



Plano: A City in Transition

A comparison of the 2000 Census and 2005 American Community Survey results

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Introduction

Purpose

As Plano transitions from a fast growing suburb to a maturing city, it will be important to track the changes in the city's population. The American Community Survey data for 2005 provides a glimpse of the city's population at the midpoint of the decade. This information is compared with the results from the 2000 Census. The findings of this comparison answer two key questions. How has Plano changed in the last five years? Are trends that were identified in the 1980, 1990 and 2000 Censuses continuing forward in time? A brief description of the data sources utilized for this report can be found in the appendix.

Population Characteristics

Population Growth

The results of the comparison between the 2000 Census and the 2005 American Community Survey (ACS) show that Plano's population is continuing to grow, yet at a slower rate than in the past. The city's population increased from 222,030 to 251,648 people, a growth rate of 13.3%. This figure is about a third of the five-year growth rate between 1990 and 1995 (29.8%) as well as 1995 and 2000 (32.9%). Plano's slowing growth is due to the fact that most of the land zoned for residential uses has been developed. However, the 13% growth in population is quite strong when compared with most cities Plano's size. This rate is more than double the national average of 5.8% for cities over 100,000 in population. Plano's population growth between 2000 and 2005 ranked 41st out of 254 cities in this category.

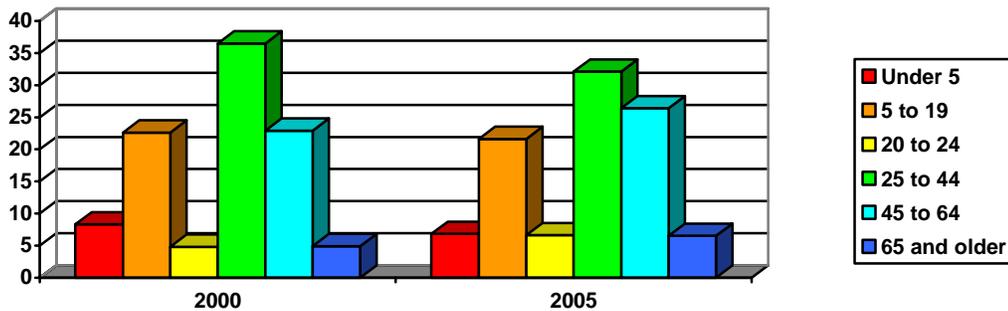
Gender Distribution

The distribution between males and females did not change much between the census and the ACS. The percentage of males decreased slightly from 49.8% to 49.4% while the percentage of females increased from 50.2% to 50.6%.

Age Distribution

Figure 1 provides the age distribution of Plano's population at the time of 2000 Census and the 2005 ACS.

Figure 1
Age Distribution, In Percent
2000 vs. 2005



Source: U. S. Census Bureau

The percentage of people under the age 45 continued to decline. A total of 67.1% of people in Plano were under the age of 45 in 2005 compared with 72.2% in 2000. For the first time since the 1950 Census, the actual numbers of people age 10 and younger as well as those between the ages of 25 to 44 declined in Plano. There is continued growth in the number with people age 45 to 64 and 65 years and over (31.2% and 49.7% respectively). This is consistent with the national trend of a growing aging population.

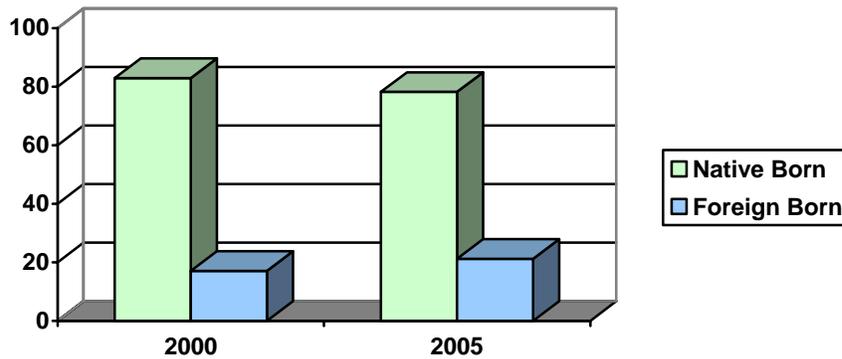
One interesting change is the number and percentage of people between the ages of 20 and 24 years in Plano. Trends from past censuses for the city have always shown a big decrease in the transition of people from the 15 to 19 to the 20 to 24 age cohort, as high school students graduated and left for college. The population of people age 20 to 24 years increased by 55.5% from 2000 to 2005, the fastest of any age cohort in the city. For the first time in many years, number of people age 20 to 24 in Plano was similar to those in the younger age cohorts.

Probable causes for the increase are two fold. More young adults may be staying in Plano to attend local colleges and universities to save costs on higher education. The second is the continued growth due to immigration with an influx of younger people moving to Plano for employment in the service sector of the local economy.

Race and Ethnicity

Plano continued to see growth in the foreign born population (Figure 2) and diversification among city residents (Figure 3).

**Figure 2
Foreign Born, In Percent
2000 vs. 2005**

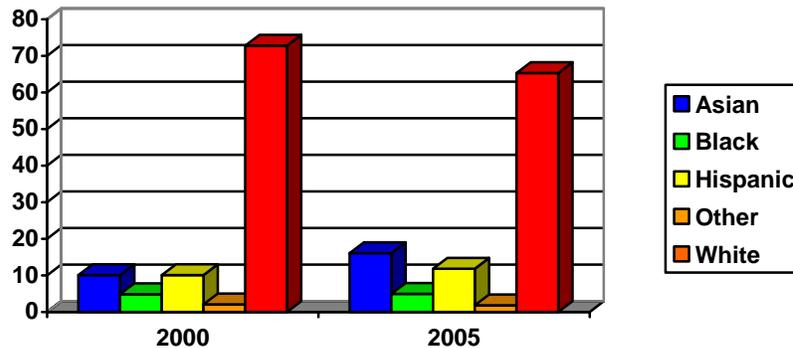


Source: U.S. Census Bureau

For many years, immigrants entered the United States through traditional gateway cities such as Chicago, Los Angeles and New York. They would move to the central city, seek out a community of people from their native country and begin a new life. A new trend in immigration patterns occurred between 1990 and 2000. Immigrants began to enter cities such as Atlanta, Dallas, Las Vegas, Phoenix, and Washington, DC. They bypassed the central city and moved to the suburbs to take advantage of the education and employment opportunities found there. This explains Plano's continued growth in the

foreign born population. It increased from 7.5% in 1990 to 17.1% in 2000 and continued to grow to 21.2% by 2005.

**Figure 3
Ethnic and Racial Distribution, In Percent
2000 vs. 2005**



Source: U. S. Census Bureau

The growth in the foreign born population led to the increased diversification in the city's population. The Asian, black, Hispanic and white populations all saw numeric increases between 2000 and 2005 while the "other" population category declined. What differed between the four groups was the rate of growth. The Asian and Hispanic population increased by 79.9% and 33.0% as compared with 14.8% and 1.7% for the blacks and whites. Thus the proportion of the Non-Hispanic white population decreased from 72.8% to 65.3%.

Asians now comprise 16.1% of the city's population and are the second largest ethnic group in Plano. Hispanics are close behind at 11.8% of the population. These percentages are similar to those found in cities in the San Francisco Bay area.

Some inconsistencies did appear between the 2005 ACS data and past censuses. Inconsistencies were most prevalent among the number of people who identified themselves as American Indian Alaskan Native, Native Hawaiian and Other Pacific Islander, some other race and two or more races. Due to the inconsistencies, these groups were combined to form the "other" category. The inconsistencies were due to the small number of people in each group and the possibility that they may not have been included in the survey.

Social Characteristics

Educational Attainment

This attribute measures the level of education attained for people age 25 years and over. The overall percentages and numbers of people with a high school diploma and bachelor's degree have changed little in Plano over the past five years. The percentages have remained steady at over 92% and 52% with high school diplomas and bachelor's degrees, respectively. These figures are well above those for the nation (84% and 27%) and Texas (79% and 25%).

What has changed in Plano is the percentage of people without a high school diploma and the percentage of people who are stopping their education after earning an Associates Degree. Those without high school diplomas grew by 40.4% and those who stopped their education after earning an Associates Degree grew by 57.2%. The increases may be explained by the growing number of young adults coming to Plano who may not have completed formal schooling and are working in service sector jobs. People completing their education at the Associate Degree level may be taking advantage of the tremendous growth in employment opportunities in the medical services industry in the city.

Language

The number and percentage of people in Plano age 5 years and over who speak a language other than English grew from 22% in 2000 to almost 30% in 2005. This trend is consistent with the increase in foreign born and minority populations.

Figure 4
Language spoken at Home
2000 Census, in Percent

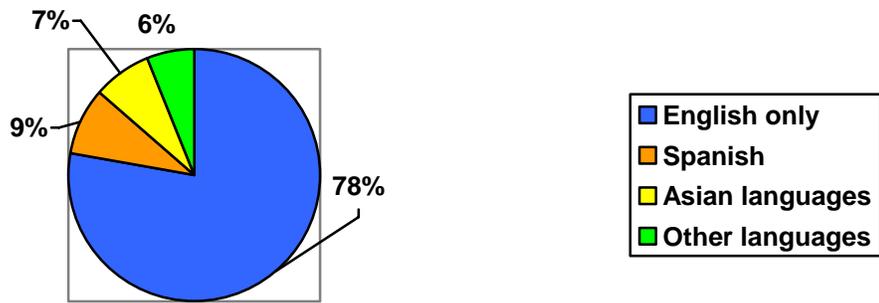
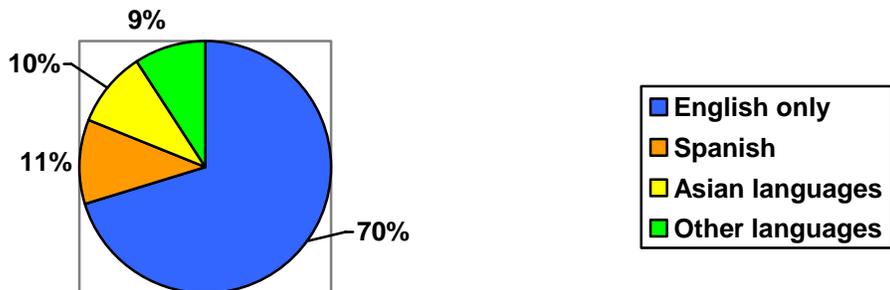


Figure 5
Language spoken at Home
2005 American Community Survey, In Percent



Source for both pie charts: U.S. Census Bureau

A more interesting figure is the percentage of people who are not fluent in English. Though the percentage did not change much (from 8.3% in 2000 to 11.1% in 2005), the actual number of people who speak another language and are not fluent in English almost doubled. The number grew from 16,973 people in 2000 to 26,079 people in 2005, a 53.6% increase. As this trend continues, it will be important to have people within city government who are able to speak languages other than English.

The greatest growth in the non-English speaking population in Plano is those who speak Indo-European languages such as Hindi, German, Persian and Russian. They grew by 74.1% between 2000 and 2005 as compared with Asian language (52.3%) and Spanish (42.6%) speakers.

Economic Characteristics

This section of the report recorded some of the most interesting changes in Plano's demographics between the 2000 Census and the 2005 American Community Survey (ACS). The North Dallas region went through a significant economic downturn during the first half of the decade. Many jobs in technology were eliminated. This situation impacted occupation by industry and household income data the most.

Occupation

This attribute measures occupation by industry for employed people 16 years and over. There have been changes since the 2000 Census. The number of people employed in management, professional and technical occupations grew slightly between 2000 and 2005. However, when compared with all other occupations, the share of jobs in this industry decreased from 55.5% to 51.9%. Employment gains were greatest in the Sales and Office occupations (22.8%), Construction, Maintenance, Production and Transportation (16.9%) and Services (11.3%). Plano's transition from an agricultural community to an urban city is complete. For the first time in the city's history, no people reported employment in Farming, Fishing or Forestry occupations.

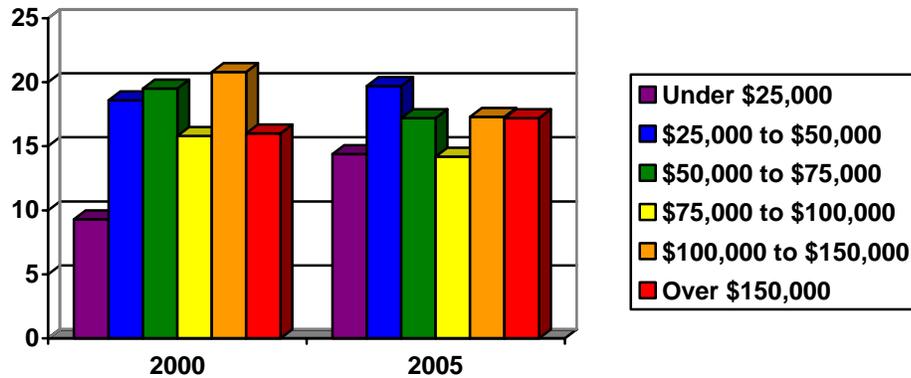
Household Income Distribution

Figure 6 displays the distribution of household incomes in Plano. The distribution shows a decrease in the middle income ranges with growth in the highest and lowest income ranges.

The greatest growth in household incomes was for those under \$25,000. They grew by 73.1% between 2000 and 2005 followed by 18.5% for household incomes ranging from \$25,000 to \$50,000. There are two possible explanations. The first may be due to the growth in the younger immigrant population employed in service occupations. The second is probably related to the 21% increase in households receiving retirement benefits from 2000 to 2005. Retirement incomes are usually less than the salary people earned while employed.

Household incomes found in the middle ranges from \$50,000 to \$150,000 decreased. The range of \$100,000 to \$150,000 saw the greatest decrease by 7% from 2000 to 2005. This was the salary range for most technology workers. Finally, the top end of the household income range continued to experience growth. The number of households in this category grew by 20.3% in Plano. These trends for Plano are different than those for Texas and the United States. There was a decrease in the percentage of household incomes in ranges below \$75,000 for both the state and nation. Increases were found in

Figure 6
Household Income Distribution, In Percent
2000 vs. 2005



Source: U.S. Census Bureau

household incomes ranges over \$75,000.

The shift in occupation type, high technology downturn, and growth of households receiving retirement incomes appears to have had a major impact on median household income. When corrected for inflation, the median household income in Plano decreased from \$92,283 to \$71,560. The same thing is true for per capita income. It decreased from \$42,804 to \$37,950 from 2000 to 2005. While median household income figures decreased for the state and nation from 2000 to 2005, the per capita income remained stable for Texas and increased for the United States.

The number of people in poverty in Plano grew by 66.3% from 9,500 in 2000 to 15,854 in 2005. Though the percentage and numeric growth were dramatic, the actual percentage of the Plano residents in poverty grew slightly from 4.3% to 6.3%, still under that of the nation (13.3%) and Texas (17.6%).

Housing Characteristics

Housing Units

The number of units increased by 13% from 86,078 units in 2000 to 97,263 units in 2005. Housing development in Plano is beginning to slow down as less than 5% of all land zoned for residential uses remains for development.

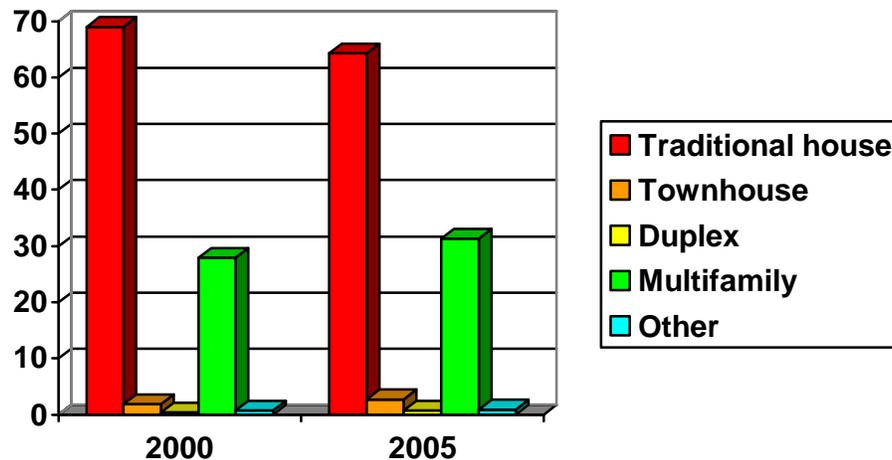
Housing Occupancy and Vacancy

The percentage of occupied housing units remained fairly stable at 93.4% in 2005. The number of vacant housing units grew by 24% from 5,203 units to 6,450 units. Though the growth in housing has slowed as compared with past decades, the number of permits for new residential units has been increasing the past two years as land has been rezoned to allow for additional residential development. The number of unoccupied newly constructed housing units in the city may have contributed to the increase in vacant housing.

Household Tenure

Household tenure provides data about the number of households that are owner or renter occupied. The percentage of renter occupied households increased in Plano from 31.8% in 2000 to 34.9% in 2005. The increase in rental housing rates may be due to recent development of multifamily housing and leasing of older single-family housing units.

Figure 7
Types of Housing in Plano, In Percent
2000 vs. 2005



Source: U.S. Census

Types of Housing

Figure 7 shows the distribution of housing types and how this has changed from 2000 and 2005. The trends show that the percentage of single-family housing units is declining as compared with multifamily housing. The zoning for multifamily and single-family housing has been in place for many years. However, the single-family housing has not been developed at the density allowed by current zoning regulations. With fewer single-family units constructed the balance is tipped more towards multifamily housing.

For many years, the primary residential development in Plano was traditional single-family detached houses and garden apartments. The predominance of these two types of housing is demonstrated in Figure 7. Beginning in the late 1990s, the new housing market began to change. Though the development of single-family homes and apartments were at the highest level in the city's history at that time, a new housing type began to emerge, the townhouse (single-family attached). From 2000 through 2006, the number of permits issued for townhouses more than doubled from 153 to 332, while the percentage of single-family permits dedicated to townhouse development increased from 8% to 39%. During that same time, the number of permits issued for single-family detached housing decreased from 1,762 to 517.

The midpoint of the decade saw the increase in demand of the development of a different type of single-family detached house. Patio homes with smaller yards and less floor area have been developed at a rapid pace, and have been particularly popular with

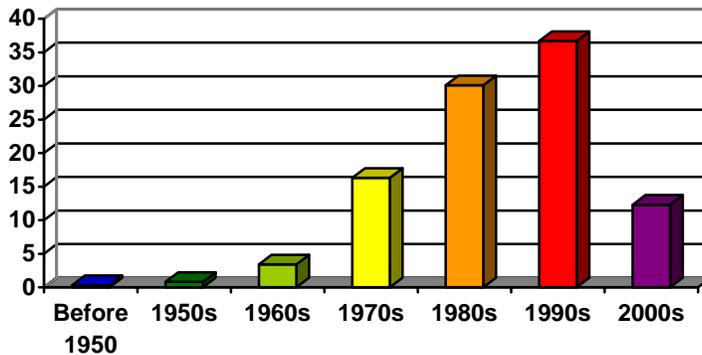
infill housing projects. Urban centers such as Legacy Town Center and the Eastside Transit Village have ushered the development of mixed uses with residential, office, retail and entertainment constructed at the same location. Most multifamily development in Plano from 2000 to 2005 has been in the form of denser urban style units instead of garden apartments. Some are fee simple ownership condominiums.

Along with the increase in variety of new housing is a change in the location of where they are built. In 2002, the Tri-City Retail Study, completed by the cities of Carrollton, Plano and Richardson produced recommendations to address an overabundance of land zoned for Retail uses. One of the recommendations was to allow for residential development in Retail zoned land. The development community has embraced this policy change and construction is underway on several hundred housing units around the city on land once zoned for non-residential uses.

Age of Housing

Figure 8 shows the distribution of the age of housing in Plano. Most of the city's housing units (79.2%) were built after 1980.

Figure 8
Age of Housing
2005 American Community Survey, In Percent



Source: U. S. Census Bureau

Plano is a young city in terms of development; however, the city has a large portion of its housing built in the same compact time period. By 2020, 75% of Plano's housing stock will range in age from 20 to 50 years old. The city will be challenged to attract new residents as they will have to choose between older housing requiring possible renovation in Plano or newer, more affordable units found in the high growth cities to the north. Many of these cities are a great distance from employment centers and cultural opportunities, thus compounding existing problems of traffic congestion and air pollution. Code enforcement issues are beginning to appear in Plano's more mature neighborhoods developed around the 1970s and 1980s.

Summary

Although only five years separate the 2000 Census and 2005 American Community Survey (ACS) data, significant changes are represented by the data, particularly in the

composition of Plano's population. Trends identified in the 2000 Census appear to be continuing in the 2005 ACS data.

Plano's population is aging. Growth continues for age groups over 45 years. The increase in foreign born population within Plano has created a surge of young adults that range in age from 20 to 24 years. However, population of people who are in the prime child bearing years (25 to 44 years) and the number of children less than 10 years is decreasing.

Plano's population continues to diversify. The Asian population is the fastest growing segment of the city's population. Hispanics are close behind. The African American or Black and Non-Hispanic white populations are stable in terms of growth.

People from around the world are still relocating to Plano. The education and economic opportunities in the city are still strong despite difficulties in the technology industry. There were fewer people in management jobs making higher incomes in 2005. The biggest growth came in the number of jobs in the sales and office occupations with the service and manufacturing sectors experiencing increase as well.

These trends were reflected in the household income figures. There was growth in the lowest and highest income ranges in Plano while the middle ranges experienced decrease or remained stable. There was also an increase in households receiving retirement incomes. All of these factors probably explain the dramatic decline in the median household income for Plano residents.

Another factor that must be mentioned is the reduced number of surveys that were sent out in comparison with Census "long form" questionnaires. In the past, one out of every six households (16.7%) received a "long form" questionnaire. Only 4.5% of all American Households receives an American Community Survey questionnaire. The results are then calculated for the whole population. This can result in some inconsistencies with comparisons of trends in smaller population groups.

As the United States and Texas continues to experience rapid growth and demographic change, it is incumbent upon local governments to study their population. It is important to identify the people that live in Plano in order to provide them with the municipal services they need to contribute to a high quality of life for city residents. This document is an ongoing project. As more data is released from the American Community Survey and future Decennial Censuses, similar reports will be completed to study and identify changes in Plano's population.

Appendix

United States Census Bureau

The U. S. Census Bureau is responsible for counting the number of American residents every ten years to ensure fair representation in the U. S. Congress. The results of each census call for the addition and redrawing of congressional district boundaries that contain approximately the same number of people throughout the nation. This is to ensure equal opportunities for all American citizens to have fair representation in the United States House of Representatives.

Census Data

The data gathered by the U. S. Census Bureau has evolved over the years and became a critical source of information for various public and private entities. It measures attributes such as age, educational attainment, ethnicity, income, occupation and race. This information has become crucial for business and government planning efforts.

Census data comes in two formats. The first is known as 100% data. Every household that receives a questionnaire is asked to report the number, age, gender, household tenure, relationship and race and ethnicity of the people living there. For most households, that is all the information they need to provide. This is called the “short form” questionnaire.

One out of every six households receives a “long form” questionnaire with additional questions regarding educational attainment, language spoken at home, occupation, disability and household income. Since it comes from a limited number of households, it is considered sample data and the information is extrapolated on to the total population for a complete profile of the community.

American Community Survey

The Census Bureau has eliminated the long form and replaced it with a new instrument called the American Community Survey. The American Community Survey provides detailed census data on an annual basis that was once found in the long form questionnaire. The survey is sent out to 5,000,000 households annually. Beginning in 2002, data was released for places exceeding 250,000 people. In 2006, data for places over 65,000 was released. Data releases for 2008 will be for places exceeding 21,000 people. By 2010, detailed census information will be available for census tracts and places with populations less than 21,000.

The U.S. Census Bureau does warn data users that the smaller the population of a place or demographic characteristic, the more inconsistency one will encounter when comparing information with previous censuses. The reduced number of surveys sent to households increases the risk that smaller places and less common demographic attributes may be missed. This is important to keep in mind as the report identifies trends from population, social, economic and housing characteristics for Plano.

Appendix

2000 Census and 2005 ACS Attribute	2000 Census		2005 ACS		Change	
	Number	Percent	Number	Percent	Difference	Percent
Total Population	222030		251648		29618	13.3
Gender Distribution						
Male	110619	49.8	124358	49.4	13739	12.4
Female	111411	50.2	127290	50.6	15879	14.3
Total Number of Households	80875		90813		9938	82.3
Persons Per Households	2.73		2.77		0.04	82.3
Age Distribution						
Under 5 years	18379	8.3	17225	6.8	-1154	-6.3
5 to 9 years	18519	8.3	16800	6.7	-1719	-9.3
10 to 14 years	17385	7.8	20015	8.0	2630	15.1
15 to 19 years	14322	6.5	17407	6.9	3085	21.5
20 to 24 years	10639	4.8	16539	6.6	5900	55.5
25 to 34 years	35576	16.0	35493	14.1	-83	-0.2
35 to 44 years	45543	20.5	45257	18.0	-286	-0.6
45 to 54 years	34182	15.4	41623	16.5	7441	21.8
55 to 64 years	16574	7.5	24953	9.9	8379	50.6
Over 64 years	10911	4.9	16336	6.5	5425	49.7
Median Age	31.0 years		35.8 years		4.8 years	6.5
Marital Status						
People age 15 years and over	168437		197608		29171	17.3
Never Married	35551	21.1	48309	24.4	12758	35.9
Married	111970	66.5	123095	62.3	11125	9.9
Separated	2135	1.3	2201	1.1	66	3.1
Widowed	4585	2.7	6336	3.2	1751	38.2
Divorced	14196	8.4	17667	8.9	3471	24.5
Parental Presence						
Households with children under 18 years	33973	42.0	34459	37.9	486	1.4
Households with children under 18 years with 2 Parents	28802	35.6	27237	30.0	-1565	-5.4
Households with children under 18 years with 1 Parent	5171	6.4	7222	8.0	2051	39.7

Appendix

Ethnicity						
Hispanic	22357	10.1	29727	11.8	7370	33.0
Non-Hispanic	199673	89.9	221921	88.2	22248	11.1
Race						
<i>Non-Hispanic, one race</i>						
African American or Black	10989	4.9	12616	5.0	1627	14.8
Asian	22518	10.1	40511	16.1	17993	79.9
Other*	4623	2.1	4498	1.8	-125	-2.7
White	161543	72.8	164296	65.3	2753	1.7
* Other includes American Indian Alaska Native, Native Hawaiian and other Pacific Islander, some other race and two or more races. Due to data inconsistencies between census and survey, categories consolidated to form one group.						
Educational Attainment						
People age 25 years and over	144046		163662		19616	13.6
No high school diploma	8772	6.1	12317	7.5	3545	40.4
High School diploma/GED	17649	12.3	19218	11.7	1569	8.9
Some college, no degree	32127	22.3	33059	20.2	932	2.9
Associates Degree	8792	6.1	13822	8.4	5030	57.2
Bachelor's Degree	51305	35.6	54097	33.1	2792	5.4
Graduate/Professional degree	25401	17.6	31149	19.0	5748	22.6
High School diploma and higher	135274	93.9	151345	92.5	16071	11.9
Bachelor's Degree or higher	76706	53.3	85246	52.1	8540	11.1
Employment by Occupation						
Employed people age 16 years and over	120230		132704		12474	10.4
Management/Professional/Technical	66777	55.5	68867	51.9	2090	3.1
Service Occupations	9647	8.0	10740	8.1	1093	11.3
Sales and Office Occupations	32833	27.3	40318	30.4	7485	22.8
Farming, Fishing, Forestry	46	0.0	0	0.0	-46	-100.0
Construction/Maintenance/Production/Transportation	10927	9.1	12779	9.6	1852	16.9
Household Income Distribution						
Estimated households from sample	81179		90813		9634	11.9
Under \$25,000	7575	9.3	13113	14.4	5538	73.1
\$25,000 to \$49,999	15116	18.6	17910	19.7	2794	18.5

Appendix

\$50,000 to \$74,999	15798	19.5	15578	17.2	-220	-1.4
\$75,000 to \$99,999	12851	15.8	12925	14.2	74	0.6
\$100,000 to \$149,999	16880	20.8	15692	17.3	-1188	-7.0
Over \$150,000	12959	16.0	15595	17.2	2636	20.3
Median Household Income	\$78,722		\$71,560			
Adjusted Median Household Income**	\$92,283		\$71,560		-\$20,723	-22.5
Per Capita Income	\$36,514		\$37,950			
Adjusted Per Capita Income**	\$42,804		\$37,950		-\$4,854	-11.3
** Income adjusted for inflation						
Poverty						
Population below poverty	9500	4.3	15854	6.3	6354	66.9
Mobility***						
People Age 5 and 1 years and over	204045		234423			
Same house (1995 and 2004)	81028	39.7	195977	83.6		
Different house, same county (1995 and 2004)	39022	19.1	14771	6.2		
Different house, same state (1995 and 2004)	39819	19.5	11976	5.1		
Different house, different state (1995 and 2004)	33301	16.3	7943	3.4		
Different house, different nation (1995 and 2004)	10875	5.3	3756	1.6		
*** Time differential inconsistent between 2000 Census and 2005 American Community Survey for comparison.						
Household Tenure						
Occupied Housing Units	80875		90813		9938	12.3
Owner Occupied Housing	55625	68.8	58960	64.9	3335	6.0
Renter Occupied Housing	25250	31.2	31853	35.1	6603	26.2
Median Housing Value	\$162,300		\$196,200			
Housing Value Adjusted for Inflation	\$190,259		\$196,200		\$5,941	3.1
Housing Vacancy						
Total Housing Units	86078		97263		11185	13.0
Occupied Housing Units	80875	94.0	90813	93.4	9938	12.3
Vacant housing units	5203	6.0	6450	6.6	1247	24.0
Age of Housing Units						

Appendix

Housing units built before 1980	21619	25.1	20216	20.8	-1403	-6.5
Median age of housing units (yr built)	11	1989	15	1990	4	36.4
Single Family Housing Units	61082	70.9	65210	67.0	4128	6.8
Language Spoken at Home						
People age 5 years and over	204045		234423		30378	73.5
Speak only English at home	158931	77.9	164756	70.3	5825	3.7
Total Non-English speakers at home	45114	22.1	69667	29.7	24553	54.4
Speak Spanish at home	17686	8.7	25224	10.8	7538	42.6
Speak Asian languages at home	15211	7.5	23172	9.9	7961	52.3
Speak Other languages at home	12217	6.0	21271	9.1	9054	74.1