GREATER PHOENIX FORWARD
Sustaining and Enhancing the Human-Services Infrastructure

GREATER PHOENIX: DEMOGRAPHIC AND SOCIOECONOMIC CHARACTERISTICS

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A Project of the ASU College of Public Programs
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Major funding provided by Valley of the Sun United Way and the City of Phoenix. Additional support provided by Alcoa Foundation, SRP, APS and Downtown Phoenix Partnership. The support of these entities is gratefully acknowledged.

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The short answer to most questions about Greater Phoenix demographics—past, present, and future—consists of three familiar words: rapid population growth. Large and sustained increases in population have driven most socioeconomic trends in the area for decades, and promise to continue doing so. Retirees and young families, educated and uneducated, domestic migrants and undocumented immigrants, homeowners and renters, Hispanic and non-Hispanic—their unceasing arrival by the thousands dwarf other phenomena in its impact on all aspects of life. Associated with it are corollary trends that also bear notice in considering the future of human-services delivery in Greater Phoenix. These include:

- The strong growth of the Hispanic population, mostly due to an increase in the number of undocumented immigrants during the 1990s. With most of the immigrants being of prime childbearing age and with immigrants having relatively high birthrates, the net natural increase of Hispanics also has been substantial.

- The peaking of immigration to Greater Phoenix. Even before the implementation of Arizona’s employer sanctions law, the number of immigrants to the Phoenix area had peaked. This law has the potential to substantially reduce the inflow of undocumented immigrants and to increase the out-migration of existing unauthorized immigrants. However, even if the law is ruled unconstitutional, the number of immigrants should continue to decrease.

- The impact of the economic cycle. Near-term changes in demographic and socioeconomic characteristics will be driven by the economic cycle. Economic growth has slowed sharply in recent months and a recession seems probable. A quick recovery from the downturn is unlikely given the severity of the Phoenix area’s real estate problems. A substantive economic recovery may be three years or so in the future.

Population Growth and the Economic Cycle

Nationally, population gains result from two sources: net natural increase (the excess of births over deaths) and net international immigration. With the numbers of each being largely consistent from year to year, the population grows at a relatively stable pace. Since 2000, the Census Bureau estimates the change to have been about 1%, or a little less than 3 million, per year. This is down a bit from the growth rates during the 1990s.

In contrast, the population of Greater Phoenix (defined in this report as Maricopa County) also is affected by domestic migration—the movement of people into and out of the area.
but within the United States. Domestic migration is highly sensitive to economic conditions. It varies substantially over time as it follows the economic cycle with a lag of several months. Thus, the annual growth rate in Greater Phoenix has been more variable than the U.S. average. However, largely because of the net inflow of domestic migrants, average growth rates in Maricopa County have been much higher than the U.S. average, exceeding 3% per year in all but one year since 1991.

The annual numeric gain in population in the Phoenix area is displayed in Figure 1. The economic cycle peaks in the early 1970s, late 1970s, mid-1980s, mid-1990s, and mid-2000s are obvious. The cyclical troughs also are clear, though the low points of the mid-1970s and early 1990s are lower than those of the early 1980s and early 2000s. In addition, population gains since the mid-1990s on average have been greater than in the preceding years.

**Domestic Migration**

Until the mid-1990s, most of the population growth in Greater Phoenix resulted from domestic migration. Despite an influx of immigrants since then, net domestic migration remains the largest source of population growth. Into the 1980s, most of the domestic migrants to the Phoenix area came from the Northern Plains and Great Lakes regions. An improved economy in those regions slowed the out-migration flow, though the net inflow to Maricopa County from this region remains substantial. Since around 1990, a much larger share of the domestic migrants to Maricopa County has come from other western states, particularly California. Many of the migrants from western states were born in the Northern Plains and Great Lakes regions.

Young adults always have represented a disproportionate share of the net domestic in-migration to Greater Phoenix. Retirees, particularly those retiring early, also have been disproportionately represented among the domestic in-migrants. However, the relative importance of retirement migration to the Phoenix area has declined since the late 1970s. While the increasing size and associated urban problems of Greater Phoenix likely have contributed to a flattening of retiree migration, the decline in relative importance has resulted more from an acceleration of net immigration of young adults, in part due to an influx of immigrants.

**Immigration**

The greater population gains in Maricopa County since the mid-1990s have resulted largely from increased immigration. Legal immigration to the Phoenix area has been limited in number, though the number has increased since the late 1990s. No official count of undocumented immigration is available, but estimates have been made by state. Unauthorized immigration to Arizona peaked in the late 1990s.

Undocumented immigration to the United States, particularly from Mexico, has occurred for decades, but historically relatively few of these unauthorized immigrants settled in the Phoenix area. Immigration from Mexico almost entirely has been employment-related, driven by greater opportunity and higher wages in the United States. Part of the reason why wages have been so low in Mexico has been the continuously larger size of the age cohort entering the workforce relative to the size of the older age groups.

The number of undocumented immigrants to the United States surged during the mid-1990s, with the Phoenix area becoming a favored destination. The increase in immigration largely resulted from two factors:

1. The implementation of NAFTA—the North American Free Trade Agreement—in 1994 initially caused economic difficulties in Mexico, culminating in a peso devaluation in December 1994. The result was an increase in the number of unemployed Mexicans and a widening in the wage differential between the two countries.

2. The United States was experiencing a shortage of workers due to a booming economy and a small number of native-born Americans entering the workforce relative to the size of the older age cohorts. During the baby boom (from 1946 through 1964), the number of births in the United States generally exceeded 4 million per year. In the subsequent baby bust (from 1965 until around 1980), the number of annual births got as low as 3.1 million in the mid-to-late 1970s. Thus, the number of Americans entering the workforce in the mid-1990s was far less than the size of the baby-boom generation workforce, resulting in a labor shortage.
The imbalance of jobs and workers was most pronounced in unskilled positions typically filled by youths (such as the fast-food industry), unskilled positions in physically demanding (e.g., crop picking) or undesirable conditions (e.g., animal slaughtering), and in certain industries needing a range of unskilled to skilled workers, such as construction. Young, relatively uneducated Mexicans (and Central Americans) were well suited to most of these job openings. Many Mexicans with greater skills, such as in the construction trades, also fit well with the needs of American employers.

Undocumented immigration to the Phoenix area peaked in the late 1990s. The 2001 recession and the slow employment growth that followed in the next couple of years reduced employment opportunities for immigrants. At the same time, the number of young native-born Americans entering the workforce began to increase. The number of U.S. births rose from a low of 3.1 million to nearly 4 million by the late 1980s—nearly as many as during the baby boom—and has remained approximately 4 million per year since.

Based strictly on demographics, the number of immigrants should continue to drop. Many more Americans will continue to move into the workforce than was the case a decade ago. In addition, birthrates in Mexico continue to fall. Within a decade or so, the number of Mexican youths entering the workforce will be no larger than the size of the older age cohorts. Thus, job availability in Mexico will be greater, with upward pressure on wages.

The implementation of the employer sanctions law in Arizona at the beginning of 2008 raises the possibility of a sharp decrease in undocumented immigration to the state, as well as an increase in the out-migration of existing unauthorized immigrants. Data are not yet available, but anecdotal evidence suggests that many undocumented immigrants already have left Greater Phoenix. Given the number of uncertainties regarding the law—whether its constitutionality continues to be upheld, and how effectively it will be enforced—its effect on the area’s economy and demography remains uncertain.

Projected Population Growth

The Arizona Department of Economic Security (DES) periodically has produced population projections by year for 50 years into the future. These projections divide population change into two components: net migration (domestic and international combined) and net natural increase. The latest population projections for Maricopa County were released in 2006.

The DES projections make no attempt to reflect the economic cycle. Not considering the economic cycle, DES projects that the increase in the county’s population will slow from 115,000 to 110,000 per year over the next few years. Net migration will drop a bit more than 5,000 while net natural increase rises slightly, due to the large number of young adults of childbearing age.

Given that the local and national economies slowed dramatically in late 2007 and early 2008, and that a recession likely either started around the beginning of 2008 or will begin soon, the DES near-term projections of population growth almost certainly will turn out to be substantially too high. Further, the projections were issued prior to the passage of the employer sanctions law, which appears to have already caused an increase in out-migration and therefore a slowing in population growth.2

Characteristics of the Population

This section examines the demographic and socioeconomic characteristics of three geographic areas: the City of Phoenix, Maricopa County, and the United States. It primarily relies on the 1990 and 2000 decennial censuses, and 2005 and 2006 data from the American Community Survey (ACS). The ACS data for 2005 and 2006 should be used cautiously because of high sampling error and inconsistencies with decennial census data.3

While a review of historical data is a useful starting point to predicting future conditions, the relationships of the past may shift in the future. Further, in the short term, the economic cycle takes precedence over long-term trends. Since the current economic cycle has shifted from strong growth to an apparent recession so quickly and so recently, projections issued prior to this cyclical shift are likely to be highly inaccurate in the short term even if they prove to be accurate over the long term.

Typically, a recession lasts several months to a little more than a year. In the past, economic growth quickly returned to a strong pace following the end of a recession; but the recovery period of the previous two recessions (in 1990-91 and 2001) lasted two years or more. Of particular relevance to current conditions, the housing boom of the early and mid-1980s was followed by several years of weak economic conditions. Therefore, given the existing problems in the housing market, a quick recovery from the current economic slowdown should not be expected. It easily could be 2011 or later until economic conditions markedly change for the better in the Phoenix area. Thus, the demographic and socioeconomic characteristics discussed in this section likely will be negatively influenced by economic conditions for some three years. After that, considerable improvement should occur, corresponding to better economic conditions.

Households and Group Quarters

More than 97% of the national population, and 98% of Maricopa County residents, live in households. The others live in group quarters such as correctional institutions, nursing homes, college dormitories, and military barracks. The group quarters population includes the homeless, but counts of the homeless are not available.

Nationally, average household size dropped slightly from 2.63 in 1990 to 2.59 in 2000, but has climbed marginally since then to 2.61 in 2006. Relative to the national average, household size in Maricopa County was less in 1990 at 2.59 but more in 2000 at 2.67. In the City of Phoenix, average household size was greater in 1990 and 2000 than in the county. It is unclear how much average household size has climbed since 2000 in the county and the city due to sampling error in the ACS.
For Maricopa County, the 2005 figure was 2.71 and the 2006 figure was 2.82; for Phoenix, the comparable figures are 2.74 and 2.93. It is extremely unlikely that household size changed that much in one year.

The Census Bureau classifies households as consisting of families (two or more related people) or nonfamilies (either those living alone or two or more people living together, no two of whom are related). In Maricopa County in 2000, the proportion of households consisting of married couples essentially was the same as the national average. However, the Phoenix area had a higher proportion of family households headed by a male with no female present and a lesser share of female-headed families. Single-person households were less common in the Phoenix area, but other nonfamily households were more common.

Nationally, the share of households consisting of a single person has risen; an increase in other nonfamily households during the 1990s has ceased (Table 1). The share of males heading a family without a wife present continues to rise, but the proportion of female-headed families has stabilized. While the proportion of married couples without children has held steady, the proportion with children continues to decline. Changes in the Phoenix area since 2000 have varied somewhat from the national average, but it is unclear whether the variation is real or a result of sampling error.

The national trends likely will continue through the next several years. In particular, large numbers of children of households headed by the baby boom generation continue to reach maturity and leave home. However, the weak economy likely will retard the formation of new households in the near term, particularly of single-person households.

### Race and Ethnicity

The racial/ethnic composition of the American population has changed considerably in recent years, mostly as a result of immigration. In particular, the Hispanic proportion of the population has climbed significantly, and the Asian share also has grown. In contrast, the percentage of non-Hispanic Whites has fallen. The proportions of other groups, including non-Hispanic Blacks, hardly have changed. The population shift from non-Hispanic Whites to Hispanics has been more pronounced in Maricopa County, and particularly in the City of Phoenix, than nationally, as seen in Table 2.

The Hispanic proportion of the population probably will continue to rise during the next several years due to net natural increase, as births greatly outnumber deaths. Latinos not only have higher birthrates, but a large number of Latinos are of prime childbearing age. The rate of increase, however, should slow due to reduced immigration resulting from lesser job opportunities during the economic slump. Further, the employer sanctions law may result in additional slowing in the rate of increase in the Hispanic share in Arizona.

### Table 1: Household Type

<table>
<thead>
<tr>
<th>SHARE OF TOTAL HOUSEHOLDS</th>
<th>FAMILY</th>
<th>NON-FAMILY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Married w/ Children</td>
<td>Married w/o Children</td>
</tr>
<tr>
<td>United States</td>
<td>1990</td>
<td>26.7%</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>23.5</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>21.7</td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>21.6</td>
</tr>
<tr>
<td>Maricopa County</td>
<td>1990</td>
<td>25.1</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>23.7</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>22.1</td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>22.8</td>
</tr>
<tr>
<td>City of Phoenix</td>
<td>1990</td>
<td>25.3</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>24.3</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>21.1</td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>23.1</td>
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</table>

Source: U.S. Department of Commerce, Census Bureau, Decennial Censuses and American Community Survey.

### Table 2: Race/Ethnicity

<table>
<thead>
<tr>
<th>SHARE OF THE TOTAL POPULATION</th>
<th>HISPANIC</th>
<th>White</th>
<th>Black</th>
<th>Asian</th>
<th>Native American</th>
<th>Other</th>
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<tr>
<td>United States</td>
<td>1990</td>
<td>9.0%</td>
<td>75.6%</td>
<td>11.7%</td>
<td>2.7%</td>
<td>0.7%</td>
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<tr>
<td></td>
<td>2000</td>
<td>12.5</td>
<td>69.1</td>
<td>12.1</td>
<td>3.6</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>14.5</td>
<td>66.8</td>
<td>11.9</td>
<td>4.3</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>14.8</td>
<td>66.2</td>
<td>12.2</td>
<td>4.3</td>
<td>0.7</td>
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<tr>
<td>Maricopa County</td>
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<td>77.1</td>
<td>3.3</td>
<td>1.5</td>
<td>1.5</td>
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<td>2000</td>
<td>24.8</td>
<td>66.2</td>
<td>3.5</td>
<td>2.1</td>
<td>1.5</td>
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<td></td>
<td>2005</td>
<td>29.2</td>
<td>61.2</td>
<td>3.7</td>
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<td>1.7</td>
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<tr>
<td></td>
<td>2006</td>
<td>30.0</td>
<td>60.2</td>
<td>3.9</td>
<td>2.8</td>
<td>1.4</td>
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<td>City of Phoenix</td>
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<td>71.8</td>
<td>4.9</td>
<td>1.4</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>34.1</td>
<td>55.8</td>
<td>4.8</td>
<td>1.9</td>
<td>1.6</td>
</tr>
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<td>41.8</td>
<td>48.3</td>
<td>4.9</td>
<td>1.9</td>
<td>1.9</td>
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<td></td>
<td>2006</td>
<td>41.2</td>
<td>48.2</td>
<td>5.4</td>
<td>2.2</td>
<td>1.5</td>
</tr>
</tbody>
</table>

* Beginning in 2000, those of more than one race are included.

Source: U.S. Department of Commerce, Census Bureau, Decennial Censuses and American Community Survey.
Age

The age distribution of the Maricopa County population in 2006 is shown in Figure 2. The county had a younger population than the national average, with greater shares of children less than 10 years old and young adults between the ages of 25 and 34, and lesser shares of those 45 or older, particularly in the 45-to-54 age group. The median age of 33.6 in Maricopa County was nearly three years younger than the U.S. average, with the increase in median age in Maricopa County between 2000 and 2006 smaller than the U.S. average. Only 11% of the county’s residents were age 65 or older, compared to 12.4% nationally. The population of the City of Phoenix was even younger, with a median age of 31.7 and less than 8% age 65 or older.

Thus, Maricopa County’s reputation as a retirement mecca is overhyped and/or out of date. While retirement-age migrants continue to move to the area, their numbers are exceeded by the numbers of young adults moving to the area.

Differences over time in the age distribution follow variations in the number of births. For example, the baby-boom generation, born between 1946 and 1964, was from 42 to 60 years old in 2006. Thus, the proportion in the 45-to-64 age group rose in Maricopa County from 19.8% in 2000 to 22.1% in 2006.

Over the next several years, the shares of those 35-to-49 years old will decrease, according to the DES projections, as the baby boom generation exits this age bracket, replaced by the baby-bust generation. Only modest changes in share are expected in other age groups except for 50-to-69. As more of the baby boom generation will age into this group in coming years, increases in the share are projected. Besides the aging in place of current residents, the number of retirement-age in-migrants likely will rise as more of the baby boom generation reaches early retirement age. However, poor economic conditions in the near term may retard this increase in retirement-age migration, as potential migrants are unable to sell their existing homes at the desired price.

Migration and Language

The 1990 and 2000 censuses asked respondents to state where they were living five years earlier. Relative to the nation, a lesser share of Maricopa County residents were living in the same house five years earlier. Considerably higher proportions had moved from another dwelling within the same county or from another state, while a lesser share had moved from another county within the same state. Mobility was not quite as high among Phoenix residents as among those living in the remainder of the county. Nationally, little change in the shares occurred between 1990 and 2000, though the proportion moving from another state was down a little, offset by a larger share moving from outside the country. The increase in immigration was larger in Maricopa County and more so in Phoenix.

It is not possible to compare the ACS migration question, which asks respondents to state where they were living one year earlier, to results from the decennial censuses. However, mobility continues to be higher in Maricopa County than nationally, both within the same county and from outside the state. Nationally, the foreign-born proportion of the population rose considerably between 1990 and 2000 and by a lesser extent between 2000 and 2006 (Table 3). The percentage of foreign-born in Maricopa County was slightly less than
the national average in 1990, but due to substantial immigration since then, the proportion continues to rise more than the U.S. average. The percentage foreign-born is considerably higher in Phoenix, with more than one in five residents in 2006 foreign-born. Less than half of the foreign-born were naturalized citizens nationally, but this low percentage results in part from the recent immigration of so many and from the waiting period before a new resident can seek citizenship. Not even a third of the foreign-born in the Phoenix area were naturalized citizens in 2006.

In the 1990 and 2000 censuses, nearly one-fourth of the foreign-born living in the nation had entered the country in the preceding five years. This share dropped a bit in 2005. In Maricopa County, the percentage entering in the prior five years jumped between 1990 and 2000, reaching 35%, but the proportion dropped back to 30% in 2005.

The proportion of the households speaking only English at home decreased between 1990 and 2006 nationally, with a more substantial decline in Maricopa County. The proportion speaking Spanish as the primary language at home rose substantially in Maricopa County, from less than 12% to nearly 23%, between 1990 and 2006. The increase was even more substantial in Phoenix. However, the rate of increase in the Spanish-speaking population has been less since 2000 than during the 1990s. The proportion speaking an Asian language also rose, but remained below 2% in Maricopa County. The proportion speaking other languages was unchanged.

Of those living in the United States speaking primarily Spanish at home, just more than half spoke English “very well” — a percentage unchanged between 1990 and 2006. In contrast, in Maricopa County, this percentage was 60 in 1990, but fell to 48 in 2000 and 47 in 2006. In 1990 and 2000 (data are not available from the ACS), nearly one fourth of the Spanish-speaking households nationally were “linguistically isolated” (no member of the household at least 14 years of age spoke English “very well”). This was a smaller percentage than in households speaking an Asian language. In Maricopa County, however, the Spanish-speaking, linguistically isolated percentage rose from less than 19% in 1990 to more than 26% in 2000. These percentages were higher in Phoenix.

Due to the passage of the employer sanctions law, the proportion of Spanish-speaking households likely will fall in the coming years in the Phoenix area. If the law is voided, the Spanish-speaking proportion probably will drop slightly.

The proportion of linguistically isolated households should decline more over time, as the bilingual children in the family become older and as more of the adults learn English.

Educational Attainment

The Census Bureau generally expresses educational attainment in terms of the population age 25 or older. Largely because of increases in attainment of age cohorts born through the first half of the 20th century, this aggregate measure continues to show improvement. As the less-educated elderly cohorts die and are replaced by younger cohorts that have greater attainment, the attainment of the entire 25-or-older cohort continues to improve, even though only modest improvement in educational attainment has occurred among those born since the middle of the 20th century.
Educational attainment in Maricopa County is higher than the national average (Table 4). Greater Phoenix has higher proportions with a bachelor’s degree and with some college, and lower shares with only a high school education (both graduating and not graduating from high school). However, a higher proportion of Phoenix area residents than U.S. residents have less than a ninth-grade education, and the percentage with a graduate degree is no higher. Educational attainment in the City of Phoenix is lower than in all of Maricopa County.

These overall educational attainment figures disguise important age patterns between Arizona and the United States. While the state’s attainment overall was close to the national average in 2000, educational attainment among adults under the age of 50—most of the working-age population—was inferior to the national average, and by a rather wide margin among the youngest adults. In contrast, the state’s attainment among those 55 or older was above the national norm, and by a wide margin among the elderly (Figure 3). A similar pattern was seen in the 1990 census data, though educational attainment among young adults was not as far below the national average in 1990 as in 2000.

Domestic in-migration of more highly educated individuals has raised the state’s educational attainment, most noticeably among retirement-age migrants. In contrast, the immigration of large numbers of young adults with limited educational attainment has lowered the attainment of the state’s young-adult population.

Between 1990 and 2000, the proportion with at least a bachelor’s degree rose and the proportion with a high school diploma or less fell, both nationally and in Maricopa County. Between 2000 and 2006, the pattern changed somewhat in both geographies, as the proportion with some college declined, offset by an increase in the percentage with a high school diploma as the maximum attainment.

Little change in overall educational attainment is likely over the next several years. As the number of poorly educated immigrants falls, the growing differential between Maricopa County and the nation in educational attainment among young adults should slow. An increase in highly educated and affluent early retirees, due to the growing numbers of baby boomers reaching this age, should maintain, if not increase, the differential in attainment in the older age groups.

**Employment**

The proportion of males age 16 or older who are employed has been higher in Maricopa County than the U.S. average, by an increasing margin over time. The female workforce participation rate has been marginally higher in Maricopa County than the U.S. average. In Phoenix, the percentage employed has been higher than the national average in both genders (Table 5).

The occupational mix in Maricopa County is a little different from the national average, with the proportions in sales and administrative support and in construction and extraction occupations higher in Maricopa County, while

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**TABLE 4 | Highest Educational Attainment | SHARE OF THE POPULATION 25 OR OLDER**

<table>
<thead>
<tr>
<th>United States</th>
<th>Less Than 9th Grade</th>
<th>9th-12th Grade</th>
<th>High School Graduate</th>
<th>Some College</th>
<th>Associate’s Degree</th>
<th>Bachelor’s Degree</th>
<th>Graduate Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>10.4%</td>
<td>14.4%</td>
<td>30.0%</td>
<td>18.7%</td>
<td>6.2%</td>
<td>13.1%</td>
<td>7.2%</td>
</tr>
<tr>
<td>2000</td>
<td>7.3</td>
<td>12.0</td>
<td>28.6</td>
<td>21.1</td>
<td>6.3</td>
<td>15.5</td>
<td>8.9</td>
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<td>20.1</td>
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<td>6.5</td>
<td>9.4</td>
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<td>19.5</td>
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<td>17.1</td>
<td>9.9</td>
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<table>
<thead>
<tr>
<th>Maricopa County</th>
<th>Less Than 9th Grade</th>
<th>9th-12th Grade</th>
<th>High School Graduate</th>
<th>Some College</th>
<th>Associate’s Degree</th>
<th>Bachelor’s Degree</th>
<th>Graduate Degree</th>
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<tr>
<td>1990</td>
<td>7.4</td>
<td>11.1</td>
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<td>24.6</td>
<td>8.3</td>
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<td>25.3</td>
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<table>
<thead>
<tr>
<th>City of Phoenix</th>
<th>Less Than 9th Grade</th>
<th>9th-12th Grade</th>
<th>High School Graduate</th>
<th>Some College</th>
<th>Associate’s Degree</th>
<th>Bachelor’s Degree</th>
<th>Graduate Degree</th>
</tr>
</thead>
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<tr>
<td>1990</td>
<td>8.8</td>
<td>12.5</td>
<td>25.5</td>
<td>26.0</td>
<td>7.3</td>
<td>13.5</td>
<td>6.4</td>
</tr>
<tr>
<td>2000</td>
<td>10.9</td>
<td>12.5</td>
<td>22.9</td>
<td>24.5</td>
<td>6.6</td>
<td>15.1</td>
<td>7.6</td>
</tr>
<tr>
<td>2005</td>
<td>10.3</td>
<td>11.0</td>
<td>25.6</td>
<td>22.2</td>
<td>7.6</td>
<td>15.3</td>
<td>7.9</td>
</tr>
<tr>
<td>2006</td>
<td>10.5</td>
<td>11.4</td>
<td>26.0</td>
<td>20.3</td>
<td>7.2</td>
<td>15.8</td>
<td>8.7</td>
</tr>
</tbody>
</table>

Source: U.S. Department of Commerce, Census Bureau, Decennial Censuses and American Community Survey.

**FIGURE 3 | Educational Attainment by Age, 2000**

DIFFERENCE IN PERCENTAGE SHARE, ARIZONA LESS THE UNITED STATES

Source: U.S. Department of Commerce, Census Bureau, Decennial Censuses.
the percentages involved in production and transportation have been lower. Relative to all of Maricopa County, higher shares of Phoenix residents were in the services, construction and extraction, and production and transportation categories, with a lower share particularly in the management and professional category.

A higher proportion of the workers in Maricopa County were employees of a private-sector company than the national average. The share working in the public sector was lower than the U.S. average, despite the presence of the state capital. Self employment also was less common in the Phoenix area.

Three-fourths of workers commuted to their workplace by driving alone in 2006, with the percentage slightly lower in the Phoenix area than nationally. The percentage carpooling has dropped nationally (to less than 11% in 2005) but remained constant in Maricopa County at more than 14%. Only 2% used public transit in Maricopa County, half the national average (the figure in Phoenix was a fourth less than the U.S. average). Mean travel time increased between 1990 and 2006, by more in the Phoenix area than nationally. The 26-minute mean commute in Maricopa County in 2006 compared to 25 minutes nationally.

The percentage employed is likely to fall in the near term as the weak economy causes employment growth to slow and the unemployment rate to rise. Later, as more baby boomers retire, the proportion of the population that is 16 or older that participates in the workforce will begin to fall.

**Income and Poverty**

Various measures of earnings and income are available from the decennial census and ACS.* Incomes reported in Table 6 have been inflation-adjusted to 2006 dollars. It is unclear how much of the fluctuation in real income over time is due to the economic cycle, and how much may be due to survey error (even in the decennial census). Because so many people refuse to report their income relative to the response rate on other questions, and because some misreport their income, the accuracy of income measures is less than that of other socioeconomic characteristics.

Incomes in Maricopa County have exceeded the national average. Measured by median household income, the differentials have ranged from 2.5% in the 1990 census to 8.4% in 2006. On a per capita basis, the differential has been between 3 and 4% except in 2005. In contrast, incomes in Phoenix have been below the national average. The differential in median household income has been 2 to 4%, except for 8% less in 2005. Per capita income has slipped from 2% less in 1990 to 8-to-10% less since.

Median earnings of a full-time year-round worker in Maricopa County in 2006 were 4% less than the national average among males, but among females, earnings in Maricopa County were 8%....
The poverty rate fluctuates with the economic cycle, being highest during and shortly after a recession. Thus, the trend in the poverty rate cannot be perceived from a limited number of observations taken at different stages of the economic cycle. In 1989, the economy had already slowed prior to the 1990-91 recession. In contrast, in 1999, the economy was still strong. By 2006, the economy was strong, having recovered from the 2001 recession, but poverty rates remained higher than in 1990 or 2000.

In each of the four years displayed in Table 6, the poverty rate in Maricopa County was 0.7 to 0.8 percentage points lower than the national average. In contrast, the poverty rate in Phoenix consistently has been higher than the U.S. average, with the differential ranging from 1 to 4 percentage points; the high rate in the city in 2006 probably was affected by sampling error.

Among children, the poverty rate in Maricopa County generally has been slightly less than the national average. The poverty rate among children in Phoenix has been considerably higher than the county figure, particularly since 2000. Among working-age adults (ages 18 to 64), the poverty rate in Maricopa County also has been a little lower, while the rate in Phoenix has been higher, than the U.S. average. In contrast, senior citizens in Maricopa County experience considerably less poverty than their national counterparts. In Phoenix, the poverty rate of those 65 or older has fluctuated from lower to higher than the U.S. average.

In 2007, real incomes and poverty rates probably were marginally better than in 2006.

Going forward, however, real incomes are likely to fall in the near term then to rebound as the economy recovers from the recession. Poverty rates are likely to rise, then to stabilize, as the economy improves.

### Housing

A bit more than two-thirds of the housing units in Maricopa County were owner-occupied in 2000, 2005, and 2006, up from 63.3% in 1990. These proportions are similar to the national average. In the City of Phoenix, however, homeownership is less common (less than 61% in 2006) and does not show an upward trend.

More than 60% of the dwelling units in Maricopa County in 2006 were single-family detached houses, a bit higher than the national average. Single-family detached houses made up a slightly lower proportion in Phoenix (Table 7). Single-family detached shares have climbed a little over time nationally, with a larger gain in Maricopa County. Large apartment complexes (buildings of five or more units) made up 20% of the housing units in Maricopa County in 2006, a higher share than in the nation. While the national share has changed little over time, the large-apartment share has declined in Maricopa County. In Phoenix, the percentage was higher at 26. The share of mobile homes has dropped in Maricopa County while holding nearly steady nationally.

Median gross rent in 2006 was higher than the U.S. average in Maricopa County, but near the U.S. average in Phoenix. The 2000-to-2006 percentage increase was lower in Maricopa County and Phoenix than the national average. In contrast, the percentage change in the median home value was nearly twice as high between 2000 and 2006 in Maricopa County and Phoenix as the national average, with the median moving from similar to the U.S. total to substantially higher (in Maricopa County, 48% higher). With incomes not rising as much as housing prices, housing became relatively more expensive nationally. Affordability fell much more in the Phoenix area.

Since 2006, housing prices have dropped nationally and in the Phoenix area while incomes have continued to rise, helping affordability to improve. However, affordability in Maricopa County remained historically very low in late 2007, limiting the purchase of homes by first-time buyers and by in-migrants
from areas with less expensive housing. This situation, however, is changing rapidly as home values in early 2008 have fallen substantially in the Phoenix area. Affordability should continue to rise, though the economic slump in the near term will negatively affect the incomes of some people. Housing prices in the Phoenix area, however, may remain higher relative to much of the nation than in the period before 2004.

The large number of people who bought or refinanced homes from 2004 through 2006 with discounted adjustable-rate mortgages (subprime loans) means that a growing number of people will have difficulty making their monthly payments. The foreclosure rate already has jumped and likely will rise further in the next year or two. This may cause homeownership rates temporarily to fall.

Seasonal Residents

Very little data are available concerning the number and characteristics of those living in Greater Phoenix for only part of the year. According to the 2000 census, 4.3% of the housing units in Maricopa County were held for seasonal, recreational, or occasional use, a higher percentage than the national average of 3.3%. However, the proportion was quite low in the City of Phoenix, at 1.1%. Similar data are not available from the ACS.

Historically, many (approximately half) of the seasonal residents of the Phoenix area lived in travel trailer and mobile home parks. In order to estimate the number and economic impact of seasonal residents, an annual survey of these parks was conducted by two members of the economics department at Arizona State University. Occasional additional surveys were conducted to determine characteristics of the seasonal population.

These studies indicated that a greatly disproportionate share of the winter residents lived in the Mesa-Apache Junction area. The far northwest Valley (near the Sun Cities) was a much smaller secondary site. Over time, the length of stay increased, with some living in Greater Phoenix more than half the year, but still considering their other home to be their primary residence. These winter residents were disproportionately from upper Midwestern states and western Canada. Many were from farming communities and smaller towns. Nearly all were at least 60 years old, though some remained active farmers. They were not particularly affluent. Other seasonal residents lived in other types of housing. Scottsdale was popular with more affluent visitors, who either owned a second home or rented an apartment or house for the season.

After years of increases, the number of seasonal residents living in travel trailer and mobile home parks has held steady or declined in recent years. Given the outward growth of the Phoenix area, some of the parks have been demolished so that the land can be used for other purposes. With increases in home prices and subsequent foreclosures, more of the units in the remaining parks are occupied by year-round residents of the area.

Qualitative information suggests that the total number of seasonal residents continues to rise, despite declines in those living in mobile home and travel trailer parks. A new breed of “snowbird” is increasingly choosing to live in single-family residences (detached houses, condominiums and townhouses). Many of these are owned units (second homes) outside of the historically popular areas of seasonal residences. During the recent housing boom, circumstantial evidence suggests that a disproportionate percentage of the homes purchased were second (or third) homes of rather affluent households who were not of traditional retirement age. An educated guess is that at the peak of the season in February, approximately 200,000 seasonal residents live in the Phoenix area.

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NOTES

1 The population statistics unit of DES recently was transferred to the Arizona Department of Commerce.

2 Beyond the next few years, the population growth projected by DES is reasonable. While a perception exists that the growth of Arizona and the Phoenix area consistently has been underprojected, a review of the historical accuracy of population projections for Arizona indicates that this has not been the case. Projections made by DES and other sources have tended to be too high when issued at times of rapid economic growth and too low when issued during economic downturns.

3 While the ACS provides annual data that have not been available previously, the sampling error for a single year is extremely high, even for an area as populous as Maricopa County. The ACS is replacing the long form of the decennial census, historically the source of most socioeconomic data. The long form of the census questionnaire was sent to approximately one in eight households, with sampling error small for areas with a substantial population, such as the City of Phoenix. The design of the ACS is to nearly match the sampling error of the decennial census long form after aggregating the results of surveys conducted over five years. Since the first year of full implementation of the ACS was 2005, and since the results are released about nine months after the end of a year, it will be late 2010 before the results of five years of ACS surveys will be available.

4 In addition to the high sampling error in currently available ACS data, the ACS results are not exactly comparable to the decennial census results. The long-form data from the decennial census were expressed mostly as a point in time (census day: April 1), though the time frame of some questions was the prior calendar year. The ACS data are collected continuously, with the results for a given year coming from surveys collected throughout the year.

Additional issues plague the comparison of long-form decennial census data and ACS data. In the census, seasonal residents are counted at the address of their primary home, even if they are residing at their secondary home on census day. In the ACS, respondents are counted at the place they are residing when contacted, if their total stay at that address will exceed two months. Thus, winter visitors have been excluded from the decennial census counts of Phoenix area residents, but some will be included in the ACS. Since winter visitors to the Phoenix area likely differ from permanent residents in nearly all regards, the ACS results will differ slightly from the decennial census figures over a broad range of characteristics.

While the wording of most questions in the ACS matches that of the decennial censuses, some differences exist. For example, the migration question in the decennial census asked where people were living five years earlier; the ACS time frame is one year.

4 Many of the changes in percentages in Table 2 since 2000 likely are due to sampling error. For example, it is unlikely that the Hispanic proportion in Phoenix declined between 2005 and 2006, but whether the 2006 figure is too low or the 2005 figure is too high cannot be determined.

5 Based on the entire one-in-eight long-form sample, the Census Bureau provided detail on educational attainment by age in 2000 only to the state level. For 1990, the smaller S% Public Use Microdata Sample—PUMS—had to be used even for the state.

6 Income and poverty rates from the decennial censuses are expressed for the preceding calendar year (1989 and 1999). In the ACS, the figures are for the preceding 12-month period, inflation-adjusted by month to represent the average for the preceding calendar year.