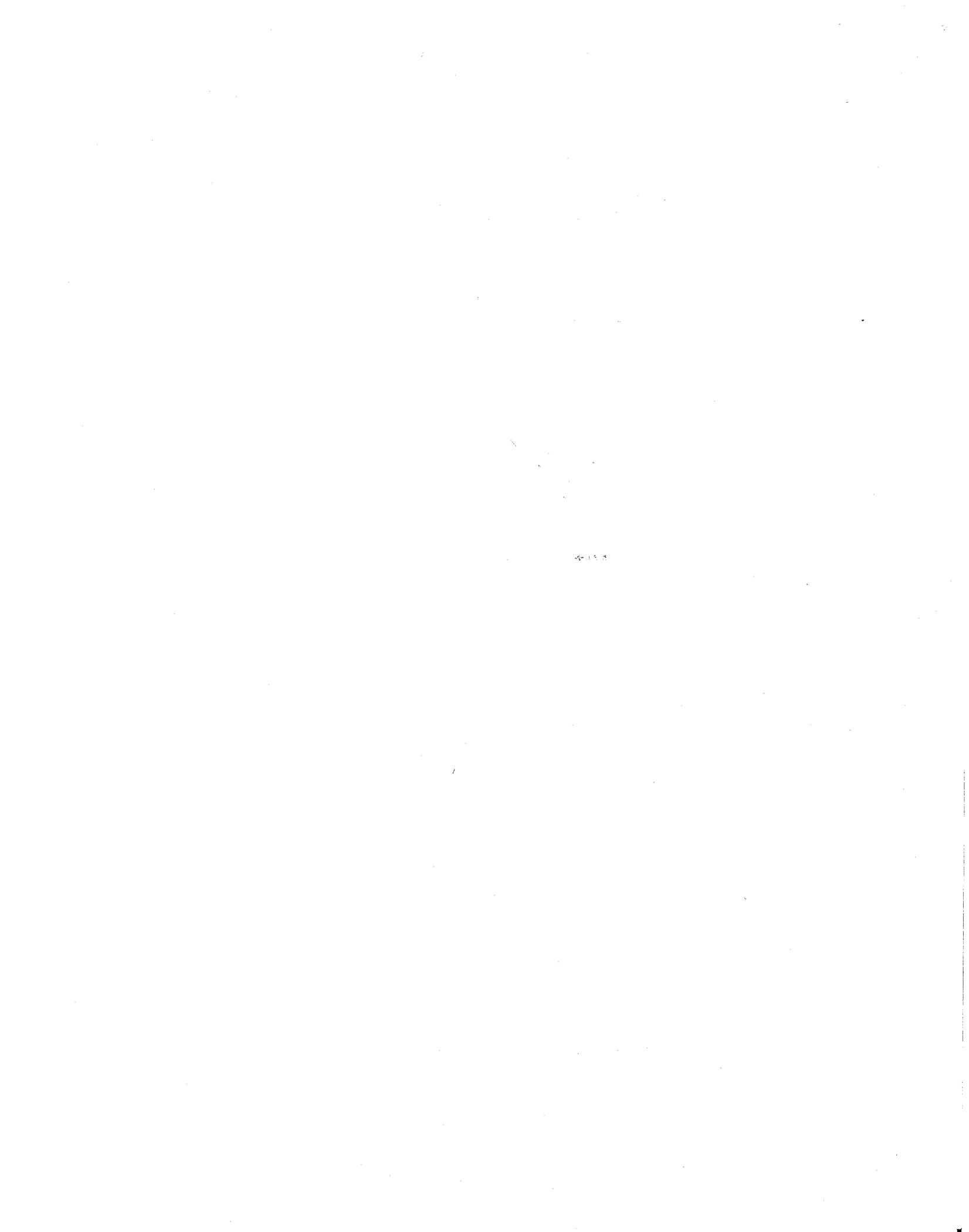


Arizona Population: Demographic and Migration Trends

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PREFACE

This document primarily represents a compendium of demographic/population/migration articles previously written by Center for Business staff, mostly printed in *Arizona Business* between 1985 and 1988. As such, the geographic emphasis is not always the same. The state and Maricopa County are most emphasized, but considerable information also is available for Pima County and non-urban Arizona as a whole; some is presented by county.

This document is designed to be comprehensive in terms of general topics without being as detailed as it could be. A major problem when discussing population is obtaining up-to-date information. Parts of this document rely on 1980 census information; updated data from the 1990 census will not be available until the early 1990s.

Numerous tables of data are provided, organized at the end of each chapter.

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I. DEMOGRAPHICS OF THE RESIDENT POPULATION

Detailed demographic information is generally only available from the decennial censuses. For those areas that conducted a special census in 1985, limited data could be updated.

A. 1980 CENSUS

Racial/Ethnic Composition

The racial composition of Arizona's population is considerably different from that of the West or of the nation as a whole (Table I-1). Arizona has a much smaller proportion of blacks and of Asian/Pacific Islanders, while it has a much larger share of American Indians. The state also has a larger proportion of people who selected to be identified with the "Other" racial category in the 1980 Census. Most of these people are Hispanic. Roughly half of Arizona's Hispanics indicated their race as white; the others responded as "other".

Hispanics account for 16.2 percent of Arizona's residents, compared with 6.4 percent nationally, and 90 percent of Arizona's Hispanics are of Mexican origin. The Hispanic population lives primarily in the southern portion of the state. Hispanics represent 74 percent of the residents of Santa Cruz County, which borders Mexico, but less than 5 percent of the residents of some of the northern counties. In the metropolitan areas, the proportion of Hispanics is closer to the statewide average: 21 percent in Pima County and 13 percent in Maricopa County.

The majority of Arizona's 153,000 Indians are members of one of the 16 Arizona tribes and live on the 22 reservations located across the state, although sizable numbers live in the Phoenix and Tucson urban areas. Most of Arizona's Indian population is concentrated in the northeastern portion of the state: 75 percent of the population of Apache County is Indian, and in Navajo County the proportion is nearly 50 percent.

Most of Arizona's black and Asian/Pacific Islander populations reside within the state's two major urban areas.

With the large volume of in-migration to the state, the non-Indian population has grown much faster than the American Indian population in Arizona. Although still very small, it appears that the "Other" race category (primarily Asian/Pacific Islanders) has been growing rapidly since 1960, but differences in reporting Hispanic origin in the 1980 Census make the "Other" race category noncomparable with earlier censuses.

Sex Composition

In a population with no migration, the relative proportions of males and females would be determined by two demographic factors: the ratio of males to females at birth and the mortality experience of males versus females. For example, if it were assumed that the ratio at birth was 105.2 males per 100 females (the U.S. average in 1983) and that mortality conditions were similar to those of the United States in 1983, such a hypothetical population would be comprised of 48.9 percent males and 51.1 percent women (or as it is conventionally reported – 95.7 males per 100 females).

Given the frontier nature of Arizona, the ratio of 138 males per 100 females in 1910 was much higher than the ratio of 106 for the nation as a whole at that time (Table I-2). Over time, this sex ratio for the state's population has declined toward the national average, due to increases in the numbers of native Arizonans in the total population and to changes in the composition of migrants to Arizona since those earlier years. By 1970, the number of females exceeded males in the state, but the sex ratio for Arizona population remained somewhat higher than the ratio for the nation as a whole. The sex ratio for the overall population of the state changed little between 1970 and 1980, with 97 males per 100 females in the Arizona population. This ratio is still greater than the 94 males per 100 females in the U.S. population, but is lower than the relative proportion of males in the total population of the Western states.

The sex composition of the Arizona population varies substantially by age (Table I-2). For the under 18 age group in the 1980 Arizona population, there were 104 males per

100 females. Within the group aged 18 to 64, on the other hand, there were slightly more females – a sex ratio of 97 males per 100 females. With the much longer life expectancy for women, the relative proportion of men to women in the elderly population was much lower – only 79 men per 100 women in the 65 and over age group in the state's 1980 population. Given the large volume of retirement migration to Arizona (primarily retired couples), the elderly population in Arizona is composed of relatively more men than the 65 and over age groups in the population of either the West or the nation as a whole.

Age Distribution

With higher fertility than the nation as a whole, the proportion of Arizona's population less than 15 years of age is higher than that for the total U.S. population or for the West (Table I-3). With substantial retirement migration to Arizona, the proportion of population 55 years and over is greater in Arizona than for the Western region but is no larger than that for the nation as a whole. The age composition within Arizona's 55 and over age group differs from the U.S. average, however, with a higher proportion of persons aged 55-74 and fewer in the 75 and over age group.

The age distribution of the state's population has changed substantially over time in response to the demographic impacts of fertility, mortality, and migration. High birth rates experienced during the "baby boom" period during the late 1940s and the 1950s resulted in a high proportion of children, but with lower fertility the relative numbers of persons under 15 years of age has declined. Conversely, as the large numbers of people who were born in the early postwar period have aged, the proportion of young adults has increased. Due to increases in both life expectancy and retirement migration, the proportion of the Arizona population aged 55 and above has also expanded dramatically.

The relative increases in the sizes of the different age groups within the total population provides further insight into the effects of the rapid population growth experienced by Arizona (Table I-4). During the 1970s, for example, the 25-34 year-old group was the fastest growing in the nation, as a result of the aging of the "baby boom" generation. In Arizona, the number of people in this age group increased by 104 percent, reflecting both the "baby boom" and the migration of large numbers of young adults to the state. This in-migration of young adults in the prime child-bearing ages has also generated a "baby boomlet" in Arizona. While the under 5 and the 5-14 year-old groups declined in size over the 1970-80 period in the U.S. population, the number of children expanded in Arizona, with a 34 percent increase in the under 5 group and a 13 percent increase in the 5-14 year-old group.

Due to low birth rates during the 1920s and 1930s, the 45-54 year-old group within the U.S. population decreased in size between 1970 and 1980. For Arizona, on the other hand, the large volume of in-migration produced a 32 percent increase in this segment of the state's population during the 1970s.

Primarily as a result of retirement migration to Arizona, the percent increases in the 55 and over age group far exceeded the nationwide experience. In particular, the 65 and over population in the state grew 91 percent over the 1970-80 period, compared with a 28 percent increase for the United States.

The net impact of all the demographic factors affecting age composition has been an overall aging of the state's population. Although the large numbers of children born during the "baby boom" lowered the median age of the Arizona population during the 1950s, since 1960 the median age has risen from 25.7 years to 29.2 years by 1980. At the same time, however, the in-migration of young adults and the high fertility have offset the impact of retirement migration and caused the median age of Arizona's population to remain below the national median.

Household and Family Type

Figures from the last four Censuses show that the number of households in Arizona has been increasing even faster than the growth rate of the state's population, and the average number of persons per household has declined. The proportion of total Arizona households composed of traditional family groups has declined substantially – married couple households made up 76 percent of all households in the state in 1950 but only 62 percent in 1980. Changes in household composition were particularly evident during the 1970s (Table I-5), with the number of households with a female head and the number of nonfamily households increasing much more rapidly than the total number of Arizona families. In fact, by 1980 nonfamily households constituted over 26 percent of all Arizona households.

The relative decline in childbearing that has occurred since the 1960s has resulted in substantial decreases in the proportion of households with children in recent years. The proportion of households in Arizona with children under 18 declined from 52 percent in 1960 to 45 percent in 1970 and to 36 percent in 1980. Households with only a female parent have not followed the same trend, however. Between 1970 and 1980, for example, the proportion of such households with children actually increased from 63 to 64 percent.

These changes in household composition have reduced the average household size. For the state as a whole, the average number of persons per household was 2.8 in 1980, down from the 3.2 persons recorded by the 1970 Census and 3.5 persons per household in 1960. In 1980, more than one-fifth of all Arizona households were single-person households, and two-person households constituted an additional one-third of the total (Table I-6).

One of the primary reasons for growth of both single-person households and nonfamily households has been the trend in marital status of Arizona's adult population (Table I-7). Since 1960, the proportion of men (15 and over) who are married declined from 69

percent to 63 percent by 1980, while the proportion of single men increased from 25 to 28 percent and the proportion of divorced men rose from 3 to 6.5 percent over the same period. Census data show similar trends for women (15 and over), with the proportion of married women dropping from 69 percent in 1960 to 60 percent in 1980, the proportion of single women rising from 18 to 21 percent, and the proportion of divorced women increasing from 4 to 9 percent by 1980. These changes in marital status of the state's population are particularly evident among younger adults. In 1980, almost half (49 percent) of men in their 20s had never been married, and of those who had been married, an additional 7 percent of the total were either separated, widowed, or divorced. Among young women (20 to 29), the proportion of never married was lower (33 percent), but another 11 percent of these young women were separated, widowed, or divorced.

Education

Arizonans generally have had more schooling than the U.S. population as a whole (Table I-8). In 1980, 72 percent of those people 25 years old and over were high school graduates and 38 percent had attended college. In comparison, census figures show that 66 percent of the U.S. population 25 years old and over had graduated from high school and 32 percent had attended college. Educational attainment levels for the adult population of Maricopa County were somewhat above statewide levels in 1980: 75 percent had graduated from high school, and 40 percent had attended college.

The number of people who currently attend school in Arizona (Table I-9) did not increase as rapidly between 1970 and 1980 as did the overall population (39 percent compared to 54 percent), primarily due to the aging of the "baby boom" generation into the 20-to-39-year-old range. The growth rate in enrollment in Arizona between 1970 and 1980 varied greatly by grade level: kindergarten and elementary grades through 8th increased only 17 percent, while high school enrollment grew 32 percent and college enrollment grew 149 percent. The growth rate in Maricopa County was somewhat lower,

particularly at the college level. Of all Arizona residents 3 years old and over, 29 percent were enrolled in school in 1980.

Labor Force and Employment Characteristics

The Arizona labor force grew 82 percent during the 1970s to a total of 1.21 million in 1980 (Table I-10). This dramatic increase resulted primarily from a 70 percent increase in the state's working-age population (16 years old and over) and expanded labor force participation rates for women. Between 1970 and 1980, the proportion of men 16 years old and over in the labor force fell slightly from 74 to 73 percent, while the female labor force participation rate rose to 48 percent in 1980, up from a 39 percent figure 10 years earlier. Both the men's and women's 1980 participation rates were slightly below the national figures.

In the Arizona labor force, the proportion of females rose substantially from 36 percent to 41 percent during the 1970-80 period. Consequently, the number of two-worker families in the state also increased. Of those families with at least one worker, 60 percent had two or more family members in the labor force in 1980 (Table I-11). Statewide, labor force participation by females with children 6 to 17 years old was actually higher than the overall female participation rate, but mothers with preschool children (under 6 years old) had a substantially lower participation rate (45 percent versus 50 percent overall). Growth of the number of working mothers in Arizona far exceeded growth of the state's female labor force in general. The increase was not as pronounced in Maricopa County over the 1970-80 period, since a much higher proportion of mothers were already in the Phoenix area workforce at the beginning of the decade (Table I-12).

Employment can be categorized in various ways, including by occupation, by industry, and by type of employer. Employment by occupation for Arizona and Maricopa County populations is summarized in Table I-13. The United States in the 1980s has become a

nation of professionals and administrators: 1980 census figures show that 23 percent of all Americans are in professional or managerial occupations, and an additional 30 percent of the U.S. workforce provide support for these professionals and managers in technical, sales, and administrative occupations. The share of the total workforce in either professional or administrative occupations is even higher in Arizona. On the other hand, the proportion of the state's total workforce who are farmers, fishermen, or foresters is lower than the national average – 2.7 percent versus 2.8 percent. In Maricopa County, these trends are even more evident, with almost 60 percent of the labor force in professional/administrative occupations.

As an employer, the service industry is the largest industrial sector in the Arizona economy, with nearly 30 percent of the total 1980 workforce. The wholesale/retail trade sector is the next largest employer with 22 percent. Between 1970 and 1980, state employment in the finance, insurance, and real estate sector grew most rapidly, while the proportions employed by the agriculture/mining and the manufacturing sectors actually declined.

Nearly three-quarters of the labor force in Arizona draw wages and salaries from private concerns. Approximately 19 percent work for government, especially at the local level (Table I-14). The remainder are primarily self-employed. In Maricopa County, government employs only 15 percent of the labor force, as the private sector is relatively more important. Between 1970 and 1980, the proportion of self-employed fell in Arizona and in Maricopa County.

Household and Family Income

Median 1979 family income in Arizona was \$19,019, somewhat less than the U.S. median family income of \$19,908, while the median income for families in Maricopa County was above the national average at \$20,480. Median 1979 household income in Arizona was \$16,448, less than the family income figure because a greater share of

nonfamily households have either no working member or only one wage earner, while families often have two wage earners. Median family income in Arizona increased 107 percent from 1969 to 1979, with family income growth in Maricopa County slightly higher at 108 percent. These rates of change exceeded the inflation rate from 1969 to 1979 (106.5 percent in Maricopa County and 103.6 percent nationally, as measured by changes in the Consumer Price Index); so that in real terms (adjusted for inflation), the median family income increased marginally during the 1970s.

Most Arizona households earn the predominant share of their total income from wages or salaries. Table I-15 shows that 80 percent of all households in the state had wage, salary, or self-employment earnings; the average amount earned by these households in 1979 was \$19,758. More than one-quarter of all Arizona households received payments from the Social Security system in 1979, with the average annual payment being \$4,345, while only 5.2 percent of households in the state received public assistance. The mean amount received by these households was \$2,261.

To examine differences in income by race, comparisons must be made in terms of mean rather than median family income figures. Mean income figures varied substantially across racial categories (Table I-16). Mean income for both white and Asian families exceeded the statewide mean in 1979 (\$23,156 and \$22,544 versus \$22,123), while mean income figures for black and American Indian families were far below the overall mean (\$16,219 and \$13,090 respectively). The mean family income for families of Spanish origin was \$17,205. In all cases, mean income figures for Maricopa County families were slightly higher, with the difference particularly evident for American Indian families (\$16,140), a difference of more than \$3,000.

Transportation to Work

The vast majority (88 percent) of Arizonans commute to work in a private vehicle; this proportion is only slightly higher than the national rate of 84 percent. Of these Arizona

commuters, 77 percent drive alone, while the remainder carpool. Only 2 percent of workers use public transportation; the remainder either walk to work or use other means such as a bicycle. In Maricopa County, the means of transportation is nearly the same, though a slightly greater proportion drive alone (Table I-17). There was little change from 1970, although fewer people walked to work in 1980 and fewer people worked at home.

Of all households in Arizona, 93 percent own at least one vehicle, with 22 percent owning three or more (Table I-18). There were considerably more vehicles available to households in 1980 than in 1970. As the proportion of households with three or more vehicles increased, the proportion without a vehicle decreased. Vehicle ownership in Maricopa County paralleled that of the rest of the state.

Nativity and Mobility

Only one-third of the people enumerated as residents of Arizona in 1980 were born in Arizona (Table I-19). This proportion, which is slightly lower than the figure for 1970, is another indication of the large flow of people that continues into Arizona. The proportion of native Arizonans in the 1980 Maricopa County population was only 29 percent. These relatively low proportions contrast sharply with the national experience in which almost two-thirds of the population of the United States was born in the state of their 1980 residence.

Of all people who resided in Arizona in 1980, 6 percent were foreign-born; the proportion of foreign-born residents in Maricopa County was slightly lower (5.5 percent). While the proportion of foreign-born Arizona residents was similar to the proportion recorded nationwide (6.2 percent), distribution of the foreign-born population across the nation was by no means uniform. For example, California's population in 1980 included 15 percent foreign-born, while other Sunbelt states such as Arkansas or Alabama had 1 percent or less.

Information on change of residence over the 1975-1980 period also demonstrates the high degree of mobility of the Arizona population (Table I-20). Fifty-eight percent of the Arizona population 5 years old and over moved between 1975 and 1980. Almost half of these movers made a major shift in residence from another state (primarily from the West or North Central regions of the country) to Arizona. The proportion of Arizona residents in 1970 who had moved during the 1965-1970 period was somewhat lower reflecting the increasingly mobile aspect of American society in the 1970s. Similar data for Maricopa County indicate that the metro area's population was slightly more mobile than Arizonans from other areas.

B. 1985 SPECIAL CENSUS

This section summarizes the results of the special census conducted for Maricopa County.

Racial/Ethnic Composition

The 1985 special census revealed no substantial changes in the overall racial/ethnic mix of Maricopa County. The proportions of blacks (3.2 percent), Native Americans (1.4 percent), and Hispanics (13.2 percent) changed very little during the early 1980s. Only a relatively large increase in the number of Asian/Pacific Islander residents (growing from 13,000 in 1980 to 24,000 in 1985) caused the proportion of minorities to rise slightly between 1980 and 1985.

The racial/ethnic populations are not distributed evenly throughout the Phoenix metropolitan area (Table I-21). Nearly three-quarters of the black population, more than one-half of the Hispanics, and almost one-half of both the Asian and Indian populations live within the city of Phoenix. Many Asian/Pacific Islanders also reside in the southeast Valley, while most of the American Indian population living outside the city of Phoenix reside in Guadalupe, the unincorporated northern areas (where both the Fort McDowell

and Salt River Indian Reservations are located) or the southeast portions of the county (the Gila River Indian Reservation). The Hispanic population living outside Phoenix is concentrated in the western part of Maricopa County.

Age Distribution

Over the 1980-85 period, the age composition of the county population changed considerably. While the proportion of young children (under 5) remained slightly less than 8 percent, the declines in U.S. fertility during the 1970s caused a drop in the proportion of children (people under 18) in the overall population from 28 to 26 percent during the 1980-85 period. At the end of the age scale, the number of county residents 65 and older grew faster than the overall population, leading to a gain in the proportion of elderly from 10 to 12 percent of all county residents in 1985.

Much of the increase in the 65 and older population resulted from retirement migration to the Phoenix metropolitan area, and many of these migrants settled in the retirement communities surrounding Phoenix. The elderly populations of Sun City and Mesa both exceed 30,000, and the smaller retirement communities of Sun City West and Sun Lakes also have grown rapidly. Substantial numbers of the 65 and older population also reside in outlying areas – Carefree, Wickenburg, and the southeastern portion of the county.

Since many younger households have chosen to locate in the western and southeastern suburbs of the metropolitan area, these communities have a much different age distribution than the county average, with fewer elderly and more children. This pattern is particularly evident in the west Valley – Avondale, Glendale, Peoria, and the surrounding unincorporated areas – but it also characterizes the fast-growing communities of Chandler and Gilbert in the southeast Valley.

**TABLE I-1
POPULATION OF ARIZONA, WESTERN STATES, AND THE UNITED STATES
BY RACE/HISPANIC ORIGIN, 1980**

	Arizona		West		United States	
	<i>Persons</i>	<i>Percent</i>	<i>Persons</i>	<i>Percent</i>	<i>Persons</i>	<i>Percent</i>
White.....	2,240,761	82.4	34,890,189	80.8	188,371,622	83.1
Black.....	74,977	2.8	2,261,712	5.2	26,495,025	11.7
American Indian.....	152,498	5.6	670,655	1.6	1,364,033	0.6
Asian/Pacific Islander....	22,032	0.8	2,080,869	4.8	3,500,439	1.5
Other.....	227,947	8.4	3,269,065	7.6	6,814,686	3.0
TOTAL.....	2,718,215	100.0	43,172,490	100.0	226,545,805	100.0
Hispanic*.....	440,701	16.2	6,253,873	14.5	14,608,673	6.4

*Persons of Hispanic origin may be of any race.

Source: U. S. Bureau of Census, 1980 Census of Population

**TABLE I-2
NUMBER OF MALES PER 100 FEMALES, ARIZONA, 1910-1980**

Year	Males	Females	Males Per 100 Females
1910.....	118,574	85,780	138.2
1920.....	183,602	150,560	121.9
1930.....	231,304	204,269	113.2
1940.....	258,170	241,091	107.1
1950.....	379,059	370,528	102.3
1960.....	654,928	647,233	101.2
1970.....	871,006	899,894	96.8
1980.....	1,337,942	1,380,273	96.9

**NUMBER OF MALES PER 100 FEMALES
ARIZONA, WESTERN STATES, AND THE UNITED STATES, 1980**

Age	Arizona	West	United States
Younger than 18.....	103.8	104.5	104.5
18-64.....	97.4	100.0	95.8
65 or older.....	79.4	71.8	67.6
TOTAL.....	96.9	98.0	94.5

Source: U. S. Bureau of Census, 1980 Census of Population

**TABLE I-3
POPULATION BY AGE FOR ARIZONA,
WESTERN STATES, AND THE UNITED STATES, 1980**

Age	Arizona		West		United States	
		%		%		%
Under 5.....	213,883	7.9	3,323,400	7.7	16,348,254	7.2
5-9.....	211,067	7.8	3,161,750	7.3	16,699,956	7.4
10-14.....	219,573	8.1	3,355,796	7.8	18,242,129	8.1
15-19.....	252,017	9.3	3,916,115	9.1	21,168,124	9.3
20-24.....	263,783	9.7	4,280,994	9.9	21,318,704	9.4
25-29.....	236,051	8.7	4,088,769	9.5	19,520,919	8.6
30-34.....	207,764	7.6	3,643,442	8.4	17,560,920	7.8
35-39.....	162,873	6.0	2,797,764	6.5	13,965,302	6.2
40-44.....	135,115	5.0	2,257,358	5.2	11,669,408	5.2
45-49.....	125,071	4.6	2,063,151	4.8	11,089,755	4.9
50-54.....	126,749	4.7	2,100,826	4.9	11,710,032	5.2
55-59.....	132,507	4.9	2,104,173	4.9	11,615,254	5.1
60-64.....	124,400	4.6	1,781,124	4.1	10,087,621	4.5
65-69.....	114,844	4.2	1,514,031	3.5	8,782,481	3.9
70-74.....	87,276	3.2	1,134,558	2.6	6,798,124	3.0
75-79.....	55,485	2.0	787,258	1.8	4,793,722	2.1
80-84.....	29,879	1.1	481,575	1.1	2,935,033	1.3
85>.....	19,878	0.7	380,406	0.9	2,240,067	1.0
TOTAL.....	2,718,215	100.0	43,172,490	100.0	226,545,805	100.0
Median Age (yrs.).....	29.2		29.3		30.0	

Source: U. S. Bureau of Census, 1980 Census of Population

**TABLE I-4
POPULATION CHANGE BY AGE
1970-1980**

Age Group	Maricopa County	Arizona	United States
Under 5.....	34.1%	34.4%	-4.8%
5-14.....	13.8	13.3	-14.3
15-24.....	67.9	61.8	19.8
25-34.....	106.5	104.1	48.8
35-44.....	55.7	52.1	11.0
45-54.....	32.4	32.2	-1.9
55-64.....	72.4	68.6	16.7
65+.....	93.4	90.7	27.9

Sources: Census of Population and Housing, 1980: Summary Tape Files 1A (Arizona) and 1C (National) (machine-readable data files); Census of Population: 1970, Vol. I, Characteristics of the Population, Part 1, U.S. Summary, and Part 4, Arizona. Prepared by U.S. Bureau of the Census.

**TABLE I-5
FAMILY TYPE**

	Number of Families		Number of Families With Children Under 18 Years of Age	
	1970	1980	1970	1980
	Arizona			
All Families.....	438,573	705,048	243,625	352,394
Married Couple.....	386,283	594,827	213,015	286,511
Female Head.....	42,502	84,773	26,664	54,161
Nonfamily Households.....	101,762	251,984	—	—
	Maricopa County			
All Families.....	246,232	397,610	135,980	195,362
Married Couple.....	217,140	334,696	118,707	157,976
Female Head.....	24,045	48,266	15,269	30,693
Nonfamily Household.....	56,753	147,149	—	—

Sources: Census of Population and Housing, 1980: Summary Tape File 1A (Arizona) (machine-readable data files); Census of Population: 1970, Vol. I, Characteristics of the Population, Part 4, Arizona. Prepared by U.S. Bureau of the Census.

TABLE I-6
HOUSEHOLD SIZE
MARICOPA COUNTY, ARIZONA, AND THE UNITED STATES, 1980

<i>Number of persons</i>	Percent of Total Households		
	<i>Maricopa County</i>	<i>Arizona</i>	<i>United States</i>
1.....	22.7%	20.9%	22.7%
2.....	34.3	34.6	31.3
3.....	16.0	16.2	17.4
4.....	14.3	14.3	15.4
5 or more.....	12.7	14.0	13.2

Sources: Census of Population and Housing, 1980: Summary Tape Files 1A (Arizona) and 1C (National) (machine-readable data files). Prepared by U.S. Bureau of the Census.

TABLE I-7
MARITAL STATUS OF THE ARIZONA POPULATION
15 YEARS AND OVER, 1950-80
(Percent)

<i>Year</i>	MALES			
	<i>Single</i>	<i>Married</i>	<i>Widowed</i>	<i>Divorced</i>
1950*.....	26.0	67.3	3.8	3.0
1960*.....	24.9	69.1	3.0	3.1
1970*.....	27.6	67.6	2.4	3.4
1980.....	28.3	63.0	2.2	6.5

<i>Year</i>	FEMALES			
	<i>Single</i>	<i>Married</i>	<i>Widowed</i>	<i>Divorced</i>
1950*.....	18.6	67.6	10.3	3.4
1960*.....	17.7	68.7	9.8	3.9
1970*.....	21.1	65.1	10.2	5.2
1980.....	21.1	59.9	10.2	8.8

*Proportion of population 14 years and over

Sources: U. S. Bureau of Census, Census of Population: 1950, 1960, 1970, 1980

**TABLE I-8
YEARS OF SCHOOL COMPLETED**

	Maricopa County		Arizona		United States	
	<i>1970</i>	<i>1980</i>	<i>1970</i>	<i>1980</i>	<i>1970</i>	<i>1980</i>
Total Population, 25 years and older.....	510,819	880,920	915,737	1,558,891	109,899,359	132,835,687
School Completed:						
Elementary: 0-8 years.....	22.7%	12.8%	24.8%	15.0%	28.3%	18.3%
High School: 1-3 years.....	17.3	12.2	17.1	12.7	19.4	15.3
High School: 4 years.....	32.2	34.9	31.6	34.3	31.1	34.6
College: 1-3 years.....	15.0	21.8	13.9	20.6	10.6	15.7
College: 4 years or more...	12.8	18.3	12.6	17.4	10.7	16.2

Sources: Census of Population and Housing, 1980: Summary Tape Files 3A (National) (machine-readable data files); Census of Population: 1970, Vol. I, Characteristics of the Population, Part 1, U.S. Summary, and Part 4, Arizona. Prepared by U.S. Bureau of the Census.

**TABLE I-9
SCHOOL ENROLLMENT**

	Maricopa County		Arizona	
	<i>1970</i>	<i>1980</i>	<i>1970</i>	<i>1980</i>
Total Population Enrolled, 3 years and older.....	290,213	400,547	535,122	741,677
Kindergarten and Elementary.....	179,974	209,312	334,317	392,027
High School.....	69,637	91,948	128,663	170,147
College.....	40,602	79,287	72,142	179,503

Sources: Census of Population and Housing, 1980: Summary Tape File 3A (Arizona) (machine-readable data file); Census of Population: 1970, Vol. I, Characteristics of the Population, Part 4, Arizona. Prepared by U.S. Bureau of the Census.

**TABLE I-10
EMPLOYMENT STATUS**

	Maricopa County			
	<i>Male</i>		<i>Female</i>	
	<i>1970</i>	<i>1980</i>	<i>1970</i>	<i>1980</i>
Total Population, 16 yrs. & older.....	314,740	550,974	344,568	588,469
Labor Force.....	76.3%	75.2%	42.3%	50.5%
Armed Forces.....	2.8	1.7	0.0	0.2
Civilian Employed.....	70.8	69.5	40.4	47.7
Civilian Unemployed.....	2.6	4.0	1.9	2.6
Not in Labor Force.....	23.7	24.7	57.7	49.5

	Arizona			
	<i>Male</i>		<i>Female</i>	
	<i>1970</i>	<i>1980</i>	<i>1970</i>	<i>1980</i>
Total Population, 16 yrs. & older.....	577,785	985,229	616,770	1,040,876
Labor Force.....	73.8%	72.6%	39.0%	47.9%
Armed Forces.....	4.4	2.4	0.1	0.3
Civilian Employed.....	66.8	65.8	37.0	44.7
Civilian Unemployed.....	2.6	4.4	1.9	2.9
Not in Labor Force.....	26.2	27.4	61.0	52.2

	United States			
	<i>Male</i>		<i>Female</i>	
	<i>1970</i>	<i>1980</i>	<i>1970</i>	<i>1980</i>
Total Population, 16 yrs. & older.....	67,235,510	81,732,090	73,851,706	89,482,168
Labor Force.....	76.6%	75.1%	41.4%	49.9%
Armed Forces.....	2.9	1.8	0.1	0.2
Civilian Employed.....	70.8	68.5	39.2	46.5
Civilian Unemployed.....	2.9	4.8	2.1	3.2
Not in Labor Force.....	23.4	24.9	58.6	50.1

Sources: Census of Population and Housing, 1980: Summary Tape Files 3A (Arizona) and 3C (National) (machine-readable data files); Census of Population: 1970, Vol. I, Characteristics of the Population, Part 1, U.S. Summary, and Part 4, Arizona. Prepared by U.S. Bureau of the Census.

**TABLE I-11
NUMBER OF WAGE EARNERS**

	Maricopa County		Arizona		United States	
	<i>1970</i>	<i>1980</i>	<i>1970</i>	<i>1980</i>	<i>1970</i>	<i>1980</i>
Total Number of Families.....	245,575	400,084	438,389	709,912	51,168,599	59,190,133
Families with:						
No Workers.....	10.7%	15.0%	11.7%	15.9%	9.2%	12.8%
One Worker.....	36.8	32.0	39.2	33.5	40.0	33.0
Two or More Workers.....	52.5	53.0	49.2	50.6	50.9	54.2

Sources: Census of Population and Housing, 1980: Summary Tape Files 3A (Arizona) and 3C (National) (machine-readable data files); Census of Population: 1970, Vol. I, Characteristics of the Population, Part 1, U.S. Summary, and Part 4, Arizona. Prepared by U.S. Bureau of the Census.

**TABLE I-12
EMPLOYMENT OF FEMALES WITH CHILDREN**

	Maricopa County		Arizona		United States	
	<i>1970</i>	<i>1980</i>	<i>1970</i>	<i>1980</i>	<i>1970</i>	<i>1980</i>
Females in Labor Force Who Have One or More of Own Children:						
Children Under 6 Years.....	33.4%	46.0%	25.0%	44.5%	30.8%	45.7%
Children 6-17 Years.....	52.2	64.2	41.5	61.4	50.1	63.0

Sources: Census of Population and Housing, 1980: Summary Tape Files 3A (Arizona) and 3C (National) (machine-readable data files); Census of Population: 1970, Vol. I, Characteristics of the Population, Part 1, U.S. Summary, and Part 4, Arizona. Prepared by U.S. Bureau of the Census.

**TABLE I-13
EMPLOYMENT BY OCCUPATION, 1980**

	Maricopa County	Arizona	United States
Total Employed, 16 yrs. & older.....	663,624	1,113,270	97,639,355
Occupation:			
Managerial and Professional Specialty.....	25.1%	24.7%	22.7%
Technical, Sales, Administrative Support.....	33.1	31.0	30.3
Service.....	12.4	13.6	12.9
Farming, Forestry, Fishing.....	2.2	2.7	2.9
Precision Production, Craft, Repair.....	13.3	14.0	12.9
Operators, Fabricators, Laborers.....	13.8	14.0	18.3

NOTE: May not add to 100.0 due to rounding.

Sources: Census of Population and Housing, 1980: Summary Tape Files 3A (Arizona) and 3C (National) (machine-readable data files). Prepared by U.S. Bureau of the Census.

**TABLE I-14
EMPLOYMENT BY CLASS OF EMPLOYER**

	Maricopa County		Arizona		United States	
	1970	1980	1970	1980	1970	1980
Total Employed, 16 years and older.....	362,156	663,624	614,055	1,113,270	76,553,599	97,639,355
Class of Employer:						
Private Wage and Salary	77.2%	78.5%	73.3%	74.0%	75.7%	75.6%
Government.....	15.3	15.2	18.9	19.3	16.1	17.2
Federal.....	N/A	3.0	5.1	4.6	4.3	3.9
State.....	N/A	4.4	5.1	5.7	3.9	4.6
Local.....	7.9	7.8	8.7	9.0	7.9	8.7
Self-employed.....	6.9	5.9	7.2	6.2	7.7	6.8
Unpaid Family Worker....	0.5	0.4	0.6	0.5	0.5	0.5

N/A = Not Available

Sources: Census of Population and Housing, 1980: Summary Tape Files 3A (Arizona) and 3C (National) (machine-readable data files); Census of Population: 1970, Vol. I, Characteristics of the Population, Part 1, U.S. Summary, and Part 4, Arizona. Prepared by U.S. Bureau of the Census.

TABLE I-15
HOUSEHOLD INCOME IN 1979 BY INCOME TYPE

	Maricopa County		Arizona		United States	
	<i>Percent of Households</i>	<i>Mean</i>	<i>Percent of Households</i>	<i>Mean</i>	<i>Percent of Households</i>	<i>Mean</i>
Earnings.....	80.9%	\$21,114	79.8%	\$19,758	81.3%	\$20,767
Interest, Dividends, or Net Rental Income.....	41.9	4,007	39.0	3,836	41.4	3,011
Social Security.....	26.1	4,421	26.6	4,345	25.9	4,094
Public Assistance.....	4.5	2,725	5.2	2,261	8.0	2,518
All Other.....	23.1	5,144	23.9	5,098	23.8	4,057

Sources: Census of Population and Housing, 1980: Summary Tape Files 3A (Arizona) and 3C (National) (machine-readable data files). Prepared by U.S. Bureau of the Census.

TABLE I-16
MEAN FAMILY INCOME BY RACE

	Maricopa County		Arizona		United States	
	1969	1979	1969	1979	1969	1979
White.....	N/A	\$24,559	\$10,826	\$23,156	\$11,348	\$24,217
Black.....	N/A	16,476	6,662	16,219	7,047	15,754
American Indian.....	N/A	16,140	N/A	13,090	N/A	16,672
Asian.....	N/A	23,478	N/A	22,544	N/A	26,456
Spanish Origin.....	N/A	17,420	8,254	17,205	8,550	17,307
Mean Income of All Race...	\$11,289	\$23,775	\$10,501	\$22,123	\$10,930	\$23,144

N/A = Not Available

Sources: Census of Population and Housing, 1980: Summary Tape Files 3A (Arizona) and 3C (National) (machine-readable data files); Census of Population: 1970, Vol. I, Characteristics of the Population, Part 1, U.S. Summary, and Part 4, Arizona. Prepared by U.S. Bureau of the Census.

**TABLE I-17
MEANS OF TRANSPORTATION TO WORK**

	Maricopa County		Arizona		United States	
	1970	1980	1970	1980	1970	1980
Total Employed, 16 years and older.....	362,156	663,624	614,055	1,113,270	76,553,599	97,639,355
Means of Commuting:						
Private Automobile.....	89.2%	89.2%	86.5%	87.5%	77.7%	84.1%
Drive Alone.....	N/A	70.2	N/A	67.7	N/A	64.4
Carpool.....	N/A	19.0	N/A	19.8	N/A	19.7
Public Transportation...	1.3	2.0	1.3	2.0	8.9	6.4
Walked.....	4.1	3.3	5.9	4.7	7.4	5.6
Other Means.....	3.6	4.0	4.1	4.0	2.5	1.6
Worked at Home.....	2.2	1.6	2.4	1.8	3.5	2.3

N/A = Not Available

Sources: Census of Population and Housing, 1980: Summary Tape Files 3A (Arizona) and 3C (National) (machine-readable data files); Census of Population: 1970, Vol. I, Characteristics of the Population, Part 1, U.S. Summary, and Part 4, Arizona. Prepared by U.S. Bureau of the Census.

**TABLE I-18
VEHICLES AVAILABLE**

	Maricopa County		Arizona		United States	
	1970	1980	1970	1980	1970	1980
Total Occupied Housing Units	302,633	544,759	539,157	957,032	63,444,750	80,389,673
Vehicles Available:						
One Vehicle.....	47.1%	37.9%	48.3%	37.1%	47.7%	35.5%
Two Vehicle.....	35.4	34.3	33.2	34.4	29.3	34.0
Three or More Vehicles.....	8.7	21.8	8.2	21.8	5.5	17.5
None.....	8.8	6.0	10.4	6.8	17.5	12.9

Sources: Census of Population and Housing, 1980: Summary Tape Files 3A (Arizona) and 3C (National) (machine-readable data files); Census of Population: 1970, Vol. I, Characteristics of the Population, Part 1, U.S. Summary, and Part 4, Arizona. Prepared by U.S. Bureau of the Census.

TABLE I-19
NATIVITY

	Maricopa County		Arizona		United States	
	1970	1980	1970	1980	1970	1980
Total Population.....	967,515	1,509,052	1,693,497	2,718,215	203,211,296	226,504,825
Location of Birth:						
Born in 1980 state of residence	31.9%	28.9%	36.6%	33.0%	67.7%	63.9%
Born in another state.....	62.9	64.9	57.4	60.1	26.2	28.9
Born abroad (U.S. citizen at birth).....	1.1	0.8	1.3	0.9	1.1	0.9
Foreign-born (foreign citizen at birth).....	4.0	5.5	4.6	6.0	5.0	6.2

Sources: Census of Population and Housing, 1980: Summary Tape Files 3A (Arizona) and 3C (National) (machine-readable data files); Census of Population: 1970, Vol. I, Characteristics of the Population, Part 1, U.S. Summary, and Part 4, Arizona. Prepared by U.S. Bureau of the Census.

TABLE I-20
MOBILITY

	Maricopa County		Arizona		United States	
	1970	1980	1970	1980	1970	1980
Total Population, 5 years and older	883,166	1,397,351	1,612,437	2,506,251	186,094,094	210,247,455
Residence 5 years earlier:						
Same House.....	43.6%	40.2%	44.5%	41.9%	55.9%	53.6%
Different House:						
Same County.....	28.4	29.8	26.0	27.1	24.6	25.1
Different County:						
Same State.....	2.8	2.6	5.0	5.0	8.9	9.8
Different State.....	23.7	25.6	22.6	23.8	9.1	9.7
Abroad.....	1.5	1.8	1.9	2.1	1.5	1.9

Sources: Census of Population and Housing, 1980: Summary Tape Files 3A (Arizona) and 3C (National) (machine-readable data files); Census of Population: 1970, Vol. I, Characteristics of the Population, Part 1, U.S. Summary, and Part 4, Arizona. Prepared by U.S. Bureau of the Census.

TABLE I-21
MARICOPA COUNTY SPECIAL CENSUS INFORMATION
October 1985 Counts and 1980-85 Percent Changes

	1985 Population	Number Change 1980-85	Percent Change 1980-85	Percentage of 1985 Population				% of 1985 Pop. Under 18	% of 1985 Pop. 65+
				Black	Asian/ Pac. Isl.	Indian/ Nat. Am.	Spanish Origin		
Avondale.....	9,704	1,536	18.8	4.9	0.8	0.6	46.1	36.1	6.7
Buckeye.....	3,779	345	10.0	5.0	1.5	1.3	21.9	34.0	9.2
Carefree.....	1,518	*	*	0.1	0.1	0.2	1.4	9.5	31.4
Chandler.....	63,817	34,144	115.1	2.2	1.8	1.0	16.0	32.4	4.4
El Mirage.....	3,908	-399	-9.3	2.5	0.1	0.1	80.2	41.5	5.2
Gila Bend.....	1,999	414	26.1	4.0	1.4	3.9	40.9	33.0	6.3
Gilbert.....	12,102	6,385	111.7	1.2	0.6	0.3	12.2	36.4	3.5
Glendale.....	122,392	25,220	26.0	2.0	1.8	0.6	12.7	30.0	7.4
Goodyear.....	4,598	1,851	67.4	7.7	1.2	2.0	19.1	21.6	5.4
Guadalupe.....	4,609	103	2.3	0.3	0.0	46.1	95.4	44.9	4.5
Mesa.....	239,587	87,134	57.2	1.5	1.1	0.7	8.6	28.1	12.7
Paradise Valley.....	11,510	425	3.8	0.1	1.2	0.1	2.1	26.2	10.9
Peoria.....	27,598	15,291	124.2	1.7	1.0	0.8	18.0	29.3	14.3
Phoenix.....	881,640	91,936	11.6	4.9	1.3	1.3	15.6	26.8	9.2
Scottsdale.....	108,447	19,825	22.4	0.5	0.9	0.4	3.4	18.5	14.3
Surprise.....	4,020	297	8.0	2.3	0.1	0.2	71.4	40.6	5.3
Tempe.....	132,942	26,022	24.3	2.6	3.0	0.8	8.2	22.0	5.7
Tolleson.....	4,438	5	0.1	0.7	0.9	0.7	71.0	36.8	7.3
Wickenburg.....	3,925	390	11.0	0.0	0.2	0.5	5.6	19.3	31.4
Youngtown.....	2,287	33	1.5	0.1	0.2	0.0	2.4	4.6	60.0
Non-incorporated.....	193,136	*	*	1.0	0.5	3.7	8.4	19.6	32.6
Fountain Hills.....	5,797	3,026	109.2	0.2	0.4	0.2	1.5	21.1	13.3
Litchfield Park.....	3,747	90	2.5	0.6	2.8	0.3	4.3	26.3	11.7
Sun City.....	39,871	-634	-1.6	0.2	0.1	0.0	0.4	0.1	82.8
Sun City West.....	10,450	6,678	177.0	0.3	0.1	0.0	0.3	0.0	60.8
Sun Lakes.....	5,030	3,105	161.3	0.3	0.1	0.0	1.1	0.3	44.2
North.....	27,199	**	**	0.7	0.3	13.9	4.8	28.7	10.1
Northwest.....	5,537	**	**	0.5	0.4	0.9	14.6	28.0	15.6
West.....	39,893	**	**	3.6	1.0	1.9	22.9	32.9	5.3
Southeast.....	55,612	**	**	0.4	0.4	4.4	8.2	23.7	26.0
COUNTY TOTALS.....	1,837,956	328,694	21.8	3.2	1.3	1.4	13.2	26.0	12.0

*Not possible to calculate due to incorporation of Carefree subsequent to 1980.

**Not possible to calculate due to annexations subsequent to 1980.

Source: Compiled by the Center for Business Research, College of Business, Arizona State University from a U.S. Census Bureau computer tape file.

II. INTRODUCTION TO POPULATION CHANGE

Population change is a function of two major components. Net natural change is the difference between the number of births and deaths. Net migration is the difference between the number of people moving to and the number moving from an area. Migration frequently is subdivided into employment-related and non-employment-related (mostly retirement) components.

Research on national and international migration has yielded several relationships that are obvious in Arizona's migration flows. A disproportionate number of migrants are young, well-educated professionals (see Section IV). These people change residence primarily for work-related and economic reasons, though quality-of-life factors, such as climate, also play a role.

Migrants generally are "pulled" to an area by factors such as availability of jobs, rather than "pushed" from their old residence by poor economic conditions. Since many migrants move more than once, an area with high in-migration usually also experiences relatively heavy out-migration; this is true of Arizona. Further, a relatively large counterstream usually develops, even with areas that provide considerable in-migration, as in the case of Arizona and Illinois.

Once established, a migration flow frequently will last for decades unless broken by a sharp change in economic conditions. One reason for the continuity is the information that travels between friends and relatives who have moved and those who have not. Further, in-migration and employment growth perpetuate each other.

In choosing a new residence, people are likely to move to the nearest location that satisfies their needs. Thus, Arizona's in-migrants disproportionately come from the West and Midwest; people in the Mideast and Northeast more frequently move to the Southeast.

This concept of "intervening opportunities" may explain Arizona's record net in-migration between 1984 and 1986. With booming economies, Texas and Oklahoma,

both closer to the Midwest and East, attracted huge numbers of migrants between the early 1970s and early 1980s. However, economic problems in the oil-producing states since 1983 may have forced some people to travel further – to Arizona – to meet their needs.

Not all migrants fall into the category of young people moving for economic reasons. While the middle-aged population moves relatively infrequently, the incidence of migration rises somewhat at retirement. Unlike the more mobile young, for whom Arizona frequently is a temporary stop, retirees generally move just once, and a counterstream does not develop.

The number of people who leave Arizona is relatively consistent from year to year, but the number who move to Arizona varies with the economic cycle. During recessions, which can be relatively severe in Arizona, the economic "pull" of the state is temporarily minimized. As a result, net in-migration is lower during recessions. Other than this economic cyclical, the underlying trends in total migration to and from Arizona were constant during the 1970s and early 1980s.

The key to Arizona's growth is migration. Depending on the point in the economic cycle, 55 to 70 percent of population growth results from net in-migration. This proportion is higher in the Phoenix area but lower in rural Arizona.

Rapid growth from migration hides the fact that many people leave the state. In an average year, net in-migration to Arizona totals 64,000, resulting from in-migration of roughly 190,000 and out-migration of approximately 126,000. Thus, for every three people who move to the state, two leave. The ratio exceeds 1.5 during economic booms but falls to less than 1.33 during recessions.

Migration and economic growth have a two-way relationship, each stimulating the other. Population drives the economy in a long-term sense, but economic performance largely dictates population growth in the short-term. Net migration to Arizona therefore drops sharply during economic recessions because would-be migrants cannot find jobs.

Though some additional people may move from the state during such periods, most of the decrease in net migration is due to declines in in-migration.

In addition to this short-term cycle, growth in Arizona has followed a longer cycle, corresponding to national demographic changes. The single most important factor underlying this long-term cycle is the age distribution of the American population, which varies as a result of fluctuating birth rates. Since the propensity to move is much higher among young people, the greater the number of young adults nationwide, the greater is the net migration to Arizona.

III. DEMOGRAPHIC TRENDS

From a sparsely settled territory at the beginning of the century, Arizona has become one of the leading Sunbelt states, with 3,405,000 residents as of July 1, 1987. Even with this record of rapid population growth, Arizona's 3.4 million residents rank the state 25th in population size among the 50 states.

A. HISTORICAL POPULATION GROWTH

The state of Arizona has experienced rapid population growth relative to the nation as a whole throughout the twentieth century. From a population of less than 123,000 in 1900, the state's population increased by more than four times to almost half a million by 1940. The post World War II period has been marked by a major shift of the nation's population to the South and the West, and this phenomenon has been clearly reflected in the growth trends of Arizona. The state had a 50 percent increase during the 1940s, even faster growth during the 1950-60 decade, a slowing of the expansion in the 1960s (similar to the experience throughout the Western states), and a strong resurgence in the rate of growth during the 1970s. Overall, Arizona's population increased more than five times during the second 40 years of the century.

Breaking down the total population increase during each decade into the shares contributed by natural increase (the excess of births over deaths) and by net migration (Table III-1) shows that more than one-half of Arizona's population growth has resulted from net in-migration. Only during the 1960s did migration contribute less than 50 percent. With lower fertility since 1970, net migration has played a more important role in the growth of Arizona than has been the case for the Western region as a whole. While the absolute numbers of migrants to several other states in the West have been greater than those into Arizona, the resident populations of these states are also larger, so that the net migration rates (the percent increase in population due to migration) to the West have been lower than in Arizona.

The geographical distribution of the state's population has shifted dramatically as Arizona has grown from a frontier territory to a state with over 3 million residents (Table III-2). As enumerated in the 1910 Census, less than 30 percent of the state's residents lived in Maricopa and Pima Counties, which have since grown into Arizona's two major urban areas. The mining areas in southeastern Arizona then had the largest concentrations of population, with Cochise County being the most populous county in the state in 1910. Since statehood, however, over three fourths of total state population growth has occurred within the two metropolitan counties, and the share of Arizona's residents living in the thirteen nonmetropolitan counties has declined from almost 75 percent in 1910 to less than 25 percent by 1980.

Arizona's growth is most clearly seen in the transformations of the Phoenix and Tucson areas. From small southwestern cities with populations of 64,000 and 36,000 respectively in 1940, the two major metropolitan areas in the state have grown to rank among the major urban areas in the United States. Meanwhile, the populations of the nonmetropolitan counties of Arizona have continued to grow, but generally at a slower rate than that of the Phoenix and Tucson areas. The pace of population growth quickened in most of the nonmetropolitan areas of the state during the 1970s, but this proved to be a temporary phenomenon. During the 1970-80 period, the population of the 13 rural counties increased by 50 percent, with the growth widely dispersed among many communities throughout the rural areas of Arizona.

B. NET NATURAL CHANGE

In Arizona, net natural increase (the excess of births over deaths) accounts for roughly one-third of total population change. Arizona's rate of net natural population increase – the number by which births outnumbered deaths – has hovered near 1 percent since 1975. During the 1980s, approximately 30,000 more births than deaths have been recorded annually.

In 1986, births to Arizona residents numbered 60,822, more than twice the number of deaths (25,409). While births have steadily risen with the population, the birth rate – 18.1 per 1,000 residents in 1986 – has varied only slightly. The mortality rate – 7.6 per 1,000 residents in 1986 – has fluctuated even less.

Compared to 30 years ago, however, birth rates have declined sharply, down approximately 40 percent from peak values reached during the 1950s baby boom. Mortality rates have fallen only slightly during this period.

Birth rates vary widely by Arizona county. In 1986, the highest rate (29.0), in Apache County, was more than double the lowest rate (11.1), which occurred in Greenlee County. The geographic variation in the mortality rate was not as great, ranging from 12.0 per 1,000 residents in Yavapai County to 4.4 per 1,000 residents in Coconino County.

The net natural increase, expressed as a rate, was highest in Apache and Navajo counties, which have a young population and a high fertility rate. Mohave and Yavapai counties, home to many senior citizens, have the lowest rates of net natural increase.

A daily average of 166 babies were born to Arizona residents during 1986; deaths averaged 69 per day. This net natural increase peaks in the summer and early fall.

C. MIGRATION

Employment-related migration makes up slightly more than one-half, while non-employment (mostly retirement) migration is responsible for approximately one-seventh of Arizona's total population gain.

Net employment migration to Arizona varies widely with the economic cycle. The Arizona economy follows the national economy closely in this regard, slumping every four to five years, on average. Largely because of fluctuations in job availability, net in-migration is more than twice as great during economic booms than during recessions.

The demographic cycle also has a large influence on migration. Population growth in Arizona was greater during the 1950s than the 1960s because of earlier fluctuations in

national birth rates. During the depression years of the 1930s and the war years of the early 1940s, the number of births declined nationally. The pool of potential migrants to Arizona (and other Southern and Western states) was less during the 1960s, resulting in much reduced flows (a decline of more than one-third in net in-migration).

By 1970, the pool of potential migrants was expanding rapidly because of the "baby boom" that began in 1946. Thus, net in-migration during the 1970s and 1980s was sharply higher than in previous years. The "baby boom" ended in 1964; the number of births dropped by more than one-fourth between the late 1950s-early 1960s peak and the mid-1970s trough (the "baby-bust" generation). Thus, Arizona is entering a period of little growth in population inflows that will last into the next century.

D. BY AREA

Maricopa County (Metropolitan Phoenix)

Growth in the Phoenix area has been the fastest in the state since World War II. More than the Tucson area or rural Arizona, the Phoenix area's growth has come from net in-migration. In recent years, it has attracted more than 70 percent of the state's net in-migration.

Net in-migration has closely followed both economic and demographic cycles. Peak growth occurred during 1984-86 (see Table III-3), but it was due to a combination of temporary factors: a pent-up demand to move, created by the twin 1980 and 1981-82 recessions; a peak in the number of young adults nationwide; slumps in economies of resource-dependent states such as Texas that "compete" with Arizona for migrants; and the unprecedented construction boom in the Phoenix area, which boosted job creation.

The short-term migration cycle became apparent during 1987, following a slowdown in the Phoenix area economy in late 1986 and 1987 that resulted in little new job creation. Net in-migration fell by one-third even though no recession developed (see Table III-4); from a peak of 19,000 per quarter in mid-1985, it fell to 4,000 in fourth quarter 1987.

Pima County (Metropolitan Tucson)

Net migration to the Tucson area has been much more erratic than to the Phoenix area, but generally has followed the demographic and economic cycles. The Tucson area has grown much more slowly than the Phoenix area during the 1980s, receiving less than 15 percent of the state's net in-migration (see Table III-5).

From the demographic cycle's trough in the mid-1960s, when the Tucson area suffered slight net out-migration, growth exploded in the early 1970s. Such rapid gains have never again been repeated.

Individual events have a greater impact in the Tucson area because of its smaller size, which partially explains the erratic nature of its growth. Changes in fortunes of major companies, such as new plant openings or layoffs, for example, have noticeably affected overall migration figures. Further, Tucson at least dabbled with controlled growth in the mid-1970s; it still has somewhat of this reputation today.

Non-metropolitan Arizona

Rural Arizona has grown more slowly than the urban areas since 1920 (see Tables III-6 and III-7), except for a brief period during the early 1970s. Though also relatively erratic, its growth pattern has followed the two basic cycles.

During the 1960s, net in-migration to rural Arizona was practically nil. Growth surged during the early 1970s, but has not since been duplicated. Though the flows and pattern closely resemble those of Pima County, the explanations differ.

The boom in the early 1970s was part of a national movement from urban to rural areas. That it did not last long was in part a result of poor economic opportunities in the rural areas.

Growth during the 1980s slowed even further as the narrow economic base of much of rural Arizona was exposed. Problems in mining and/or agriculture caused severe economic decline in some parts of the state.

TABLE III-1
COMPONENTS OF POPULATION CHANGE, ARIZONA,
WESTERN STATES, AND THE UNITED STATES, 1950-1980
(In Thousands)

ARIZONA								
	Total Increase	Percent Increase	Births	Deaths	Natural Increase	Net Migration	Net Migration Rate	Migration/ Total % Increase
1940-50.....	250	50.1	175	61	114	137	27.4	54.8
1950-60.....	553	73.7	303	80	223	329	44.0	59.5
1960-70.....	470	36.1	365	122	243	228	17.5	48.5
1970-80.....	943	53.1	405	173	232	656	37.0	69.0

WEST								
	Total Increase	Percent Increase	Births	Deaths	Natural Increase	Net Migration	Net Migration Rate	Migration/ Total % Increase
1940-50.....	5,678	40.9	3,872	1,697	2,175	3,504	25.2	61.7
1950-60.....	7,863	38.9	6,095	2,076	4,019	3,843	19.0	48.9
1960-70.....	6,756	24.1	6,532	2,630	3,902	2,854	10.2	42.2
1970-80.....	8,334	23.9	6,330	3,010	3,320	4,115	11.8	49.4

UNITED STATES								
	Total Increase	Percent Increase	Births	Deaths	Natural Increase	Net Migration	Net Migration Rate	Migration/ Total % Increase
1940-50.....	19,028	14.5	31,913	14,247	17,666	1,362	27.4	7.2
1950-60.....	27,997	18.5	40,963	15,608	25,355	2,642	44.0	9.4
1960-70.....	23,862	13.3	39,033	18,192	20,841	3,020	17.5	12.7
1970-80.....	23,244	11.4	35,244	19,279	15,965	4,516	37.0	19.4

Sources: U. S. Bureau of Census, Current Population Reports, Series P-25, Number 72 (May 1953), Number 304 (April 1965), Number 460 (June 1971), Number 957 (October 1984)

**TABLE III-2
GEOGRAPHIC DISTRIBUTION OF ARIZONA'S POPULATION, 1910-1980**

County	1910	1920	1930	1940	1950	1960	1970	1980	1980 share (%)
Apache.....	9,196	13,196	17,765	24,095	27,767	30,438	32,304	52,108	1.9
Cochise.....	34,591	46,465	40,998	34,627	31,488	55,039	61,918	85,686	3.2
Coconino.....	8,130	9,982	14,064	18,770	23,910	41,857	48,326	75,008	2.8
Gila.....	16,348	25,678	31,016	23,867	24,158	25,745	29,255	37,080	1.4
Graham.....	23,999	10,148	10,373	12,113	12,985	14,045	16,578	22,862	0.8
Greenlee.....		15,362	9,886	8,698	12,805	11,509	10,330	11,406	0.4
Maricopa.....	34,488	89,576	150,970	186,193	331,770	663,510	971,228	1,509,262	55.5
Mohave.....	3,773	5,259	5,572	8,591	8,510	7,736	25,857	55,865	2.1
Navajo.....	11,471	16,077	21,202	25,309	29,446	37,994	47,559	67,629	2.5
Pima.....	22,818	34,680	55,676	72,838	141,216	265,660	351,667	531,443	19.5
Pinal.....	9,045	16,130	22,081	28,841	43,191	62,673	68,579	90,918	3.3
Santa Cruz..	6,766	12,689	9,684	9,482	9,344	10,808	13,966	20,459	0.8
Yavapai.....	15,996	24,016	28,470	26,511	24,991	28,912	37,005	68,145	2.5
Yuma.....	7,733	14,904	17,816	19,326	28,006	46,235	60,827	90,554	3.3
Metro.....	57,306	124,256	206,646	259,031	472,986	929,170	1,322,895	2,040,705	
%.....	28.0	37.2	47.4	51.9	63.1	71.4	74.5	75.1	
Nonmetro....	147,048	209,906	228,927	240,230	276,601	372,991	452,504	677,720	
%.....	72.0	62.8	52.6	48.1	36.9	28.6	25.5	24.9	
TOTAL.....	204,354	334,162	435,573	499,261	749,587	1,302,161	1,775,399	2,718,425	100.0

POPULATION GROWTH BY DECADE (percent increase)

County	1910-20	1920-30	1930-40	1940-50	1950-60	1960-70	1970-80
Apache.....	43.5	34.6	35.6	15.2	9.6	6.1	61.3
Cochise.....	34.3	-11.8	-15.5	-9.1	74.8	12.5	38.4
Coconino.....	22.8	40.9	33.5	27.4	75.1	15.5	55.2
Gila.....	57.1	20.8	-23.0	1.2	6.6	13.6	26.7
Graham.....		2.2	16.8	7.2	8.2	18.0	37.9
Greenlee.....		-35.6	-12.0	47.2	-10.1	-10.2	10.4
Maricopa.....	159.7	68.5	23.3	78.2	100.0	46.4	55.4
Mohave.....	39.4	6.0	54.2	-0.9	-9.1	234.2	116.1
Navajo.....	40.2	31.9	19.4	16.3	29.0	25.2	42.2
Pima.....	52.0	60.5	30.8	93.9	88.1	32.4	51.1
Pinal.....	78.3	36.9	30.6	49.8	45.1	9.4	32.6
Santa Cruz.....	87.5	-23.7	-2.1	-1.5	15.7	29.2	46.5
Yavapai.....	50.1	18.5	-6.9	-5.7	15.7	28.0	84.2
Yuma.....	92.7	19.5	8.5	44.9	65.1	31.6	48.9
Metro.....	116.8	66.3	25.4	82.6	96.4	42.4	54.3
Nonmetro.....	42.7	9.1	4.9	15.1	34.8	21.3	49.8
TOTAL.....	63.5	30.3	14.6	50.1	73.7	36.3	53.1
Metro share(%).....	51.6	81.2	82.3	85.5	82.6	83.2	76.1
Nonmetro share(%)....	48.4	18.8	17.7	14.5	17.4	16.8	23.9

Sources: U. S. Bureau of Census, 1980 Census of Population; Valley National Bank, Arizona Statistical Review, 41st Edition

TABLE III-3
POPULATION ESTIMATES AT JULY 1
(In Thousands)

	Total				Change			
	<i>Arizona</i>	<i>Maricopa</i>	<i>Pima</i>	<i>Non-urban</i>	<i>Arizona</i>	<i>Maricopa</i>	<i>Pima</i>	<i>Non-urban</i>
1960.....	1,321	678	268	375				
1961.....	1,407	740	280	387	86	62	12	12
1962.....	1,471	775	299	397	64	35	19	10
1963.....	1,521	808	308	405	50	33	9	8
1964.....	1,556	833	310	413	35	25	2	8
1965.....	1,584	852	313	419	28	19	3	6
1966.....	1,614	870	318	426	30	18	5	7
1967.....	1,646	890	324	432	32	20	6	6
1968.....	1,682	914	332	436	36	24	8	4
1969.....	1,737	946	345	446	55	32	13	10
1970.....	1,795	980	357	458	58	34	12	12
1971.....	1,896	1,026	380	490	101	46	23	32
1972.....	2,008	1,087	407	514	112	61	27	24
1973.....	2,125	1,156	428	541	117	69	21	27
1974.....	2,224	1,217	444	563	99	61	16	22
1975.....	2,286	1,253	460	573	62	36	16	10
1976.....	2,346	1,279	471	596	60	26	11	23
1977.....	2,425	1,329	483	613	79	50	12	17
1978.....	2,515	1,387	497	631	90	58	14	18
1979.....	2,636	1,455	523	658	121	68	26	27
1980.....	2,735	1,521	535	679	99	66	12	21
1981.....	2,812	1,570	547	695	77	49	12	16
1982.....	2,883	1,611	561	710	71	41	14	15
1983.....	2,951	1,654	572	725	68	43	11	15
1984.....	3,061	1,730	587	744	110	76	15	19
1985.....	3,178	1,814	604	760	117	84	17	16
1986.....	3,304	1,902	621	781	126	88	17	21
1987.....	3,405	1,970	635	800	101	68	14	19
Average Change								
1961-70.....					47	30	9	8
1971-80.....					94	54	18	22
1981-87.....					96	64	14	17

Source: Center for Business Research, College of Business, Arizona State University (1980-date) and U.S. Bureau of the Census (1960-79).

TABLE III-4
COMPONENTS OF POPULATION CHANGE
(In Thousands)

	Net Natural Increase				Net Migration			
	Arizona	Maricopa	Pima	Non-urban	Arizona	Maricopa	Pima	Non-urban
1961.....	27	13	5	9	59	49	7	3
1962.....	27	13	5	9	37	22	14	1
1963.....	25	12	5	8	25	21	4	0
1964.....	24	12	4	8	11	13	-2	0
1965.....	22	11	4	8	6	8	-1	-2
1966.....	20	10	3	7	10	8	2	0
1967.....	20	10	3	7	12	10	3	-1
1968.....	19	10	3	7	17	14	5	-3
1969.....	20	10	3	7	35	22	10	3
1970.....	23	12	4	7	35	22	8	5
1971.....	23	12	4	8	78	34	19	24
1972.....	22	11	4	7	90	50	23	17
1973.....	21	11	3	7	96	58	18	20
1974.....	23	11	4	8	76	50	12	14
1975.....	23	11	4	8	39	25	12	2
1976.....	23	11	4	8	37	15	7	15
1977.....	24	11	4	8	55	39	8	9
1978.....	24	12	4	8	66	46	10	10
1979.....	27	14	4	9	94	54	22	18
1980.....	29	15	5	9	70	51	7	12
1981.....	30	16	5	9	47	33	7	7
1982.....	31	16	5	9	40	25	9	6
1983.....	30	16	5	9	38	27	6	6
1984.....	31	17	5	9	79	59	10	10
1985.....	34	19	5	9	83	65	12	7
1986.....	35	20	5	9	91	68	12	12
1987.....	36	21	6	9	65	47	8	10
Averages								
1961-70.....	23	11	4	8	24	19	5	0
1971-80.....	24	12	4	8	70	42	14	14
1981-87.....	32	18	5	9	64	46	9	8

Source: Center for Business Research, College of Business, Arizona State University (1980-date) and U.S. Bureau of the Census (1960-79).

**TABLE III-5
SHARE OF STATE CHANGE**

	Total Population			Net Migration		
	<i>Maricopa</i>	<i>Pima</i>	<i>Non-urban</i>	<i>Maricopa</i>	<i>Pima</i>	<i>Non-urban</i>
1961.....	72%	14%	14%	83%	12%	5%
1962.....	55	30	16	59	38	3
1963.....	66	18	16	84	16	0
1964.....	71	6	23	100+	neg	0
1965.....	68	11	21	100+	neg	neg
1966.....	60	17	23	80	20	0
1967.....	63	19	19	83	25	neg
1968.....	67	22	11	82	29	neg
1969.....	58	24	18	63	29	9
1970.....	59	21	21	63	23	14
1971.....	46	23	32	44	24	31
1972.....	54	24	21	56	26	19
1973.....	59	18	23	60	19	21
1974.....	62	16	22	66	16	18
1975.....	58	26	16	64	31	5
1976.....	43	18	38	41	19	41
1977.....	63	15	22	71	15	16
1978.....	64	16	20	70	15	15
1979.....	56	21	22	57	23	19
1980.....	67	12	21	73	10	17
1981.....	64	16	21	70	15	13
1982.....	58	20	21	63	23	15
1983.....	63	16	22	71	15	15
1984.....	69	14	17	75	13	13
1985.....	72	15	14	78	14	8
1986.....	70	13	17	75	12	13
1987.....	67	14	19	72	12	14
Averages						
1961-70.....	64	19	17	79	21	0
1971-80.....	57	19	23	60	20	20
1981-87.....	67	15	18	72	14	13

Source: Center for Business Research, College of Business, Arizona State University.

TABLE III-6
DECENNIAL CENSUS POPULATION, 1900-80
AND PROJECTIONS, 1990-2010

	Number				Change in Number			
	Arizona	Maricopa	Pima	Non-urban	Arizona	Maricopa	Pima	Non-urban
1900.....	122,931	20,457	14,689	87,785				
1910.....	204,354	34,488	22,818	147,048	81,423	14,031	8,129	59,263
1920.....	334,162	89,576	34,680	209,906	129,808	55,088	11,862	62,858
1930.....	435,573	150,970	55,676	228,927	101,411	61,394	20,996	19,021
1940.....	499,261	186,193	72,838	240,230	63,688	35,223	17,162	11,303
1950.....	749,587	331,770	141,216	276,601	250,326	145,577	68,378	36,371
1960.....	1,302,161	663,510	265,660	372,991	552,574	331,740	124,444	96,390
1970.....	1,775,399	971,228	351,667	452,504	473,238	307,718	86,007	79,513
1980.....	2,716,633	1,509,262	531,443	675,928	941,234	538,034	179,776	223,424
Projected:								
1990.....	3,690,000	2,155,000	680,000	855,000	973,367	645,738	148,557	179,072
2000.....	4,750,000	2,865,000	835,000	1,050,000	1,060,000	710,000	155,000	195,000
2010.....	5,895,000	3,620,000	1,010,000	1,265,000	1,145,000	755,000	175,000	215,000

Source: U.S. Bureau of the Census (1900-80), Center for Business Research, College of Business, Arizona State University (1990-2010).

TABLE III-7
PROPORTION OF TOTAL POPULATION CHANGE AND
PERCENT CHANGE, BY DECADE

	Share of Arizona Change			Arizona	Percent Change		
	Maricopa	Pima	Non-urban		Maricopa	Pima	Non-urban
1900-1910.....	17%	10%	73%	66%	69%	55%	68%
1910-1920.....	42	9	48	64	160	52	43
1920-1930.....	61	21	19	30	69	61	9
1930-1940.....	55	27	18	15	23	31	5
1940-1950.....	58	27	15	50	78	94	15
1950-1960.....	60	23	17	74	100	88	35
1960-1970.....	65	18	17	36	46	32	21
1970-1980.....	57	19	24	53	55	51	49
Projected:							
1980-1990.....	66	15	18	35	43	28	26
1990-2000.....	67	15	18	29	33	23	23
2000-2010.....	66	15	19	24	26	21	20

Source: U.S. Bureau of the Census (1900-80), Center for Business Research, College of Business, Arizona State University (1990-2010).

IV. RELATIONSHIP OF POPULATION GROWTH TO ECONOMIC GROWTH

Migration, rather than net natural increase (the number of births minus the number of deaths), accounts for most of Arizona's population gains. However, migration to the state is not steady, ebbing and flowing with cyclical economic recessions and expansions. This variability of migration has affected the performance of the Arizona economy.

Since 1970, the state's economy, measured by Gross State Product (GSP), has grown twice as rapidly as the national economy, measured by Gross National Product. (GNP). This wide differential is explained by the state's more rapid population growth, not by a more productive economy.

Analysis in per capita terms reveals that average growth in inflation-adjusted, per capita GSP was slightly less than that of real, per capita GNP. The cyclical variation, however, has been greater in Arizona than nationally. In particular, the state's per capita economic performance declined more sharply during the 1974-75 and 1981-82 recessions, while economic growth during boom periods has been more rapid than the nation's.

Arizona's booming economy both causes and relies on population growth. Job creation and economic opportunity attract people to the state at the same time that people moving to Arizona create jobs both by attracting employers to the state and by consuming goods and services. Except when interrupted by national recessions, migration is somewhat self-perpetuating, as is Arizona's rapid economic growth. Take away population growth and the state would no longer have a "boom" economy. Instead, inferior levels of productivity would place Arizona in a slightly laggard economic position.

Local changes can also affect national patterns of migration. For example, the Texas economy boomed during the late 1970s, due to the oil industry; net in-migration to Texas

totaled 574,000 people – 2.5 times Arizona's net increase. But with the oil slump of the 1980s, some areas of Texas have lost population. Arizona's high in-migration during the mid-1980s probably resulted in part from the circumstances in Texas. Arizona received a net inflow of people from Texas, as well as additional people from other states who previously would have moved to Texas.

Nationally, the evolving age composition will create tremendous economic effects. Arizona's rapid in-migration will modify these impacts on the local economy.

The labor force grew rapidly during the last 20 years because the "baby boomers" were entering the work force, and the labor force participation rate of females was increasing. During the next 20 years, however, fewer young people will enter the work force, and gains in the female participation rate will slow. While the decreased number of new workers should put an end to the generally rising unemployment rate of the last 20 years, the rate may not decline substantially. Proportionately, not many workers will reach retirement age until after 2005; further, less demand will exist due to a smaller number of young consumers. The slowdown in labor-force growth will translate to a smaller potential gain in Gross National Product, from the historical 3 percent per year to perhaps less than 2.5 percent annually.

Concern has been expressed about the long-term viability of the Social Security program, as the number of workers declines and the number of retirees increases. While future problems may be substantial, they are more than 20 years away. Until then, the number of retirees per worker will remain nearly constant: In 1965, there were 24.8 people 65 or older for every 100 workers; by 2005, the ratio will climb only to 25.1.

The housing industry will undergo major changes during the next 20 years. The necessary number of new housing units will decline, from 1.85 million in the 1980s to less than 1.6 million after 1995. In addition, demand for the various types of housing will shift.

Since a disproportionately large share of apartment dwellers are young adults, the demand for apartment units will begin to decline before 1990. The surge in apartment construction during the mid-1980s probably will not be repeated for decades. Areas that are not growing rapidly may experience persistently high vacancy rates.

The single-family home market will also change. The demand for starter homes is currently peaking, but the clamor for larger, more expensive homes will rise during the next few years as "baby boomers" incomes and families grow. That market, too, will decline later, as the "baby boomers" age into their 50s.

This changing age distribution will affect the demand for many other products since the consumption patterns of those in their 20s and 30s differ from those of older adults. All segments of the economy will need to adapt to these changing conditions.

V. MIGRANT PROFILE

People who migrated both to and from Arizona between 1975 and 1980 had a demographic profile considerably different from that of the entire Arizona population. However, little distinction existed between the profiles of in-migrants and out-migrants, according to U.S. Bureau of the Census data.

Many migrants were either young adults or senior citizens (see Table V-1). Compared to the entire Arizona adult population, a greater proportion of migrants were divorced or had never married. Many migrants – presumably college students – lived in group quarters, such as dormitories, or with non-relatives.

Correlated with the greater educational achievement shown in Table V-1, migrants were more likely to work at an executive, professional or technical occupation. In addition, a larger proportion of migrants were skilled workers, but a smaller percentage worked in sales, service or clerical occupations.

A. RACE/ETHNICITY AND AGE

Over 90 percent of the 650,000 people migrating to Arizona during the 1975-80 period were white (Table V-2). Although relatively few of those residents in 1980 who had moved to the state in the previous 5 years were nonwhite, the numbers of persons of other races, particularly Asian and Pacific Islanders, rose sharply in the 1970s. Hispanics accounted for 46,000 or about 7 percent of all in-migrants to Arizona during the 1975-80 period.

Among all 1980 residents who moved to the state between 1975 and 1980, males slightly outnumbered females. The ratio of males to females was particularly high among blacks, while for the Asian/Pacific Islander group, female in-migrants outnumbered males for the 1975-80 period.

The greatest numbers of people who moved to Arizona between 1975 and 1980 were in their 20s or early 30s. Indirect evidence of substantial in-migration of families to the state can be seen in the relatively large proportions of in-migrants under 15 years of age.

The overall age distribution of persons who moved to Arizona between 1975 and 1980 shows that while many persons in the 55-and-over group moved to the state, the flow of retirement migration to the state is much smaller than the in-migration of younger persons. In fact, the median age of 28 years for all in-migrants to Arizona during the 1975-80 period was slightly lower than that of existing state residents.

B. REGIONAL DIFFERENCES

Migrants to Arizona from the Midwest more frequently worked at sales and clerical positions than did other migrants, and their incomes were slightly lower. In contrast, migrants from the South more commonly held professional and technical positions that yielded slightly higher incomes. Migrants both to and from the Northeast were less frequently married. A larger proportion of the people who moved to the Northeast from Arizona had a greater educational attainment and held a professional job.

Immigrants from other countries who settled in Arizona had considerably different demographic characteristics. Compared to all migrants, immigrants were more frequently members of large, extended families. Since a greater proportion of the adults had no income, the extended members of the family were more likely to depend only on a householder's income. Immigrants were less likely to be office workers of any type but more likely to be laborers. Although the proportion of immigrants without a high school education (16.7 percent) was twice that of other migrants (7.5 percent), the percentage with a college degree was nearly as great; a larger proportion of immigrants gained a graduate degree.

The people leaving Arizona for other Western states are predominantly in their 20s and early 30s (see Table V-3). In contrast, Arizona is receiving net in-migration, even from the Western states, of those at least 55 years old. Thus, Arizona is losing those residents who are in the prime consumption and child-bearing years.

C. MIGRANTS TO AND FROM WESTERN STATES

Those who left Arizona for other Western states commonly were born in the West, particularly in Arizona or in the state to which they moved. While those born east of the Mountain states constituted 67 percent of Arizona's in-migration between 1975 and 1980 and 54 percent of its 1980 population, they made up only approximately 40 percent of its out-migration to other Western states.

The characteristics of Arizona migrants who moved to and from Colorado, Nevada and Utah illustrate the type of differences found among Western states:

Colorado. People who moved between Arizona and Colorado were more highly educated than migrants as a whole. Those who moved to Arizona had higher incomes and more frequently worked in executive, professional and technical occupations.

Nevada. In sharp contrast to Coloradan migrants, in-migrants from Nevada were less highly educated and less likely to hold professional or technical positions. Since so much of Nevada's economy is based on services, people moving both to and from Nevada frequently worked in that industry.

Utah. People who moved to Arizona from Utah were more frequently married and highly educated; those who moved to Utah from Arizona were more commonly members of large families or were young adults who had not married.

**TABLE V-1
DEMOGRAPHIC PROFILE
Arizona Residents, 1980, and Migrants, 1975-80**

	Household Relationship					
	<i>Householder</i>	<i>Spouse</i>	<i>Child</i>	<i>Other Relative</i>	<i>Non- Relative</i>	<i>Group Quarters</i>
Total Population.....	35.2%	21.9%	32.5%	4.6%	3.9%	1.9%
In-migrants.....	38.8	24.4	23.5	3.5	6.5	3.4
Out-migrants.....	37.5	22.3	25.2	3.9	6.1	5.0

Educational Attainment, Persons 18 Years or Older

	<i>Elementary</i>	<i>High School</i>	<i>Some College</i>	<i>College Degree</i>
	Total Population.....	13.0%	50.1%	21.8%
In-migrants.....	7.5	49.1	24.2	19.3
Out-migrants.....	7.5	47.5	24.5	20.7

Marital Status, Persons 15 Years or Older

	<i>Married</i>	<i>Never Married</i>	<i>Divorced</i>	<i>Widowed</i>
	Total Population.....	61.4%	24.6%	7.6%
In-migrants.....	60.4	26.0	9.3	4.3
Out-migrants.....	57.2	26.5	12.1	4.2

Occupation, Persons 16 Years or Older

	<i>Executives, Professionals, Technicians</i>	<i>Sales, Clerical, Service Workers</i>	<i>Skilled Workers, Machinists, Transporters</i>	<i>Farm Workers, Laborers</i>
	Total Population.....	28.2%	41.1%	23.8%
In-migrants.....	30.5	34.7	26.8	8.0
Out-migrants.....	30.0	37.3	24.7	8.1

Source: U.S. Department of Commerce, Bureau of the Census, *Census of Population, 1980: County-to-County Migration Flows* (machine-readable data file), 1984.

TABLE V-2
CHARACTERISTICS OF IN-MIGRANTS TO ARIZONA 5 YEARS AND OVER, 1980

<i>Age</i>	Age/Sex Distribution					<i>Total</i>	<i>%</i>
	<i>Male</i>	<i>%</i>	<i>Female</i>	<i>%</i>			
5-9.....	27,630	8.4	26,923	8.4	54,553	8.4	
10-14.....	25,474	7.7	25,837	8.0	51,311	7.9	
15-19.....	29,051	8.8	28,294	8.8	57,345	8.8	
20-24.....	47,969	14.6	41,927	13.1	89,896	13.8	
25-29.....	44,881	13.6	40,090	12.5	84,971	13.1	
30-34.....	34,117	10.4	31,144	9.7	65,261	10.0	
35-39.....	22,796	6.9	21,868	6.8	44,664	6.9	
40-44.....	16,241	4.9	14,712	4.6	30,953	4.8	
45-49.....	12,018	3.7	12,528	3.9	24,546	3.8	
50-54.....	10,871	3.3	11,534	3.6	22,405	3.4	
55-59.....	12,684	3.9	15,859	4.9	28,543	4.4	
60-64.....	15,354	4.7	17,571	5.5	32,925	5.1	
65-69.....	15,494	4.7	14,688	4.6	30,182	4.6	
70-74.....	8,239	2.5	8,641	2.7	16,880	2.6	
75+.....	5,992	1.8	9,636	3.0	15,628	2.4	
TOTAL.....	328,811	100.0	321,252	100.0	650,063	100.0	

	Race/Spanish Origin						<i>Total</i>	<i>Hispanic</i>
	<i>White</i>	<i>Black</i>	<i>Am Ind/ Esk/Aleut</i>	<i>Asian/PI</i>	<i>Other</i>			
Male.....	299,744	9,064	4,700	4,686	10,617	328,811	23,672	
%.....	50.3	58.3	52.4	46.6	53.8	50.6	51.7	
Female.....	296,007	6,496	4,262	5,370	9,117	321,252	22,124	
%.....	49.7	41.7	47.6	53.4	46.2	49.4	48.3	
TOTAL.....	595,751	15,560	8,962	10,056	19,734	650,063	45,796	
Race/Ethnic..... Share (%)	91.6	2.4	1.4	1.5	3.0	100.0	7.0	

Source: U. S. Bureau of Census, Census of Population: 1980

TABLE V-3
ARIZONA NET MIGRATION
 By Age Group, 1975-80 (in thousands)

Age in 1980	All States	11 Western States*	9 Western States**
5-14.....	30.5	-1.4	-7.3
15-19.....	18.7	0.0	-3.3
20-24.....	32.5	-4.1	-3.9
25-29.....	19.0	-5.7	-3.7
30-34.....	15.6	-2.8	-3.9
35-39.....	15.0	0.0	-2.9
40-44.....	10.2	0.2	-1.8
45-49.....	9.6	-0.3	-1.6
50-54.....	11.5	1.7	-0.5
55-59.....	18.4	4.2	0.0
60-64.....	24.3	5.6	1.5
65-69.....	22.0	5.2	2.1
70-74.....	10.7	2.6	1.2
75 & older.....	7.5	1.0	0.2
TOTAL.....	245.7	6.3	-23.8

*The 11 western states are California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Texas, Utah, Washington and Wyoming.

**The nine western states exclude California and Colorado.

Source: Calculations of the Center for Business Research in the College of Business, Arizona State University, from *Census of Population, 1980: County to County Migration Flows*, prepared by U.S. Bureau of the Census.

VI. GEOGRAPHIC PATTERN OF MIGRATION

Migration can be measured in a variety of ways; each is examined in this section. "Net migration," the measure most frequently used, is the difference between in-migration and out-migration. "Migration efficiency" is the ratio of in-migration to out-migration. An efficiency of 100 indicates an equal number of in- and out-migrants; the higher the value, the more in-migration exceeds out-migration.

Finally, migration rates can be determined by dividing flows by population to adjust for difference in size; for example, New York provides a large number of migrants to all states simply because of its size. To determine the rate of in-migration to Arizona from New York, that flow is divided by New York's population.

The analysis of migration patterns presented in this chapter is based upon two different data sources. Pre-1980 information has been derived by the U.S. Bureau of the Census. Analysis of patterns during the 1980s is based upon migration statistics provided by the Internal Revenue Service. (See Appendix II for details concerning these data sources.)

A. NATIONAL MIGRATION PATTERNS

Ever since European settlement, North America has experienced east-to-west migration. North-to-south movement has become more common in recent decades. Within these consistent long-term patterns, migration involving smaller regions has varied with changing economic conditions.

1975-80

Of the 50 states, Arizona experienced the fourth greatest net in-migration of residents between 1975 and 1980, as 246,000 more people moved to Arizona than left for other states. Only Florida, Texas and Washington gained more population through migration, and only Nevada's net migration as a proportion of its total population exceeded Arizona's proportion.

Several states received a greater number of new residents between 1975 and 1980 than the 598,000 in-migrants Arizona received, but most lost nearly as many, or more, residents to other states. More people (1.9 million) moved to California than to any other state, although Florida's 1.8 million in-migrants made it a close second. With 1.4 million in-migrants, Texas was the only other state to exceed 700,000. New York, Illinois, Virginia and Washington also experienced greater in-migration than Arizona.

Arizona encountered out-migration of 353,000 residents between 1975 and 1980. A number of states, primarily in the Northeast and near the Great Lakes, lost more people, including 1.7 million from New York and 1.1 million from Illinois. While nearly 1 million people moved out of Florida, net migration still exceeded 800,000. Likewise, despite nearly 900,000 people leaving, Texas netted more than 500,000 new residents. In contrast, 1.8 million people left California, nearly as many as moved there.

California's migration patterns provide an example of changing conditions. The total number of in-migrants to California hardly changed between the late 1950s and the late 1970s. However, the number of people moving out of California more than doubled during this period. California was transformed from a boom state to one that was growing primarily because of net natural increases. Thus, while people keep streaming to California from Eastern states, an ever-growing number of residents have apparently become dissatisfied with living conditions, leaving California in favor of other Western states.

Patterns Since 1980

Significant swings in migration patterns have occurred since 1980. The Northwest, for example, attracted many migrants during the mid-to-late 1970s. This region has suffered net out-migration during the 1980s. In contrast, while still experiencing net out-migration, the Northeast has not lost nearly as many people during the 1980s as in the mid-to-late 1970s – the result of an economic rebound which has occurred in the Northeast.

Between the early 1970s and early 1980s, the oil-producing states in the West South Central region grew rapidly. Since 1983, however, Louisiana and Oklahoma have experienced net out-migration.

Net out-migration has characterized the Midwest for years. The flows have hardly changed during the 1980s, except that some of the farm-dependent states have greater outflows than ever.

Few states shared Arizona's rising levels of in-migration between 1983-84 and 1984-85; Georgia was the most notable exception. In contrast, the oil-dependent states of Texas, Oklahoma, Louisiana, Colorado and Alaska registered sharp declines in in-migration; these decreases preceded the worst of the energy slump by more than one year.

Out-migration typically varies less than in-migration, but the level of out-migration fell by sizable amounts during 1984-85 in California, Massachusetts, Michigan and Ohio. Net migration remained negative in each of the last three states, however. In some farming states, such as Iowa, out-migration increased.

Regionally, net migration improved along the Pacific, Mid-Atlantic and South Atlantic coasts and near the Great Lakes. However, net flows still were negative in the Great Lakes and Mid-Atlantic areas, as well as in the Great Plains and East South Central states. Net in-migration was limited to the Western region (mostly Arizona and California) and to the South Atlantic region (especially Florida and Georgia).

Appreciable levels of net in-migration occurred in just a handful of states. Florida's total was more than twice that of California; the latter's flow greatly exceeded the net flows of Georgia, Arizona and Texas. Another gap existed between Texas' total and the net in-migration figures of North Carolina and Virginia.

B. MIGRATION TO AND FROM ARIZONA

A majority of those 1980 residents who had lived outside Arizona in 1975 moved here from either the West or Midwest regions of the country (Table VI-1). The largest number

of such in-migrants (19 percent of total interstate migration) lived in California before moving to Arizona, and Table VI-1 also lists the other nine states contributing the greatest numbers of in-migrants during the 1975-80 period.

The regional pattern of in-migration to Arizona has shifted dramatically over the past 50 years. Information has been collected relating to change in residence over the five years prior to each census since 1940. These data for the 1935-40 period show that almost half of in-migrants to Arizona came from the South during the 1930s, while relatively few moved from the Midwestern states or from the Northeast to Arizona. The top 10 individual "sending" states during that period are listed in Table VI-1, which shows migration from Oklahoma and Texas as the major source of new Arizona residents during that period.

In the post World War II period, the pattern has changed: the Midwest region has become the most important source of in-migrants to Arizona. The other states in the West, particularly California, have continued to be a major source. Meanwhile, the relative magnitude of migration from the South has declined drastically, and the numbers of in-migrants from the Northeast have increased.

The demographic characteristics of recent in-migrants to the state from different regions of the nation vary substantially. For example, the flows from the South and the other states in the West between 1975 and 1980 include a higher proportion of racial-ethnic minorities, particularly Hispanics, than do those from the East and Midwest. On the other hand, the proportion of in-migrants 55 and over was highest for the Midwest and lowest for the South.

Among those who moved to Arizona from abroad, the proportions made up of Hispanics and of Asian/Pacific Islanders were much higher than for interstate migrants. Most of these immigrants were either children or young adults, with the proportion aged 55 and over much less than that for the in-migrants coming to Arizona from other U.S. states.

1975-80

Among the 50 states, the fourth greatest net in-migration of residents between 1975 and 1980 occurred in Arizona, where 246,000 more people moved into the state than left for other states. Arizona's large net gain in population from migration was primarily due to heavy in-migration from the Northeast and the Midwest, with few people moving from Arizona to those regions (Table VI-2). However, the state did have out-migration of 353,000 residents to other states between 1975 and 1980. More than one-half of these out-migrants moved to other states in the West, with relatively fewer persons going to the South and Midwest and very few going to the Northeast. While Arizona did have net in-migration from all four regions of the nation, the state suffered net out-migration to most other Western states between 1975 and 1980.

More than one-half of Arizona's net migration came from just four states: Illinois, Michigan, Ohio and New York. Each contributed at least 25,000 people to the Arizona population between 1975 and 1980. Together with net inflows from six other states – Pennsylvania, New Jersey, Wisconsin, Minnesota, Indiana and Iowa – 80 percent of Arizona's net migration is explained.

Arizona's two metropolitan counties received 88 percent of the state's total net migration from other states during the 1975-80 period. The Phoenix metropolitan area, with net in-migration of 177,000 people, gained two new residents from out-of-state for every resident who left Arizona, a ratio greater than that of any Arizona county except Mohave. The Tucson metropolitan area received net in-migration of just 38,000, as two residents moved out-of-state for every three who moved into Pima County. Four counties – Apache, Graham, Greenlee and Santa Cruz – suffered net out-migration of residents to other states between 1975 and 1980 (Table VI-3).

Net migration from within the United States was responsible for approximately 60 percent of Arizona's population gain between 1975 and 1980. In-migration from foreign countries and U.S. possessions numbered nearly 52,000, accounting for approximately

10 percent of the population growth, although the number of out-migrants from Arizona to other countries is unknown. The remainder of Arizona's population growth was due to a net natural increase from births minus deaths.

Large net in-migration hides the fact that Arizona suffered net out-migration of residents to most other Western states. More people moved from Arizona to Washington, Oregon, Idaho, Wyoming, Utah, Nevada, New Mexico and Texas than moved from each of these states to Arizona.

The Western states from which Arizona received net in-migration – California, Colorado and Montana – sustained net out-migration to each of the other Western states as well (see Table VI-4). Arizona received net in-migration of 23,000 people from California, but every other Western state also gained population from California. The number entering Arizona from California was dwarfed by the more than 100,000 California residents received by both Oregon and Washington. Even Utah and Idaho claimed more residents from California than did Arizona.

The divergent migration patterns among the Western states are illustrated in Table VI-4. California is at one extreme, receiving huge net in-migration from Eastern states but losing nearly as many to other Western states. Washington is at the other extreme, with relatively modest net in-migration from Eastern states but the greatest number of residents from other Western states. Arizona's situation is more similar to that of California, with strong net in-migration from Eastern states but net out-migration to other Western states (excluding California).

a. Migration of Senior Citizens

People between the ages of 55 and 69 years old constituted a major portion of the migration flow into Arizona during the 1975-80 period. Isolating those of the traditional retirement age of 65 years and older, net migration to Arizona exceeded 40,100. With 61,400 in-migrants and just 21,300 out-migrants, the proportion of in-migrants to out-migrants is much higher among the elderly population than for the entire population (a

ratio of 2.9, compared to 1.7). Net in-migration accounted for one-half of Arizona's total increase in senior citizens; the aging of residents constituted the other half.

The migration patterns of senior citizens between 1975 and 1980 were somewhat different from those of the entire population. Arizona received net in-migration of senior citizens from nearly all of the Western states, excluding California and Colorado, although it was limited to people 60 years and older.

A sizable portion (40 percent) of the net inflow of senior citizens came from Illinois, New York, Michigan and Ohio, but this proportion was less than that for the entire population. Illinois alone provided net in-migration of more than 6,700 senior citizens, 17 percent of all elderly migrants. With the addition of Wisconsin, Minnesota, Iowa, Pennsylvania, Indiana and New Jersey, nearly two-thirds of all net in-migration of senior citizens to Arizona is accounted for. In contrast to the total population, Washington and Colorado were also strong contributors to the inflow of retirement-age people.

Elderly in-migrants to Maricopa County generally came from states far from Arizona, while a greater proportion of in-migrants from the western states chose Arizona's rural counties as their new home. More senior citizens left Coconino, Greenlee and Navajo Counties for other states than arrived from out-of-state, but the numbers involved were small.

Arizona experienced net out-migration of senior citizens to only five states – Georgia, Louisiana, North Carolina, Hawaii and Texas – compared to net out-migration of the general population to 11 states. The number of elderly involved in this net out-migration was minimal, except to Texas.

b. Migration of Hispanics

Being a border state with a relatively large population of Hispanic origin, Arizona's net in-migration of Hispanics from other states was barely positive. One-half of all states received more Hispanics from Arizona than had Hispanic residents move to Arizona between 1975 and 1980. In particular, more Hispanics left Arizona for other Western

states than moved from those states to Arizona – a pattern similar to that of the entire population.

Arizona experienced the greatest net out-migration of Hispanics to the states of Washington, Nevada, Utah, Oregon and Hawaii. The greatest net inflows came from states outside the Southwest – Illinois and New York – that contributed heavily to total net in-migration. California and Texas also contributed much of the Hispanic net in-migration during the 1975-80 period. While receiving net in-migration from California, that state was also the destination of nearly one-half of the Hispanics who left Arizona.

In addition to the in-migration of Hispanics from other states, a large proportion of the immigrants from other countries between 1975 and 1980 were of Hispanic origin. These immigrants to Arizona totalled 14,800 people, one-third of the state's Hispanic in-migration.

The Phoenix metropolitan area was the destination of many Hispanic in-migrants during the 1975-80 period, including 40 percent of those from other countries. However, one-third of the Hispanic in-migrants to Arizona settled in rural counties, compared to just 12 percent of all in-migrants. Among the rural counties, Yuma and Cochise received the greatest number of these Hispanics. Yuma County, in particular, assimilated a large number of Hispanic immigrants from other countries, nearly as many Pima County received.

Patterns Since 1980

Arizona experienced tremendous net in-migration from Northeastern and Midwestern states but net out-migration to most neighboring Western states between 1975 and 1980. Since 1980, however, Arizona has received proportionately less, though still substantial, net in-migration from Eastern states, while migration flows from most Western states have reversed to a net positive number.

a. Through 1983

Significant swings have occurred in migration patterns between 1970 and 1983. The geographical distribution of migration flows during the mid-1970s – the recession years of 1974-75 and the weak recovery years of 1976-77 – was considerably different from that of either the early 1970s or the post-1978 period, which were generally similar. Thus, because they primarily cover the 1975-79 period, the census data provide a biased view of the dominant migration patterns since 1970.

While Arizona experienced net out-migration to most Western states during the mid-1970s, the trend has reversed since 1980, with net in-migration from Idaho, Oregon, Utah, Washington and Wyoming; net migration from Nevada swung positive in 1983. Arizona's net migration from these states was in the plus column during the early 1970s as well.

From 1980 through 1983, Arizona continued to experience net out-migration to Texas and New Mexico; the negative balance with New Mexico was greater than in the 1970s. Net out-migration also persisted with Alaska, Louisiana and Oklahoma.

The improved migration flows from Western states to Arizona were offset by less net in-migration from many Northeastern and some Midwestern states. States such as New York, New Jersey and Illinois provided a far smaller share of Arizona's net in-migration from 1980 to 1983; however, these states remained among the most important contributors. Thus, while a swing away from the extreme patterns of the mid-1970s has occurred, considerable migration from the Northeast and Midwest continues.

Increased in-migration explains the improvement in net migration to Arizona from Nevada and Wyoming. From Oregon and Utah, in-migration rose at the same time that out-migration to those states fell. Out-migration from Arizona to Idaho and California decreased. Texas and New Mexico experienced greater flows in both directions, though the largest increased occurred in the number of Arizonans moving to New Mexico.

From the Northeastern and Midwestern states, decreased in-migration to Arizona is more responsible for the state's decline in net migration than an increase in out-migration from Arizona to those regions. However, the latter contributed to the decline in some states, particularly in New York.

b. 1983-84

In-Migration

More people moved to Arizona in 1983-84 than to all but eight other states. States providing the greatest number of Arizona's in-migrants during 1983-84 were located either in the West or near the Great Lakes. Eighteen percent of in-migrants were from California, far more than from New Mexico or Illinois, the next largest contributors, each with 7 percent. The smallest number of in-migrants came from small Northeastern states and from Southern states such as Mississippi and Alabama.

Continuing the trend of the 1980s, the 1983-84 proportion of migrants from Michigan, Ohio and New Jersey declined, each reaching the lowest level since 1970. In contrast, the proportions from three of Arizona's neighboring states, Colorado, Utah and New Mexico, reached their highest levels.

Out-Migration

Since the early 1970s, Arizona consistently has ranked 19th or 20th in the nation for number of people leaving the state. Arizona's resident population ranking is 27th, meaning that a relatively large number of people leave the state each year.

Out-migration has varied less than 10 percent between peak and trough years. In 1983-84, California was the destination of 22 percent of those who left Arizona. Twelve percent moved to New Mexico and 9 percent to Texas; other common destination states included Florida, Illinois and Michigan. The smallest number of people went to small states in the Northeast.

Compared to 1982-83, the proportion of out-migrants to New Mexico, Georgia and Michigan increased, reaching peaks in each case. Out-migration to the oil-dependent states – Texas, Oklahoma and Colorado – declined. As a rate, the greatest out-migration was to other Western states, led by New Mexico and Nevada. The lowest rates again were with Eastern and Southern states.

Net Migration

When the net number of in-migrants is measured, Arizona ranks between second and ninth highest, the peak rank having occurred in the early 1970s and the low during the 1975 recession. Arizona placed fifth in 1983-84, behind Florida, Texas, California and Georgia. Except for Florida and Texas, which have experienced greater net in-migration every year since the early 1970s, the states ranking higher than Arizona have alternated. Mostly because of fluctuations in in-migration, Arizona's net migration has varied widely with the economic cycle.

Net in-migration to Arizona generally is greatest from northern states in the West and Midwest. In 1983-84, net in-migration from Illinois was nearly twice as great as that from the next-highest-ranked states (Michigan, Ohio and California). Several other states reached highs: Colorado, Idaho, Utah, Wyoming, Iowa and Illinois.

Arizona usually experiences net out-migration to only a handful of states in any year; the numbers generally are small and persist for only one or two years. However, Arizona normally suffers net out-migration to New Mexico, Nevada and Alaska; between the early 1970s and early 1980s, the oil-producing states commonly were included on this list. During 1983-84, Georgia, South Carolina and Virginia also received more Arizonans than vice-versa.

When migration is expressed as a rate, states in the Northwest and Midwest, including Wyoming, Utah, Colorado, South Dakota and Nebraska, contributed the greatest net migration to Arizona in 1983-84. The lowest rates, some negative, were with Southern and neighboring states, led by New Mexico.

Efficiency

The total effectiveness of Arizona's migration has ranged between 130 and 157 since the mid-1970s, usually placing it between the second and fourth highest in the nation. The efficiencies are cyclical, with the peak reached in 1978-79 and the low point in 1982-83.

Florida's total efficiency consistently has been higher than Arizona's, while those for Texas, Alaska and Nevada sometimes have been higher. In 1983-84, Arizona's maximum efficiencies with individual states were with those in the Midwest. The ranking of the lowest individual efficiency is nearly identical to the ranking of the lowest net migration.

Many state efficiencies rose during 1983-84, particularly in the West and West South Central regions. In contrast, efficiencies declined with other states, particularly those in New England.

c. 1984-85

In-Migration

Flows of in-migrants to Arizona follow the cyclical pattern of the national economy, peaking during economic expansions. The 1984-85 increase was no exception. In-migration to Arizona from most Western states rose, with the exception of Washington, California and New Mexico. The Great Plains was the only other region from which Arizona in-migration gained.

The state ranked eighth in the number of in-migrants for 1984-85. Texas, Illinois and Colorado provided comparably large numbers of in-migrants to Arizona, but their numbers were dwarfed by Californians moving to Arizona. When comparing the number of migrants from other states to the resident populations of those states, the rate of in-migration was highest from New Mexico, followed by other Western states.

Out-Migration

Though the number of its residents who moved to other states declined during 1984-85, Arizona still ranked a relatively high 20th. The states to which Arizonans moved were little changed from prior years, with the number going to California more than double the total moving to New Mexico; Texas was also the destination of many Arizonans.

Net Migration

The increase in net in-migration to Arizona resulted from improved migration flows with most Western states, as well as with oil-dependent states and with most Midwestern states. The greatest net inflow came from Illinois. Economic problems in Colorado pushed that state into second position, followed by Midwestern states such as Iowa, Michigan, Ohio and Minnesota. Led by Wyoming, states in the Northern Rockies provided the highest rate of net migration to Arizona.

Arizona ranked fourth in net in-migration during 1984-85. Alabama, Arkansas, Georgia, South Carolina and New Mexico were the only states to which Arizona suffered net out-migration.

d. 1985-86

State-to-state migration surged in 1985-86. Arizona's 16 percent gain in the number of people moving to the state matched the national average, but its 4 percent rise in out-migration was among the smallest in the nation. The result was an acceleration in net in-migration second only to that in Florida.

In-Migration

Acceleration in Arizona's in-migration during 1985-86 was not as great as in many states. The number of people moving to Arizona ranked 11th, the lowest of the 1980s. The greatest number of migrants came from California, more than double the number from second-ranked Illinois. Other prime sources included New Mexico, Texas and

Colorado. Proportionally, in-migration from the Midwest increased, while that from the South and West dipped, with the exception of New Mexico.

When the number of migrants from other states was compared to the resident populations of those states, New Mexico's migration rate to Arizona – which jumped in 1985-86 – was more than double that of any other state. Other Western states also had relatively high rates; the lowest rates continued to be primarily from Southeastern states.

Out-Migration

The number of people leaving Arizona does not vary much from year-to-year; it continued to rank 20th in 1985-86. Proportionately, out-migration rose to the states bordering the Great Lakes. Both the proportion and number of Arizonans moving to New Mexico, Texas and California decreased. The greatest number, however, still went to California and New Mexico.

Net Migration

Net migration to Arizona ranked third, up a notch from 1984-85. On a proportional basis, little geographic change occurred. Net in-migration was up with California and New Mexico and down with some of the Midwestern states.

The net inflow was greatest from Illinois, more than double that of second-ranked Iowa. Other major suppliers included Michigan, Colorado, California, Ohio, Wisconsin and Minnesota. Slight net out-migration was measured to Georgia, Alabama, South Carolina, Tennessee and Nevada. The net rate adjusted for population was highest with Wyoming, New Mexico, Montana, North Dakota and Utah.

Efficiency

Arizona's "efficiency," the ratio of in-migration to out-migration, remained second to that of Florida in 1985-86, even though Arizona's figure rose from 152 to 169, the highest of the 1980s. Efficiencies declined with 17 states, but soared with Montana, Wyoming, Nebraska and North Dakota. The highest efficiency was with Iowa at 557 (11 people moving from Iowa to Arizona for every two who moved in the opposite direction.) Other

efficient flows included Nebraska (412), Wyoming (392), North Dakota (380), Wisconsin (369) and Illinois (366). The lowest ratio was 90, with Tennessee.

C. COMPARISON OF ARIZONA TO OTHER SUNBELT STATES

With the nation's dominant migration flows away from the Northeast and Midwest and toward the Southeast, Southwest and West, Arizona "competes" with several states for migrants. Since the mid-1970s, the primary rivals have been Florida, Texas and California. Other states that have done well for briefer periods include Georgia, Oklahoma, Colorado and Nevada.

Prior to 1984

California

During the 1970s, California experienced little net in-migration. Although the state attracted huge numbers of in-migrants – more than any other state – large numbers of people left, particularly for other Western states. During the 1980s, the number of in-migrants to California fell slightly, but out-migration dropped more precipitously. Net in-migration since 1981 has exceeded Arizona's, though California has a lower total efficiency.

The regional pattern of migration to and from California is nearly identical to that of Arizona. Thus, the two states are direct competitors.

Colorado

Through the 1970s, both Colorado's net migration and total efficiency were similar to that of Arizona, though slightly lower. Migration surged during the 1981-82 energy boom but subsequently crashed; net in-migration was minimal in 1983-84 as in-migration declined.

Until the slump in the energy industry, the regional pattern of migration to and from Colorado was similar to that of Arizona, except that Colorado did better against its neighboring states, such as Nebraska.

Florida

Since the mid-1970s, Florida's total efficiency consistently has exceeded Arizona's by 20 to 30 points; it frequently has been the highest in the nation. Its attraction of retirees may be a factor in its effectiveness. Net in-migration has been approximately four times as great as to Arizona; Florida has ranked first nearly every year. In-migration increased during the late 1970s and since has held steady. Out-migration has remained constant.

While some overlap exists, the geographical sources of Florida's migrants are different from those of Arizona. Florida draws more heavily from the East Coast and Mideast, while Arizona attracts more Midwesterners. Indiana is the dividing line. Florida's four-times-as-many migrants can be explained partially by the twice-as-great population northeast of Indiana than in the northern tier of states west of Indiana.

Georgia

Georgia's total efficiency and net migration surged after 1981. While its efficiency remains 5 to 10 points below that of Arizona, its net in-migration between 1982 and 1984 was identical. Both an increase in in-migration and a decrease in out-migration contributed to the improvement.

The sources of migrants to Georgia are similar to those for Florida.

Nevada

Through the middle and late 1970s, the total efficiency of migration to Nevada was higher than that to Arizona. However, Nevada's efficiency declined during the 1980s, dropping to 20 points less than Arizona's. Net migration always was less than that for Arizona, but it dropped to barely positive after 1982. Changes in both in-migration and out-migration during the 1980s contributed to the deterioration, which can be traced to Nevada's dependence on the slumping gambling industry.

The geographical pattern of migration to and from Nevada and Arizona is similar, except that Nevada has attracted more people living in certain southern states, including Georgia, Louisiana and New Mexico.

Oklahoma

Until the oil boom in 1981-82, Oklahoma's total migration efficiency was similar to, or somewhat less than, Arizona's efficiency. After surging to 186 in 1981-82, the highest in the nation, Oklahoma's efficiency fell to less than 100 by 1983-84. Similarly, Oklahoma's net in-migration usually was less than Arizona's; the only exceptions were in 1981-82 and during the 1975 recession. Oklahoma's varying fortunes during the 1980s have resulted mostly from fluctuations in in-migration, though out-migration did increase after 1982.

The regional pattern of migration to and from Oklahoma is not too dissimilar from that to and from Arizona, except that Oklahoma's efficiencies with the Northwest are lower.

Texas

Between the early 1970s and 1983, the total effectiveness of Texas' migration exceeded that of Arizona's migration. But after jumping to 184 in 1981-82, Texas' efficiency fell to less than 120 in 1983-84, closer to the experience of the early 1970s (prior to the first oil shock).

Net in-migration to Texas has been greater than that to Arizona since the early 1970s. However, after generally exceeding Arizona's number by three or four times, the difference in 1983-84 was relatively slight.

In terms of regional migration patterns, Texas does much better against Southern states but worse against Northwestern states, in comparison to Arizona.

1984-85

Poor economic conditions elsewhere have pared the list of competing states, with Oklahoma and Colorado dropping off during the 1980s. Of the Western states, California was the only real competitor during 1984-85. Despite growing economic problems, Texas still added nearly as much population from migration as did Arizona.

With a net migration jump during 1984-85, California pulled well ahead of Arizona and marked its strongest year since the early 1970s. California continued to experience net out-migration to Arizona, as well as to Nevada and some Southern states.

Net in-migration to Texas was the weakest since the early 1970s, preceding the first oil shock. The state suffered net out-migration to Arizona, as well as to a number of Western, Southern and Northeastern states.

Florida's situation hardly changed in 1984-85; it remained first, by large margins, in both net migration and efficiency. Georgia's growth remains the major story of the 1980s, however. Its net in-migration during 1984-85 surpassed Arizona's for the second straight year. Its efficiency rose from 12th in 1980-81 to third in 1984-85 (144).

Other states that briefly attracted many new residents during the 1970s or early 1980s include Washington, Oregon, Nevada, Colorado and Oklahoma. During 1984-85, Oklahoma and Oregon experienced net out-migration, while Washington, Nevada and Colorado gained slight net in-migration.

Since 1985

With slumps continuing in 1988 in Texas, Colorado and other states with resource-dependent economies, California remains Arizona's main "competitor" for migrants. California's net in-migration exceeded Arizona's by approximately 20 percent in 1985-86, not as much as in 1984-85.

Nevada and New Mexico also attract migrants similar to those moving to Arizona, but their flows are relatively small.

In the near-term, however, the performance of other states will have little impact on Arizona's attraction of migrants. The current reduced flows result from the sluggish local economy, which largely is a consequence of the over-extended construction boom from 1983 through 1986. Changing conditions in competing states as well as in Northern and Eastern states are secondary to Arizona's own economic health in the movement of people to the state.

D. MIGRATION TO AND FROM COUNTIES

1975-80

Many Arizona residents moved from one county to another between 1975 and 1980. Yavapai County, with net in-migration of 3,800 Arizona residents, led this intrastate migration, while Maricopa County lost the greatest number of inhabitants to other Arizona counties – nearly 40,000 people. Cochise County experienced net out-migration of more than 3,200 people. Only two counties, Greenlee and Santa Cruz, lost residents both to other Arizona counties and to other states. In addition, Apache and Gila Counties each lost more people in total than they gained.

Nearly 8,000 senior citizens moved from one Arizona county to another between 1975 and 1980. Yavapai County was the greatest beneficiary of this movement, gaining a net of 583 senior citizens from other counties. Maricopa County lost 475 more senior citizens than it gained, with most of the out-migrants moving to Yavapai and Gila Counties – probably to the towns of Prescott and Payson.

1980s

Maricopa County received a disproportionately large 74 percent share of Arizona's net in-migration between 1980-81 and 1984-85. In contrast, Pima County's share – 12 percent – was unexpectedly low, less than its share of Arizona's total population.

Yavapai and Mohave Counties received the greatest net in-migration of the non-metropolitan counties. Six counties – Apache, Gila, Graham, Greenlee, Navajo and Santa Cruz – experienced net out-migration during the 1980-85 period. Apache and Navajo Counties lost people in each year, while the other net losers posted gains in 1980-81 and/or 1981-82.

Maricopa County's migration followed the economic cycle, with greater flows during the expansion years of 1983-84 and 1984-85; the least net in-migration occurred during the 1982 recession. Among the other counties, however, local conditions sometimes overwhelmed the effect of the economic cycle on migration flows. Of most interest, but

difficult to explain, is the pattern in Pima County, where the weakest flows occurred during the expansion.

When the number of people moving into or out of the county is compared to the size of the resident population, Apache, Greenlee and Cochise Counties experienced the greatest migration during 1984-85. In contrast, the urban counties (and Santa Cruz County) had the lowest migration rates.

In addition to the six counties that experienced net out-migration during the first five years of the 1980s, Cochise County also suffered a net outflow during 1984-85. Pima County's 1984-85 net gain was little more than the net increases of much smaller Yavapai and Yuma Counties.

Migration efficiency – the ratio of in-migration to out-migration – was highest in Maricopa County at 1.7. The efficiencies of Mohave (1.5) and Yavapai (1.4) Counties were also well above average. Greenlee County's ratio was very low at 0.5; Navajo and Graham Counties each had efficiencies of 0.8.

Considering only migration from out of state, Santa Cruz and Gila Counties recorded small net inflows, leaving only five counties with a net loss. Pinal, Mohave and Yavapai Counties all had efficiencies of 1.7, trailing Maricopa County's 1.9.

If only in-state migration is reviewed, just three counties – Maricopa, Yavapai and Apache – received a net inflow. Generally, poor economic conditions prompted people from throughout Arizona to move to the Phoenix area. Maricopa County's in-state migration efficiency – 1.2 – was equalled by Yavapai County. This relatively low efficiency indicates that net in-migration from in-state sources was not that great; many people moved to Maricopa County, but many also left.

a. Maricopa County

The Phoenix area received net in-migration from all Arizona counties except Yavapai. The largest net number came from Pima County.

Regionally, more than one-half of the net gain came from the Midwest, with which Maricopa County had a high efficiency of 3.4. Other Western states provided less than one-fourth of the county's net in-migration – an efficiency of just 1.4. The migration efficiency with the South was equivalent, but the flows were less than one-half the magnitude of those with the West. With a higher efficiency of 2.3, the Northeast provided more net migrants than the South.

Of individual counties, Cook County (Chicago), Illinois, provided by far the highest net number of in-migrants to the Phoenix area. The greatest actual number of in-migrants came from Los Angeles County, but the efficiency of this migration was just 1.3, resulting in a net in-migration flow less than one-third the size of that from Cook County.

Other counties with which Maricopa County experienced large gross flows (in-migration plus out-migration) include the California counties of San Diego, Orange, San Bernardino and Santa Clara (San Jose); and Clark County (Las Vegas), Nevada. The Phoenix area lost more residents than it gained from San Diego and San Bernardino Counties.

Other counties with which the Phoenix area enjoyed high efficiencies include Hennepin (Minneapolis-St. Paul), Minnesota; Salt Lake, Utah; and Denver, Colorado. The only other counties east of the Mississippi River that provided a sizable number of migrants were DuPage (Chicago), Illinois; Cuyahoga (Cleveland), Ohio; and the Detroit area counties of Wayne and Oakland.

b. Pima County

Net migration flows and migration efficiency in Pima County were much weaker than those in Maricopa County. Pima County sustained net out-migration with several Arizona counties, particularly Maricopa and Yuma.

More than 70 percent of Pima County's net in-migration from out of state came from the Midwest, but its 2.0 efficiency with that region was much lower than that of Maricopa

County. Migration from the Northeast was positive, with a 1.6 efficiency, but the Tucson area suffered a net outflow to the South and barely received a net inflow from the West.

The greatest number of net in-migrants came from Los Angeles County, with which Pima County's efficiency was 1.3, equivalent to the Phoenix area's ratio with Los Angeles. In contrast, Pima County's efficiency with Cook County, Illinois, which provided nearly as many net in-migrants as Los Angeles, was only 2.3, barely one-half Maricopa County's ratio with Cook County.

The Tucson area suffered net out-migration to several counties, including the California counties of San Diego, Santa Clara, Orange and San Bernardino; Bernalillo County (Albuquerque), New Mexico; Clark County, Nevada; and Dallas County, Texas.

c. Non-metropolitan Counties

Most of the rural counties received net in-migration, though of small numbers, from the Northeast and Midwest. However, net out-migration was common to the South and West.

Many of the counties did not have a sizable net flow with any out-of-state county. However, Mohave and Yavapai Counties received a net inflow from the Los Angeles-Orange County area. The northern counties of Apache, Navajo and Coconino each suffered net out-migration to McKinley, New Mexico, which borders northern Arizona.

TABLE VI-1
MIGRATION FLOWS TO ARIZONA, 1935-1940, 1955-1960, AND 1975-1980

<i>Region of Previous Residence</i>	Region					
	<i>1935-1940</i>		<i>1955-1960</i>		<i>1975-1980</i>	
	<i>Number of Migrants</i>	<i>%</i>	<i>Number of Migrants</i>	<i>%</i>	<i>Number of Migrants</i>	<i>%</i>
Northeast.....	4,258	4.6	35,735	11.4	102,480	17.1
Midwest.....	19,073	20.6	118,247	19.6	87,839	14.7
West.....	27,309	29.5	97,499	31.2	203,860	34.1
Total Interstate Migration.....	92,425	100.0	312,597	100.0	598,368	100.0
Migration from Abroad.....	1,907	2.0	25,725	7.6	51,695	8.0
Total In-migration.....	94,332		338,322		650,063	

States of Origin

<i>1935-40</i>	<i>%</i>	<i>1955-60</i>	<i>%</i>	<i>1975-80</i>	<i>%</i>
Oklahoma	18.8	California	15.8	California	18.7
Texas	16.6	Illinois	7.6	Illinois	8.2
California	13.4	Texas	7.0	New York	7.2
New Mexico	7.4	Ohio	6.3	Ohio	5.8
Arkansas	4.9	Michigan	5.0	Michigan	5.3
Missouri	4.0	New York	4.7	Texas	4.2
Colorado	3.7	Indiana	3.9	Colorado	4.0
Illinois	3.5	Colorado	3.1	Pennsylvania	3.3
Kansas	2.9	New Mexico	3.0	New Mexico	2.6
New York	2.3	Pennsylvania	2.9	New Jersey	2.6

Sources: U. S. Bureau of Census, Censuses of Population: 1940, 1960, 1980; D. A. Plane, "Interstate Migration to Arizona," Arizona State Data Center Newsletter, Summer 1985

TABLE VI-2
IN-MIGRATION, OUT-MIGRATION, AND NET MIGRATION TO ARIZONA, 1975-80

Region	In-migrants	%	Out-migrants	%	Net Migration	%
Northeast.....	102,480	17.1	19,931	5.7	82,549	33.6
Midwest.....	204,189	34.1	59,073	16.7	145,116	59.1
South.....	87,839	14.7	84,125	23.9	3,714	1.5
West.....	203,860	34.1	189,551	53.7	14,309	5.8
Total.....	598,368	100.0	352,680	100.0	245,688	100.0

Source: U. S. Bureau of Census, 1980 Census of Population

TABLE VI-3
ARIZONA NET MIGRATION
By County, 1975-80

County	Other States	Other Arizona Counties
Apache.....	-1,148	556
Cochise.....	4,874	-3,253
Coconino.....	1,818	2,869
Gila.....	96	-406
Graham.....	-649	1,073
Greenlee.....	-563	-628
Maricopa.....	176,731	-3,988
Mohave.....	14,048	-341
Navajo.....	115	2,003
Pima.....	37,969	1,713
Pinal.....	3,069	-737
Santa Cruz.....	-446	-790
Yavapai.....	6,944	3,809
Yuma.....	2,831	-1,880
TOTAL.....	245,688	0

Source: Calculations of the Center for Business Research in the College of Business, Arizona State University, from Census of Population, 1980: County to County Migration Flows, prepared by U.S. Bureau of the Census.

TABLE VI-4
NET MIGRATION TO TWELVE WESTERN STATES

	Total, All 50 States	Excluding 12 Western States	12 Western States Only	10 Western States*	California Only
Texas.....	574,007	526,859	47,148	5,010	40,006
Washington.....	280,417	122,606	157,811	46,122	105,054
Arizona.....	245,688	239,359	6,329	-23,808	23,297
Oregon.....	166,856	56,466	110,390	-1,258	105,818
Colorado.....	128,685	125,832	-24,147	-37,662	13,515
Nevada.....	112,689	58,420	54,269	-4,038	56,236
California.....	94,458	495,926	-401,468	-387,953	-
Utah.....	66,398	29,383	37,015	9,126	25,561
Wyoming.....	47,358	31,763	15,595	4,109	4,805
Idaho.....	44,378	20,772	23,606	-5,830	27,373
New Mexico.....	30,080	33,414	-3,334	-9,870	4,760
Montana.....	1,518	14,818	-13,300	-19,563	4,957

*Excluding California and Colorado.

Source: Calculations of the Center for Business Research in the College of Business, Arizona State University, from *Census of Population, 1980: County to County Migration Flows*, prepared by U.S. Bureau of the Census.

VII. POPULATION PROJECTIONS

The basic factors affecting population growth include net natural increase, non-employment migration and employment migration. Net natural increase varies with birth rates, which have increased since the late 1970s with the children of the 1946-64 "baby boom" in child-bearing years. The trend toward greater net natural increase should end shortly as the "baby-bust" generation ages into child-bearing years.

Gradually lower fertility has been the long-term pattern in this country; it was accelerated by the Depression and Second World War and offset in the period after the war. Another change in the long-term pattern is not foreseen; thus, nearly stable gains from net natural increase are likely into the next century.

Non-employment migration is little affected by economic conditions, but much affected by the aging of the American population. The number of elderly increased by some 30 percent between 1970 and 1985, but should rise by less than 20 percent between 1985 and 2000. Thus, slow gains in retirement migration are likely until after 2005, when the "baby-boom" generation approaches retirement age.

The underlying factor affecting employment migration is the number of young adults nationwide. This figure will fall by several million – about 14 percent – between 1985 and 2000. The result will be no gains in employment-related migration by the end of the century.

A. FACTORS AFFECTING EMPLOYMENT MIGRATION

A number of other factors could affect employment migration, but the likelihood of changes in each is relatively small:

- (1) The "pulling" effect of Arizona. Migration to Arizona is heavily dependent on local economic conditions. The economic cycle will persist and major changes to Arizona's economic structure or performance are unlikely. The "pulling" effect – from employment, climate and lifestyle – is not likely to change.

(2) "Pushing" of people from Arizona. The growing problems of Arizona's urban areas – pollution, traffic congestion, generally uncontrolled growth – probably have not yet had much impact on out-migration. Such factors can have an impact, however, as seen in California. Lack of progress toward resolving these issues will cause out-migration to rise, but probably not within the next few years.

(3) The "pulling" effect of other Sunbelt states. Economic conditions in states like Texas have an effect on migration to and from Arizona. The boom-crash cycle of resource-dependent states is unlikely to repeat itself in the rest of this century.

(4) The "pushing" effect in Northern states. Changes in economic conditions of states subject to net out-migration do have an impact on population flows, but this pushing effect is secondary to the pull of other regions. The economic vitality of New England has reduced, but not eliminated, net out-migration. Some recovery in Midwestern economic conditions is probable, but not to a level different from in the 1970s.

(5) Changes in local policies. Pro- or anti-growth policies will affect migration flows, but Arizona's metro areas are not expected to change their stances.

(6) Changes in mobility or migration patterns. The likelihood of such changes are near zero given the stability of such patterns internationally and over time. Thus, conditions such as increasing mobility of the general population or increased movement of people from the Northeast to Arizona are highly unlikely.

B. SCENARIOS

Population projections are provided in Table VII-1 for each of four sets of assumptions. The "middle" scenario is considered to be the most likely. In general, it assumes the continued dominance of the economic and demographic cycles. Little else is assumed to be different from average conditions that have prevailed in the past, especially since 1970. For example, neither a boom nor a bust is assumed in economic conditions of other Southwestern or Western states, suggesting some improvement there from the conditions of the last few years. In sum, in Arizona, slightly greater net natural increase

and retirement migration, but nearly flat employment migration translate to slightly greater projected population gains than in the 1970s and 1980s.

Lesser population gains are projected in the "low" scenario due to a combination of factors. The difference from the middle scenario is not very great, reflecting the low probability of many of the alternative factors. During the rest of the 1980s, the low scenario mostly reflects a recession that is not assumed in the middle scenario until at least 1990. After 1990, most of the difference from the middle scenario results from slightly lower birth rates and net migration, the latter a result of reduced quality of life pushing people from the urban areas. An economic depression or war probably would be the only events to cause much lesser population gains in Arizona.

The difference between the high scenario and the middle series is somewhat greater. Greater population growth could result from higher birth rates and greater net migration. The latter is based on two assumptions – that other Western and Southwestern states continue to experience significant economic difficulties and that local policies are both pro-growth and successful in economic development.

The "high2" scenario is presented because it is the state's latest (1986) "official" projection series. It does not allow for any economic cyclicity – every year is projected to have a population change near or exceeding the record historical number. Sharp increases in employment-related migration, especially in the early 1990s, are assumed, contrary to the near stability in migration expected from the demographic cycle. The only rationale provided is highway construction in the Phoenix area. This construction, however, already is underway and will be spread over a long span of time. While it will have a positive impact, it will not be tens of thousands of people annually.

Much more rapid growth is forecast by the state's official series than by the U.S. Bureau of the Census. Projections released in April 1988 by the Census Bureau show less growth, particularly after 1995, than in the Center's projections.

On a year-by-year basis, two versions of the middle scenario are presented. The "trend" version shows population changes independent from the economic cycle; the "cyclical" version illustrates the inevitable economic cycles, the timing of which are highly subjective. The population at the end of the century is identical in the trend and cyclical projections.

Maricopa County

In all scenarios, the Phoenix area will continue to grow rapidly (Table VII-2). Its growth will be the fastest in the state except in the high scenario after the year 2000.

In the middle scenario, net natural increase should rise slightly from the current level of about 22,000 per year. Non-employment migration will gradually grow from the current figure of about 8,000 annually, but employment migration will increase only slightly from an average value near 37,000 per year. In net, moderately more people will be added to the population in each of the next two decades.

Since the Phoenix area's growth has conformed to the economic and demographic cycles so well, the high and low scenarios are not much different from the middle series. Only a depression, war or the unlikely swing from pro-growth to anti-growth attitudes should cause a lower population than in the low scenario.

Pima County

Since the Tucson area's historical growth has been uneven, the reliability of any projection is lower. As such, the relative spread between the low and high series is greater than in the Phoenix area.

The middle scenario is based on growth since the mid-1970s. However, given that this growth was relatively slow, employment-related migration is allowed to rise slightly more rapidly than otherwise expected. Future population changes should be greater than in the 1980s (see Tables VII-3 and VII-4) but less than in the early 1970s.

The low series is hardly lower than the middle series. Relative to the Phoenix area, the middle series already represents slow growth. Further, quality of life deterioration

(real or perceived) is not likely to occur in Tucson to the extent that it would impact net migration.

On the other hand, the high series assumes much more rapid growth, along the lines of that experienced in the early 1970s. Local policies and developments could have a noticeable impact in Pima County. For example, a planned community, particularly one with a large retirement component, could result in higher population figures, especially in the next century. The high series still is below the "high2" series, but the difference is not nearly as great as in Maricopa County.

Rural Arizona

The rest of the state as a whole is expected to continue to lag behind the urban areas in growth. In the most likely scenario, growth will be more rapid than in the early 1980s, when many areas were hard hit by mining and/or agricultural problems, but less than in the early 1970s, which was an aberrant demographic phenomenon.

As in Pima County, the low series is not much different from the middle series. The likelihood of the rural area doing worse than in the recent past is slim. The high series assumes much more rapid growth, particularly after the end of the century. It is roughly comparable to the "high2" series after 1990.

C. DEMOGRAPHIC IMPLICATIONS OF FUTURE GROWTH

As a result of migration, fertility swings, and continued increases in life expectancy, the age structure of Arizona's population will continue to evolve throughout the remainder of the century. The combined effects of relatively slow natural increase together with sizable net in-migration will result in the numbers of people in all age groups increasing substantially in future years. Based upon the age structures of the state's projected 1990 and 2000 populations, Arizona's population will be older on average, with a median age of 35 years in 2000 compared with 29.2 in 1980. The proportion of the state's population 65 and over is projected to surpass that for the nation as a whole by 2000 – rising to 14 percent by 2000 from 11 percent in 1980.

During the rest of the 1980s, the number of children in the under-10 age group is forecast to grow rapidly, while the size of the state's high school/college-age population is projected to remain relatively stable. Continued maturing of the "baby boom" generation will result in rapid growth through 1990 in the number of people in their 30s and 40s within the Arizona population. And, as stated above, the state's senior citizen population is projected to expand during the rest of the 1980s.

The pattern will change during the 1990-2000 decade, with the state's high school/college-age populations experiencing rapid growth, while the numbers of children in the younger age groups are expected to increase at a slower rate. During the 1990s, the bulge in the age structure caused by the "baby boom" generation will result in particularly big increases in the 40-49 and 50-59 age groups.

However, the most important social and economic effects of probable future shifts in age structure will probably result from much slower growth in the numbers of young adults, compared with the big growth in those age groups in the past. After expanding by 90 percent during both the 1970s, the number of 20-29 year-olds in Arizona is projected to increase by less than 15 percent during the 1980s and the 1990-2000 decade. Thus many fewer young adults will be entering the labor force over the remainder of the century relative to past experience. More generally, the size of the entire working-age population is also expected to grow more slowly in the future. For example, the 20-64 age group of the Arizona population grew almost 70 percent during the 1970s, but is forecast to increase by 24 percent in the 1990s.

TABLE VII-1
POPULATION PROJECTIONS BY DECADE, FOUR SCENARIOS
(In Thousands)

	1980	1990				2000				2010			
	Census	Low	Middle	High	High2	Low	Middle	High	High2	Low	Middle	High	High2
TOTAL POPULATION													
Maricopa.....	1,509	2,115	2,155	2,180	2,260	2,755	2,865	2,945	3,250	3,405	3,620	3,770	4,050
Pima.....	531	670	680	700	735	805	835	930	975	950	1,010	1,180	1,260
Non-urban.....	677	850	855	860	885	1,020	1,050	1,090	1,095	1,190	1,265	1,385	1,360
Arizona.....	2,717	3,635	3,690	3,740	3,880	4,580	4,750	4,965	5,320	5,545	5,895	6,335	6,670
TEN-YEAR POPULATION CHANGE													
Maricopa.....	538	606	646	671	751	640	710	765	990	650	755	825	800
Pima.....	180	139	149	169	204	135	155	230	240	145	175	250	285
Non-urban.....	223	173	178	183	208	170	195	230	210	170	215	295	265
Arizona.....	941	918	973	1,023	1,163	945	1,060	1,225	1,440	965	1,145	1,370	1,350

Source: Center for Business Research, College of Business, Arizona State University. 1980 Census from U.S. Bureau of the Census. 'High2' scenario from Arizona Department of Economic Security.

TABLE VII-2
POPULATION CHANGE IN MARICOPA COUNTY
Estimates and Projections
(In Thousands)

	Middle Series		'High2' Series
	Trend	Cyclical	
1981.....		49	53
1982.....		41	43
1983.....		43	30
1984.....		76	76
1985.....		84	96
1986.....		88	97
1987.....		68	79
1988.....	52		79
1989.....	67	52	83
1990.....	66	64	110
1991.....	69	44	110
1992.....	69	55	111
1993.....	70	80	111
1994.....	71	85	104
1995.....	71	85	99
1996.....	72	70	105
1997.....	72	55	101
1998.....	72	60	91
1999.....	72	80	93
2000.....	72	85	91
		80	85

Source: Center for Business Research, College of Business, Arizona State University. 'High2' series from Arizona Department of Economic Security.

TABLE VII-3
POPULATION ESTIMATES AND PROJECTIONS AT MID-YEAR
Most Likely Scenario, Trend Forecast
(In Thousands)

	Maricopa	Pima	Non-urban	Arizona
1980 (April 1 Census).....	1,509	531	676	2,716
1981.....	1,570	547	695	2,812
1982.....	1,611	561	710	2,882
1983.....	1,654	571	726	2,951
1984.....	1,730	587	744	3,061
1985.....	1,814	604	760	3,178
1986.....	1,902	621	781	3,304
1987.....	1,970	635	800	3,405
1988.....	2,022	649	817	3,488
1989.....	2,089	665	836	3,590
1990.....	2,155	680	855	3,690
1991.....	2,224	696	875	3,795
1992.....	2,293	711	894	3,898
1993.....	2,363	727	914	4,004
1994.....	2,434	742	933	4,109
1995.....	2,505	758	953	4,216
1996.....	2,577	773	972	4,322
1997.....	2,649	789	992	4,430
1998.....	2,721	804	1,011	4,536
1999.....	2,793	820	1,031	4,644
2000.....	2,865	835	1,050	4,750

Source: Center for Business Research, College of Business, Arizona State University. 1980 Census from U.S. Bureau of the Census.

TABLE VII-4
POPULATION ESTIMATES AND PROJECTIONS AT MID-YEAR
Most Likely Scenario, Cyclical Forecast
(In Thousands)

	Maricopa	Pima	Non-urban	Arizona
1980 (April 1 Census).....	1,509	531	676	2,716
1981.....	1,570	547	695	2,812
1982.....	1,611	561	710	2,882
1983.....	1,654	571	726	2,951
1984.....	1,730	587	744	3,061
1985.....	1,814	604	760	3,178
1986.....	1,902	621	781	3,304
1987.....	1,970	635	800	3,405
1988.....	2,022	649	817	3,488
1989.....	2,086	666	838	3,590
1990.....	2,130	680	855	3,665
1991.....	2,185	692	871	3,748
1992.....	2,265	707	889	3,861
1993.....	2,350	725	912	3,987
1994.....	2,435	743	934	4,112
1995.....	2,505	759	955	4,219
1996.....	2,560	770	970	4,300
1997.....	2,620	783	987	4,390
1998.....	2,700	799	1,006	4,505
1999.....	2,785	817	1,028	4,630
2000.....	2,865	835	1,050	4,750

Source: Center for Business Research, College of Business, Arizona State University. 1980 Census from U.S. Bureau of the Census.

APPENDIX I

RELATED ARTICLES

A variety of other articles relating to demographics, population and migration have been written for *Arizona Business*. Rather than reproducing them here, they are abstracted below. Copies may be obtained by contacting the Center for Business Research.

June 1986: "Retirement and Seasonal Migration – Arizona Approaches No. 2 as Destination"

Based on 1980 census data, retirement and seasonal migration is examined, including geographic patterns.

February 1987: "Survey of Readers: Migration – 60 Percent Might Leave Arizona; Quality of Life Key Factor"

This survey concentrates on the following topics:

- Why people moved to Maricopa County
- A history of their prior intercity moves
- Whether residents of the Phoenix area would consider leaving Arizona
- Reasons for a potential move from the state
- Likely destinations

August 1987: "Survey of Readers: Urban Growth – Businesses Enjoy Benefits; Individuals, Society Pay Costs"

This article examines the benefits and costs of urban growth and increased size. Survey respondents were asked to evaluate and list benefits and costs, and to provide a preferred growth rate and urban size of the Phoenix area. In

addition, respondents evaluated how well growth had been planned and managed and who was to blame for any problems.

January 1988: "Apartment Vacancies To Have Long-Term Impact on Construction/Economy"

The interface of population growth, construction and overall economic performance is analyzed in this article. In particular, the slowing of the economy and of net migration during 1986-87 is examined, as are specifics of the apartment sector.

Each year, generally in the May issue, results of the annual "snowbird" (seasonal resident) survey are provided.

APPENDIX II

DATA SOURCES AND METHODOLOGY

Demographic information and accurate population counts are generally available only once every 10 years – at the decennial census, last taken April 1, 1980. Between these censuses, the population must be estimated from other data, such as passenger car registrations or the size of the labor force. Several methods are commonly used, frequently resulting in widely different population estimates.

Most information on migration is derived from the decennial censuses conducted by the U.S. Bureau of the Census. These data are available only for five-year periods, e.g. 1975-80, and have been gathered from an 8 percent sample of the population.

Another source of migration statistics is the Internal Revenue Service (IRS), but their information also is limited. First, it has been available only since 1970 for selected years, and the most recent data were collected in 1986. Further, complete tallies of migration are not provided since the IRS counts only those who file income tax returns and those whose social security numbers match from year to year; hence, the measured proportion of probable total migration varies by year. However, the IRS information does allow a comparison of migration patterns for various years, and it provides an update, albeit not current, to 1980 census data.

Because of the limitations of each of these sources, a direct comparison of migration between sources is not possible. However, for the 1975-80 period, data that are available from the two sources generally agree as to each state's proportion of net migration. For example, the Census Bureau and the IRS concur that Arizona suffered net out-migration to 11 states, all in the Western or South-

central regions; the IRS adds Alaska to the list. The only major discrepancy is that the IRS shows much greater net out-migration to New Mexico.

In subdividing net migration into its components, the sources also largely agree on out-migration, although the IRS measures more migrants to New Mexico and fewer to Washington than does the Census Bureau. For in-migration, however, a geographical difference exists: the IRS information shows less in-migration to Arizona from the Northeastern and Midwestern states, especially Illinois, Michigan and New York, but greater in-migration from Western and Southern states, particularly California, Nevada, New Mexico, Texas and Oklahoma.

The Center for Business Research generates quarterly population estimates for Maricopa County; from this, a figure for Arizona also is provided. Population estimates are derived separately, both quarterly and annually, from occupied housing units and from first-time electrical connections. Each series exhibits a small but opposite bias in estimating population, which provides a cross-check in generating the final estimate. The number of first-time electrical connections tends to overstate population gains during recessions and other periods of rising vacancies; an offsetting underestimate occurs during economic recoveries. The change in the number of occupied housing units tends to understate population gains during recessions and overstate increases during recoveries. Such factors as job loss during recessions cause a small portion of the population to temporarily share housing units.

APPENDIX III

QUARTERLY DATA

Appendix II provides quarterly population estimates for Maricopa County and figures for the entire state. The latest data are described below.

The net inflow of people to the Phoenix metropolitan area during fourth quarter 1987 slowed to a trickle. At only 4,000, net in-migration nearly matched the low recorded in the depths of the 1981-82 recession. Total population at year-end approximated 1,993,000.

In 1986, the flow of people to the Valley began to diminish from the 1985 record. The reduction was gradual until after first quarter 1987, when net in-migration dropped from 12,000 to 6,000. For all of 1987, net in-migration totaled 30,000, less than one-half the 1986 level. Since 1970, the annual average has been approximately 44,000.

Fluctuations in net in-migration result mostly from changes in in-migration, not out-migration; and in-migration varies with local employment opportunities. New job creation slowed sharply in late 1986 and remained weak throughout 1987. As a result, in-migration to the Phoenix area declined from roughly 162,000 in 1986 to 135,000 in 1987.

Out-migration does not vary much over time. Between 1986 and 1987, it rose slightly, from approximately 100,000 to 105,000. Many of the thousands of laid-off construction workers probably left the Valley.

The ratio of people moving to, versus from, the Valley varies from somewhat more than 1.5 (three people moving in for every two who move out) during economic expansions to slightly less than 1.33 (four people moving in for every three who move out) during recessions. Fluctuations in in-migration have substantial effects on the Valley, particularly on certain businesses and industries. For example, migration has considerable impact on apartment absorption,

discussed in the January 1988 *Arizona Business*. Vacancy rates cannot decrease much when net growth is slow.

Migration flows also directly affect home sales. An exact estimate of the impact is difficult to ascertain because of data insufficiencies. If the average newcomer household size is 2.7 people (equivalent to that of the resident population), the annual number of newcomer households has ranged from 46,000 to 63,000 during the 1980s. *Inside Phoenix*, a study published annually by Phoenix Newspapers, Inc., reports that since the early 1980s, nearly one-third of these households purchased a home within one year of their arrival, accounting for 16,000 to 19,000 sales per year. This number, in turn, represents one-fourth to one-third of annual home sales in the Phoenix area.

Because of the lower number of in-migrants, the estimated number of home purchases by newcomers dropped from approximately 19,000 in 1986 to 16,000 in 1987. The total number of homes sold fell slightly more than 4,000.

TABLE A-III-1
Quarterly Population Estimates (in Thousands)

	Population		Change	
	<i>Maricopa</i>	<i>Arizona</i>	<i>Maricopa</i>	<i>Arizona</i>
1980: 1.....	1,509*	2,717		
2.....	1,521	2,735	12	18
3.....	1,533	2,754	12	19
4.....	1,545	2,773	12	19
1981: 1.....	1,558	2,793	13	20
2.....	1,570	2,812	12	19
3.....	1,580	2,829	10	17
4.....	1,595	2,854	15	25
1982: 1.....	1,604	2,870	9	16
2.....	1,611	2,883	7	13
3.....	1,619	2,896	8	13
4.....	1,627	2,909	8	13
1983: 1.....	1,639	2,928	12	19
2.....	1,654	2,951	15	23
3.....	1,670	2,974	16	23
4.....	1,690	3,003	20	29
1984: 1.....	1,710	3,032	20	29
2.....	1,730	3,061	20	29
3.....	1,750	3,090	20	29
4.....	1,770	3,119	20	29
1985: 1.....	1,790	3,147	20	28
2.....	1,814	3,178	24	31
3.....	1,838*	3,210	24	32
4.....	1,859	3,241	21	31
1986: 1.....	1,882	3,275	23	34
2.....	1,902	3,304	20	29
3.....	1,922	3,333	20	29
4.....	1,941	3,361	19	28
1987: 1.....	1,959	3,387	18	26
2.....	1,970	3,405	11	18
3.....	1,984	3,427	14	22
4.....	1,993	3,443	9	16

*Census Count

Source: Center for Business Research, College of Business, Arizona State University.

TABLE A-III-2
Components of Population Change
Quarterly, In Thousands

		Maricopa			Arizona		
		<i>Net Natural Increase</i>	<i>Net Migration</i>		<i>Net Natural Increase</i>	<i>Net Migration</i>	
1980:	2.....	12	4	8	18	7	11
	3.....	12	3	9	19	7	12
	4.....	12	4	8	19	7	12
1981:	1.....	13	4	9	20	7	13
	2.....	12	4	8	19	8	11
	3.....	10	4	6	17	7	10
	4.....	15	4	11	25	8	17
1982:	1.....	9	4	5	16	7	9
	2.....	7	4	3	13	8	5
	3.....	8	4	4	13	7	6
	4.....	8	4	4	13	8	5
1983:	1.....	12	4	8	19	7	12
	2.....	15	4	11	23	8	15
	3.....	16	4	12	23	7	16
	4.....	20	4	16	29	8	21
1984:	1.....	20	4	16	29	8	21
	2.....	20	5	15	29	8	21
	3.....	20	4	16	29	8	21
	4.....	20	5	15	29	8	21
1985:	1.....	20	5	15	28	8	20
	2.....	24	5	19	31	9	22
	3.....	24	5	19	32	8	24
	4.....	21	5	16	31	9	22
1986:	1.....	23	5	18	34	9	25
	2.....	20	5	15	29	9	20
	3.....	20	5	15	29	9	20
	4.....	19	5	14	28	9	19
1987:	1.....	18	6	12	26	9	17
	2.....	11	5	6	18	9	9
	3.....	14	6	8	22	9	13
	4.....	9	5	4	16	9	7

Source: Center for Business Research, College of Business, Arizona State University.