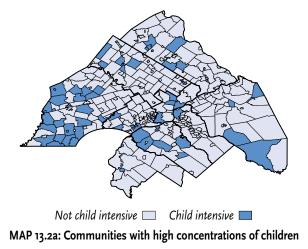
delphia, Camden, and several suburban communities close to the city, for example, Abington, Haverford, Lower Merion, and Upper Dublin. We also see favorable ratios in several townships located in the northeast corner of Chester County, including East Whiteland, Tredyffrin, West Goshen, and Westtown Townships.

#### indicator 13.2: arts. culture and kids

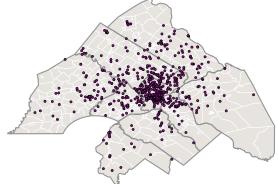
For most people, participation in arts and culture activities occurs during leisure hours, rather than being a structured, pre-programmed activity. That places a premium on convenient access, so that arts and culture pursuits can easily be added to school or work schedules. Children especially are unable or not allowed to travel long distances to take part in cultural events. So the location of such events near their homes may be an important determinant of their level of participation.

Map 13.2a shows the communities in the region with the highest proportions of their population represented by children under 18. While some are located in the core cities of Philadelphia and Camden, a good many others are located in the distant suburbs of western Chester County, upper Bucks and Montgomery counties, and lower Burlington County.





Source: U.S. Census, summary file 3, 2000.



MAP 13.2b: Distribution of nonprofit arts and culture organizations

Sources: National Center for Charitable Statistics, 2003; Greater Philadelphia Cultural Alliance, 2003–2004; NJ State Council on the Arts, 2003–2004.

National surveys have found that different types of people participate in cultural activities at different rates. In general, more highly educated people, and people with higher incomes, are more likely to attend arts and culture events. Some national studies have also shown that factors associated with different life stages affect cultural participation. For example, adults with

children are more likely to participate in activities that involve their youngsters. Furthermore, there is some evidence that participation in arts and culture is more likely for people who also participate in other segments of community life, possibly because involvement in one activity acts as a pathway to the other.

When we examine the effects of education and income on cultural participation, patterns in this region are similar to nationally observed trends. Figure 13.3 shows that households with higher levels of education and income are more likely than others to have participated in each

type of cultural activity during the past year. As anticipated, our respondents reported lower participation in the activities that required attendance at scheduled performances (classical music, plays, dance, theatre) than in unscheduled activities like visiting museums or craft fairs. With respect to age differences, we had expected young adults (aged 17–24) to report

lower participation in cultural activities
than older adults. This was true for plays,
dances, and craft fairs. However, for other
types of activities, young adults were more
likely to participate than at least one of
the older age groups. Most notably, a very
high percentage of young adults reported
having visited an art museum during the
prior 12 months.
Respondents in this region confirmed the

Respondents in this region confirmed the national finding that engagement in other community activities is associated with higher cultural participation. Those households who reported attending block club meetings in their neighborhood during the previous year were far more like to have participated in all types of cultural events than respondents who had not attended block club meetings.

Education Percent										
no college	24		36		34		54		48	
college degree	35		51		59		69		74	
MA degree or better	52		72		73		80		83	
Household income										
under \$40,000	26		36		30		52		46	
\$40,001 to \$80,000	29		44		47		65		62	
over \$80,000	37		51		64		66		76	
Age										
aged 17-24	33		39		39		42		75	
aged 25-54	26		42		54		64		64	
55 or older	38		51		36		60		54	
Community engagement										
attended block club	42		58		62		72		76	
didn't attend block club	27		41		41		58		24	
Classical music or opera Play, dance, or musical Science or										

FIGURE 13.3: Percentage attending at least one cultural event in past year by: education, household income, age, community engagement

history museum Craft fair or cultural festival Art museum

Source: Temple University, Philadelphia Metropolitan Area Survey, 2005.

### indicator 13.4: change in arts and culture employment, 1990-2000

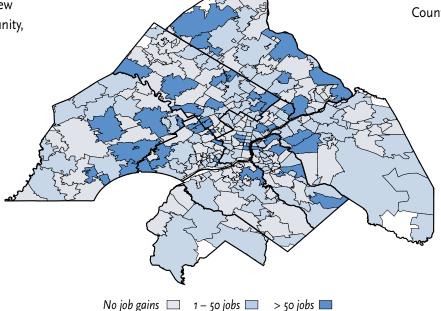
This indicator assesses the change in the number of employees in arts-related enterprises in each community of the region. Such enterprises range from museums, dance companies and galleries to historical societies, archives and libraries, art schools, and theatres. While such employment represents only a small percentage of the total employment base of the region (with most communities having only around two percent of total employment in arts and culture jobs), the arts sector carries disproportionate importance for many towns. A community that contains arts and culture institutions may rely on them to draw visitors who become customers for local restaurants, retailers and other busi-

nesses. In addition, a lively arts and culture scene has been shown to draw new companies and residents to a community,

contributing to economic growth. Recognizing these benefits, a substantial number of the region's towns have worked to establish cultural districts.

Map 13.4 portrays the zip codes of the region, dividing them into three categories: those that experienced no increase in the number of jobs in arts and culture from 1997 to 2002; those that posted only small gains in arts and culture employment (up to 50 additional jobs); and those that gained 50 or more jobs in this sector. It shows that suburban gains occurred in and around communities with identifiable town centers like Quakertown and New Hope in Bucks County, Moorestown in Burlington County, Ken-

nett Square and West Chester in Chester County, and Pottstown in Montgomery County.



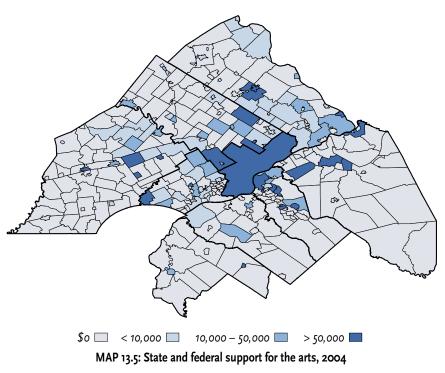
MAP 13.4: Change in arts, culture, and entertainment employment, 1997-2002

Sources: US Census Zip Code Business Patterns, 1997-2002.

The flow of federal and state funds is an indicator of whether a community contains mature and vibrant arts organizations capable of attracting support from these competitive sources. Particularly in the tight fiscal climate that has recently prevailed in government agencies, the ability to draw these funds is an important sign of artistic and cultural vitality. Government funding often serves to promote access to and participation in exhibits, performances, arts education, and other cultural events regardless of geography and family income. And it provides a catalyst to leverage additional dollars.

During the last decade, there has been increasing political support for funding arts and culture projects that address the backgrounds and

preferences of an increasingly diverse citizenry for example, by recognizing the cultural heritage of African-American, Latino, and Asian people. Politicians representing these communities have complained that public money has been too concentrated geographically in downtown areas and in traditional fine arts. Furthermore, the shift of population to the suburbs has



Sources: National Endowment for the Arts, 2004; National Endowment for the Humanities, 2004; Institute of Museum and Library Services, 2004; PA State Council on the Arts, 2003–2004; NJ State Council on the Arts, 2003–2004.

moved many households far away from the region's core cultural district, and increased the demand for arts and cultural venues in the suburbs.

To assess the amount and geographic distribution of governmental funding coming into the region, we have combined the dollars awarded in a single year (2004) by three national agencies (National Endowment for the Humanities. National Endowment for the Arts. and Institute of Museum and Library Services), along with grant dollars coming to the region from two state agencies (Pennsylvania Council on the Arts and New Jersey State Council on the Arts). Map 13.5 shows where federal and state dollars were awarded to arts and culture organizations in the region.

These awards confirm the ability of regional programs and institutions to compete for support in an environment where more arts groups are bidding for scarce funds. As we would expect, the map shows that the recipients of the largest sums of governmental funding are located at the center of the region. Yet the map also shows that a noticeable number of suburban communities have captured arts dollars to enhance local cultural programs.

#### 84 arts and culture

#### indicator 13.6: who is willing to support local arts and culture with taxes?

In the U.S., government provides about 10 cents out of every dollar that supports the arts. Despite the public controversy that periodically erupts concerning federal and state funding for the arts, the level of government that spends the most money to support arts and culture is local government. While the federal and state levels each contribute about two percent of arts funding, local governments provide six percent, more than the other two combined. Since local government is already the source of the majority

of government funding for the arts, one might assume there is little public appetite for spending more local tax dollars on arts and culture. One would be wrong. Figure 13.6 shows that a majority of residents either "strongly agree" or "agree" that they would be willing to pay more taxes if they were assured the money would support arts and culture.

Residents of this region's Urban Centers are more likely than residents of the Middle Class and Affluent Suburbs to say they would be willing to increase local taxes to improve arts and culture in their local communities. Since most research shows that more affluent and more educated citizens are more likely to participate in arts and culture (see indicator 13.3), it is surprising that more affluent people appear less willing to tax themselves to support cultural opportunities in their home communities. This may be because they have adequate transportation to travel outside of their communities to enjoy arts and culture.

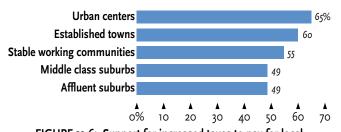
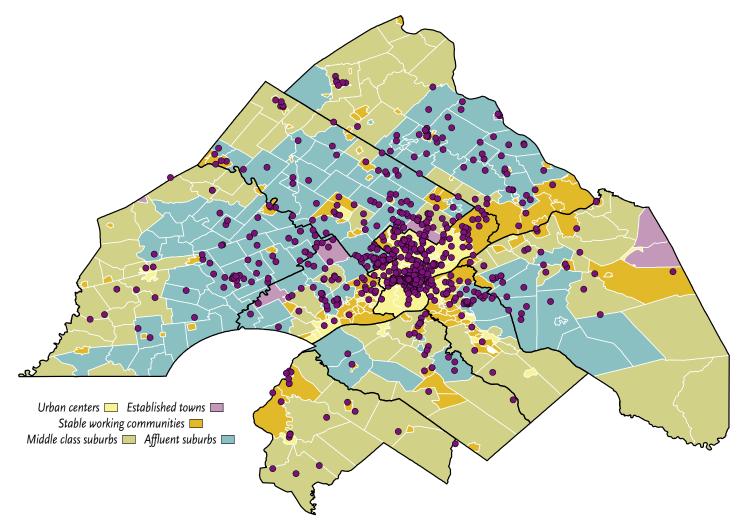


FIGURE 13.6: Support for increased taxes to pay for local arts and culture

Source: Temple University, Philadelphia Metropolitan Area Survey, 2005.



Nonprofit arts and culture organizations by type of community

Sources: National Center on Charitable Statistics, 2003; Greater Philadelphia Cultural Alliance, 2003; NJ State Council on the Arts, 2003.

# chapter 14 health

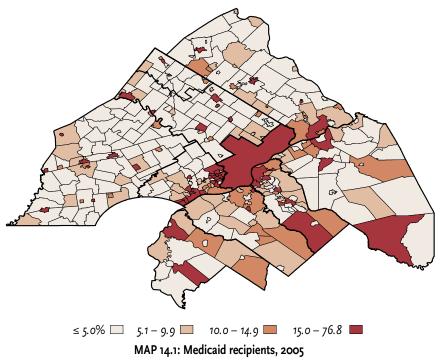
Increasingly, Medicaid is the health insurance program of last resort. Nationally, in 2004, almost 46 million persons or about 16 percent of the population lacked health insurance. Within the metropolitan region the figure was more than 500,000 persons or about 10 percent of the population were without health insurance. The percentage of the population covered by employer-sponsored health insurance declined by five points in the U.S. and four points in the metropolitan area between 2000 and 2004, pushing some persons onto state Medicaid rolls and leaving others without coverage. Data on the medically uninsured are unavailable for the region's communities after 2000, but data on Medicaid rolls tend to track the uninsured and are examined here. It is also becoming increasingly clear that employers who offer low wage jobs often have significant percentages of employees who rely on Medicaid. Within the region, Wal-Mart and Giant and Weis supermarkets are among the employers with sizable percentages of employees on Medicaid.

indicator 14.1: Medicaid recipients, 2005

indicator 14.2: change in Medicaid recipients, 2001–2005

indicator 14.3: growth in Medicaid and access to care

Eligibility for Medicaid is determined by each state within federal guidelines. Eligibility differs somewhat for Pennsylvania and New Jersey although most policies are quite similar.12 In both states, participation in the Temporary Assistance for Needy Families (TANF) program confers eligibility, but both states also cover some non-TANF families based on their incomes, assets, and sizes. In addition, both cover persons who meet the financial requirements and are aged or blind or disabled or who are pregnant women. Both states also insure the "medically needy," persons who are above the income limits but whose medical expenses are allowed to offset those limits. In



Sources: NJ Department of Human Services, 2006; PA Department of Public Welfare, 2006

both states slightly less than half of the recipients are children, but roughly 85 percent of spending is for the care of adults, including the disabled and aged. In some categories of coverage, income limits rise to 200 percent of the poverty line for families for specified family sizes. In November, 2005 more than 750,000 residents of the region or 14 percent of the population were enrolled in either New Jersey's or Pennsylvania's Medicaid programs.

Map 14.1 displays the percentage of the population in each municipality who were Medicaid recipients in November, 2005. Philadelphia is shown as a single entity as the data are unavailable below the municipal level. Aside from Philadelphia, communities in eastern and southern Delaware County such as Upper Darby, Collingdale, Chester, Lower Chichester, and Marcus Hook are among the most heavily enrolled. Another cluster of municipalities with significant participation is in southern Bucks County. However, on average, communities in New Jersey appear to have higher percentages of recipients

than those in Pennsylvania, with Camden County municipalities particularly likely to have substantial rates of participation. Many of the suburban communities with substantial percentages of recipients have lower incomes because they are still recovering from the decline in regional manufacturing.

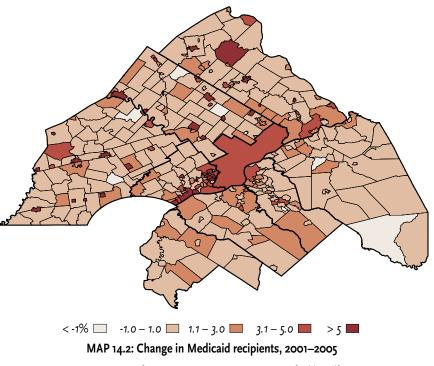
### indicator 14.2: change in Medicaid recipients, 2001–2005

Medicaid enrollments in the region grew between 2001 and 2005. The percentage change in Medicaid recipients reveals the extent to which families, individuals and employers are having difficulty coping with the rising cost of health insurance. For the entire region, the increase in Medicaid enrollment was 16 percent over the four years. Enrollment in the suburbs increased 22 percent while enrollment in the city grew 12.

In examining the changes in the region's communities, we look at the difference between the percentage of residents enrolled in 2001 and the percentage enrolled in 2005 rather than the percentage change. We use the percentage difference because the percentage change

figure distorts growth when the 2001 percentage is low.

Given the strength of the overall growth in Medicaid, it should not be surprising to learn that enrollments declined in relatively few places. If we define a percentage difference of ±one percentage point as representing essential stability over the period, then only eight communities actually had a lower percentage on Medicaid in 2005 than in 2001. In contrast, 127 places saw growth in their Medicaid percentage. Map 14.2 displays the changes.



Sources: NJ Department of Human Services, 2006; PA Department of Public Welfare, 2006..

The places that saw growth of more than five percentage points were all in the Pennsylvania suburbs. While generally geographically small, their populations are roughly comparable to the median for all regional communities. Although data on the incomes of those who became recipients between 2001 and 2005 are unavailable for the region's communities, we can characterize the communities by their incomes in 2000. Figures 14.2a and 14.2b, show that the gain in Medicaid enrollment correlates with both the percentage of their populations which were less than the poverty line and the percentage who were

above poverty but less than 185 percent of the poverty line (a commonly used definition of the "near poor"). Those communities with larger "at risk" populations had larger gains. These results are consistent with recent research on increasing income insecurity among the near poor.<sup>13</sup>

Figure 14.2c examines the communities that displayed a large gain (more than three percent) in Medicaid recipients by the community typology, and it reveals that the growth in Medicaid enrollment is concentrated among the Urban Centers and Stable Working Communities.

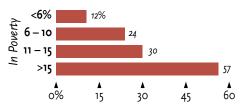


FIGURE 14.2a: Percentage of communities with high growth in Medicaid participation ( > 3% gain) from 2001–2005, by population percentage in poverty, 2000

Sources: NJ Department of Human Services, 2006 and PA Department of Public Welfare, 2006; and U.S. Census, summary file 3, 2000. Area Survey 2003; 2004.

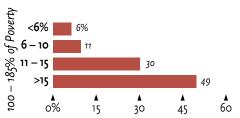


FIGURE 14.2b: Percentage of communities with high growth in Medicaid participation (> 3% gain) from 2001–2005, by population percentage between poverty line and 185 percent of poverty line, 2000

Sources: NJ Department of Human Services, 2006 and PA Department of Public Welfare, 2006; and U.S. Census, summary file 3, 2000.

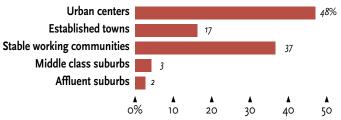
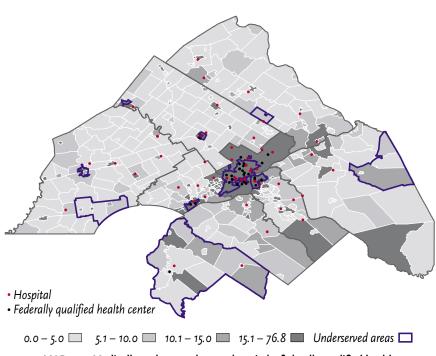


FIGURE 14.2c: Percentage of communities with high growth in Medicaid participation ( > 3% gain) from 2001–2005 by community type

Sources: NJ Department of Human Services, 2006 and PA Department of Public Welfare, 2006; and U.S. Census, summary file 3, 2000.

### indicator 14.3: growth in Medicaid and access to care

The growth in the Medicaid population raises questions about their access to care. In last year's report, we showed that the region has several medically underserved areas as defined by the federal government. As the Medicaid population grows, a question arises as to whether it is increasing in geographical areas already recognized as lacking adequate access to care. Medicaid enrollees are more likely to live in areas with fewer office-based physicians and are more likely to obtain their care from communitybased health centers and general hospitals. For Medicaid patients, deductibles and copayments are not impediments to care, but time and convenience costs often are. As seen in the chapter on transportation in our 2004 report, households in Urban Centers and Stable Work-



MAP 14.3: Medically underserved areas, hospitals, federally qualified health centers, and percentage on Medicaid, 2005

Sources: U.S. Department of Health and Human Services, Health Resources Services Administration, 2005; American Hospital Association, Guide, 2005; NJ Department of Human Services, 2006 and PA Department of Public Welfare, 2006.

ing Communities are more reliant on public transportation, and, as shown in Figure 14.2c, are more likely to have members on Medicaid.

Map 14.3 combines Map 14.1 with maps from our 2005 report showing the locations of general hospitals, federally qualified health centers, and medi-

medically underserved areas are outlined in blue. Hospitals and federally qualified health centers appear as black and red dots. The relationship between underserved areas, hospitals, federally qualified health centers, and substantial Medicaid populations is strongest in the cities of Philadelphia, Camden, and Chester, Outside of these areas it is substantially weaker—in part because there are very few health centers in the suburban counties and in part because there are significant percentages of persons on Medicaid in places which are not defined as medically underserved. However, many of the suburban places with higher percentages on Medicaid are served by nearby

cally underserved areas. The

hospitals. The association of the population percentage on Medicaid with hospital locations probably reflects the presence of less expensive housing in areas surrounding hospitals and the fact that hospitals are often in older communities.

Map 1.1: We created a typology of five kinds of communities where communities were defined differently for the city and suburbs. To define communities in the city, we used the twelve planning analysis districts which the Philadelphia Planning Commission has historically used in its work; in the suburbs, the communities are the municipalities. We performed a cluster analysis, a statistical procedure that divided the communities into relatively homogenous groups using variables from the 2000 U.S. Census. The planning analysis districts were placed in three of the five community types. Thirteen variables were used: five housing, six socioeconomic, and two household characteristics. The housing variables were percentage of units built before 1940, percentage of units built after 1995, percentage vacant, percentage detached single units, and percentage owner-occupied; the socio-economic variables were percentage Black, percentage with less than a high school education, percentage with a bachelor's degree or better, percentage of families less than 150 percent of the poverty line, percentage working outside municipality of residence, and percentage of males not in the labor force; the household variables were percentage of families with children under 18 and percentage of families which were female-headed.

**Map 1.2 and Figure 1.2a:** Population change was computed by subtracting the 1980 population from the 2000 population and dividing by the 1980 population.

Figures 1.2b and 1.3b: American Community Survey data for Baltimore, Minneapolis, and Phoenix metropolitan areas was limited to the most populous constituent counties. In Baltimore these included: Anne Arundel. Baltimore City, and Baltimore County; in Minneapolis these included: Anoka, Dakota, Hennepin, and Ramsey; in Phoenix these included Maricopa county.

**Map 1.3 and Figure 1.3a:** Computed by dividing the total population and the total number of housing units by the total acres of the MCD.

**Figure 1.4b:** The total number of housing permits in the metropolitan area from 2000 to 2004 divided by the number of occupied housing units in 2000.

Map 1.5: The original data from the USGS had 30 different classification categories. This map shows five categories: Developed (an aggregation of the four developed categories

in the original data), Evergreen Forest (an aggregation of the three categories in the original), Agriculture (originally two categories), Wetlands (originally 6 categories), and Water. Other classifications such as Barren and Perennial Ice and Snow were either not represented in the region or were so small as to be insignificant on the map.

Map 2.1: The Wharton Residential Land-Use Regulation Index was developed by Professors Joseph Gyourko, Albert Saiz, and Anita Summers, based on a survey conducted in 2005 by the Zell/Lurie Real Estate Center in the Wharton School of the University of Pennsylvania. Surveys were mailed to 364 municipalities in the Philadelphia metropolitan area. (Note that in this chapter of the report, the definition of the Philadelphia metropolitan area adds Mercer County, New Jersey, to the definition of the region used in the other chapters of the report.) Responses were obtained from 237 municipalities, whose combined populations represent 90% of the population surveyed. A national survey was mailed to 6,896 localities; responses were obtained from 2,649, whose combined represent 60% of the surveyed population. The components of the index were drawn from the survey responses on zoning, approvals, regulatory delays, quantity restrictions, improvement cost requirements, and affordable housing.

Maps 3.1–3.3: Dissimilarity indices were calculated for non-Hispanic Whites and Blacks, non-Hispanic Whites and Hispanics, and non-Hispanic Whites and Asians at the block level data for each municipality. MCDs with no dissimilarity index value had no Black, Hispanic or Asian residents.

Map 3.4: We first determined which MCDs has gained or lost population between 1990 and 2000. Among those that had gained population, we compared the overall growth in the population to the growth in the foreign born population. Those MCDs whose growth in foreign born was equal to or greater than the overall population growth were classified as having growth in foreign born contribute disproportionately to overall growth. Most of these MCDs would have had a net loss in population if not for the influx of foreign born residents.

**Map 3.5:** We divided the population characterized as linguistically isolated by the total population of the MCD.

**Map 4.1:** We computed the average household size in 1980 and the average household size in 2000 and then subtracted the average in 1980 from the average in 2000.

**Figure 4.2:** For 2000, we calculated the number of persons between the ages of 0 and 18 years in the MCD and divided it by the number of persons 65 and over.

Map 4.2: For 1980, we divided the number of persons aged o to 18 in the MCD by the number of persons 65 and over. We then subtracted the ratio in 1980 from the ratio in 2000 and divided by the ratio in 1980.

Map 4.3: We computed the number of persons aged 65 and over living alone and divided by the total number of persons aged 65 and over.

Map 4.4: We computed the total number of persons between ages 40 and 61 and divided by the total number of persons.

Map 4.5a and 4.5b: New Jersey reports crimes at the municipal level. Pennsylvania reports crimes based upon the police jurisdiction, necessitating allocation to the municipal level. When municipal boundaries and police district boundaries coincided, no allocation occurred. Where several municipalities were served by one police district, crimes reported for the police district were allocated to the municipality based upon the population served by the police district. Some municipalities were served either full- or part-time by the state police, crimes reported for the state police jurisdiction were allocated to the municipality in the same manner. Crimes reported by other state law enforcement agencies were allocated based on the sum of the other allocated crimes for the municipality.

Maps 5.1–5.5: To calculate the share of households that were in each income quintile at the MCD level for 1990 and 2000, we used the methods developed by Alan Berubé and Thacher Tiffany in their paper, "The Shape of the Curve: Household Income Distributions in U.S. Cities, 1979–1999," available at http://www.brookings.edu/metro/pubs/20040803\_income.pdf. We first determined the median income for the Philadelphia metropolitan area using the U.S. Census website for both 1990 and 2000. We then calculated the share of households that were in the 1st, 2nd, 3rd, and 4th quintiles; we used variables from the 1990 Census STF3 and 2000 Census SF3 data.

Map 6.1: We computed the ratio of rental units to all occupied housing units in both 1980 and 2000 and then compared the difference in the ratios.

#### 92 technical appendix and endnotes

**Map 6.2:** To calculate the lending activity in a community, we took the average number of conventional new purchase loans from 2000 to 2004 from the Home Mortgage Disclosure Act (HMDA) data and divided by the number of owner-occupied housing units in 2000.

Map 6.3: We calculated the average home mortgage amount by aggregating the total amount of conventional owner occupied housing mortgages to the municipal level and dividing that dollar amount by the number of conventional owner occupied housing mortgages in the MCD from the HMDA data.

**Figures 6.4a and 6.4b:** We separated those loans in the Home Mortgage Disclosure Act raw data that were specifically for home improvement and then divided the number of those in each MCD by the total number of loans approved.

Map 6.5: We obtained the sub-prime lender list from U.S. Department of Housing and Urban Development 2002-2004 and used it to identify lenders in the HMDA data who issued sub-prime loans. We divided the number of mortgage loans from sub-prime lender from 2002 to 2004 by the total number of loans in that period.

Map 7.2: we obtained the location of all of the commuter rail stops in the Philadelphia Metropolitan Area and mapped them using a Geographic Information System. We then computed the distance from the centroid of each MCD to the closest commuter rail stop.

Maps 7.3 and 7.4: Transportation costs are derived from the Center for Transit-Oriented Development's housing Affordability Index. The Affordability Index is derived by combining housing costs with a modeled set of transportation costs and indexing these by household income. A full description of this methodology is presented in a technical paper accompanying the first empirical application of the index, in Minneapolis-St. Paul, and is available at http://www.cnt.org/publications/Affordability-Index-White-Paper-Draft-0805.pdf. These estimates were prepared at the tract level, and aggregated to the community level for our measure. We used the median average household size and the median income of the MCD to determine the appropriate transportation cost for both owners and renters within the MCD. We used a \$2.50

estimate for transit fares within the city of Philadelphia and a \$3.50 estimate for suburban transit fares.

Maps 8.1-8.5: We obtained data from the Pennsylvania and New Jersey Departments of Labor on every taxpaying establishment in both states. These data included a monthly accounting of the number of employees and the average wage for each quarter. These data included an address for each establishment as well as a NAICS code classifying their industry. We geo-coded each address to an MCD.

To calculate the number of manufacturing jobs, we added together all establishments with six digit NAICS codes between 311111 and 339999 (all manufacturing).

To calculate the number of Creative Class jobs, we used the following six digit NAICS codes: 323115, 323117, 323122, 334611 thru 334613, 443120, 453920, 511110 thru 511140, 511199, 511210, 512110, 512120, 512191, 512199, 512210, 512230 thru 512240, 512290, 515110, 515120, 515210, 516110, 541310, 541340, 541360, 541370, 541410 thru 541430, 541490, 541511 thru 541512, 541519, 541612, 541620, 541690, 541710, 541720, 541810, 541830, 541840, 541850, 541860, 541870, 541890, 541910, 541922, 541990, 561439, 611110, 611210, 611310, 611410, 611420, 611430, 611512, 611513, 611519, 611610, 611630, 611691, 611699, 611710, 711110, 711120, 711130, 711190, 711310, 711320, 711410, 711510, 712110, 712120, 811210, 451211, 451220, 451140.

To calculate the number of biotech jobs, we used the following six digit NAICS codes: 325411, 325412 325413, 325414, 325188, 325199, 334510, 334513, 334516, 334517, 339111 thru 339116, 541380, 541710, 423450, 423460, 541710, 621511, 621512.

To calculate the number of tourism and travel based jobs, we added together all establishments with six digit NAICS codes between 711110 and 722410 and between 561510 and 561599.

Map 9.1: Because tax laws differ between New Jersey and Pennsylvania, we computed total revenues collected per municipality differently for each state. In New Jersey we used the total revenues collected and listed on the Department of Government affairs website. These revenues included those collected for education. In Pennsylvania, school districts, not municipalities, levy school taxes and typically a school district is made up of several municipalities. In order to compute revenues by municipality, we had to allocate these

school taxes back to the municipality. To accomplish this, we first acquired housing market values for both school districts and the municipalities within those school districts. We computed each municipality's portion of the overall market value of the school district and then allocated the taxes collected by the school district to the municipality based on this proportion. To compute total taxes in Pennsylvania we combined these school taxes with county real estate taxes, municipal real estate taxes, municipal real estate transfer taxes. We did this for both 1998 and 2003 and then computed the difference.

**Map 9.2:** We downloaded the total debt held by each municipality, excluding school debt, and divided this by the population.

Map 9.3: The model household tax burden was computed by adding together the average effective property tax rate for the MCD (the percentage of overall market value that is paid in real estate taxes), County tax rates, local wage tax rate and state tax rates. We then multiplied these tax rates by the median home value for the region (\$174,044) and the median income for the region (\$51,980). Because of the size of the Philadelphia wage tax for people who work but do not live in Philadelphia, we also calculated a value if the model householder works in Philadelphia.

Map 9.4: State aid comes from the Census of Governments. We aggregated all inter-governmental transfers from the state to the municipality excluding educational transfers. We then divided by the population of the municipality. Map 10.1: In Pennsylvania, spending per pupil is provided for every K-12 school district. In New Jersey, a portion of the school districts cover K-12 as does Pennsylvania. Some New Jersey municipalities are served by two separate school districts, an elementary school district that serves the pupils from a particular township or combination of townships, and a regional secondary school district that serves several elementary school districts. Because funding levels are different for elementary and secondary students, we needed to allocate the funds and students from the secondary school districts to the corresponding elementary school districts they serve. To accomplish this, we acquired the number of students in each secondary school district from the New Jersey Department of Education. We then computed the proportion of students attending the secondary district from each elementary district. The total

expenditures were then allocated back to the elementary district based upon the proportion of students contributed to the total enrollment in the secondary district. We did this for both 1999 and 2004 and then computed the difference in this time period.

Map 10.2: To determine school districts that perform above expectation, we fitted an OLS regression with the percentage failing to meet the state minimum standards on reading and math tests as the dependent variable and the percentage Black, percentage of students receiving free or reduced priced lunch, student teacher ratio,total enrollment in the district, and expenditures per pupil as independent variables. The equations for reading and math explained 75 percent and 72 percent of the variance in percentage failing respectively. The districts with the highest residual scores, that is, whose actual percentage failing in reading and math were higher than the expected percentage failing based on the regression equation were chosen as high value districts.

**Map 10.3:** We downloaded data about graduates attending four year colleges from the Departments of Education in both Pennsylvania and New Jersey. We then divided this number by the total graduates for the given year.

Map 10.4 and Figure 10.4a: Annual median combined SAT scores, 2002-2004, averaged over 3 years.

Map 12.2: We received location data on Superfund and hazardous waste sites from the Environmental Protection Agency. These data were geo-referenced and then a five mile buffer was created from the centroid of each municipality. Map 12.2 reflects the number of these sites that fall within that five mile buffer.

Map and Figure 12.3: FEMA 100 year floodplain data was geo-referenced to MCD boundaries and a proportion of land area was computed.

Figure 12.3 a: List of community 100 year floodplain percentages, 80th and 90th percentile

% ir	1 100-year	floodplain	
8oth Percentile		90th Percentile	
Willingboro	11.4	Woodlynne	27.6
Ridley	11.7	Penns Grove	28.2
West Norriton	11.7	Avondale	28.7
Coatesville city	12.0	South Philadelphia	29.2
Darby township	12.4	Center City	29.9
Pottstown	12.6	Carneys Point	30.2
Darby borough	12.8	Falls	30.6
Quakertown	13.3	Riverside	30.9
Mount Holly	13.	Trainer	32.7
West Conshohocken	13.8	Beverly city	32.8
Norwood	14.4	Chester city	32.9
Phoenixville	14.5	Tullytown	34.4
Bordentown city	14.6	Yardley	34.6
Spring City	15.7	Riverton	35.3
Bristol borough	16.3	Westville	36.6
Atglen	16.4	Brooklawn	37.9
Collegeville	16.4	Delanco	38.9
Morrisville	17.2	Folcroft	38.9
Upland	17.5	Camden city	39.1
Bordentown	17.6	Marcus Hook	42.8
Chalfont	17.9	Gloucester City	44.6
Bass River	18.1	Colwyn	45.2
Cinnaminson	18.3	Palmyra	45.9
Delran	18.8	SW Philadelphia	47.2
Bristol township	18.8	Logan	50.8
Hainesport	18.9	Paulsboro	54.8
New Hope	19.8	Eddystone	55.6
Riegelsville	20.3	Salem city	56.5
Conshohocken	20.5	National Park	57.1
Pemberton	20.9	Burlington city	57.9
Hulmeville	21.1	Pennsville	63.9
Downingtown	21.2	Lower Alloways Creek	68.8
Pennsauken	23.5	Tinicum	76.5
Bridgeport	26.7	Greenwich	79.2
Modena	27.1	Elsinboro	84.2
14 ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '			

Kensington, River Wrds 27.2

West Deptford

Map 12.4: Risk Screening Environment Indicator data were provided by the EPA. These data were geo-referenced to one kilometer square grids and then aggregated and averaged to the MCD level.

Figure 12.4a: List of community airborne risk levels, 80th and 90th percentile

RSEI risk score 2000									
8oth Percentile		90th Percentile							
Plymouth	451.4	Douglass	700.8						
East Pikeland	454.0	West Deptford	705.8						
Yeadon	454.4	Upper Pottsgrove	706.3						
West Caln	454.8	Ridley	725.6						
Lower Providence	461.6	Lower Chichester	730.9						
Honey Brook Twp	463.7	Falls	731.7						
Elverson	465.4	Pottstown	758.9						
Yardley	469.9	North Coventry	773.3						
West Bradford	472.0	Upland	779.6						
Haddon Township	473.3	Upper Merion	789.1						
Tinicum	476.3	Chester township	810.4						
Honey Brook Boro	483.4	Bordentown Twp	846.2						
Upper Providence	485.4	Collingswood	863.3						
West Vincent	495.9	Maple Shade	865.2						
Riverside	499.1	West Pottsgrove	877.4						
East Nantmeal	502.4	Tullytown	910.0						
Trappe	503.9	Chester city	925.5						
Parkside	511.1	Merchantville	986.1						
Florence	521.5	East Fallowfield	1050.1						
Limerick	524.6	Delran	1075.7						
Royersford	526.9	Morrisville	1093.4						
New Hanover	534.0	Pennsauken	1145.5						
Spring City	535.2	Caln	1149.8						
Collegeville	542.6	Marcus Hook	1197.3						
Moorestown	544.1	Ridley Park	1388.2						
East Vincent	549.1	Trainer	1488.4						
West Conshohocken	585.5	Eddystone	1683.0						
Philadelphia	597-3	Coatesville	1937.1						
Cinnaminson	605.8	Valley	2551.0						
Bristol borough	620.7	Modena	3850.4						
Bridgeport	622.4	South Coatesville	4109.4						
Lower Pottsgrove	639.4	Camden	12374.7						
South Coventry	644.5								

East Coventry	645.1
Palmyra	646.8
Westville	653.4
Conshohocken	674.3
Warwick	689.6
Paulsboro	697.1

Map and Figure 13.1: We defined cultural nonprofits according to the National Center for Charitable Statistics' National Taxonomy of Exempt Entities (NTEE) major group code A (arts, culture and humanities). Using the NCCS data base, we geo-coded all code A organizations to the MCD. Total net assets for every Code A organization were then aggregated to that MCD.

Map 13.2a: Communities with high concentrations of children were the top 25 MCDs in terms of the percentage of the entire population that is under the age of 18.

Map 13.2b: We used the National Center for Charitable Statistics definition of NTEE major group code A (arts, culture and humanities). Greater Philadelphia Cultural Alliance data are all organizations applying to the Five-County Art Fund, 2001–2003. New Jersey State Council on the Arts data come from all organizations applying for funding to the Burlington, Camden, Salem and Gloucester county art councils, 2001–2003. These data were then geocoded.

Map 13.4: We obtained Zip Code Business Pattern data for both 1997 and 2002. Arts and Culture jobs were defined as NAICS 71110, 711120, 711130, 711190, 711510, 712110, 712120, 712130 and 712190 for both years and then we calculated a percentage change by subtracting the number of jobs in 1997 from the number of jobs in 2002 and dividing by the number of jobs in 1997.

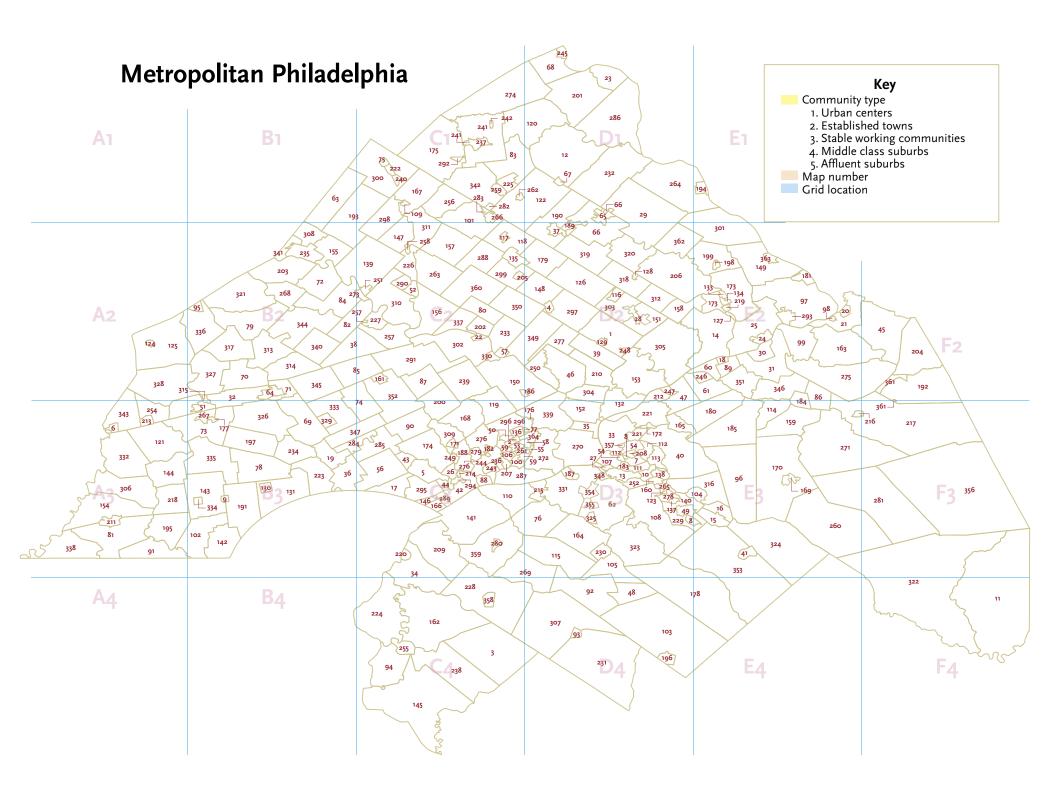
Map 13.5: We acquired address level data from both federal and state sources and geo-coded each of the organizations receiving money to the MCD. We then aggregated the total amount of money received by these organizations from federal and state sources to the MCD.

Maps 14.1-14.3: Medicaid data were acquired at the MCD level from the state of Pennsylvania and at the zip code level from the state of New Jersey. We allocated the New Jersey Medicaid data to the MCD based on the location of the centroid of the zip code.

#### **Endnotes**

- 1. In 2002, the federal Office of Management and Budget redefined the nation's metropolitan areas in ways that affect the comparability of metropolitan areas over time; while we have made Philadelphia's definition consistent from 2000 to 2004, there are some differences which we could not control in the comparison metropolitan areas. For further information on metropolitan area definitions, see www. census.gov/population/www/estimates/metroarea.html.
- 2. Boston data are provided for the more extensive Consolidated Metropolitan Statistical Area, as housing permit data are collected on a county by county basis, while traditional metropolitan areas in New England are defined on a town by town rather than county by county basis.
- 3. Pittsburgh's data were not provided in this report.
- 4. This report includes data provided by the Center for Neighborhood Technology and Center for Transit Oriented Development from their joint Housing and Transportation Affordability Index product. These data are based on a variety of sources including the 2000 U.S. Census, the 1995 FTA Bus Routes Database, and the Center for Transit Oriented Development National TOD Database, as inputs to a pilot transportation cost model developed by Center for Neighborhood Technology and Center for Transit Oriented Development through the Brookings Institution Urban Markets Initiative to estimate the household transportation costs in a given census tract for a particular household size and income. Center for Neighborhood Technology and Center for Transit Oriented Development are not responsible for any inaccuracies in the data and do not necessarily endorse any interpretation or products derived from the data. Estimates are for the primary metropolitan statistical areas (PMSA) as defined for the 2000 Census.
- 5. Metropolitan data are obtained form the U.S. Bureau of Labor Statistics' Quarterly Census of Employment and Wages, 2004 data series (the last for which non-preliminary data were available by sector and metropolitan area). Metropolitan area boundaries are set by the 2001 GAO standards, which are somewhat different than in prior reports. These are as follows: Baltimore-Towson, MD MSA; Boston-Cambridge-Quincy, MA-NH MSA; Chicago-Naperville-Joliet, IL-IN-WI MSA; Cleveland-Elyria-Mentor,

- OH MSA; Detroit-Warren-Livonia, MI MSA; Minneapolis-St. Paul-Bloomington, MN-WI MSA; Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA; Phoenix-Mesa-Scottsdale, AZ MSA; Pittsburgh, PA MSA.
- 6. Richard Florida. The Rise of the Creative Class, New York: Basic Books, 2002; Cities and the Creative Class, New York: Routledge, 2005. John Howkins. The Creative Economy, London: Penguin, 2001
- 7. Joseph Gyourko and Anita Summers, "Philadelphia: Spatial Economic Disparities," in Janet Rothenberg Pack, ed., Sunbelt/Frostbelt. Washington, DC: Brookings Institution, 2005.
- 8. Nonprofit Finance Fund, "Cultural Facilities Study Summary," New York, NY, 2001, p.1. Accessible on-line at www.nonprofitfinancefund.org.
- 9. Calculated from U.S. Census, Current Population Survey Annual Social and Economic file, 2004.
- 10. Kaiser Commission on Medicaid and the Uninsured. The Uninsured: A Primer. Washington, D.C.: The Henry J. Kaiser Family Foundation, 2004, and MPIP calculations from the U.S. Census, Current Population Survey Annual Social and Economic file, 2004 and Annual Demographic File, 2000.
- 11. Amy Worden. "Many Wal-Mart Workers Use Medicaid." The Philadelphia Inquirer. March 2, 2006.
- 12. State Policy Documentation Project. "States' Implementation of Selected Medicaid Provisions of the Personal Responsibility and Work Opportunities Reconciliation Act of 1996." Washington, D.C.: Center for Law and Social Policy and Center on Budget and Policy Priorities, January, 2000.
- 13. Daniel A. Sandoval, Thomas A. Hirschl, and Mark S. Rank, "The Increase of Poverty Risk and Income Insecurity in the U.S. since the 1970s." Paper presented to the annual meeting of the American Sociological Association, August, 2004



							_				_				_				_
Abington Township	4	1	D <sub>2</sub>	East Pikeland Township	5	82	B <sub>2</sub>	Lower Southampton				Plumstead Township	5	232	D1	Upper Northeast	3	305	D2
Aldan Borough	3	2	C3	East Rockhill Township	2	83	Cı	Township	à	158	D2	Plymouth Township	4	233	C2	Upper O ford Township	Ž.	306	A3
			C4	East Vincent Township			B2										7		D <sub>4</sub>
Alloway Township	4	3			4	84		Lumberton Township	5	159	E3	Pocopson Township	5	234	B3	Upper Pittsgrove Township	4	307	
Ambler Borough	3	4	D <sub>2</sub>	East Whiteland Township	5	85	B <sub>2</sub>	Magnolia Borough	3	160	D3	Pottstown Borough	3	235	B2	Upper Pottsgrove Township	5	308	B2
Aston Township	4	5	C <sub>3</sub>	Eastampton Township	4	86	E2	Malvern Borough	3	161	C2	Prospect Park Borough	3	236	C3	Upper Providence Township,			
Atglen Borough	3	6	A3	Easttown Township	5	87	C2	Mannington Township	4	162	C4	uakertown Borough	3	237	Cı	Delaware Co.	5	309	C <sub>3</sub>
Audubon Borough	3	7	D3	Eddystone Borough	5	88	C3	Mansfield Township	100	163	E2	uinton Township		238	C4	Upper Providence Township,	See	4540	- 3
	3				2				4				4				12	10000	60
Audubon Park Borough	2	8	D3	Edgewater Park Township	3	89	E2	Mantua Township	4	164	D3	Radnor Township	2	239	C2	Montgomery Co.	5	310	C2
Avondale Borough	3	9	B3	Edgmont Township	5	90	C3	Maple Shade Township	3	165	D3	Red Hill Borough	3	240	Cı	Upper Salford Township	5	311	C2
Barrington Borough	3	10	D3	Elk Township,				Marcus Hook Borough	1	166	C <sub>3</sub>	Richland Township	4	241	Cı	Upper Southampton			
Bass River Township		11	F4	Chester Co.		91	A3	Marlborough Township		167	Ci	Richlandtown Borough	2	242	Cı	Township		312	D2
	4				4	91	7.5		4				3				4		
Bedminster Township	4	12	Dı	Elk Township,				Marple Township	4	168	C3	Ridley Park Borough	3	243	C3	Upper Uwchlan Township	5	313	B2
Bellmawr Borough	3	13	D3	Gloucester Co.	4	92	D <sub>4</sub>	Medford Lakes Borough	5	169	E3	Ridley Township	3	244	C3	Uwchlan Township	5	314	B <sub>2</sub>
Bensalem Township	3	14	E2	Elmer Borough	2	93	D <sub>4</sub>	Medford Township	5	170	E3	Riegelsville Borough	3	245	Dı	Valley Township	4	315	A3
		25		Elsinboro Township	-				-				3	2.6	E2	Voorhees Township	100		En
Berlin Borough	4	15	E3		4	94	C4	Media Borough	2	171	C3	Riverside Township	3	246			5	316	E3
Berlin Township	4	16	E3	Elverson Borough	2	95	B <sub>2</sub>	Merchantville Borough	3	172	D3	Riverton Borough	3	247	D <sub>2</sub>	Wallace Township	5	317	B2
Bethel Township	5	17	C3	Evesham Township	5	96	E3	Middletown Township				Rockledge Borough	3	248	D <sub>2</sub>	Warminster Township	4	318	D2
Beverly city	1	18	E2	Falls Township	2	97	E <sub>2</sub>	Delaware Co.	5	174	C3	Rose Valley Borough	5	249	C <sub>3</sub>	Warrington Township	5	319	D <sub>2</sub>
	9			Fieldsboro Borough	2		E2	Middletown Township,	-			Ro Borough Manayunk	3		C2	Warwick Township,	-	3.3	
Birmingham Township	5	19	B3		3	98					-		3	250					
Bordentown city	3	20	E2	Florence Township	3	99	E2	Bucks Co.	4	173	E2	Royersford Borough	3	251	C2	Bucks Co.	5	320	D2
Bordentown Township	4	21	E2	Folcroft Borough	3	100	C3	Milford Township	5	175	Cı	Runnemede Borough	3	252	D <sub>3</sub>	Warwick Township,			
Bridgeport Borough	3	22	C2	Franconia Township	5	101	Cı	Millbourne Borough	2	176	D3	Rutledge Borough	3	253	C3	Chester Co.	4	321	B <sub>2</sub>
Bridgeton Township			Dı	Franklin Township,	,	1.00	200	Modena Borough	4		B3	Sadsbury Township				Washington Township,	-4	2	100
	4	23							15000	177			4	254	A3				
Bristol Borough	3	24	E2	Chester Co.	5	102	B3	Monroe Township	4	178	E4	Salem city	1	255	C4	Burlington Co.	4	322	F4
Bristol Township	3	25	E2	Franklin Township,				Montgomery Township	5	179	D2	Salford Township	4	256	Cı	Washington Township,			
Brookhaven Borough	3	26	C3	Gloucester Co.	4	103	D <sub>4</sub>	Moorestown Township	5	180	E3	Schuylkill Township	5	257	C2	Gloucester Co.	5	323	D <sub>3</sub>
Brooklawn Borough			D3	Gibbsboro Borough	100			Morrisville Borough	3	181	E2	Schwenksville Borough	3	258	C2	Waterford Township	4		E <sub>3</sub>
	3	27			4	104	E3		3				3				4	324	E3
Bryn Athyn Borough	5	28	D <sub>2</sub>	Glassboro Borough	3	105	D3	Morton Borough	3	182	C3	Sellersville Borough	3	259	Cı	Wenonah Borough	5	325	D3
Buckingham Township	5	29	Di	Glenolden Borough	3	106	C3	Mount Ephraim Borough	3	183	D3	Shamong Township	5	260	E3	West Bradford Township	5	326	B3
Burlington city	2	30	E2	Gloucester City	3	107	D <sub>3</sub>	Mount Holly Township	3	184	E2	Sharon Hill Borough	2	261	C <sub>3</sub>	West Brandywine Township	5	327	B <sub>2</sub>
	3		E2		1200				3501			Silverdale Borough	,	262	Ci		3		A <sub>2</sub>
Burlington Township	4	31		Gloucester Township	4	108	D <sub>3</sub>	Mount Laurel Township	5	185	E3		5			West Caln Township	4	328	
Caln Township	4	32	B2	Green Lane Borough	3	109	Cı	Narberth Borough	2	186	C2	Skippack Township	5	263	C2	West Chester Borough	2	329	B3
Camden city	1	33	D3	Greenwich Township	4	110	C3	National Park Borough	3	187	D <sub>3</sub>	Solebury Township	5	264	D1	West Conshohocken			
Carneys Point Township	2	34	C3	Haddon Heights Borough	2	111	D <sub>3</sub>	Nether Providence	100			Somerdale Borough	2	265	D <sub>3</sub>	Borough	2	330	C2
	3		D2		3					188	Co		3	266	Ci		3		
Center City	2	35		Haddon Township	4	112	D3	Township	5		C3	Souderton Borough	3			West Deptford Township	4	331	D3
Chadds Ford Township	5	36	B3	Haddonfield Borough	5	113	D3	New Britain Borough	5	189	D2	South Coatesville Borough	1	267	B3	West Fallowfield Township	4	332	A3
Chalfont Borough	5	37	D2	Hainesport Township	4	114	E3	New Britain Township	5	190	Dı	South Coventry Township	4	268	B <sub>2</sub>	West Goshen Township	5	333	B3
Charlestown Township	5	38	B2	Harrison Township	5	115	D <sub>3</sub>	New Garden Township	5	191	B3	South Harrison Township	4	269	C <sub>3</sub>	West Grove Borough	2	334	B <sub>3</sub>
Cheltenham Township	2		D <sub>2</sub>	Hatboro Borough		116	D2	New Hanover Township,		.3.	552	South Philadelphia				West Marlborough	,	334	-3
	2	39			3						400			270	D3				
Cherry Hill Township	5	40	D3	Hatfield Borough	3	117	C2	Burlington Co.	2	192	F2	Southampton Township	4	271	E3	Township	4	335	B3
Chesilhurst Borough	1	41	E3	Hatfield Township	4	118	C2	New Hanover Township,				Southwest Philadelphia	3	272	D <sub>3</sub>	West Nantmeal Township	4	336	B <sub>2</sub>
Chester city	1	42	C3	Haverford Township	5	119	C3	Montgomery Co.	4	193	Bı	Spring City Borough	4	273	C2	West Norriton Township	3	337	C2
Chester Heights Borough			C3	Haycock Township		120	Di	New Hope Borough	2		Eı	Springfield Township,	7			West Nottingham		221	
	3	43			4					194					400			1000	450
Chester Township	1	44	C3	Highland Township	4	121	A3	New London Township	5	195	A <sub>3</sub>	Bucks Co.	4	274	Cı	Township	4	338	A3
Chesterfield Township	4	45	F2	Hilltown Township	4	122	Dı	Newfield Borough	3	196	D4	Springfield Township,				West Philadelphia	1	339	D <sub>3</sub>
Chestnut Hill,				Hi Nella Borough	1	123	D <sub>3</sub>	Newlin Township	5	197	B3	Burlington Co.	5	275	E2	West Pikeland Township	5	340	B <sub>2</sub>
Mt.Airy Germantown		46	D <sub>2</sub>	Honey Brook Borough		124	A2	Newtown Borough		198	E2	Springfield Township,	,	-/3		West Pottsgrove Township	3		B2
					2				3	190	LZ			100000000			3	341	
Cinnaminson Township	4	47	D <sub>2</sub>	Honey Brook Township	4	125	A <sub>2</sub>	Newtown Township,				Delaware Co.	5	276	C3	West Rockhill Township	4	342	Cı
Clayton Borough	3	48	D4	Horsham Township	5	126	D <sub>2</sub>	Bucks Co.	5	199	E2	Springfield Township,				West Sadsbury Township	4	343	A3
Clementon Borough	3	49	D3	Hulmeville Borough	3	127	E2	Newtown Township,				Montgomery Co.	3	277	D <sub>2</sub>	West Vincent Township	5	344	B <sub>2</sub>
Clifton Heights Borough	2	50	C3	Ivyland Borough	2	128	D <sub>2</sub>	Delaware Co.		200	C3	Stratford Borough	1	278	D <sub>3</sub>	West Whiteland Township	5	345	B2
	3				3				3		Di		1			Westampton Township	5,833		
Coatesville city	-	51	B3	Jenkintown Borough	3	129	D <sub>2</sub>	Nockami on Township	4	201		Swarthmore Borough	2	279	C3		5	346	E2
Collegeville Borough	5	52	C2	Kennett S uare Borough	3	130	B3	Norristown Borough	1	202	C2	Swedesboro Borough	3	280	C <sub>3</sub>	Westtown Township	5	347	B <sub>3</sub>
Collingdale Borough	3	53	C <sub>3</sub>	Kennett Township	5	131	B3	North Coventry Township	4	203	B2	Tabernacle Township	5	281	F3	Westville Borough	3	348	D <sub>3</sub>
Collingswood Borough	3	54	D3	Kensington and River/Wards	1	132	D <sub>3</sub>	North Hanover Township	2	204	F2	Telford Borough, Bucks Co.	3	282	Ct	Whitemarsh Township	5	349	D2
Colwyn Borough		57	D3	Langhorne Borough			E2	North Wales Borough		205	C2	Telford Borough,	-	93,020	544	Whitpain Township			C2
	- 1	55			2	133			3						2		5	350	
Concord Township	5	56	C3	Langhorne Manor Borough	5	134	E2	Northampton Township	5	206	D <sub>2</sub>	Montgomery Co.	3	283	Cı	Willingboro Township	4	351	E2
Conshohocken Borough	3	57	C2	Lansdale Borough	3	135	C2	Norwood Borough	3	207	C3	Thornbury Township,				Willistown Township	5	352	C2
Darby Borough	1	58	D3	Lansdowne Borough	3	136	C3	Oaklyn Borough	3	208	D3	Chester Co.	5	284	B3	Winslow Township	4	353	E3
Darby Township	1	59	C3	Laurel Springs Borough	3	137	D <sub>3</sub>	Oldmans Township	4	209	C3	Thornbury Township,	350	1878	10000	Woodbury city	3	354	D <sub>3</sub>
					3				7				-	00-	Co		3	334	05
Delanco Township	4	60	E2	Lawnside Borough		138	D3	Olney Oak Lane		210	D <sub>2</sub>	Delaware Co.	2	285	C3	Woodbury Heights			20
Delran Township	4	61	E2	Limerick Township	5	139	C2	O ford Borough	3	211	A3	Tinicum Township,				Borough	5	355	D3
Deptford Township	4	62	D3	Lindenwold Borough	1	140	D3	Palmyra Borough	3	212	D2	Bucks Co.	4	286	D1	Woodland Township	4	356	F3
Douglass Township	4	63	Bı	Logan Township	5	141	C3	Parkesburg Borough	2	213	A3	Tinicum Township,				Woodlynne Borough	1	357	D3
Downingtown Borough	3	64	B2	London Britain Township	-	A STATE OF THE PARTY OF THE PAR	B3	Parkside Borough	3	214	C <sub>3</sub>	Delaware Co.	-	287	C <sub>3</sub>	Woodstown Borough	3	358	Ci
	3				)	142			,				,				100		D <sub>3</sub> C <sub>4</sub> C <sub>3</sub>
Doylestown Borough	3	65	Di	London Grove Township	5	143	B3	Paulsboro Borough	19	215	D <sub>3</sub>	Towamencin Township	5	288	C2	Woolwich Township	5	359	C3
Doylestown Township	5	66	D2	Londonderry Township	4	144	A <sub>3</sub>	Pemberton Borough	3	216	E3	Trainer Borough	-1	289	C3	Worcester Township	5	360	C2
Dublin Borough	3	67	Di	Lower Alloways				Pemberton Township	3	217	F3	Trappe Borough	5	290	C2	Wrightstown Borough	1	361	F3
Durham Township	4	68	Dı	Creek Township	4	145	C4	Penn Township	4	218	A3	Tredyffrin Township	5	291	C2	Wrightstown Township	5	362	D2
East Bradford Township				Lower Chichester Township	2		C3				E2		3		Cı	ardley Borough	200		E2
	5	69	B3		3	146	C3	Penndel Borough	3	219		Trumbauersville Borough	3	292			3	363	
East Brandywine Township	5	70	B2	Lower Frederick Township	5	147	C2	Penns Grove Borough	1	220	C3	Tullytown Borough	3	293	E2	eadon Borough	1	364	D3
East Caln Township	5	71	B <sub>2</sub>	Lower Gwynedd Township	5	148	D2	Pennsauken Township	3	221	D <sub>3</sub>	Upland Borough	1	294	C3				
East Coventry Township	4	72	B2	Lower Makefield Township	5	149	E2	Pennsburg Borough	3	222	Ci	Upper Chichester Township	4	295	Ca				
	1	7-		Lower Merion Township	2		C2						-	205	C <sub>3</sub>				
East Fallowfield Township	4	73	B3		5	150		Pennsbury Township	5	223	B3	Upper Darby Township	3	296	C3				
East Goshen Township	5	74	C3	Lower Moreland Township	5	151	D <sub>2</sub>	Pennsville Township	3	224	C4	Upper Dublin Township	5	297	D2				
East Greenville Borough	3	75	Ci	Lower North Philadelphia	1	152	D3	Perkasie Borough	3	225	Cı	Upper Frederick Township	4	298	Cı				
Face Constant Tomation	4	75 76	D <sub>3</sub>	Lower Northeast	1	153	D2	Perkiomen Township	5	226	C2	Upper Gwynedd Township	5	299	C2				
East Greenwich Township		/~	D3		The same	154	A <sub>3</sub>	Phoeni ville Borough			C2	Upper Hanover Township	-		Cı				
East Greenwich Township	2			LOWEL O TOTA TOWNSHID	4	154	MS	rnoem vine borough	3	227		Opper manover lownship	4	300	W1 .				
East Lansdowne Borough	3	77										11 M. I. C. 11 11-	1		F				
East Lansdowne Borough East Marlborough Township	3 5	78	B <sub>3</sub>	Lower Pottsgrove Township		155	B2	Pilesgrove Township	4	228	C4	Upper Makefield Township	5	301	E2				
East Lansdowne Borough East Marlborough Township East Nantmeal Township	3 5 5	77 78 79	B <sub>3</sub> B <sub>2</sub>	Lower Pottsgrove Township Lower Providence Township			B2 C2		4 3	228	C <sub>4</sub> D <sub>3</sub>	Upper Makefield Township Upper Merion Township	5		C2				
East Lansdowne Borough East Marlborough Township	3 5 5 3	78 79	B <sub>3</sub>	Lower Pottsgrove Township Lower Providence Township		155 156		Pilesgrove Township Pine Hill Borough	3	229	D3		5 5 3	301 302					
East Lansdowne Borough East Marlborough Township East Nantmeal Township	3 5 5 3 5	78	B <sub>3</sub> B <sub>2</sub>	Lower Pottsgrove Township Lower Providence Township Lower Salford Township		155	C2	Pilesgrove Township				Upper Merion Township	5 5 3 1	301	C2				



## metropolitan philadelphia indicators project

Gladfelter 327
Temple University
1115 West Berks Street
Philadelphia, PA 19122
(215) 204-9073 (tel)
(215) 204-7833 (fax)
www.temple.edu/mpip