



The Center for  
Demographic and  
Socioeconomic  
Research and  
Education

**A Summary of  
The Texas Challenge in the Twenty-  
First Century: Implications of  
Population Change for the  
Future of Texas**

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# Chapter 1

## Introduction, Methods, and Limitations

### Introduction

What will the future of Texas be? Will its population increase and if so how rapidly and where will this growth be most extensive? Will its wealth increase with its population or will per capita levels of income and wealth decrease? What are the population-related opportunities and challenges likely to impact Texas in the first decades of the 21st Century?

We first attempted to address such questions in the mid-1990s with the publication of a report and related book entitled, *The Texas Challenge: Population Change and the Future of Texas*. In that work, we generally projected a sober future for Texas if the socioeconomic characteristics (differences in income, education, and program participation) of the fastest growing segments of Texas population did not change and if the State showed the rapid, diverse, and relatively pervasive growth projected to occur. The work suggested that the challenge for the State was to ensure that all Texans had the skills and education necessary to compete in the increasingly international economy and that to fail to meet this challenge could result in a Texas that is poorer and less competitive.

The 2000 Census revealed a Texas population that had increased even more rapidly and in diversity than anticipated and a State that showed rapid levels of economic expansion in many areas. At the same time, many public programs such as welfare and higher education access and financial aid have been dramatically changed.

This is a summary volume of a detailed report, *The Texas Challenge in the Twenty-First Century: Implications of Population Change for the Future of Texas*, which attempts to address both the original questions raised by *The Texas Challenge* in light of new 2000 and post-2000 data and the questions of how, in what ways, and to what extent recent trends, patterns, and policies may have changed its conclusions.

To accomplish these goals, the effects of four major demographic trends are examined:

1. changes in the rates and sources of population growth;
2. the aging and age structure of the population;
3. growth in the non-Anglo population; and
4. the changing composition of Texas households.

The magnitude of, and projected trends in, these four factors have impacted and will continue to impact numerous aspects of Texas and United States society and are critical for understanding the future. In this volume, we provide a summary of our examination of these demographic changes and their socioeconomic and service implications. The full report can be obtained by contacting the offices of the Texas State Data Center at Texas A&M (979-845-5115) or the Office of the State Demographer (512-463-8390) or from our website ([txsdc.tamu.edu](http://txsdc.tamu.edu)).

## **Methods**

This volume presents the results of projections made using population projections completed by the Texas Population Projections Program in the Texas State Data Center and Office of the State Demographer in the Department of Rural Sociology in the Texas A&M University System. The population projections were made using a cohort-component procedure which projects populations within each age, sex, and race/ethnicity group (or cohort) for each county and for the State as a whole. The race/ethnicity groups used include Anglos (non-Hispanic Whites), Blacks (non-Hispanic Blacks), an Other category (which includes persons from other races [except Whites and Blacks] who are non-Hispanic) and Hispanics of all races. Projections are provided for 2001 through 2040 for cohorts of both sexes and each of the four race/ethnicity groups for individual years of age for ages 0-1 through 85 or older. County-level birth and death data were used to compute 2000-based rates for each cohort with these rates trended over the projection period assuming patterns from past periods and national level forecasts to provide projections of fertility and mortality rates for each county and the State. These county and State-specific fertility and mortality rates were used for all of the alternative population projection scenarios.

Because migration is the most difficult component to project, differences in assumptions about cohort-specific net migration rates were used to formulate three alternative scenarios of future population growth. One scenario, referred to as the zero or 0.0 scenario, assumes no migration or that immigration and outmigration are equal. This scenario is not likely to occur but allows one to discern how the population will change as a result of natural increase (the excess of births relative to deaths) alone and, when compared to the other scenarios, allows one to identify the unique effects of migration. The 1990-2000, or 1.0, scenario assumes that the age, sex and race/ethnicity cohort-specific rates of net migration remain in the future at the same levels (i.e., have the same values) as those from 1990 to 2000. Because the 1990s brought about unprecedented growth and its migration levels were affected by several changes in the Census process, an intermediate projection scenario, a one-half 1990-2000 or 0.5 scenario is also provided. It assumes age, sex, and race/ethnicity cohort-specific rates of migration that are one-half of the levels of the 1990-2000 period. Given these population projections, household projections were obtained by applying 2000 age, sex, and race/ethnicity cohort-specific householder rates to the projections of population.

The population and household projections were used as the bases for projecting socioeconomic and service characteristics. These characteristics were generally projected by using 2000 based rates for socioeconomic characteristics and service usage and applying them to the population or household projections as appropriate. Given projections of socioeconomic factors and/or service usage, cost and revenue projections were made by applying per-participant costs or per-household resource acquisition and tax rates for 2000 to the projections of the number of service participants or households.

## **Limitations**

The work is limited in several regards. First, it must be recognized that these, like all projections, are subject to error as a result of unanticipated changes in basic demographic processes, in service usage, and patterns of resource acquisition. Uncertainty and inaccuracy are evident in all projections, especially those made for relatively small areas, specific forms of participation, and for long periods of time into the future. In general, 2000 service usage and resource acquisition rates (or rates trended to reflect 1990-2000 patterns of change) are assumed to continue across the projection period. It is obvious that in most situations neither current (2000) conditions nor 1990-2000 trends in these conditions will continue unchanged throughout a 40-year projection period. It

must also be recognized that these projections are intended to provide information that examines the implications of long-term trends in Texas population for socioeconomic characteristics and service usage. They are not meant to substitute for the short-term projections made by state agencies which are more appropriate for short-term planning efforts. These projections should thus be used with full realization of their limitations.

The work is also limited by the fact that it examines the implications of only population change for a limited number of services and socioeconomic conditions. We maintain that demography plays an important role in determining characteristics of the future, but any analysis stressing only one dimension, be it demographic or any other single dimension, is admittedly incomplete. Numerous other social, economic, and policy factors also affect socioeconomic and service conditions. The analysis also emphasizes only the demographically determined demand for services. Supply issues that reflect funding, policy, and other factors are not examined.

Similarly, we assume that socioeconomic conditions are associated with demographic characteristics -- that differences in age, household composition, and race/ethnicity tend to differentiate the levels of socioeconomic resources available to persons and households. This assumption is not intended to suggest that such relationships are immutable nor is it a blaming of persons with certain characteristics for the socioeconomic conditions they are experiencing or for the effects these conditions may have on overall aggregate patterns. The work simply recognizes that, because of a variety of historical, discriminatory, and other factors, certain demographic characteristics (such as very young or old age or non-Anglo status) tend to be associated with reduced levels of socioeconomic resources.

The methods used and the assumptions made have clear limitations, which are described in detail in the body and appendices of the full report. Despite these limitations, we believe that readers will find this summary report useful in describing the conditions that have prevailed in the past and those that may characterize the future of Texas.

## **Chapter 2**

### **Texas Past and Projected Population**

The recent and projected population patterns of Texas form the basis for the findings in the report and are summarized here:

#### **Historical and Current Patterns**

##### *Texas Population Has Shown Rapid Growth, Diversification, and Aging*

#### **Population Change**

The demographic history of Texas has been one of growth. Texas' population has increased more rapidly (in percentage terms) than the population of the nation in every decade since Texas became a state (Figure 2.1). The decade of the 1990s was notable in several regards, however, with the State's population growing to 20,851,820 by 2000, an increase of 22.8 percent since 1990. This increase of 3,865,310 persons was the largest of any decade in Texas history and moved Texas past New York to become the nation's second largest state. Texas population increase was second only to that in California (California increased by 4.1 million persons in the 1990s) and the eighth largest in percentage terms among all states.

Growth in the 1990s came nearly equally from the two components of population growth, with 49.7 percent due to natural increase (the difference between the number of births and deaths) and 50.3 percent due to net migration (which can be immigration from nations outside the United States or inmigration from other states). Because natural increase rates change relatively slowly, and their response to economic change is less immediate than that for migration, Texas has a natural impetus to growth that is likely to lead to substantial future population growth in the State under a variety of economic conditions.

The growth in the population of Texas was also pervasive. All 24 of the Texas council of governments (COG) regions experienced population growth, as did all 27 of its metropolitan statistical areas (MSAs), 186 (73.2 percent) of its counties, and 945 (74.0 percent) of its places (i.e., towns and cities). The three parts of Texas which showed the highest levels of population growth included areas along the Texas-Mexico border, areas in the central corridor of Texas from Dallas-Fort Worth through San Antonio, and the Houston-Galveston area. The

slowest rates of growth were in the Panhandle, West Texas, and Beaumont-Port Arthur areas. Rural areas continued to show reduced levels of growth. By 2000 nonmetropolitan counties accounted for only 15.2 percent of the total population of the State (and received only 8.8 percent of the State's population increase in the 1990s), while metropolitan counties accounted for 84.8 percent of the population (and received 91.2 percent of the population increase). Metropolitan central city counties accounted for 67.1 percent of the total population (and received 61.5 percent of the population growth from 1990 to 2000) while suburban counties accounted for 17.7 percent of the population in 2000 (and received 29.7 percent of the 1990-2000 population increase).

### **Change in the Racial/Ethnic Composition of Texas**

An extensive diversification in the racial/ethnic composition of the population of Texas has occurred in recent decades. In both the 1980s and 1990s, non-Anglo population groups showed substantially larger percentage increases than the Anglo population.

<b><u>Group</u></b>	<b><u>Percent Change</u></b>	
	<b><u>1980-1990</u></b>	<b><u>1990-2000</u></b>
Anglo	10.1	7.6
Black	16.8	22.5
Hispanic	45.4	53.7
Other	88.8	81.2

As a result of these trends, the proportion of Texas population that is Anglo declined over time and the proportion that is non-Anglo increased:

<b><u>Group</u></b>	<b><u>Percent of Total Population</u></b>		
	<b><u>1980</u></b>	<b><u>1990</u></b>	<b><u>2000</u></b>
Anglo	65.7	60.6	53.1
Black	11.9	11.6	11.6
Hispanic	21.0	25.6	32.0
Other	1.4	2.2	3.3

By 2000, Texas had the second largest total population among the states in the United States and also had the third largest Anglo population (11,074,716),

second largest Black population (2,421,653), second largest Hispanic population (6,669,666), and fourth largest population of persons from the Other racial/ethnic group (685,785) of any state in the nation. Equally important, its growth across these groups was such that it had the second largest numerical increase in the Anglo population in the 1990s (an increase of 783,036), the third largest increase in the Black population (445,293), the second largest increase in the Hispanic population (2,329,761), and the third largest increase (307,220) in the Other population.

### **The Age Structure of the Texas Population**

Two aspects of the age structure of the Texas population are critical to understanding the impacts of population change. First, as with the rest of the United States, Texas population is aging as a result of increased longevity and the aging of the baby-boom generation (those persons born between 1946 and 1964). The Texas median age (the age at which half the people are younger and half are older) was 18.7 years in 1900 but was 32.3 years in 2000 (Figure 2.2). Although still younger than the population in the nation as a whole (which had a median age of 35.3 years in 2000), Texas population is likely to continue to age in a manner similar to that in the nation as a whole and to have nearly one-in-five persons who are 65 years of age or older by 2040 compared to fewer than one-in-ten in 2000. Services and conditions impacting older persons will become of increasing relevance to Texas and the rest of the nation in the coming decades.

A second characteristic of the age structure in Texas and in the United States is the clear relationship between youth status and non-Anglo status. For example, the median age for Anglos in 2000 was 38.0 years but for Blacks it was 29.6 years, for Hispanics 25.5 years, and for the Other population 31.1 years. The differences in age structure are especially obvious when data for specific age groups are examined. For example, among the population 65 years of age or older, 73 percent is Anglo and 17 percent is Hispanic, while for the group that is less than 5 years of age, 40 percent is Anglo and 44 percent is Hispanic. Sixty percent of the population of Texas less than 5 years of age and 57 percent of the total population less than 18 years of age are non-Anglo. Clearly, issues related to older persons are more likely to affect Anglo populations and those related to children to affect non-Anglo populations. Issues related to race/ethnicity and age may become increasingly interrelated.

## Projected Patterns

### *Texas Population Will Show Continuing and Extensive Growth*

Substantial population increases are projected for Texas under a variety of alternative projection scenarios (Figures 2.3 and 2.4). By 2010 the population is projected to be between 24.2 million (0.5 scenario) and 25.9 million (1.0 scenario) and by 2040 between 35.0 million (0.5 scenario) and 50.6 million (1.0 scenario). Even under the 0.0 scenario, the population of the State would increase by more than 4.7 million persons from 2000 to 2040. Increases under the 0.5 scenario would add nearly 14.2 million, and under the high growth (1.0) scenario, the increase would be more than 29.7 million. The rates of growth for the total projection period from 2000 to 2040 would be 22.6 percent under the 0.0 scenario, 67.9 percent under the 0.5 scenario, and 142.6 percent under the 1.0 scenario (Figure 2.4).

The alternative projections also show how large a role migrants and their descendants will play in the State's future growth. Of the net growth in the State from 2000 to 2040, 66.7 percent under the 0.5 scenario and 84.2 percent under the 1.0 scenario would be due to net migration (that is to migrants and their descendants). These rates are similar to historical patterns but show how important migrants and their descendants are in the continuing population growth in the State.

### *Texas Will Have an Increasingly Diverse Population*

Projections show more extensive percentage rates of growth in non-Anglo than in Anglo populations from 2000 to 2040.

	<b><u>Percent Change 2000-2040</u></b>	
<b><u>Group</u></b>	<b><u>0.5 Scenario</u></b>	<b><u>1.0 Scenario</u></b>
Anglo	2.8	10.4
Black	35.6	65.0
Hispanic	175.7	348.7
Other	185.0	546.8
Total Population	67.9	142.6

As a result, the proportion of the total population composed of non-Anglos also increases substantially (Figures 2.5 and 2.6). Under the 1.0 scenario the State's population in 2040 would be 24.2 percent Anglo, 7.9 percent Black, 59.1 percent Hispanic, and 8.8 percent members of the Other racial/ethnic group. By 2005 under the 1.0 scenario, and by 2006 under the 0.5 scenario, Texas population will be less than one-half Anglo. The Hispanic population is projected to become a majority of the State's population by 2026 under the 1.0 scenario and by 2035 under the 0.5 scenario. Under the 1.0 scenario, of the net increase in the population between 2000 and 2040, only 3.9 percent would be due to the Anglo population – meaning that more than 96 percent of the net additions to Texas population between 2000 and 2040 would be non-Anglo.

### ***Texas Will Have an Aging and Age-Stratified Population***

The aging of the population and the pattern showing that Black and Hispanic populations tend to be younger and Anglo (and by the end of the projection period Other) populations to be older are evident throughout the alternative projections for Texas (Figures 2.7 and 2.8), although the aging is less extensive in the fast growth scenario. The slower aging under the higher growth scenarios reflects the fact that such scenarios project more growth from non-Anglo populations that have higher birth and migration rates and younger populations. Despite such differences, the median age of all racial/ethnic groups increases over the projection period under both scenarios, and the average Texan will be at least six years older in 2040 than in 2000.

### ***Texas Will Be a State with a Larger, Older, and Increasingly Diverse Population -- and Thus Increasingly Challenged***

Overall, the projections of the Texas population suggest that socioeconomic and service structures will be impacted by a population that is larger, older, and increasingly diverse. It is a population that is expected to experience the emergence of a new numerical majority. Its size and complexity are likely to increasingly challenge the State's resources in the coming decades.

## Figure 2.1

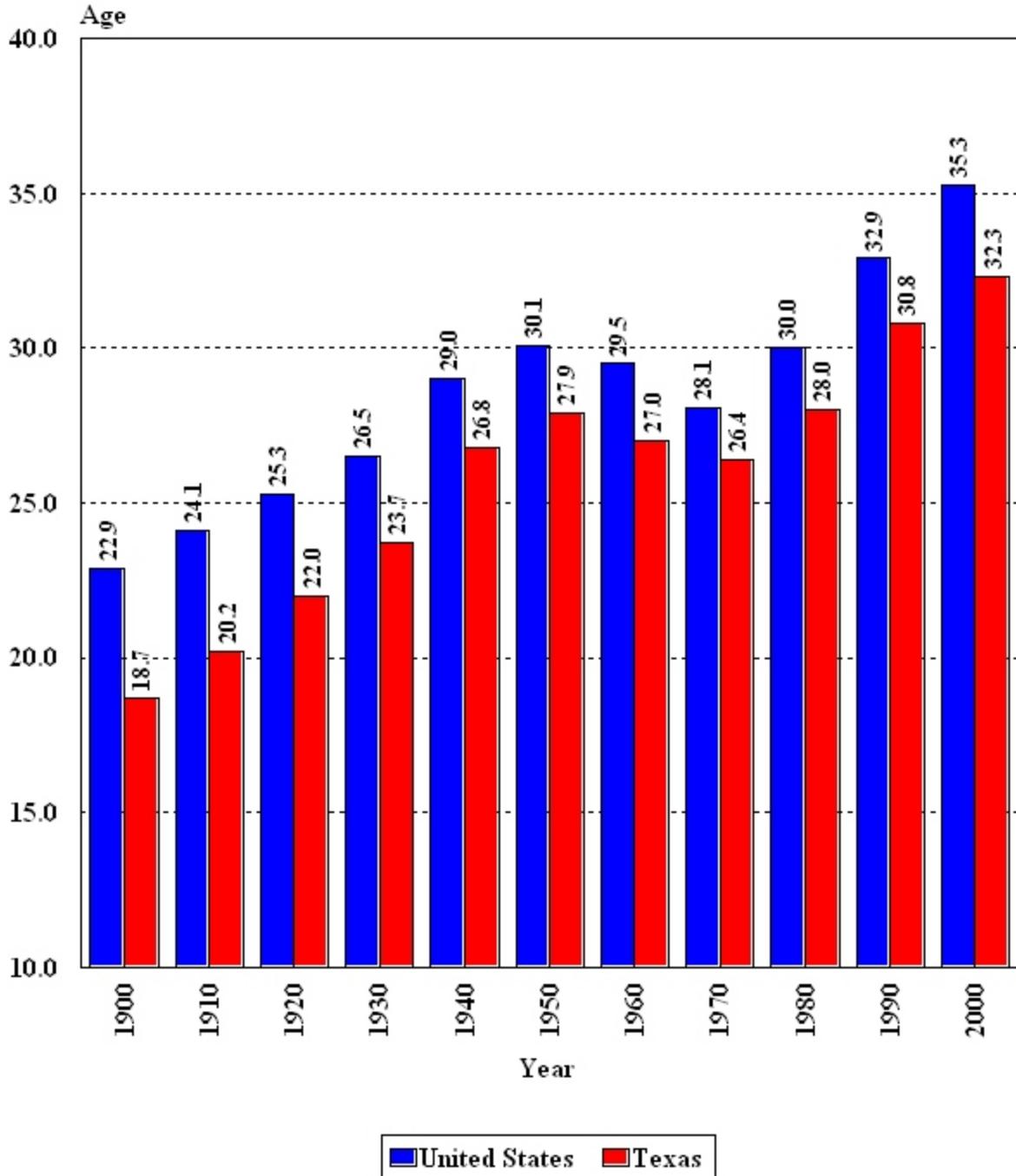
### Total Population and Percent Population Change in Texas and the United States, 1850-2000

Year	Total Population		Percent Change	
	Texas	U.S.	Texas	U.S.
1850	212,592	23,191,876	—	—
1860	604,215	31,443,321	184.2	35.6
1870	818,579	39,818,449	35.5	26.6
1880	1,591,749	50,155,783	94.5	26.0
1890	2,235,527	62,947,714	40.4	25.5
1900	3,048,710	75,994,575	36.4	20.7
1910	3,896,542	91,972,266	27.8	21.0
1920	4,663,228	105,710,620	19.7	14.9
1930	5,824,715	122,775,046	24.9	16.1
1940	6,414,824	131,669,275	10.1	7.2
1950	7,711,194	150,697,361	20.2	14.5
1960	9,579,677	179,323,175	24.2	19.0
1970	11,196,730	203,302,031	16.9	13.4
1980	14,229,191	226,545,805	27.1	11.4
1990	16,986,510	248,709,873	19.4	9.8
2000*	20,851,820	281,421,906	22.8	13.2

\* All values are for the indicated census year.

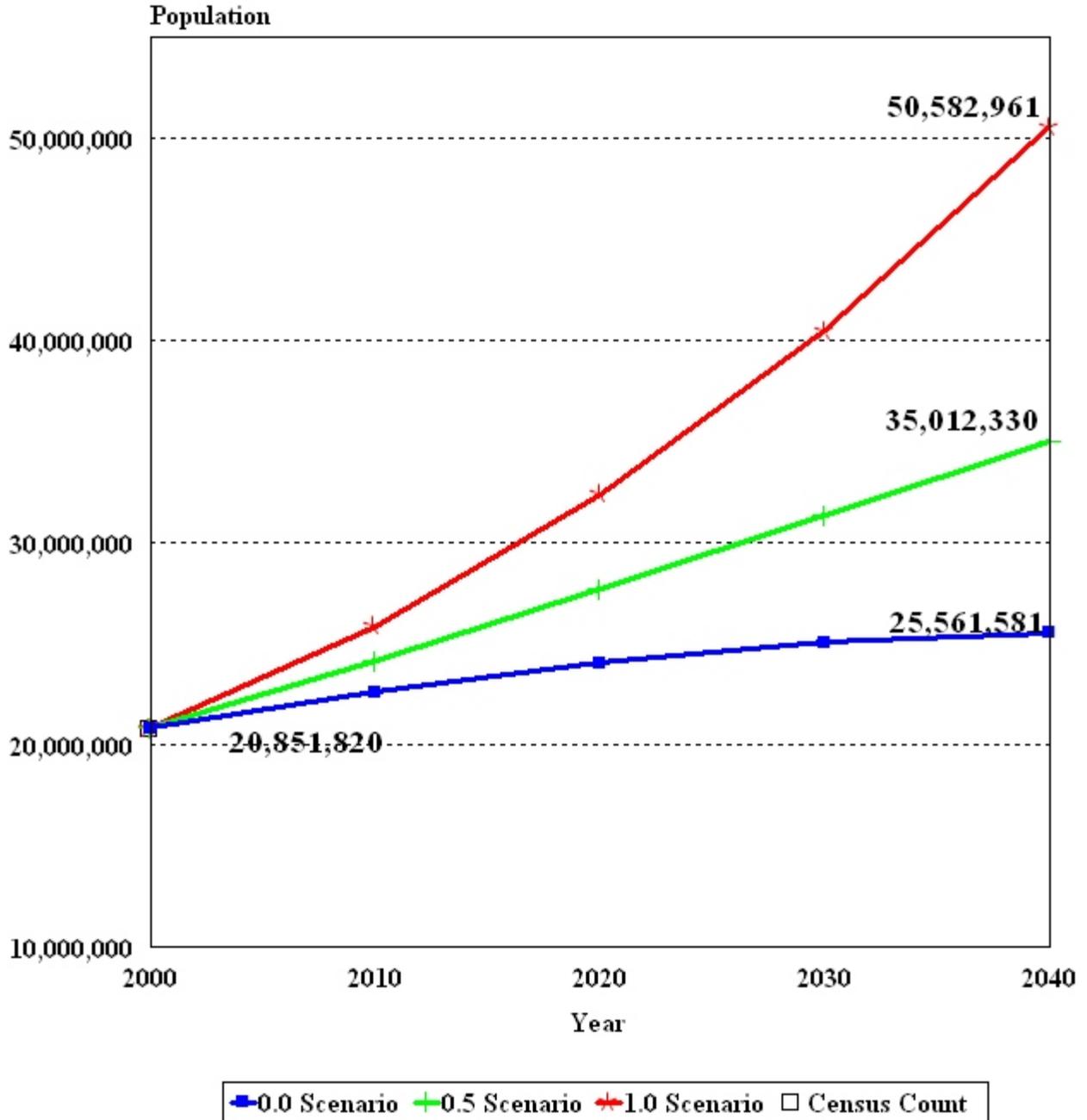
**Figure 2.2**

**Median Age in the United States and Texas, 1900-2000**



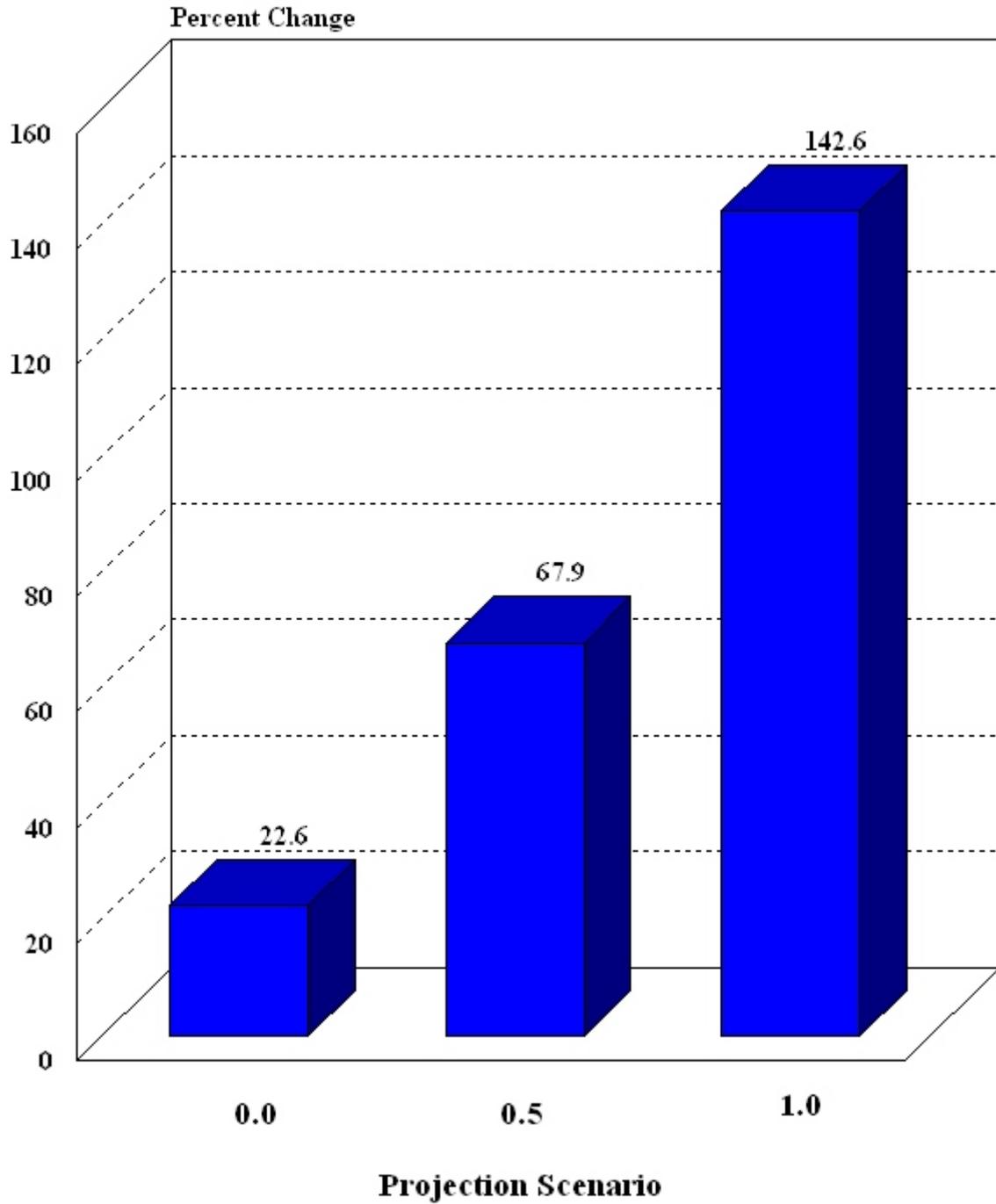
**Figure 2.3**

**Population in Texas in 2000 and Projections to 2040  
for All Scenarios**



**Figure 2.4**

**Percent Change in Texas Population by Alternative  
Projection Scenarios, 2000 to 2040**



**Figure 2.5**

**Percent of Texas Population by Race/Ethnicity in 2000  
and Projections to 2040 (0.5 Scenario)**

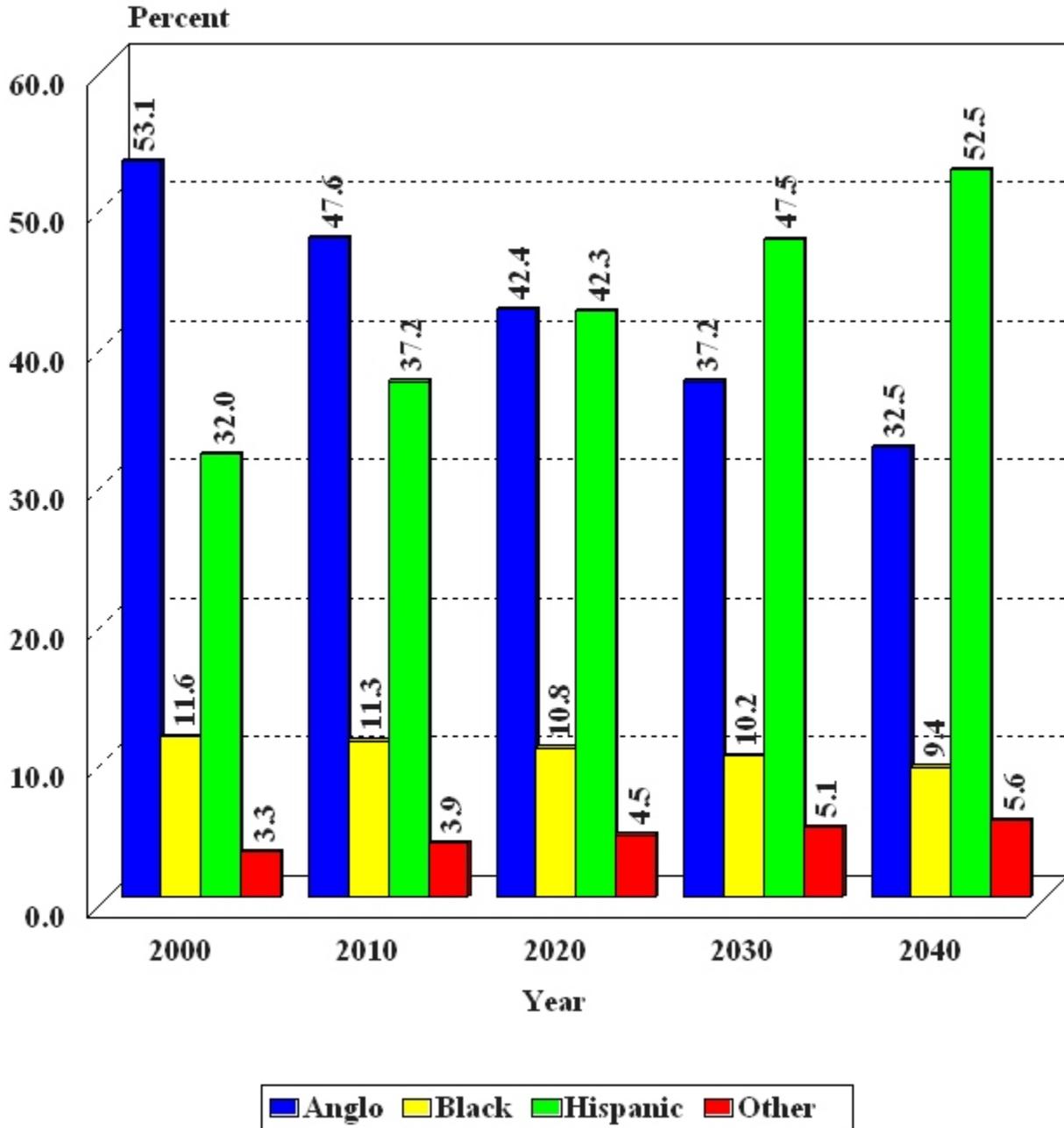


Figure 2.6

Percent of Texas Population by Race/Ethnicity in 2000 and Projections to 2040 (1.0 Scenario)

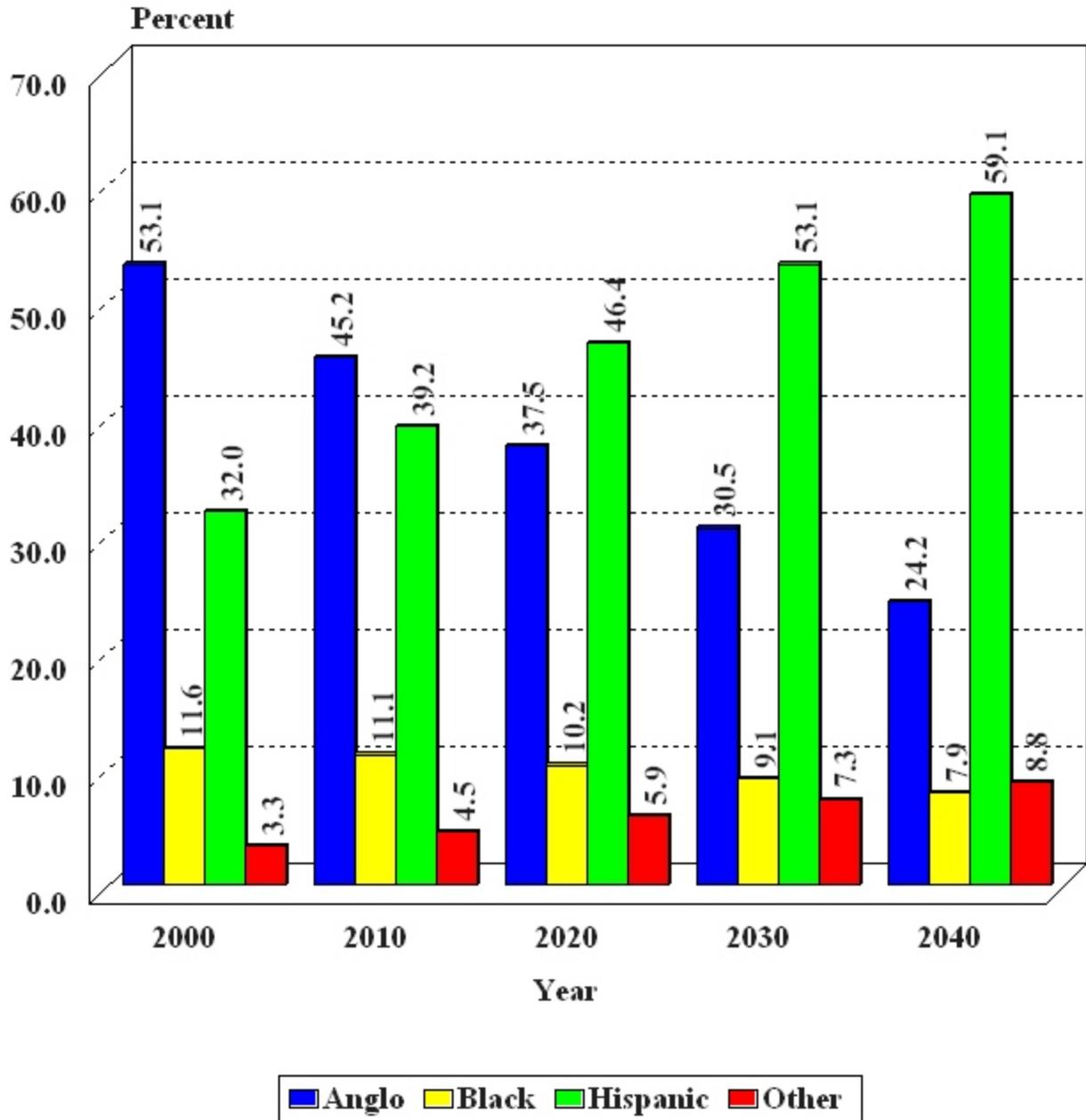


Figure 2.7

Median Age of the Texas Population by Race/Ethnicity  
in 2000 and Projections to 2040 (0.5 Scenario)

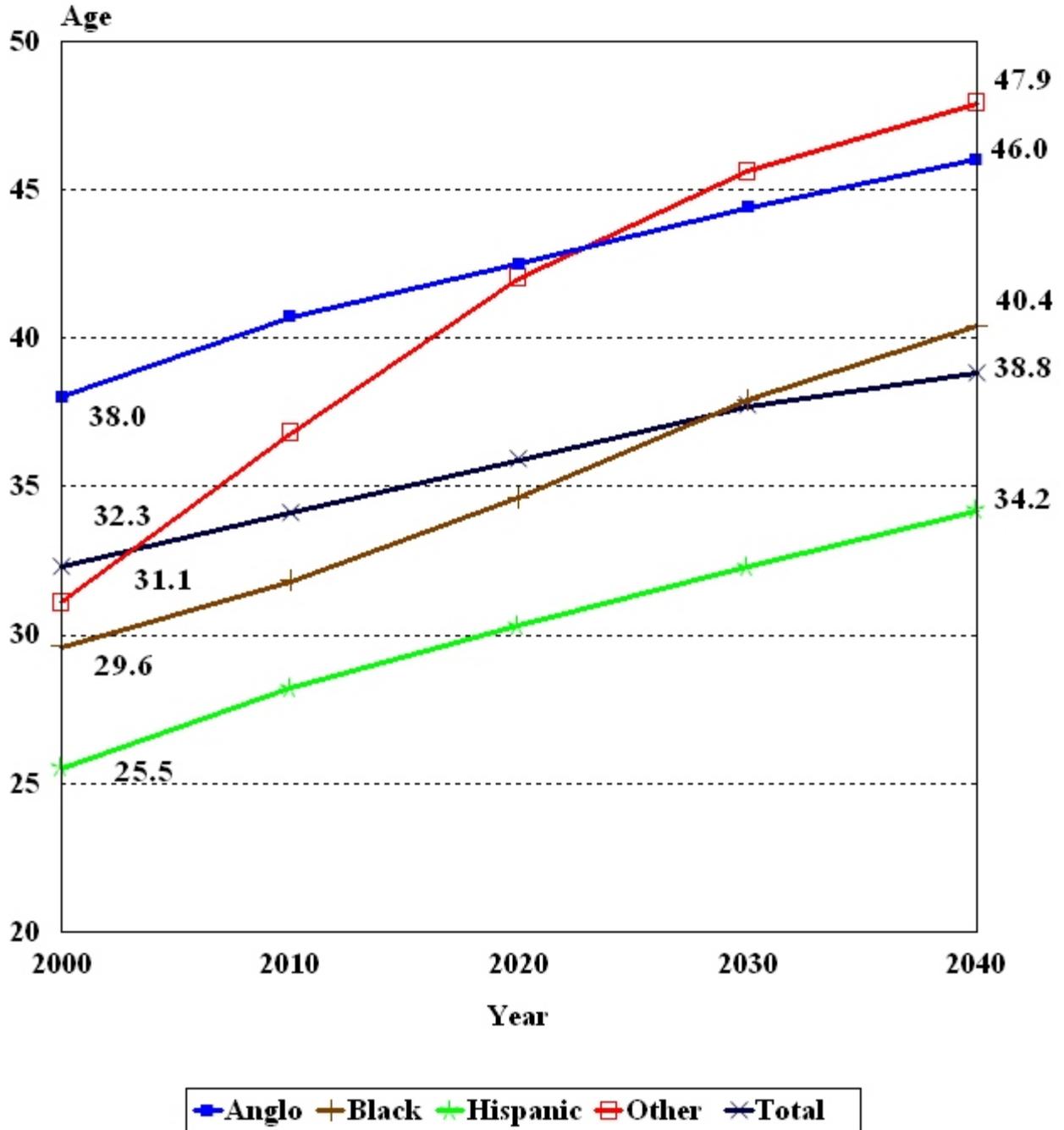
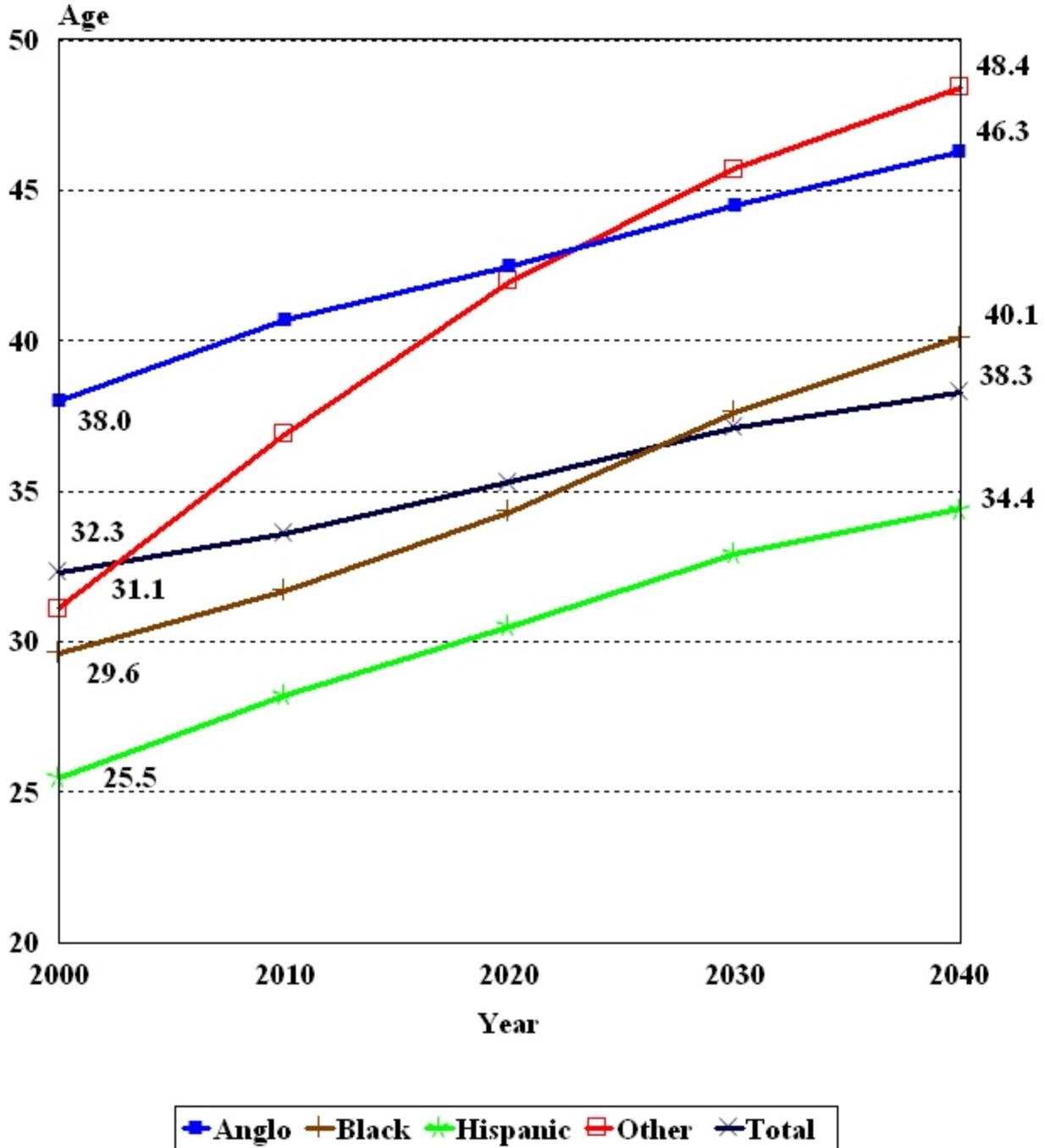


Figure 2.8

Median Age of the Texas Population by Race/Ethnicity  
in 2000 and Projections to 2040 (1.0 Scenario)





## **Chapter 3**

### **Households and Household Change in Texas**

The past and projections of the future show substantial change in Texas households.

#### **Historical and Current Patterns**

##### ***The Number of Texas Households Has Increased Rapidly, but Households Have Become Smaller and More Diverse in Form***

The number of Texas households has increased rapidly as a result of population growth and the large numbers of the baby-boomers who have entered household-formation ages. The number of households increased by 43.7 percent in the 1970s, 23.0 percent during the 1980s, and 21.8 percent in the 1990s, and as a result, the State had 7,393,354 households by 2000.

Households have become smaller in size. The average Texas household has decreased by one person since 1940, from roughly 3.7 persons in 1940 to 2.7 persons in 2000, or by 36.5 percent. This decline is important because fewer persons per household results in a larger number of households for a given size population, which in turn means growth in the number of consumer units.

The diversification of household forms has also been evident. The number of family households increased by 30.9, 18.1, and 20.8 percent in the 1970s, 1980s, and 1990s, respectively, while the number of nonfamily households increased by 100.5, 38.0, and 24.2 percent; the number of married-couple households increased by 16.1 percent in the 1990s but the number of male-householder households by 55.2 percent and the number of female-householder households by 33.6 percent. The percentage of married-couple households declined from 71.5 percent in 1970 to 54 percent in 2000.

#### **Projected Patterns**

##### ***Rapid Growth in Households Will Continue***

The rapid growth, racial/ethnic diversification, and aging evident in the projected population are apparent in the projections of households as well. From

2000 to 2040 the number of Texas households is projected to increase by nearly 6.2 million, from 7.4 million households in 2000 to 13.6 million households in 2040 under the 0.5 scenario and by nearly 12.0 million to 19.4 million households in 2040 under the 1.0 scenario (Figure 3.1) -- increases of 84.2 percent and 162.1 percent under the 0.5 and 1.0 scenarios, respectively (Figure 3.2).

### ***At Least 60 Percent of All Householders Will Be Non-Anglo***

The percentage of households with an Anglo householder will decline and the percentage with a non-Anglo householder increase (Figures 3.3 and 3.4). As a result, by 2040 under either the 0.5 or 1.0 scenario, the proportion of Anglo householders would be less than 39 percent of all households, while Black householders would account for at least 9.0 percent, Hispanic householders for at least 45 percent, and Other householders for at least 5 percent of all households.

### ***The Average Householder Will Be More than 50 Years of Age***

The age structure of householders in Texas will become older in the coming years. In 2000 the median age of householders in Texas was 45 years of age. By 2040, the median age of householders would be 51.7 under the 0.5 scenario and 50.1 years of age under the 1.0 scenario.

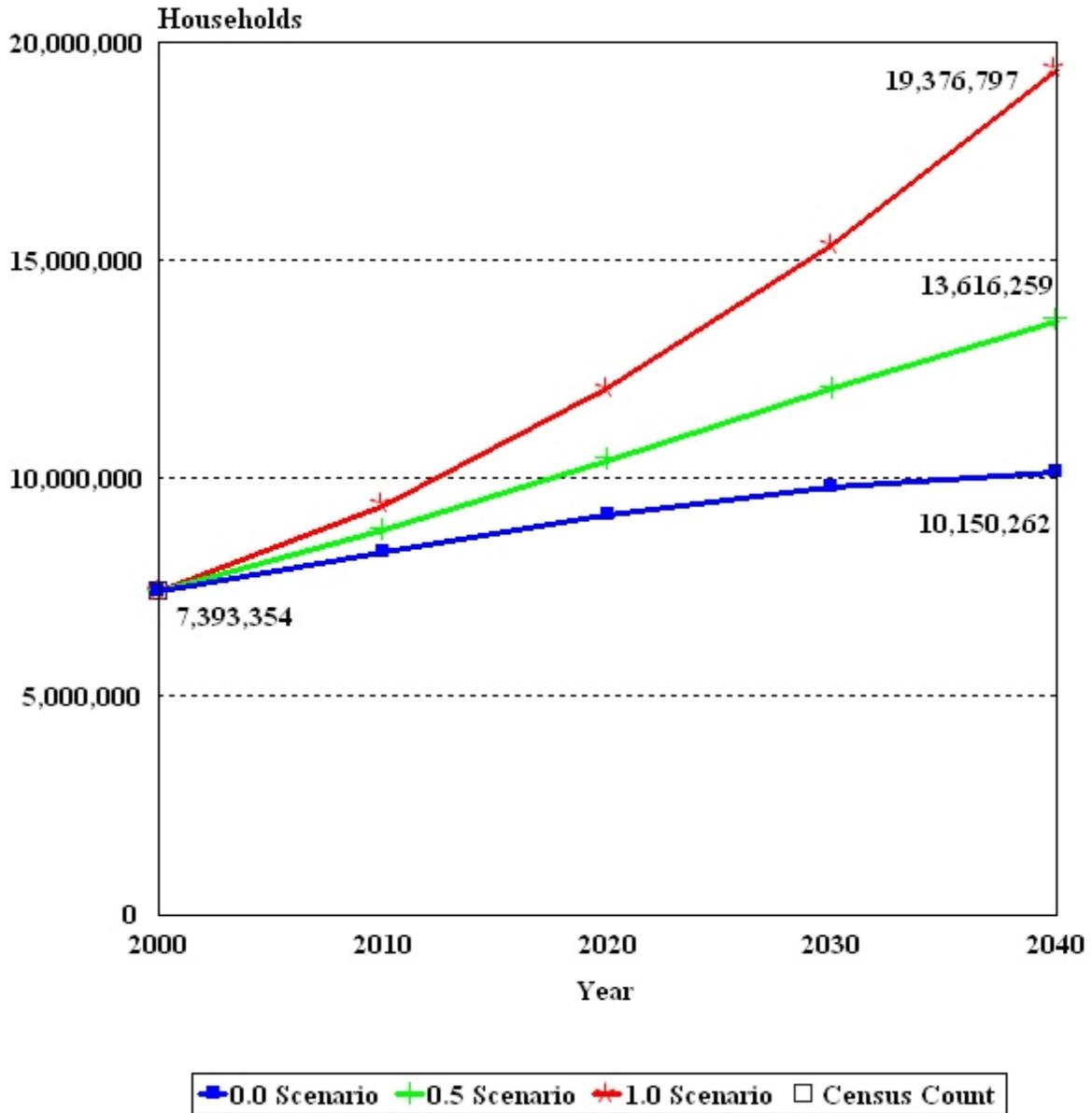
### ***Higher Rates of Family Households Among Non-Anglos Increases the Proportion of Family Households, but Single Householder Families Show the Most Growth***

Because of the faster growth of non-Anglo populations in the higher growth scenarios, the projected increases in family households and married-couple households are greater than in the past and greater than for nonfamily households. For example, under the 1.0 scenario, the percentage of family households increases from 71.0 percent in 2000 to 74.9 percent in 2040 and the percentage of married-couple-with-children households increases from 27.1 percent in 2000 to 29.9 percent in 2040. Single-parent households continue to increase at a faster percentage rate than married-couple households, while nonfamily households show the smallest percentage increases (Figures 3.5 and 3.6).

Texas can expect to have an increasing number of households that are more racial/ethnically diverse and older. Issues impacting older householders will be of increasing importance, as will issues of concern to non-Anglo households.

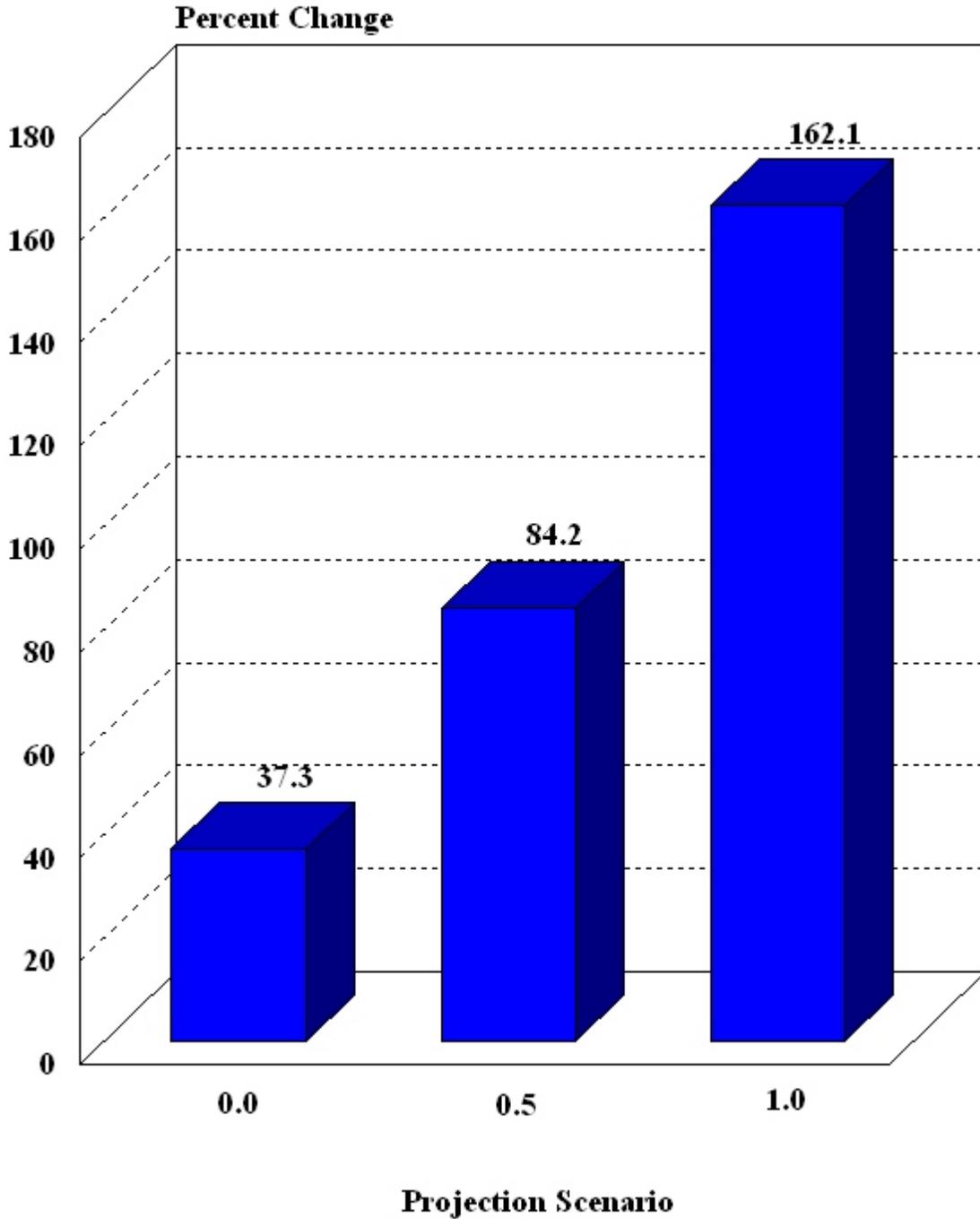
**Figure 3.1**

**Households in Texas in 2000 and Projections to 2040 for All Scenarios**



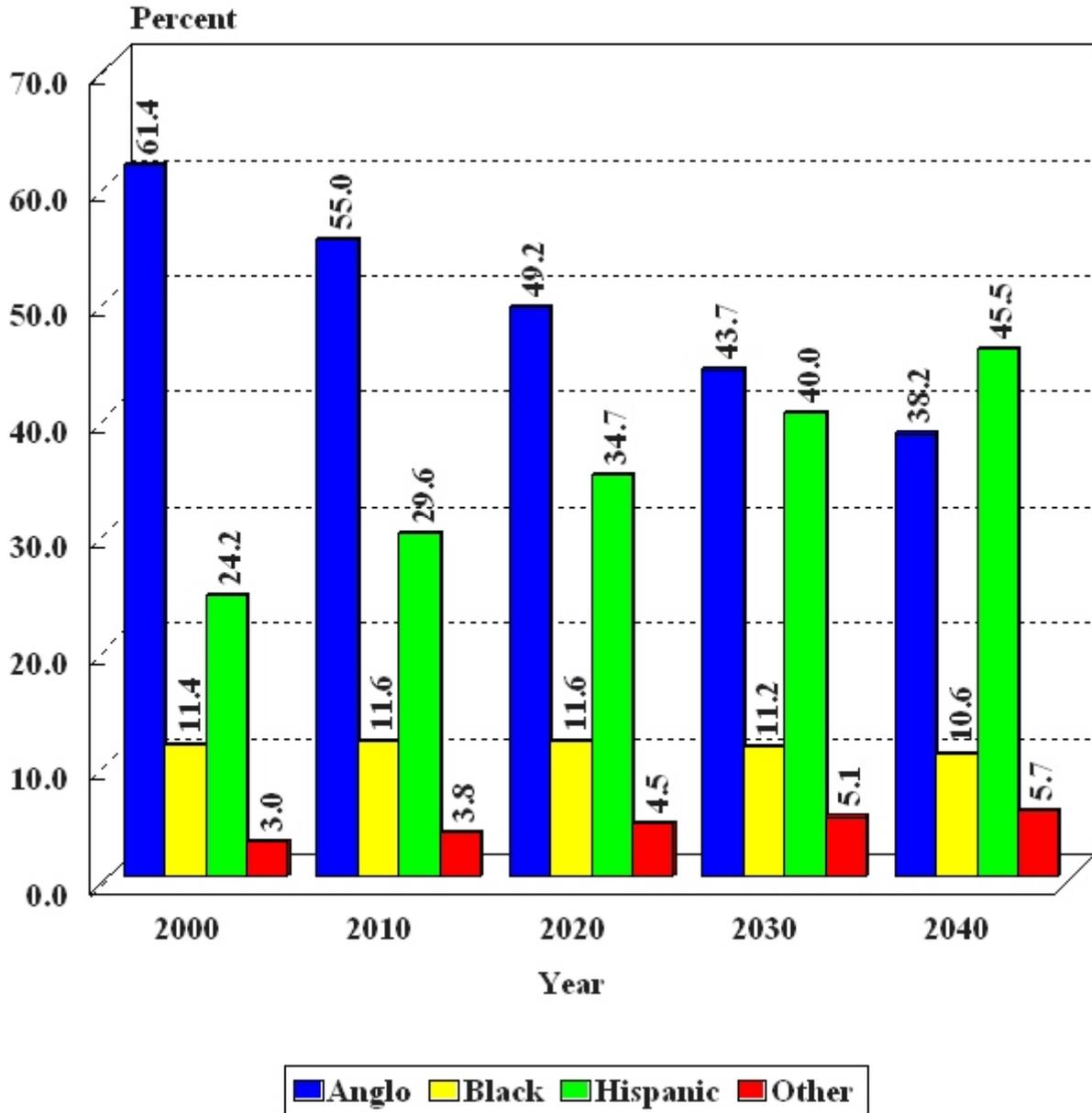
**Figure 3.2**

**Percent Change in Texas Households by Alternative  
Projection Scenarios, 2000 to 2040**



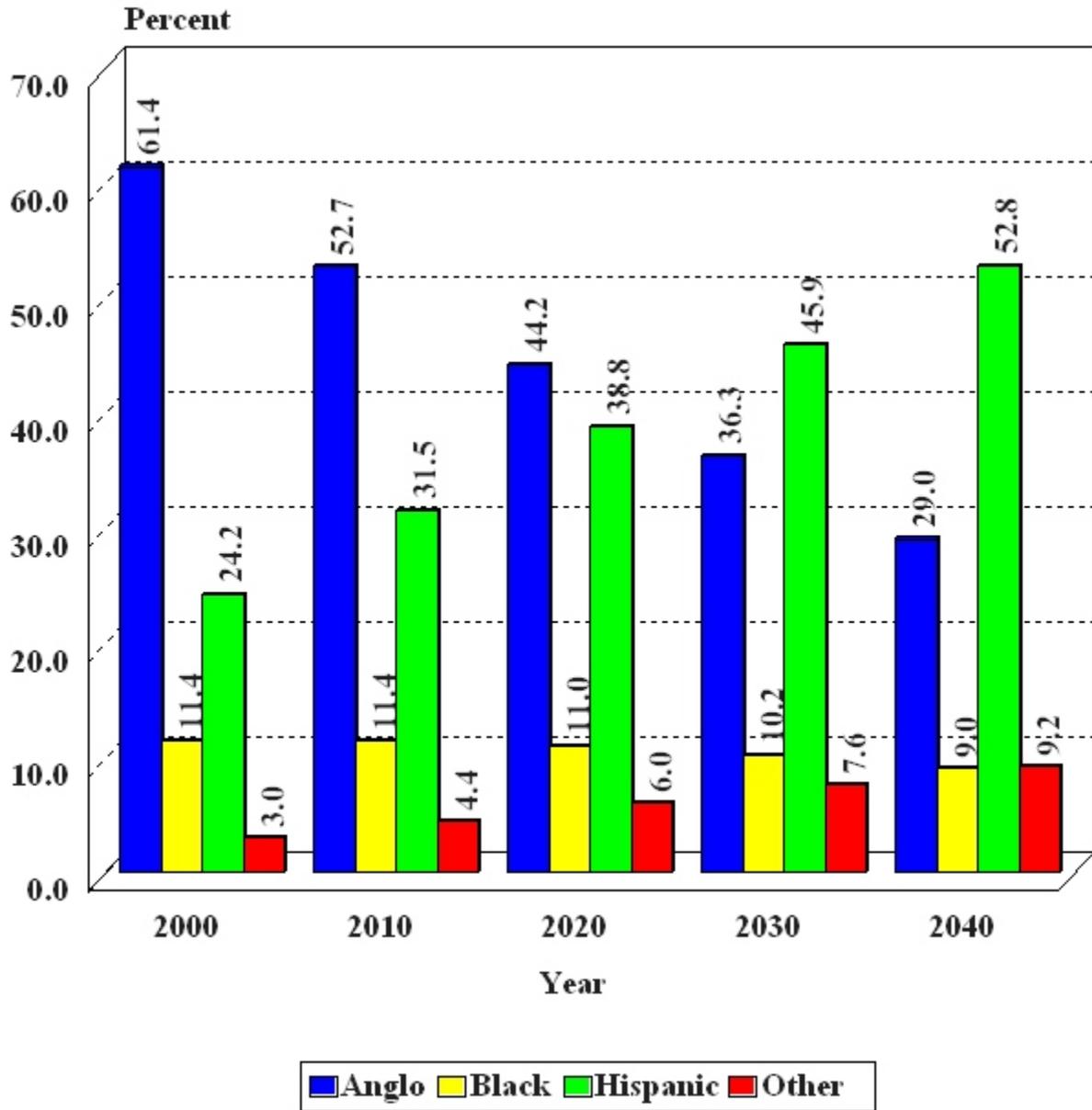
**Figure 3.3**

**Percent of Texas Households by Race/Ethnicity  
in 2000 and Projections to 2040 (0.5 Scenario)**



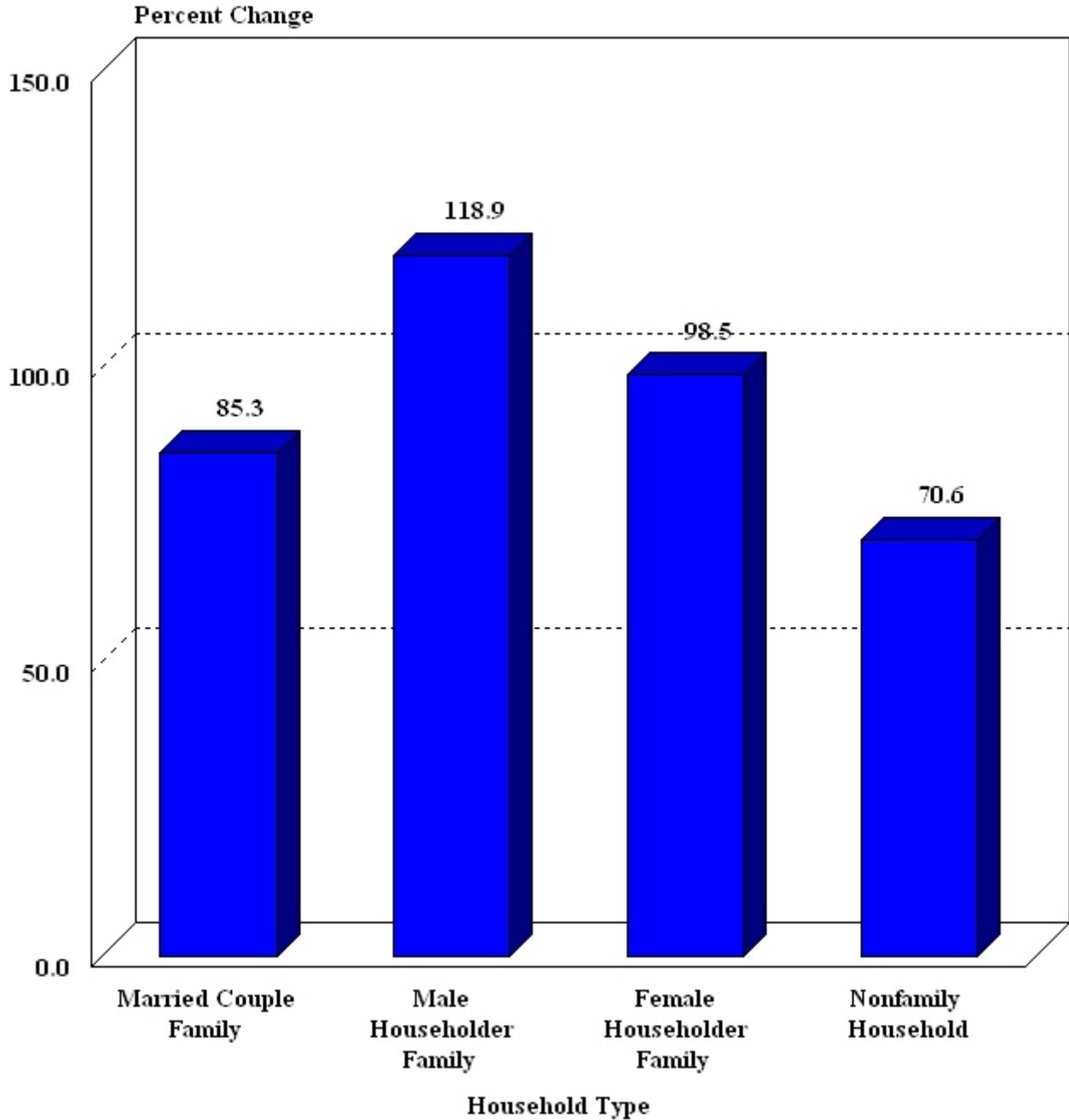
**Figure 3.4**

**Percent of Texas Households by Race/Ethnicity  
in 2000 and Projections to 2040 (1.0 Scenario)**



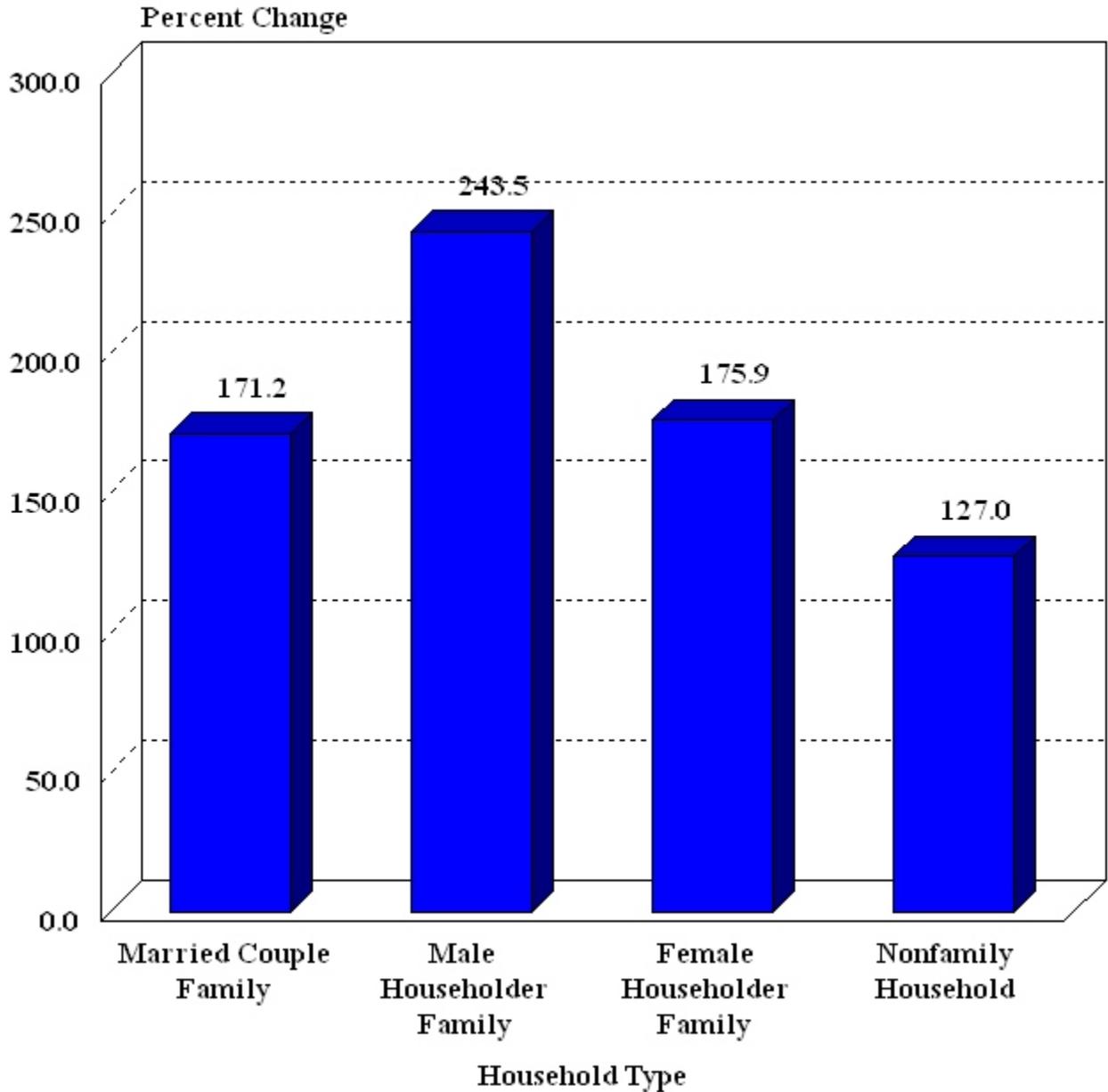
**Figure 3.5**

**Percent Change in Texas Households by Household Type, 2000 to 2040 (0.5 Scenario)**



**Figure 3.6**

**Percent Change in Texas for Households by Household Type, 2000 to 2040 (1.0 Scenario)**



## **Chapter 4**

### **Population Change and Income in Texas**

The population and household changes noted above will markedly impact the income and poverty of Texans and the tax revenues of the State of Texas.

#### **Historic and Current Patterns**

##### ***The Gaps Between Texas and U.S. Income and Poverty Were Narrowed in the 1990s, but Substantial Disparities Remain***

In the 1990s, income levels increased in Texas faster than those in the nation and the State's poverty rate decreased more rapidly. In constant dollars, median household income in Texas increased by 13.9 percent compared to only 7.7 percent in the nation and per capita income increased by 17.1 percent compared to 15.3 percent in the nation. Poverty rates for persons fell by 14.9 percent in Texas compared to a decline of only 5.3 percent nationwide. Texas 1999 median household and per capita income levels, however, remained lower than those in the nation -- median household income in Texas in 1999 was \$39,927 compared to \$41,994 in the nation and per capita income in Texas was \$19,617 compared to \$21,587 in the nation. Poverty levels remained higher at 15.4 percent for Texas in 1999 compared to 12.4 percent for the nation, but the differences between Texas and U.S. values decreased in the 1990s such that the Texas median household income was 95.1 percent of that in the U.S., Texas per capita income was 90.9 percent of that in the U.S., and the Texas poverty rate was 124.2 percent of that in the nation in 1999.

Despite the rapid growth of the 1990s, the disparities among groups in Texas remained large (Figure 4.1). Although the percentage increases in income and declines in poverty rates were generally larger for Hispanics and Blacks than for Anglos from 1989 to 1999, large differences in absolute income and poverty levels remained, and in some cases increased. For example, median household incomes (in current dollars) for Anglos increased by 49.8 percent from 1989 to 1999 while for Blacks the increase was 64.0 percent, and for Hispanics it was 55.3 percent. As a result, Black and Hispanic median household incomes increased as a proportion of Anglo incomes (from 56.8 percent in 1989 to 62.1 percent in 1999 for Blacks and from 61.1 percent to 63.3 percent for Hispanics). The Anglo-Black absolute difference in median household income, however, was \$13,602 in 1989

but was \$17,857 in 1999 and the Anglo-Hispanic differences were \$12,242 in 1989 and \$17,289 in 1999.

Revenues for the State have also shown substantial increases. In current (2000) dollars, state tax revenues increased from roughly \$13.6 billion in 1990 to nearly \$25.3 billion by 2000, an increase of approximately 43 percent in constant dollars.

### **Projected Patterns of Change in Income, Poverty, and Tax Revenues**

#### ***In the Absence of Change in Socioeconomic Differentials, Income Growth Will Not Keep Pace with Household Growth, and Average Incomes Will Decline***

If 2000 differentials among age and race/ethnicity groups were to prevail, total aggregate income would increase by 130.5 percent under the 1.0 scenario and by 67.1 percent under the 0.5 scenario, compared to the 162.1 and 84.2 percent respective increases in the number of households, resulting in a decline in the overall level of per-household income in the State. The average income for all Texas households would decline by more than \$6,500 from 2000 to 2040 (in 2000 constant dollars) under the 1.0 scenario and by \$5,061 under the 0.5 scenario (Figures 4.2 and 4.3).

The distributions of households by income level will also show a general shift toward lower income categories. For example, under the 1.0 scenario, the percentage of households with incomes below \$25,000 would increase from 30.7 percent in 2000 to 38 percent in 2040 (in 2000 constant dollars), while the percentage with incomes of \$100,000 or more would decrease from 11.5 percent to 8 percent (Figures 4.4 and 4.5).

Poverty rates would increase by 4.0 percent for families if the demographic trends projected under the 1.0 scenario were to occur. Overall, if 2000 socioeconomic differentials do not change and if the population does change as projected, Texas will be poorer in the future.

If Texas could close the gap among racial/ethnic groups, the socioeconomic implications could be dramatic. A simulation assuming that 1990-2000 increases in relative income between Anglos and Blacks and Anglos and Hispanics continued to 2040 suggests that, under the 1.0 scenario, total aggregate income by 2040 would increase by \$93 billion and average household income (in 2000

constant dollars) would decline by only \$1,782 rather than by the more than \$6,500 projected to occur if 2000 differentials continue. Under a simulation assuming that Blacks and Hispanics come to have Anglo levels of income and that household growth is at the level of the 1.0 population projection scenario, aggregate income in Texas would increase by \$295 billion and average household income would be \$63,116 rather than the \$54,441 that it was in 2000 or the \$47,883 that it is projected to be in 2040 under the assumption of continuing 2000 differentials (Figure 4.6). Changing the socioeconomic differentials existent in Texas society is of clear significance for changing the economic future of the State.

### ***Total Tax Revenues Will Increase and Per-Household Tax Levels Will Decrease***

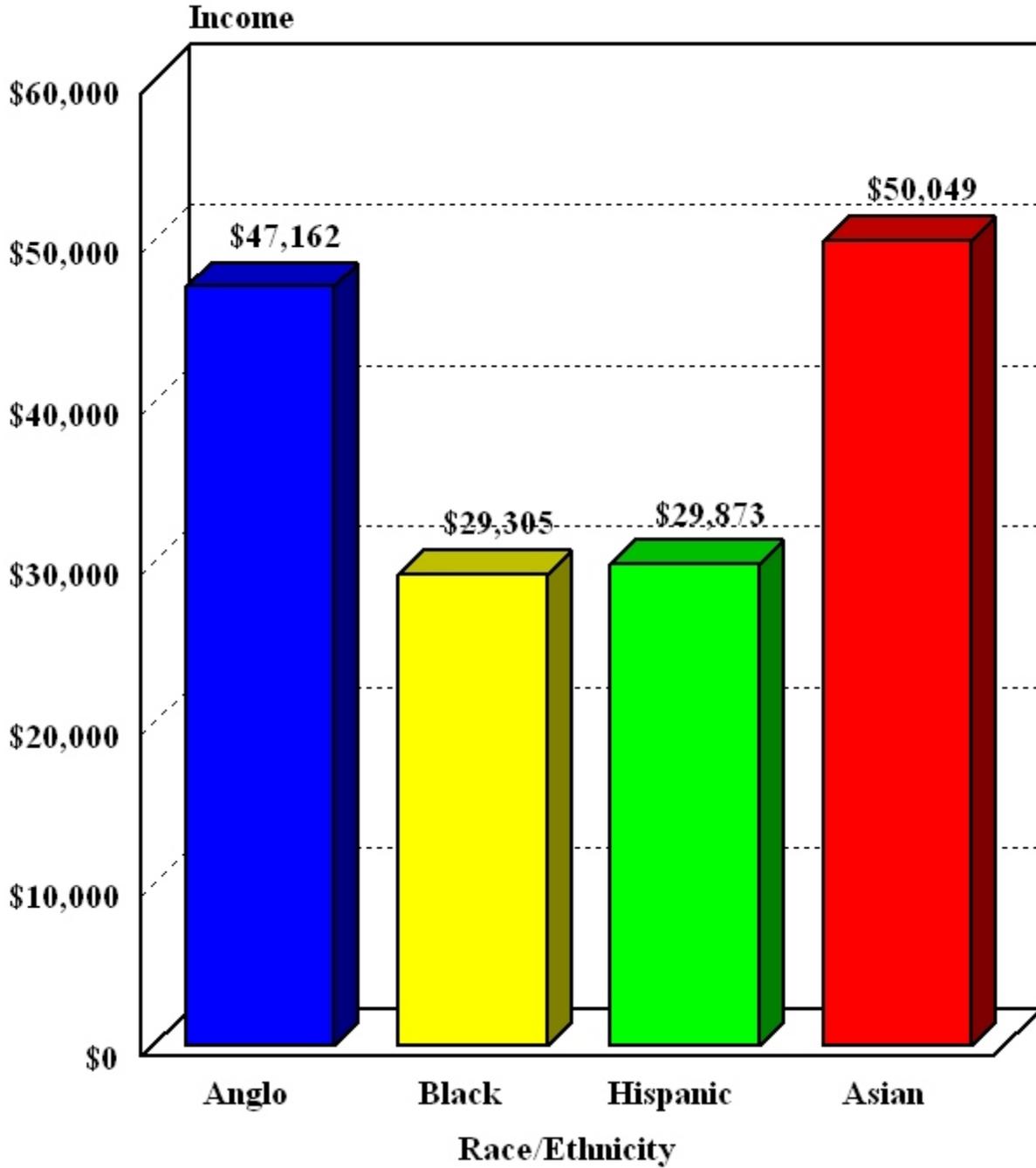
Demographic changes will also affect tax revenues through their impacts on socioeconomic resources. Although tax revenues are projected to increase by 67.1 percent under the 0.5 scenario and by 130.5 percent under the 1.0 scenario, these rates of increase would be slower than the 84.2 and 162.1 percent rates of growth in households. As a result, in the absence of changes in the 2000 socioeconomic differentials in income, per-household revenues would decline from 2000 to 2040 with annual per household tax revenues declining by more than \$400. The sources of such revenues would also change. By 2040, the percentage of revenues from non-Anglo households would increase to 61.8 percent (under the 1.0 scenario) of all revenues, compared to only 28.8 percent in 2000 (Figures 4.7).

If income differentials were to decline as a result of increases in Black and Hispanic incomes, then revenues would also be affected. If 1990-2000 declines in differentials were to continue through 2040, annual tax revenues would be \$6.8 billion higher in 2040 and, if Black and Hispanic incomes were to reach the levels of Anglos in 2000, annual revenues would be \$21.6 billion higher by 2040 (under the 1.0 projection scenario). As a result, although annual per-household revenues are projected to decrease under the 1.0 scenario by more than \$400 dollars from 2000 levels (in constant dollars) if differentials do not change, these revenues would increase by more than \$600 per household per year if Anglo income levels were to be obtained by all racial/ethnic groups (Figure 4.8).

The analysis in Chapter 4 points to a Texas that will be poorer in the future if the 2000 differentials in income and related socioeconomic resources among population subgroups do not change. If these differentials change, the State's socioeconomic resources could be increased significantly.

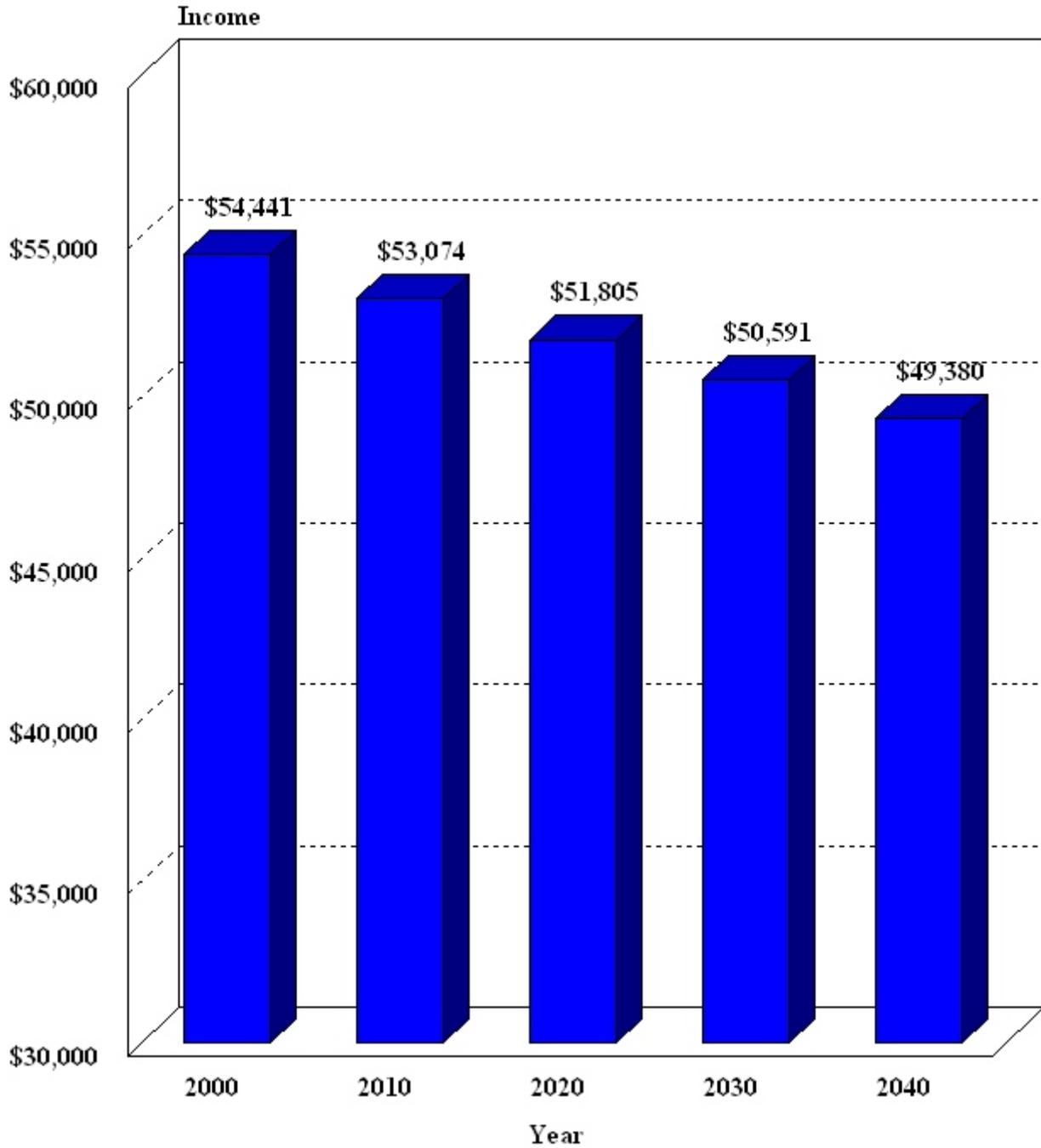
**Figure 4.1**

**Median Household Income in Texas by  
Race/Ethnicity of Householder, 1999**



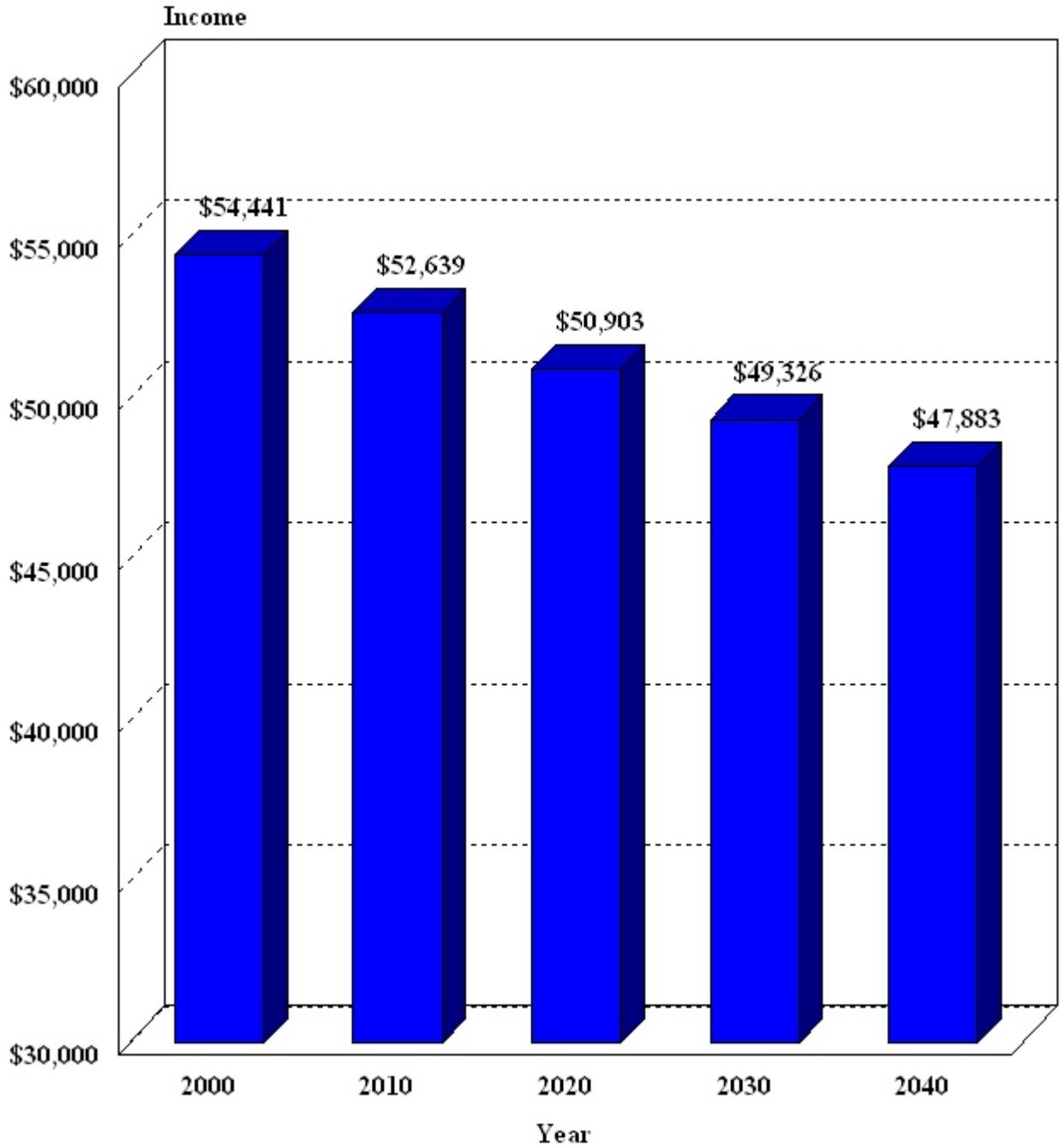
**Figure 4.2**

**Average Household Income in Texas (in 2000 Dollars),  
2000 to 2040 (0.5 Scenario)**



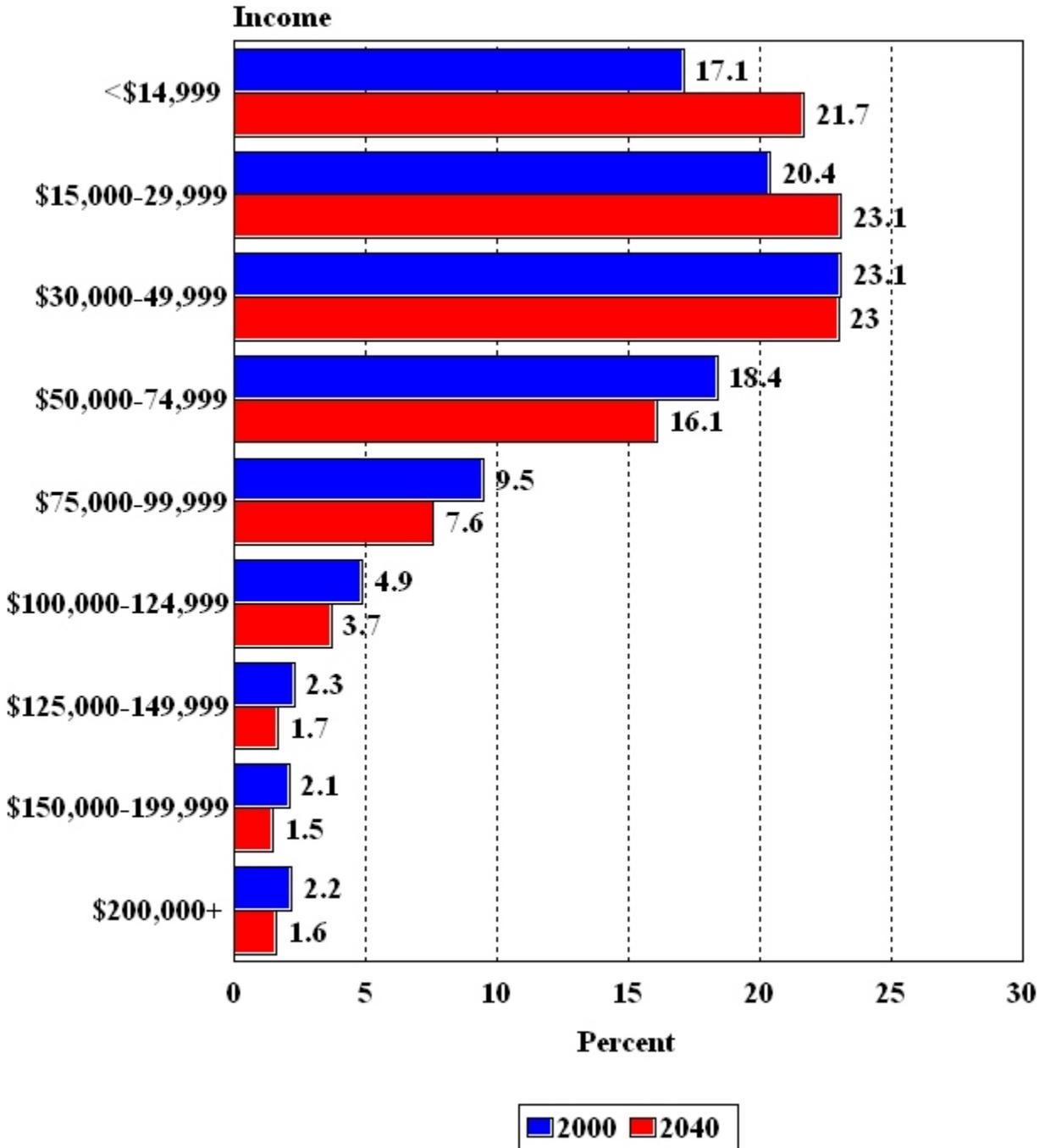
**Figure 4.3**

**Average Household Income in Texas (in 2000 Dollars),  
2000 to 2040 (1.0 Scenario)**



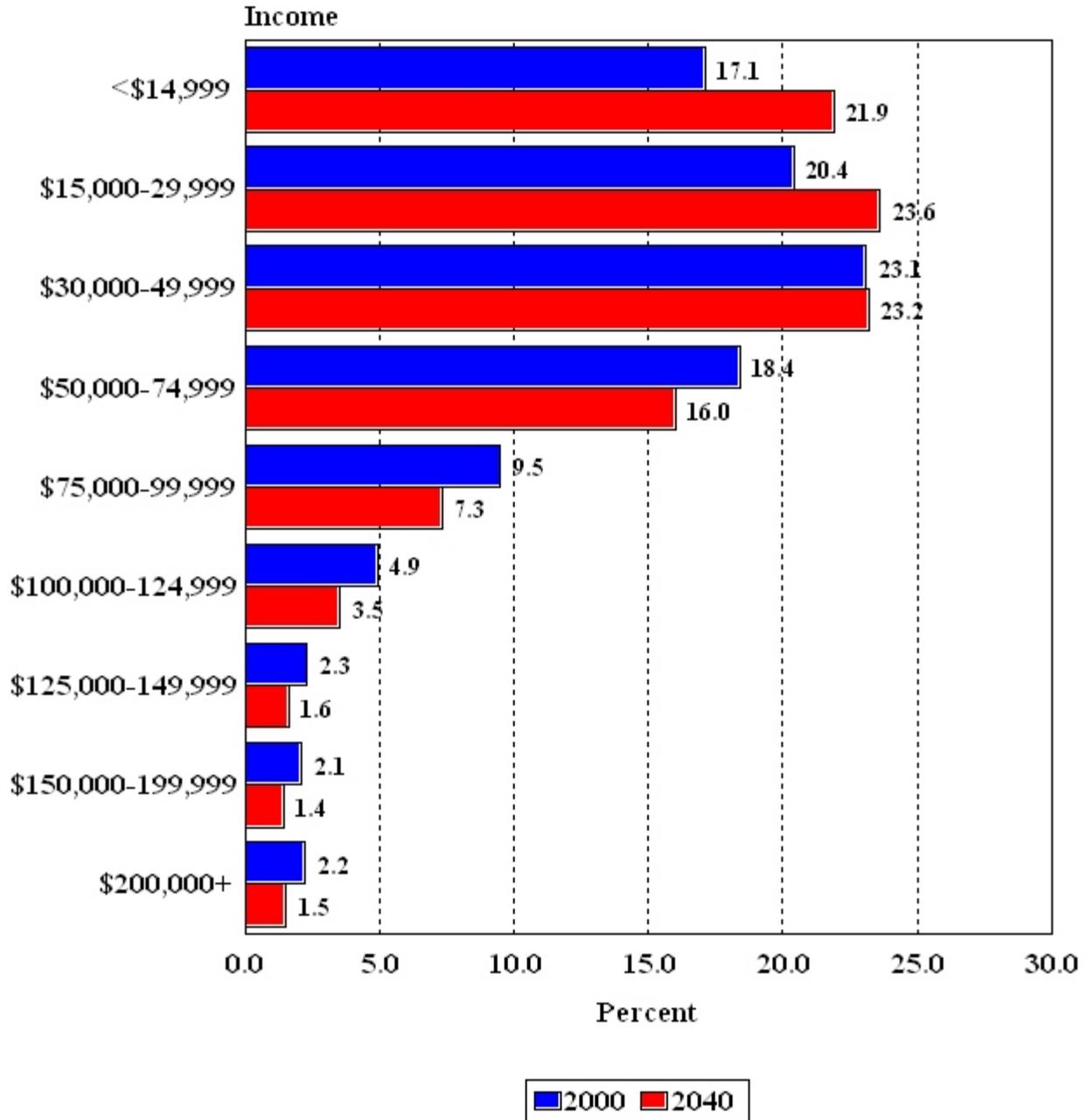
**Figure 4.4**

**Percent of Texas Households by Income Category in 2000 and Projections for 2040 (0.5 Scenario)**



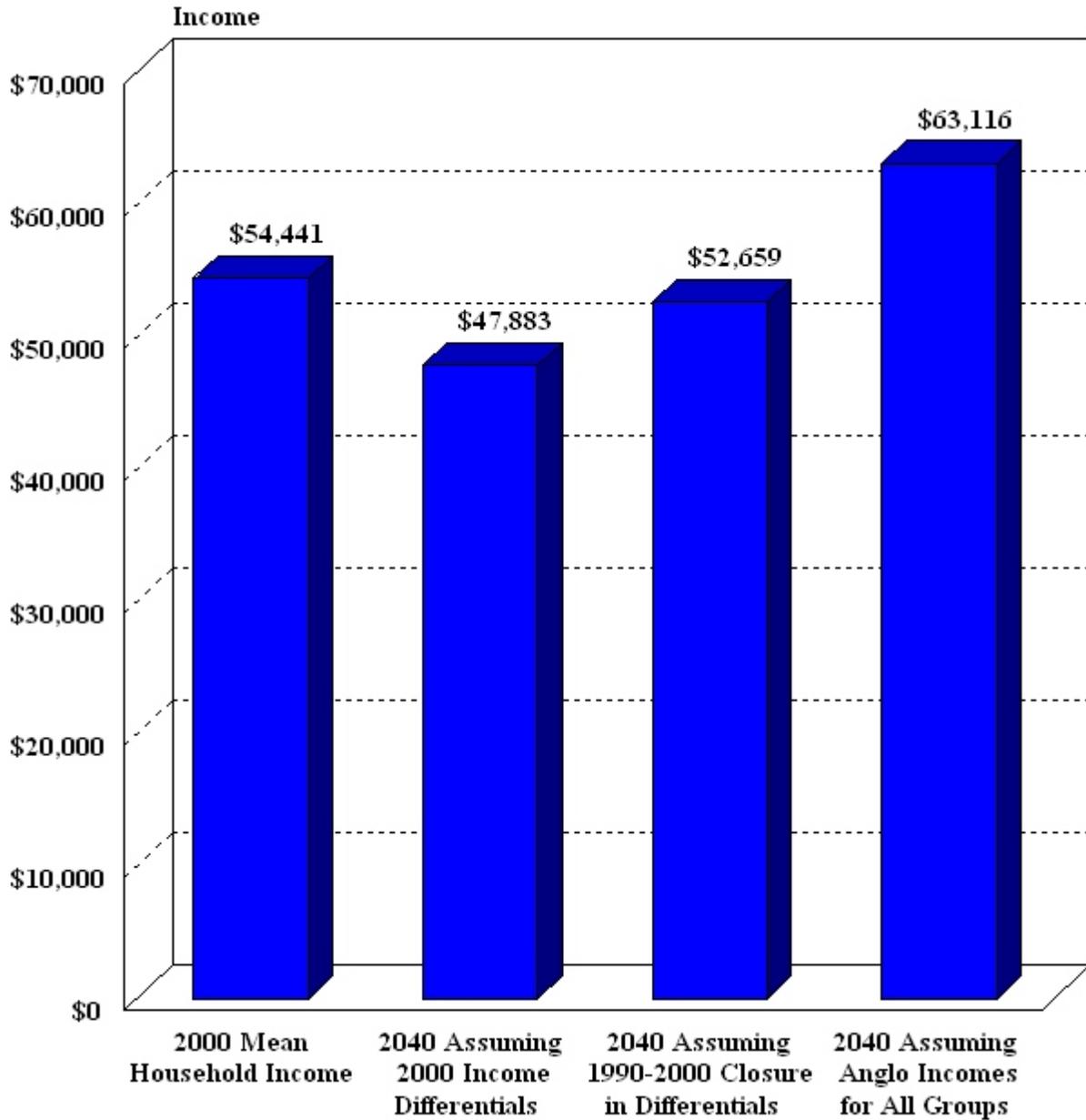
**Figure 4.5**

**Percent of Texas Households by Income Category in 2000 and Projections for 2040 (1.0 Scenario)**



**Figure 4.6**

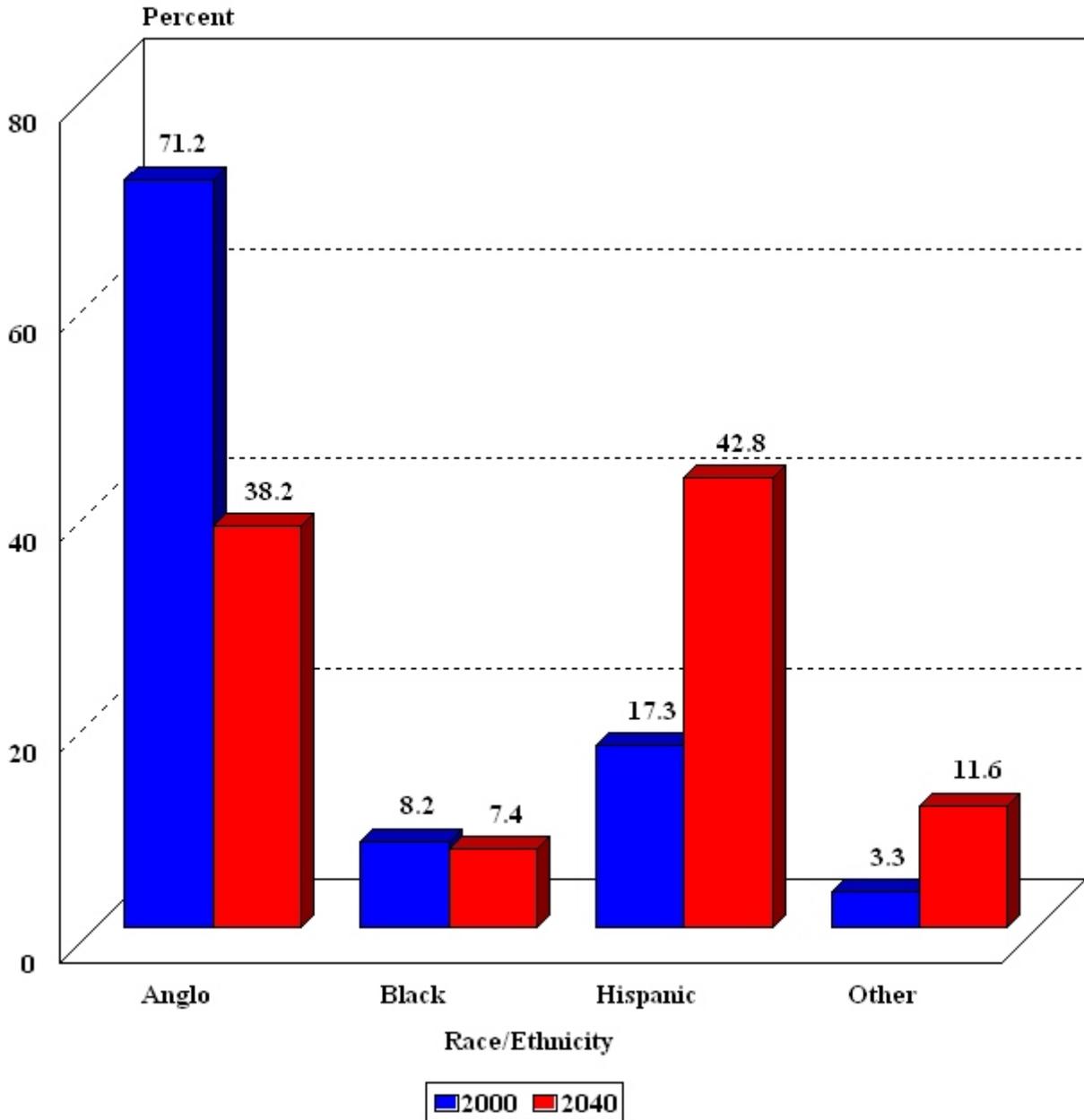
**Mean Household Income in Texas in 2000 and Projections for 2040\* Assuming 2000 Rates, 1990-2000 Rates of Closure Between Anglo-Black and Anglo-Hispanic Incomes, and Anglo Income Levels for All Race/Ethnicity Groups**



\* Projections are shown for the 1.0 scenario

**Figure 4.7**

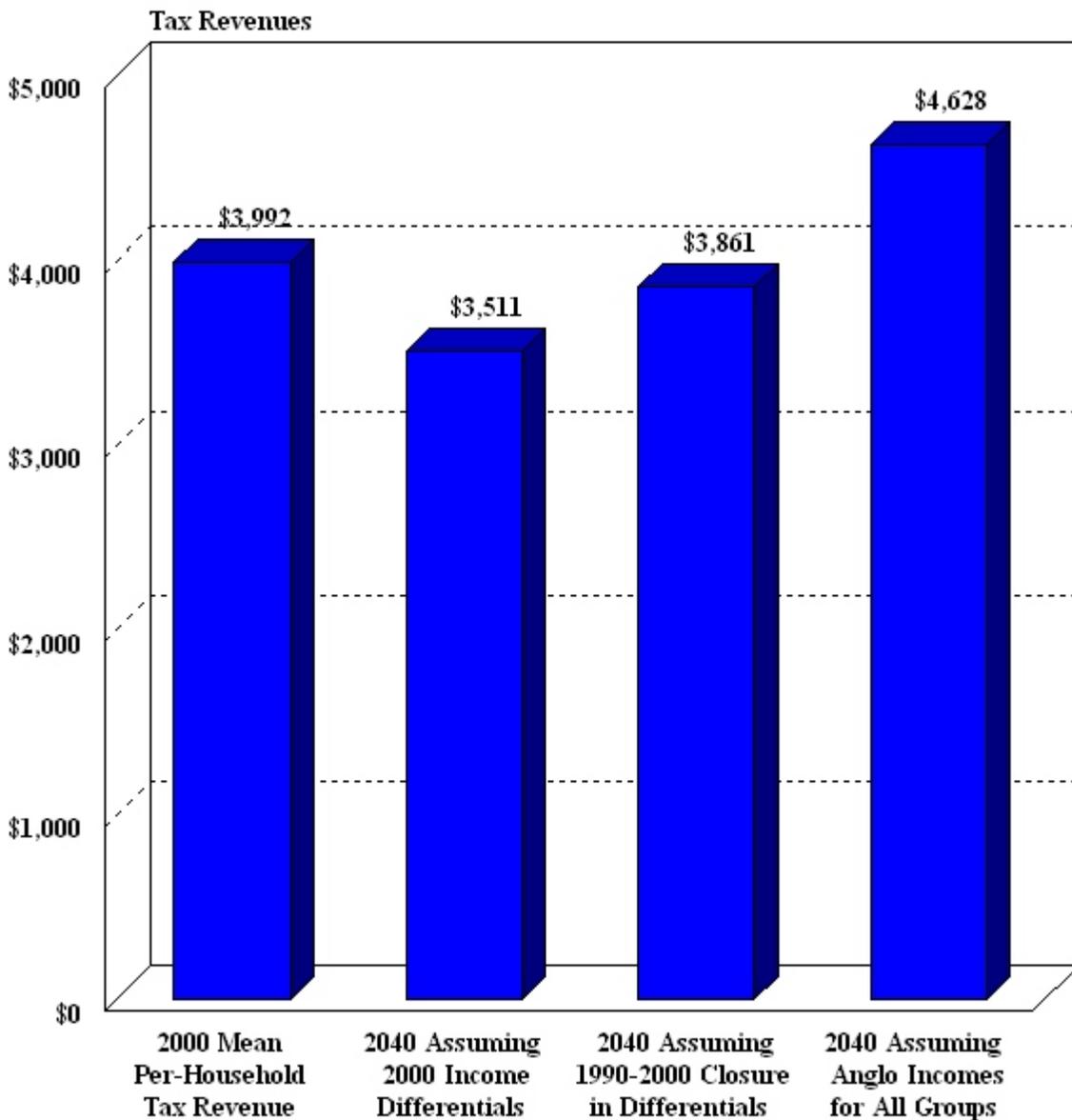
**Proportion of State Tax Revenues Due to Households  
From Each Race/Ethnicity Group, 2000 and 2040\***



\* Projections are shown for the 1.0 scenario

**Figure 4.8**

**Mean Per-Household State Tax Revenues in Texas in 2000 and Projections for 2040\* Assuming 2000 Rates, 1990-2000 Rates of Closure Between Anglo-Black and Anglo-Hispanic Incomes, and Anglo Income Levels for All Race/Ethnicity Groups**



\* Projections are shown for the 1.0 scenario



## **Chapter 5**

### **Implications of Population Change for the Private Sector in Texas**

The population, household, and income changes noted above have substantial implications for the markets for private-sector goods and services.

#### **Historic and Current Patterns**

##### ***Texas Sales, Employment, and Exports Have Expanded Substantially***

The Texas economy has shown substantial expansion in the past two decades, particularly in the 1990s. Gross state product, employment, and retail sales grew faster than the population, and the increase in the export of products indicates that numerous factors in addition to population growth have led to the expansion of the Texas economy. The gross state product of Texas increased by 100.5 percent from 1980 to 2000 (in 1992 constant dollars), employment increased by 60.4 percent, and retail sales increased by 68.5 percent, all outpacing the State's 46.5 percent rate of population growth. Texas exports increased by 169.1 percent from 1980 to 2000, further indicating that the State's businesses were producing products and services beyond those needed by its own population.

#### **Projected Patterns of Change in Consumer Expenditures, Net Worth, and Assets**

##### ***Projected Demographic Change Will Lead to Reduced Per-Household Consumer Expenditures, Net Worth, and Assets***

The socioeconomic conditions projected for the State will impact consumer expenditures and net worth and asset levels, factors of central importance to businesses in Texas. Assuming 2000 socioeconomic differentials, under the 1.0 scenario, projections indicate that consumer expenditures, net worth, and assets will fail to keep pace with the growth in households. Under the 1.0 scenario there would be a marked shift toward non-Anglo households such that, by 2040, 68.1 percent of all consumer expenditures and roughly 50.8 percent of net worth would involve non-Anglos (compared to 33.6 percent of expenditures and 19.0 percent of net worth in 2000). Similarly, by 2040 nearly 60 percent of all assets would be in households with a householder 55 years of age or older. As a result of such

changes, per-household consumer expenditures are projected to decline (Figure 5.1).

If the socioeconomic trends of the 1990s (which witnessed increases in Black and Hispanic income relative to Anglo income) were to continue from 2000 to 2040 or if all racial/ethnic groups were to come to have the expenditure patterns for Anglos, the effects on consumer expenditures would be substantial. Under the 1.0 scenario, assuming 1990-2000 levels of closure in expenditures that reflect those in income, the total additional expenditures generated would be nearly \$23 billion per year, and if Anglo expenditure patterns occurred for all racial/ethnic groups, the increase in expenditures would exceed \$84 billion per year. Similarly, under the latter set of assumptions, per-household expenditures would increase rather than decrease (Figure 5.1).

Net worth and assets will also increasingly come from non-Anglo households but the differentials between Anglo and non-Anglo household assets result in per-household assets decreasing from \$96,000 in 2000 to \$74,500 in 2040 (under the 1.0 scenario), a decrease of 22.4 percent.

## **Implications for Housing and Health Care**

### ***The Effects of Demographic Change Vary by Sector***

#### **Housing**

### ***The Aging of the Population Increases Owner Rates while Non-Anglo Population Growth Leads to Increased Renter Rates***

Housing demand will change substantially in the coming years. The aging of the population leads to growth in owner households because of the higher rates of ownership among older householders, but the rapid growth of non-Anglo populations with higher rates of renters leads to faster growth in renter households. As a result, both owner and renter housing grow rapidly in Texas in the coming years and at nearly equal rates, with the growth in units with non-Anglo householders increasing dramatically.

**Percent of All Households by Tenure**

<b><u>Group</u></b>	<b><u>Renter</u></b>		<b><u>Owner</u></b>	
	<b><u>2000</u></b>	<b><u>2040</u></b>	<b><u>2000</u></b>	<b><u>2040</u></b>
Anglo	49.7	21.1	68.1	33.4
Black	17.0	11.9	8.2	7.4
Hispanic	29.4	57.3	21.3	50.3
Other	3.9	9.7	2.4	8.9

Householders will get older; under the 1.0 scenario, 29.8 percent of owner households and 15.1 percent of renter households in 2040 would involve a householder who is 65 years of age or older.

Expenditures for housing will also reflect the patterns of the aging and changing race/ethnicity of the population. By 2040 under the 1.0 scenario, 67.2 percent of owner expenditures and 78.7 percent of renter expenditures would involve non-Anglos, and 35.9 percent of owner expenditures and 21.6 percent of renter expenditures would come from a household with a householder who is 55 years of age or older.

Non-Anglo and older householders will become of increasing importance in real estate markets in the coming decades.

**Health**

***The Aging of the Population Leads to Increases in Demand in Health Care that Exceed Levels of Projected Population Growth and the Increasing Diversity of the Population Leads to Increases in Patient Diversity***

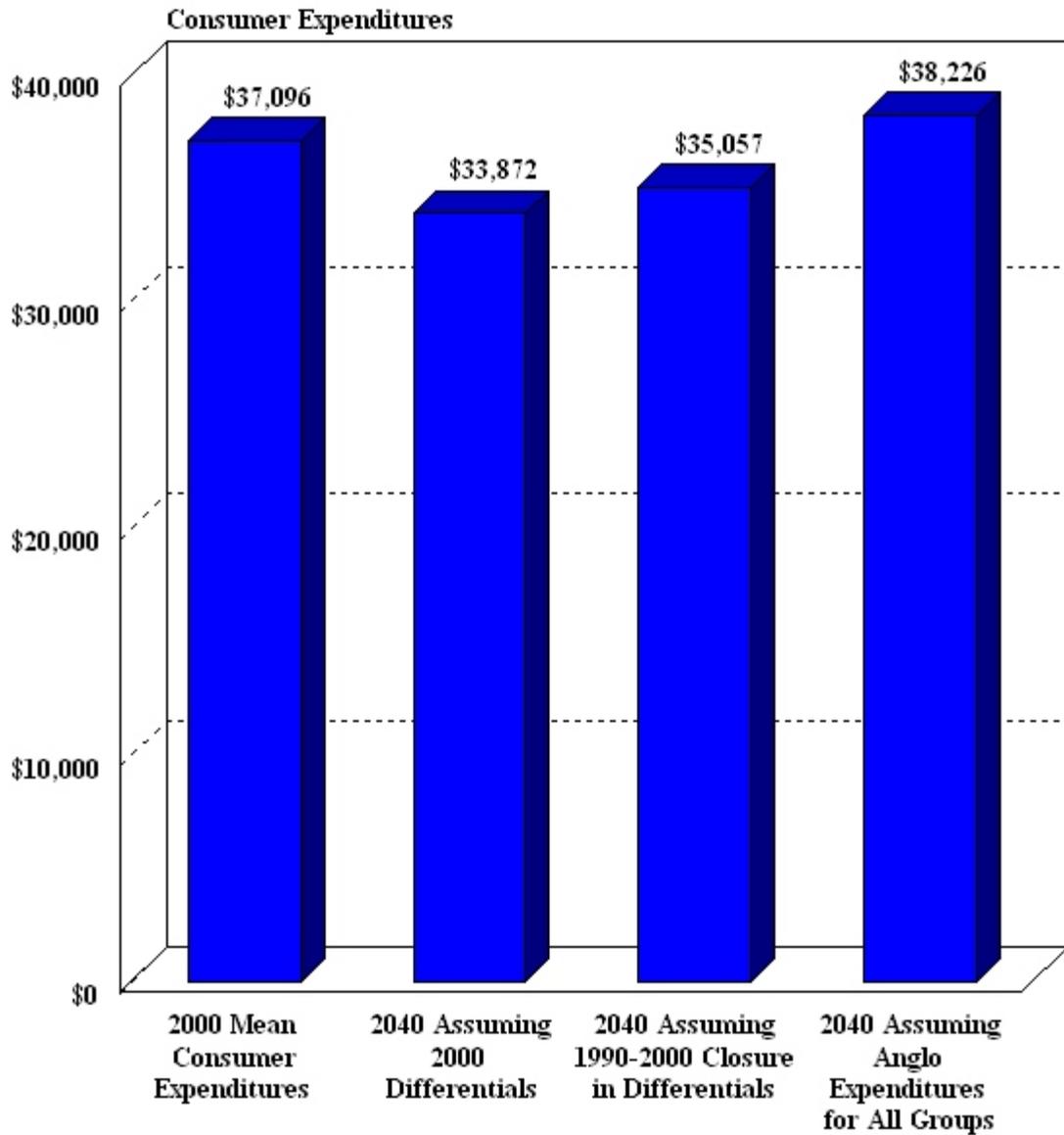
Health care needs and markets will grow substantially due to the aging of the population. Whether examined from the standpoint of a diverse array of diseases/disorders and disabilities or the growth in days of hospital care, number of nursing home residents, or other factors, the growth in the demand for health care will exceed the growth in the population. Although the total population increases by 142.6 percent from 2000 to 2040 under the 1.0 scenario, the number of incidences of diseases/disorders increases by 161.4 percent, the number of physician contacts by 170.2 percent, the number of days of hospital care by 208.9 percent, and the number of nursing home residents by 280.2 percent (Figure 5.2). Coupled with this growth will be an increasing diversity in the patient population

such that by 2040 under the 1.0 scenario only 29.9 percent of adult incidences of diseases/disorders and only 23.6 percent of child incidences of diseases/disorders would involve Anglos.

Overall the data in this chapter suggest that the coming decades will witness substantial expansion in the markets for goods and services in Texas with such expansion increasingly involving older and more racial/ethnically diverse market segments and market segments that involve an increasing diversity of household forms (married couple, single parent, etc.).

**Figure 5.1**

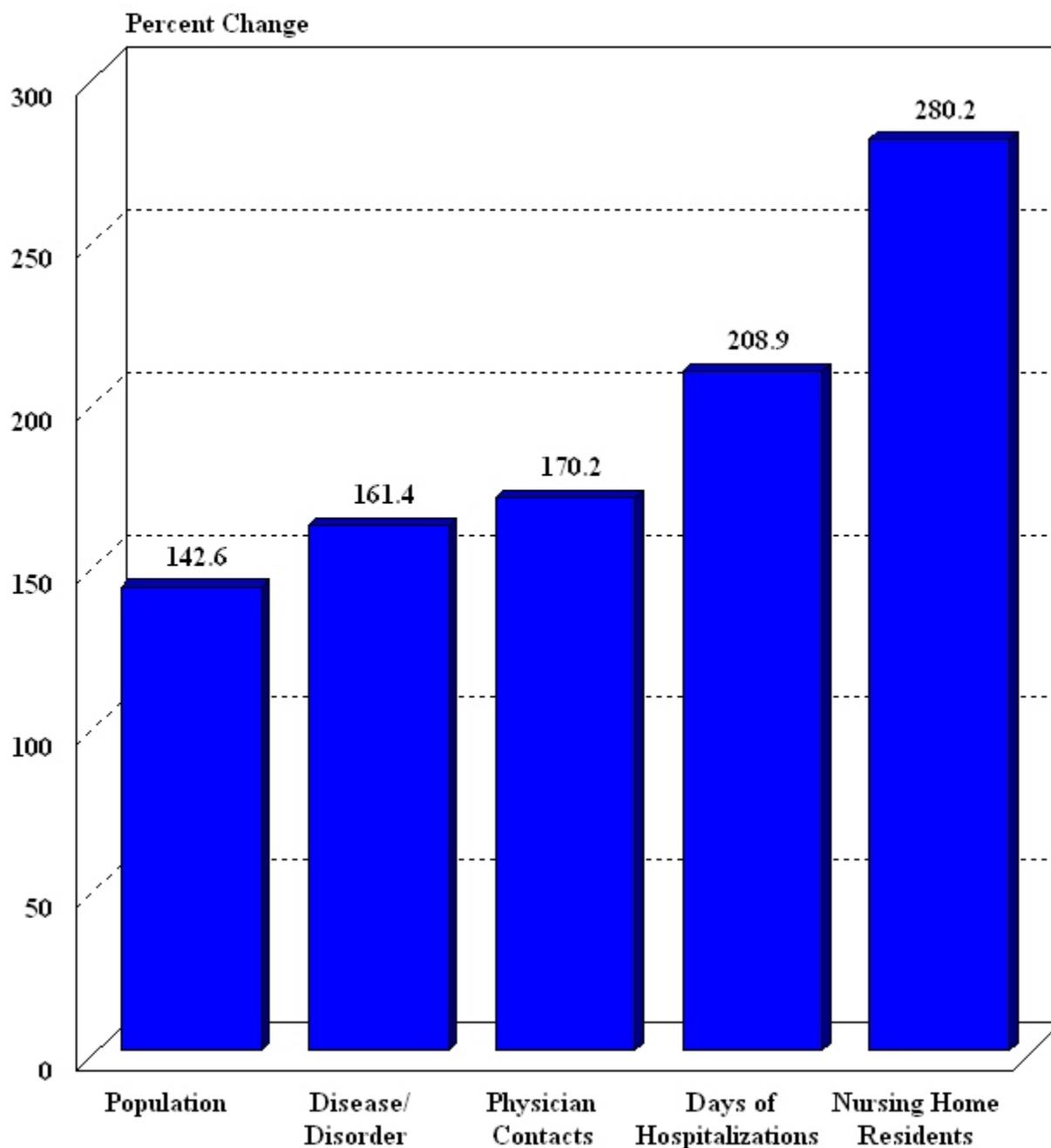
**Mean Per-Household Consumer Expenditures in Texas in 2000 and Projections to 2040\* Assuming 2000 Rates in 2040, 1990-2000 Rates of Closure Between Anglo/Black and Anglo/Hispanic Expenditures, and Anglo Expenditures for All Race/Ethnicity Groups**



\* Projections are shown for the 1.0 scenario

**Figure 5.2**

**Percent Change in Selected Health Care  
Factors in Texas, 2000 to 2040\***



\* Projections are shown for the 1.0 scenario

## **Chapter 6**

### **The Effects of Population Change on the Labor Force**

The Texas labor force will be substantially impacted by the changes projected to occur in the population of Texas.

#### **Historic and Current Patterns**

##### ***The Texas Labor Force Has Increased More Rapidly Than the National Labor Force***

The labor force of Texas has increased rapidly in recent decades with its growth exceeding the rate of growth in the nation's labor force. The Texas labor force increased from 6,574,676 in 1980 to 9,830,559 in 2000, an increase of 49.5 percent, compared to an increase of 31.8 percent for the nation during the same period. Although the rate of growth in the labor force has slowed over the past decade due to the aging of the population out of the initial labor force entrance years of age, 3,255,883 new persons were added to the labor force between 1980 and 2000.

#### **Projected Change in the Labor Force**

##### ***The Texas Labor Force Will Grow, Diversify, and Age***

The labor force is projected to increase from 9.8 million in 2000 to nearly 15.7 million in 2040 under the 0.5 scenario and to nearly 23.3 million under the 1.0 scenario, representing increases of 59.6 percent under the 0.5 scenario and 136.7 percent under the 1.0 scenario (Figure 6.1). These rates of growth are slower than the 67.9 and 142.6 percent increases projected for the total population, reflecting the continuing influence of the aging of the population.

The non-Anglo labor force grows more rapidly than the Anglo labor force, resulting in faster increases for the non-Anglo labor force and increased proportions of non-Anglos.

**Percent Change 2000-2040**

<b><u>Group</u></b>	<b><u>0.5 Scenario</u></b>	<b><u>1.0 Scenario</u></b>
Anglo	-5.2	2.0
Black	43.1	74.9
Hispanic	193.6	406.0
Other	142.2	470.5

**Percent of Total Labor Force**

<b><u>Group</u></b>	<b><u>0.5 Scenario</u></b>		<b><u>1.0 Scenario</u></b>	
	<b><u>2000</u></b>	<b><u>2040</u></b>	<b><u>2000</u></b>	<b><u>2040</u></b>
Anglo	58.4	34.7	58.4	25.2
Black	10.7	9.6	10.7	7.9
Hispanic	27.5	50.5	27.5	58.7
Other	3.4	5.2	3.4	8.2

The labor force will age as the population ages. Although 32.7 percent of the labor force was 45 years of age or older in 2000, by 2040 that percentage would be 41.2 under the 0.5 scenario and 40.6 under the 1.0 scenario. The workforce that is younger than 35 years of age decreases from 40.7 percent in 2000 to 35.8 percent in 2040 under the 0.5 scenario and to 35.5 percent in 2040 under the 1.0 scenario.

***The Texas Labor Force Will Be Less Well Educated***

In the absence of change in the educational characteristics of those segments of the labor force projected to grow most rapidly, the labor force in Texas in the future would be less well educated than it was in 2000. Whereas 5.3 percent of the labor force had a graduate degree and 18.2 percent a bachelor's degree in 2000, 4.4 percent would have a graduate degree and 12.9 percent a bachelor's degree in 2040 under the 1.0 scenario. Similarly while only 18.8 percent had less than a high school level of education in 2000, 30.1 percent would have only that level of education by 2040 under the 1.0 scenario (Figure 6.2).

***The Texas Labor Force Will Be Less Skilled***

Projections of the occupational characteristics of the labor force show that current demographic patterns, if accompanied by current occupational differentials

among racial/ethnic groups, will lead to a labor force that is generally less skilled in the future than it is today. For example, although Anglos would make up only 25.2 percent of the labor force under the 1.0 scenario, they would still account for more than 39.4 percent of workers in executive positions and for 42.2 percent of workers in professional positions, but for 14.8 percent of the unemployed; Hispanics, who would make up 58.7 percent of the labor force, would account for only 40.0 percent of workers in executive positions, 39.0 percent of workers in professional positions, and 68 percent of the unemployed. Overall the percentage of the workforce employed in executive professions and similar positions would decline from 2000 to 2040 and the percentage in lower skilled jobs would increase (Figure 6.3).

### ***The Texas Labor Force Will Earn Less***

Projections of the earnings of the labor force show that in the absence of changes in earnings differentials, projected population change will lead to reduced overall earnings. Under the 1.0 scenario, 7.2 percent of the labor force in 2000 earned more than \$75,000, but only 4.9 percent would earn that much (in 2000 constant dollars) in 2040. On the other hand, 33.5 percent earned less than \$15,000 per year in 2000, but 38.4 percent would earn less than \$15,000 (in 2000 constant dollars) in 2040 (Figure 6.4).

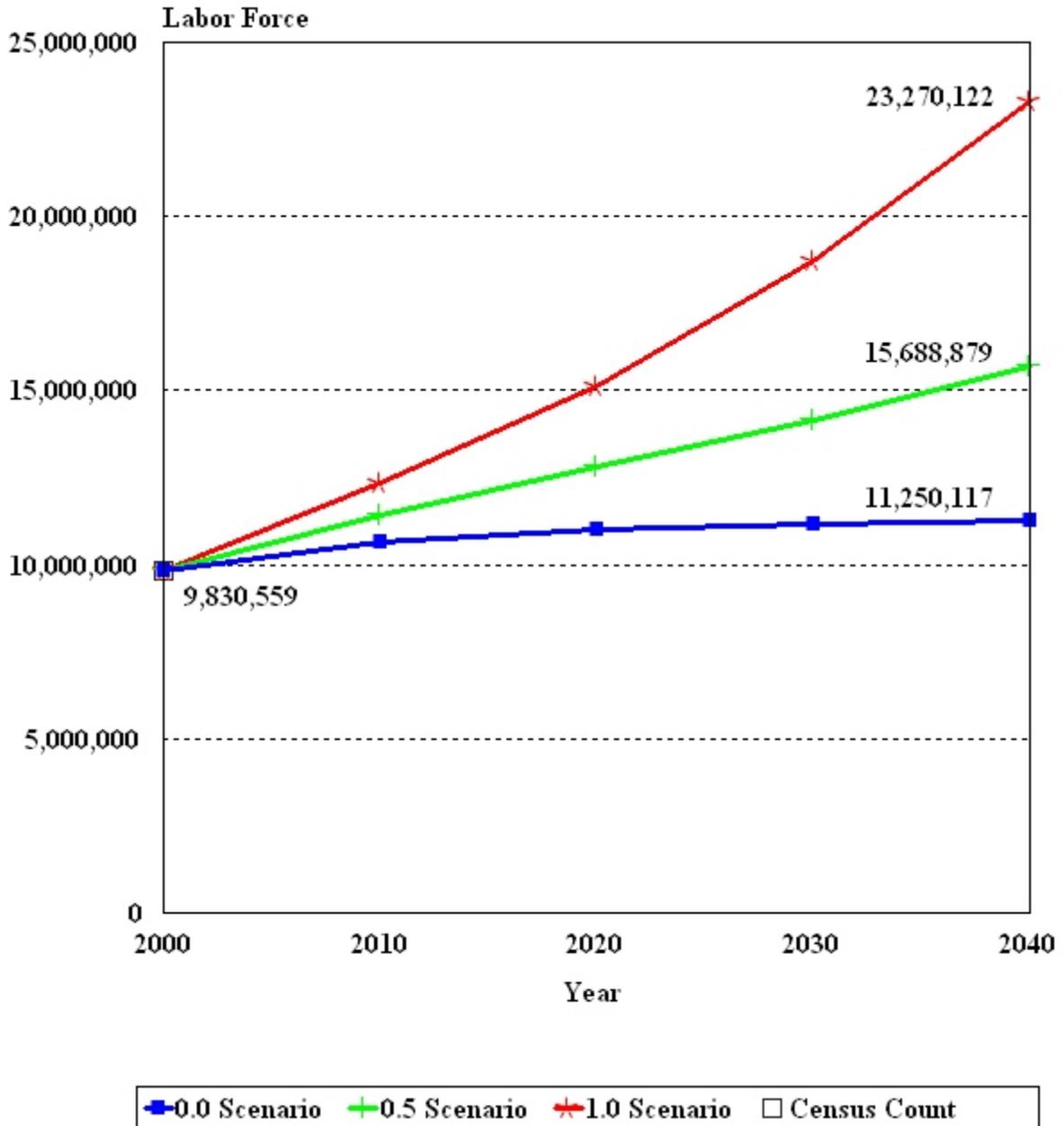
### ***Demand for Workforce Training Will Increase***

Projections of the number of persons in labor force training programs indicate that the total number of participants in all programs would increase from 273,411 in 2000 to 739,959 in 2040 under the 1.0 scenario, a numerical increase of 466,548, and a percentage increase of 170.6 percent. Growth in the enrollment in these programs generally exceeds the 142.6 percent increase in the population from 2000 to 2040 and the 136.7 percent growth in the labor force from 2000 to 2040 (Figure 6.5).

Overall, the results of projected changes point to a labor force that would grow rapidly in the future, although more slowly than the population, and that would become increasingly diverse and older. If differentials in the socioeconomic characteristics of the labor force do not change, the future labor force of Texas will be less well educated, less skilled, earn lower salaries and wages, and thus be in greater need of labor force training (with substantial associated costs).

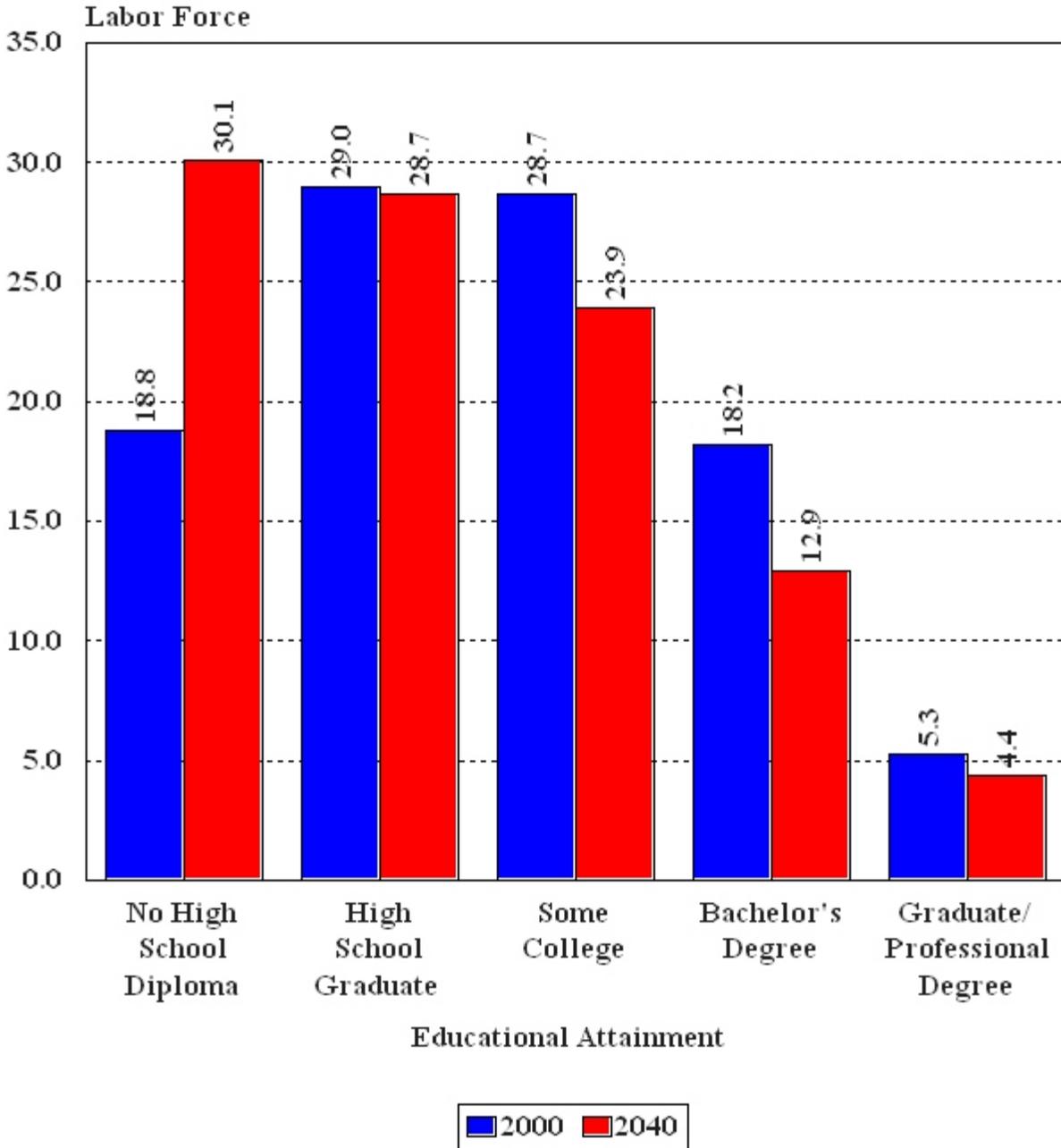
**Figure 6.1**

**Civilian Labor Force in Texas in 2000 and Projections to 2040 for All Scenarios**



**Figure 6.2**

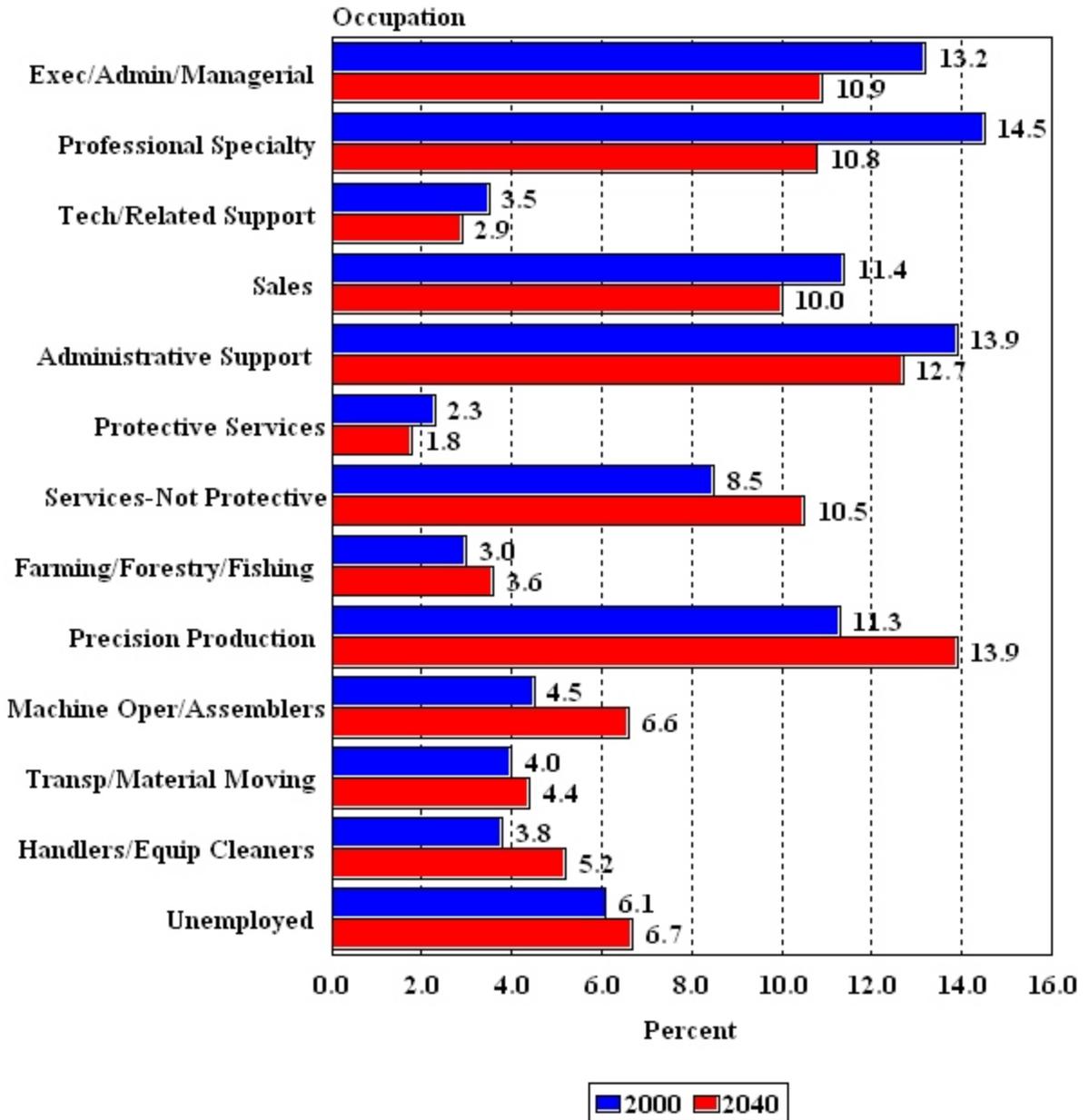
**Percent of Texas Labor Force by Educational Attainment  
in 2000 and Projections for 2040\***



\* Projections are shown for the 1.0 scenario

**Figure 6.3**

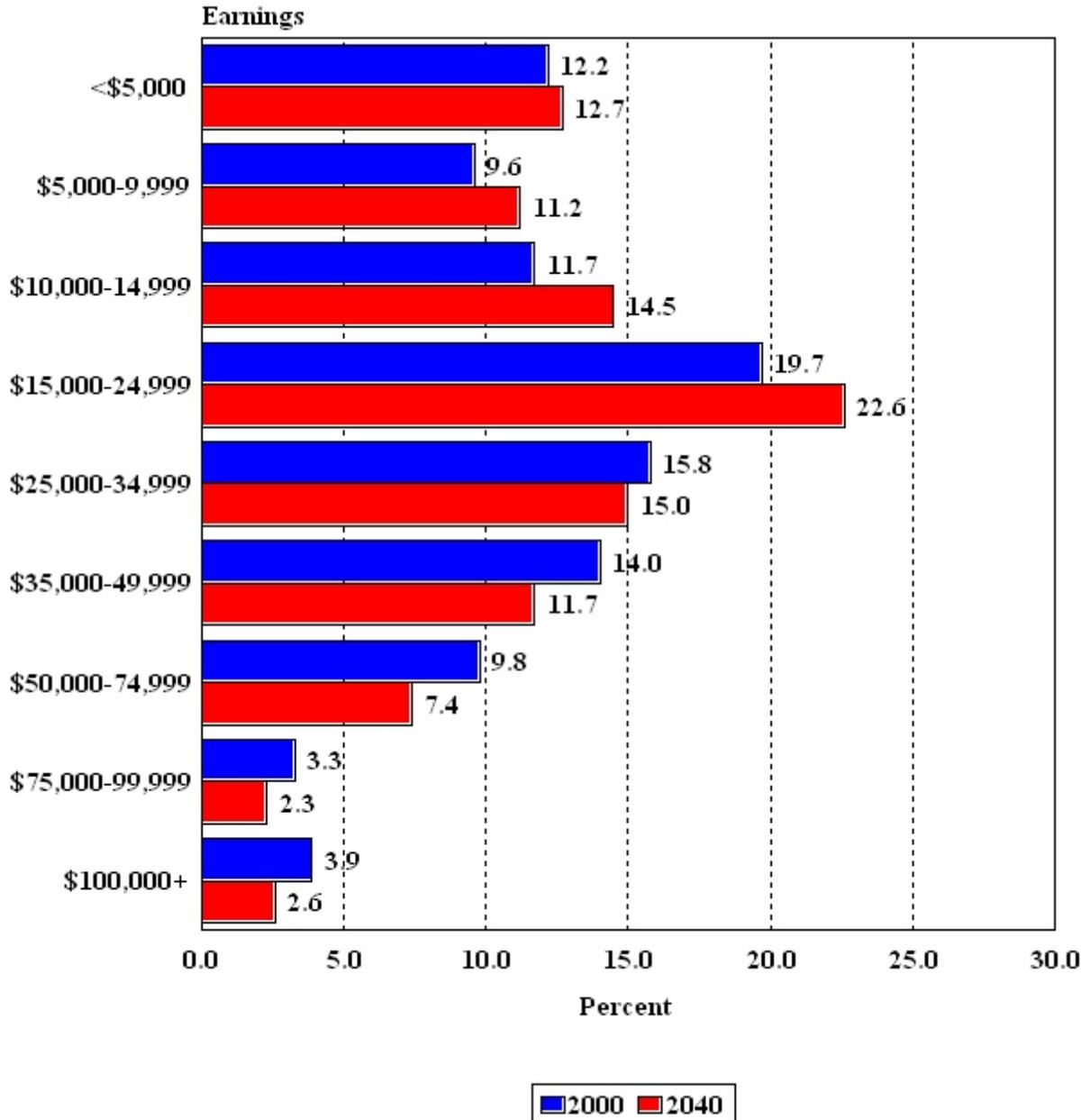
**Percent of Texas Labor Force by Occupation  
in 2000 and Projections for 2040\***



\* Projections are shown for the 1.0 scenario

**Figure 6.4**

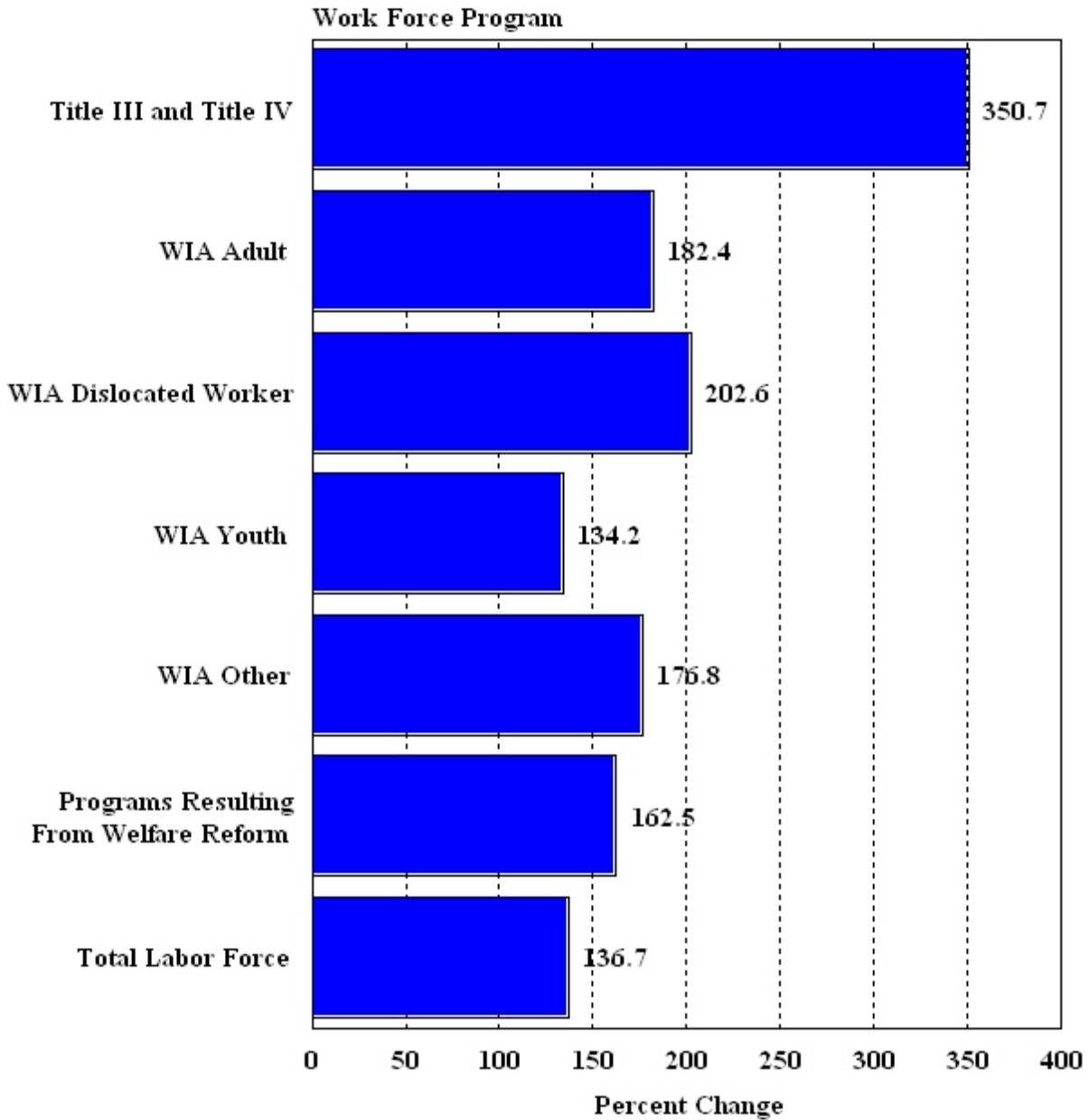
**Percent of Texas Labor Force by Earnings  
in 2000 and Projections for 2040\***



\* Projections are shown for the 1.0 scenario

**Figure 6.5**

**Percent Change in Texas Work Force Training Programs  
and in the Total Labor Force, 2000 to 2040\***



\* Projections are shown for the 1.0 scenario

## **Chapter 7**

### **Public Elementary, Secondary, and Higher Education**

Public education will change rapidly in the coming decades as the population changes.

#### **Historic and Current Patterns**

***Educational Enrollment Has Increased such that More Than 4.8 Million Persons in 2000 Were Enrolled in Texas Public Elementary and Secondary Schools and Colleges: A Number Larger than the Total Populations of 29 of the 50 States***

Texas has witnessed increases in enrollment in education at all levels in the past decade, coupled with increases in expenditures and development of a number of major policy initiatives. Total enrollment in elementary and secondary schools (both public and private) increased by 45.3 percent from 1980 to 2000, and 4.0 million students were enrolled in public institutions in 2000. The number of Texas residents enrolled in Texas colleges and universities (at both the graduate and undergraduate levels) increased by 64.3 percent from 1980 to 2000 and public college enrollment stood at more than 835,000 in 2000. Costs for public education in 2000 were more than \$23.0 billion for elementary and secondary education and general revenue costs for educational programs at colleges and universities were more than \$2.6 billion in 2000.

#### **Projected Patterns of Change**

***Texas May Add Nearly 3.8 Million More Students over the Next 40 Years and School Populations Will Be Increasingly Non-Anglo***

Projections show increases in the total number of persons enrolled in public education at all levels, from 4.8 million in 2000 to 6.2 million under the 0.5 scenario, and to 8.6 million under the 1.0 scenario by 2040. These projections represent increases of 28.3 percent from 2000 to 2040 under the 0.5 scenario and 79.0 percent under the 1.0 scenario compared to the population increase of 67.9 percent under the 0.5 scenario and 142.6 percent under the 1.0 scenario. Nearly 3.8 million students would be added to the student population in public elementary

and secondary schools, colleges, and universities from 2000 to 2040 under the 1.0 scenario.

A majority of the enrollment increases will be due to non-Anglos. Under the 1.0 scenario, Anglo enrollment declines by 16.2 percent from 2000 to 2040 while Black enrollment increases by 7.5 percent, Hispanic enrollment increases by 205.6 percent, and the enrollment of persons from the Other group increases by 260.4 percent. As a result, by 2040 under the 1.0 scenario, 21.4 percent of all those enrolled in school would be Anglo, 8.3 percent would be Black, 63.6 percent would be Hispanic, and 6.7 percent would be members of the Other racial/ethnic group.

Public elementary and secondary school enrollment will increase by roughly 1.1 million from 4.0 million in 2000 to 5.1 million in 2040 under the 0.5 scenario and by nearly 3.1 million to 7.1 million in 2040 under the 1.0 scenario (Figure 7.1). More than 80 percent of total enrollment in all public schools would be in elementary and secondary schools.

The importance of non-Anglo populations is apparent. By 2040, under the 1.0 scenario, 19.9 percent of those enrolled in public elementary and secondary schools would be Anglo while 8.3 percent would be Black, 66.3 percent Hispanic, and 5.5 percent would be persons from the Other racial/ethnic group (Figure 7.2).

The data on public colleges and universities and community colleges show different patterns (Figures 7.3 and 7.4). The number of residents enrolled in universities was roughly 50,000 less than that in community colleges in 2000 (370,970 in universities and 421,078 in community colleges), and the faster growth of enrollment in community colleges leads to expansion in this difference. Under the 1.0 scenario, community college enrollment would be 848,867 in 2040 compared to 676,942 in public universities, a difference of nearly 172,000.

Both community college and university enrollment become more diverse, but diversity is greater in community colleges. Under the 1.0 scenario, 74.3 percent of community college students and 67.7 percent of those in public universities in 2040 (Figure 7.5) would be non-Anglo, compared to 45.3 and 38.5 percent in 2000.

### ***Costs for All Forms of Education Will Increase***

Total elementary and secondary school costs would increase by \$6.3 billion under the 0.5 scenario and by roughly \$17.6 billion under the 1.0 scenario, and public college and university costs would increase by roughly \$840 million under the 0.5 scenario and by \$2.3 billion under the 1.0 scenario.

### ***The Need for Specialized Programs in Elementary and Secondary Schools Will Increase***

Such changes have substantial implications relative to enrollment in specialized elementary and secondary programs. Those programs most impacted by non-Anglo enrollment increases, such as Bilingual/ESL, Economically Disadvantaged, Immigrant, Limited English Proficiency, and Title I, would all have increases from 2000 to 2040 in the projected number of students involved in these programs that exceed 100 percent under the 1.0 scenario (Figure 7.6).

### ***The Need for Financial Assistance for Students in Colleges and Universities Will Increase***

The number of college students requiring financial assistance will increase faster than total enrollment. Under the 1.0 scenario, enrollment increases by 101.6 percent in public community colleges and by 82.5 percent in public universities between 2000 and 2040, but the number of students with financial need unmet by household resources increases by 120.1 percent for community colleges and by 90.6 percent for public universities.

Those in need are projected to be increasingly non-Anglo, and the percentage of students with the highest level of need will increase. The total level of unmet financial need would increase from \$671.9 million in 2000 to nearly \$2.2 billion by 2040, or by 219.9 percent. This increase is larger than the enrollment increase of 92.6 percent or the increase in persons requiring at least some level of assistance of 105.4 percent.

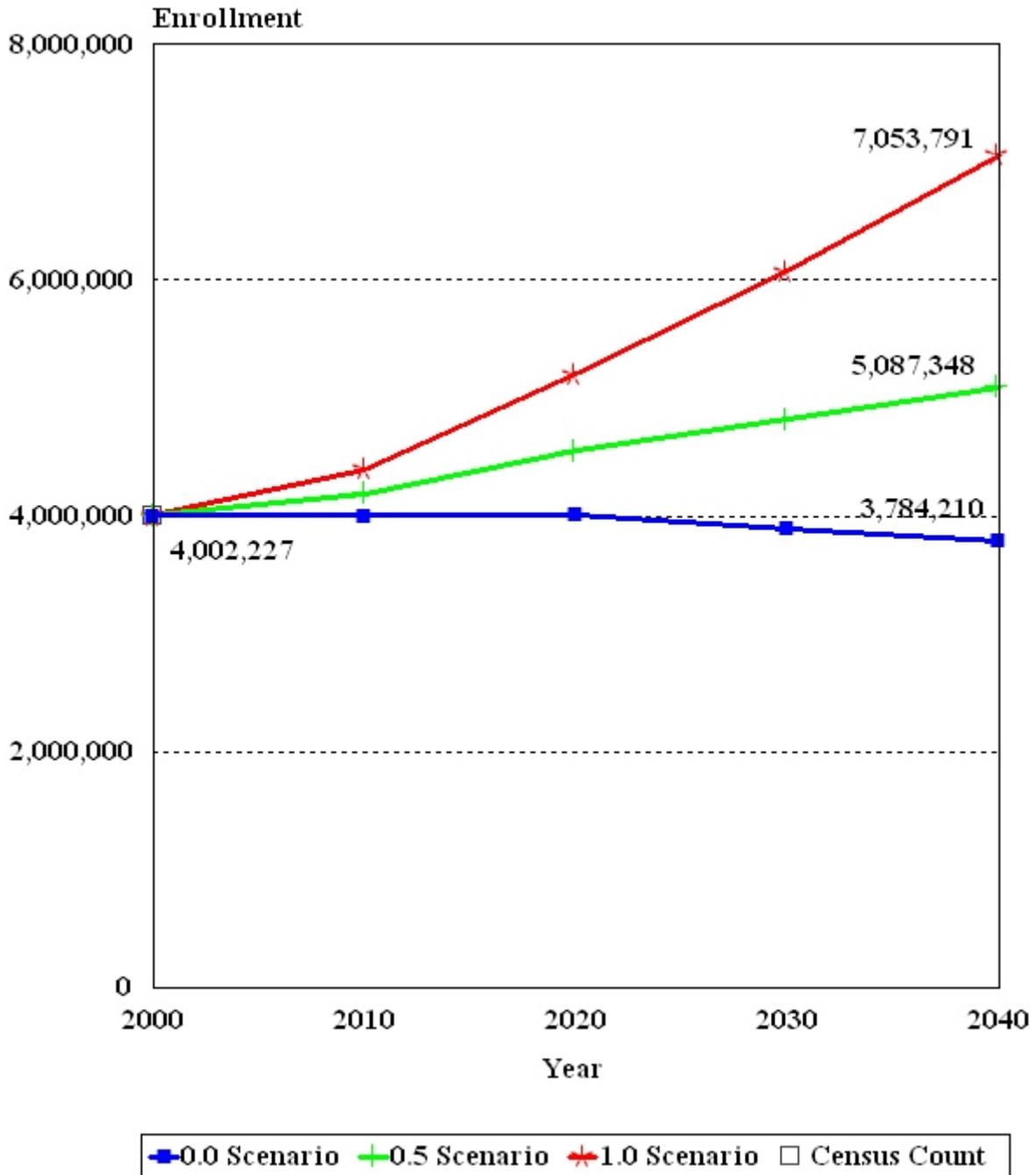
Under alternative enrollment projections for higher education that assume a continuation of 1990-2000 trends in enrollment rates, the number of students would increase to 1,936,166 by 2040 instead of the 1,525,809 projected assuming 2000 rates. Whereas community college enrollment increases by 425,855 under this scenario, public university enrollment increases by 15,497 less than under the

2000 constant rates of enrollment scenario because Hispanic enrollment rates in universities declined from 1990 to 2000 and projections using such rates show a substantial decline in Hispanic enrollment.

In the absence of changes in population patterns and/or relative socioeconomic resources, the growth in enrollment will increase: (1) the number of persons, and the associated costs, in specialized educational programs; (2) total public costs for education; (3) the number of students with unmet financial need; (4) and the total level of financial assistance required by students and to be provided by the State. Education change will represent a significant challenge for the State of Texas.

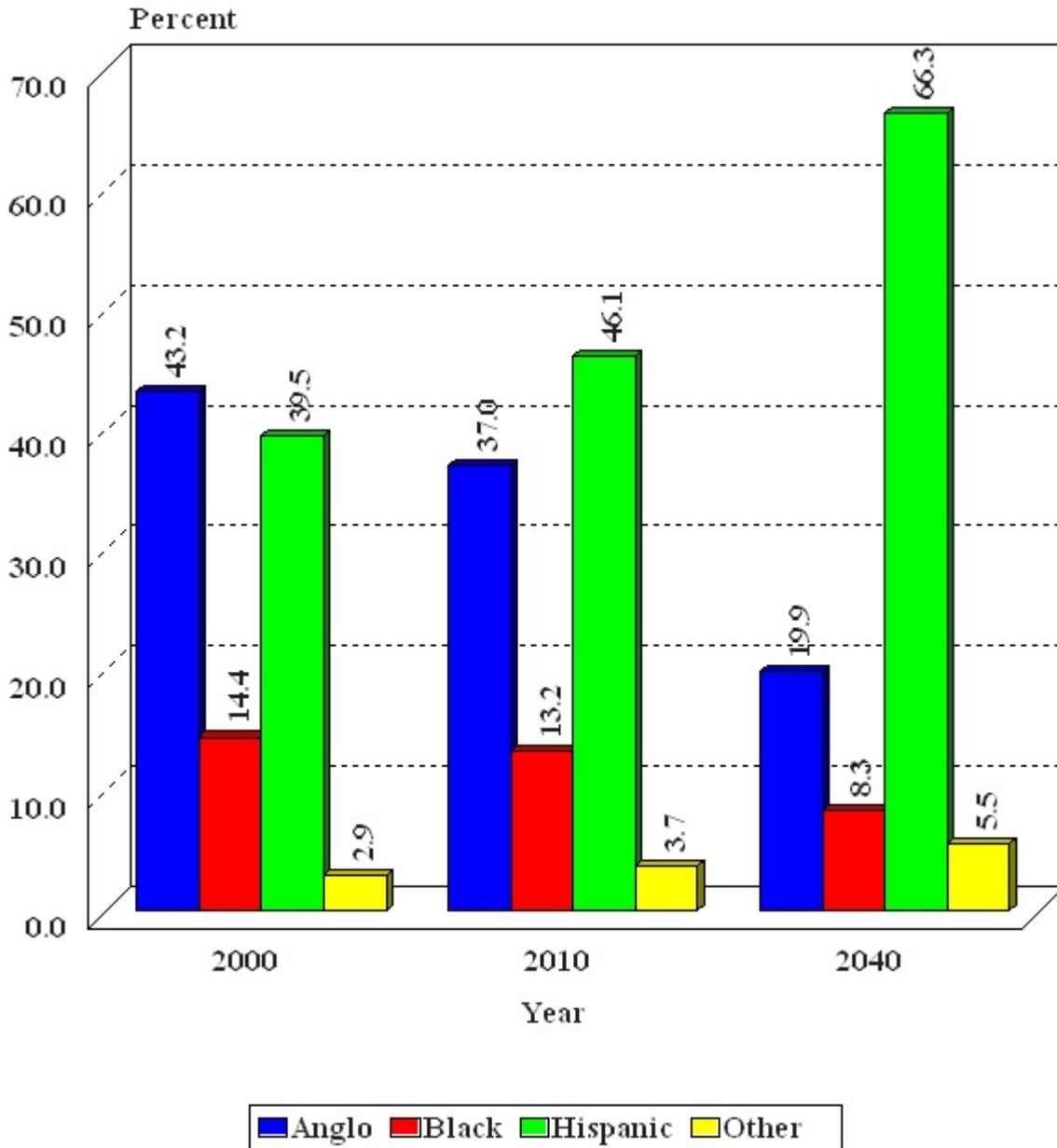
Figure 7.1

Enrollment in Texas Public Elementary and Secondary Schools in 2000 and Projections to 2040 for All Scenarios



**Figure 7.2**

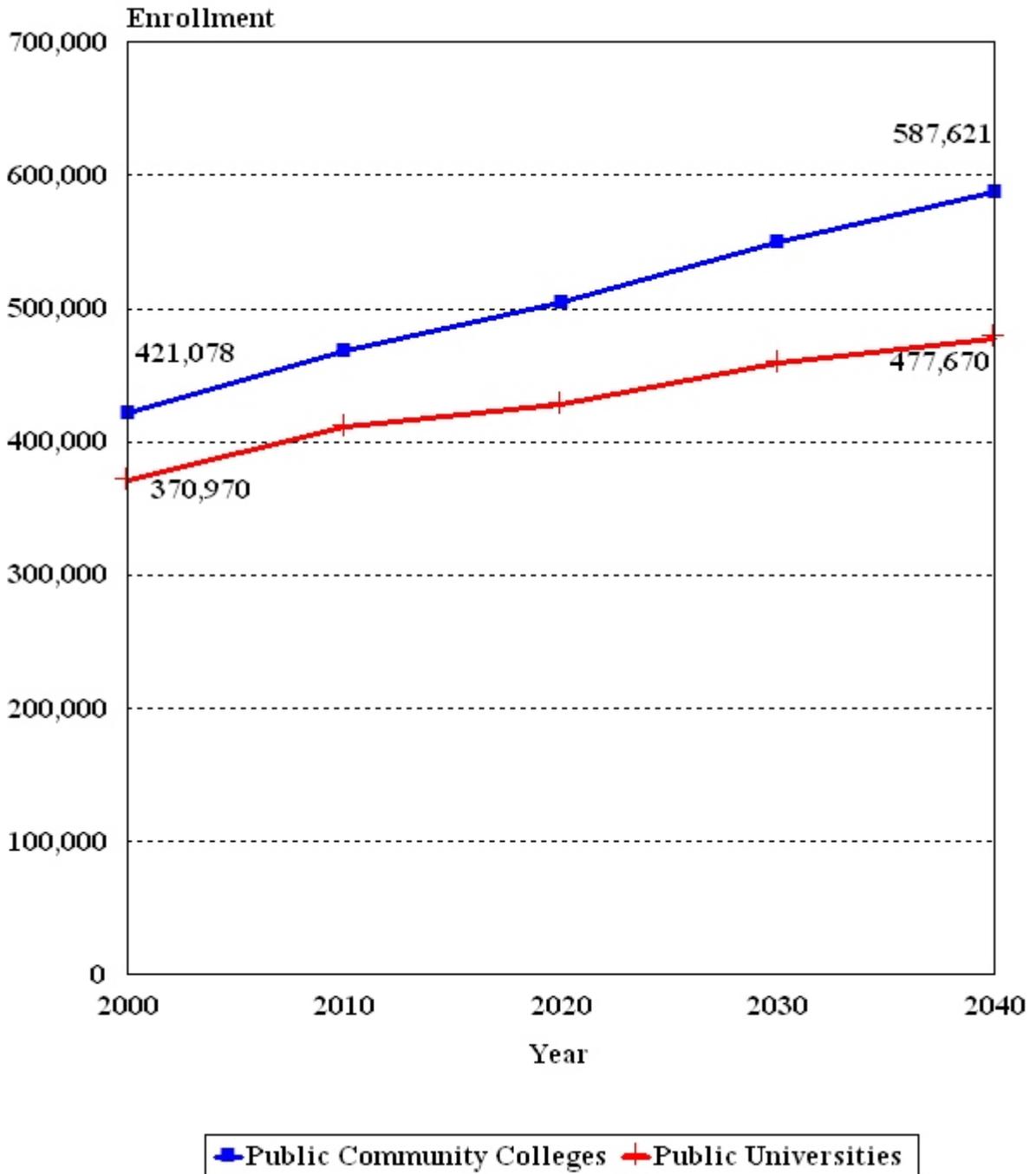
**Percent of Texas Public Elementary and Secondary School Enrollment by Race/Ethnicity in 2000 and Projections for 2010 and 2040\***



\* Projections are shown for the 1.0 scenario

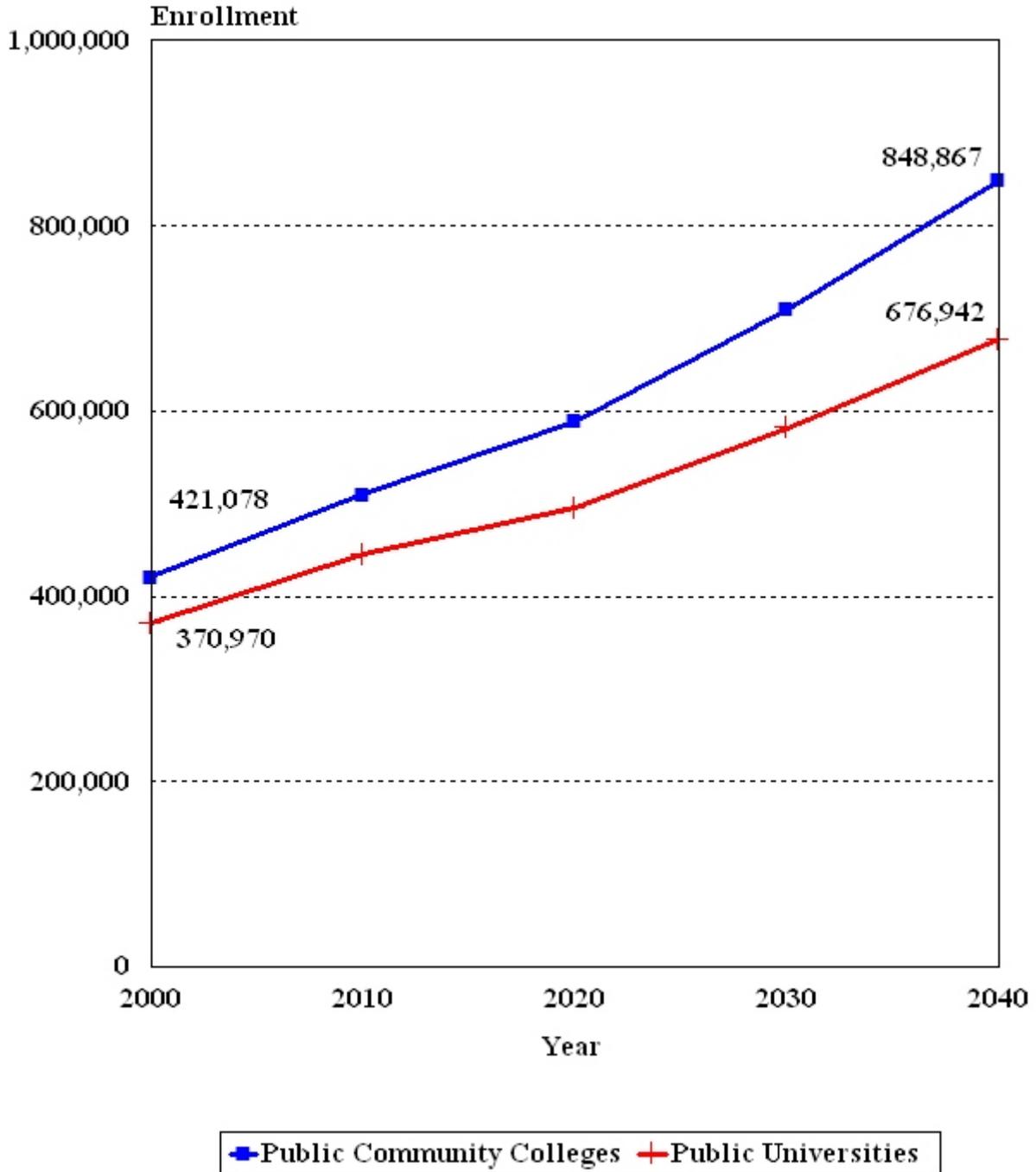
**Figure 7.3**

**Enrollment in Texas Public Community Colleges and Universities in 2000 and Projections to 2040 (0.5 Scenario)**



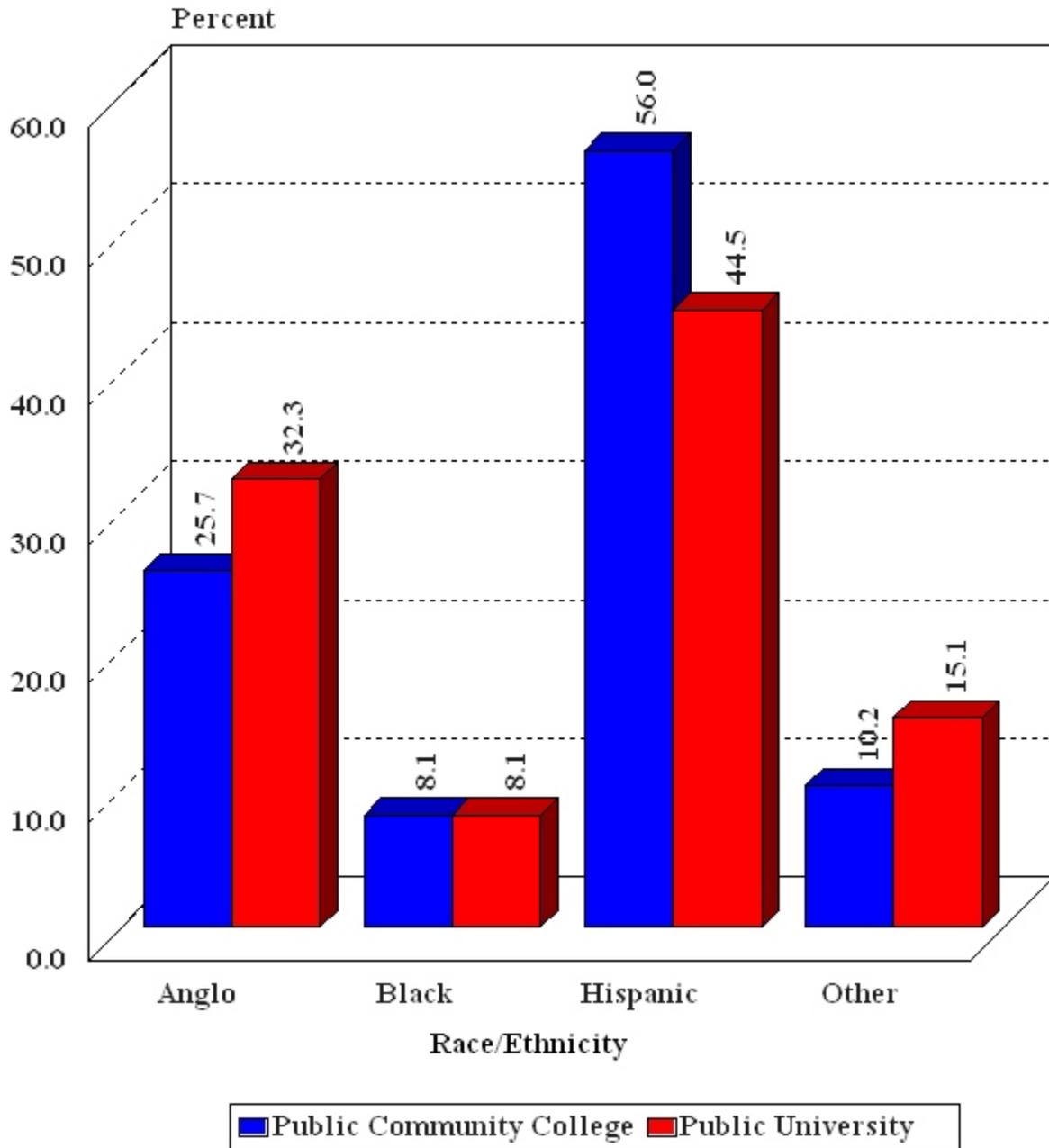
**Figure 7.4**

**Enrollment in Texas Public Community Colleges and Universities in 2000 and Projections to 2040 (1.0 Scenario)**



**Figure 7.5**

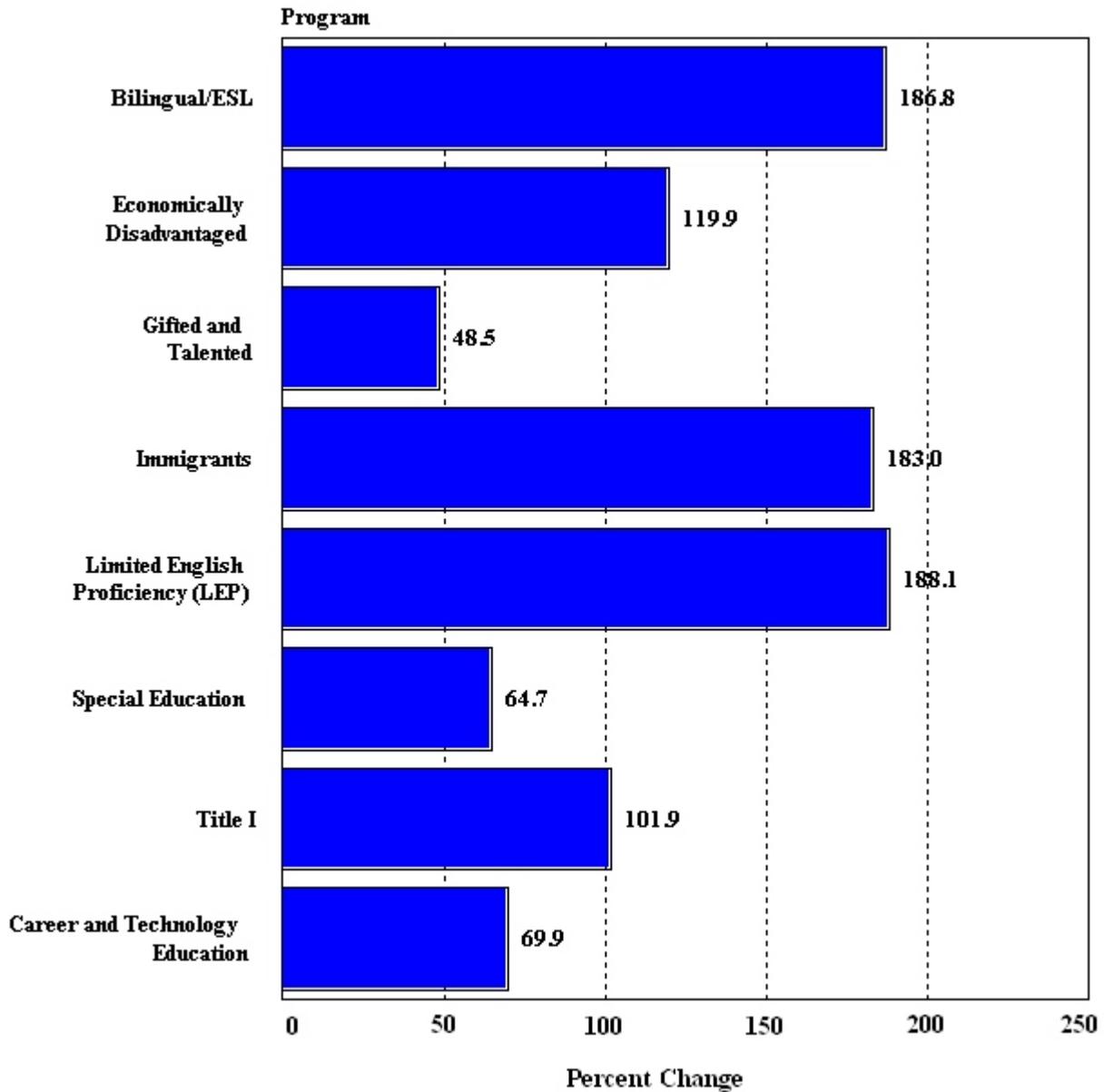
**Projected Percent of Public Community College and Public University Enrollment in Texas by Race/Ethnicity, 2040\***



\* Projections are shown for the 1.0 scenario

**Figure 7.6**

**Percent Change in Enrollment in Selected Elementary and Secondary School Programs in Texas, 2000 to 2040\***



\* Projections are shown for the 1.0 scenario

## **Chapter 8**

### **Human Services**

The projected population change has substantial implications for Food Stamps, Medicaid, and the Temporary Assistance for Needy Families (TANF) programs.

#### **Historic and Current Patterns**

##### ***Texas Human Service Caseloads Declined Substantially in the Late 1990s***

During the latter part of the 1990s, human service programs showed dramatic changes as a result of welfare reform legislation and an expanding economy. Between 1995 and 2000, the TANF caseload in Texas declined by more than 50 percent, the Food Stamp caseload declined by almost 50 percent, and the number of Medicaid recipients declined almost 15 percent (Figure 8.1).

Human service expenditures also declined or slowed during the latter part of the 1990s. The changes in expenditure patterns, however, did not necessarily parallel those for caseloads. TANF expenditures declined by 3.4 percent and Food Stamp expenditures by 42.8 percent, but Medicaid program expenditures increased by 8.9 percent. Because costs either decreased less, or actually increased, while the number of recipients declined rapidly, costs per recipient increased in Texas from 1995 to 2000 by 81.3 percent for TANF, 139.9 percent for Food Stamps, and 34.5 percent for Medicaid.

#### **Projected Patterns**

##### ***Increases in All Texas Human Service Programs Will Be Faster than Population Growth and All Will Have Increasingly Diverse Client Populations***

The number of TANF recipients is projected to increase from 405,287 in 2000 to 1,008,932 by 2040 under the 1.0 scenario, an increase of 148.9 percent (Figure 8.2). The number of Anglo recipients declines, the number of Black recipients increases by 22.3 percent, the number of Hispanics increases by 260.0 percent, and the number of persons from the Other racial/ethnic group increases by 355.8 percent. As a result, the percentage of recipients who would be Anglo,

Black, Hispanic, and Other in 2040 is 5.9, 14.0, 78.6, and 1.5 percent, respectively (Figure 8.3).

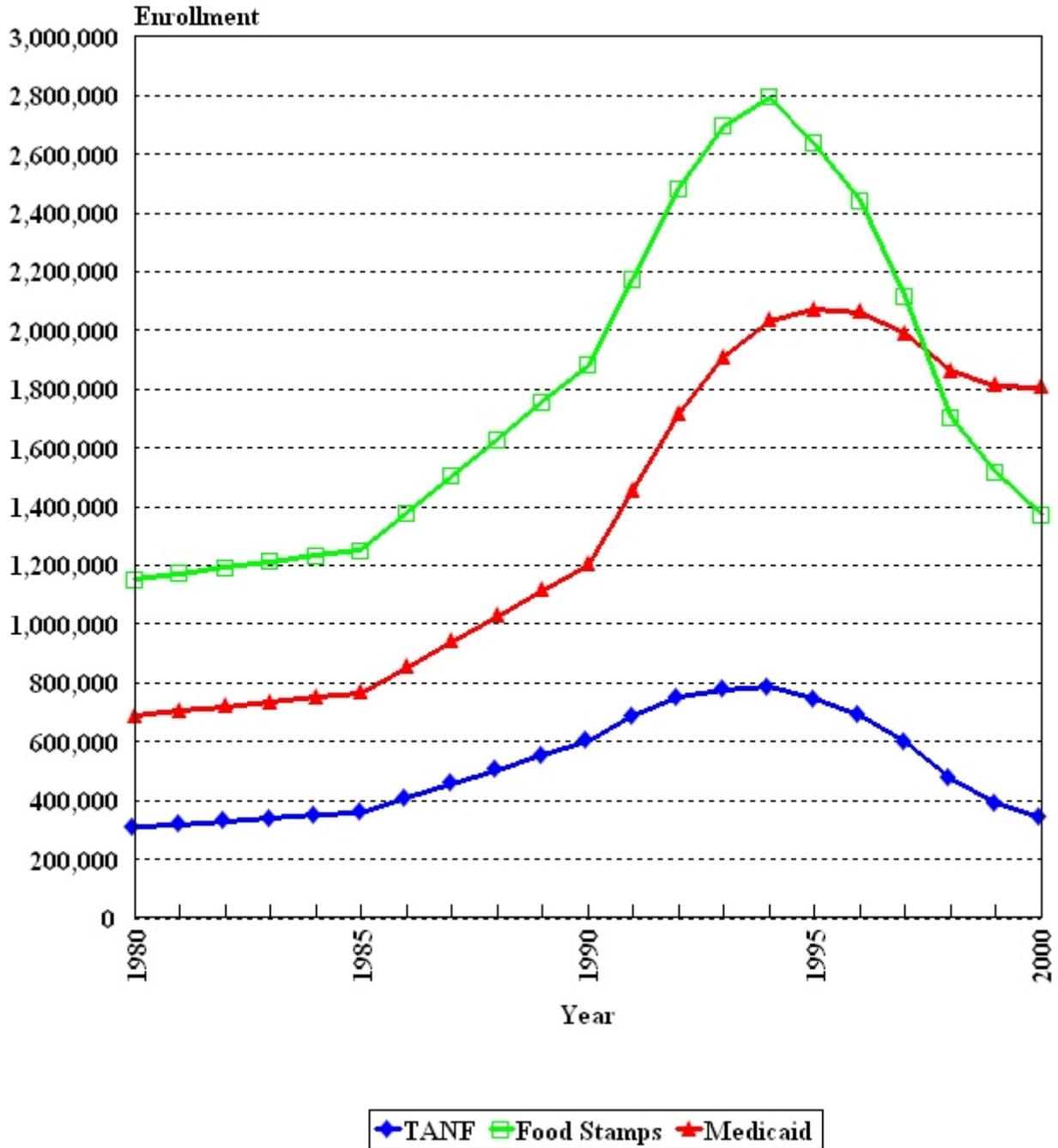
The number of Food Stamp recipients would increase more rapidly than the number of TANF recipients, increasing from 1,007,067 recipients in 2000 to 3,229,632 recipients by 2040 under the 1.0 scenario (Figure 8.2), or by 220.7 percent. The recipients in the program would increasingly be non-Anglo, particularly Hispanic. By 2040 under the 1.0 scenario, the Food Stamp population would be 6.2 percent Anglo, 9.1 percent Black, 79.2 percent Hispanic, and 5.5 percent persons from the Other racial/ethnic group (Figure 8.3).

Medicaid enrollment would be substantially larger by 2040. The total number of Medicaid recipients increases from 1,886,937 in 2000 to 5,319,029 in 2040 under the 1.0 scenario (Figure 8.2), or by 181.9 percent. By 2040, under the 1.0 scenario, the Medicaid population would be 12.5 percent Anglo, 12.8 percent Black, 69.6 percent Hispanic, and 5.1 percent persons from the Other racial/ethnic group (Figure 8.3).

The data on projected enrollment in TANF, Food Stamps, and Medicaid show rapid increases in the number of persons enrolled in these programs. Under the 1.0 scenario, the 2000 to 2040 increases in the number of recipients would be more than 600,000 for TANF, 2.2 million for Food Stamps, and 3.4 million for Medicaid. Increases in State costs from 2000 to 2040 would be roughly \$375 million for TANF, \$480 million for Food Stamps, and \$7.9 billion for Medicaid.

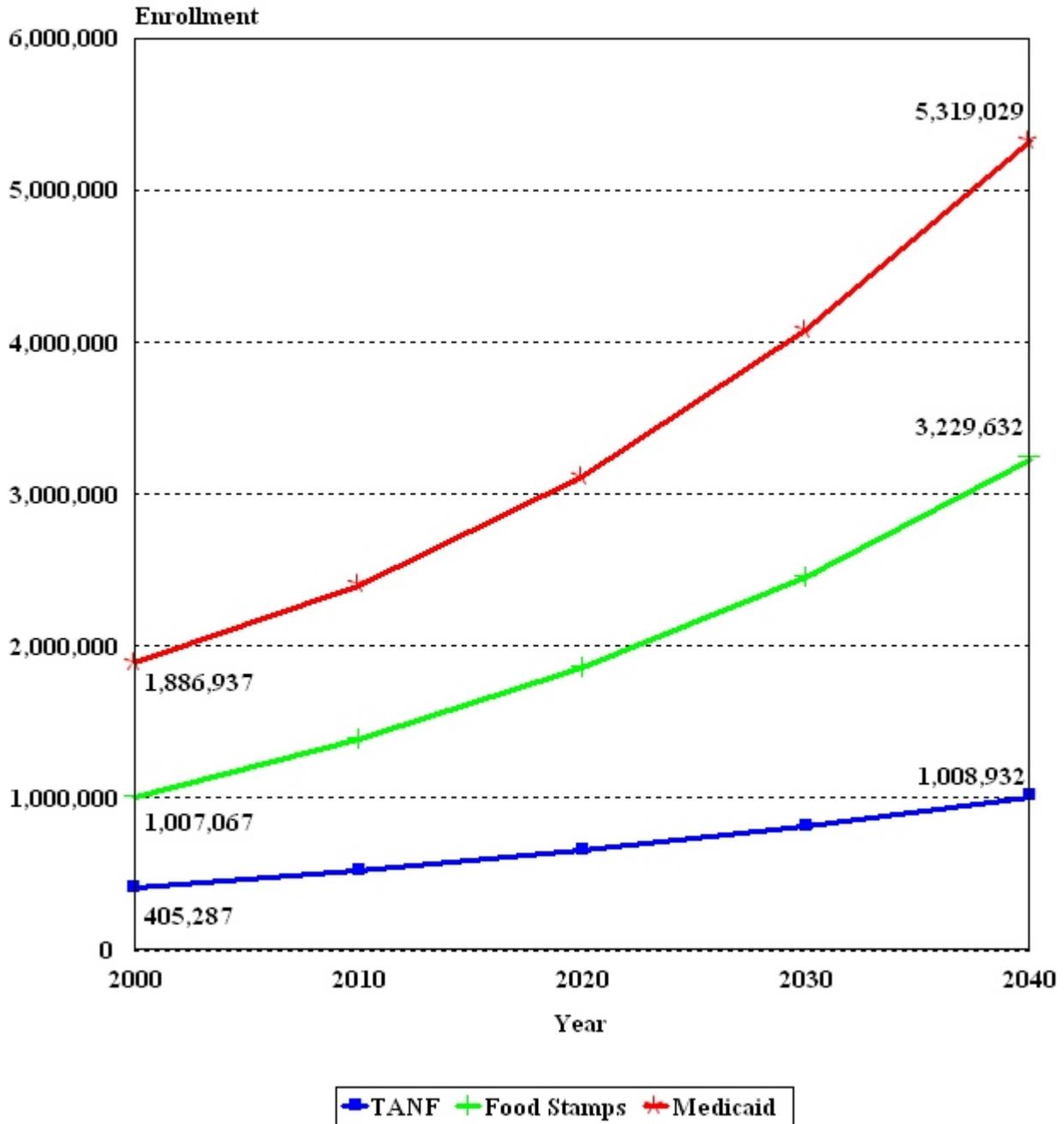
**Figure 8.1**

**TANF, Food Stamp, and Medicaid Enrollment  
in Texas, 1980 to 2000**



**Figure 8.2**

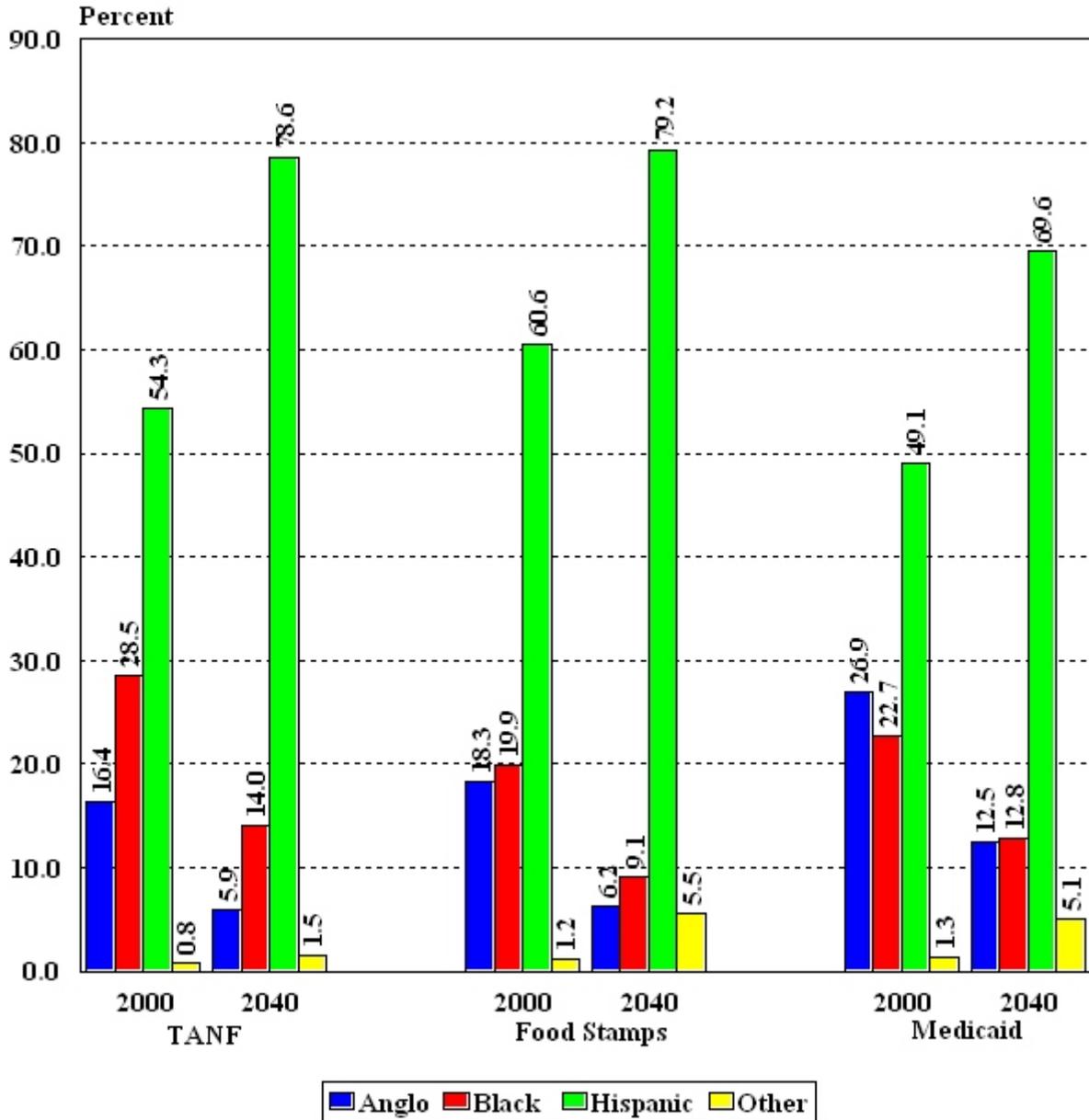
**TANF, Food Stamp, and Medicaid Enrollment  
in Texas in 2000 and Projections to 2040\***



\* Projections are shown for the 1.0 scenario

**Figure 8.3**

**Percent of TANF, Food Stamp, and Medicaid Enrollment in Texas by Race/Ethnicity in 2000 and Projections for 2040\***



\* Projections are shown for the 1.0 scenario



## **Chapter 9**

### **Youth and Adult Correctional Systems**

The number of persons in, and costs associated with, Texas adult prisons and youth correctional facilities will be impacted by population change.

#### **Historic and Current Patterns**

##### ***Texas Correctional Populations Have Grown Dramatically in Recent Decades***

Both youth and adult criminal justice services provided by the State have grown considerably in recent decades. From 1979 to 1999, the number of persons involved in youth correctional programs in Texas increased by 155.1 percent compared to a national increase of 51.5 percent. Similarly, the Texas prison population increased by 414.2 percent from 1980 to 2000, exceeding the national rate of growth of 310.6 percent.

#### **Projected Patterns**

##### ***Increases in Texas Correctional Populations and Associated Costs Will Be Substantial, with Increasing Proportions Involving Non-Anglos***

The number of youth in Texas Youth Commission programs is projected to increase from 8,603 in 2000 to 11,771 by 2040 under the 0.5 scenario and to 17,118 under the 1.0 scenario (Figure 9.1). These values represent increases of 36.8 percent in TYC programs compared to a projected total population change of 67.9 percent under the 0.5 scenario, and 99.0 percent in TYC programs compared to a projected total population change of 142.6 percent under the 1.0 scenario.

The rapid growth in non-Anglo and non-Black populations is evident in the change in the TYC population.

#### **Percent Change 2000-2040**

<b><u>Group</u></b>	<b><u>0.5 Scenario</u></b>	<b><u>1.0 Scenario</u></b>
Anglo	-19.9	-14.6
Black	-2.5	21.6
Hispanic	100.6	215.4
Other	74.9	274.3

As a result of such differentials in growth, the proportion of Anglos among TYC clientele is projected to decline by 2040 to 13.5 percent and 9.9 percent under the 0.5 and 1.0 scenarios, respectively (Figures 9.2 and 9.3).

The number of adult prisoners is projected to increase less rapidly than the population, from 151,868 in 2000 to 234,257 in 2040 under the 0.5 scenario and to 340,723 under the 1.0 scenario (Figure 9.4), increases of 54.3 percent and 124.4 percent, respectively, compared to projected overall population increases of 67.9 percent (0.5 scenario) and 142.6 percent (1.0 scenario).

The number of Anglo prisoners is projected to decline and the number of non-Anglos to increase.

**Percent Change 2000-2040**

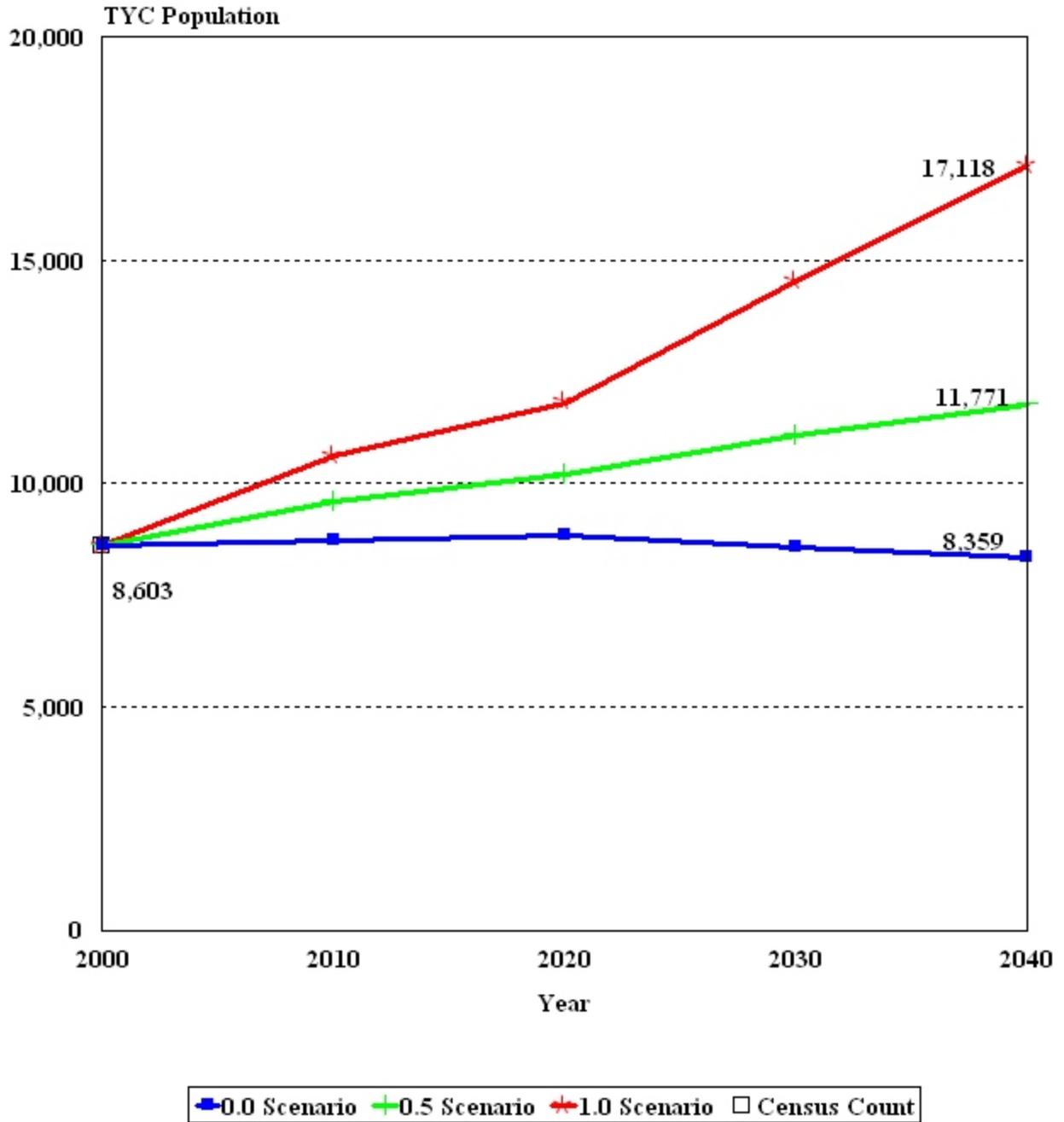
<b><u>Group</u></b>	<b><u>0.5 Scenario</u></b>	<b><u>1.0 Scenario</u></b>
Anglo	-11.1	-4.5
Black	31.9	62.2
Hispanic	172.5	386.5
Other	91.3	339.7

The percentage of all prisoners who would be Anglo by 2040 is between 17.8 percent (under the 0.5 scenario) and 13.1 percent (under the 1.0 scenario), Blacks between 37.2 and 31.5 percent, Hispanics between 44.5 and 54.6 percent, and Others between 0.5 and 0.8 percent (Figures 9.5 and 9.6).

Costs for TYC services would increase from nearly \$262 million in 2000 to roughly \$354 million under the 0.5 scenario and to \$510 million under the 1.0 scenario by 2040, and costs for prisons would increase from \$2.25 billion in 2000 to \$3.48 billion under the 0.5 scenario and to \$5.06 billion under the 1.0 scenario by 2040.

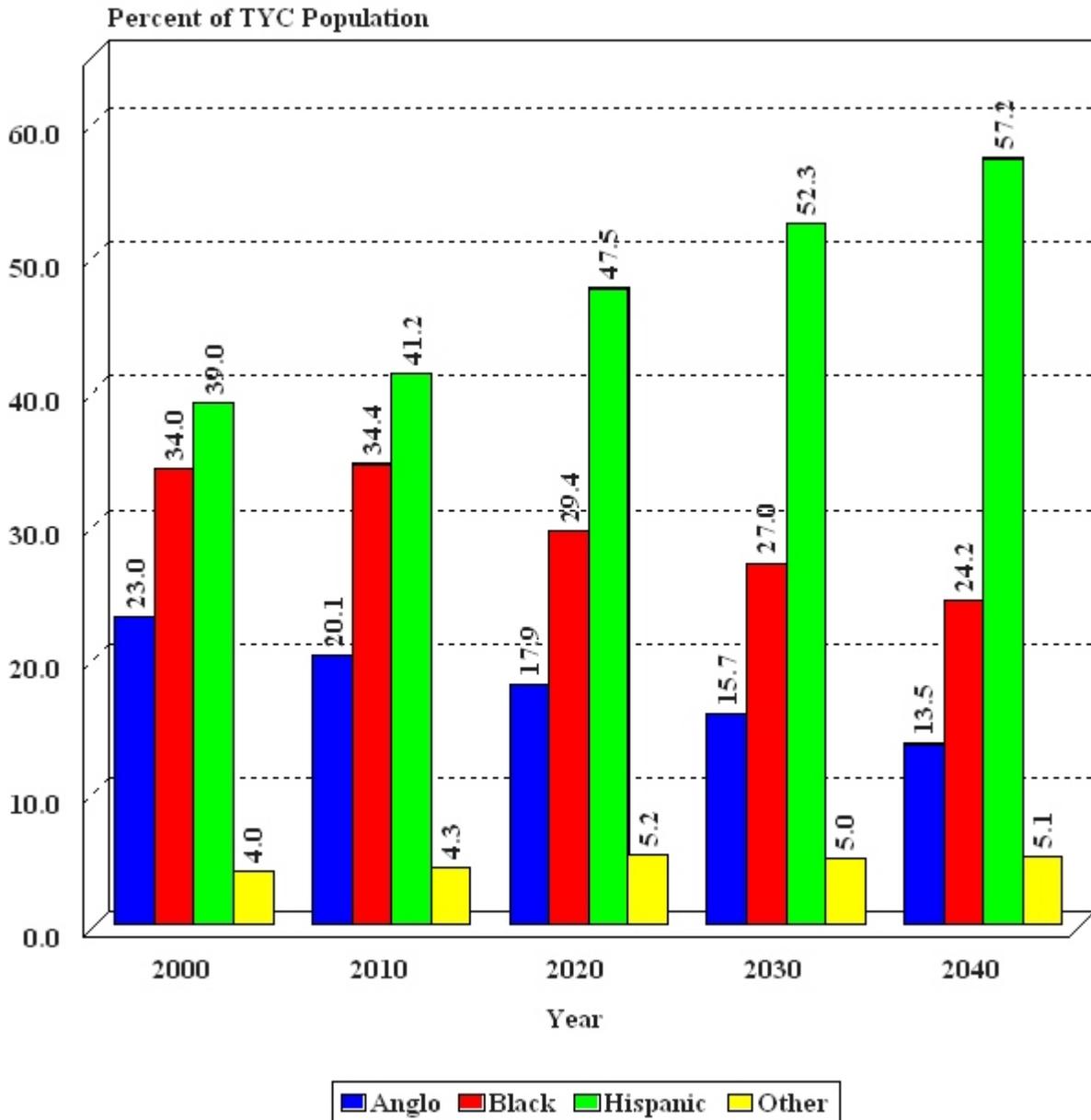
Figure 9.1

Total Texas Youth Commission Population in 2000 and Projections to 2040 for All Scenarios



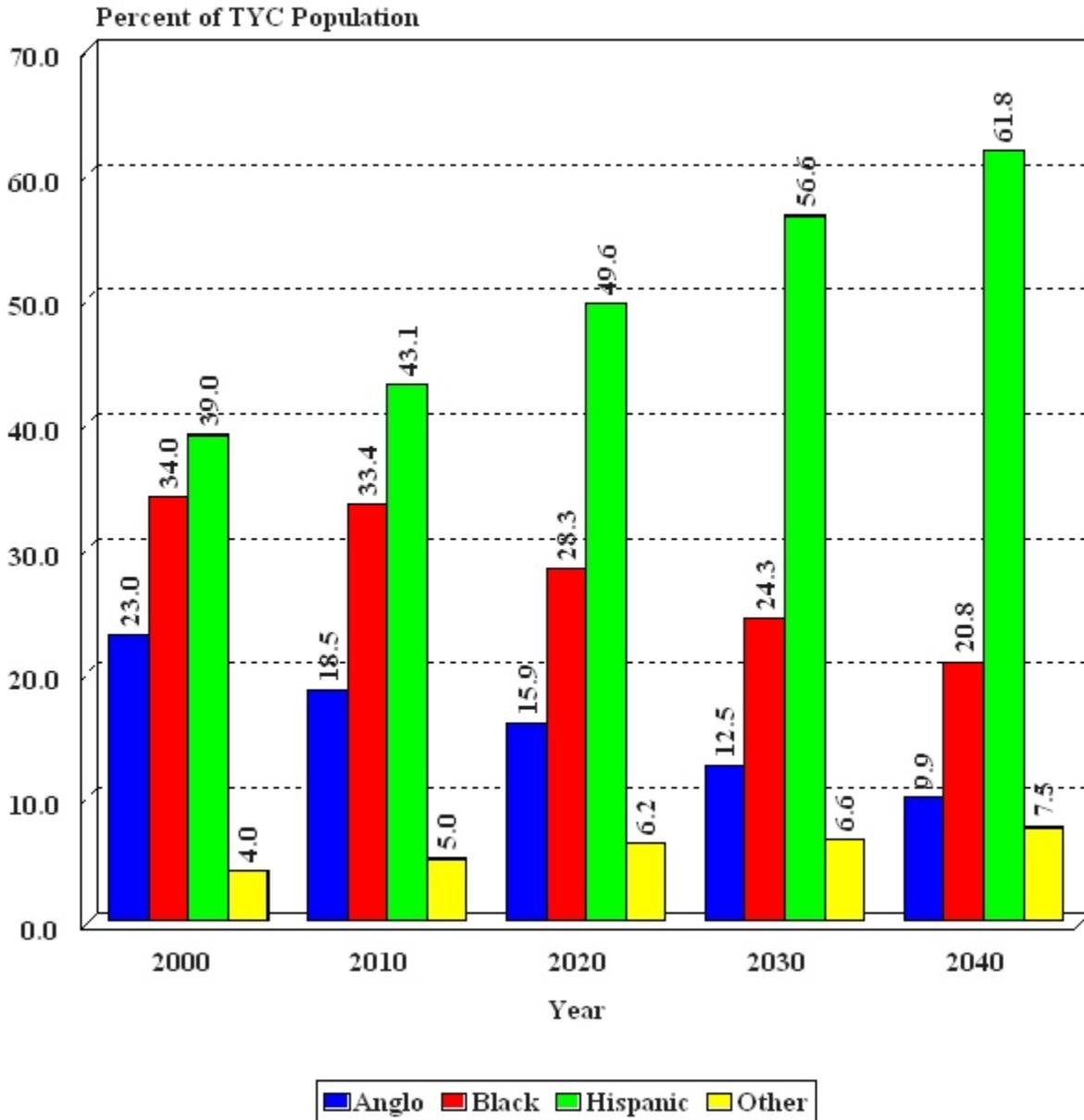
**Figure 9.2**

**Percent of the Texas Youth Commission Population by Race/Ethnicity in 2000 and Projections to 2040 (0.5 Scenario)**



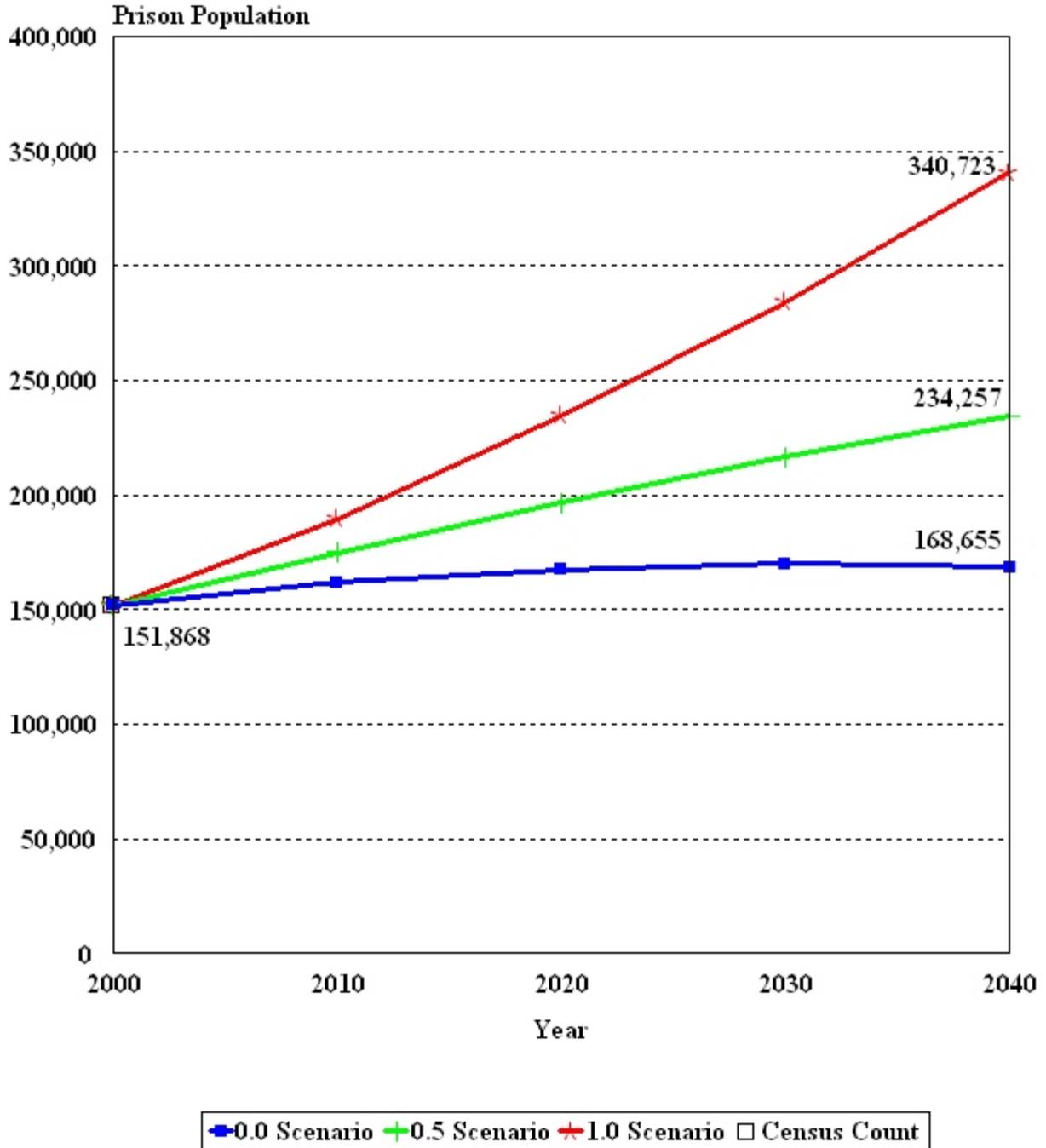
**Figure 9.3**

**Percent of the Texas Youth Commission Population by Race/Ethnicity in 2000 and Projections to 2040 (1.0 Scenario)**



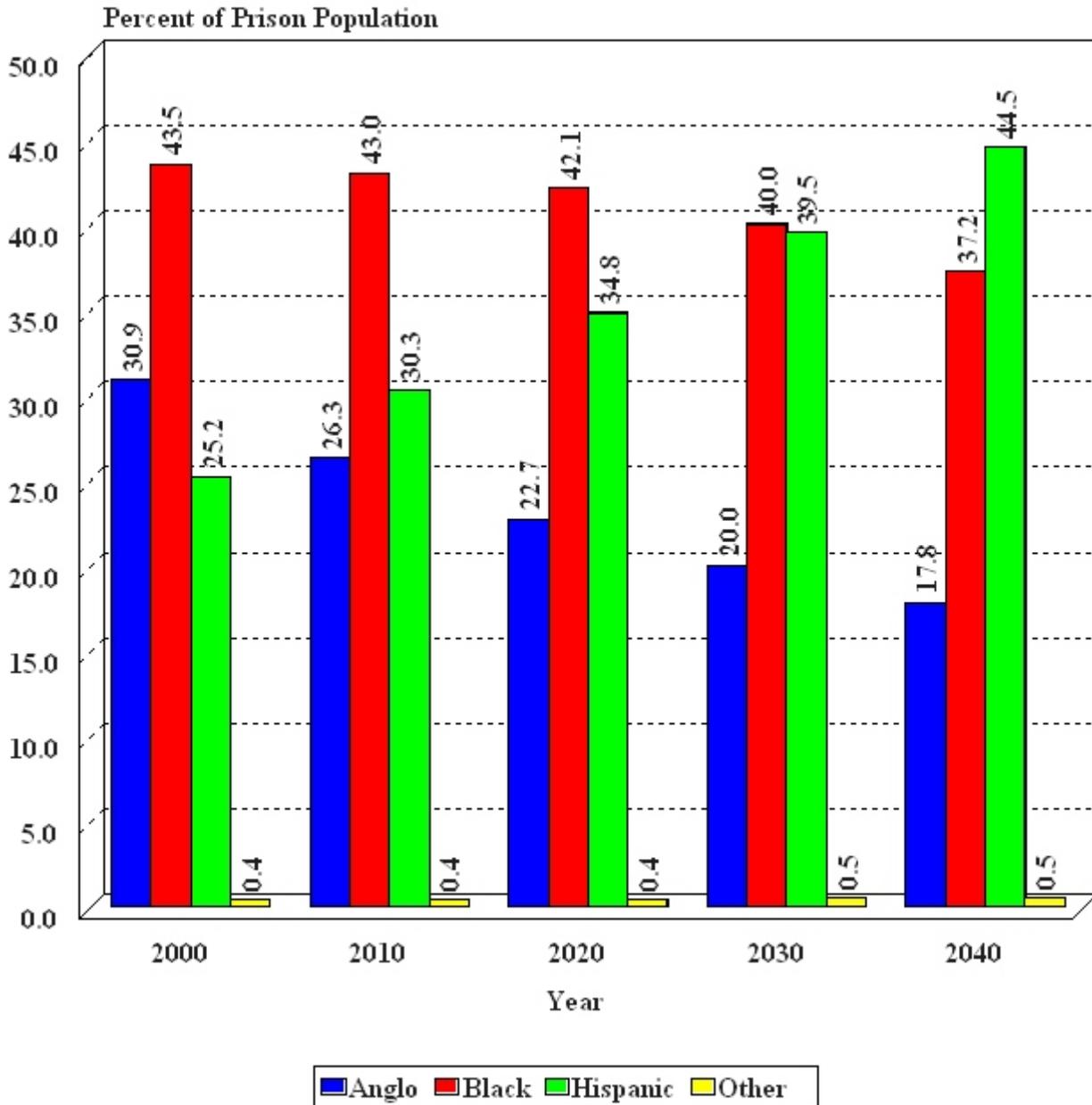
**Figure 9.4**

**Total Texas Prison Population in 2000 and Projections to 2040 for All Scenarios**



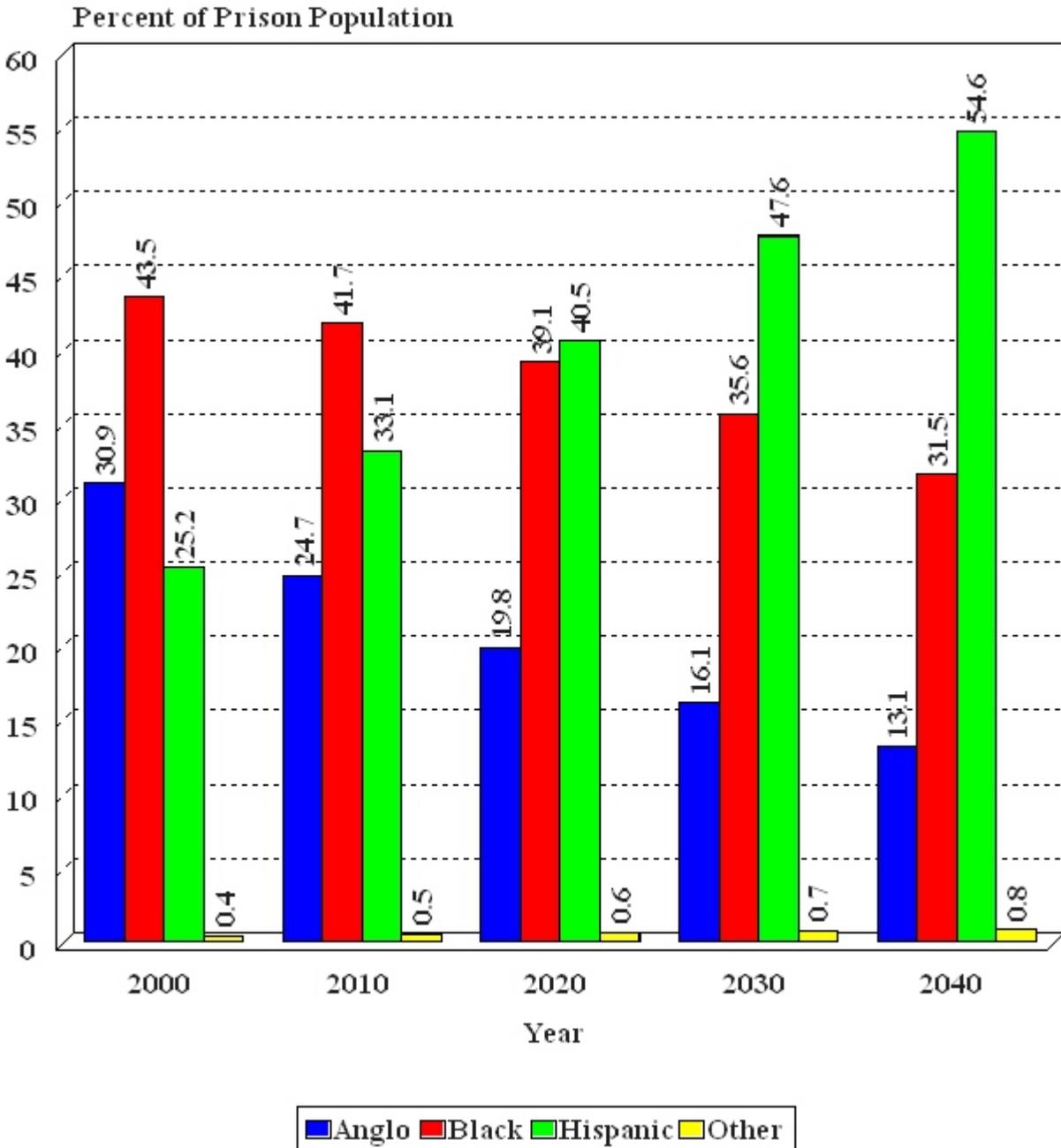
**Figure 9.5**

**Percent of the Texas Prison Population by Race/Ethnicity in 2000 and Projections to 2040 (0.5 Scenario)**



**Figure 9.6**

**Percent of the Texas Prison Population by Race/Ethnicity  
in 2000 and Projections to 2040 (1.0 Scenario)**



## **Chapter 10**

### **Summary, Implications, and Assessment of Alternative Futures**

This volume summarizes the potential effects of changes in the size and the age, race/ethnicity, and household composition of Texas population on socioeconomic factors and public services. The findings of this work must be utilized with the understanding that demographic change is only one of many factors affecting the socioeconomic and service characteristics examined. Similarly, the limitations entailed in projections of populations, households, and socioeconomic conditions and service participation must be recognized. Despite such limitations, we believe the work will be of interest to State public- and private-sector policy makers.

In this final section we describe the overarching population trends examined in the analysis, explicate the implications of several general alternative futures, and discuss some of the issues suggested by the analysis.

#### **Major Population and Socioeconomic Trends Impacting Texas**

##### ***The Projected Demographic Patterns Will Occur***

The population of Texas has increased rapidly with its rate of growth exceeding that in the nation in every decade since it became a state. It has also diversified rapidly such that its Anglo population was only 53 percent of the total population in 2000. Texas was not only the second largest state in the nation but also had the third largest Anglo population, second largest Black and Hispanic populations, and fourth largest population in the Other racial/ethnic group. Its population has aged; its median age, although younger than that in the nation, has increased in each of the last two decades. Its households, like those in the nation, tend to show the fastest rates of growth in nonfamily and single-parent categories.

The analyses presented here and in the full report project a continuation of such patterns, and in general, the pervasiveness of these patterns suggests that although the magnitude of the changes may not be exactly as projected, the direction of change is likely to be as projected. The trends suggest that the effects of a growing, diversifying, and aging population, and of a growing and diversifying base of households, will have clear implications for State characteristics and services in the coming decades.

### ***Growth, Aging, and Diversification Show Pervasive Effects***

The effects of rapid population growth are evident. The labor force; public elementary, secondary, and higher education enrollment; participation in TANF, Food Stamps, and Medicaid; and aggregate income, families in poverty, consumer expenditures, and state taxes all increase by at least 25 percent from 2000 to 2040 under the 0.5 scenario, and all except school enrollment by more than 50 percent. Under the 1.0 scenario, all of these areas increase by at least 75 percent. Growth in the population will lead to growth in service demand and to increases (although not necessarily per-household or per capita increases) in total resources in the coming years.

A comparison of rates of growth in services to the 67.9 percent rate of population growth from 2000 to 2040 under the 0.5 scenario and the 142.6 percent rate of growth under the 1.0 scenario and the 84.2 percent and 162.1 percent rates of growth in the number of households (Figures 10.1-10.3) shows the effects of demographic factors:

- The slower growth in the labor force, in school enrollments at all levels, and in TYC and prison populations compared to population change show the effects of the aging of the population.
- The rapid increases in the number of persons with diseases/disorders and disabilities, as well as the growth in households and housing expenditures, also reflect the aging of the population.
- The growth in the use of specialized labor force and educational programs; the increase in the number of persons in poverty and the increase in the number of TANF, Food Stamp, and Medicaid participants; and the slower-than-household rates of growth in income, consumer expenditures, net worth, and tax revenues show the effects of the rapid growth of non-Anglo populations, which have more limited socioeconomic resources.

The effects of racial/ethnic change are pervasive (Figures 10.4-10.6). For example, by 2040 under the 1.0 scenario, the population, householders, the labor force, elementary and secondary and college enrollment, aggregate household income, and consumer expenditures would be dominated by non-Anglos.

## **The Effects of Alternative Futures**

The effects noted above depend not only on demographic change but also on the relationships that exist between demographic and socioeconomic factors. If these relationships change, so may the implications of future demographic change.

In addition to the projections discussed above and in the complete report, we have examined several alternative futures varying the relationships between demographic and socioeconomic factors. In these alternatives, we did not change the projected demographic patterns, but we varied the socioeconomic differences that exist between key demographic groups. Specifically, we examined the effects of changing key socioeconomic differentials between racial/ethnic groups were examined. Two sets of alternative futures are presented below and in the complete report, one simply alters the differences between Anglos and Blacks and between Anglos and Hispanics, and one in which the effects of educational change are traced on socioeconomic factors.

### ***Changing the Differentials Between Anglos, Blacks, and Hispanics Could Lead to a Future with a Population that is Richer, Better Educated, and Less in Need of Public Services***

An examination of racial/ethnic differences indicates that the major socioeconomic differences are between Anglos (and sometimes persons from the Other racial/ethnic group) and Blacks and Hispanics. Anglos tend to have higher levels of education that translate into higher incomes (and lower levels of poverty) and with increased incomes come such factors as increased consumer expenditures, higher rates of home ownership, reduced levels of incarceration, and lower rates of use of human service and workforce training programs. The lower levels of education and income historically exhibited by Blacks and Hispanics lead to opposite patterns.

The implications of reducing differentials in Anglo and Black and Anglo and Hispanic rates of occurrence by half by 2020 and, alternatively, of completely eliminating the differentials between Anglo and Black and Anglo and Hispanic groups (that is, Blacks and Hispanics come to have Anglo rates) by 2020 were also examined. Rates for the Other population remain unchanged.

These alternative simulations suggest that such changes would have extensive effects (Figures 10.7-10.11). For example, under the 1.0 population projection scenario, the percent change from 2000 to 2040 in the baseline compared to the complete closure scenarios are:

- a 92.6 percent increase in the baseline scenario compared to a 172.2 percent increase in the complete closure scenario for total public community college and university enrollment and a 82.5 percent compared to a 195.2 percent increase for public university enrollment (which has relatively large Anglo-Black and Anglo-Hispanic enrollment rate differentials);
- a 99 percent compared to a 6.7 percent increase in the number of TYC clients;
- a 124.4 percent compared to a 35.7 percent increase in the prison population;
- a 130.5 percent compared to a 202.5 percent increase in aggregate household income and a decrease of 12.1 percent compared to an increase of 15.4 percent in average household income;
- a 274.0 percent compared to a 55.3 percent increase for family poverty;
- a 139.3 percent compared to a 171.0 percent increase in consumer expenditures; and
- a 130.5 percent compared to a 202.5 percent increase in State tax revenues (resulting in \$21.2 billion in additional revenue annually).

The data from these scenarios show that change in differentials among racial/ethnic groups could substantially alter the effects of population change on Texas. In particular, closure between Anglo, Black, and Hispanic groups could increase those effects generally perceived as positive (such as increased income) and reduce the negative effects (such as increases in human service and prison populations).

## **An Education Alternative**

### ***Increased Education Will Increase Levels of Socioeconomic Resources and Reduce Rates of Service Utilization***

One of the reasons for the emphasis placed on education is that it is so closely tied to socioeconomic success. For example, the average income for a household in the United States in 2000 in which the householder is not a high school graduate was \$28,974, for a high school graduate it was \$45,368 but for a college graduate it was \$84,029. Higher levels of education are related to socioeconomic success. Such success, in turn, tends to be associated with lower levels of participation in public services, particularly those services that are usually required by persons or households that have a lack of socioeconomic resources.

The implications of changing rates of educational attainment on selected service and socioeconomic factors were projected using three educational alternatives (Figures 10.12-10.19):

1. 2000 rates of attainment by race/ethnicity were assumed to prevail throughout the projection period (that is, the Anglo, Black, Hispanic, and Other population's 2000 educational attainment rates were assumed to continue unchanged from 2000 through 2040);
2. 1990-2000 percent change in the number of persons within each educational attainment category within each race/ethnicity group was assumed to continue for each decade from 2000 to 2040; and
3. Anglo proportions by attainment level were assumed to apply to all racial/ethnic groups (e.g., Anglo rates in 2010 were assumed to apply to all groups in 2010, Anglo rates in 2020 were assumed to apply to all groups in 2020, etc.).

These projections are not directly comparable to data presented elsewhere in the volume because they are limited to the population 25 years of age or older because available census data on educational attainment were limited to persons of such ages. Because of this restriction, the data can only be used comparatively to indicate the effects of increased educational attainment.

When compared to the scenario that assumes a continuation of 2000 rates, the scenario that assumes that the educational progression of 1990-2000 continues would result in a population 25 years of age or older in 2040 under the 1.0 scenario that had:

- \$143 billion more total household income per year;
- \$100 billion more in consumer expenditures;
- prison, TANF, Food Stamp and Medicaid populations and expenditures that would be 33 percent smaller (savings of \$1.7 billion for prisons, \$84 million for TANF, \$47 million for Food Stamps, \$1.0 billion for Medicaid, a total of nearly \$2.8 billion per year).

Under the scenario that assumes Anglo rates of educational attainment, the differences relative to the 2000 rates of attainment scenario would be:

- \$317 billion more in total household income per year;
- \$224 billion more in consumer expenditures;
- prison, TANF, Food Stamp, and Medicaid populations and expenditures that would be 60 percent smaller (savings relative to baseline levels of more than \$3.0 billion for prisons, nearly \$214 million for TANF, nearly \$123 million for Food Stamps, and nearly \$2.2 billion for Medicaid, with total savings approaching \$5.5 billion per year).

Education appears to pay not only through increased income and consumer expenditures but also through reduced public costs. Education is only one answer to changing the socioeconomic differentials among racial/ethnic groups in Texas, but it may have substantial potential to address the challenges likely to result from the projected future population patterns in the State.

## **Implications for the Future of Texas**

The demographic and socioeconomic characteristics of Texas will change rapidly in the coming years.

### ***Population Growth Will Mean Increased Public Service Demands and Expanding Markets for Texas***

For public-sector decision makers, the change in the size of Texas population will be of substantial importance. Growth likely will be extensive but not everywhere the same. Many parts of Texas that have shown rapid growth will likely continue to do so but others may show reduced growth and still others renewed growth. These projections suggest that variation in growth may be substantial but that growth is likely in the State as a whole, leading to the need to anticipate new infrastructure, service, and other requirements. Careful examinations of change in the characteristics of populations are also essential. Different types of populations will have different types of needs that will require detailed analyses and preparation to ensure effective service delivery. Under a wide variety of alternative scenarios, Texas population growth seems likely to continue to form a challenge for the public sector.

For the private sector, Texas population growth will lead to continuing expansion in markets for nearly all types of goods and services. Market niches tied to the unique demographics of Texas will likely become of increasing importance, and there seems little doubt that the variation in population growth across the State will necessitate careful market analyses. Texas will remain a growing market during periods in which many other states may show only marginal growth, and the Texas population increase suggests substantial private-sector opportunities.

### ***The Aging of the Population Will Create Extensive Demands for Health and Related Services and Markets Increasingly Oriented to the Elderly, But Anglo and Non-Anglo Differences Will Be Evident***

The aging of the population will have many of the same effects in Texas as in other parts of the nation, with a growing elderly population placing increased demands on health care, long term care, and other services. At the same time, the aging process in Texas is tempered by relatively rapid growth in young, largely non-Anglo populations, meaning that Texas is likely to remain somewhat younger

than many other parts of the nation. The marked age differentials between Anglos and non-Anglos suggest that the elderly population of Texas will be disproportionately (to the total population) Anglo, while its younger population will be disproportionately non-Anglo.

For public-sector decision makers, this aging factor suggests that increasing parts of State and local service demands and budgets will involve health, long-term care, and other needs of older populations. In Texas, as in nearly all other parts of the nation, the needs of the rapidly expanding elderly population are likely to place pressures on other service areas that are more directly affected by the slower growth in younger populations. For Texas, however, there is the potential for tension between the needs of the different age groups to be accentuated by differences in race/ethnicity.

For the private sector, the realities of the Texas age structure suggest that Texas, like the rest of the nation, will be a growing market for health care and other services for the elderly. The fact that its age structure is marked by substantial differentials in race/ethnicity may also suggest that Texas' young and older markets will be increasingly distinct, with markets for children and young adults also becoming increasingly non-Anglo markets while markets for older persons remain more closely tied to Anglo populations.

### ***Growth in the Number of Households Will Be Extensive, as Will the Diversification of Households***

The number of Texas households has increased and households have diversified rapidly. Although these patterns may partially abate effects of projected changes in household form, the overall increase and diversification of Texas households are likely to continue. Because single-parent and other nontraditional forms of households often have higher levels of use of public services, patterns of household change may accentuate public-sector service requirements in the coming years, and serving Texas households will increasingly require serving diverse forms of households with a diverse range of services.

For the private sector, projected patterns of growth in the number of households in Texas suggest that the State will remain a strong market for goods and services and may represent a stronger market for family-oriented products than that in many other parts of the nation. As with aging effects, the fact that married-couple families are more likely to be concentrated in specific racial/ethnic

groups suggests additional needs for specialized products. Household change will present a variety of opportunities for the private sector of Texas.

***The Pervasive Racial/Ethnic Diversification of Texas Population Means that the Future of Texas Will Be Increasingly Tied to its Non-Anglo Populations***

The analysis presented here shows that the diversification of Texas is the dominant demographic pattern impacting the State. Texas will become less than one-half Anglo in the next few years and is likely to have an Hispanic majority population by 2040 (with only one-third to one-quarter of the population being Anglo by 2040 and between 52 and 59 percent being Hispanic). Given the current socioeconomic differentials among racial/ethnic groups, this growing diversity presents a major challenge to Texas.

The non-Anglo populations of Texas will increasingly become the Texas population. This pattern suggests that the State's future will be increasingly tied to its non-Anglo populations and that the way non-Anglo populations grow and change will largely determine the future of Texas.

For the public sector, unless the socioeconomic differences among racial/ethnic groups change, the growth in non-Anglo populations will increase the demand for nearly all forms of State services and result in a relative reduction in the resources available to pay for these services.

For the private sector, increasing diversity means that Texas will be a major and growing market for many forms of racial/ethnically distinct products. Texas is a major Hispanic market and will likely become increasingly so in the coming years, but it is also the state with the second largest Black population and fourth largest population of persons from the Other racial/ethnic group. Texas demographics make it a major market area for the development of increasingly diverse and culturally oriented goods and services.

***Unless Socioeconomic Differentials Among Demographic Subgroups Change Texas Will Be Poorer and Less Competitive in the Future than It Is Today***

Socioeconomic differences in a population are a product of a wide variety of historical, discriminatory, and other factors and are related to, but not necessarily dictated by, demographic factors. Population change leads to predictable patterns

of change in socioeconomic conditions to the extent that socioeconomic differences among population subgroups remain unchanged.

The baseline patterns of population change presented here suggest that, in the absence of changes in the socioeconomic resources of population groups in Texas that show reduced levels of education, reduced incomes, increased levels of poverty, and related increased rates of use of a variety of State services, demographic change in Texas is likely to produce socioeconomic change. Under these baseline conditions of population change, Texas would have a general population that would be poorer, less well educated, and more in need of numerous forms of State services than its present population but would be less able to support such services. It would have a population that is likely to be less competitive in the increasingly international labor and other markets of the world.

***If Socioeconomic Differentials Were Reduced or Eliminated, Texas' Location and its Younger, Diverse Population Could Provide It with a Competitive Advantage in the Coming Decades***

If socioeconomic differentials between demographic groups were to be reduced through increased education and other means, Texas population growth could be a source of increased private- and public-sector resource growth. Coupled with such growth would be increased competitiveness and a diverse population that might well have a competitive advantage relative to that in other states in competing in international markets.

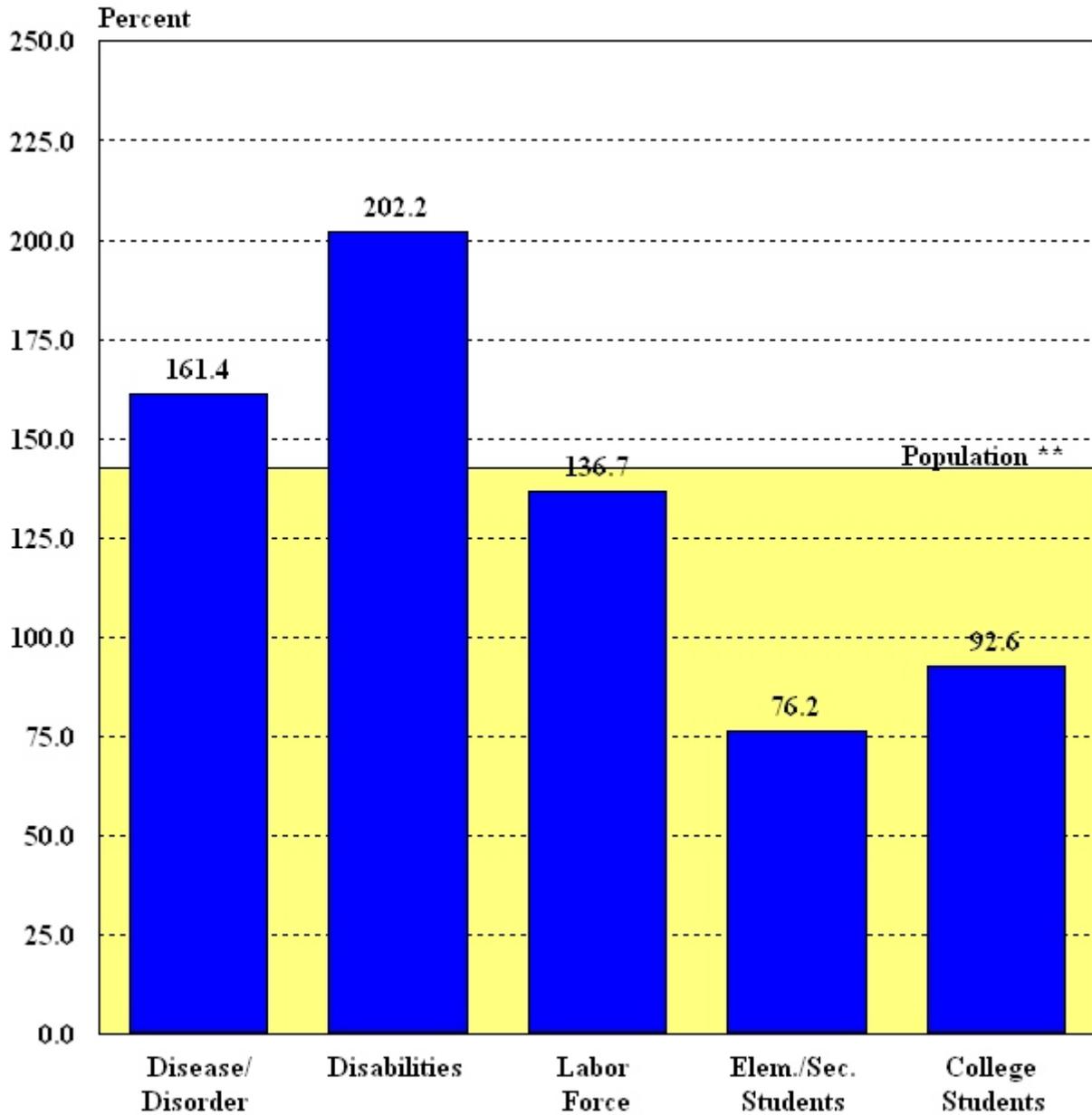
**Conclusion**

***Demography is Not Destiny, but Adequately Addressing Demographic Change May Be the Major Challenge for Texas in the 21<sup>st</sup> Century***

Demography is not destiny but it plays an important role in determining the future. In many ways, how well Texas meets the challenges of the 21<sup>st</sup> Century may well depend on the extent to which it can alter the determinative effects of its changing population and ensure that population growth also leads to extensive and inclusive patterns of socioeconomic growth.

**Figure 10.1**

**Percent Change in Selected Factors Compared to Percent Change in Population, 2000 to 2040\***

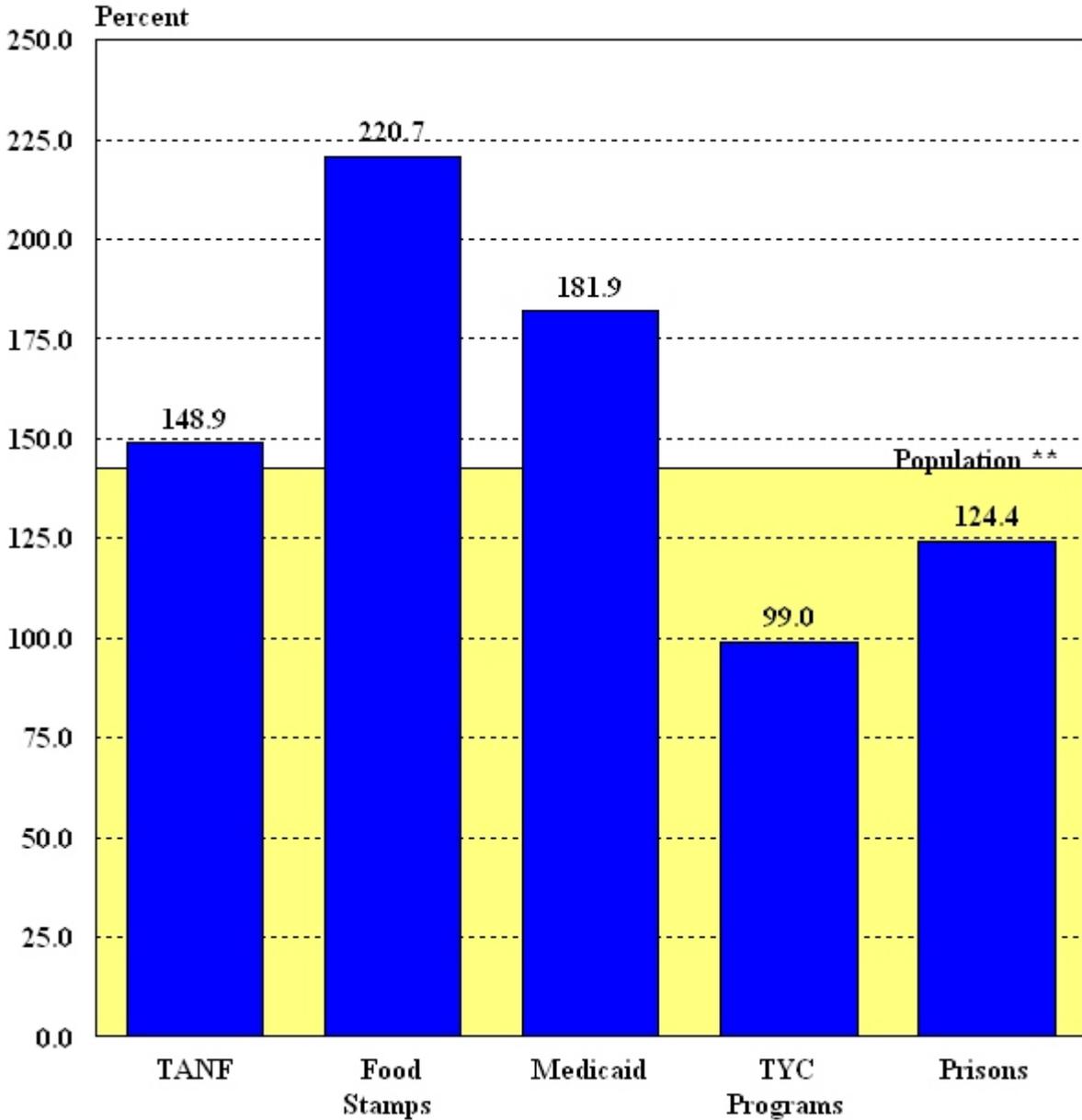


\* Projections are shown for the 1.0 scenario

\*\* Yellow background indicates population change (142.6%)

**Figure 10.2**

**Percent Change in Selected Factors Compared to Percent Change in Population, 2000 to 2040\***

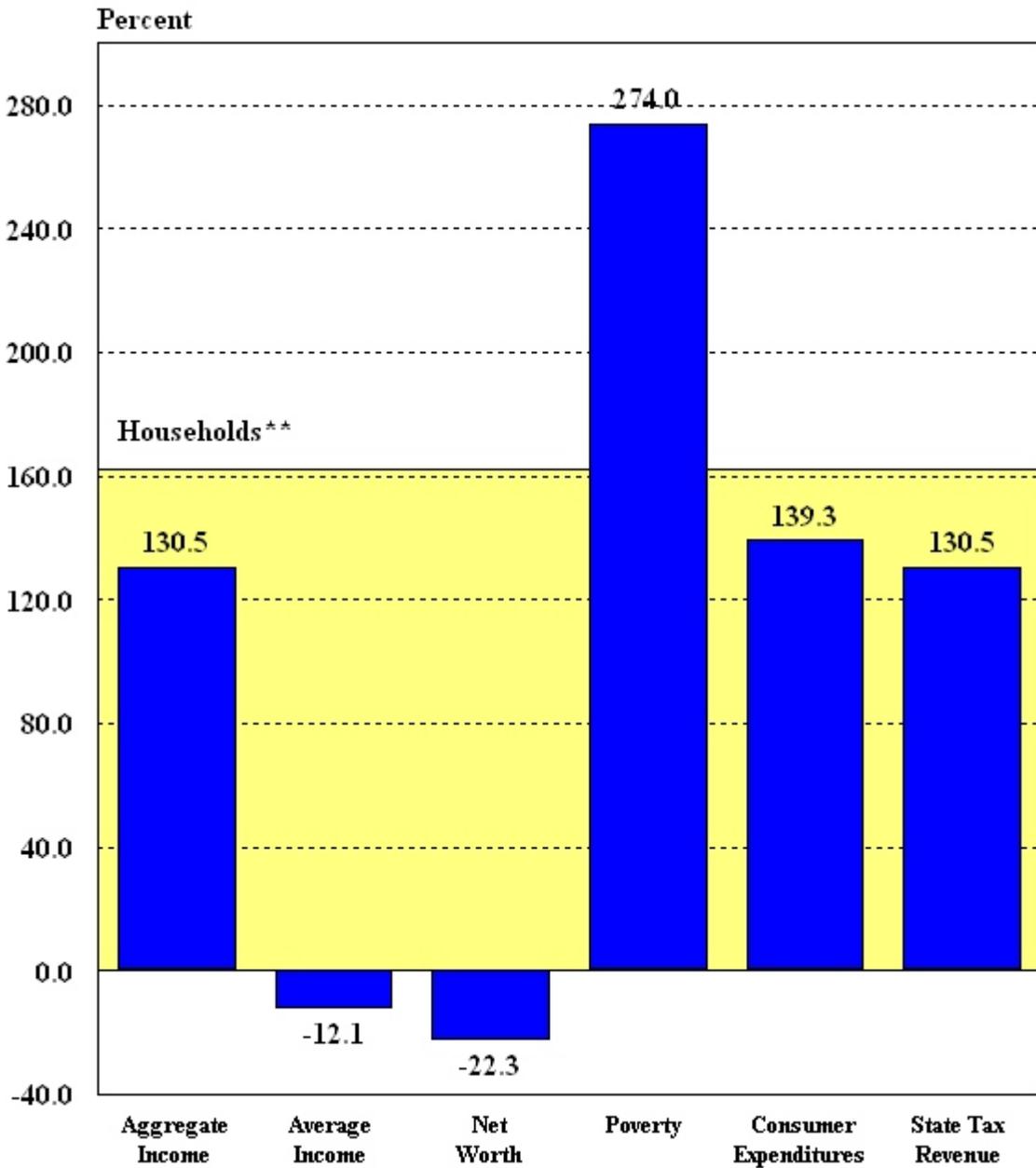


\* Projections are shown for the 1.0 scenario

\*\* Yellow background indicates population change (142.6%)

**Figure 10.3**

**Percent Change in Socioeconomic Resources  
Compared to Percent Change in Households,  
2000 to 2040\***

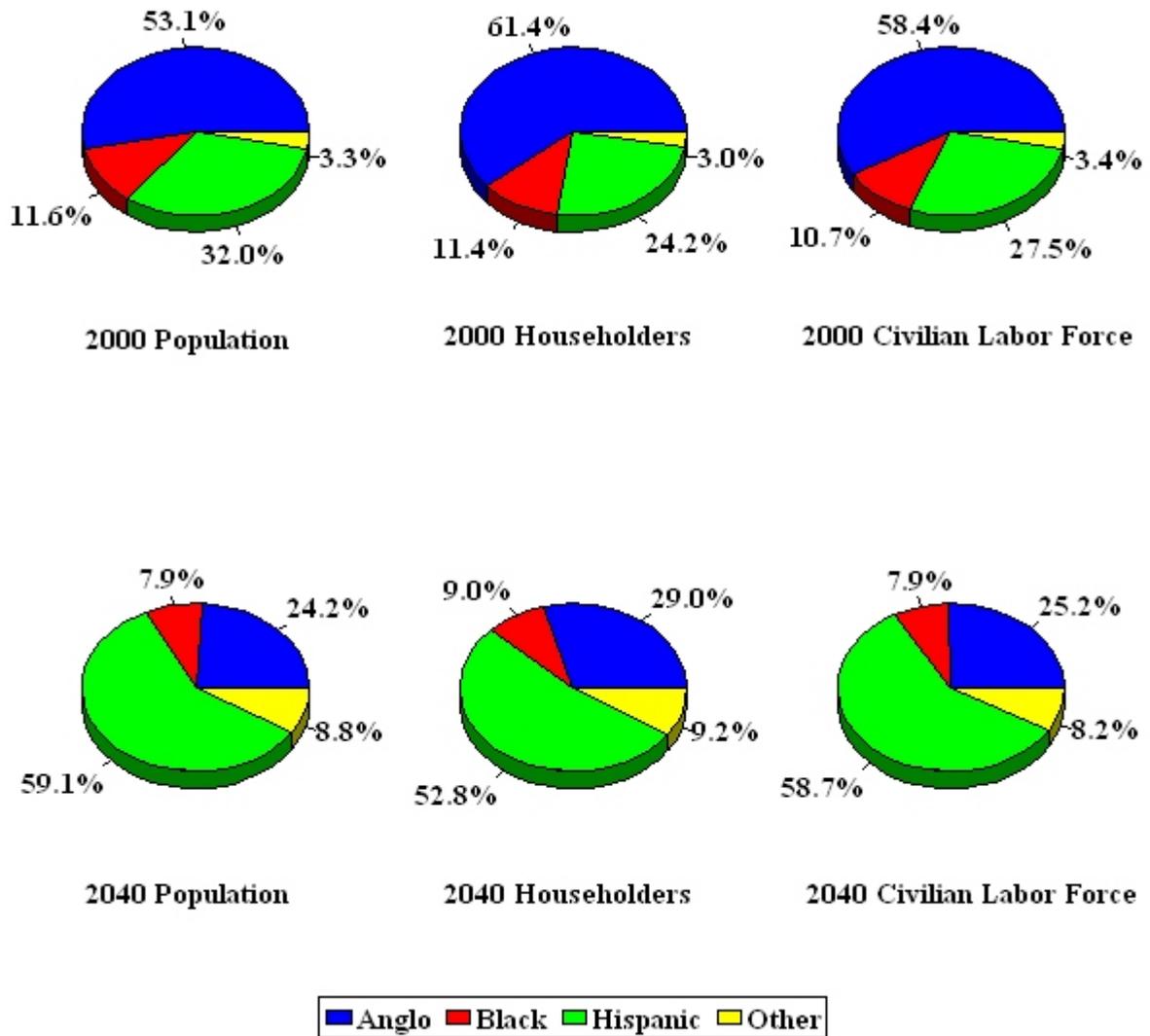


\* Projections are shown for the 1.0 scenario

\*\* Yellow background indicates household change (162.1%)

**Figure 10.4**

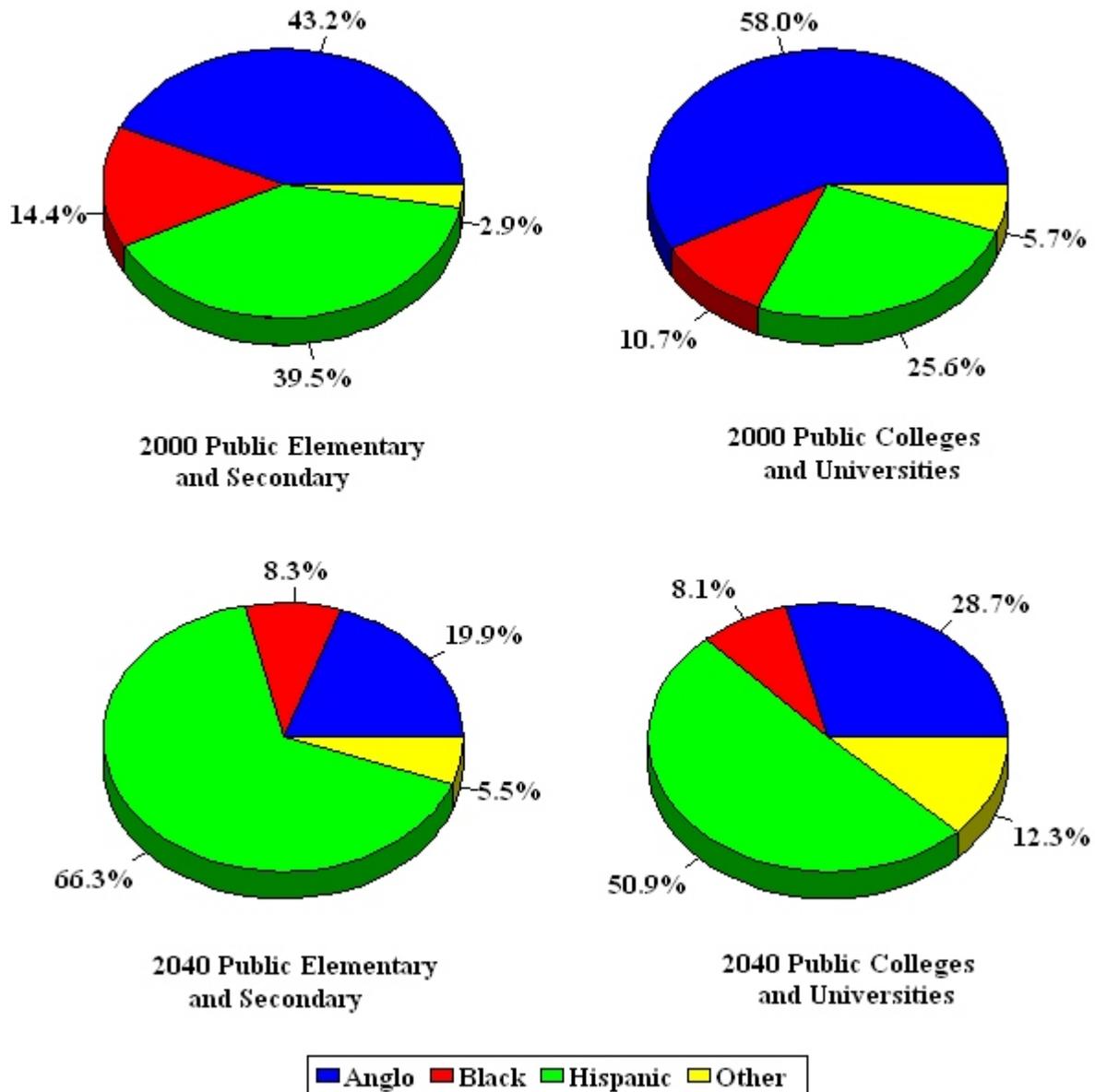
**Ethnic Diversity of the Population, Householders, and Labor Force in Texas, 2000 and 2040\***



\* Projections are shown for the 1.0 scenario

**Figure 10.5**

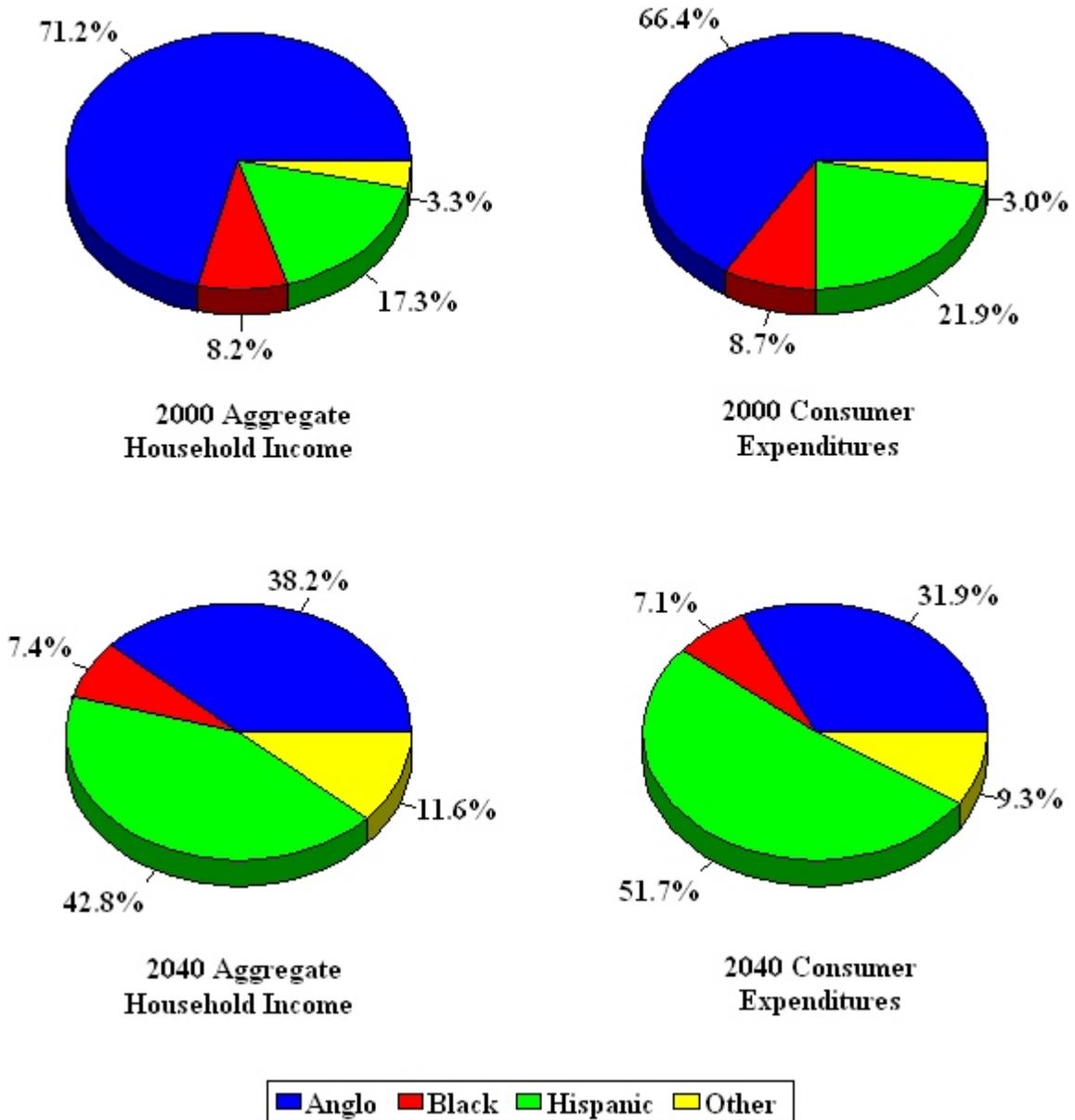
**Ethnic Diversity of the Population Enrolled in Public Elementary and Secondary Schools and Colleges and Universities in Texas, 2000 and 2040\***



\* Projections are shown for the 1.0 scenario

Figure 10.6

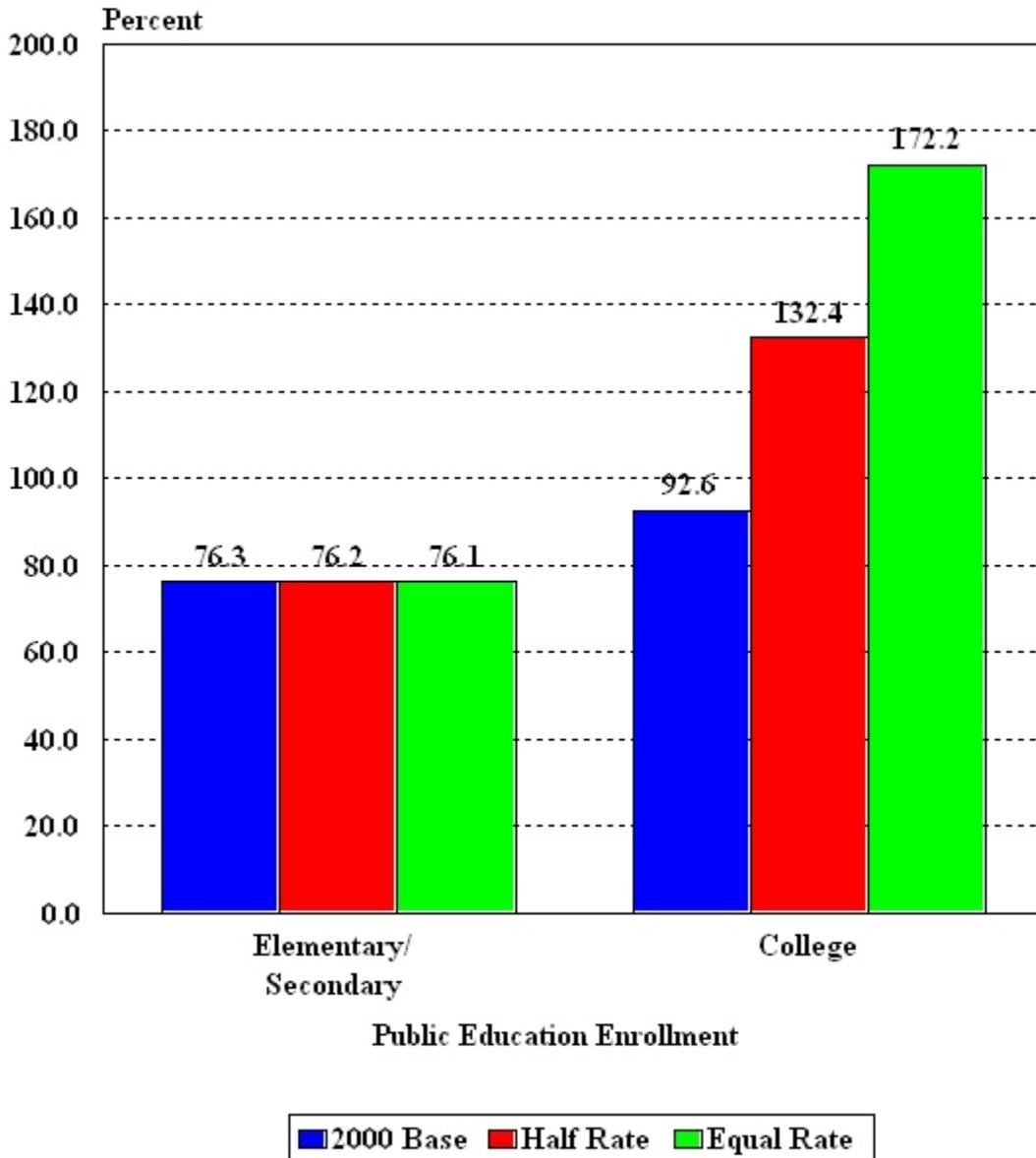
Ethnic Diversity of Household Income and Consumer Expenditures in Texas, 2000 and 2040\*



\* Projections are shown for the 1.0 scenario

**Figure 10.7**

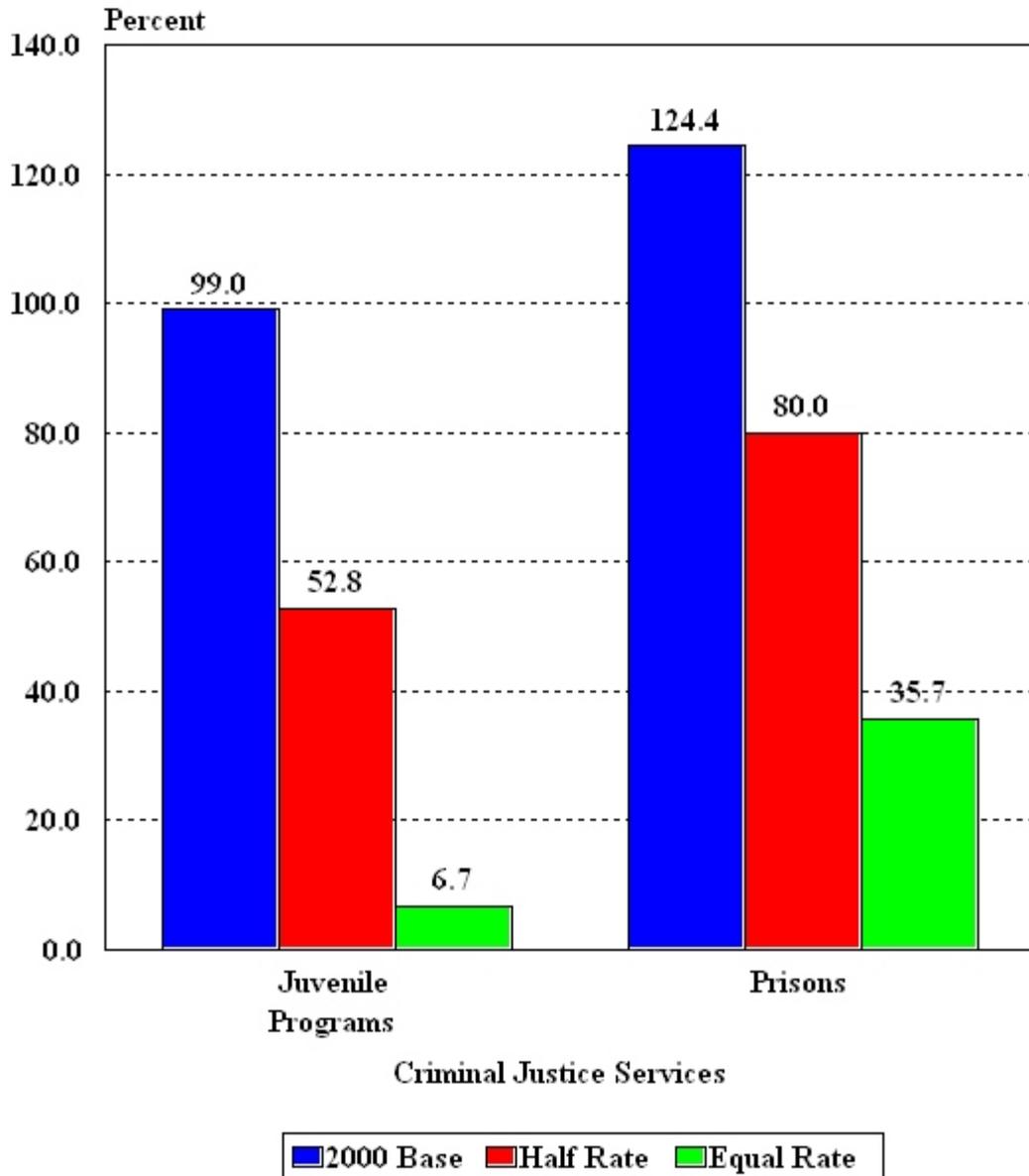
**Percent Change in Public Education Enrollment  
in Texas from 2000 to 2040 Under the Base  
Projection Scenario and Alternative Scenarios of  
Black and Hispanic Rates at Half the Anglo  
Rate and Equal to the Anglo Rate by 2020\***



\* Projections are shown for the 1.0 scenario

**Figure 10.8**

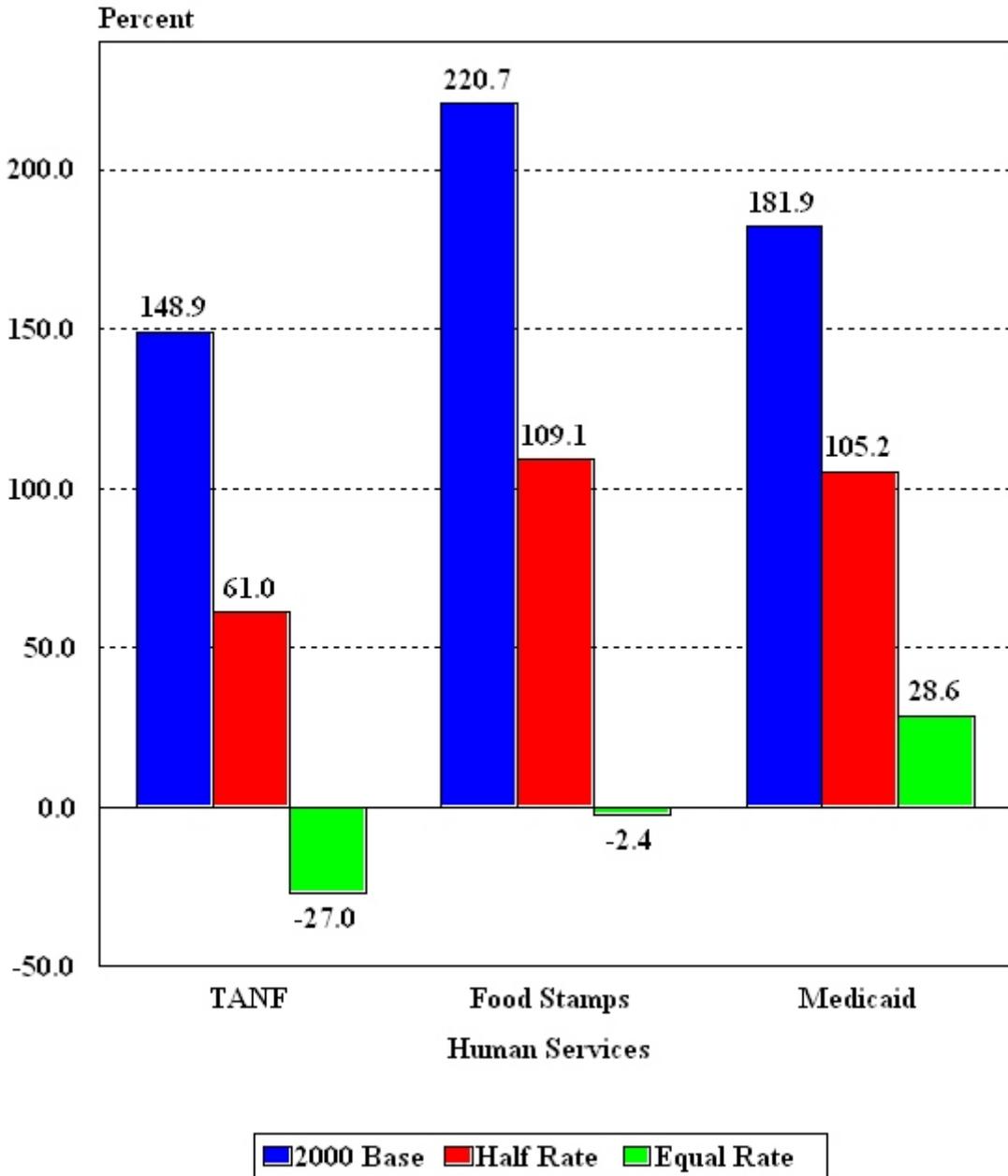
**Percent Change in Criminal Justice Services in Texas  
from 2000 to 2040 Under the Base Projection  
Scenario and Alternative Scenarios of Black and  
Hispanic Rates at Half the Anglo Rate and Equal  
to the Anglo Rate by 2020\***



\* Projections are shown for the 1.0 scenario

**Figure 10.9**

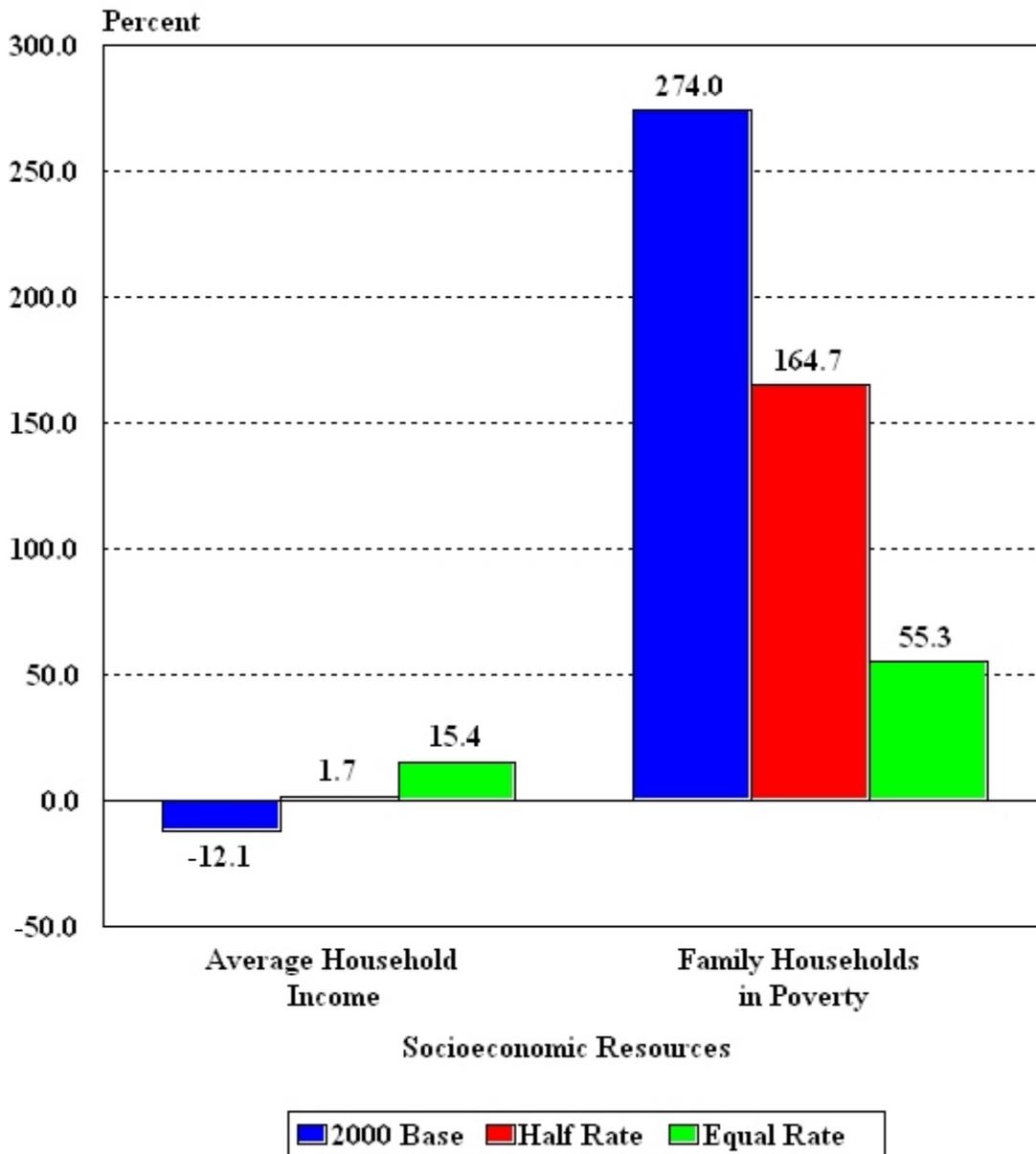
**Percent Change in Human Services in Texas from 2000 to 2040 Under the Base Projection Scenario and Alternative Scenarios of Black and Hispanic Rates at Half the Anglo Rate and Equal to the Anglo Rate by 2020\***



\* Projections are shown for the 1.0 scenario

**Figure 10.10**

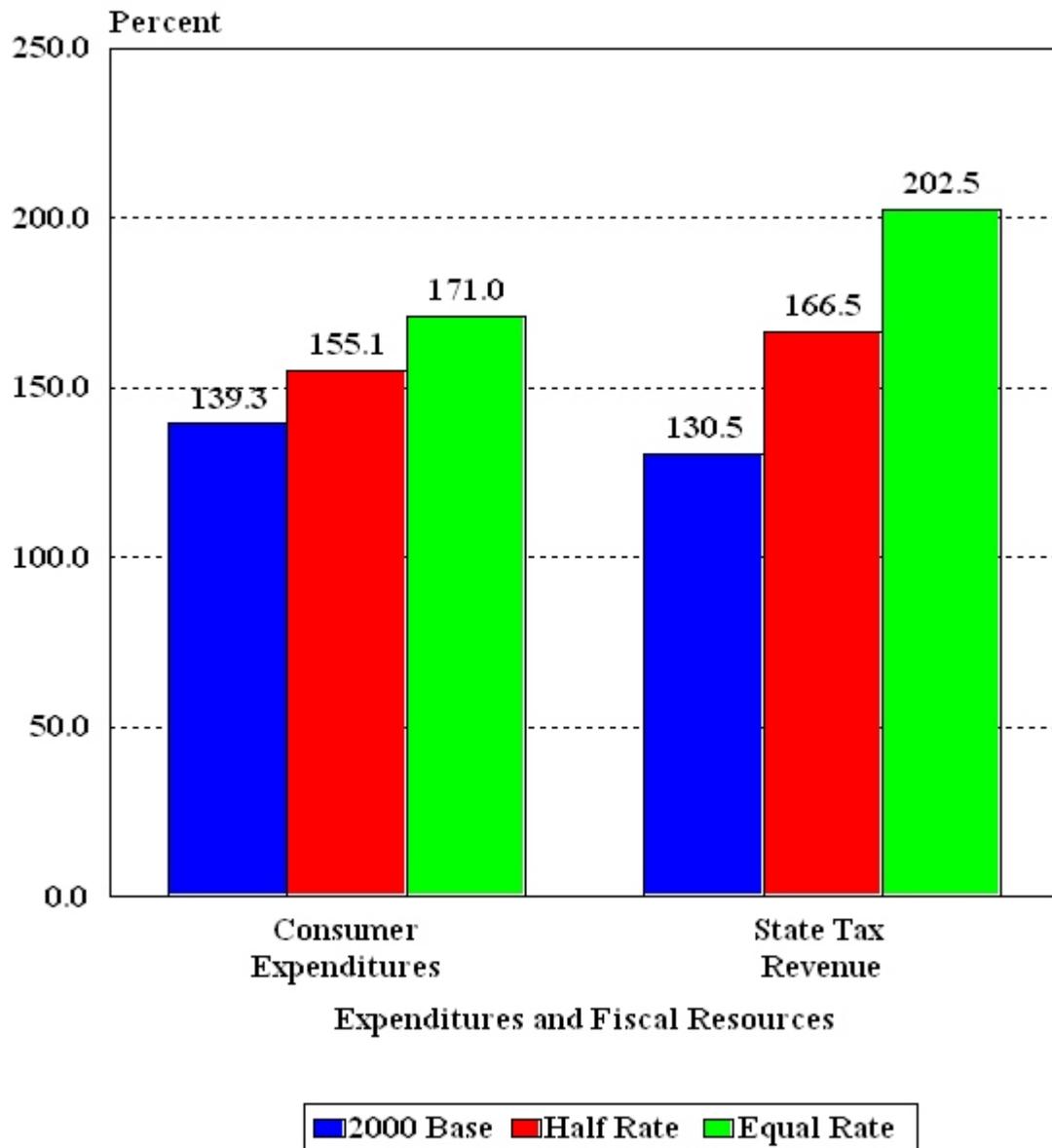
**Percent Change in Socioeconomic Resources in Texas from 2000 to 2040 Under the Base Projection Scenario and Alternative Scenarios of Black and Hispanic Rates at Half the Anglo Rate and Equal to the Anglo Rate by 2020\***



\* Projections are shown for the 1.0 scenario

**Figure 10.11**

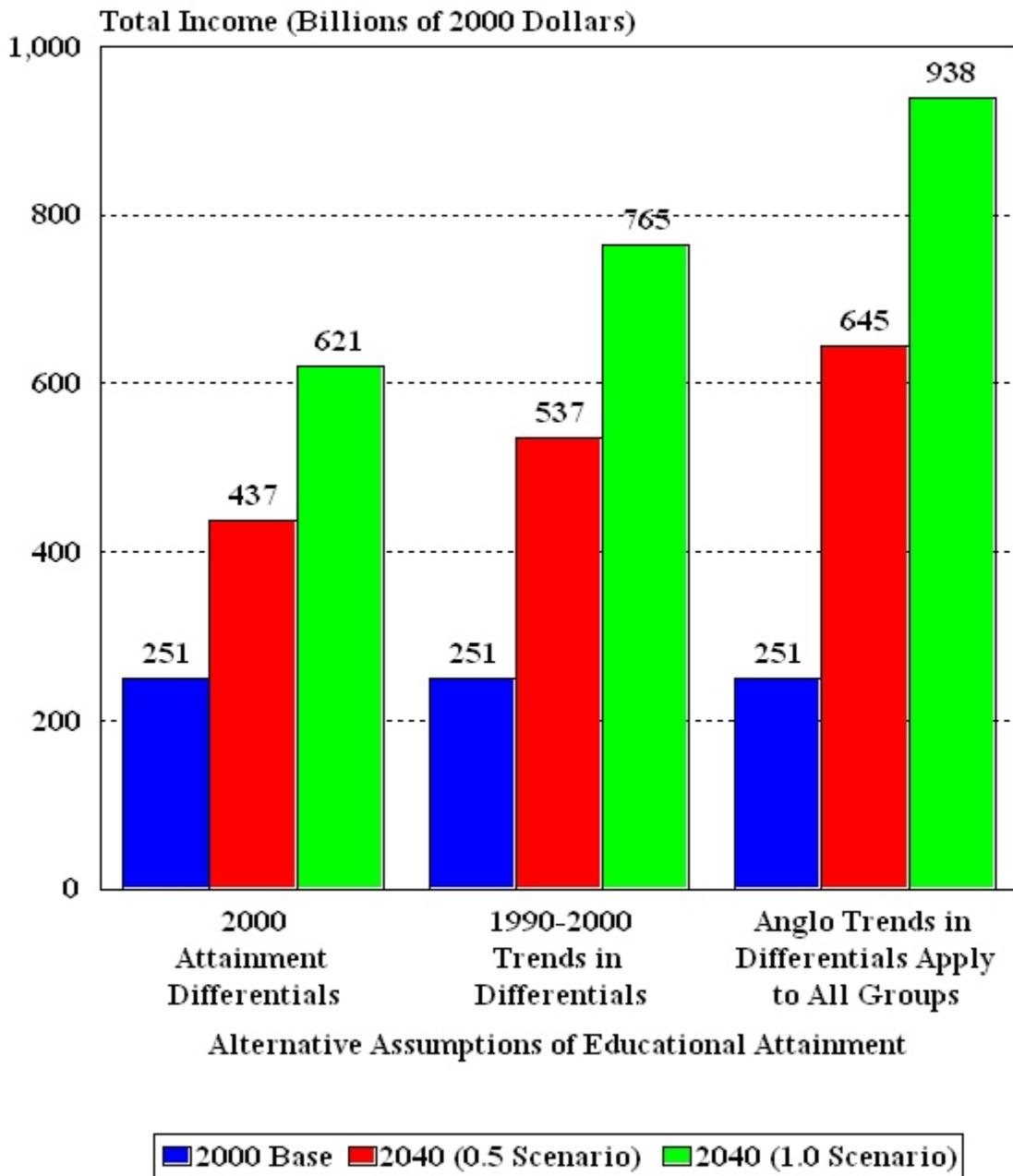
**Percent Change in Expenditures and Fiscal Resources  
in Texas from 2000 to 2040 Under the Base Projection  
Scenario and Alternative Scenarios of Black and  
Hispanic Rates at Half the Anglo Rate and Equal  
to the Anglo Rate by 2020\***



\* Projections are shown for the 1.0 scenario

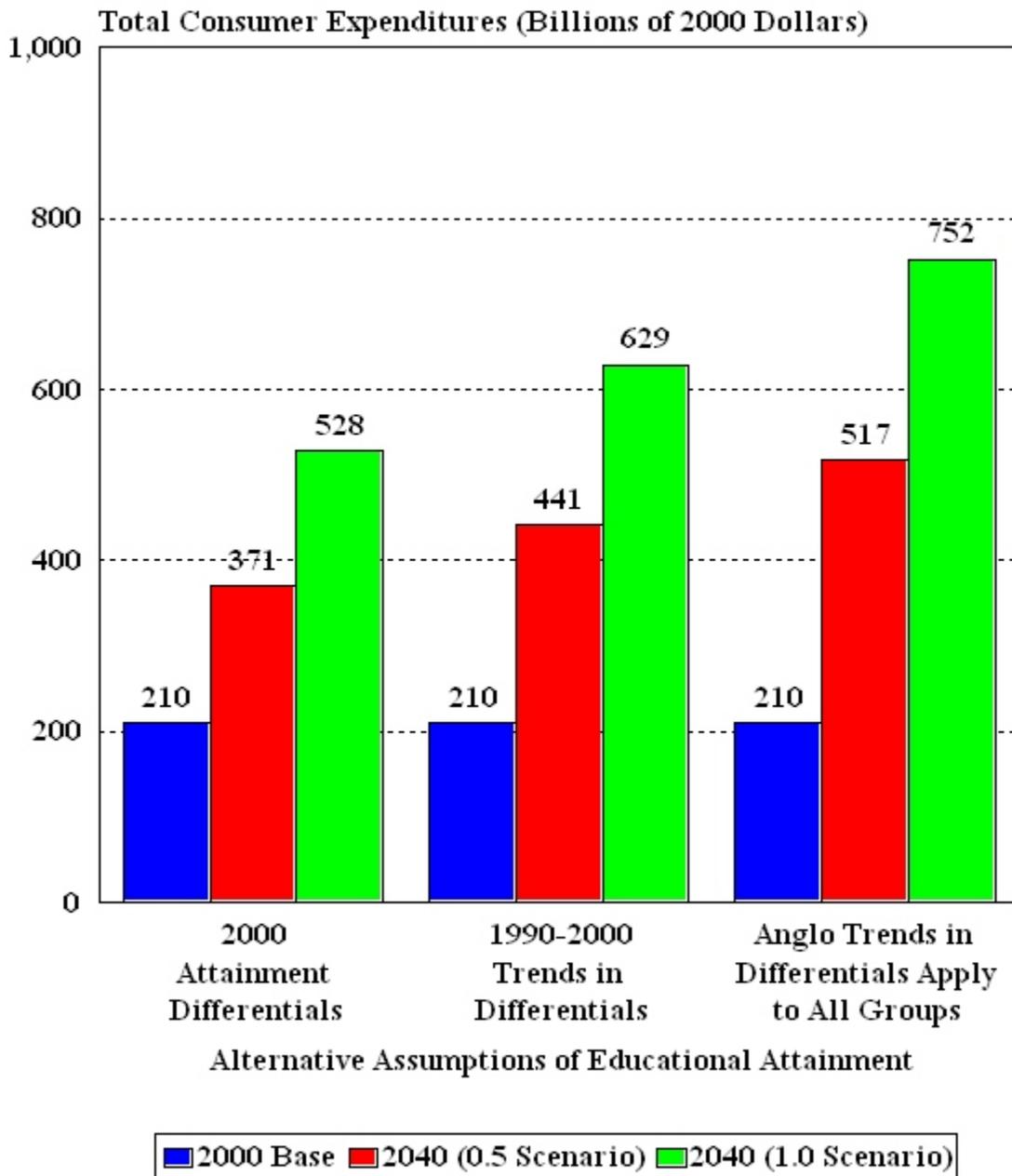
**Figure 10.12**

**Aggregate Household Income for Persons 25+ Years of Age in Texas in 2000 and Projections for 2040 Under Alternative Assumptions of Educational Attainment and Alternative Population Projection Scenarios**



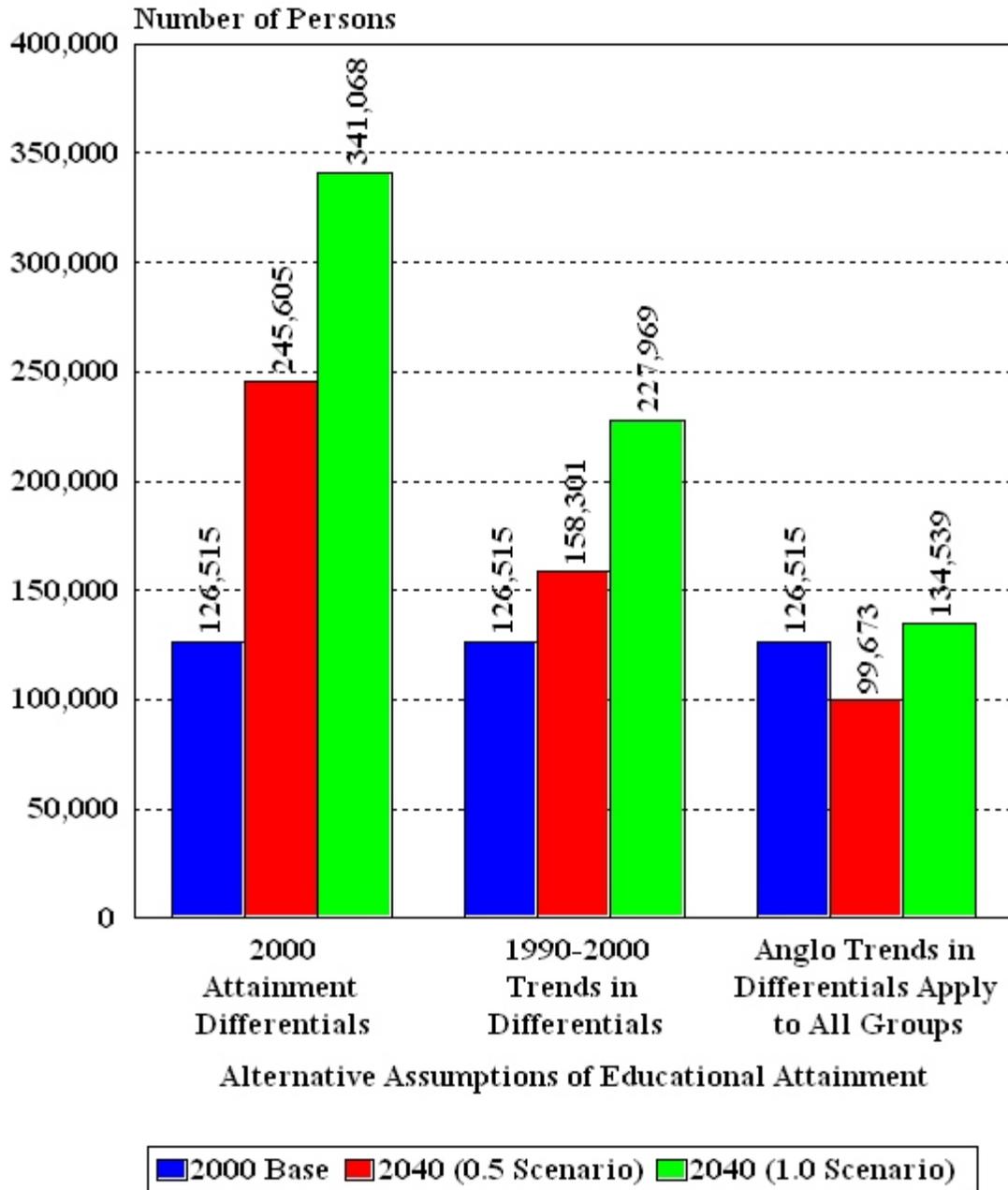
**Figure 10.13**

**Consumer Expenditures for Persons 25+ Years of Age in Texas in 2000 and Projections for 2040 Under Alternative Assumptions of Educational Attainment and Alternative Population Projection Scenarios**



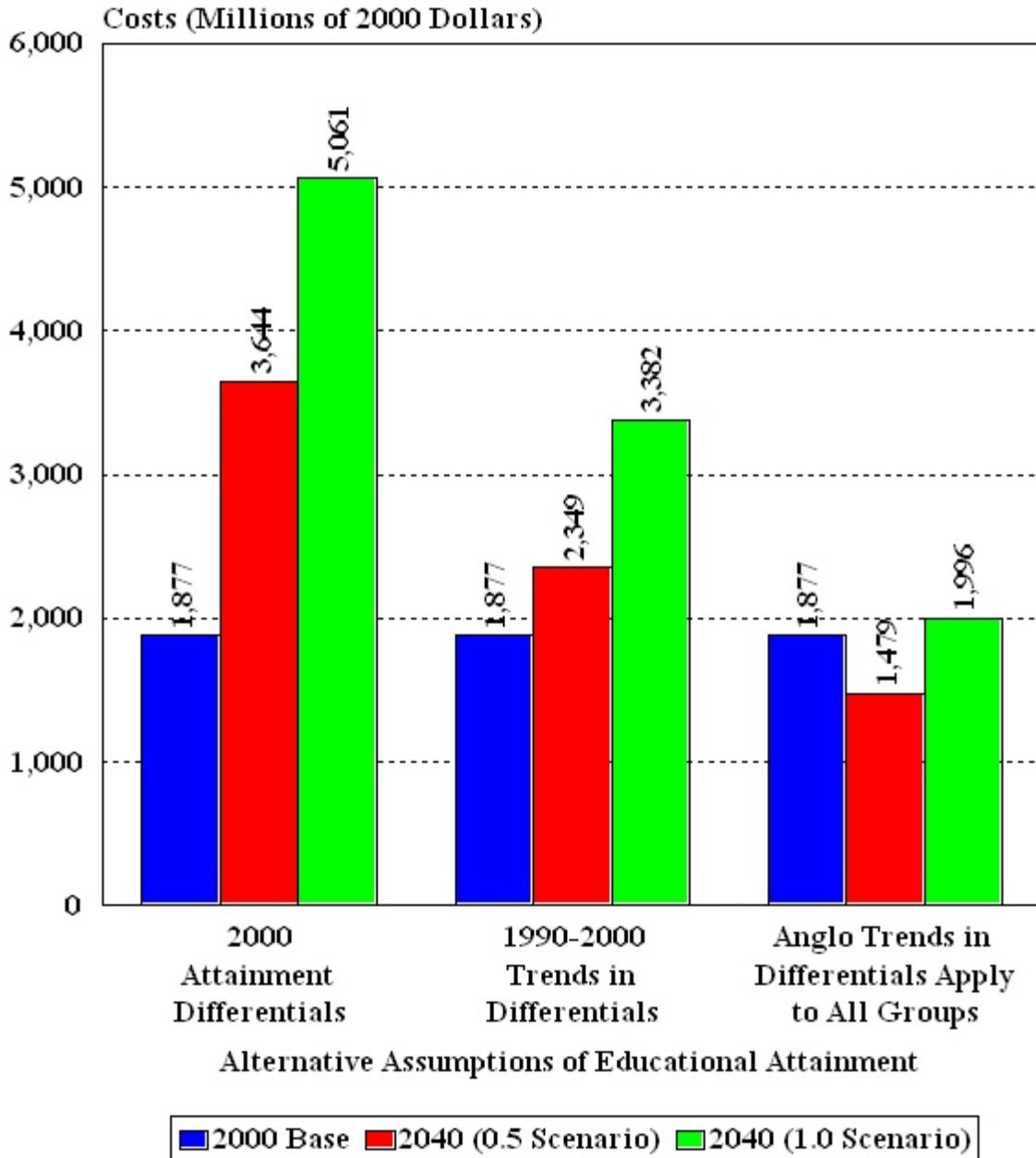
**Figure 10.14**

**Persons 25+ Years of Age in Prisons in Texas in 2000 and Projections for 2040 Under Alternative Assumptions of Educational Attainment and Alternative Population Projection Scenarios**



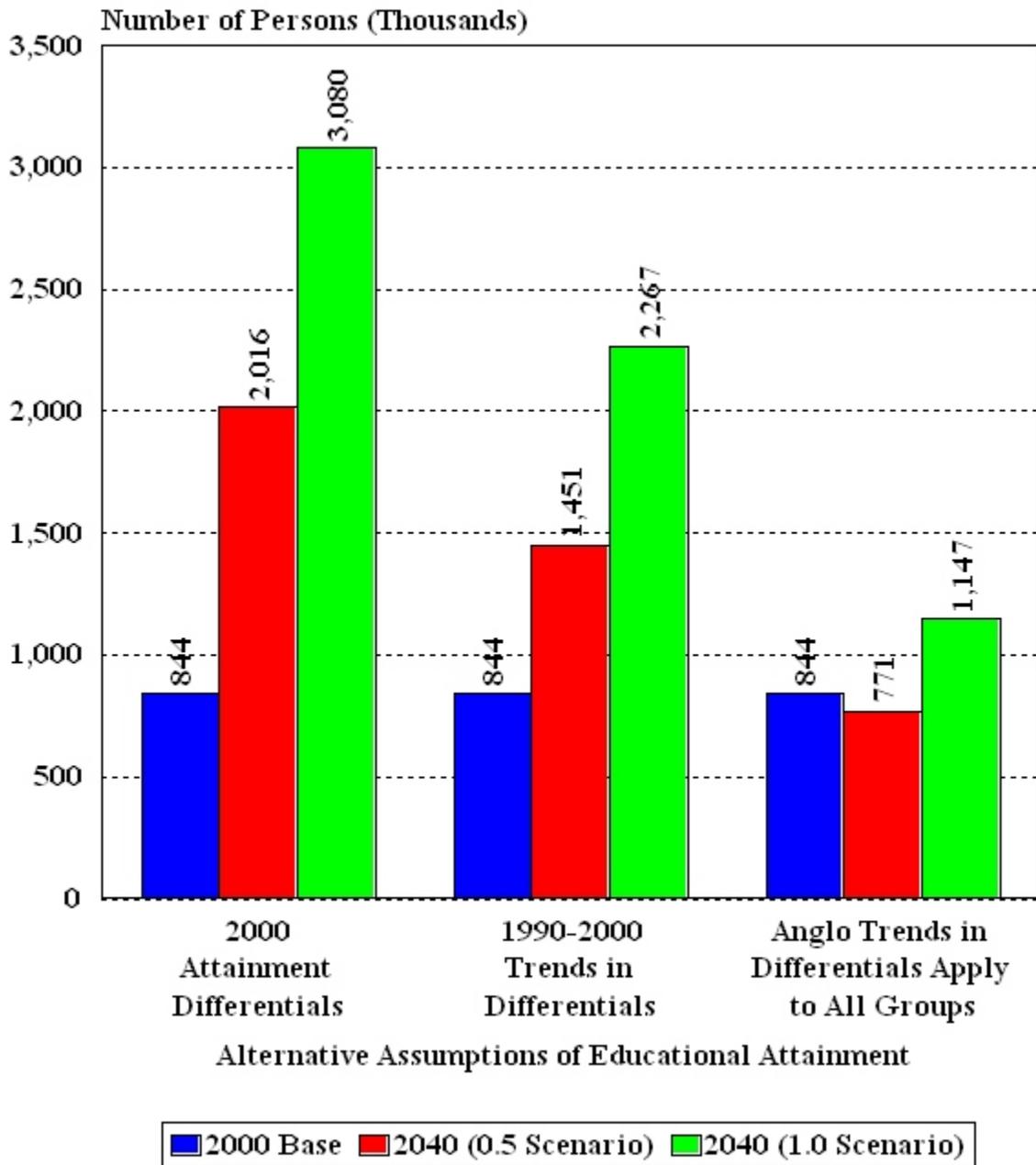
**Figure 10.15**

**Prison Costs for Persons 25+ Years of Age in Texas  
in 2000 and Projections for 2040 Under Alternative  
Assumptions of Educational Attainment and  
Alternative Population Projection Scenarios**



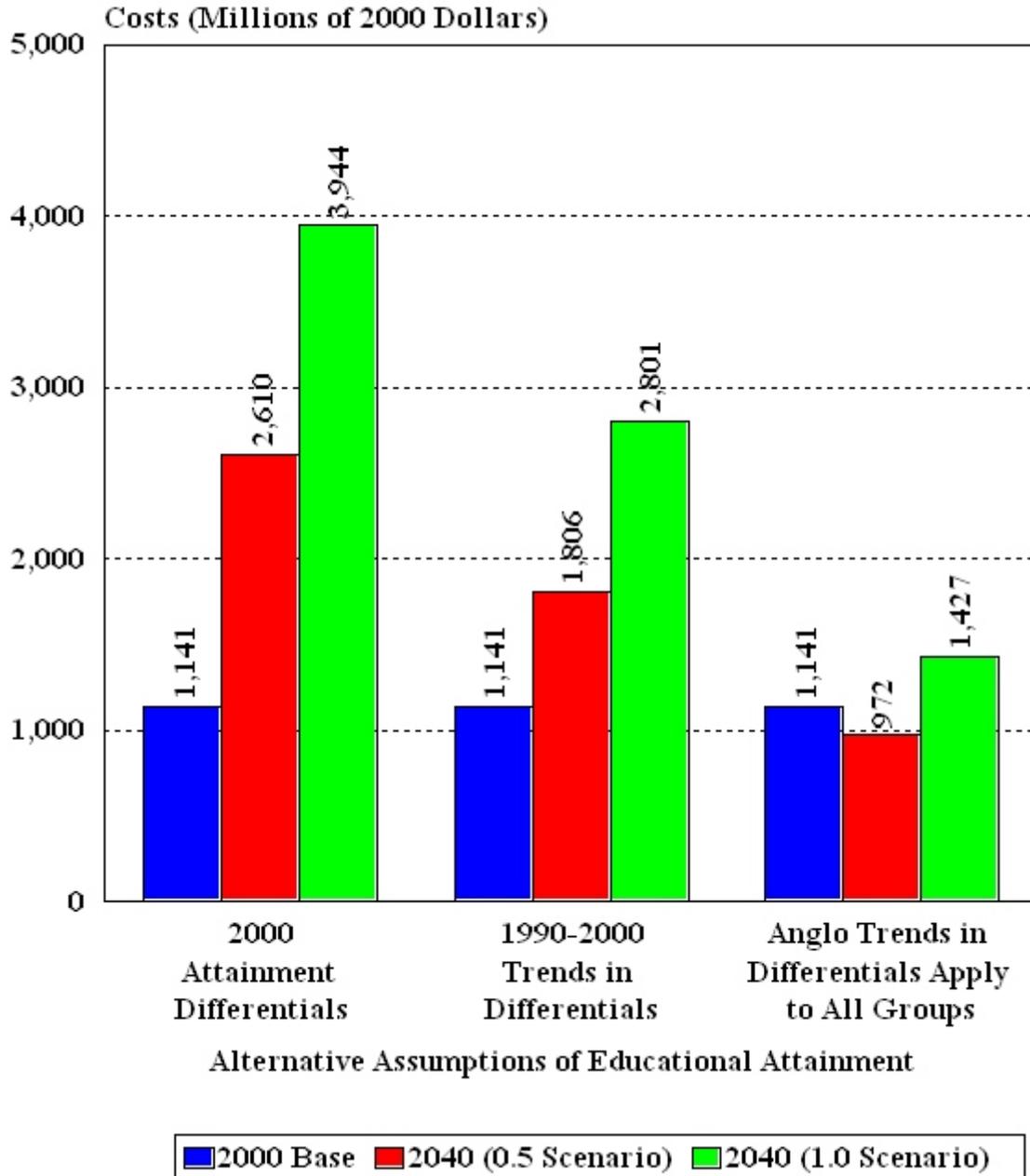
**Figure 10.16**

**Participants 25+ Years of Age in All Human Service Programs in Texas in 2000 and Projections for 2040 Under Alternative Assumptions of Educational Attainment and Alternative Population Projection Scenarios**



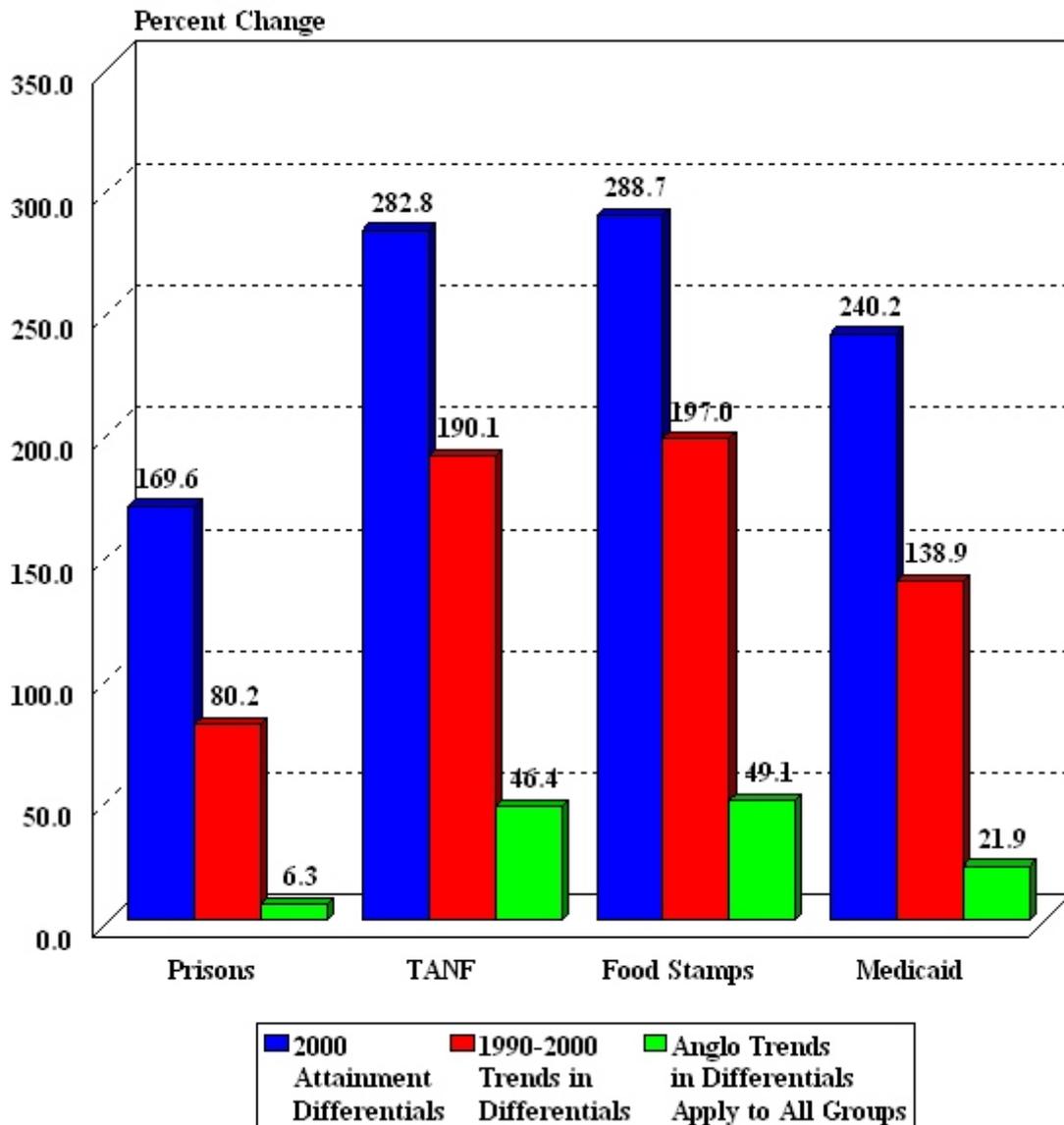
**Figure 10.17**

**Total Costs for All Human Service Programs for Persons 25+ Years of Age in Texas in 2000 and Projections for 2040 Under Alternative Assumptions of Educational Attainment and Alternative Population Projection Scenarios**



**Figure 10.18**

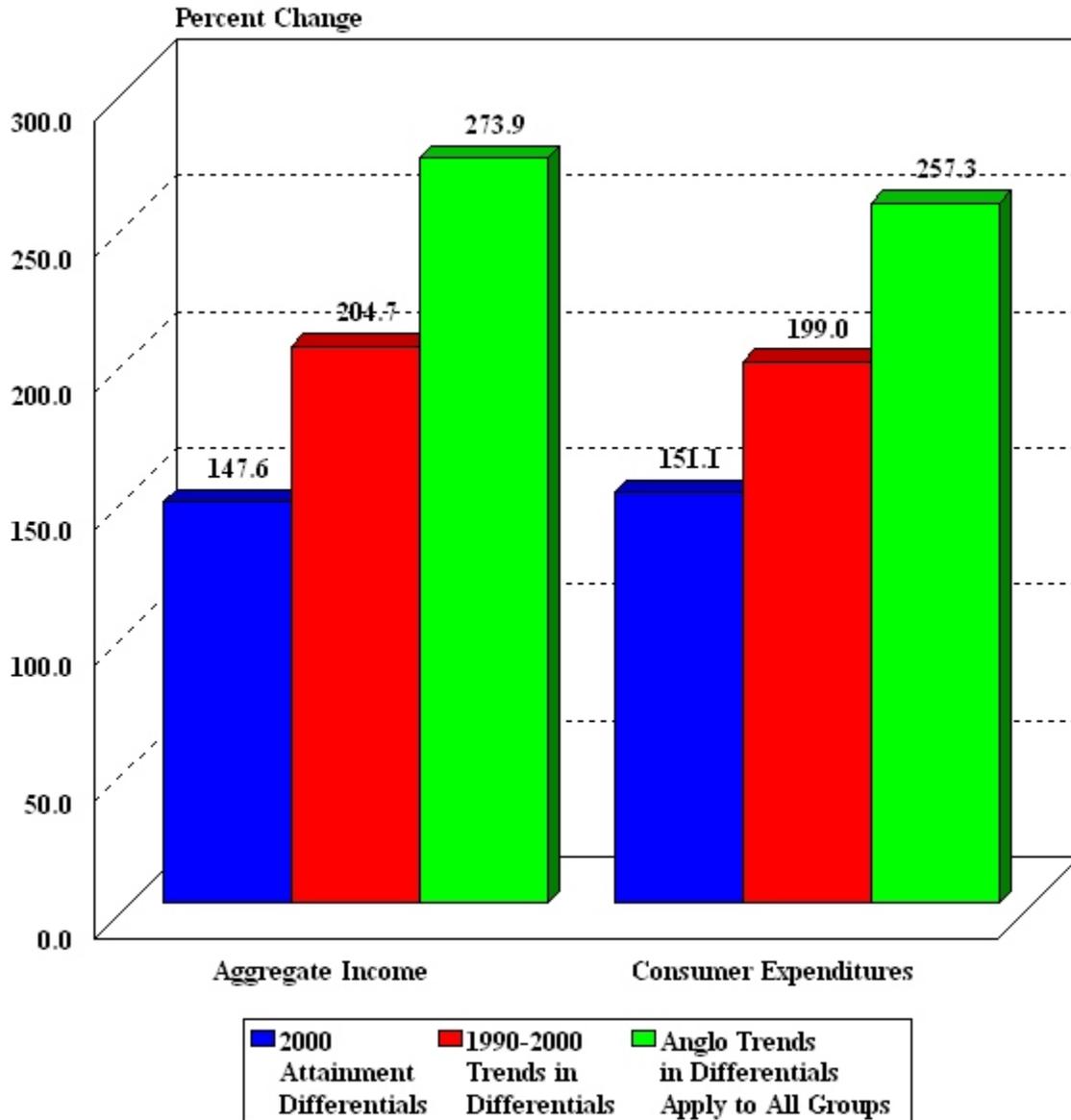
**Percent Change in the Number of Participants and in Associated Costs for Prisons, TANF, Food Stamps, and Medicaid in Texas Under Alternative Educational Attainment Assumptions, 2000 to 2040\***



\* Projections are shown for the 1.0 scenario

**Figure 10.19**

**Percent Change in Aggregate Income and Consumer Expenditures in Texas Under Alternative Educational Attainment Assumptions, 2000 to 2040\***



\* Projections are shown for the 1.0 scenario