The Center for Demographic and Socioeconomic Research and Education

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

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Preface

In the latter part of the 20th Century many policy makers, analysts, and academics began to recognize that the population of Texas was changing rapidly with dramatic implications for the State. By 1950, Texas was no longer a state that was primarily rural. By the end of the century, Texas had become the second largest state in the United States with a population of nearly 21 million persons and three of the ten largest cities in the nation.

Its demographic characteristics reflected those of the nation in some regards but differed in others. As with other states, Texas median age was increasing as the baby-boom generation (those persons born from 1946 through 1964) aged. By 2000, the median age of Texas population was 32.3 years compared to 18.7 in 1900 and 26.4 years in 1970. Households in Texas were also changing rapidly such that households involving married couples with children were only 27.1 percent of all households by 2000.

Particularly notable, however, was the change in the racial/ethnic composition of the population of Texas. Although the Hispanic heritage of Texas is older than its existence either as a nation or as a state, self-enumeration of Hispanics as a group did not begin until 1980, providing the first opportunity to accurately record the growth of this population group, and data on the population by race/ethnicity have shown dramatic differences in rates of population growth among racial/ethnic groups. During the 1980s, the Anglo population increased by 10.1 percent and in the 1990s by about 7.6 percent, but the Black population increased by 16.8 percent in the 1980s and 22.5 percent in the 1990s, the Hispanic population by 45.4 percent in the 1980s and 53.7 percent in the 1990s, and the population of persons from the Other racial/ethnic group by 88.8 percent in the 1980s and 81.2 percent in the 1990s. As a result, by 2000, Texas was 53.1 percent Anglo, 11.6 percent Black, 32.0 percent Hispanic, and 3.3 percent members of the Other racial/ethnic group. By 2005, the Texas population is projected to be less than one-half Anglo.

Against the background of such change, the Center for Demographic and Socioeconomic Research and Education was commissioned by the Texas Legislative Council in the mid-1990s to examine the implications of current and future patterns of population change for State services. With sponsorship from the Council under the leadership of House Speaker Pete Laney and Lieutenant Governor Bob Bullock, the Center contracted to examine the implications of the demographic change for the demand for, and delivery and financing of, state services. This work resulted in a report that became the book entitled *The Texas Challenge: Population Change and the Future of Texas*. The work examined the implications of recent and future population change for the demand for housing, education, welfare, and employment services, as well as for income and wealth and for State costs and revenues. The findings portrayed a sober future for the State if the population changed as projected and if the socioeconomic differences among population groups did not change. The conclusions suggested that the challenge for Texas was to ensure that all Texans had the skills and other resources necessary to compete in the global economy so that the resources necessary to drive private-sector growth and fund public services would be available.

This volume addresses several basic questions that logically follow from the work presented in the original Texas Challenge volume: Has the dramatic demographic and economic expansion of the 1990s changed the outlook for the future of Texas in the 21st Century? In what ways have the demographic and economic changes affected the need for State services? When, where, and how have changes occurred that may alter the future of different geographic regions and population groups in Texas? The purpose of this volume is thus threefold: (1) to update its readers on the progress that Texas has made in meeting the challenges suggested by the original (1995-97) volumes; (2) to use current data and recent trends to provide updated projections of the implications of population change for socioeconomic resources and services, including previously unexamined services, in Texas; and (3) to provide an expanded discussion of the policy implications of the State's future demographic trends. The volume thus provides both a report card of sorts and a prognosis for the future, if recent and projected trends prevail.

This publication begins with overviews of recent and projected population and housing change, which provide the underlying basis for socioeconomic change and change in demand for public- and private-sector services in Texas. It then presents a series of chapters each of which examines the implications of population change for specific socioeconomic characteristics of the population or for key public, or selected privately provided, services. Each of these topical chapters examines recent and historical changes in the topics under consideration, including change in service demand and provision during the 1990s, provides an overview of the projected changes in the service area, and examines the implications of the projected changes. The work concludes with a chapter that assesses the overall implications of the past and projected changes for the future of Texas.

The data used in this volume are based on values that are either directly or indirectly derived from historical population and socioeconomic statistics, projections of the population, and projections of population-based factors impacting the topics under examination. In so doing, we do not intend to suggest that demography is destiny. Economic, policy, societal, and other factors may also result in equally large or larger levels of change and related challenges. We believe, however, that demographics will play a sufficiently large role to merit close examination. We also clearly acknowledge that demographic like all forms of projections are subject to substantial errors. This is especially true for projections made for extended periods of time into the future. Projections are generally more accurate for periods closer to the base date for the projections and become increasingly inaccurate for extended periods in the future (such as the 40 year period utilized in these projections). Anyone using the work reported in this volume should use the results with full recognition of the limitations of projections.

We also assume that current relationships between demographic and socioeconomic and service factors will continue across time. We, in fact, do not expect this to be the case, but such assumptions are made for two reasons. First, in many cases there is little data available to allow us to extend trends other than those prevailing at the current period or those resulting from relatively short historical periods. Second, by examining the implications of current trends projected into the future, we provide information on what is likely to occur in the State if no new actions are taken to change these trends. It thus provides a base against which to measure the implications of alternative policy and other options.

In examining the implications of population change for selected topics, we make no claim to inclusiveness. That is, we have clearly chosen to examine only some of the areas of importance to the State. Many other equally important dimensions could have been examined had time, data availability, and space allowed.

We wish to also acknowledge that our discussion of differences impacting services and conditions often focus on racial/ethnic differences as potential drivers of change. Our intention is not to suggest that race or ethnicity as social and/or cultural or other phenomena are determinants of service or socioeconomic factors in and of themselves. Rather we argue that due to a variety of historical, discriminatory, and other factors, many socioeconomic conditions and differences that are major drivers of service usage have become associated with race/ethnicity. Clearly many of the racial/ethnic differences are largely social class differences for which race/ethnicity are but indicators. At the same time, we do not wish to suggest that race/ethnicity-related forms of discrimination do not continue to play a role in society. We attempt to recognize the reality of race/ethnicity and to use it to explicate the potential future of Texas through such groups for which data are often available when socioeconomic or social class data are not available.

Similarly, we recognize that our selection of the racial/ethnic categories used in this volume is somewhat arbitrary. We examine patterns for non-Hispanic Whites or Anglos, non-Hispanic Blacks, Hispanics from all races, and for persons in a category that includes persons from all Other racial/ethnic groups (who are not Hispanic and not members of the other groups noted above). The definition of such groups became increasingly difficult with the multiple-race identification allowed in the 2000 Census, and we were forced to make certain assumptions to provide comparability between 2000 data and that for earlier periods (see Appendix A). Our reason for including these groups was largely dictated by the size of the groups in all parts of the State. Analysis for specific subgroups included in our Other category such as Asians, Native Americans, Multi-race, and other persons would have been useful if group size, time, and resources had been sufficient. We trust that those groups not specifically noted will understand that our omission of them as separate groups was not intended to suggest that they are of diminished importance for Texas but was rather a result of size and resource considerations.

Finally, we trust that the names we use to refer to groups will not offend our readers. That is, we use Anglos to refer to non-Hispanic Whites, Blacks rather than African-Americans, Hispanics rather than Latinos, and Other (without differentiating between different subgroups within). We use Anglo because of its widespread use in the Southwest, Black because Blacks of non-African Origin are included in this category, Hispanic because this category is not limited to Hispanics of a given set of origins, and Other simply because there are too many specific subgroups to list all of them. We have found no uniform acceptance of any terms and hope that those used are generally acceptable.

In completing the work reported in this volume, we have received assistance from numerous organizations and agencies. We wish to thank especially the Texas Legislative Council and its Executive Director, Steve Collins, and its Director of Research, Debbie Irvine, for supporting the work from which this volume is derived. We also wish to thank the Texas Agricultural Experiment Station and the Vice Chancellor for Agriculture and Director of the

Texas Agricultural Experiment Station, Dr. Edward A. Hiler, who has provided ongoing support for this activity in the Department of Rural Sociology. We are also grateful to the Texas state agencies that have generously provided data for use in the analysis. Among these are the Texas Youth Commission, Texas Department of Criminal Justice, Criminal Justice Policy Council, Texas Education Agency, Texas Higher Education Coordinating Board, Office of the Texas Comptroller of Public Accounts, Texas Legislative Budget Board, Texas Workforce Commission, Texas Department of Human Services, and Texas Department of Health. It should be noted, however, that the views expressed here are those of the authors and do not necessarily reflect those of any of the agencies listed above. Similarly, any errors in the use of data from these agencies should be attributed to the authors. Finally, it is essential to note that the projections presented here for specific State services are long-term projections and are not intended to supplant or substitute for those made by the agencies that clearly use more detailed procedures for short-term projections of service needs, usage, and costs.

We extend our appreciation to numerous persons who participated in this work. We acknowledge the careful and extensive computer analysis of Darrell Fannin, Jeffrey Jordan, and Hongmei Wang. Xiaodong Wang provided extensive graduate assistance. We especially appreciate the tireless efforts in typing and retyping drafts provided by Andrea Chrietzberg and Teresa Ray. We owe very special appreciation to Patricia Bramwell and Sheila Dos Santos-Dierking who ensured that all parts of the production of this work were carefully coordinated and completed. They are our friends as well as our colleagues.

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We thank our families and friends for bearing with us as we neglected them to finish this work. Finally, we wish to thank the many Texans who have provided many of the insights suggested here in numerous conversations and forms of correspondence over the years and who must ultimately ensure that the Texas Challenge is successfully addressed.

Chapter 1

Introduction

Texans have generally maintained an optimistic view of the future of their State. This optimism has been supported by extensive economic and population growth that has made Texas a land of opportunity for many natives and new residents alike. Parts of Texas, and some Texas residents, however, have failed to share in that growth such that the State had 68 counties in which population declined from 1990 to 2000 and some of the highest county-level poverty rates in the nation.

What will the future of Texas be? Will its population continue to 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 opportunities and challenges likely to impact governments in 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* (Murdock et al. 1996 and 1997). 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 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 impacting Texas and the rest of the nation and world, 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 have been altered such that previous programs are either no longer in existence or have changed substantially. For example, welfare programs have been dramatically altered by the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996 and higher-education-access programs by the *Hopwood v. State of Texas* decision of 1994. Educational programs such as the Texas Higher Education Coordinating Board's Closing the Gaps program and financial aid programs such as the TEXAS Grants program have been instituted. In light of such changes, have the realities underlying the original projections contained in *The Texas Challenge* been altered and, if so, how, in what ways, and to what extent?

This volume attempts to address both the original questions raised by *The Texas Challenge* in light of new 2000 and post-2000 data and to address the question of how, and in what ways, recent trends, patterns, and policies may have changed its conclusions. In so doing, the intent is both to provide an overview of how far Texas has come and to suggest where it may be going under conditions prevailing in the first years of this century.

To accomplish these goals, we again examine the effects of four major demographic trends that continue to markedly impact Texas and other parts of the nation. We examine:

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.

These four factors not only continue to impact numerous aspects of Texas and United States society and public programs (see Murdock 1995; Murdock et al. 1996), but also continue to show trends that are critical for understanding the future.

The Texas population increased by nearly 4.0 million persons in the 1990s to reach about 21.0 million persons, representing a growth rate of 22.8 percent. That growth was due nearly equally to the two determinant processes of population change, natural increase (the difference between births and deaths) and net migration (including both inmigration from other states and immigration from other nations). The fact that so much of this growth was due to net migration reflected the economic expansion of the State and helped to propel that expansion because new growth through migration results in new households with needs for housing and other services. Overall, the population growth made Texas the second fastest growing state in the nation in numerical terms and the eighth fastest growing in percentage terms and exceeded projected growth for the decade by at least 400,000 persons.

The population also diversified more rapidly than expected with the Anglo (non-Hispanic White) population increasing by only 7.6 percent, compared to 22.5 percent for the Black (non-Hispanic Black) population, 53.7 percent for the Hispanic population, and 81.2 percent for the Other (non-Hispanic persons of all other races) population. Of the total net increase in Texas population in the 1990s, almost 80 percent was due to non-Anglo populations compared to roughly 66 percent in the 1980s. As a result, Texas population was only 53 percent Anglo in 2000 (compared to nearly 66 percent in 1980 and nearly 61 percent in 1990), and projections (Texas Population Estimates and Projections Program 2001) suggest that its population will be less than one-half Anglo by 2005 or 2006 and will become a majority Hispanic between 2026 and 2035. In addition, by 2000 Hispanics had come to form the single largest racial/ethnic group

in the cities of Houston, Dallas, San Antonio, and El Paso. Thus in four of the five largest places in Texas (the exception being Austin), Hispanics were the largest single racial/ethnic group.

Two basic characteristics continued to describe the age structure of Texas population and the changes taking place within it. The population continued to age overall, with the State's median age increasing from 30.8 years in 1990 to 32.3 years in 2000. This trend was a result of the aging of the baby-boom generation (those born from 1946 through 1964) that is expected to move the overall population in Texas as well as in the rest of the nation toward increasing proportions of elderly whose numbers will challenge health care, long-term care, retirement, and other systems. The second important characteristic of the age structure is the clear relationship between non-Anglo status and youth status. By 2000, the differences in Texas were marked. For example, whereas 53 percent of the total population was Anglo and 32 percent Hispanic, 73 percent of the population 65 years of age or older was Anglo and 17 percent Hispanics; for the population less than 5 years of age, 40 percent was Anglo and 44 percent Hispanic. In total, 57 percent of the population less than 18 years of age in 2000 was non-Anglo.

Household composition has continued to change as well. Although some demographers anticipated a marked reversal of the trend toward greater diversity in households in the 1990s, this reversal did not occur. Despite the extensive growth in Hispanic and other non-Anglo population groups that are more likely to be in married-couple households, the percentage of Texas households involving married couples increased by only 16.1 percent, while the total number of Texas households increased by 21.8 percent. Married-couple households decreased as a share of all households from 56.6 in 1990 to 54.0 percent in 2000.

When combined with the fact that differences in age, race/ethnicity, and household composition tend to be associated with differences in income, poverty, and other socioeconomic

factors that affect service usage, such demographic trends provide the impetus for substantial change in Texas. For example (see Table 1.1), income tends to peak at middle age, Hispanic and Black incomes are less than two-thirds of the income for Anglos, and married-couple families tend to have incomes substantially higher than those for single-parent (male- and female-householder) families. It is these patterns of population change, along with socioeconomic differences and differences related to policy changes, that are addressed in this volume. Specifically, we examine these demographic changes, their socioeconomic implications, and their implications for State and selected private-sector services for the period from 2000 through 2040.

Organization

The work is organized with two general chapters that describe recent and projected future trends in the population of Texas (Chapter 2) and the households of Texas (Chapter 3). These chapters provide the demographic base for the socioeconomic and service impacts that are delineated in subsequent chapters. In these two chapters, the patterns of the past are examined and alternative projections of the population and of households are described.

The remainder of the volume presents chapters examining the impacts of population and household change on selected characteristics and services. Chapter 4 examines the impacts of the changes in population and households on socioeconomic factors including income, poverty, and tax revenues. Chapter 5 examines effects on the private sector. It includes analyses of consumer expenditures, net worth and assets, and provides more detailed analysis of two selected industries, housing and health care, as examples of private-sector impacts. Chapter 6 provides an overview of effects on the labor force and labor force programs. Chapter 7 examines impacts on

primary and secondary and higher education. Chapter 8 presents information on human services and related programs, and Chapter 9 describes effects likely to occur in the area of youth and adult corrections.

Each of these latter chapters (4-9) presents data on recent historical changes and a discussion of the factors affecting such changes, projections of the underlying factors driving change in the area under examination, an examination of the implications of the historical patterns and projected changes, and an examination of alternative simulations when appropriate. In sum, each chapter attempts to describe for each topic, where it has been, where it is going, and what these changes mean for those requiring, and those providing, such services and for the State as a whole.

The final chapter, Chapter 10, provides a broad overview of the implications of the patterns described in the preceding nine chapters. It presents not only a summary but an examination of several alternative futures as potentially impacted by changes that were not apparent when the previous volume was written. It attempts to summarize what is likely to occur if current conditions continue and what might occur under different patterns of change.

Limitations of the Work

The work is obviously limited in several regards. First, we examine the implications of only population change for a limited number of services and conditions. Numerous social, economic, and policy factors also affect socioeconomic and service 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. Similarly, we assume that socioeconomic conditions are associated with

demographic characteristics. In particular, we assume 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 but rather that they have tended to prevail across time and can be used in the absence of more direct indicators to assess likely socioeconomic change. This is not a blaming of persons with certain characteristics for the socioeconomic conditions they are experiencing or for the effects these conditions may have on overall population patterns, but 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.

Since the volume examines only some services and conditions, it does not address all of the important dimensions or issues likely to affect Texas in the coming years. Because this summary volume is a part of a larger study that examines patterns for substate areas, only services and conditions for which consistent county-level data could be obtained were included. Important areas such as transportation, environmental factors such as water supply and quality and air quality, and numerous other quality of life dimensions could not be examined. No claim is made that this analysis is inclusive or exhaustive.

The work is also limited by the fact that many of its conclusions are based on population projections which make certain assumptions about the future of the demographic processes of fertility, mortality, and migration (see Texas Population Estimates and Projections Program 2001 for a description of these assumptions) and, when applied to socioeconomic and service projections, about the future age-, sex-, and race/ethnicity-specific rates of acquisition of resources or use of different types of services. 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 (Ascher 1978; Brody 1993; Murdock et al. 1991; Murdock and Ellis 1991; Siegel 2002; Smith et al. 2001). Uncertainty is compounded when there is a need to create comparability between population subgroups (such as racial/ethnic groups) used as major components in the projections. Thus, the procedures used to create similar racial/ethnic groups for 2000 and 1990 described in Appendix A may have affected the accuracy of projections in ways that cannot be determined with absolute certainty. It must also be recognized that projections are less accurate for extended periods in the future such that projections for the near term, (e.g., 5-10 years) tend to be more accurate than those for the long term (e.g., 30-40 years). In sum, population projections, like projections of any phenomena, must be used with full recognition of their limitations.

The work is also affected by data limitations. Although numerous data sources were used (see Appendix B for a list of these sources) and every attempt was made to use the best data available in each topical area, there were numerous instances in which data were insufficient in several regards. These limitations are noted in the substantive chapters.

The work is further limited by the fact that we emphasize only the demographically determined demand for services and do so in many cases assuming that either 2000 conditions prevail throughout the projection period from 2000 through 2040 or that 1990-2000 trends continue in the future. Supply issues that reflect funding, policy, and other factors simply are not examined. It is obvious that in most situations current (2000) conditions will not continue unchanged through a 40-year projection period nor will trends of the 1990s. In the absence of adequate historical data for modeling change, however, there are few alternatives to assuming historical continuity, and the use of assumptions of constant rates or trended rates may be useful

in identifying the conditions that are likely to prevail in the absence of change. Additionally, because of differences in reporting periods and procedures used for reporting the number of people using specific services among agencies, the numbers of persons noted in the descriptive data at the beginning of each chapter may differ from that used in the projections sections of these chapters.

The work thus has numerous limitations. Despite these limitations, we hope that readers will find this publication useful in describing the conditions that have prevailed in the past and those that may characterize the future of Texas.

Table 1.1

Median Household Income
in Texas by Age of Householder, Race/Ethnicity
of Householder, and Household Type, 1999

Characteristics of Householder	Median Income
Age of Householder	
Total	$ 39,927
<25	21,570
25-34	37,732
35-44	47,418
45-54	52,926
55-64	44,905
65-74	30,296
75+	21,734
Race/Ethnicity of Householder	
Total	$ 39,927
Anglo	47,162
Black	29,305
Hispanic	29,873
Other	44,834
Household Type	
All households	$ 39,927
Family households	45,861
Married couple	53,338
Female householder	23,583
Male householder	31,739
Nonfamily households	25,623

Source: U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Chapter 2

Current and Future State of the Population of Texas

The population of Texas has shown dramatic change since the State was formed, and projections of its future suggest that equally substantial changes may be expected in the coming decades. In this chapter we give an overview of recent and projected change in the population of Texas, with an emphasis placed on three of the four major demographic trends that are the focus of this volume. Specifically we examine total population change, change in the racial/ethnic composition of the population, and change in the age structure of the population. Household change and projections are examined in Chapter 3. The purpose of this chapter is to describe the basic demographic trends underlying the socioeconomic and service changes described in the remainder of the volume.

Historical and Current Patterns of Population Change in Texas

Patterns of Population Change in Texas

The demographic history of Texas has been one of growth. As shown in Table 2.1, Texas population has increased more rapidly (in percentage terms) than that of the nation in every decade since it became a state. 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. It was an increase roughly equivalent to adding to the Texas population, in a single decade, the sum of the 1990 populations of the cities of Houston, Dallas, San Antonio, and Corpus Christi. It was an increase

larger than the total populations of 24 of the 50 states and meant that more than one of every nine persons added to the population of the United States in the 1990s was added in Texas. Texas population increase was second only to California in numerical size (California increased by 4.1 million persons in the 1990s) and the eighth largest in percentage terms among all states (see Table 2.2).

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). The relatively large proportion attributable to net migration is reflective of the dramatic economic expansion of the decade, which brought substantial numbers of new households and the economic impacts of moving these new households into the State. The number attributable to natural increase is notable as well because this 1.9 million increase in the 1990s was greater than the total population increase in all other states except California and Florida. 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 relatively 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). But growth was not everywhere the same and tended to be larger in the State's large urban centers and in three major regions of the State. The three parts of Texas which showed the highest levels of population growth in either numerical or percentage

terms are evident when levels of population change in council of governments regions are examined (see Figure 2.1 for the boundaries of these regions and Table 2.3 showing 1990-2000 population growth for the regions). These data show that areas along the Texas-Mexico border (such as the Lower Rio Grande and South Texas COGs, which increased by 263,402 or 39.8 percent and 76,032 or 40.4 percent, respectively), areas in the central corridor of Texas from Dallas-Fort Worth through San Antonio (for example the North Central Texas COG increased by nearly 1.2 million persons or 29.1 percent and the Capital Area COG increased by 427,377 or 46.5 percent), and the Houston-Galveston COG (with an increase of 957,308 or 24.6 percent) had the most substantial levels of growth. The growth in large urban COGs was also substantial such that the combined 2000 population in the four largest COGs--North Central Texas, Houston-Galveston, Alamo Area, and Capital Area--was greater than the total population of the State in 1970 (13,318,432 compared to a State population of 11,196,730 in 1970).

These data show that the slowest rates of growth were in COGs in the Panhandle, West Texas, and Beaumont-Port Arthur areas. For example, the Permian Basin COG increased by only 1.6 percent, West Central Texas by 4.1 percent, Concho Valley by 4.2 percent, South Plains by 4.3 percent, Nortex by 6.0 percent, South East Texas by 6.6 percent, and the Panhandle COG by 8.3 percent. As such data suggest, 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). The central city counties accounted for 67.1 percent of the total population (and received 61.5 percent of the population growth from 1990-2000) while suburban

counties accounted for 17.7 percent of the population (and received 29.7 percent of the 1990-2000 population increase).

Overall, Texas has shown rapid population growth resulting from both natural increase and net migration, and its high level of natural increase suggests future growth. Its growth was relatively pervasive but was highest in the Texas-Mexico border area, the Central Texas corridor, and the Houston-Galveston area and lowest in the Panhandle, South Plains, West Texas, and Beaumont-Port Arthur regions. Population growth was generally less in rural areas, extensive in central cities, and fastest in suburban areas in the State.

Change in the Racial/Ethnic Composition of Texas

An extensive diversification of the racial/ethnic composition of the population of Texas has occurred in recent decades (for a discussion of the construction of the racial/ethnic categories used in this volume, see Appendix A). Tables 2.4 and 2.5 show recent patterns of population change by race/ethnicity. In both the 1980s and 1990s, non-Anglo population groups showed substantially larger percentage increases than the Anglo population, with the Anglo population increasing by only 10.1 percent in the 1980s and 7.6 percent in the 1990s compared to 16.8 and 22.5 percent increases in the Black population, 45.4 and 53.7 percent increases in the Hispanic population, and 88.8 and 81.2 percent increases in the population of persons from the Other racial/ethnic group. As a result of these trends, Texas population was 53.1 percent Anglo by 2000 (down from 65.7 percent in 1980 and 60.6 percent in 1990), 11.6 percent Black (compared to 11.9 and 11.6 percent in 1980 and 1990, respectively), and 32.0 percent Hispanic (compared to 21.0 percent in 1980 and 25.6 percent in 1990), and 3.3 percent (compared to 1.4 percent in 1980 and 2.2 percent in 1990) were members of the Other racial/ethnic group.

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 (2,421,653), second largest Hispanic (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.

Particularly notable is the increase in the Hispanic population. Not only does Texas have the second largest Hispanic population in the nation (behind California, which had 11.0 million in 2000), but Hispanic population growth has also been the single largest determinant of population growth in the State for each of the last two decades. In the 1980s, 49.1 percent of the net population growth in the State, and in the 1990s, 60.3 percent of the net increase was due to the Hispanic population, and this growth was pervasive across the State. For example, Hispanic population increases occurred in all 24 COGs, all 27 MSAs, 89.4 percent of the counties, and 88.0 percent of the places in Texas. By comparison, 15 of the COGs, 23 of the MSAs, 56.3 percent of counties, and 56.0 percent of places showed increases in their Anglo populations. Similarly, if one examines the relative contributions of Hispanic population growth to total net population growth in different types of counties (metropolitan central city, metropolitan suburban, nonmetropolitan adjacent counties [counties that share a common boundary with a metropolitan central city or suburban county], and nonmetropolitan nonadjacent counties), one finds that Hispanics accounted for 78.1 percent of the net increase in the population in central city counties, 23.3 percent of the net growth in suburban counties, 54.7 percent in

nonmetropolitan adjacent counties, and 82.2 percent of the net change in the population of nonmetropolitan nonadjacent counties (see Figure 2.2).

For the State of Texas as a whole and pervasively across the State, population change has come to be increasingly determined by change in non-Anglo populations.

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). As shown in Table 2.6, 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 28.0 in 1980, 30.8 in 1990, and 32.3 in 2000. Although still younger than that 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 the middle of this century 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.

The 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, and for the Other population 31.1 years. The differences in age structure are especially obvious when data for specific age groups are examined. Figure 2.3 shows the percentages of the population in each of several age groups that are Anglo and Hispanic (data for Blacks and Other population groups are not shown in this figure). For 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. When other non-Anglo population groups are included, 60 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.

Future Patterns of Population Change in Texas

In this section, we examine alternative projections of the population of Texas. These projections are those produced by the Texas State Population Projections Program in the Texas State Data Center in the Office of the State Demographer in the Department of Rural Sociology in the Texas A&M University System (Texas Population Estimates and Projections Program 2001).

These projections were made using the cohort-component projection method, which is a widely accepted method for projecting populations (see Murdock and Ellis 1991; Smith et al. 2001). This method consists of the development of assumptions for projecting the three major demographic processes of fertility, mortality, and migration for different population cohorts (a cohort being a population subgroup that shares one or more common characteristics). The Texas State Data Center provides projections for both sexes for Anglos, Blacks, Hispanics, and persons from the Other racial/ethnic group for age groups from less than 1 through 85 years of age or older for each year from 2001 through 2040 using 2000 Census data as a base and alternative assumptions about age-, sex-, and race/ethnicity-specific net migration that result in alternative population projection scenarios. Projections are completed for each of the 254 Texas counties

and the State as a whole, and the sum of county values is controlled to the State total for each age, sex, and race/ethnicity cohort for each year for each scenario. The methodology for these projections is described in detail on the website for the Texas State Data Center (at txsdc.tamu.edu). As noted above, these and any other projections should be used with full realization of their limitations.

These projection scenarios use common assumptions about birth and death rates but use three different assumptions about age-, sex-, and race/ethnicity-specific net migration that differentiate the three projection scenarios; these are the zero (the 0.0) scenario, the one-half of 1990-2000 age-, sex-, and race/ethnicity-specific net migration rates (the 0.5) scenario, and the scenario which assumes a continuation of age-, sex-, and race/ethnicity-specific rates of net migration at the 1990-2000 level (the 1.0 scenario). The zero migration scenario is provided for comparison only. It indicates what the population would be if the population increased only as a result of natural increase with net migration being zero, either because no one moved into or out of the State or the amounts of in- and outmigration were equal. This scenario is unlikely to characterize future population growth, but its inclusion allows one to compare the relative importance of both natural increase and net migration for future population growth. The 1.0 scenario assumes that the rates of the 1990s will continue throughout the projection period and the 0.5 scenario assumes migration levels that are half of the 1990-2000 decade.

Values based on both the 0.5 and 1.0 scenarios are discussed in this analysis because of the uncertainty inherent in population projections (see Murdock and Ellis 1991). This uncertainty is increased because of characteristics of the 2000 Census that may affect the net migration rates upon which the projection scenarios are based. The 2000 Census revealed substantially more persons than anticipated by the U.S. Bureau of the Census for the nation and

nearly all states, including Texas. This finding suggests that one or more of the following factors may have occurred: (1) the 2000 Census provided a more complete count of the existing population than other recent censuses (i.e., the rate of undercount was less), (2) the number of undocumented persons counted in this census was substantially higher than in earlier censuses, or (3) the 1990-2000 estimates by the U.S. Census Bureau were less accurate than at earlier periods. The difficulty presented by either a reduced undercount or a better count of undocumented persons is that it is impossible to determine what proportion of those in the 2000 count lived in the nation in 1990. Since the migration rates used to project population are residual net migration rates, meaning that they are computed as the difference between 1990 and 2000 population counts after the effects of births and deaths have been removed, any undercount or other differences become part of the residual and affect the migration rates. Therefore, somewhat greater uncertainty may exist in the migration rates computed from 1990-2000 than those from earlier censuses, and the factors leading to such uncertainty tend to be ones that would increase migration rates. As a result, the 1.0 scenario projections may, in most cases, be seen as a high-growth projection and the 0.5 scenario as a moderate-growth projection scenario. Values for both the 0.5 and 1.0 scenarios are discussed throughout this volume.

Population Growth Projected to Continue

The data in Tables 2.7 and 2.8 suggest substantial population increases under all of the scenarios. Under the 0.5 scenario Texas population would be 24.2 million by 2010, and under the 1.0 scenario it would reach 25.9 million. By 2040, under the 0.5 scenario, the State would have a population of more than 35 million with 11.4 million Anglo, 3.3 million Black, 18.4 million Hispanic, and nearly 2.0 million persons from the Other racial/ethnic group. Under the 1.0 scenario, the State's population would be nearly 50.6 million by 2040 with 12.2 million

Anglo, about 4.0 million Black, 29.9 million Hispanic, and 4.4 million persons from the Other racial/ethnic group. 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 67.9 percent under the 0.5 scenario and 142.6 percent under the 1.0 scenario. The projected population would increase by decennial rates that are between 70 and 50 percent of the growth rate of the 1990s under the middle scenario, and as might be expected, under the 1.0 scenario, decennial growth rates are about 100 percent of the rates of growth for the 1990s.

The alternative projections also show how large a role migrants and their descendants will play in the State's future growth and how the role of migration varies by racial/ethnic group. If one compares the growth of the total population under the 0.0 scenario (which shows growth resulting only from natural increase) to that for the other scenarios (which include growth from both natural increase and net migration), one finds that 66.7 percent of the net growth in the State from 2000 to 2040 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). Because its birth rate is below the replacement level, the Anglo population would actually decline by 2040 under the 0.0 migration scenario, so all of the growth in the Anglo population under both the 0.5 and 1.0 scenarios is due to net migration. Under the 0.5 scenario, 68.0 percent of the net growth in the Black population, 59.6 percent of the growth in the Hispanic, and 86.6 percent of the growth in the Other population would be due to migrants and their descendants, while under the 1.0 scenario 82.4 percent of the Black, 79.6 percent of the Hispanic, and 95.5 percent of the growth in the Other population would be due to migrants and their descendants. Although some may see a lack of

migration as benefiting the State because it reduces the number of persons for whom the State must provide services, others view the lack of migration as inhibiting business expansion (the average decennial growth rates under the 0.0 scenario would be lower than at any period in the State's history except that which occurred during the decade of the 1930s, which reflected the effects of the great depression). Similarly, as described below, the 0.0 scenario results in the oldest age structure of any of the scenarios and, as will be shown in subsequent chapters, in lower levels of employment and a proportionate increase in services for the elderly compared to the other scenarios. In general, then, net migration at some level seems likely to be desired by most persons from the public and private sectors in Texas.

The extensive nature of growth in the Texas population and its implications for different parts of the State are evident in the data in Tables 2.9 and 2.10, which show the COGs ranked by numerical and percent change in population from 2000 to 2040 under the 0.5 and 1.0 scenarios. These data show how extensive such growth would be in certain parts of the State and indicate that the historical areas of growth are expected to continue to have the highest rates of growth in the first four decades of this century. For example, under the scenario assuming 1990-2000 migration levels (the 1.0 scenario), the North Central Texas COG would have a population of more than 17.1 million in 2040 (a larger population than exists in the Los Angeles area today), the Houston-Galveston area would have nearly 12.9 million persons (a larger population than any area of the United States except the New York and Los Angeles areas in 2000), and the State would have seven COGs with more than 1.2 million persons each. The three areas that by 2040 would be added to the four regions that already had at least 1.0 million persons in 2000 would be the Lower Rio Grande, Rio Grande, and East Texas regions. At the same time, nine regions of the State would change their population by less than 60,000, and these are primarily rural parts of

Texas. When percentage values are examined (see Table 2.10), the data show three areas to be the most rapidly increasing. These are areas (COGs) along the Texas-Mexico border (e.g., the South Texas and Lower Rio Grande COGs), those in the Central Texas corridor (e.g., the North Central Texas and the Capital Area COGs), and the Houston-Galveston area (the Houston-Galveston COG), which all increase by 74 percent or more between 2000 and 2040. These projections show a state that will come to have very large population concentrations under either high or moderate rates of growth.

An Increasingly Diverse Population

When differences in rates of population growth among racial/ethnic groups (see Tables 2.7 and 2.8) are examined in conjunction with data in Tables 2.11 and 2.12, the extensive growth of non-Anglo populations is evident. Although all racial/ethnic groups show population increases under the 0.5 and 1.0 scenarios, the Anglo population increases by only 2.8 percent from 2000 to 2040 under the 0.5 scenario and by 10.4 percent under the 1.0 scenario, while the Black population increases by 35.6 percent and 65.0 percent, the Hispanic population by 175.7 percent and 348.7 percent, and the Other population by 185.0 percent and 546.8 percent. As a result, the Anglo population decreases as a proportion of the total population, from 53.1 percent in 2000 to 32.5 percent in 2040 under the 0.5 scenario and to 24.2 percent by 2040 under the 1.0 scenario, and the Black population decreases from 11.6 percent of the population in 2000 to 9.4 percent by 2040 under the 0.5 scenario and to 7.9 percent by 2040 under the 1.0 scenario. On the other hand, the Hispanic population increases from 32.0 percent in 2000 to 52.5 percent by 2040 under the 0.5 scenario and to 59.1 percent under the 1.0 scenario and the Other population increases from 3.3 percent in 2000 to 5.6 percent in 2040 under the 0.5 scenario and to 8.8 percent under the 1.0 scenario. By 2005 under the 1.0 scenario, and by 2006 under the 0.5

scenario, Texas population would 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 either the 0.5 or 1.0 scenarios, the Anglo population would account for no more than one-third of the total population by 2040, and even under the highest growth scenario (the 1.0 scenario), the Anglo population would account for only 3.9 percent of net population growth from 2000 to 2040 (see Table 2.12 and Figure 2.4), meaning that more than 96 percent of the total net increase in Texas population between 2000 and 2040 would be due to the non-Anglo population.

The extent to which slow Anglo population growth and rapid growth for Hispanics will become pervasive patterns across the State can be seen by examining the data in Table 2.13. Under even the high-growth scenario (1.0), which shows the maximum increase in Anglo populations, the Anglo population would show an absolute numerical decline between 2000 and 2040 in 19 of 24 council of governments regions, with declines of at least 25 percent occurring in 13 regions. On the other hand, Hispanic populations increase in all 24 regions, with increases exceeding 100 percent in 21 of 24 regions.

The projected population of Texas will clearly become more diverse over the next few decades. By about 2005 no single racial/ethnic group will account for a majority of the population, and before the end of the projection period Texas population will become a majority Hispanic. The diverse, multi-racial population that many (Skrabanek et al. 1985; Bouvier and Poston 1993; Murdock et al. 1997) have foreseen as characterizing the future of Texas is projected to become a reality during the first decades of this century.

An Aging and Age-Stratified Population

As noted above, Texas population although aging in a manner similar to other parts of the nation is nevertheless somewhat younger than the populations of most other states. In fact, Texas was the second youngest state in the nation in 2000 with only Utah (with a median age of 27.1 years) having a lower median age. The aging of the population and the pattern showing that non-Anglo populations tend to be younger and Anglo populations to be older are evident throughout the alternative projections for Texas (see Table 2.14).

The trend toward a generally older population is evident under all projection scenarios. The median age increases from 32.3 years in 2000 to 39.7 years by 2040 under the 0.0 scenario, to 38.8 years by 2040 under the 0.5 scenario, and to 38.3 years by 2040 under the 1.0 scenario. The patterns are not uniform across time or age groups, however. For example, the percentage of the population that is 65 years of age or older, which is 9.9 percent in 2000 but 16 to 20 percent by 2040, changes by less than 1 percent from 2000 to 2010 (depending on the scenario) but by 1 to 4 percent for each decade thereafter. The proportion of the population that is between 45 and 64 years of age increases by about 3 to 5 percent over the projection period, and the percentage of the population that is under 18 years of age declines by about 5 to 7 percent from 2000 to 2040. 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 rates and younger populations. Under all scenarios, however, the population will age substantially.

The differentials by race/ethnicity are marked as well, and although non-Anglo and Anglo populations show aging population structures, racial/ethnic differences in age remain important. For example, in 2000, 13.7 percent of the Anglo population was 65 years of age or older and the median age of Anglos was 38.0 years. By comparison, only 5.2 percent of the Hispanic

population was 65 years of age or older in 2000 and the median age of Hispanics was 25.5 years. Under the 0.5 scenario in 2040, the percentage of persons 65 years of age or older would be 25.9 percent for Anglos and 12.2 percent for Hispanics and median ages would be 46.0 for Anglos and 34.2 for Hispanics. Under the 1.0 scenario, the percentage of persons 65 years of age or older increases to 26 percent for Anglos but is only 9.9 percent for Hispanics and median ages are 46.3 and 34.4 years, respectively. The aging of populations occurs across race/ethnicity groups, but younger populations remain more characteristic of non-Anglo than Anglo populations and older populations of Anglo than non-Anglo populations.

Overall, the data on aging suggest that Texas population will become older, that the aging will become more obvious after 2010 when the baby boomers begin to reach 65 years of age, and that marked differences in the age structures of Anglos and non-Anglos will continue across the projection period. These patterns suggest that issues related to aging and issues related to younger non-Anglo populations and older Anglo populations are likely to be important in the coming decades.

Summary

In this chapter we have described recent and projected changes in the size, race/ethnicity, and age composition of Texas population. The results suggest several important conclusions:

1. Texas population is likely to increase substantially under the alternative scenarios of future growth. For the total projection period from 2000 to 2040, the population increase would be at least 4.7 million persons and could be as high as 29.7 million under the high growth (1.0) scenario, with percentage increases of between 67.9 and 142.6 percent under the 0.5 and 1.0 scenarios, respectively. This growth is expected to be concentrated in metropolitan areas and

along the Texas-Mexico border, the Central Texas corridor, and the Houston-Galveston regions of the State. Under the two most likely scenarios (the 0.5 and 1.0 scenarios), between 66.7 and 84.2 percent of the population increase will result from migrants and their descendants. Although growth through migration is somewhat more uncertain than that resulting from natural increase, the historical patterns of growth in Texas suggest that, under each of the alternative futures examined, the increase in the population of Texas is likely to be extensive.

2. The racial/ethnic diversity of the State will also increase substantially. Under all scenarios, Texas population becomes more diverse over the next few decades. Texas population will be less than one-half Anglo by 2005 under the high growth (1.0) scenario and by 2006 under the moderate rate of growth (0.5) scenario. Under either scenario, the Texas population is projected to be more than one-half Hispanic before the end of the projection period, and by the end of the projection period, Texas population will be between (depending on whether one employs the 1.0 or 0.5 scenario) 24.2 and 32.5 percent Anglo, between 7.9 and 9.4 percent Black, between 59.1 and 52.5 percent Hispanic, and between 8.8 and 5.6 percent Other. Of the total net increase projected in the population of Texas under the 1.0 scenario, at least 96 percent is expected to be due to non-Anglo populations. When examined regionally, the slower growth of the Anglo and more rapid growth of the Hispanic populations are clearly evident. In 19 of 24 council of governments regions, the Anglo population shows absolute decline under the 1.0 scenario, while the Hispanic population increases in all 24 and increases by more than 100 percent in 21 of the 24 COGs. Under all projection scenarios, the dependence of Texas population growth on non-Anglo population growth is extensive and pervasive.

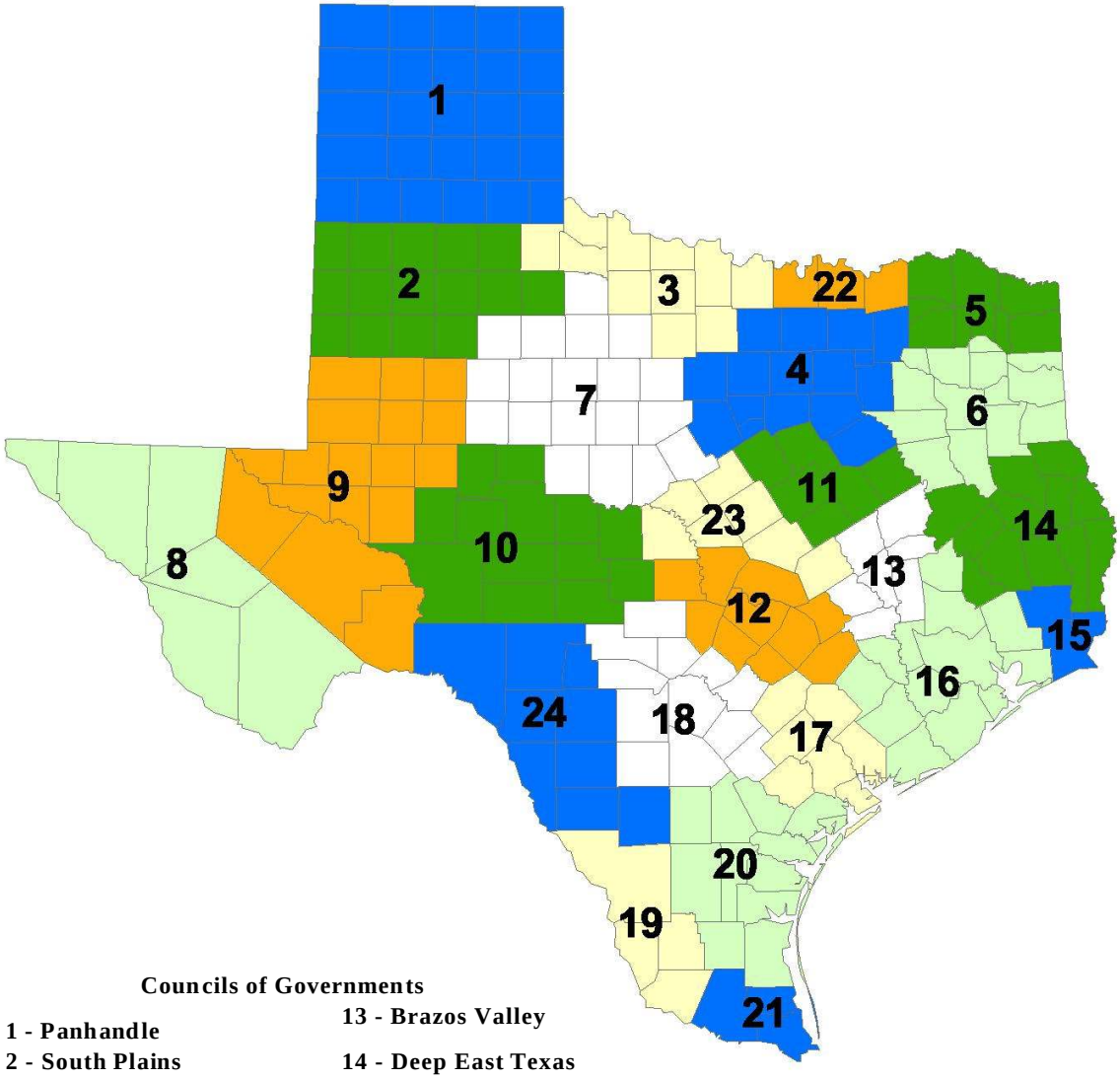
3. The aging of the Texas population and the racial/ethnic diversification in the age structure are projected to continue. By 2040, the median age in Texas will be at least 38.3 years,

compared to 32.3 in 2000. Anglo populations will continue to be older, with the median age of Anglos increasing to about 46 years (from 38.0 in 2000) under all scenarios, while that of Hispanics increases to at most 34.4 years by 2040 (compared to 25.5 in 2000). Such patterns suggest that issues related to aging and issues impacting older Anglos and younger non-Anglos will play important roles in the coming years.

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 and one that will be increasingly concentrated in the high-growth corridors and urban centers. It is a population that seems likely to increasingly challenge the State's resources in the coming decades.

Figure 2.1

Councils of Governments in Texas



Councils of Governments

1 - Panhandle
2 - South Plains
3 - Nortex
4 - North Central Texas
5 - Ark-Tex
6 - East Texas
7 - West Central Texas
8 - Rio Grande
9 - Permian Basin
10 - Concho Valley
11 - Heart of Texas
12 - Capital Area
13 - Brazos Valley
14 - Deep East Texas
15 - South East Texas
16 - Houston-Galveston
17 - Golden Crescent
18 - Alamo Area
19 - South Texas
20 - Coastal Bend
21 - Lower Rio Grande Valley
22 - Texoma
23 - Central Texas
24 - Middle Rio Grande

Figure 2.2

Proportion of Net Population Change from 1990 to 2000 Due To Each Racial/Ethnic Group by Each Metropolitan Status Type in Texas

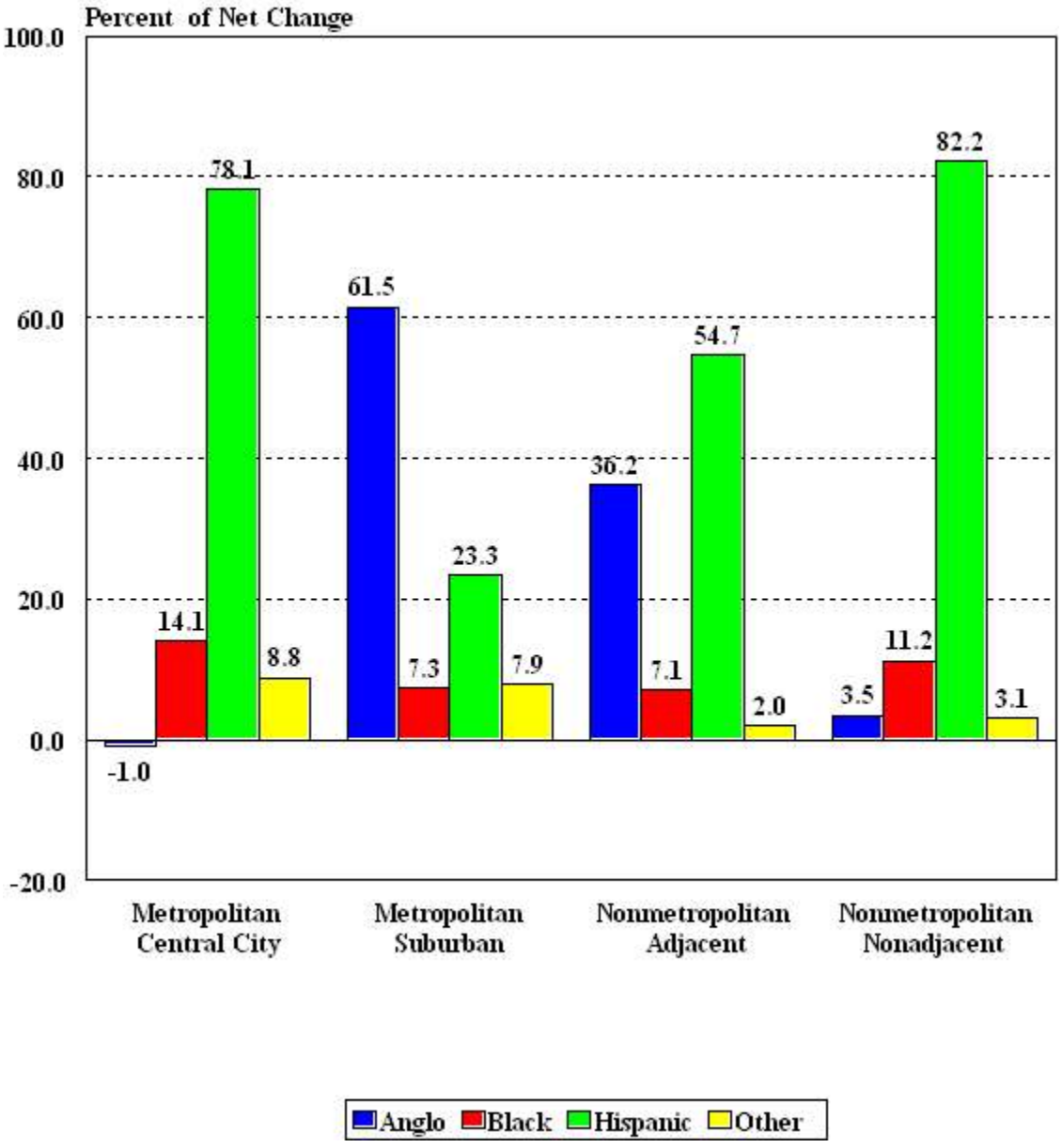


Figure 2.3

Percent of Texas Population by Age Group and Race/Ethnicity, 2000

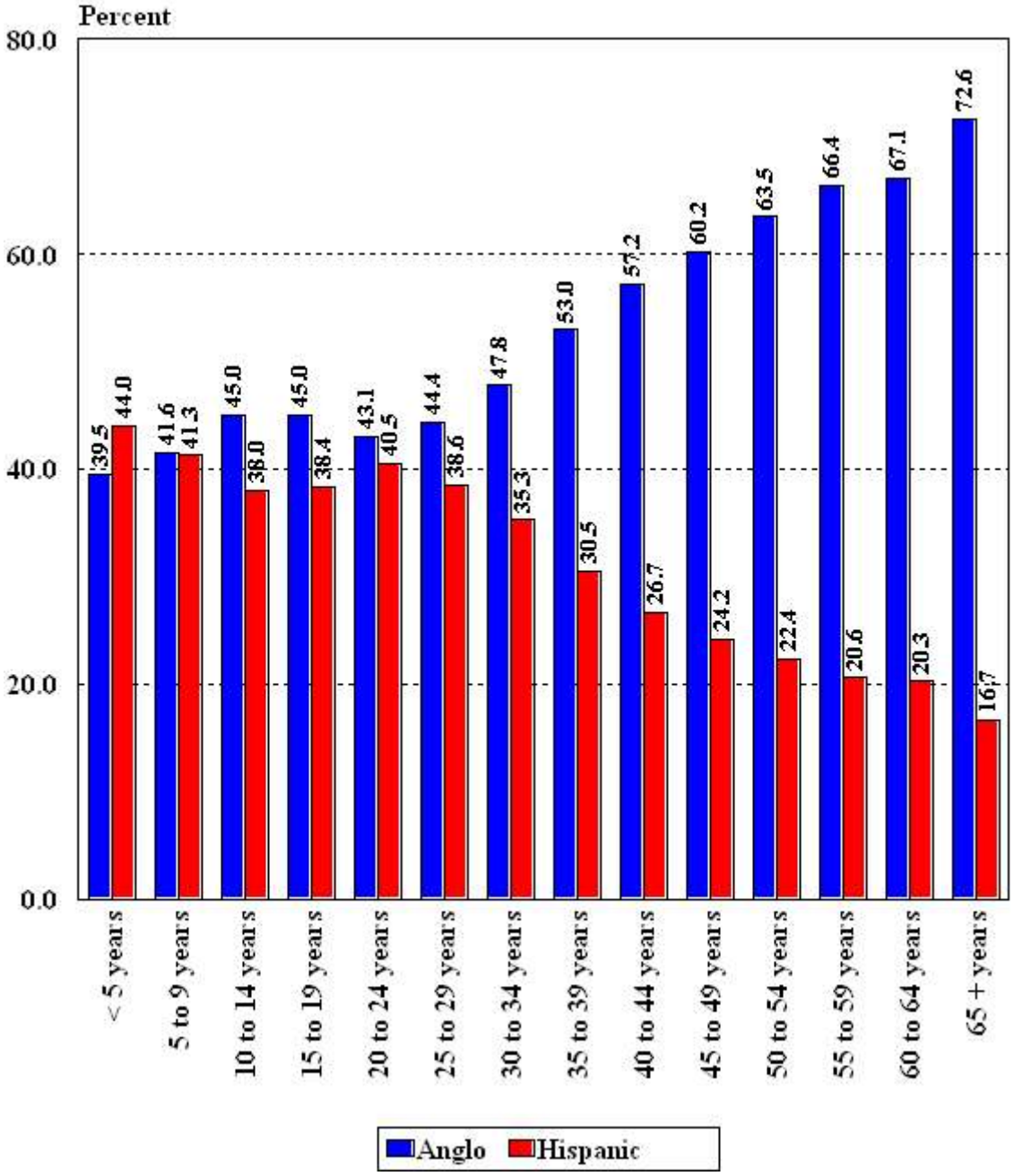
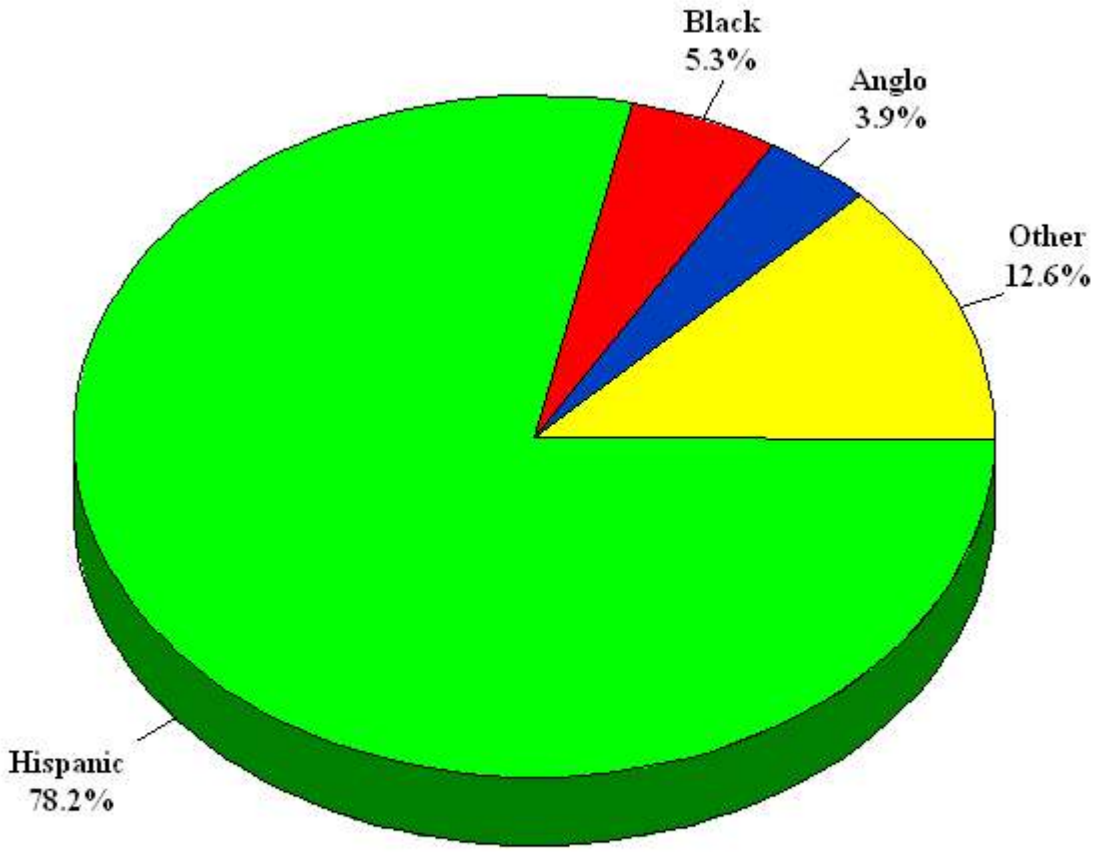


Figure 2.4

Projected Percent of Net Change Due To Each Race/Ethnicity Group in Texas for 2000-2040*



*** Using U.S. Census count for 2000 and Texas Population Estimates and Projections Program 1.0 population projection scenario for 2040.**

Table 2.1

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

Year	Total Population		Percent Change from Previous Time Period	
	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

Source: U.S. Census Bureau, Census of Population and Housing, April 1 population counts for each year indicated.

Table 2.2

Population and Population Change by State for the United States, 1990-2000

State	1990 Census Count	2000 Census Count	Population Change 1990-2000	Percent Population Change 1990-2000
United States	248,709,873	281,421,906	32,712,033	13.2
Alabama	4,040,587	4,447,100	406,513	10.1
Alaska	550,043	626,932	76,889	14.0
Arizona	3,665,228	5,130,632	1,465,404	40.0
Arkansas	2,350,725	2,673,400	322,675	13.7
California	29,760,021	33,871,648	4,111,627	13.8
Colorado	3,294,394	4,301,261	1,006,867	30.6
Connecticut	3,287,116	3,405,565	118,449	3.6
Delaware	666,168	783,600	117,432	17.6
Florida	12,937,926	15,982,378	3,044,452	23.5
Georgia	6,478,216	8,186,453	1,708,237	26.4
Hawaii	1,108,229	1,211,537	103,308	9.3
Idaho	1,006,749	1,293,953	287,204	28.5
Illinois	11,430,602	12,419,293	988,691	8.6
Indiana	5,544,159	6,080,485	536,326	9.7
Iowa	2,776,755	2,926,324	149,569	5.4
Kansas	2,477,574	2,688,418	210,844	8.5
Kentucky	3,685,296	4,041,769	356,473	9.7
Louisiana	4,219,973	4,468,976	249,003	5.9
Maine	1,227,928	1,274,923	46,995	3.8
Maryland	4,781,468	5,296,486	515,018	10.8
Massachusetts	6,016,425	6,349,097	332,672	5.5
Michigan	9,295,297	9,938,444	643,147	6.9
Minnesota	4,375,099	4,919,479	544,380	12.4
Mississippi	2,573,216	2,844,658	271,442	10.5
Missouri	5,117,073	5,595,211	478,138	9.3
Montana	799,065	902,195	103,130	12.9
Nebraska	1,578,385	1,711,263	132,878	8.4
Nevada	1,201,833	1,998,257	796,424	66.3
New Hampshire	1,109,252	1,235,786	126,534	11.4
New Jersey	7,730,188	8,414,350	684,162	8.9
New Mexico	1,515,069	1,819,046	303,977	20.1
New York	17,990,455	18,976,457	986,002	5.5
North Carolina	6,628,637	8,049,313	1,420,676	21.4
North Dakota	638,800	642,200	3,400	0.5
Ohio	10,847,115	11,353,140	506,025	4.7
Oklahoma	3,145,585	3,450,654	305,069	9.7
Oregon	2,842,321	3,421,399	579,078	20.4
Pennsylvania	11,881,643	12,281,054	399,411	3.4
Rhode Island	1,003,464	1,048,319	44,855	4.5
South Carolina	3,486,703	4,012,012	525,309	15.1
South Dakota	696,004	754,844	58,840	8.5
Tennessee	4,877,185	5,689,283	812,098	16.7
Texas	16,986,510	20,851,820	3,865,310	22.8
Utah	1,722,850	2,233,169	510,319	29.6
Vermont	562,758	608,827	46,069	8.2
Virginia	6,187,358	7,078,515	891,157	14.4
Washington	4,866,692	5,894,121	1,027,429	21.1
West Virginia	1,793,477	1,808,344	14,867	0.8
Wisconsin	4,891,769	5,363,675	471,906	9.6
Wyoming	453,588	493,782	40,194	8.9

Sources: U.S. Census Bureau, Census 2000 Redistricting Data (Public Law 94-171), [machine readable data files], 2001a; and Census of Population and Housing, 1990: Summary Tape File 1, [machine readable data files], 1991a.

Table 2.3

Population and Numerical and Percent Change in Population in Council of Governments Regions in Texas, 1990-2000

COG	Population		Change in Population	
	1990	2000	Numerical	Percent
Alamo Area	1,487,180	1,807,868	320,688	21.6
Ark-Tex	248,614	270,468	21,854	8.8
Brazos Valley	219,576	267,085	47,509	21.6
Capital Area	919,456	1,346,833	427,377	46.5
Central Texas	309,433	374,518	65,085	21.0
Coastal Bend	500,805	549,012	48,207	9.6
Concho Valley	142,285	148,212	5,927	4.2
Deep East Texas	305,452	355,862	50,410	16.5
East Texas	652,423	745,180	92,757	14.2
Golden Crescent	167,168	183,905	16,737	10.0
Heart of Texas	285,870	321,536	35,666	12.5
Houston-Galveston	3,897,146	4,854,454	957,308	24.6
Lower Rio Grande Valley	661,370	924,772	263,402	39.8
Middle Rio Grande	134,085	154,381	20,296	15.1
Nortex	211,586	224,366	12,780	6.0
North Central Texas	4,111,750	5,309,277	1,197,527	29.1
Panhandle	371,956	402,862	30,906	8.3
Permian Basin	370,784	376,672	5,888	1.6
Rio Grande	615,196	704,318	89,122	14.5
South East Texas	361,226	385,090	23,864	6.6
South Plains	362,182	377,871	15,689	4.3
South Texas	188,145	264,177	76,032	40.4
Texoma	150,602	178,200	27,598	18.3
West Central Texas	312,220	324,901	12,681	4.1

Sources: U.S. Census Bureau, Census 2000 Redistricting Data (Public Law 94-171), [machine readable data files], 2001a; and Census of Population and Housing, 1990: Summary Tape File 1, [machine readable data files], 1991a.

Table 2.4

Population and Percent Population Change
in Texas by Race/Ethnicity, 1980-2000

Race/ Ethnicity	Population			Percent Change		
	1980	1990	2000	1980-1990	1990-2000	1980-2000
Anglo	9,350,297	10,291,680	11,074,716	10.1	7.6	18.4
Black	1,692,542	1,976,360	2,421,653	16.8	22.5	43.1
Hispanic	2,985,824	4,339,905	6,669,666	45.4	53.7	123.4
Other	200,528	378,565	685,785	88.8	81.2	242.0
Total	14,229,191	16,986,510	20,851,820	19.4	22.8	46.5

Sources: U.S. Census Bureau, Census 2000 Redistricting Data (Public Law 94-171), [machine readable data files], 2001a; Census of Population and Housing, 1990: Summary Tape File 2, [machine readable data files], 1991b; and Census of Population and Housing, 1980: Summary Tape File 2, [machine readable data files], 1982.

Table 2.5

Numerical Change in Texas Population, Proportions of Population, and Proportions of Net Change by Race/Ethnicity, 1980-2000

Race/ Ethnicity	Numerical Change		Proportion of Population			Proportion of Net Change	
	1980-1990	1990-2000	1980	1990	2000	1980-1990	1990-2000
Anglo	941,383	783,036	65.7	60.6	53.1	34.1	20.3
Black	283,818	445,293	11.9	11.6	11.6	10.3	11.5
Hispanic	1,354,081	2,329,761	21.0	25.6	32.0	49.1	60.3
Other	178,037	307,220	1.4	2.2	3.3	6.5	7.9
Total	2,757,319	3,865,310	100.0	100.0	100.0	100.0	100.0

Sources: U.S. Census Bureau, Census 2000 Redistricting Data (Public Law 94-171), [machine readable data files], 2001a; Census of Population and Housing, 1990: Summary Tape File 2, [machine readable data files], 1991b; and Census of Population and Housing, 1980: Summary Tape File 2, [machine readable data files], 1982.

Table 2.6

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

Year	United States	Texas
1900	22.9	18.7
1910	24.1	20.2
1920	25.3	22.0
1930	26.5	23.7
1940	29.0	26.8
1950	30.1	27.9
1960	29.5	27.0
1970	28.1	26.4
1980	30.0	28.0
1990	32.9	30.8
2000	35.3	32.3

Source: U.S. Census Bureau, Census of Population and Housing, for each year indicated.

Table 2.7

Population in Texas by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other	Total
			All Scenarios		
2000	11,074,716	2,421,653	6,669,666	685,785	20,851,820
			Assuming Rates of Zero Net Migration (0.0 Scenario)		
2010	11,292,858	2,604,162	7,986,640	776,088	22,659,748
2020	11,320,857	2,727,365	9,220,971	828,786	24,097,979
2030	11,086,475	2,756,470	10,406,060	856,437	25,105,442
2040	10,599,190	2,697,888	11,408,456	856,047	25,561,581
			Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
2010	11,494,673	2,730,659	8,999,827	953,348	24,178,507
2020	11,735,043	3,004,173	11,742,820	1,256,342	27,738,378
2030	11,701,065	3,191,230	14,900,692	1,596,578	31,389,565
2040	11,382,992	3,283,413	18,391,333	1,954,592	35,012,330
			Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
2010	11,700,471	2,863,397	10,164,378	1,168,772	25,897,018
2020	12,165,004	3,309,068	15,056,028	1,897,182	32,427,282
2030	12,350,427	3,694,283	21,533,219	2,960,361	40,538,290
2040	12,225,486	3,995,349	29,926,210	4,435,916	50,582,961

Source: Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001.

Table 2.8

Percent Change in Projected Population in Texas by Race/Ethnicity
Assuming Alternative Projection Scenarios, 2000-2040

Time Period	Anglo	Black	Hispanic	Other	Total
Assuming Rates of Zero Net Migration (0.0 Scenario)					
2000-2010	2.0	7.5	19.7	13.2	8.7
2010-2020	0.2	4.7	15.5	6.8	6.3
2020-2030	-2.1	1.1	12.9	3.3	4.2
2030-2040	-4.4	-2.1	9.6	0.0	1.8
2000-2040	-4.3	11.4	71.0	24.8	22.6
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
2000-2010	3.8	12.8	34.9	39.0	16.0
2010-2020	2.1	10.0	30.5	31.8	14.7
2020-2030	-0.3	6.2	26.9	27.1	13.2
2030-2040	-2.7	2.9	23.4	22.4	11.5
2000-2040	2.8	35.6	175.7	185.0	67.9
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
2000-2010	5.7	18.2	52.4	70.4	24.2
2010-2020	4.0	15.6	48.1	62.3	25.2
2020-2030	1.5	11.6	43.0	56.0	25.0
2030-2040	-1.0	8.1	39.0	49.8	24.8
2000-2040	10.4	65.0	348.7	546.8	142.6

Source: Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001.

Table 2.9

Total Population in 2000 and Projected Total Population in 2040, and Numerical and Percent Change in Population, 2000-2040, under Alternative Projection Scenarios for Council of Governments Regions in Texas, Ranked by Numerical Population Change, 2000-2040

Rank	COG	Population		Change in Population	
		2000	2040	Number	Percent
	Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
1	North Central Texas	5,309,277	10,086,037	4,776,760	90.0
2	Houston-Galveston	4,854,454	8,483,600	3,629,146	74.8
3	Capital Area	1,346,833	2,737,844	1,391,011	103.3
4	Lower Rio Grande Valley	924,772	2,127,598	1,202,826	130.1
5	Alamo Area	1,807,868	2,593,408	785,540	43.5
6	Rio Grande	704,318	1,182,611	478,293	67.9
7	South Texas	264,177	645,983	381,806	144.5
8	East Texas	745,180	971,935	226,755	30.4
9	Coastal Bend	549,012	775,224	226,212	41.2
10	Central Texas	374,518	589,407	214,889	57.4
11	Panhandle	402,862	528,600	125,738	31.2
12	Brazos Valley	267,085	370,314	103,229	38.7
13	Heart of Texas	321,536	414,644	93,108	29.0
14	Permian Basin	376,672	465,549	88,877	23.6
15	Deep East Texas	355,862	438,474	82,612	23.2
16	Middle Rio Grande	154,381	229,400	75,019	48.6
17	South Plains	377,871	440,524	62,653	16.6
18	South East Texas	385,090	447,626	62,536	16.2
19	Golden Crescent	183,905	229,557	45,652	24.8
20	Texoma	178,200	212,011	33,811	19.0
21	West Central Texas	324,901	350,551	25,650	7.9
22	Nortex	224,366	247,467	23,101	10.3
23	Concho Valley	148,212	170,452	22,240	15.0
24	Ark-Tex	270,468	273,514	3,046	1.1

Table 2.9, continued

Rank	COG	Population 2000	Population 2040	Change in Population Number	Change in Population Percent
	Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
1	North Central Texas	5,309,277	17,091,098	11,781,821	221.9
2	Houston-Galveston	4,854,454	12,883,490	8,029,036	165.4
3	Capital Area	1,346,833	4,802,535	3,455,702	256.6
4	Lower Rio Grande Valley	924,772	2,599,376	1,674,604	181.1
5	Alamo Area	1,807,868	3,136,524	1,328,656	73.5
6	Rio Grande	704,318	1,274,183	569,865	80.9
7	East Texas	745,180	1,275,802	530,622	71.2
8	South Texas	264,177	786,341	522,164	197.7
9	Central Texas	374,518	745,272	370,754	99.0
10	Coastal Bend	549,012	873,659	324,647	59.1
11	Panhandle	402,862	593,469	190,607	47.3
12	Heart of Texas	321,536	506,024	184,488	57.4
13	South East Texas	385,090	552,846	167,756	43.6
14	Deep East Texas	355,862	522,052	166,190	46.7
15	Brazos Valley	267,085	425,411	158,326	59.3
16	Middle Rio Grande	154,381	213,897	59,516	38.6
17	Texoma	178,200	236,905	58,705	32.9
18	Permian Basin	376,672	431,016	54,344	14.4
19	Golden Crescent	183,905	233,946	50,041	27.2
20	South Plains	377,871	404,206	26,335	7.0
21	Concho Valley	148,212	169,314	21,102	14.2
22	Nortex	224,366	245,267	20,901	9.3
23	West Central Texas	324,901	320,811	-4,090	-1.3
24	Ark-Tex	270,468	259,517	-10,951	-4.0

Source: Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001.

Table 2.10

Total Population in 2000 and Projected Total Population in 2040, and Numerical and Percent Change in Population, under Alternative Projection Scenarios for Council of Governments Regions in Texas, Ranked by Percent Population Change, 2000-2040

Rank	COG	Population		Change in Population	
		2000	2040	Number	Percent
	Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
1	South Texas	264,177	645,983	381,806	144.5
2	Lower Rio Grande Valley	924,772	2,127,598	1,202,826	130.1
3	Capital Area	1,346,833	2,737,844	1,391,011	103.3
4	North Central Texas	5,309,277	10,086,037	4,776,760	90.0
5	Houston-Galveston	4,854,454	8,483,600	3,629,146	74.8
6	Rio Grande	704,318	1,182,611	478,293	67.9
7	Central Texas	374,518	589,407	214,889	57.4
8	Middle Rio Grande	154,381	229,400	75,019	48.6
9	Alamo Area	1,807,868	2,593,408	785,540	43.5
10	Coastal Bend	549,012	775,224	226,212	41.2
11	Brazos Valley	267,085	370,314	103,229	38.7
12	Panhandle	402,862	528,600	125,738	31.2
13	East Texas	745,180	971,935	226,755	30.4
14	Heart of Texas	321,536	414,644	93,108	29.0
15	Golden Crescent	183,905	229,557	45,652	24.8
16	Permian Basin	376,672	465,549	88,877	23.6
17	Deep East Texas	355,862	438,474	82,612	23.2
18	Texoma	178,200	212,011	33,811	19.0
19	South Plains	377,871	440,524	62,653	16.6
20	South East Texas	385,090	447,626	62,536	16.2
21	Concho Valley	148,212	170,452	22,240	15.0
22	Nortex	224,366	247,467	23,101	10.3
23	West Central Texas	324,901	350,551	25,650	7.9
24	Ark-Tex	270,468	273,514	3,046	1.1

Table 2.10, continued

Rank	COG	Population 2000	Population 2040	Change in Population Number	Change in Population Percent
	Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
1	Capital Area	1,346,833	4,802,535	3,455,702	256.6
2	North Central Texas	5,309,277	17,091,098	11,781,821	221.9
3	South Texas	264,177	786,341	522,164	197.7
4	Lower Rio Grande Valley	924,772	2,599,376	1,674,604	181.1
5	Houston-Galveston	4,854,454	12,883,490	8,029,036	165.4
6	Central Texas	374,518	745,272	370,754	99.0
7	Rio Grande	704,318	1,274,183	569,865	80.9
8	Alamo Area	1,807,868	3,136,524	1,328,656	73.5
9	East Texas	745,180	1,275,802	530,622	71.2
10	Brazos Valley	267,085	425,411	158,326	59.3
11	Coastal Bend	549,012	873,659	324,647	59.1
12	Heart of Texas	321,536	506,024	184,488	57.4
13	Panhandle	402,862	593,469	190,607	47.3
14	Deep East Texas	355,862	522,052	166,190	46.7
15	South East Texas	385,090	552,846	167,756	43.6
16	Middle Rio Grande	154,381	213,897	59,516	38.6
17	Texoma	178,200	236,905	58,705	32.9
18	Golden Crescent	183,905	233,946	50,041	27.2
19	Permian Basin	376,672	431,016	54,344	14.4
20	Concho Valley	148,212	169,314	21,102	14.2
21	Nortex	224,366	245,267	20,901	9.3
22	South Plains	377,871	404,206	26,335	7.0
23	West Central Texas	324,901	320,811	-4,090	-1.3
24	Ark-Tex	270,468	259,517	-10,951	-4.0

Source: Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001.

Table 2.11

Percent of Population in Texas by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other
All Scenarios				
2000	53.1	11.6	32.0	3.3
Assuming Rates of Zero Net Migration (0.0 Scenario)				
2010	49.9	11.5	35.2	3.4
2020	47.0	11.3	38.3	3.4
2030	44.2	11.0	41.4	3.4
2040	41.5	10.6	44.6	3.3
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
2010	47.6	11.3	37.2	3.9
2020	42.4	10.8	42.3	4.5
2030	37.2	10.2	47.5	5.1
2040	32.5	9.4	52.5	5.6
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
2010	45.2	11.1	39.2	4.5
2020	37.5	10.2	46.4	5.9
2030	30.5	9.1	53.1	7.3
2040	24.2	7.9	59.1	8.8

Source: Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001.

Table 2.12

Number and Percent of Net Change in the Texas Population
Due To Each Race/Ethnicity Group,
Assuming Alternative Projection Scenarios, 2000-2040

Race/ Ethnicity	Number	Percent
Assuming Rates of Zero Net Migration (0.0 Scenario)		
Anglo	-475,526	-10.1
Black	276,235	5.9
Hispanic	4,738,790	100.6
Other	170,262	3.6
Total	4,709,761	100.0
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
Anglo	308,276	2.2
Black	861,760	6.1
Hispanic	11,721,667	82.8
Other	1,268,807	8.9
Total	14,160,510	100.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
Anglo	1,150,770	3.9
Black	1,573,696	5.3
Hispanic	23,256,544	78.2
Other	3,750,131	12.6
Total	29,731,141	100.0

Source: Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001.

Table 2.13

Anglo and Hispanic Population in 2000, Projected Anglo and Hispanic Population in 2040, and Percent Anglo and Hispanic Population Change under the 1.0 Projection Scenario for Council of Governments Regions in Texas, Ranked by Percent Population Change, 2000-2040

Rank	COG	Population		Change in Population	
		2000	2040	Number	Percent
	Anglo Population				
1	Capital Area	848,497	1,812,033	963,536	113.6
2	North Central Texas	3,203,159	4,443,409	1,240,250	38.7
3	Alamo Area	769,661	875,144	105,483	13.7
4	Brazos Valley	179,746	203,432	23,686	13.2
5	Deep East Texas	262,411	281,720	19,309	7.4
6	East Texas	551,053	536,200	-14,853	-2.7
7	Central Texas	232,968	226,044	-6,924	-3.0
8	South Texas	13,098	12,235	-863	-6.6
9	Texoma	151,821	135,259	-16,562	-10.9
10	Houston-Galveston	2,383,452	2,122,363	-261,089	-11.0
11	Panhandle	280,519	214,842	-65,677	-23.4
12	Coastal Bend	211,723	157,344	-54,379	-25.7
13	Heart of Texas	217,328	160,422	-56,906	-26.2
14	Middle Rio Grande	28,722	20,012	-8,710	-30.3
15	Nortex	177,785	122,346	-55,439	-31.2
16	Ark-Tex	202,570	137,395	-65,175	-32.2
17	Golden Crescent	107,013	71,008	-36,005	-33.6
18	West Central Texas	243,287	161,324	-81,963	-33.7
19	Concho Valley	94,577	59,159	-35,418	-37.4
20	South East Texas	248,509	149,035	-99,474	-40.0
21	Lower Rio Grande Valley	112,088	65,900	-46,188	-41.2
22	South Plains	222,776	128,014	-94,762	-42.5
23	Permian Basin	204,766	93,467	-111,299	-54.4
24	Rio Grande	127,187	37,379	-89,808	-70.6

Table 2.13, continued

Rank	COG	Population 2000	Population 2040	Change in Population Number	Change in Population Percent
		Hispanic Population			
1	East Texas	64,942	577,898	512,956	789.9
2	North Central Texas	1,137,181	9,420,583	8,283,402	728.4
3	South East Texas	30,832	234,609	203,777	660.9
4	Capital Area	340,603	2,375,420	2,034,817	597.4
5	Texoma	12,899	74,940	62,041	481.0
6	Houston-Galveston	1,389,915	7,919,349	6,529,434	469.8
7	Deep East Texas	31,203	166,005	134,802	432.0
8	Heart of Texas	51,962	270,235	218,273	420.1
9	Central Texas	58,932	267,121	208,189	353.3
10	Brazos Valley	41,712	151,226	109,514	262.5
11	Ark-Tex	19,212	67,610	48,398	251.9
12	Panhandle	96,005	323,046	227,041	236.5
13	Nortex	25,271	83,706	58,435	231.2
14	Lower Rio Grande Valley	803,045	2,484,939	1,681,894	209.4
15	South Texas	249,428	766,218	516,790	207.2
16	Golden Crescent	62,413	140,812	78,399	125.6
17	Rio Grande	547,124	1,177,045	629,921	115.1
18	Coastal Bend	308,190	642,168	333,978	108.4
19	Concho Valley	47,054	97,236	50,182	106.6
20	Alamo Area	894,135	1,844,808	950,673	106.3
21	Permian Basin	148,982	304,146	155,164	104.1
22	West Central Texas	60,191	119,732	59,541	98.9
23	South Plains	125,376	228,922	103,546	82.6
24	Middle Rio Grande	123,059	188,436	65,377	53.1

Source: Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001.

Table 2.14

Percent of Population in Texas by Age and Race/Ethnicity of the Population and Median Age by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Age Group	Anglo	Black	Hispanic	Other	Total Percent
All Scenarios					
2000					
<18	23.0	31.7	35.8	26.1	28.2
18 - 24	8.8	11.2	13.2	11.2	10.6
25 - 44	30.1	32.1	31.8	37.7	31.1
45 - 64	24.4	17.7	14.0	20.1	20.2
65+	13.7	7.3	5.2	4.9	9.9
Median Age	38.0	29.6	25.5	31.1	32.3
Assuming Rates of Zero Net Migration (0.0 Scenario)					
2010					
<18	21.1	27.3	34.0	24.6	26.5
18 - 24	9.1	11.8	11.1	8.7	10.1
25 - 44	25.4	29.1	30.0	31.3	27.6
45 - 64	29.5	24.2	18.8	26.8	25.1
65+	14.9	7.6	6.1	8.6	10.7
Median Age	40.7	32.0	28.2	36.8	34.6
2020					
<18	19.9	24.1	31.4	20.7	24.8
18 - 24	8.1	10.2	11.1	9.1	9.6
25 - 44	24.9	29.8	27.2	24.4	26.3
45 - 64	27.6	25.3	21.8	30.2	25.1
65+	19.5	10.6	8.5	15.6	14.2
Median Age	42.4	34.9	30.1	41.9	36.7
2030					
<18	18.4	21.8	29.1	17.5	23.1
18 - 24	8.0	9.3	10.6	8.1	9.3
25 - 44	24.5	29.3	26.5	23.9	25.9
45 - 64	24.4	24.5	21.8	27.4	23.4
65+	24.7	15.1	12.0	23.1	18.3
Median Age	44.3	38.2	31.9	45.4	38.5

Table 2.14, continued

Age Group	Anglo	Black	Hispanic	Other	Total Percent
2040					
<18	17.4	19.8	27.4	17.0	22.1
18 - 24	7.7	8.9	10.1	6.7	8.8
25 - 44	24.0	27.3	26.7	23.8	25.6
45 - 64	25.2	27.0	20.8	22.9	23.3
65+	25.7	17.0	15.0	29.6	20.2
Median Age	45.8	40.8	34.1	47.2	39.7
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
2010					
<18	21.0	27.3	32.9	23.3	26.2
18 - 24	9.1	12.0	11.7	9.0	10.4
25 - 44	25.5	29.2	31.9	32.7	28.6
45 - 64	29.4	24.0	17.9	26.7	24.4
65+	15.0	7.5	5.6	8.3	10.4
Median Age	40.7	31.8	28.2	36.8	34.1
2020					
<18	19.7	24.1	30.4	19.4	24.7
18 - 24	8.1	10.4	11.0	8.7	9.6
25 - 44	25.1	30.0	30.8	26.5	28.1
45 - 64	27.5	25.0	20.4	30.7	24.4
65+	19.6	10.5	7.4	14.7	13.2
Median Age	42.5	34.6	30.3	42.0	35.9
2030					
<18	18.2	21.9	27.9	16.4	23.1
18 - 24	7.9	9.4	10.7	7.8	9.4
25 - 44	24.7	29.8	29.6	25.0	27.5
45 - 64	24.4	24.2	21.9	29.1	23.5
65+	24.8	14.7	9.9	21.7	16.5
Median Age	44.4	37.9	32.3	45.6	37.7
2040					
<18	17.2	19.8	26.0	15.5	22.0
18 - 24	7.6	9.2	10.1	6.5	9.0
25 - 44	23.9	27.6	29.4	24.2	27.1
45 - 64	25.4	26.8	22.3	25.5	23.9
65+	25.9	16.6	12.2	28.3	18.0
Median Age	46.0	40.4	34.2	47.9	38.8

Table 2.14, continued

Age Group	Anglo	Black	Hispanic	Other	Total Percent
	Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
2010					
<18	20.8	27.3	31.8	22.1	25.9
18 - 24	9.2	12.3	12.3	9.4	10.8
25 - 44	25.7	29.2	33.8	34.0	29.6
45 - 64	29.3	23.7	16.9	26.4	23.7
65+	15.0	7.5	5.2	8.1	10.0
Median Age	40.7	31.7	28.2	36.9	33.6
2020					
<18	19.6	24.1	29.2	18.2	24.4
18 - 24	8.0	10.7	10.8	8.3	9.6
25 - 44	25.3	30.2	34.6	28.5	30.3
45 - 64	27.4	24.6	19.1	31.1	23.5
65+	19.7	10.4	6.3	13.9	12.2
Median Age	42.5	34.3	30.5	42.0	35.3
2030					
<18	18.0	22.0	26.7	15.4	22.8
18 - 24	7.9	9.6	10.6	7.4	9.4
25 - 44	24.7	30.1	32.9	26.2	29.7
45 - 64	24.6	23.9	21.7	30.7	23.4
65+	24.8	14.4	8.1	20.3	14.7
Median Age	44.5	37.6	32.9	45.7	37.1
2040					
<18	17.0	19.9	24.4	14.1	21.4
18 - 24	7.5	9.4	10.2	6.4	9.1
25 - 44	23.9	27.9	31.9	24.5	29.0
45 - 64	25.6	26.6	23.6	28.0	24.7
65+	26.0	16.2	9.9	27.0	15.8
Median Age	46.3	40.1	34.4	48.4	38.3

Source: Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001.

Chapter 3

Current and Future Trends in Texas Households

After population growth, change in racial/ethnic diversity, and the aging of the population, the fourth major demographic factor shaping the future of Texas is the change in the number and composition of Texas households. The forms of households--that is, how Texans are grouped together to live--impact numerous aspects of the State's public and private sectors. For example, the number of persons in a household affects the level of demand for different types of housing, households with single parents tend to have higher levels of need for public assistance, and married-couple households tend to have higher incomes. Services such as long-term care are often impacted by the characteristics of the family (e.g., the number of care givers), and even the level of public versus private care that is required may be affected by household characteristics. Understanding how households in Texas have changed and are projected to change in the future is thus instrumental to understanding the future of Texas. In this chapter, we examine both the past and future of Texas households and families. Regional patterns of change which were examined for populations in Chapter 2 are not examined here for households because of the need to reduce the length of this document and the fact that the patterns of statewide household change shown in this chapter are distributed across regions in rough proportion to their populations. More detailed data are presented in the regional analyses provided in other volumes of this report.

Historical Trends in Texas Households

For a number of decades, household growth in Texas has mirrored the extensive growth of the population. In fact, because of the rapid growth of the population in those ages associated with initial stages of household formation, the decennial percentage increases in households have tended to exceed those in the population. For example, population growth in the 1960s, 1970s, and 1980s of 16.9 percent, 27.1 percent, and 19.4 percent (see Table 2.1) was surpassed by increases in the number of households of 23.6, 43.7, and 23.0 percent during the same decades (see Table 3.1). The movement of baby boomers into household formation ages resulted in substantial growth in the number of households.

In the 1990s, the percentage increase in the number of households in Texas was less than the percentage increase in the population (21.8 percent for households and 22.8 percent for the population). This change can be attributed to two factors: (1) large parts of the population were aging out of the ages in which initial household formation occurs, so that fewer households were being formed, and (2) non-Anglo populations, which accounted for roughly 80 percent of the net population growth in the 1990s, have larger average household sizes, resulting in larger population increases per housing unit. Overall, however, these data suggest that, although the pace of growth has varied by decade, the number of households in Texas has increased rapidly in all recent decades.

Texas and U.S. households have also shown substantial changes in size (see Figure 3.1) and composition (Table 3.2 and Figures 3.2-3.5). Since 1940, the size of the average Texas household has decreased by one person, representing a decrease of 36.5 percent, and similar declines occurred in Texas and in the nation in more recent periods (see Figure 3.1). This decline is important because fewer numbers of persons per household result in a larger number of

households. This means that changes in household size affect changes in the number of households--that is, growth in the number of both consumer units and taxing units.

Like growth in the number of households, change in average household size in Texas was impacted by the characteristics of the population changes of the 1990s. The 1990s witnessed relatively little change in average household size in Texas, while in the nation, the average size of households continued to decline from 2.63 in 1990 to 2.59 in 2000. The difference between Texas and national patterns reflects differences in the composition of population growth. In Texas, average household size decreased for nearly all racial/ethnic groups during the 1990s, but the larger household size of Hispanic and other non-Anglo populations (e.g., the average household size in 2000 for Hispanics was 3.6 and that for non-Hispanics was 2.5) and the large proportion of the population increase that is due to non-Anglo populations resulted in the addition of a larger proportion of larger households. As a result, the overall average size of households in the total state population did not decline in the 1990s as in earlier decades. The substantial difference in the size of households being added to the population of Texas in the 1990s compared to earlier decades is very evident in the data in the top panel of Table 3.2. These data show that although households with five or more persons showed the smallest percentage increases in both the 1970s and 1980s, the number of households with five or six persons showed the largest percentage increases in the 1990s. The rapid growth of populations with larger households played a significant role in household change in Texas in the 1990s. Despite such changes, the data on households continue to show that a majority of all households are one and two person households, with 23.7 percent of all households in 2000 involving only one individual and 30.5 having only two persons.

The diversification of household forms was evident in both Texas and the United States as a whole. As shown in Table 3.2 and Figures 3.2-3.5, Texas and U.S. households have become increasingly characterized by nonfamily, single-parent, and unmarried-partner households. The percentage increase in nonfamily households (that is, households consisting of a single person or two or more unrelated persons living in the same housing unit) has exceeded that for family households (households with two or more persons who are related by kinship, marriage, or adoption and living in the same housing unit) in each of the last three decades (see the bottom panel of Table 3.2 and Figures 3.2 and 3.3). Married-couple (including both those with and those without children) households have shown smaller percentage increases than male- or female-family householder (i.e., single-parent) households, and the percentage of married-couple households declined and showed smaller rates of growth than unmarried-partner households (see Figures 3.4 and 3.5). For example, the number of family households in Texas 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 during the same decades; 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, and the percentage of all households in Texas that were married-couple households declined from 71.5 percent of all households in 1970 to 54.0 percent in 2000; and while the number of married-couple households increased by 16.1 percent from 1990 to 2000, the number of unmarried-partner households increased by 87.7 percent. Although a majority of Texas and U.S. households (54.0 percent in Texas and 51.7 percent in the United States) remained married-couple households in 2000, the forms and types of households are clearly diversifying.

Overall, recent patterns of household change suggest that the number of households in Texas has increased substantially and that households have become smaller in size and more diverse in form than in the past. The larger non-Anglo population in Texas has resulted in slower rates of change toward nonfamily, single-parent, and unmarried-partner households than in the United States as a whole, but it is evident that Texas households are changing. This growth in the number and diversity of household forms affects the magnitude of services needed in the State, the types of services, and how these services can be delivered most effectively.

Future Patterns of Household Change in Texas

The number of Texas households is likely to continue to grow extensively in the coming years and the characteristics of such households to reflect the diversity and age structure of the population. Household projections based on the population projection scenarios discussed in the preceding chapter are shown in Tables 3.3-3.8.

The data in these tables point to substantial change in the number of Texas households. From 2000 to 2040 the number of Texas households is projected to increase by more than 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 (Table 3.3). These numbers represent increases of 84.2 percent and 162.1 percent, respectively (Table 3.4). The rate of growth in households is expected to exceed the 67.9 percent and 142.6 percent rates of growth projected for the total population of Texas. The faster growth in households than in population is a reflection of the large number of non-Anglos who will enter household-formation ages during this time period. For example, under the 1.0 scenario, although the rate of increase in households from 2000 to 2040 exceeds that in the populations of all

racial/ethnic groups, the percentage increase in households exceeds the rate of increase in the population by 13.2 percent for Anglos (23.6 percent rate of growth for households compared to 10.4 percent for the population) but by 42.0 percent for Blacks, 123.0 percent for Hispanics, and by 166.1 percent for the Other population group.

The diversity in the future population is reflected in the diversity of householders (see Table 3.5). By 2040 under the 1.0 scenario, 29.0 percent of all households would involve Anglo householders compared to 61.4 percent in 2000, 9.0 percent would involve Blacks compared to 11.4 percent in 2000, 52.8 percent would involve Hispanics compared to 24.2 percent in 2000, and 9.2 percent would involve persons from the Other racial/ethnic group compared to 3.0 percent in 2000.

Householders tend to have age structures older than the general population because one does not generally become a householder before one's late teens or early adult years. For this reason and because the non-Anglo population is younger than the Anglo population, the percentages of households that have a non-Anglo householder are lower than the non-Anglo proportion of the population. These data point, however, to a household structure in which a majority of households will have a non-Anglo householder by the second decade of this century. In fact, if one examines the net increase in the number of households between 2000 and 2040 under the 1.0 scenario, 91.0 percent is projected to be due to growth in the number of non-Anglo households with 7.5 percent due to Black, 70.4 percent due to Hispanic, and 13.1 percent due to increases in the number of households with a householder from the Other racial/ethnic group.

The age structure of householders in Texas will become older in the coming years. In 2000 the median age of householders in Texas was 45.0 years of age (see Table 3.7) while the median age in the population was 32.3 years of age (see Table 2.14). The average householder

will be older in the future, however. By 2040, under the 1.0 scenario, the median age of all householders would be 50.1 years. The faster growth scenario projects larger increases in the number of households because of faster growth in younger non-Anglo populations, and the slower growth scenarios show higher median ages for householders; that is, the 0.0 scenario shows a median age of 53.3 in 2040 and the 0.5 scenario shows a median age of 51.7. What is particularly evident is that the number of households with elderly householders increases extensively such that by 2040, under the 1.0 scenario, 24.5 percent of all households would have a householder 65 years of age or older, compared to 17.6 percent in 2000.

The age of householders also varies by race/ethnicity. Reflecting their generally younger populations, the median age of non-Anglo households is younger and the proportion at older ages is smaller. For example, in 2000 the median age was 47.9 years for Anglo householders but was 43.1 years for Blacks, 40.7 years for Hispanics, and 40.9 years for households headed by persons of the Other racial/ethnic group. Even in 2040, differentials remain in the median ages: under the 1.0 scenario, the median age for Anglos would be 56.4 years, but it would be 51.0 years for Blacks, 46.5 years for Hispanics, and 55.2 years for the Other racial/ethnic group. Although the age of householders increases for all racial/ethnic groups, non-Anglo households remain younger.

The patterns projected for households indicate the expected patterns in that they show substantial growth, diversification, and an aging of the household base of Texas. These patterns were reflected in our previous projections (Murdock et al. 1997) and are ones that have been examined extensively.

The data in Table 3.8 provide projections of households by type. These projections were made using age-, race/ethnicity-, and household-type-specific rates for 2000. The data point to some reversal in household change patterns from those of the past. Because of the higher rates of

family households among Hispanic and Other populations and the rapid growth expected to occur in these populations compared to Anglo and Black populations, the projections point to growth in the proportion of all households that would be family households and the proportion that would be married-couple families with children, thereby reversing the trends that have characterized change in Texas households during recent decades. Because of the faster growth of non-Anglo populations in the higher growth scenarios, the increase in family households and married-couple households is greater in these scenarios. For example, under the 0.0, scenario the percentage of family households increases from 71.0 percent in 2000 to 71.2 percent in 2040; in the 0.5 scenario, the percentage of family households in 2040 is 73.1 percent, and in the 1.0 scenario it is 74.9 percent. Similarly, the percentage of married-couple-with-children households increases from 27.1 percent in 2000 to 29.9 percent in 2040 under the 1.0 scenario but declines to only 24.3 percent under the 0.0 scenario and remains at 27.1 percent under the 0.5 scenario. These projections will not be correct, of course, if Hispanic and Other households come to display patterns more similar to Anglo or Black households.

Even if there is some closure in household patterns, however, it is evident that the projected demographic changes are likely to result in a larger number of family households and a larger number of households with children than would be the case if Anglo patterns were to prevail. Table 3.9 compares the total number of households by type in 2040 under the 1.0 scenario to the numbers that would result if Anglo rates were assumed for all racial/ethnic groups. The data show that there would be more than 1.7 million fewer family households and roughly 1.9 million fewer married-couple-with-children households if Anglo rates prevailed. What this suggests is that the large proportion of Texas growth that comes from Hispanic and

Other population groups is also likely to result in issues involving families and children playing a larger role in Texas than in some other parts of the nation in the coming years.

Summary

The data point to the following patterns:

1. The number of Texas households has increased rapidly in the last several decades as the population has grown and large numbers of persons from the baby-boom generation have entered household-formation ages. As a result, the State had 7,393,354 households by 2000.

2. Households have become increasingly diverse in form, with the percentages of married-couple and married-couple-with-children households declining and the percentage of single-parent families and non-family and unmarried-partner households increasing.

3. Because of the rapid growth of non-Anglo populations in the 1990s, and the fact that they are more likely to have larger households and higher proportions of family households, the 1990s witnessed slower growth in households than in the population, a pattern not seen for several decades, and the diversification toward fewer married-couple and non-family households slowed compared to earlier decades.

4. Although the diversity in patterns of household change was abated somewhat in the 1990s, the historical trends in Texas households can be characterized as ones of rapid growth and diversification in form toward larger proportions of single-parent, non-family, and unmarried-partner households.

5. Projections of households suggest that the patterns of rapid growth, racial/ethnic diversification, and aging evident in the population will be apparent in households as well. Under the 1.0 scenario, the number of households in Texas would increase to 19.4 million by

2040 compared to 7.4 million in 2000, an increase of 162.1 percent. The percentage of households with an Anglo householder would decline from 61.4 percent in 2000 to 29.0 percent of all households by 2040, while the percentage of householders who are Black would decrease from 11.4 to 9.0 percent of all households, the percentage of all households with a Hispanic householder would increase from 24.2 to 52.8 percent, and the percentage of all households with an Other householder would increase from 3.0 percent to 9.2 percent. The median age of householders would increase under the 1.0 scenario from 45.0 in 2000 to 50.1 years of age in 2040.

6. Because of the rapid growth projected in Hispanic and Other populations with larger household sizes and larger proportions of family and married-couple households, these projections suggest that future patterns of change in household composition could differ from those in the past, resulting in larger proportions of married-couple and married-couple-with-children households.

The data provided in this chapter suggest that Texas can expect to have an increasing number of households that are ever more racially/ethnically diverse and older. Issues impacting older householders will be of increasing importance, as will issues of concern to non-Anglo households. Coupled with such previously projected changes may be an unanticipated increase in concerns related to non-Anglo families, including families with children. The growth and the diversity of Texas households may thus provide substantial challenges and opportunities for the State in the coming decades.

Figure 3.1

Average Persons Per Household in the United States and Texas, 1950-2000

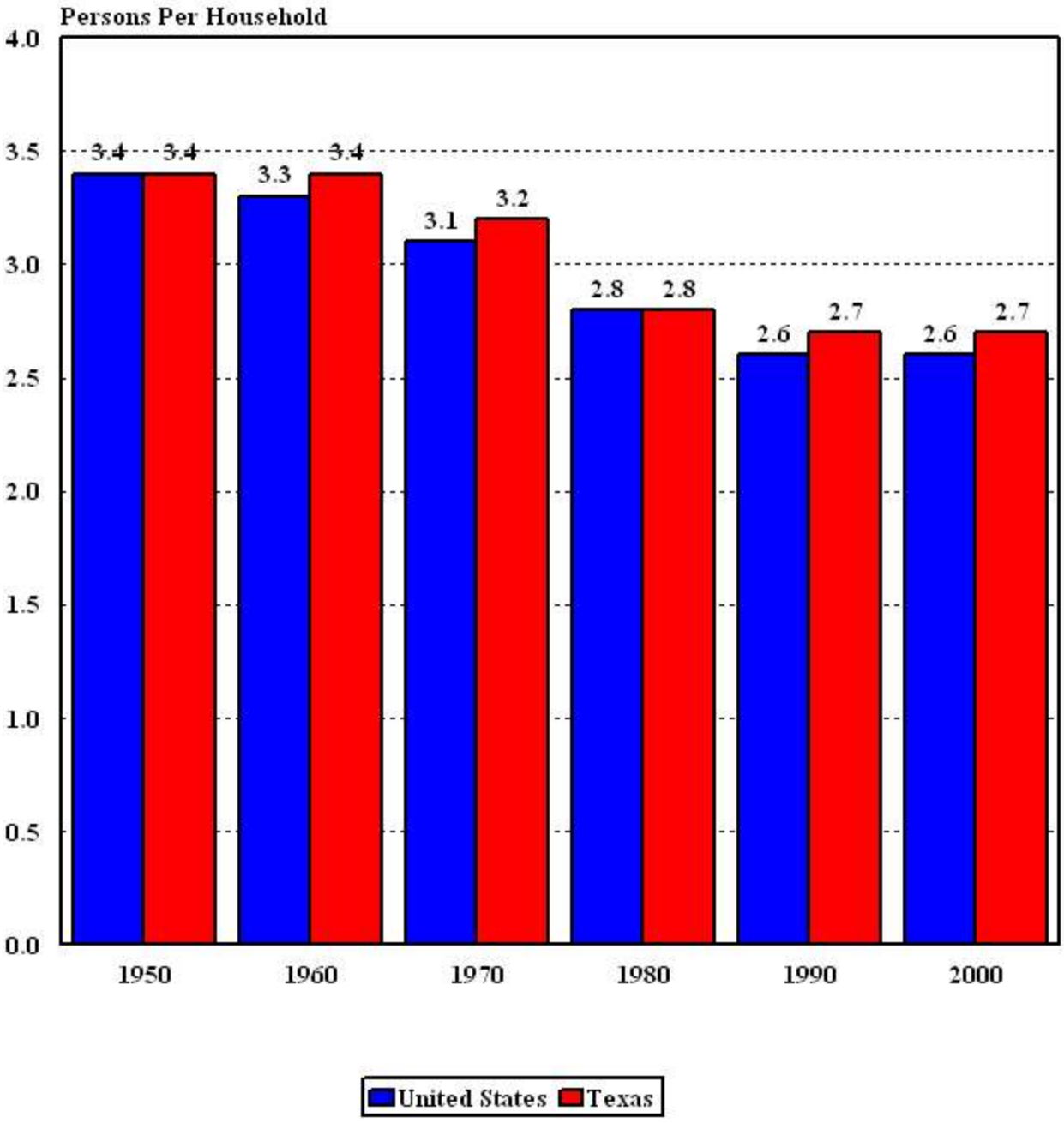


Figure 3.2

Percent Change in Households by Type in the United States and Texas, 1980-2000

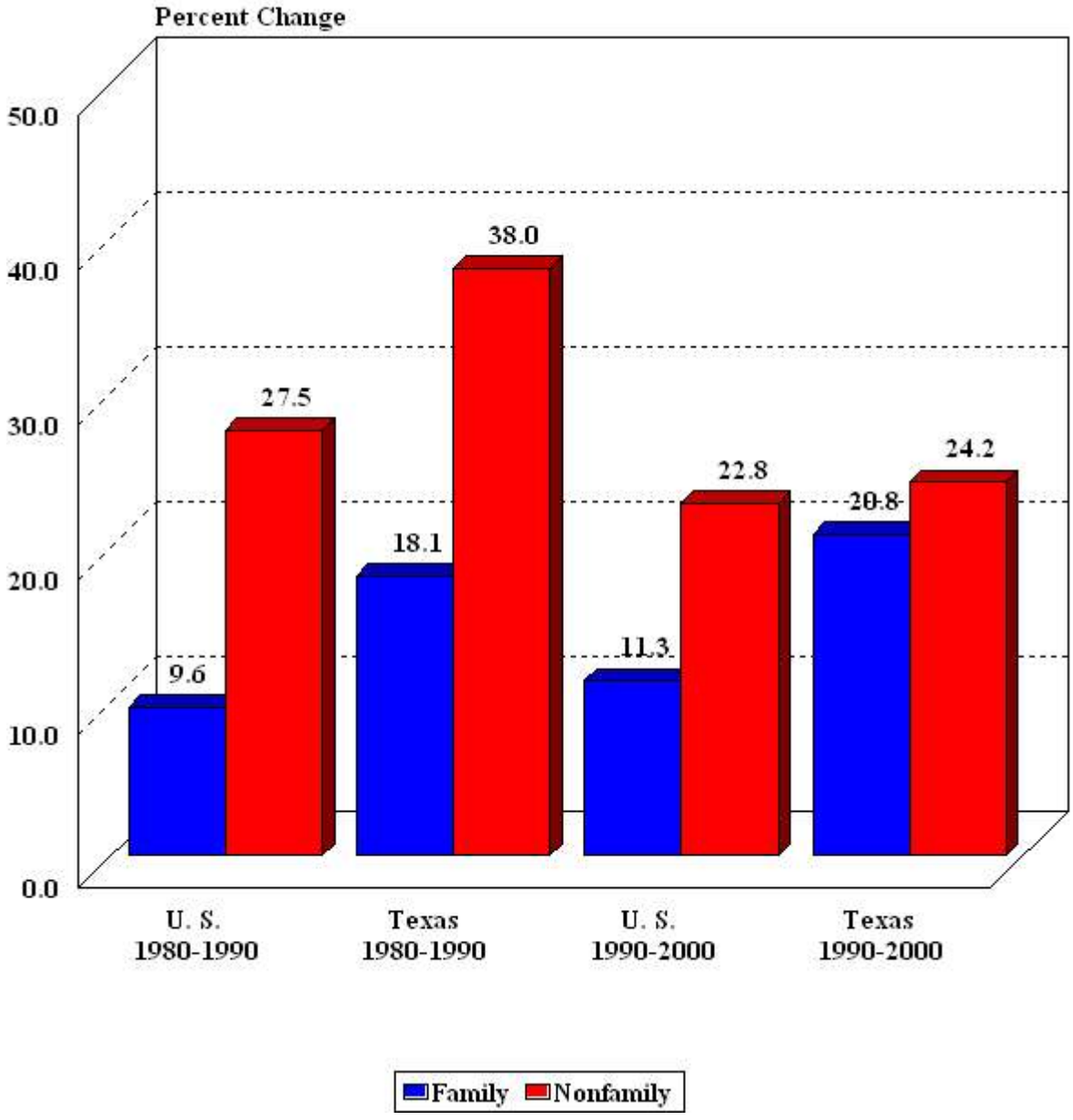


Figure 3.3

Percent Change in Family Households by Type in the United States and Texas, 1980-2000

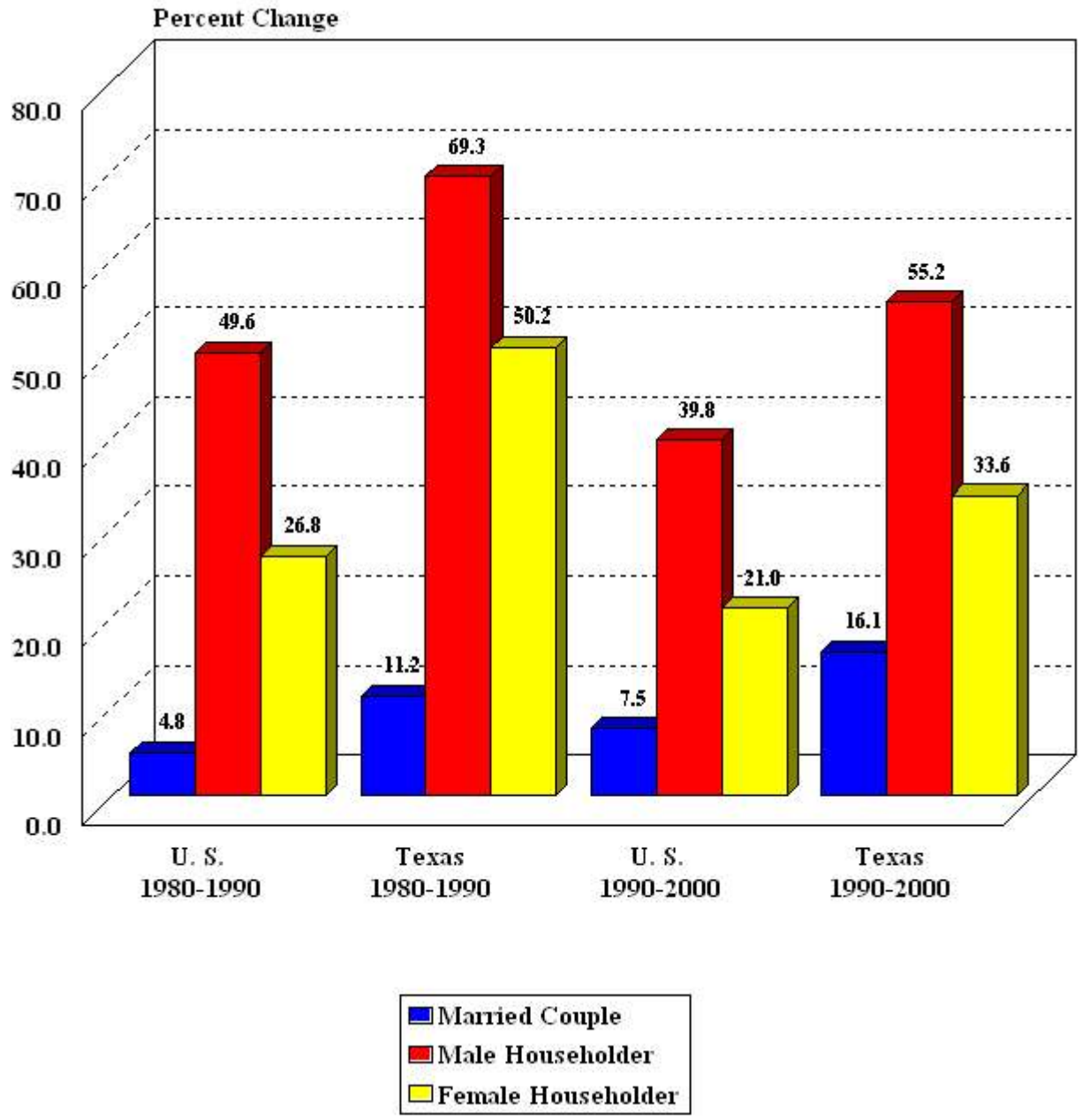


Figure 3.4

Partners by Type as a Percent of Total Households in the United States and Texas, 1990 and 2000

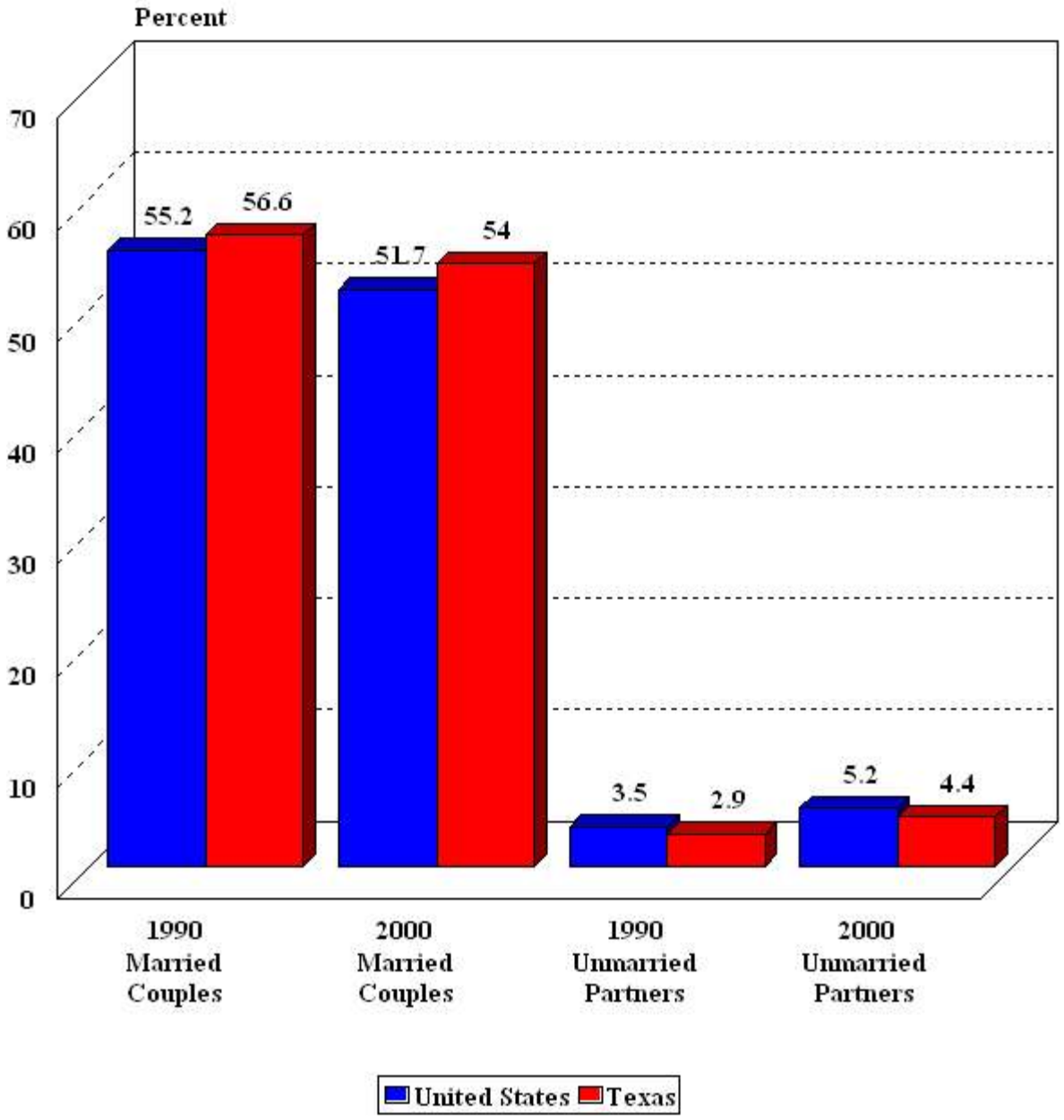


Figure 3.5

Percent Change in Partners by Type in the United States and Texas, 1990-2000

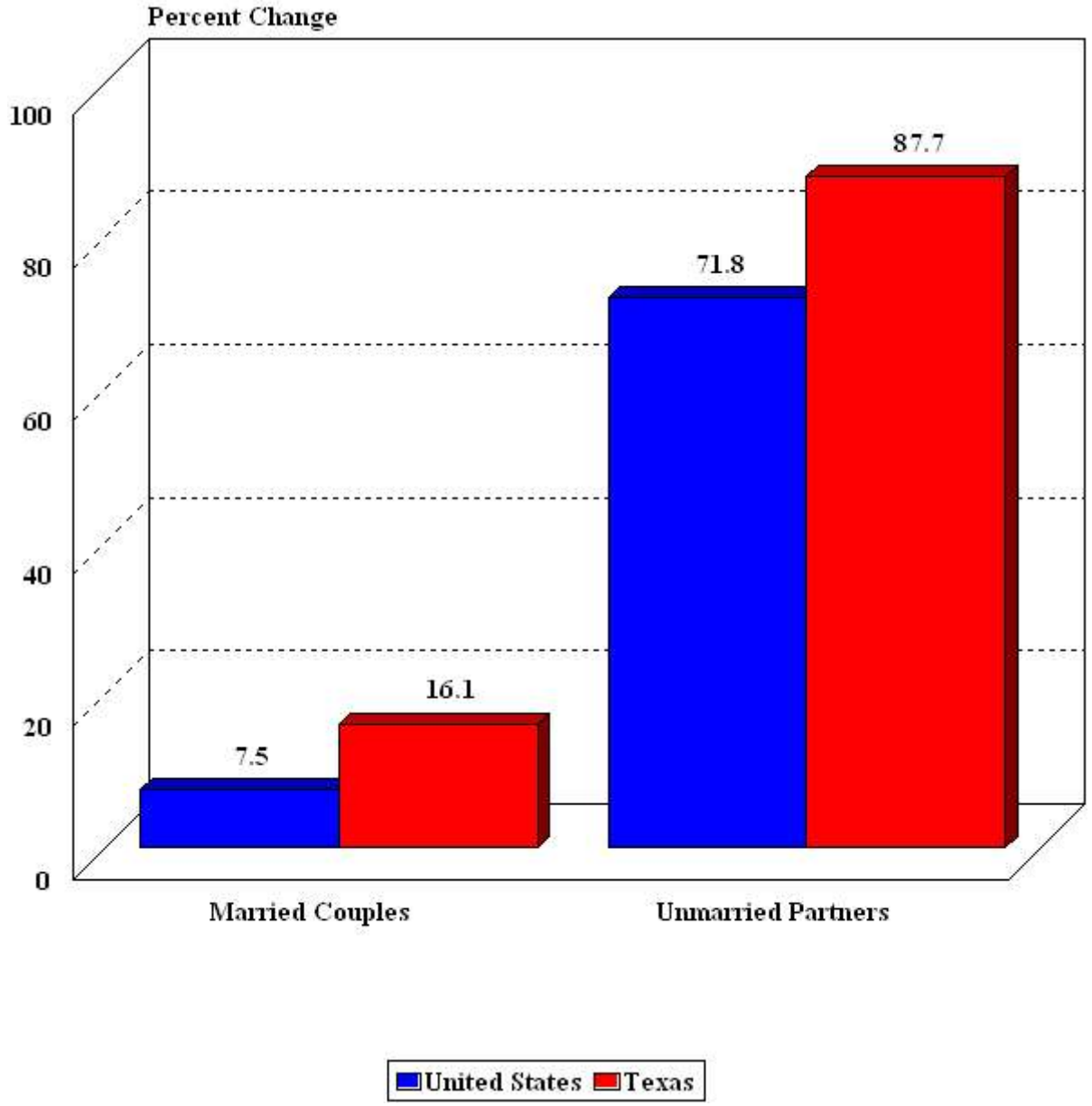


Table 3.1

Number and Percent Change in Households in the United States and Texas, 1960-2000

	Number of Households					Percent Change in Households			
	1960	1970	1980	1990	2000	1960-1970	1970-1980	1980-1990	1990-2000
U.S.	53,021,343	63,616,135	80,467,427	91,947,410	105,480,101	20.0	26.5	14.3	14.7
Texas	2,777,982	3,433,996	4,934,936	6,070,937	7,393,354	23.6	43.7	23.0	21.8

Source: U.S. Census Bureau, Census of Population and Housing, for each year indicated.

Table 3.2

Percent of and Percent Change in Texas Households by Size and Type, 1970-2000

Size/Type of Household	Year				Percent Change in Number of Households		
	1970	1980	1990	2000	1970-1980	1980-1990	1990-2000
Total Households (in thousands)	3,434	4,929	6,071	7,393	43.5	23.2	21.8
Households by Size							
One-person	16.2	21.6	23.9	23.7	90.5	36.4	20.6
Two-person	30.0	30.8	30.1	30.5	47.5	20.4	23.6
Three-person	17.4	17.5	17.3	17.1	44.6	21.6	20.1
Four-person	15.6	15.6	15.7	15.3	43.8	23.2	18.6
Five-person	9.8	8.0	7.5	7.8	17.6	15.7	26.5
Six or more	11.0	6.5	5.5	5.6	-14.9	2.4	25.2
Households by Type							
Family	81.8	74.6	71.6	71.0	30.9	18.1	20.8
Married couple	71.5	62.6	56.6	54.0	25.7	11.2	16.1
Male householder	2.0	2.5	3.4	4.3	75.9	69.3	55.2
Female householder	8.3	9.5	11.6	12.7	64.4	50.2	33.6
Nonfamily	18.2	24.4	28.4	29.0	100.5	38.0	24.2

Source: U.S. Census Bureau, Census of Population and Housing, for each year indicated.

Table 3.3

Number of Households in Texas by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other	Total
			All Scenarios		
2000	4,540,078	843,712	1,789,623	219,941	7,393,354
			Assuming Rates of Zero Net Migration (0.0 Scenario)		
2010	4,762,878	977,518	2,304,591	267,695	8,312,682
2020	4,932,966	1,099,907	2,819,656	302,058	9,154,587
2030	4,970,785	1,172,391	3,339,755	324,990	9,807,921
2040	4,826,827	1,190,014	3,804,178	329,243	10,150,262
			Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
2010	4,855,688	1,022,198	2,607,216	333,617	8,818,719
2020	5,126,311	1,207,150	3,614,696	467,026	10,415,183
2030	5,262,528	1,351,408	4,821,738	617,857	12,053,531
2040	5,203,862	1,441,747	6,200,085	770,565	13,616,259
			Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
2010	4,950,419	1,068,979	2,956,070	414,118	9,389,586
2020	5,327,431	1,324,961	4,676,499	717,860	12,046,751
2030	5,571,513	1,557,897	7,051,958	1,166,697	15,348,065
2040	5,610,322	1,746,730	10,231,880	1,787,865	19,376,797

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 1, [machine readable data files], 2001b.

Table 3.4

Percent Change in the Projected Number of Households in Texas by Race/Ethnicity Assuming Alternative Projection Scenarios, 2000-2040

Time Period	Anglo	Black	Hispanic	Other	Total
Assuming Rates of Zero Net Migration (0.0 Scenario)					
2000-2010	4.9	15.9	28.8	21.7	12.4
2010-2020	3.6	12.5	22.3	12.8	10.1
2020-2030	0.8	6.6	18.4	7.6	7.1
2030-2040	-2.9	1.5	13.9	1.3	3.5
2000-2040	6.3	41.0	112.6	49.7	37.3
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
2000-2010	7.0	21.2	45.7	51.7	19.3
2010-2020	5.6	18.1	38.6	40.0	18.1
2020-2030	2.7	12.0	33.4	32.3	15.7
2030-2040	-1.1	6.7	28.6	24.7	13.0
2000-2040	14.6	70.9	246.4	250.4	84.2
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
2000-2010	9.0	26.7	65.2	88.3	27.0
2010-2020	7.6	23.9	58.2	73.3	28.3
2020-2030	4.6	17.6	50.8	62.5	27.4
2030-2040	0.7	12.1	45.1	53.2	26.2
2000-2040	23.6	107.0	471.7	712.9	162.1

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 1, [machine readable data files], 2001b.

Table 3.5

Percent of Households in Texas by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other
		All Scenarios		
2000	61.4	11.4	24.2	3.0
		Assuming Rates of Zero Net Migration (0.0 Scenario)		
2010	57.3	11.8	27.7	3.2
2020	53.9	12.0	30.8	3.3
2030	50.6	12.0	34.1	3.3
2040	47.6	11.7	37.5	3.2
		Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
2010	55.0	11.6	29.6	3.8
2020	49.2	11.6	34.7	4.5
2030	43.7	11.2	40.0	5.1
2040	38.2	10.6	45.5	5.7
		Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
2010	52.7	11.4	31.5	4.4
2020	44.2	11.0	38.8	6.0
2030	36.3	10.2	45.9	7.6
2040	29.0	9.0	52.8	9.2

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 1, [machine readable data files], 2001b.

Table 3.6

Number and Percent of Net Change in Texas Households Due To Each Race/Ethnicity Group, Assuming Alternative Projection Scenarios, 2000-2040

Race/ Ethnicity	Number	Percent
Assuming Rates of Zero Net Migration (0.0 Scenario)		
Anglo	286,749	10.3
Black	346,302	12.6
Hispanic	2,014,555	73.1
Other	109,302	4.0
Total	2,756,908	100.0
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
Anglo	663,784	10.7
Black	598,035	9.6
Hispanic	4,410,462	70.9
Other	550,624	8.8
Total	6,222,905	100.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
Anglo	1,070,244	9.0
Black	903,018	7.5
Hispanic	8,442,257	70.4
Other	1,567,924	13.1
Total	11,983,443	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 1, [machine readable data files], 2001b.

Table 3.7

Percent of Households in Texas by Age and Race/Ethnicity of the Householder and Median Age of Householders by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Age Group	Anglo	Black	Hispanic	Other	Total Percent
All Scenarios					
2000					
15-24	5.5	7.4	8.9	7.4	6.6
25-44	38.5	47.5	52.3	53.8	43.4
45-64	34.6	31.0	27.7	32.2	32.4
65+	21.4	14.1	11.1	6.6	17.6
Median Age	47.9	43.1	40.7	40.9	45.0
Assuming Rates of Zero Net Migration (0.0 Scenario)					
2010					
15-24	5.3	7.1	7.2	5.3	6.1
25-44	31.5	39.9	46.2	42.2	36.9
45-64	40.6	39.4	34.5	40.3	38.7
65+	22.6	13.6	12.1	12.2	18.3
Median Age	51.1	46.3	43.6	46.1	48.2
2020					
15-24	4.7	5.6	6.8	5.3	5.5
25-44	29.9	37.9	39.7	30.9	33.9
45-64	36.8	38.6	37.6	42.9	37.4
65+	28.6	17.9	15.9	20.9	23.2
Median Age	54.4	48.4	46.7	50.9	50.8
2030					
15-24	4.5	4.9	6.1	4.3	5.1
25-44	28.6	35.6	36.6	28.9	32.2
45-64	31.7	35.5	35.9	37.2	33.7
65+	35.2	24.0	21.4	29.6	29.0
Median Age	55.8	50.2	48.9	55.0	52.5

Table 3.7, continued

Age Group	Anglo	Black	Hispanic	Other	Total Percent
2040					
15-24	4.2	4.5	5.6	3.7	4.7
25-44	27.5	31.9	35.7	28.6	31.2
45-64	32.2	37.6	33.0	30.6	33.1
65+	36.1	26.0	25.7	37.1	31.0
Median Age	56.2	51.8	50.1	56.7	53.3
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
2010					
15-24	5.3	7.2	7.4	5.4	6.2
25-44	31.7	40.1	48.8	43.5	38.1
45-64	40.4	39.1	32.7	39.4	37.9
65+	22.6	13.6	11.1	11.7	17.8
Median Age	51.1	46.2	42.5	45.5	47.7
2020					
15-24	4.7	5.8	6.6	4.9	5.5
25-44	30.0	38.2	44.5	32.9	36.1
45-64	36.6	38.3	35.2	42.8	36.6
65+	28.7	17.7	13.7	19.4	21.8
Median Age	54.3	48.2	44.5	50.1	49.5
2030					
15-24	4.4	5.0	6.0	4.1	5.1
25-44	28.7	36.2	40.7	29.7	34.4
45-64	31.7	35.2	35.8	38.9	34.1
65+	35.2	23.6	17.5	27.3	26.4
Median Age	55.8	49.8	46.6	53.9	50.9
2040					
15-24	4.1	4.6	5.5	3.4	4.7
25-44	27.5	32.5	38.7	28.5	33.2
45-64	32.2	37.4	35.1	33.3	34.2
65+	36.2	25.5	20.7	34.8	27.9
Median Age	56.3	51.4	48.0	55.9	51.7

Table 3.7, continued

Age Group	Anglo	Black	Hispanic	Other	Total Percent
	Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
2010					
15-24	5.3	7.4	7.7	5.5	6.3
25-44	31.8	40.2	51.3	44.7	39.5
45-64	40.2	38.8	30.8	38.6	37.0
65+	22.7	13.6	10.2	11.2	17.2
Median Age	51.0	46.1	41.5	44.9	47.0
2020					
15-24	4.6	5.9	6.3	4.6	5.4
25-44	30.3	38.6	49.5	34.9	38.9
45-64	36.4	37.9	32.6	42.4	35.5
65+	28.7	17.6	11.6	18.1	20.2
Median Age	54.2	47.9	42.8	49.3	48.1
2030					
15-24	4.4	5.1	5.9	3.8	5.1
25-44	28.7	36.9	44.8	30.8	37.1
45-64	31.6	34.7	35.2	40.1	34.2
65+	35.3	23.3	14.1	25.3	23.6
Median Age	55.7	49.5	44.7	52.8	49.2
2040					
15-24	4.1	4.7	5.3	3.2	4.7
25-44	27.3	33.0	41.6	28.3	35.4
45-64	32.3	37.2	36.5	35.9	35.4
65+	36.3	25.1	16.6	32.6	24.5
Median Age	56.4	51.0	46.5	55.2	50.1

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 2, [machine readable data files], 2001c.

Table 3.8

Number and Percent of Households in Texas by Type of Household and Race/Ethnicity of Householder in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

	Anglo		Black		Hispanic		Other		Total	
Family Type	Number	%	Number	%	Number	%	Number	%	Number	%
Panel A: Assuming Rates of Zero Net Migration (0.0 Scenario)										
2000										
Family households	3,047,023	67.1	576,324	68.3	1,463,353	81.8	161,094	73.2	5,247,794	71.0
Married-couple family	2,524,945	55.6	293,195	34.8	1,039,515	58.1	132,086	60.1	3,989,741	54.0
With own children	1,077,641	23.7	155,495	18.4	689,684	38.5	78,808	35.8	2,001,628	27.1
No own children	1,447,304	31.9	137,700	16.4	349,831	19.6	53,278	24.3	1,988,113	26.9
Other family	522,078	11.5	283,129	33.6	423,838	23.7	29,008	13.2	1,258,053	17.0
Male householder, no spouse present	138,641	3.1	44,957	5.3	126,459	7.1	10,407	4.7	320,464	4.3
With own children	72,840	1.6	22,560	2.7	58,594	3.3	3,420	1.6	157,414	2.1
No own children	65,801	1.5	22,397	2.6	67,865	3.8	6,987	3.1	163,050	2.2
Female householder, no spouse present	383,437	8.4	238,172	28.3	297,379	16.6	18,601	8.5	937,589	12.7
With own children	217,395	4.8	149,299	17.7	187,609	10.5	9,985	4.5	564,288	7.6
No own children	166,042	3.6	88,873	10.6	109,770	6.1	8,616	4.0	373,301	5.1
Nonfamily households	1,493,055	32.9	267,388	31.7	326,270	18.2	58,847	26.8	2,145,560	29.0
Male householder	1,236,907	27.2	228,911	27.1	241,493	13.5	44,830	20.4	1,752,141	23.7
Female householder	256,148	5.7	38,477	4.6	84,777	4.7	14,017	6.4	393,419	5.3
Total Households	4,540,078	100.0	843,712	100.0	1,789,623	100.0	219,941	100.0	7,393,354	100.0
2010										
Family households	3,188,589	66.9	669,127	68.5	1,880,789	81.6	194,879	72.8	5,933,384	71.4
Married-couple family	2,642,478	55.5	340,860	34.9	1,336,519	58.0	159,542	59.6	4,479,399	53.9
With own children	1,115,849	23.4	181,559	18.6	881,241	38.2	90,536	33.8	2,269,185	27.3
No own children	1,526,629	32.1	159,301	16.3	455,278	19.8	69,006	25.8	2,210,214	26.6
Other family	546,111	11.5	328,267	33.6	544,270	23.6	35,337	13.2	1,453,985	17.5
Male householder, no spouse present	144,438	3.0	52,146	5.3	163,782	7.1	12,448	4.7	372,814	4.5
With own children	75,266	1.6	26,266	2.7	74,972	3.3	3,941	1.5	180,445	2.2
No own children	69,172	1.4	25,880	2.6	88,810	3.8	8,507	3.2	192,369	2.3
Female householder, no spouse present	401,673	8.5	276,121	28.3	380,488	16.5	22,889	8.5	1,081,171	13.0
With own children	224,644	4.7	173,658	17.8	237,421	10.3	11,455	4.3	647,178	7.8
No own children	177,029	3.8	102,463	10.5	143,067	6.2	11,434	4.2	433,993	5.2
Nonfamily households	1,574,289	33.1	308,391	31.5	423,802	18.4	72,816	27.2	2,379,298	28.6
Male householder	1,307,070	27.4	263,530	27.0	314,239	13.6	56,438	21.1	1,941,277	23.4
Female householder	267,219	5.7	44,861	4.5	109,563	4.8	16,378	6.1	438,021	5.2
Total Households	4,762,878	100.0	977,518	100.0	2,304,591	100.0	267,695	100.0	8,312,682	100.0

Table 3.8, Panel A continued

Family Type	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
2040										
Family households	3,156,524	65.4	795,196	66.8	3,032,922	79.7	233,308	70.9	7,217,950	71.1
Married-couple family	2,622,659	54.3	405,104	34.0	2,140,591	56.3	189,699	57.6	5,358,053	52.8
With own children	946,698	19.6	190,878	16.0	1,251,239	32.9	81,138	24.6	2,469,953	24.3
No own children	1,675,961	34.7	214,226	18.0	889,352	23.4	108,561	33.0	2,888,100	28.5
Other family	533,865	11.1	390,092	32.8	892,331	23.5	43,609	13.2	1,859,897	18.3
Male householder, no spouse present	135,318	2.8	62,417	5.2	259,173	6.8	14,185	4.3	471,093	4.6
With own children	64,205	1.3	27,917	2.3	106,252	2.8	3,682	1.1	202,056	2.0
No own children	71,113	1.5	34,500	2.9	152,921	4.0	10,503	3.2	269,037	2.6
Female householder, no spouse present	398,547	8.3	327,675	27.6	633,158	16.7	29,424	8.9	1,388,804	13.7
With own children	189,735	3.9	182,032	15.3	331,780	8.7	10,219	3.1	713,766	7.0
No own children	208,812	4.4	145,643	12.3	301,378	8.0	19,205	5.8	675,038	6.7
Nonfamily households	1,670,303	34.6	394,818	33.2	771,256	20.3	95,935	29.1	2,932,312	28.9
Male householder	1,437,682	29.8	343,905	28.9	608,071	16.0	79,285	24.1	2,468,943	24.3
Female householder	232,621	4.8	50,913	4.3	163,185	4.3	16,650	5.0	463,369	4.6
Total Households	4,826,827	100.0	1,190,014	100.0	3,804,178	100.0	329,243	100.0	10,150,262	100.0
Panel B: Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)										
2000										
Family households	3,047,023	67.1	576,324	68.3	1,463,353	81.8	161,094	73.2	5,247,794	71.0
Married-couple family	2,524,945	55.6	293,195	34.8	1,039,515	58.1	132,086	60.1	3,989,741	54.0
With own children	1,077,641	23.7	155,495	18.4	689,684	38.5	78,808	35.8	2,001,628	27.1
No own children	1,447,304	31.9	137,700	16.4	349,831	19.6	53,278	24.3	1,988,113	26.9
Other family	522,078	11.5	283,129	33.6	423,838	23.7	29,008	13.2	1,258,053	17.0
Male householder, no spouse present	138,641	3.1	44,957	5.3	126,459	7.1	10,407	4.7	320,464	4.3
With own children	72,840	1.6	22,560	2.7	58,594	3.3	3,420	1.6	157,414	2.1
No own children	65,801	1.5	22,397	2.6	67,865	3.8	6,987	3.1	163,050	2.2
Female householder, no spouse present	383,437	8.4	238,172	28.3	297,379	16.6	18,601	8.5	937,589	12.7
With own children	217,395	4.8	149,299	17.7	187,609	10.5	9,985	4.5	564,288	7.6
No own children	166,042	3.6	88,873	10.6	109,770	6.1	8,616	4.0	373,301	5.1
Nonfamily households	1,493,055	32.9	267,388	31.7	326,270	18.2	58,847	26.8	2,145,560	29.0
Male householder	1,236,907	27.2	228,911	27.1	241,493	13.5	44,830	20.4	1,752,141	23.7
Female householder	256,148	5.7	38,477	4.6	84,777	4.7	14,017	6.4	393,419	5.3
Total Households	4,540,078	100.0	843,712	100.0	1,789,623	100.0	219,941	100.0	7,393,354	100.0

Table 3.8, Panel B continued

Family Type	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
2010										
Family households	3,266,431	67.3	700,617	68.5	2,130,129	81.7	243,539	73.0	6,340,716	71.9
Married-couple family	2,711,969	55.9	358,872	35.1	1,516,341	58.2	199,684	59.9	4,786,866	54.3
With own children	1,147,769	23.6	191,859	18.8	1,009,870	38.7	113,936	34.2	2,463,434	27.9
No own children	1,564,200	32.3	167,013	16.3	506,471	19.5	85,748	25.7	2,323,432	26.4
Other family	554,462	11.4	341,745	33.4	613,788	23.5	43,855	13.1	1,553,850	17.6
Male householder, no spouse present	147,058	3.0	54,376	5.3	188,103	7.2	15,498	4.6	405,035	4.6
With own children	76,933	1.6	27,431	2.7	85,947	3.3	4,890	1.5	195,201	2.2
No own children	70,125	1.4	26,945	2.6	102,156	3.9	10,608	3.1	209,834	2.4
Female householder, no spouse present	407,404	8.4	287,369	28.1	425,685	16.3	28,357	8.5	1,148,815	13.0
With own children	228,310	4.7	180,731	17.7	268,510	10.3	14,247	4.3	691,798	7.8
No own children	179,094	3.7	106,638	10.4	157,175	6.0	14,110	4.2	457,017	5.2
Nonfamily households	1,589,257	32.7	321,581	31.5	477,087	18.3	90,078	27.0	2,478,003	28.1
Male householder	1,318,728	27.2	274,715	26.9	350,067	13.4	69,738	20.9	2,013,248	22.8
Female householder	270,529	5.5	46,866	4.6	127,020	4.9	20,340	6.1	464,755	5.3
Total Households	4,855,688	100.0	1,022,198	100.0	2,607,216	100.0	333,617	100.0	8,818,719	100.0
2040										
Family households	3,459,482	66.5	967,592	67.1	4,976,540	80.3	552,597	71.7	9,956,211	73.1
Married-couple family	2,896,800	55.7	503,628	34.9	3,540,823	57.1	452,371	58.7	7,393,622	54.3
With own children	1,056,499	20.3	242,221	16.8	2,186,445	35.3	199,283	25.9	3,684,448	27.1
No own children	1,840,301	35.4	261,407	18.1	1,354,378	21.8	253,088	32.8	3,709,174	27.2
Other family	562,682	10.8	463,964	32.2	1,435,717	23.2	100,226	13.0	2,562,589	18.8
Male householder, no spouse present	144,416	2.8	74,806	5.2	449,270	7.2	32,974	4.3	701,466	5.2
With own children	69,485	1.3	33,762	2.3	186,709	3.0	8,618	1.1	298,574	2.2
No own children	74,931	1.5	41,044	2.9	262,561	4.2	24,356	3.2	402,892	3.0
Female householder, no spouse present	418,266	8.0	389,158	27.0	986,447	16.0	67,252	8.7	1,861,123	13.6
With own children	201,259	3.9	217,024	15.1	549,510	8.9	24,278	3.2	992,071	7.3
No own children	217,007	4.1	172,134	11.9	436,937	7.1	42,974	5.5	869,052	6.3
Nonfamily households	1,744,380	33.5	474,155	32.9	1,223,545	19.7	217,968	28.3	3,660,048	26.9
Male householder	1,497,075	28.8	412,276	28.6	928,599	15.0	179,358	23.3	3,017,308	22.2
Female householder	247,305	4.7	61,879	4.3	294,946	4.7	38,610	5.0	642,740	4.7
Total Households	5,203,862	100.0	1,441,747	100.0	6,200,085	100.0	770,565	100.0	13,616,259	100.0

Table 3.8, continued

Family Type	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Panel C: Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)										
2000										
Family households	3,047,023	67.1	576,324	68.3	1,463,353	81.8	161,094	73.2	5,247,794	71.0
Married-couple family	2,524,945	55.6	293,195	34.8	1,039,515	58.1	132,086	60.1	3,989,741	54.0
With own children	1,077,641	23.7	155,495	18.4	689,684	38.5	78,808	35.8	2,001,628	27.1
No own children	1,447,304	31.9	137,700	16.4	349,831	19.6	53,278	24.3	1,988,113	26.9
Other family	522,078	11.5	283,129	33.6	423,838	23.7	29,008	13.2	1,258,053	17.0
Male householder, no spouse present	138,641	3.1	44,957	5.3	126,459	7.1	10,407	4.7	320,464	4.3
With own children	72,840	1.6	22,560	2.7	58,594	3.3	3,420	1.6	157,414	2.1
No own children	65,801	1.5	22,397	2.6	67,865	3.8	6,987	3.1	163,050	2.2
Female householder, no spouse present	383,437	8.4	238,172	28.3	297,379	16.6	18,601	8.5	937,589	12.7
With own children	217,395	4.8	149,299	17.7	187,609	10.5	9,985	4.5	564,288	7.6
No own children	166,042	3.6	88,873	10.6	109,770	6.1	8,616	4.0	373,301	5.1
Nonfamily households	1,493,055	32.9	267,388	31.7	326,270	18.2	58,847	26.8	2,145,560	29.0
Male householder	1,236,907	27.2	228,911	27.1	241,493	13.5	44,830	20.4	1,752,141	23.7
Female householder	256,148	5.7	38,477	4.6	84,777	4.7	14,017	6.4	393,419	5.3
Total Households	4,540,078	100.0	843,712	100.0	1,789,623	100.0	219,941	100.0	7,393,354	100.0
2010										
Family households	3,345,914	67.6	733,749	68.6	2,417,245	81.8	303,010	73.2	6,799,918	72.4
Married-couple family	2,783,465	56.2	378,331	35.4	1,723,896	58.3	248,722	60.1	5,134,414	54.7
With own children	1,180,764	23.9	203,114	19.0	1,158,955	39.2	142,558	34.4	2,685,391	28.6
No own children	1,602,701	32.3	175,217	16.4	564,941	19.1	106,164	25.7	2,449,023	26.1
Other family	562,449	11.4	355,418	33.2	693,349	23.5	54,288	13.1	1,665,504	17.7
Male householder, no spouse present	149,598	3.0	56,669	5.3	216,542	7.3	19,212	4.6	442,021	4.7
With own children	78,573	1.6	28,637	2.7	98,746	3.3	6,084	1.5	212,040	2.3
No own children	71,025	1.4	28,032	2.6	117,796	4.0	13,128	3.1	229,981	2.4
Female householder, no spouse present	412,851	8.4	298,749	27.9	476,807	16.2	35,076	8.5	1,223,483	13.0
With own children	231,823	4.7	187,891	17.6	303,894	10.3	17,742	4.3	741,350	7.9
No own children	181,028	3.7	110,858	10.3	172,913	5.9	17,334	4.2	482,133	5.1
Nonfamily households	1,604,505	32.4	335,230	31.4	538,825	18.2	111,108	26.8	2,589,668	27.6
Male householder	1,330,377	26.9	286,308	26.8	391,303	13.2	85,932	20.8	2,093,920	22.3
Female householder	274,128	5.5	48,922	4.6	147,522	5.0	25,176	6.0	495,748	5.3
Total Households	4,950,419	100.0	1,068,979	100.0	2,956,070	100.0	414,118	100.0	9,389,586	100.0

Table 3.8, Panel C continued

Family Type	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
2040										
Family households	3,784,227	67.5	1,177,751	67.4	8,250,778	80.6	1,294,033	72.4	14,506,789	74.9
Married-couple family	3,194,833	56.9	634,783	36.3	5,924,365	57.9	1,064,991	59.6	10,818,972	55.8
With own children	1,179,309	21.0	314,001	18.0	3,821,479	37.3	482,045	27.0	5,796,834	29.9
No own children	2,015,524	35.9	320,782	18.3	2,102,886	20.6	582,946	32.6	5,022,138	25.9
Other family	589,394	10.5	542,968	31.1	2,326,413	22.7	229,042	12.8	3,687,817	19.0
Male householder, no spouse present	153,027	2.7	88,836	5.1	782,986	7.7	75,777	4.2	1,100,626	5.7
With own children	74,392	1.3	40,539	2.3	328,007	3.2	20,475	1.1	463,413	2.4
No own children	78,635	1.4	48,297	2.8	454,979	4.5	55,302	3.1	637,213	3.3
Female householder, no spouse present	436,367	7.8	454,132	26.0	1,543,427	15.0	153,265	8.6	2,587,191	13.3
With own children	211,848	3.8	253,646	14.5	906,561	8.9	58,239	3.3	1,430,294	7.4
No own children	224,519	4.0	200,486	11.5	636,866	6.1	95,026	5.3	1,156,897	5.9
Nonfamily households	1,826,095	32.5	568,979	32.6	1,981,102	19.4	493,832	27.6	4,870,008	25.1
Male householder	1,559,804	27.8	493,665	28.3	1,448,202	14.2	404,600	22.6	3,906,271	20.2
Female householder	266,291	4.7	75,314	4.3	532,900	5.2	89,232	5.0	963,737	4.9
Total Households	5,610,322	100.0	1,746,730	100.0	10,231,880	100.0	1,787,865	100.0	19,376,797	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 1, [machine readable data files], 2001b.

Table 3.9

Total Number of Households by Type in 2040 under the 1.0 Projection Scenario and Assuming That the Anglo Rates of Households by Type Apply to All Race/Ethnicity Groups

Household Type	Assuming Race/Ethnicity Specific Rates for 1.0 Scenario	Assuming Anglo Rates Apply to All Race/Ethnicity Groups	Difference between Projections
Family households	14,849,576	13,073,343	-1,776,233
Married couple	11,106,239	10,895,874	-210,365
With own children	6,710,020	4,768,772	-1,941,248
No own children	4,396,219	6,127,102	1,730,883
Other family	3,743,337	2,177,469	-1,565,868
Male householder, no spouse present	1,146,560	578,446	-568,114
With own children	524,116	303,943	-220,173
No own children	622,444	274,503	-347,941
Female householder, no spouse present	2,596,777	1,599,023	-997,754
With own children	1,645,731	910,422	-735,309
No own children	951,046	688,601	-262,445
Nonfamily households	4,527,221	6,303,454	1,776,233
Total Households	19,376,797	19,376,797	—

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 1, [machine readable data files], 2001b.

Chapter 4

Population Change and Income in Texas

In the introduction we noted that demographic change may lead to socioeconomic change; that is, to change in income, poverty, wealth, and related factors. As populations change their age, sex, race/ethnicity, and other demographic characteristics, socioeconomic characteristics associated with them may also change (Murdock et al. 1997). For example, because middle-age populations tend to have higher incomes, all other things being the same, a population with a larger proportion of middle-age householders will have more resources. Similarly, because non-Anglo populations tend to have lower incomes, larger proportionate increases in non-Anglo populations may lead to lower average household incomes for the total (aggregate) population. Such changes may, in turn, affect both the markets for private-sector goods and services and the revenues collected in the public sector.

The relationships that exist between demographic and socioeconomic characteristics are a product of a variety of historical, discriminatory, and other factors, and although such relationships may change over time, much can be learned about how population change may affect the future socioeconomic characteristics of Texas by examining projected demographic change in conjunction with existing differences in the socioeconomic characteristics of subgroups of the population. In this chapter, we examine the implications of the relationships between demographic change and socioeconomic change for the future of Texas concentrating on their effects on income, poverty, and through these--tax revenues. Specifically, we use projections of the population and households as shown in Chapters 2 and 3 together with data on the income, poverty, and tax levels of persons and households with different demographic

characteristics to examine how changes in Texas population may impact future levels of income, poverty, and state tax revenues. This examination is done primarily by assuming that socioeconomic differences among key demographic groups remain as they were in 2000 and that populations and households change in the manner projected in Chapters 2 and 3. In some instances, however, we also examine the implications of changes in the relationships between demographic and socioeconomic characteristics on trends in socioeconomic characteristics, assuming that these relationships change in specific manners. In Chapter 5, we examine the implications of demographic change for the private sector of Texas.

Through such analyses we attempt to examine how the socioeconomic future of Texas is likely to change depending on what does or does not change in the population of Texas and in the relationships between demographic and socioeconomic characteristics. Since socioeconomic characteristics are strongly associated with the level of use of state services, this chapter provides a basis for the analyses and discussion provided in subsequent chapters devoted to future demand for specific services.

Recent Socioeconomic Trends in Texas

In the last two decades Texas has experienced periods of economic recession and expansion relative to the nation as a whole, but by the time of the 2000 Census, it had still failed to achieve economic parity with the nation on many socioeconomic indicators (see Table 4.1).

In constant dollars, median household income in Texas declined by 1.3 percent from 1979 to 1989 (the reference year for income data for decennial censuses is the calendar year prior to the census year) and per capita income increased by 9.3 percent, while in the nation as a whole median household income increased by 8.9 percent and per capita income increased by 20.3

percent. Similarly, whereas the poverty rate in Texas increased by 23.1 percent from 14.7 percent in 1979 to 18.1 percent in 1989, in the United States the rate increased by only 5.6 percent from 12.4 percent to 13.1 percent. As a result, Texas-United States differences in levels of income that had virtually disappeared by 1979 reemerged, and Texas income levels were less than 90 percent of, and its poverty rate 38 percent greater than, those for the nation by 1989.

The 1989-1999 data show the 1990s to be a period of substantial economic expansion in Texas. 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 and per capita income levels, however, remained lower than those in the nation with median household income in Texas being $39,927 compared to $41,994 in the nation and per capita income in Texas being $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 Texas median household income levels were 95.1 percent of U.S. levels, Texas per capita income levels were 90.9 percent of U.S. levels, 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 (Table 4.2). 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 income and poverty remain, and in some cases, differentials between Anglos and non-Anglos increased in absolute terms. 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 in 1989 to 63.3 percent in 1999 for Hispanics). The Anglo-Black absolute difference in median household income levels, however, was $13,602 in 1989 but $17,857 in 1999 and the Anglo-Hispanic difference was $12,242 in 1989 but $17,289 in 1999. Similarly, the Anglo poverty rate for persons decreased by 17.9 percent, the Black poverty rate decreased by 24.5 percent, and the Hispanic rate decreased by 23.0 percent, but the poverty rates of 23.4 percent for Blacks and 25.4 percent for Hispanics were still roughly three times as high as the 7.8 percent of persons in poverty among Anglos.

Revenues and expenditures for the State have also shown substantial increases in key areas (see Tables 4.3 and 4.4). In current dollars state tax revenues increased from roughly $13.6 billion in 1990 to nearly $25.3 billion by 2000 and net expenditures by function increased from $22.7 to $49.7 billion (the expenditures shown include expenditures from all sources, including non-state sources). In constant dollar terms these represent increases of approximately 43 percent and 70 percent, respectively. Particularly noticeable are the real (constant) dollar increases in expenditures for health and human services, public safety, and education. Of the increase in net expenditures of $20.5 billion (in real dollar terms), approximately $16.9 billion or 82.4 percent occurred in these three areas. Overall, Texas population growth has been accompanied by increasing revenues and costs.

Recent changes in socioeconomic factors in Texas have brought about substantial real dollar increases in the incomes of Texans from all racial and ethnic groups. Substantial gaps remain between groups, however, and in some cases, absolute differences have increased. The impact of demographic change on socioeconomic change thus requires further analysis.

Projecting the Socioeconomic Effects of Population Change

As noted above, the socioeconomic characteristics resulting from demographic change are projected assuming that the socioeconomic differences that existed among age, sex, race/ethnicity, and other population and household groups in 2000 continue throughout the projection period or change in a specified assumed manner. Appendix B provides a listing of the income, poverty, and other data items that are the basis of our assumptions and the sources of the data.

In most cases, the analysis was completed by simply multiplying the value of a socioeconomic factor in 2000 by its associated population for a specific projection period for a specific projection scenario (e.g., multiplying the average annual median household incomes for Anglo householders of a given age in 2000 by the projected number of Anglo householders in 2010 in that age group under the 1.0 scenario). This same value for the socioeconomic factor is applied to the same age, sex, and race/ethnicity group for each projection year and scenario across time to provide values in 2000 constant dollars and to assess what the future will hold if socioeconomic differences among demographic groups do not change from those that existed in 2000. These projections--assuming that differences existent in 2000 do not change--are used as base values for comparisons throughout the chapter. Given this base, we simulate the implications of alternative socioeconomic characteristics by completing projections based on alternative assumptions about socioeconomic differences among racial/ethnic groups and/or assumptions about the applicability of recent patterns of change to the future.

In presenting these projections, we wish to make it clear that numerous economic and market factors, the overall state of the economy, political and policy factors, and numerous other factors may be as important, and in many instances perhaps more important, than population

change in altering socioeconomic conditions in Texas. We recognize that actual future socioeconomic conditions in Texas will likely be different from those projected here and that the determinants of socioeconomic conditions and change in such conditions are numerous and complex.

Impact on Income and Poverty

Household Income

The data in Tables 4.5 and 4.6 show 2000 income distributions of the Texas population and projections under the 0.5 and 1.0 scenarios for 2010 through 2040. Increasingly, households with incomes at all levels will consist of persons from non-Anglo households. For example, although Anglos make up a majority of households at the income levels above $20,000 in 2000, they represent a majority of households at only the income levels of $125,000 or more by 2040 under the 1.0 scenario (see Table 4.5). As this suggests, Anglos are projected to continue to have higher income distributions than Blacks or Hispanics. Anglos who are projected to make up only 29 percent of households by 2040 under the 1.0 scenario would hold a share of households of more than 29 percent for all households with incomes of $40,000 or more in 2040. By comparison, Blacks who would be 9.0 percent of households, would make up more than 9.0 percent of households in only four income groups with three of the four being the three lowest income categories. Hispanics who would account for 52.8 percent of households would make up more than 52.8 percent of the households in all income categories below $50,000 but less than that percentage in all income categories above $50,000. Persons from the Other racial/ethnic group would account for 9.2 percent of all households and would represent at least that percentage in all income categories above $50,000 and in the lowest income category.

Differences are less under the 0.5 scenario, but Anglos who would make up 38.2 percent of all households in 2040 would make up more than that percentage of the households in only categories of $40,000 or more. Black households, which would be 10.6 percent of all households, would make up that percentage or more in only five income categories with four of the five being the lowest income categories. The Hispanic population would make up a percentage of households larger than its 45.5 percent share of all households only in the income categories below $45,000. Persons from the Other racial/ethnic group who would account for 5.7 percent of all households would account for a larger share of the lowest income category and all income categories of $50,000 or more. Although the advantaged incomes of Anglos and persons from the Other racial/ethnic group are projected to continue across the projection period, the dependence of the State on non-Anglo households for the markets for goods and services and the revenues associated with all income levels will increase.

What is also apparent is that if the income distributions of non-Anglo populations were not to change, the income levels of the average household in the State would decrease as well. The distributions of households would generally gravitate to the lower income categories because of the more rapid growth of Hispanic and Black populations, which have lower incomes (see Table 4.6 and Figure 4.1). In 2000, 30.7 percent of all households had an income of less than $25,000, but by 2040 (under the 1.0 scenario and in 2000 constant dollars) 38.0 percent of all households would have incomes of less than $25,000 per year. On the other hand, although 11.5 percent of all households had incomes of $100,000 or more in 2000, only 8.0 percent would have such incomes by 2040. For the 0.5 scenario, the increase in the percentage of households with incomes less than $25,000 would be from 30.7 percent in 2000 to 37.5 in 2040, while the percentage with incomes of $100,000 or more would decrease from 11.5 percent to 8.5 percent.

Overall the median income level (not shown but computed from Table 4.6) that was $39,927 in 2000 would be $33,191 in 2000 constant dollars under the 1.0 scenario and only $33,783 under the 0.5 scenario. Thus the median household income of all Texas households would decline in 2000 constant dollars as a result of the projected demographic changes and the existent differentials in income among racial/ethnic groups. Such data suggest that in the absence of change in the incomes of Black and Hispanic households, Texas households would, on average, be poorer, in 2000 constant dollars, in 2040 than they were in 2000.

Aggregate Income

Another means of examining the effects of demographic change on socioeconomic change can be obtained by projecting age, sex, and race/ethnicity effects on aggregate income (see Table 4.7). The effect of the projected demographic changes would be to increase total aggregate income from $402.5 billion in 2000 to $672.4 billion in 2040 under the 0.5 scenario and to $927.8 billion under the 1.0 scenario, increases of 67.1 percent and 130.5 percent, respectively. Since these rates of growth are slower than the projected changes in households under the same scenarios (increases of 84.2 and 162.1 percent, respectively), they suggest a decline in average income over time. As shown in the last column of Table 4.7, the average income of Texas households (in 2000 constant dollars) would decline from $54,441 in 2000 to $49,380 in 2040 under the 0.5 scenario and to $47,883 under the 1.0 scenario. These values represent absolute constant dollar declines of $5,061 or 9.3 percent under the 0.5 scenario and $6,558 or 12.1 percent under the 1.0 scenario. Whether examined from the standpoint of mean incomes or proportions of households by income category, the projections of income shown here point to real dollar declines in the total incomes and in the average incomes (both median and

mean) of Texas households, given projected demographic changes and 2000 socioeconomic differentials.

Poverty Rates

As a third way of examining socioeconomic change related to change in race/ethnicity and household composition, we examine the likely impacts of such changes on family poverty levels (see Table 4.8). The number of families in poverty and the poverty rate for such families will increase as a result of the projected demographic change if socioeconomic differentials do not change. A comparison of the 2000 data to that projected for 2040 under the 1.0 scenario shows that the number of families in poverty would increase by 274.0 percent (compared to a 176.4 percent increase in the total number of family households, see Table 3.8), and the poverty rate for all family households would increase from 11.4 percent in 2000 to 15.4 percent in 2040. Increases in poverty would be pervasive across family types. For example, the poverty rate for married couples would increase from 7.5 percent in 2000 to 11.8 percent in 2040, the rate for married couples with children would increase from 10.3 to 15.9, and the rate for family households without children would increase from 4.7 percent to 7.0 percent. For female-householder families with children, the percent in poverty would increase from 35.7 percent in 2000 to 41.8 percent in 2040. Unless the socioeconomic differentials among racial/ethnic groups change substantially, the number of families in poverty will also increase substantially.

Alternative Simulations

How would changes in socioeconomic characteristics affect the future incomes of Texas households? To examine this question, we simulate two alternative income distributions (see Table 4.9) to compare with the baseline scenario (which assumes that 2000 income differentials continue throughout the projection period). First, we simulate the change that would be

produced if the change in the percentage of Black to Anglo and of Hispanic to Anglo incomes that occurred from 1990 to 2000 were to continue during each decade from 2000 to 2040. Specifically, we simulate what the effects would be if the increases in the ratios of Black and Hispanic incomes to Anglo incomes from 1989 to 1999 (these ratios were .568 for Anglo-Black and .611 for Anglo-Hispanic differences in 1989 and increased to .621 and .633, respectively, in 1999) continue during each decade of the projection period and if the incomes of Anglos and persons in the Other category remain as they were in 2000. This assumption would reduce the gap in income so that by 2040 the income of Blacks would be .836 (83.6 percent) of Anglo income and the income of Hispanics would be .723 (72.3 percent) of Anglo income.

In the second simulation, we examine the effects of a complete closure between Anglo and all other racial/ethnic groups. The effects of significant closures in socioeconomic differentials would be to substantially increase aggregate income in the State and to close the gap in average incomes (see Table 4.9 and Figure 4.2). Assuming the 1.0 scenario and rates of closure between Anglo and Black and Anglo and Hispanic incomes experienced during the 1990s, the total level of aggregate income increases to $1.0 trillion by 2040, an increase of approximately $93 billion compared to that projected for 2040 assuming 2000 income differentials, and the difference between the mean household income in 2000 (of $54,441) and that projected for 2040 (of $52,659) decreases to $1,782, instead of the $6,558 decrease that would occur if 2000 differentials continue. Under the 1.0 scenario and the assumption that Blacks and Hispanics come to have Anglo income levels, the level of aggregate income increases to $1.223 trillion, an increase of $295 billion compared to the 2040 value projected assuming 2000 income differentials, and the average household income increases to the Anglo level of $63,116 for all groups. Under these assumptions, the mean income for all households in 2040

would be $8,675, or 15.9 percent, higher than the average income level of $54,441 in 2000 and $15,233, or 31.8 percent, higher than the average income projected for 2040 under the scenario assuming 2000 differentials. Maintaining the declines in the differentials which occurred in the 1990s during the coming decades would substantially impact the aggregate wealth of the State, and attaining complete closure among racial/ethnic groups would mean that household change would be accompanied by similar changes in socioeconomic conditions--that is, Texas wealth would increase as rapidly as its number of households.

The projections of income and poverty clearly show that incomes will decline and poverty increase as a result of demographic change if the 2000 differentials in the socioeconomic characteristics of Black and Hispanic households do not change. If they do change, as shown in Table 4.9, the socioeconomic picture could be substantially more positive. Much will depend on the state of the economy and other economic factors in the coming years. Under any foreseeable set of conditions, however, it seems likely that increasing the income and reducing the poverty of Texans in light of the projected demographic changes will represent a formidable challenge.

Implications for Tax Revenues

One of the major implications of change in the socioeconomic characteristics of Texas is the effect on tax revenues. In this section we examine such change by using data on the percentage of income paid in taxes in each decile of households (from the Texas Comptroller of Public Accounts 2001) and projections of aggregate income (as presented in Tables 4.7 and 4.9) adjusted for proportions of total aggregate income subject to taxation. Our figures are purely exemplary and should not be confused with the much more sophisticated values produced by the Comptroller's office for revenue forecasting. The projections presented here provide an

indication only of the effects of demographic change on tax revenues and are thus inclusive of only some of the factors impacting tax revenues.

Table 4.10 shows the overall projections of state tax revenues that would be collected assuming that rates of 2000 aggregate household income prevail throughout the projection period, that total aggregate income is distributed among racial/ethnic groups as in the projections of such income noted in Table 4.7, and that the level of taxation per income decile remains as it was in 2000 data reported by the Comptroller (Texas Comptroller of Public Accounts 2001). The data in this table suggest that tax revenues will increase substantially from 2000 to 2040. Revenues would increase from $29.5 billion in 2000 to $49.3 billion in 2040 under the 0.5 scenario and to $68.0 billion by 2040 under the 1.0 scenario (see Table 4.10). These figures represent increases of 67.1 percent under the 0.5 scenario and 130.5 under the 1.0 scenario.

The effects of the diversification of the population are clearly evident in the revenue data shown on Table 4.10. For example, under the 0.5 scenario state tax revenues from Anglo households increase by 14.6 percent from 2000 to 2040, revenues from Black households by 70.9 percent, revenues from Hispanic households by 246.4 percent, and revenues from households with a householder who is from the Other racial/ethnic group by 250.4 percent. Under the 1.0 scenario, these increases are 23.6 percent, 107.0 percent, 471.7 percent, and 712.9 percent for Anglo, Black, Hispanic, and Other households, respectively. As a result of such changes, the percentage of all tax revenues from Anglo households declines from 71.2 percent in 2000 to 48.9 percent by 2040 under the 0.5 scenario and to only 38.2 percent under the 1.0 scenario. Revenues from Black households increase from 8.2 percent in 2000 to 8.4 percent in 2040 under the 0.5 scenario but decline to 7.4 percent of all revenues under the 1.0 scenario (the absolute dollars of revenues from Anglo and Black households continue to increase, but the proportion of

all revenues accounted for by these households declines because of faster growth in households from the Hispanic and Other racial/ethnic groups). The percentage of taxes from Hispanic households increases from 17.3 percent in 2000 to 35.8 percent under the 0.5 scenario and to 42.8 percent under the 1.0 scenario, while the percentage from households with a householder from the Other racial/ethnic group increases from 3.3 in 2000 to 6.9 percent under the 0.5 scenario and to 11.6 percent under the 1.0 scenario (see Figure 4.3). Thus, by 2040 under the 0.5 scenario 51.1 percent and under the 1.0 scenario 61.8 percent of total revenues would come from non-Anglo households compared to 28.8 percent in 2000. Of the net change in tax revenues between 2000 and 2040, only 15.5 percent would come from Anglo households under the 0.5 scenario and 12.9 percent under the 1.0 scenario. Texas state tax revenues will be increasingly dependent on the incomes and expenditures of non-Anglo households.

The data also suggest that, in the absence of changes in 2000 race/ethnicity differentials in income, the average amount of revenue collected per household in Texas will decline because the number of households increases faster than revenues. The number of Texas households is projected to increase by 84.2 percent from 2000 to 2040 under the 0.5 scenario and by 162.1 percent under the 1.0 scenario, while revenues increase by 67.1 percent under the 0.5 scenario and by 130.5 percent under the 1.0 scenario. As a result, tax revenues per household decrease from $3,992 in 2000 to $3,621 in 2040 under the 0.5 scenario and to $3,511 under the 1.0 scenario, decreases of 9.3 percent and 12.0 percent, respectively. In the absence of change in socioeconomic differentials, population change in Texas will lead to decreased levels of per-household taxes to address the service needs of the State.

As noted above, changes in the socioeconomic differentials among racial/ethnic groups could significantly affect incomes and, as a result, tax revenues. In Table 4.11, we examine the

same three scenarios for tax revenues as we examined in Table 4.9 for income. That is, we examine the revenues as shown in Table 4.10 and compare those to revenues that would be collected if the 1990-2000 levels of closure between Anglo and Black and Anglo and Hispanic incomes continued throughout the projection period and to those that would be generated as a result of total closure between Anglo incomes and the incomes of all other racial/ethnic groups. The data in Table 4.11 show that changes in income would have substantial impacts on tax revenues. Under the 1.0 scenario, if the relative increases in Black and Hispanic incomes that occurred from 1990-2000 could be maintained from 2000 to 2040, an additional $6.8 billion (more than that projected for 2040 assuming 2000 income differentials) would be generated annually by 2040, and if Blacks and Hispanics were to come to have the incomes of Anglos, more than $21.6 billion in additional revenue would be generated each year. In addition (see Figure 4.4) per-household revenues would increase by $636 from 2000 to 2040 rather than decline by $481. State revenues would be enhanced by increases in non-Anglo incomes.

Summary

In this chapter we have examined the implications of demographic change for the socioeconomic characteristics of the population of Texas. The results point to substantial shifts in the overall level of socioeconomic resources. Specifically:

1. Texas has displayed patterns of both economic stagnation and expansion in recent decades. During the 1980s, Texas median household income and per capita income levels failed to keep pace with national increases, while poverty levels increased more rapidly than those in the nation. In the 1990s, Texas income levels increased faster than those in the nation and its poverty rate decreased more rapidly, and differentials in Anglo-Black and Anglo-Hispanic

incomes decreased while the ratio of Black and Hispanic incomes to those for Anglos increased. Despite these changes, Black and Hispanic incomes were less than two-thirds the level for Anglos, and their poverty rates were roughly three times those for Anglos. The 1990s brought socioeconomic progress to the State, but differentials remain substantial.

2. If 2000 differentials among age and race/ethnicity groups were to prevail, the average income for all Texas households would decline by $6,558 from 2000 to 2040 (in 2000 constant dollars) under the 1.0 scenario and by $5,061 under the 0.5 scenario. 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, suggesting a decline in the overall level of per-household aggregate income in the State. The distributions of households by income level would also show a general shift toward lower income categories. Under the 1.0 scenario, the 30.7 percent of households with incomes below $25,000 in 2000 would increase to 38.0 percent in 2040 (in 2000 constant dollars), while the percentage with incomes of $100,000 or more would decrease from 11.5 percent to 8.0 percent. Similarly, 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.

3. 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 the 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 incomes would be $63,116 rather than the $54,441 that they were in 2000 or the $47,883 that they are projected to be in 2040 under the assumption of continuing 2000 differentials. Changing the socioeconomic differentials existent in Texas society is of clear significance for changing the economic future of the State.

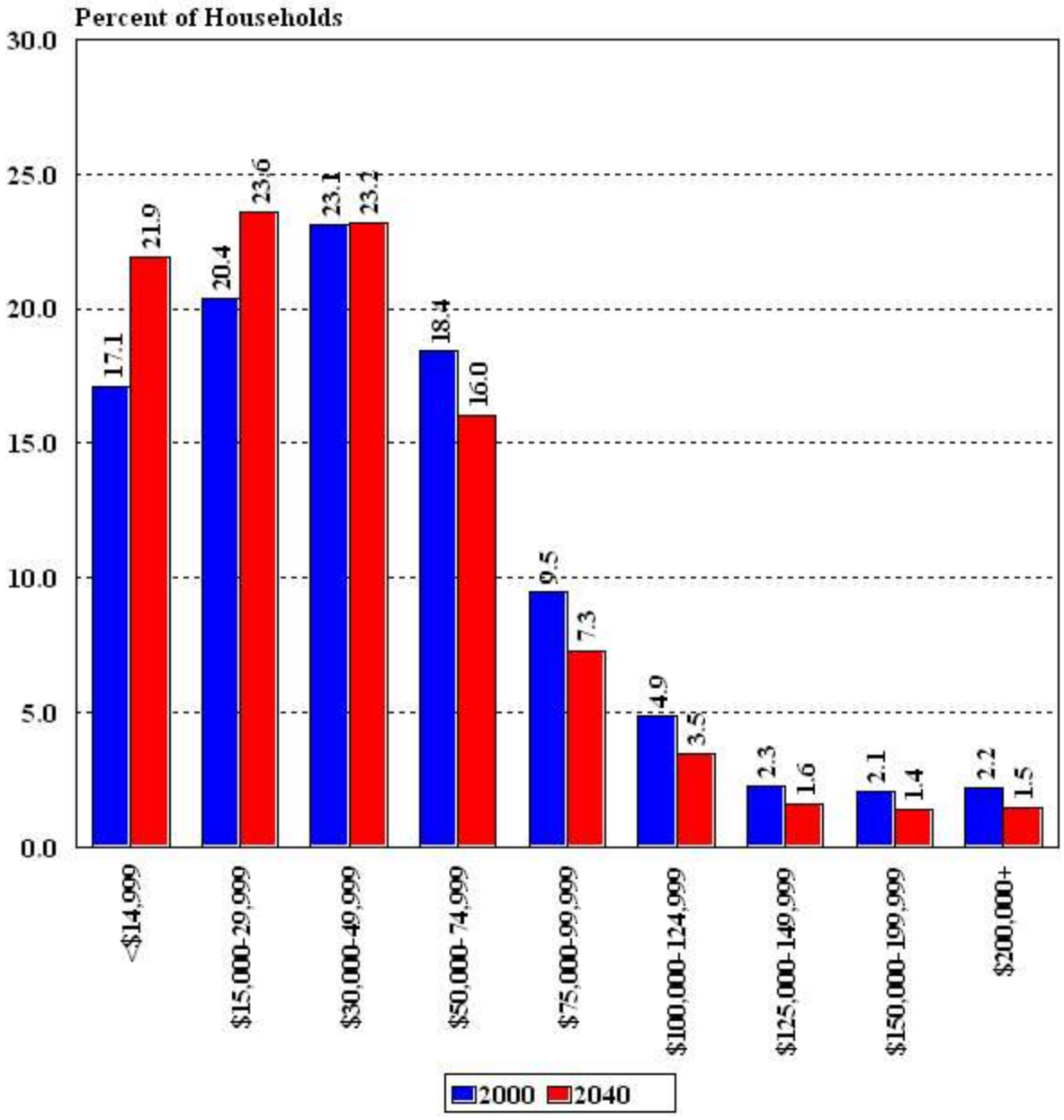
4. Demographic changes will also affect tax revenues through their impacts on socioeconomic resources. Although tax revenues are projected to increase by 67.1 percent under the 0.5 scenario and by 130.5 percent under the 1.0 scenario, these rates of increase would be slower than the 84.2 and 162.1 percent 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 by between 9.3 percent and 12.0 percent. The sources of such revenues would also change. By 2040, the percentage of revenues from non-Anglo households would increase to between 51.1 (under the 0.5 scenario) and 61.8 percent (under the 1.0 scenario) of all revenues, compared to only 28.8 percent in 2000. 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).

The analysis in this chapter 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. The result would be reduced aggregate income, increased poverty, and decreased per-household tax revenues. If these differentials change, the State's socioeconomic resources could be increased significantly. Changes in the economy and other factors likely will drive much of the change that actually does occur, but altering socioeconomic differentials is clearly of importance to both the private and public sectors of Texas.

Figure 4.1

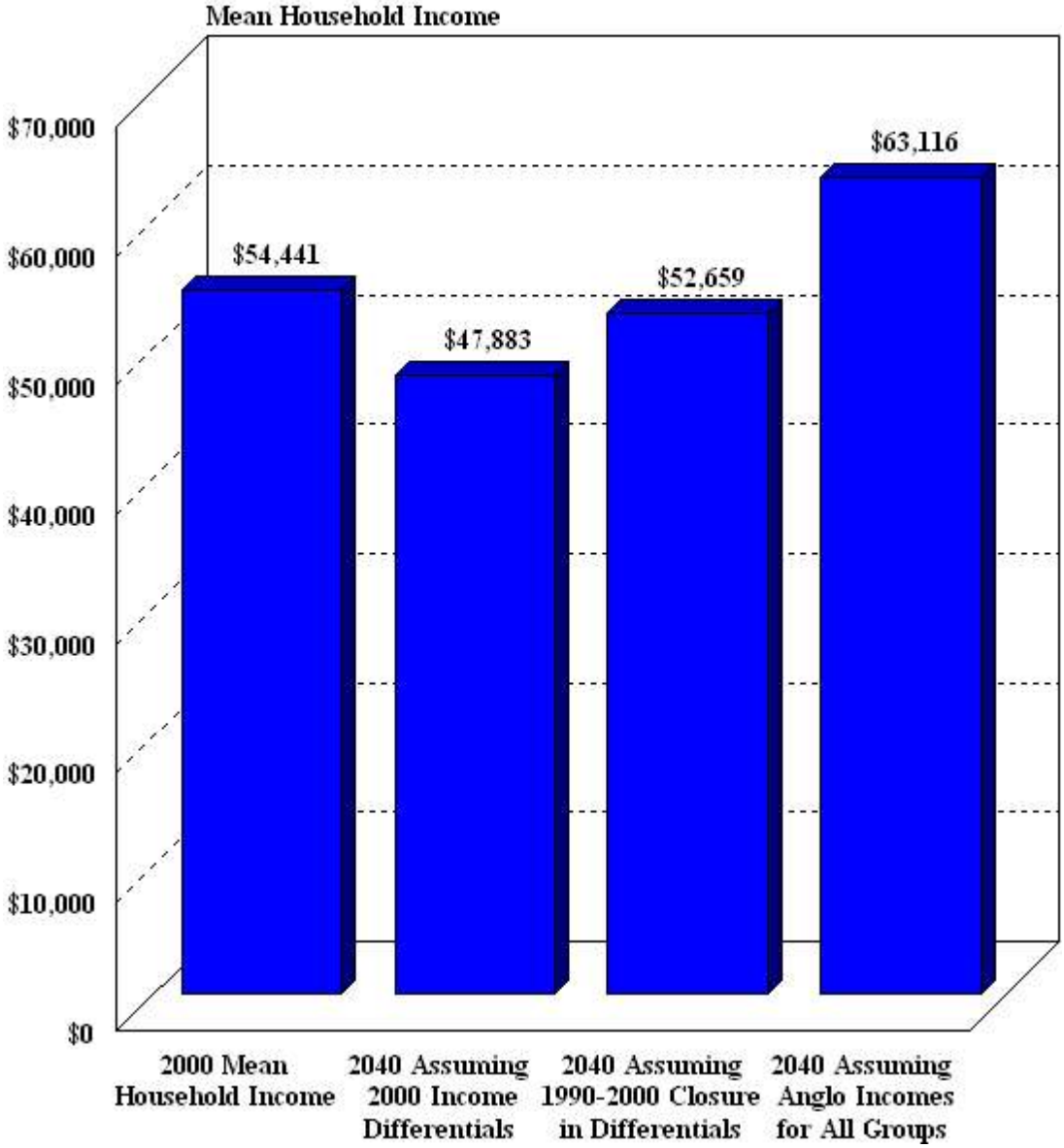
Percent of Households by Income Category for the State of Texas in 2000 and Projections for 2040*



*** Projections are shown for the 1.0 scenario**

Figure 4.2

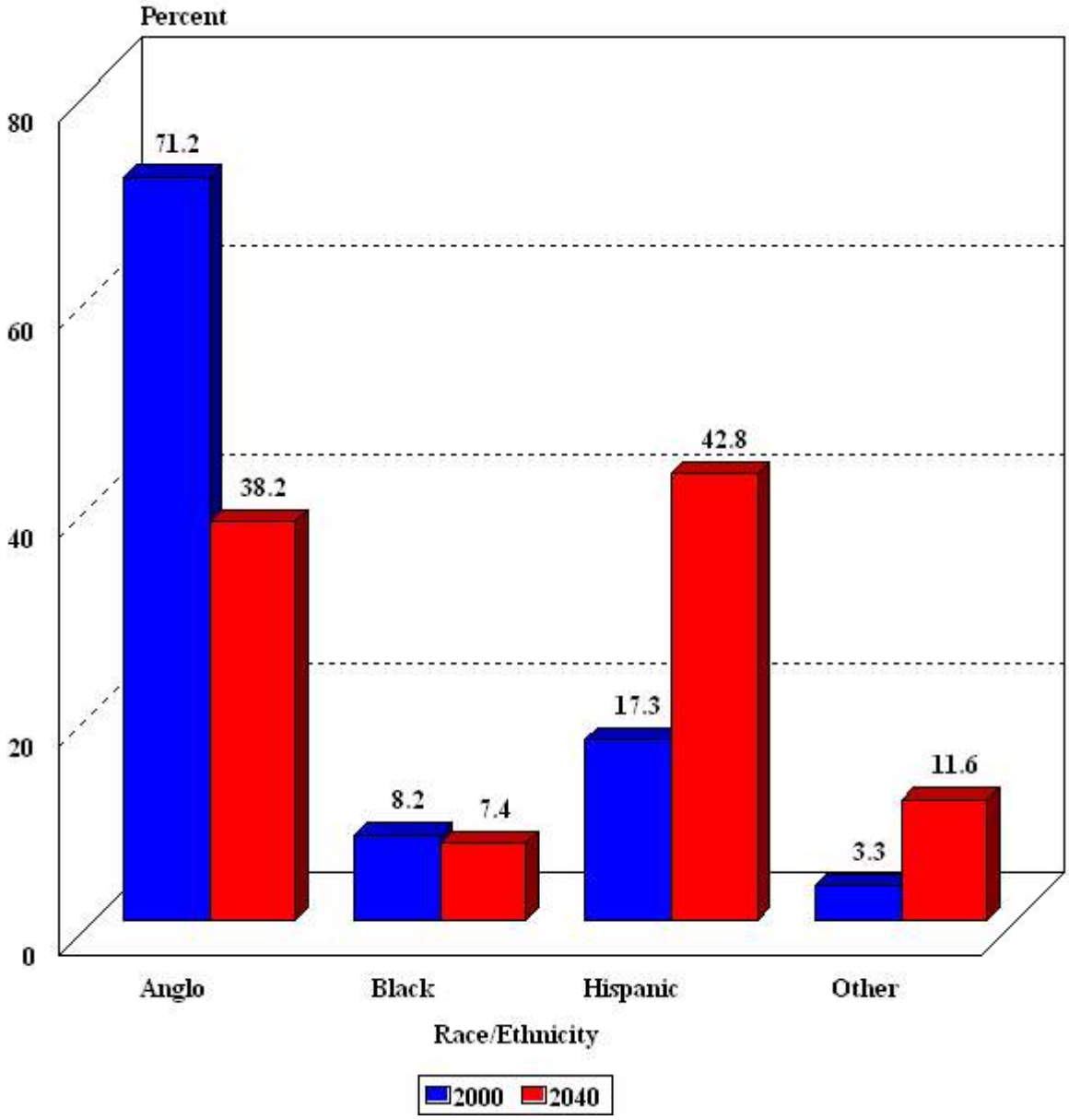
Mean Household Income in Texas in 2000 and Projections for 2040* Assuming 2000 Rates, 1990-2000 Rates of Closure between Anglo-Black and Anglo-Hispanic Incomes, and Anglo Income Levels for All Race/Ethnicity Groups



*** Projections are shown for the 1.0 scenario**

Figure 4.3

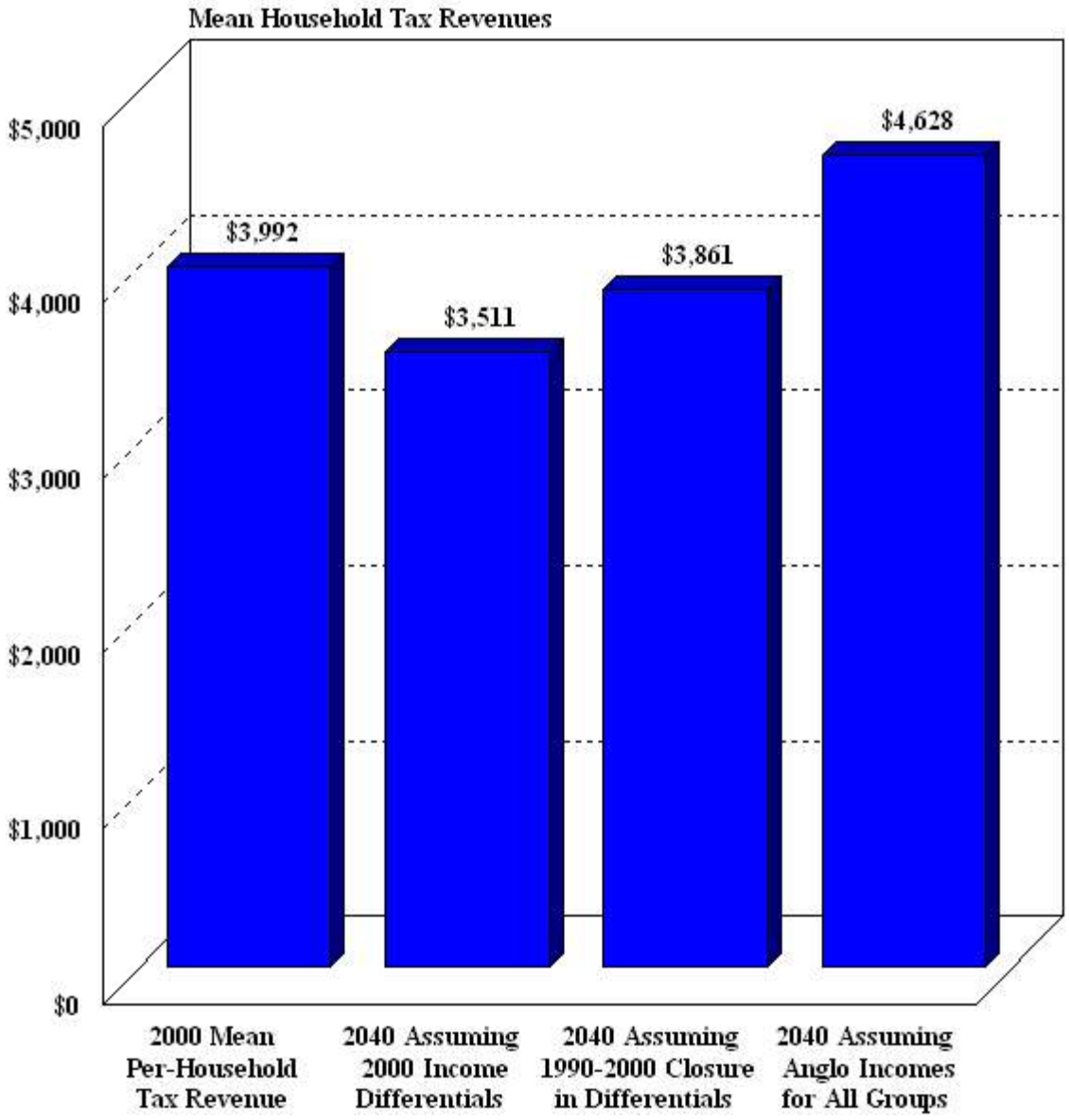
Proportion of State Tax Revenues Due To Households from Each Race/Ethnicity Group, 2000 and 2040*



*** Projections are shown for the 1.0 scenario**

Figure 4.4

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**

Table 4.1

Median Household Income and Per Capita Income in Constant (2000) and Current Dollars, Percent of Persons in Poverty in Texas and the United States, and Texas Values as a Percentage of United States Values, 1979-1999

Income/Poverty	1979	1989	1999	Percent Change 1979-1989	Percent Change 1989-1999	Percent Change 1979-1999
Texas						
Panel A: Constant Dollars						
Median Household Income	$ 35,539	$ 35,063	$ 39,927	-1.3	13.9	12.3
Per Capita Income	$ 15,326	$ 16,748	$ 19,617	9.3	17.1	28.0
Percent of Persons in Poverty	14.7	18.1	15.4	23.1	-14.9	4.8
Panel B: Current Dollars						
Median Household Income	$ 16,708	$ 27,016	$ 39,927	61.7	47.8	139.0
Per Capita Income	$ 7,205	$ 12,904	$ 19,617	79.1	52.0	172.3
Percent of Persons in Poverty	14.7	18.1	15.4	23.1	-14.9	4.8
United States						
Panel A: Constant Dollars						
Median Household Income	$ 35,822	$ 39,009	$ 41,994	8.9	7.7	17.2
Per Capita Income	$ 15,555	$ 18,715	$ 21,587	20.3	15.3	38.8
Percent of Persons in Poverty	12.4	13.1	12.4	5.6	-5.3	0.0
Panel B: Current Dollars						
Median Household Income	$ 16,841	$ 30,056	$ 41,994	78.5	39.7	149.4
Per Capita Income	$ 7,313	$ 14,420	$ 21,587	97.2	49.7	195.2
Percent of Persons in Poverty	12.4	13.1	12.4	5.6	-5.3	0.0
Texas Values As A Percentage of United States Values						
Median Household Income	99.2	89.9	95.1	-9.4	5.8	-4.2
Per Capita Income	98.5	89.5	90.9	-9.2	1.6	-7.8
Percent of Persons in Poverty	118.5	138.2	124.2	16.5	-10.1	4.8

Sources: Derived by the authors from U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a; and Census of Population and Housing, 1990: Summary Tape File 3, [machine readable data files], 1991c.

Table 4.2

Income and Poverty Characteristics of the Population in Texas by Race/Ethnicity, 1989-1999

Race/ Ethnicity	Median Household Income	Median Family Income	Per Capita Income	Persons In Poverty	Percent Persons In Poverty	Families In Poverty	Percent Families In Poverty	Children In Poverty	Percent Children In Poverty	Elderly In Poverty	Percent Elderly In Poverty
					1989						
Anglo	$ 31,475	$ 38,051	$ 16,469	953,739	9.5	188,688	6.6	244,508	10.1	158,786	12.8
Black	17,873	20,630	8,137	590,554	31.0	132,623	27.6	247,137	39.2	58,663	39.6
Hispanic	19,233	20,121	6,633	1,394,983	33.0	284,083	29.7	631,120	40.0	76,485	36.3
Total	27,016	31,553	12,904	3,000,515	18.1	617,981	14.1	1,140,367	24.0	296,690	18.4
					1999						
Anglo	$ 47,162	$ 57,194	$ 26,197	826,459	7.8	156,231	5.2	205,667	8.3	113,585	8.0
Black	29,305	33,276	14,253	525,082	23.4	118,004	20.4	218,071	30.0	45,353	27.3
Hispanic	29,873	30,840	10,770	1,658,434	25.4	338,079	22.8	734,288	31.2	85,274	25.7
Total	39,927	45,861	19,617	3,117,609	15.4	632,676	12.0	1,189,935	20.5	251,172	12.8
					Percent Change 1989-1999*						
Anglo	49.8	50.3	59.1	-13.3	-17.9	-17.2	-21.2	-15.9	-17.8	-28.5	-37.5
Black	64.0	61.3	75.2	-11.1	-24.5	-11.0	-26.1	-11.8	-23.5	-22.7	-31.1
Hispanic	55.3	53.3	62.4	18.9	-23.0	19.0	-23.2	16.3	-22.0	11.5	-29.2
Total	47.8	45.3	52.0	3.9	-14.9	2.4	-14.9	4.3	-14.6	-15.3	-30.4

* Changes in values by race/ethnicity are only approximate because exact comparability cannot be obtained given 1990 and 2000 census differences in race/ethnicity classification procedures. For purposes of these comparisons, Hispanics of all races and non-Hispanic Whites in 1990 are compared to the same groups in 2000. Black non-Hispanics in 1990 are compared to Black alone in 2000.

Sources: Derived by the authors from U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a; and Census of Population and Housing, 1990: Summary Tape File 3, [machine readable data files], 1991c.

Table 4.3

Total State Tax Collections and Per Capita Collections in Texas, 1971-2000

Fiscal Year	State Tax Collections	Resident Population*	Per Capita Tax Collections	Percent Change	Taxes as a Percent of Personal Income
1971	$ 1,992,055,564	11,475,893	$ 173.59	8.7	4.6
1972	2,341,326,235	11,727,295	199.65	15.0	5.0
1973	2,582,903,255	11,984,910	215.51	7.9	4.8
1974	3,026,705,043	12,238,925	247.30	14.8	4.9
1975	3,367,751,883	12,532,443	268.72	8.6	4.9
1976	3,913,827,072	12,857,805	304.39	13.2	5.0
1977	4,419,881,616	13,156,205	335.95	10.5	5.0
1978	5,032,274,299	13,464,130$_r$	373.75$_r$	11.3	5.0$_r$
1979	5,390,313,009	13,842,213$_r$	389.41$_r$	4.2	4.5$_r$
1980	6,343,785,161	14,280,510$_r$	444.23$_r$	14.1	4.6
1981	7,742,032,894	14,705,060$_r$	526.49	18.5$_r$	4.8
1982	8,650,025,743	15,246,820$_r$	567.33	7.8	4.8
1983	8,497,817,125	15,689,250$_r$	541.63	-4.5	4.5$_r$
1984	9,305,839,492	15,977,270$_r$	582.44	7.5	4.5$_r$
1985	10,721,208,262	16,242,810$_r$	660.06	13.3	4.8$_r$
1986	10,231,670,211	16,512,640$_r$	619.63	-6.1	4.4$_r$
1987	10,266,162,781	16,615,480$_r$	617.87$_r$	-0.3	4.4$_r$
1988	12,364,618,924	16,669,270$_r$	741.76$_r$	20.1	5.0$_r$
1989	12,905,940,817	16,796,030$_r$	768.39$_r$	3.6	4.8$_r$
1990	13,632,640,459	17,019,370$_r$	801.01$_r$	4.2$_r$	4.7$_r$
1991	14,922,113,980	17,310,680$_r$	862.02$_r$	7.6$_r$	4.8$_r$
1992	15,848,915,148	17,624,370$_r$	899.26$_r$	4.3$_r$	4.8
1993	17,010,737,258	17,964,540$_r$	946.91$_r$	5.3$_r$	4.9$_r$
1994	18,105,950,594	18,305,230$_r$	989.11$_r$	4.5$_r$	4.9
1995	18,858,790,042	18,649,930$_r$	1,011.20$_r$	2.2$_r$	4.8$_r$
1996	19,762,504,350	18,966,000$_r$	1,042.00$_r$	3.0$_r$	4.7$_r$
1997	21,187,868,237	19,312,000$_r$	1,097.13$_r$	5.3$_r$	4.7$_r$
1998	22,634,019,740	19,666,000$_r$	1,150.92$_r$	4.9$_r$	4.6$_r$
1999	23,614,611,235	20,003,000	1,180.55	2.6	4.5
2000	25,283,768,842	20,342,000	1,242.93	5.3	4.5

Sources: Texas Comptroller of Public Accounts, 2000 Annual Cash Report, [online], 2002a; 1998 Annual Cash Report, [online], 2002b; and Texas Financial Update, 1995.

* Population figures are for fiscal years.

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Table 4.4

Net Expenditures* for State Government in Texas by Function in Constant (2000) and Current Dollars, and Percent Change, 1990-2000

Function	Fiscal Year (ending August 31)					
	1990	2000	Percent Change 1990-2000	1990	2000	Percent Change 1990-2000
	Constant Dollars			Current Dollars		
General Government						
Executive	$ 1,227,197,361	$ 1,505,059,205	22.6	$ 953,462,337	$ 1,505,059,205	57.9
Legislative	69,795,520	96,915,631	38.9	54,227,137	96,915,631	78.7
Judicial	93,233,292	149,082,642	59.9	72,436,949	149,082,642	105.8
Total	1,390,226,173	1,751,057,478	26.0	1,080,126,423	1,751,057,478	62.1
Services						
Health & Human Services	$ 7,281,703,260	$ 16,332,205,617	124.3	$ 5,657,468,005	$ 16,332,205,617	188.7
Public Safety and Corrections	1,333,797,520	3,012,269,270	125.8	1,036,284,579	3,012,269,270	190.7
Transportation	3,322,939,615	4,459,445,451	34.2	2,581,734,504	4,459,445,451	72.7
Natural Resources/Recreational Services	321,638,274	1,349,094,404	319.4	249,894,589	1,349,094,404	439.9
Education	12,944,192,844	19,104,693,795	47.6	10,056,899,362	19,104,693,795	90.0
Regulatory Agencies	202,357,855	196,323,154	-3.0	157,220,509	196,323,154	24.9
Employee Benefits	1,455,505,981	1,961,888,489	34.8	1,130,845,109	1,961,888,489	73.5
Debt Service	406,030,224	597,962,810	47.3	315,462,320	597,962,810	89.6
Capital Outlay	533,271,801	693,121,732	30.0	414,321,766	693,121,732	67.3
Lottery Winnings Paid	-	249,692,036	-	-	249,692,036	-
Total	29,191,663,548	49,707,754,236	70.3	22,680,257,166	49,707,754,236	119.2

Sources: Texas Comptroller of Public Accounts, 2000 Annual Cash Report, [online], 2002a; and 1998 Annual Cash Report, [online], 2002b.

*Funds 1-849, excluding Fund 021 as it is a trust account.

Note: Totals may not add due to rounding.

Table 4.5

Household Income in Texas by Income Category and Race/Ethnicity of Householder in 2000
and Projections to 2040 Assuming Alternative Projection Scenarios (Percentaged within Income Group)

	Anglo		Black		Hispanic		Other		Total	
Household Income	Number	%	Number	%	Number	%	Number	%	Number	%
All Scenarios										
2000										
$ < 10,000	341,684	44.6	149,514	19.5	251,625	32.8	23,995	3.1	766,818	100.0
10,000 - 14,999	242,608	49.4	70,966	14.5	165,395	33.7	11,714	2.4	490,683	100.0
15,000 - 19,999	242,784	49.9	66,404	13.7	165,277	34.0	11,702	2.4	486,167	100.0
20,000 - 24,999	269,952	52.2	67,047	13.0	167,064	32.3	13,167	2.5	517,230	100.0
25,000 - 29,999	272,946	54.3	63,339	12.6	154,110	30.7	12,152	2.4	502,547	100.0
30,000 - 34,999	285,102	57.8	55,869	11.3	139,362	28.3	12,711	2.6	493,044	100.0
35,000 - 39,999	267,306	60.0	48,014	10.8	118,350	26.6	11,541	2.6	445,211	100.0
40,000 - 44,999	257,415	61.8	43,160	10.4	104,374	25.1	11,327	2.7	416,276	100.0
45,000 - 49,999	226,205	63.3	35,376	9.9	85,512	23.9	10,219	2.9	357,312	100.0
50,000 - 59,999	422,419	66.4	59,528	9.3	134,970	21.2	19,999	3.1	636,916	100.0
60,000 - 74,999	506,652	70.1	62,038	8.6	129,151	17.9	24,202	3.4	722,043	100.0
75,000 - 99,999	530,742	75.2	51,636	7.3	98,607	14.0	24,495	3.5	705,480	100.0
100,000 - 124,999	263,225	72.7	50,412	13.9	35,631	9.8	13,145	3.6	362,413	100.0
125,000 - 149,999	142,048	81.8	8,489	4.9	15,018	8.7	7,899	4.6	173,454	100.0
150,000 - 199,999	129,469	84.4	5,723	3.7	11,771	7.7	6,481	4.2	153,444	100.0
200,000+	139,521	84.8	6,197	3.8	13,406	8.2	5,192	3.2	164,316	100.0
Total	4,540,078	61.4	843,712	11.4	1,789,623	24.2	219,941	3.0	7,393,354	100.0
Panel A: Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)										
2010										
$ < 10,000	369,594	38.6	180,236	18.9	366,770	38.4	38,812	4.1	955,412	100.0
10,000 - 14,999	263,943	43.3	85,605	14.1	241,020	39.6	18,551	3.0	609,119	100.0
15,000 - 19,999	262,993	43.6	80,323	13.3	240,803	40.0	18,479	3.1	602,598	100.0
20,000 - 24,999	290,896	45.7	81,268	12.8	243,378	38.3	20,208	3.2	635,750	100.0
25,000 - 29,999	293,298	47.9	76,832	12.5	224,491	36.6	18,439	3.0	613,060	100.0
30,000 - 34,999	305,480	51.2	67,794	11.4	202,998	34.1	19,392	3.3	595,664	100.0
35,000 - 39,999	286,005	53.5	58,282	10.9	172,393	32.3	17,367	3.3	534,047	100.0
40,000 - 44,999	274,902	55.4	52,401	10.6	152,032	30.6	16,986	3.4	496,321	100.0
45,000 - 49,999	241,373	56.9	42,949	10.1	124,554	29.4	15,243	3.6	424,119	100.0
50,000 - 59,999	449,881	60.0	72,290	9.7	196,592	26.3	29,750	4.0	748,513	100.0
60,000 - 74,999	538,402	64.2	75,380	9.0	188,111	22.5	35,818	4.3	837,711	100.0
75,000 - 99,999	563,110	69.9	62,735	7.8	143,626	17.8	36,117	4.5	805,588	100.0
100,000 - 124,999	279,314	67.8	61,351	14.9	51,898	12.6	19,462	4.7	412,025	100.0
125,000 - 149,999	150,705	77.5	10,317	5.3	21,875	11.2	11,666	6.0	194,563	100.0
150,000 - 199,999	137,407	80.3	6,943	4.1	17,146	10.0	9,625	5.6	171,121	100.0
200,000+	148,385	81.0	7,492	4.1	19,529	10.7	7,702	4.2	183,108	100.0
Total	4,855,688	55.0	1,022,198	11.6	2,607,216	29.6	333,617	3.8	8,818,719	100.0

Table 4.5, Panel A continued

Household Income	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
2020										
$ < 10,000	411,638	33.8	222,111	18.2	525,186	43.1	59,481	4.9	1,218,416	100.0
10,000 - 14,999	301,713	38.9	104,919	13.6	339,781	43.9	27,637	3.6	774,050	100.0
15,000 - 19,999	294,840	39.1	96,171	12.8	335,460	44.5	27,425	3.6	753,896	100.0
20,000 - 24,999	318,348	40.8	95,589	12.3	336,570	43.2	28,793	3.7	779,300	100.0
25,000 - 29,999	316,756	42.7	89,780	12.1	309,147	41.7	25,827	3.5	741,510	100.0
30,000 - 34,999	325,388	45.8	78,977	11.1	278,596	39.2	27,386	3.9	710,347	100.0
35,000 - 39,999	302,549	48.0	67,693	10.7	236,774	37.5	24,016	3.8	631,032	100.0
40,000 - 44,999	288,118	49.6	60,751	10.5	208,532	35.9	23,364	4.0	580,765	100.0
45,000 - 49,999	251,954	51.1	49,807	10.1	170,531	34.6	20,789	4.2	493,081	100.0
50,000 - 59,999	465,135	54.2	83,645	9.7	269,101	31.4	40,399	4.7	858,280	100.0
60,000 - 74,999	550,501	58.4	86,790	9.2	257,052	27.3	48,235	5.1	942,578	100.0
75,000 - 99,999	571,128	64.4	72,294	8.1	196,469	22.1	48,342	5.4	888,233	100.0
100,000 - 124,999	283,482	62.9	69,645	15.5	70,995	15.8	26,225	5.8	450,347	100.0
125,000 - 149,999	152,825	72.7	11,858	5.6	30,011	14.3	15,659	7.4	210,353	100.0
150,000 - 199,999	139,587	75.7	8,107	4.4	23,547	12.8	13,035	7.1	184,276	100.0
200,000+	152,349	76.7	9,013	4.5	26,944	13.6	10,413	5.2	198,719	100.0
Total	5,126,311	49.2	1,207,150	11.6	3,614,696	34.7	467,026	4.5	10,415,183	100.0
2030										
$ < 10,000	446,555	29.2	263,588	17.2	733,899	48.0	85,657	5.6	1,529,699	100.0
10,000 - 14,999	335,516	34.9	123,622	12.8	464,483	48.3	38,818	4.0	962,439	100.0
15,000 - 19,999	321,894	35.0	109,781	11.9	450,688	48.9	38,385	4.2	920,748	100.0
20,000 - 24,999	339,374	36.4	106,392	11.4	447,255	48.0	38,772	4.2	931,793	100.0
25,000 - 29,999	333,124	38.1	98,975	11.3	408,197	46.7	34,187	3.9	874,483	100.0
30,000 - 34,999	337,258	40.8	86,667	10.5	365,944	44.3	36,554	4.4	826,423	100.0
35,000 - 39,999	311,263	42.7	73,954	10.2	311,375	42.8	31,373	4.3	727,965	100.0
40,000 - 44,999	293,421	44.2	66,187	10.0	273,674	41.2	30,348	4.6	663,630	100.0
45,000 - 49,999	255,438	45.6	54,287	9.7	223,174	39.9	26,762	4.8	559,661	100.0
50,000 - 59,999	466,515	48.5	90,862	9.5	352,052	36.6	51,758	5.4	961,187	100.0
60,000 - 74,999	545,104	52.7	93,569	9.0	335,399	32.4	61,235	5.9	1,035,307	100.0
75,000 - 99,999	560,180	58.5	78,047	8.2	256,767	26.9	60,956	6.4	955,950	100.0
100,000 - 124,999	278,269	58.2	73,443	15.4	92,788	19.4	33,316	7.0	477,816	100.0
125,000 - 149,999	149,864	67.6	12,752	5.7	39,400	17.8	19,807	8.9	221,823	100.0
150,000 - 199,999	137,170	70.8	8,927	4.6	30,962	16.0	16,652	8.6	193,711	100.0
200,000+	151,583	71.9	10,355	4.9	35,681	16.9	13,277	6.3	210,896	100.0
Total	5,262,528	43.7	1,351,408	11.2	4,821,738	40.0	617,857	5.1	12,053,531	100.0

Table 4.5, Panel A continued

Household Income	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
2040										
$ < 10,000	444,909	24.3	286,262	15.7	979,975	53.7	114,978	6.3	1,826,124	100.0
10,000 - 14,999	335,357	29.7	133,975	11.9	609,493	53.9	51,052	4.5	1,129,877	100.0
15,000 - 19,999	320,976	29.9	117,838	11.0	583,015	54.4	50,332	4.7	1,072,161	100.0
20,000 - 24,999	337,336	31.4	113,295	10.6	573,253	53.4	49,152	4.6	1,073,036	100.0
25,000 - 29,999	330,515	33.1	105,072	10.5	520,335	52.1	42,658	4.3	998,580	100.0
30,000 - 34,999	333,947	35.7	91,870	9.8	464,370	49.6	45,967	4.9	936,154	100.0
35,000 - 39,999	307,887	37.6	78,279	9.5	395,526	48.2	38,660	4.7	820,352	100.0
40,000 - 44,999	289,823	39.0	69,993	9.4	347,019	46.6	37,190	5.0	744,025	100.0
45,000 - 49,999	252,144	40.4	57,418	9.2	282,288	45.2	32,507	5.2	624,357	100.0
50,000 - 59,999	459,790	43.2	95,994	9.0	445,172	41.9	62,576	5.9	1,063,532	100.0
60,000 - 74,999	536,246	47.4	98,607	8.7	423,126	37.4	73,355	6.5	1,131,334	100.0
75,000 - 99,999	550,304	53.5	82,287	8.0	324,392	31.5	72,514	7.0	1,029,497	100.0
100,000 - 124,999	273,396	53.9	76,819	15.1	117,229	23.1	39,937	7.9	507,381	100.0
125,000 - 149,999	147,218	62.9	13,427	5.7	49,972	21.3	23,639	10.1	234,256	100.0
150,000 - 199,999	134,791	66.1	9,473	4.7	39,324	19.3	20,074	9.9	203,662	100.0
200,000+	149,223	67.3	11,138	5.0	45,596	20.5	15,974	7.2	221,931	100.0
Total	5,203,862	38.2	1,441,747	10.6	6,200,085	45.5	770,565	5.7	13,616,259	100.0
	Panel B: Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)									
2010										
$ < 10,000	377,034	36.8	188,451	18.4	411,080	40.1	47,918	4.7	1,024,483	100.0
10,000 - 14,999	269,339	41.2	89,508	13.7	271,663	41.6	22,943	3.5	653,453	100.0
15,000 - 19,999	268,308	41.4	83,994	13.0	272,564	42.1	22,860	3.5	647,726	100.0
20,000 - 24,999	296,692	43.5	84,989	12.4	276,186	40.4	25,060	3.7	682,927	100.0
25,000 - 29,999	299,097	45.5	80,351	12.2	255,127	38.8	22,888	3.5	657,463	100.0
30,000 - 34,999	311,471	48.9	70,901	11.1	230,971	36.2	24,060	3.8	637,403	100.0
35,000 - 39,999	291,591	51.1	60,954	10.7	196,098	34.4	21,573	3.8	570,216	100.0
40,000 - 44,999	280,242	52.9	54,804	10.4	173,016	32.7	21,107	4.0	529,169	100.0
45,000 - 49,999	246,052	54.5	44,918	9.9	141,834	31.4	18,949	4.2	451,753	100.0
50,000 - 59,999	458,553	57.6	75,604	9.5	223,884	28.2	36,991	4.7	795,032	100.0
60,000 - 74,999	548,714	61.9	78,838	8.9	214,352	24.2	44,556	5.0	886,460	100.0
75,000 - 99,999	573,844	67.7	65,613	7.7	163,602	19.3	44,942	5.3	848,001	100.0
100,000 - 124,999	284,641	65.9	64,169	14.8	59,116	13.7	24,208	5.6	432,134	100.0
125,000 - 149,999	153,578	75.4	10,790	5.3	24,893	12.2	14,515	7.1	203,776	100.0
150,000 - 199,999	140,029	78.3	7,261	4.1	19,505	10.9	11,969	6.7	178,764	100.0
200,000+	151,234	79.3	7,834	4.1	22,179	11.6	9,579	5.0	190,826	100.0
Total	4,950,419	52.7	1,068,979	11.4	2,956,070	31.5	414,118	4.4	9,389,586	100.0

Table 4.5, Panel B continued

Household Income	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
2020										
$ < 10,000	428,038	30.1	243,454	17.1	662,368	46.5	90,094	6.3	1,423,954	100.0
10,000 - 14,999	313,818	34.7	115,021	12.7	433,829	48.0	42,048	4.6	904,716	100.0
15,000 - 19,999	306,607	34.6	105,509	11.9	432,355	48.8	41,751	4.7	886,222	100.0
20,000 - 24,999	330,968	36.1	104,932	11.5	436,310	47.6	44,127	4.8	916,337	100.0
25,000 - 29,999	329,265	37.9	98,577	11.3	402,101	46.2	39,694	4.6	869,637	100.0
30,000 - 34,999	338,187	40.7	86,723	10.4	363,344	43.8	42,033	5.1	830,287	100.0
35,000 - 39,999	314,426	42.9	74,341	10.1	308,614	42.0	36,992	5.0	734,373	100.0
40,000 - 44,999	299,398	44.4	66,720	9.9	272,089	40.4	36,020	5.3	674,227	100.0
45,000 - 49,999	261,805	45.8	54,701	9.6	222,828	39.0	32,098	5.6	571,432	100.0
50,000 - 59,999	483,270	48.8	91,871	9.3	351,690	35.6	62,420	6.3	989,251	100.0
60,000 - 74,999	571,890	53.1	95,340	8.8	336,400	31.2	74,634	6.9	1,078,264	100.0
75,000 - 99,999	593,263	59.0	79,414	7.9	256,901	25.6	74,880	7.5	1,004,458	100.0
100,000 - 124,999	294,471	58.4	76,543	15.2	92,830	18.4	40,573	8.0	504,417	100.0
125,000 - 149,999	158,748	67.6	13,028	5.5	39,152	16.6	24,244	10.3	235,172	100.0
150,000 - 199,999	145,000	70.9	8,901	4.3	30,694	15.0	20,150	9.8	204,745	100.0
200,000+	158,277	72.2	9,886	4.5	34,994	16.0	16,102	7.3	219,259	100.0
Total	5,327,431	44.2	1,324,961	11.0	4,676,499	38.8	717,860	6.0	12,046,751	100.0
2030										
$ < 10,000	472,816	24.0	302,813	15.4	1,030,390	52.5	158,316	8.1	1,964,335	100.0
10,000 - 14,999	355,259	28.8	142,080	11.5	664,839	53.9	72,189	5.8	1,234,367	100.0
15,000 - 19,999	340,828	28.5	126,408	10.6	655,012	54.9	71,445	6.0	1,193,693	100.0
20,000 - 24,999	359,322	29.7	122,692	10.1	656,323	54.2	72,879	6.0	1,211,216	100.0
25,000 - 29,999	352,697	31.1	114,206	10.1	602,391	53.1	64,545	5.7	1,133,839	100.0
30,000 - 34,999	357,066	33.4	100,033	9.4	542,527	50.8	68,865	6.4	1,068,491	100.0
35,000 - 39,999	329,540	35.2	85,383	9.1	461,150	49.3	59,440	6.4	935,513	100.0
40,000 - 44,999	310,645	36.5	76,426	9.0	406,046	47.7	57,581	6.8	850,698	100.0
45,000 - 49,999	270,430	37.7	62,686	8.8	331,942	46.4	50,899	7.1	715,957	100.0
50,000 - 59,999	493,888	40.4	104,940	8.6	523,791	42.9	98,566	8.1	1,221,185	100.0
60,000 - 74,999	577,075	44.3	108,117	8.3	500,184	38.4	116,900	9.0	1,302,276	100.0
75,000 - 99,999	593,024	50.2	90,175	7.6	382,371	32.3	116,582	9.9	1,182,152	100.0
100,000 - 124,999	294,585	50.7	84,981	14.6	138,172	23.8	63,588	10.9	581,326	100.0
125,000 - 149,999	158,650	58.8	14,737	5.5	58,439	21.7	37,850	14.0	269,676	100.0
150,000 - 199,999	145,214	62.3	10,301	4.4	45,860	19.7	31,736	13.6	233,111	100.0
200,000+	160,474	64.1	11,919	4.8	52,521	21.0	25,316	10.1	250,230	100.0
Total	5,571,513	36.3	1,557,897	10.2	7,051,958	45.9	1,166,697	7.6	15,348,065	100.0

Table 4.5, Panel B continued

Household Income	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
2040										
$ < 10,000	479,999	18.4	345,355	13.1	1,540,524	58.6	261,203	9.9	2,627,081	100.0
10,000 - 14,999	361,915	22.3	161,709	10.0	979,973	60.5	116,647	7.2	1,620,244	100.0
15,000 - 19,999	346,318	22.2	142,557	9.1	954,754	61.3	115,100	7.4	1,558,729	100.0
20,000 - 24,999	363,863	23.2	137,322	8.8	949,951	60.7	113,497	7.3	1,564,633	100.0
25,000 - 29,999	356,443	24.6	127,449	8.8	868,319	59.8	98,960	6.8	1,451,171	100.0
30,000 - 34,999	360,076	26.6	111,475	8.2	779,413	57.4	106,393	7.8	1,357,357	100.0
35,000 - 39,999	331,945	28.1	95,017	8.1	663,002	56.2	90,019	7.6	1,179,983	100.0
40,000 - 44,999	312,427	29.3	84,978	8.0	583,013	54.6	86,739	8.1	1,067,157	100.0
45,000 - 49,999	271,793	30.4	69,708	7.8	475,753	53.3	76,016	8.5	893,270	100.0
50,000 - 59,999	495,547	32.9	116,574	7.7	750,555	49.7	146,538	9.7	1,509,214	100.0
60,000 - 74,999	577,848	36.4	119,819	7.6	715,510	45.1	172,258	10.9	1,585,435	100.0
75,000 - 99,999	592,918	42.0	99,976	7.1	547,548	38.8	170,647	12.1	1,411,089	100.0
100,000 - 124,999	294,570	43.3	93,514	13.8	197,864	29.1	93,764	13.8	679,712	100.0
125,000 - 149,999	158,617	50.4	16,318	5.2	83,926	26.7	55,573	17.7	314,434	100.0
150,000 - 199,999	145,232	53.9	11,492	4.3	65,928	24.4	47,049	17.4	269,701	100.0
200,000+	160,811	55.9	13,467	4.7	75,847	26.4	37,462	13.0	287,587	100.0
Total	5,610,322	29.0	1,746,730	9.0	10,231,880	52.8	1,787,865	9.2	19,376,797	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Table 4.6

Household Income in Texas by Income Category and Race/Ethnicity of Householder in 2000 and Projections to 2040
Assuming Alternative Projection Scenarios (Percentaged within Race/Ethnicity Group)

	Anglo		Black		Hispanic		Other		Total	
Household Income	Number	%	Number	%	Number	%	Number	%	Number	%
All Scenarios										
2000										
$ < 10,000	341,684	7.5	149,514	17.7	251,625	14.3	23,995	11.0	766,818	10.5
10,000 - 14,999	242,608	5.3	70,966	8.4	165,395	9.2	11,714	5.3	490,683	6.6
15,000 - 19,999	242,784	5.3	66,404	7.9	165,277	9.2	11,702	5.3	486,167	6.6
20,000 - 24,999	269,952	5.9	67,047	7.9	167,064	9.3	13,167	6.0	517,230	7.0
25,000 - 29,999	272,946	6.0	63,339	7.5	154,110	8.6	12,152	5.5	502,547	6.8
30,000 - 34,999	285,102	6.3	55,869	6.6	139,362	7.8	12,711	5.8	493,044	6.7
35,000 - 39,999	267,306	5.9	48,014	5.7	118,350	6.6	11,541	5.2	445,211	6.0
40,000 - 44,999	257,415	5.7	43,160	5.1	104,374	5.8	11,327	5.2	416,276	5.6
45,000 - 49,999	226,205	5.0	35,376	4.2	85,512	4.8	10,219	4.6	357,312	4.8
50,000 - 59,999	422,419	9.3	59,528	7.1	134,970	7.5	19,999	9.1	636,916	8.6
60,000 - 74,999	506,652	11.2	62,038	7.4	129,151	7.2	24,202	11.0	722,043	9.8
75,000 - 99,999	530,742	11.7	51,636	6.1	98,607	5.5	24,495	11.1	705,480	9.5
100,000 - 124,999	263,225	5.8	50,412	6.0	35,631	2.0	13,145	6.0	362,413	4.9
125,000 - 149,999	142,048	3.1	8,489	1.0	15,018	0.8	7,899	3.6	173,454	2.3
150,000 - 199,999	129,469	2.9	5,723	0.7	11,771	0.7	6,481	2.9	153,444	2.1
200,000+	139,521	3.1	6,197	0.7	13,406	0.7	5,192	2.4	164,316	2.2
Total	4,540,078	100.0	843,712	100.0	1,789,623	100.0	219,941	100.0	7,393,354	100.0
Panel A: Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)										
2010										
$ < 10,000	369,594	7.5	180,236	17.6	366,770	14.3	38,812	11.7	955,412	10.8
10,000 - 14,999	263,943	5.4	85,605	8.4	241,020	9.2	18,551	5.6	609,119	6.9
15,000 - 19,999	262,993	5.4	80,323	7.9	240,803	9.2	18,479	5.5	602,598	6.8
20,000 - 24,999	290,896	6.0	81,268	8.0	243,378	9.3	20,208	6.1	635,750	7.2
25,000 - 29,999	293,298	6.0	76,832	7.5	224,491	8.6	18,439	5.5	613,060	7.0
30,000 - 34,999	305,480	6.3	67,794	6.6	202,998	7.8	19,392	5.8	595,664	6.8
35,000 - 39,999	286,005	5.9	58,282	5.7	172,393	6.6	17,367	5.2	534,047	6.1
40,000 - 44,999	274,902	5.7	52,401	5.1	152,032	5.8	16,986	5.1	496,321	5.6
45,000 - 49,999	241,373	5.0	42,949	4.2	124,554	4.8	15,243	4.6	424,119	4.8
50,000 - 59,999	449,881	9.3	72,290	7.1	196,592	7.5	29,750	8.9	748,513	8.5
60,000 - 74,999	538,402	11.1	75,380	7.4	188,111	7.2	35,818	10.7	837,711	9.5
75,000 - 99,999	563,110	11.6	62,735	6.1	143,626	5.5	36,117	10.8	805,588	9.1
100,000 - 124,999	279,314	5.8	61,351	6.0	51,898	2.0	19,462	5.8	412,025	4.7
125,000 - 149,999	150,705	3.1	10,317	1.0	21,875	0.8	11,666	3.5	194,563	2.2
150,000 - 199,999	137,407	2.8	6,943	0.7	17,146	0.7	9,625	2.9	171,121	1.9
200,000+	148,385	3.1	7,492	0.7	19,529	0.7	7,702	2.3	183,108	2.1
Total	4,855,688	100.0	1,022,198	100.0	2,607,216	100.0	333,617	100.0	8,818,719	100.0

Table 4.6, Panel A continued

Household Income	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
2020										
$ < 10,000	411,638	8.1	222,111	18.5	525,186	14.5	59,481	12.6	1,218,416	11.8
10,000 - 14,999	301,713	5.9	104,919	8.7	339,781	9.4	27,637	5.9	774,050	7.4
15,000 - 19,999	294,840	5.8	96,171	8.0	335,460	9.3	27,425	5.9	753,896	7.2
20,000 - 24,999	318,348	6.2	95,589	7.9	336,570	9.3	28,793	6.2	779,300	7.5
25,000 - 29,999	316,756	6.2	89,780	7.4	309,147	8.6	25,827	5.5	741,510	7.1
30,000 - 34,999	325,388	6.3	78,977	6.5	278,596	7.7	27,386	5.9	710,347	6.8
35,000 - 39,999	302,549	5.9	67,693	5.6	236,774	6.6	24,016	5.1	631,032	6.1
40,000 - 44,999	288,118	5.6	60,751	5.0	208,532	5.8	23,364	5.0	580,765	5.6
45,000 - 49,999	251,954	4.9	49,807	4.1	170,531	4.7	20,789	4.5	493,081	4.7
50,000 - 59,999	465,135	9.1	83,645	6.9	269,101	7.4	40,399	8.7	858,280	8.2
60,000 - 74,999	550,501	10.7	86,790	7.2	257,052	7.1	48,235	10.3	942,578	9.1
75,000 - 99,999	571,128	11.1	72,294	6.0	196,469	5.4	48,342	10.4	888,233	8.5
100,000 - 124,999	283,482	5.5	69,645	5.8	70,995	2.0	26,225	5.6	450,347	4.3
125,000 - 149,999	152,825	3.0	11,858	1.0	30,011	0.8	15,659	3.4	210,353	2.0
150,000 - 199,999	139,587	2.7	8,107	0.7	23,547	0.7	13,035	2.8	184,276	1.8
200,000+	152,349	3.0	9,013	0.7	26,944	0.7	10,413	2.2	198,719	1.9
Total	5,126,311	100.0	1,207,150	100.0	3,614,696	100.0	467,026	100.0	10,415,183	100.0
2030										
$ < 10,000	446,555	8.5	263,588	19.6	733,899	15.3	85,657	13.9	1,529,699	12.8
10,000 - 14,999	335,516	6.4	123,622	9.1	464,483	9.6	38,818	6.3	962,439	8.0
15,000 - 19,999	321,894	6.1	109,781	8.1	450,688	9.3	38,385	6.2	920,748	7.6
20,000 - 24,999	339,374	6.4	106,392	7.9	447,255	9.3	38,772	6.3	931,793	7.7
25,000 - 29,999	333,124	6.3	98,975	7.3	408,197	8.5	34,187	5.5	874,483	7.3
30,000 - 34,999	337,258	6.4	86,667	6.4	365,944	7.6	36,554	5.9	826,423	6.9
35,000 - 39,999	311,263	5.9	73,954	5.5	311,375	6.5	31,373	5.1	727,965	6.0
40,000 - 44,999	293,421	5.6	66,187	4.9	273,674	5.7	30,348	4.9	663,630	5.5
45,000 - 49,999	255,438	4.9	54,287	4.0	223,174	4.6	26,762	4.3	559,661	4.6
50,000 - 59,999	466,515	8.9	90,862	6.7	352,052	7.3	51,758	8.4	961,187	8.0
60,000 - 74,999	545,104	10.4	93,569	6.9	335,399	7.0	61,235	9.9	1,035,307	8.6
75,000 - 99,999	560,180	10.6	78,047	5.8	256,767	5.3	60,956	9.9	955,950	7.9
100,000 - 124,999	278,269	5.3	73,443	5.4	92,788	1.9	33,316	5.4	477,816	4.0
125,000 - 149,999	149,864	2.8	12,752	0.9	39,400	0.8	19,807	3.2	221,823	1.8
150,000 - 199,999	137,170	2.6	8,927	0.7	30,962	0.6	16,652	2.7	193,711	1.6
200,000+	151,583	2.9	10,355	0.8	35,681	0.7	13,277	2.1	210,896	1.7
Total	5,262,528	100.0	1,351,408	100.0	4,821,738	100.0	617,857	100.0	12,053,531	100.0

Table 4.6, Panel A continued

Household Income	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
2040										
$ < 10,000	444,909	8.5	286,262	19.7	979,975	15.9	114,978	15.0	1,826,124	13.4
10,000 - 14,999	335,357	6.4	133,975	9.3	609,493	9.8	51,052	6.6	1,129,877	8.3
15,000 - 19,999	320,976	6.2	117,838	8.2	583,015	9.4	50,332	6.5	1,072,161	7.9
20,000 - 24,999	337,336	6.5	113,295	7.9	573,253	9.2	49,152	6.4	1,073,036	7.9
25,000 - 29,999	330,515	6.4	105,072	7.3	520,335	8.4	42,658	5.5	998,580	7.3
30,000 - 34,999	333,947	6.4	91,870	6.4	464,370	7.5	45,967	6.0	936,154	6.9
35,000 - 39,999	307,887	5.9	78,279	5.4	395,526	6.4	38,660	5.0	820,352	6.0
40,000 - 44,999	289,823	5.6	69,993	4.9	347,019	5.6	37,190	4.8	744,025	5.5
45,000 - 49,999	252,144	4.8	57,418	4.0	282,288	4.6	32,507	4.2	624,357	4.6
50,000 - 59,999	459,790	8.8	95,994	6.7	445,172	7.2	62,576	8.1	1,063,532	7.8
60,000 - 74,999	536,246	10.3	98,607	6.8	423,126	6.8	73,355	9.5	1,131,334	8.3
75,000 - 99,999	550,304	10.6	82,287	5.7	324,392	5.2	72,514	9.4	1,029,497	7.6
100,000 - 124,999	273,396	5.3	76,819	5.3	117,229	1.9	39,937	5.2	507,381	3.7
125,000 - 149,999	147,218	2.8	13,427	0.9	49,972	0.8	23,639	3.1	234,256	1.7
150,000 - 199,999	134,791	2.6	9,473	0.7	39,324	0.6	20,074	2.6	203,662	1.5
200,000+	149,223	2.9	11,138	0.8	45,596	0.7	15,974	2.1	221,931	1.6
Total	5,203,862	100.0	1,441,747	100.0	6,200,085	100.0	770,565	100.0	13,616,259	100.0
	Panel B: Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)									
2010										
$ < 10,000	377,034	7.6	188,451	17.6	411,080	13.9	47,918	11.6	1,024,483	10.9
10,000 - 14,999	269,339	5.4	89,508	8.4	271,663	9.2	22,943	5.5	653,453	7.0
15,000 - 19,999	268,308	5.4	83,994	7.9	272,564	9.2	22,860	5.5	647,726	6.9
20,000 - 24,999	296,692	6.0	84,989	8.0	276,186	9.3	25,060	6.1	682,927	7.3
25,000 - 29,999	299,097	6.0	80,351	7.5	255,127	8.6	22,888	5.5	657,463	7.0
30,000 - 34,999	311,471	6.3	70,901	6.6	230,971	7.8	24,060	5.8	637,403	6.8
35,000 - 39,999	291,591	5.9	60,954	5.7	196,098	6.6	21,573	5.2	570,216	6.1
40,000 - 44,999	280,242	5.7	54,804	5.1	173,016	5.9	21,107	5.1	529,169	5.6
45,000 - 49,999	246,052	5.0	44,918	4.2	141,834	4.8	18,949	4.6	451,753	4.8
50,000 - 59,999	458,553	9.3	75,604	7.1	223,884	7.6	36,991	8.9	795,032	8.5
60,000 - 74,999	548,714	11.1	78,838	7.4	214,352	7.3	44,556	10.8	886,460	9.4
75,000 - 99,999	573,844	11.6	65,613	6.1	163,602	5.5	44,942	10.9	848,001	9.0
100,000 - 124,999	284,641	5.7	64,169	6.0	59,116	2.0	24,208	5.8	432,134	4.6
125,000 - 149,999	153,578	3.1	10,790	1.0	24,893	0.8	14,515	3.5	203,776	2.2
150,000 - 199,999	140,029	2.8	7,261	0.7	19,505	0.7	11,969	2.9	178,764	1.9
200,000+	151,234	3.1	7,834	0.7	22,179	0.8	9,579	2.3	190,826	2.0
Total	4,950,419	100.0	1,068,979	100.0	2,956,070	100.0	414,118	100.0	9,389,586	100.0

Table 4.6, Panel B continued

Household Income	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
2020										
$ < 10,000	428,038	8.1	243,454	18.5	662,368	14.2	90,094	12.5	1,423,954	11.8
10,000 - 14,999	313,818	5.9	115,021	8.7	433,829	9.3	42,048	5.9	904,716	7.5
15,000 - 19,999	306,607	5.8	105,509	8.0	432,355	9.2	41,751	5.8	886,222	7.4
20,000 - 24,999	330,968	6.2	104,932	7.9	436,310	9.3	44,127	6.1	916,337	7.6
25,000 - 29,999	329,265	6.2	98,577	7.4	402,101	8.6	39,694	5.5	869,637	7.2
30,000 - 34,999	338,187	6.3	86,723	6.5	363,344	7.8	42,033	5.9	830,287	6.9
35,000 - 39,999	314,426	5.9	74,341	5.6	308,614	6.6	36,992	5.2	734,373	6.1
40,000 - 44,999	299,398	5.6	66,720	5.0	272,089	5.8	36,020	5.0	674,227	5.6
45,000 - 49,999	261,805	4.9	54,701	4.1	222,828	4.8	32,098	4.5	571,432	4.7
50,000 - 59,999	483,270	9.1	91,871	6.9	351,690	7.5	62,420	8.7	989,251	8.2
60,000 - 74,999	571,890	10.7	95,340	7.2	336,400	7.2	74,634	10.4	1,078,264	9.0
75,000 - 99,999	593,263	11.1	79,414	6.0	256,901	5.5	74,880	10.4	1,004,458	8.3
100,000 - 124,999	294,471	5.5	76,543	5.8	92,830	2.0	40,573	5.7	504,417	4.2
125,000 - 149,999	158,748	3.0	13,028	1.0	39,152	0.8	24,244	3.4	235,172	2.0
150,000 - 199,999	145,000	2.7	8,901	0.7	30,694	0.7	20,150	2.8	204,745	1.7
200,000+	158,277	3.0	9,886	0.7	34,994	0.7	16,102	2.2	219,259	1.8
Total	5,327,431	100.0	1,324,961	100.0	4,676,499	100.0	717,860	100.0	12,046,751	100.0
2030										
$ < 10,000	472,816	8.5	302,813	19.5	1,030,390	14.7	158,316	13.7	1,964,335	12.7
10,000 - 14,999	355,259	6.4	142,080	9.1	664,839	9.4	72,189	6.2	1,234,367	8.0
15,000 - 19,999	340,828	6.1	126,408	8.1	655,012	9.3	71,445	6.1	1,193,693	7.8
20,000 - 24,999	359,322	6.4	122,692	7.9	656,323	9.3	72,879	6.2	1,211,216	7.9
25,000 - 29,999	352,697	6.3	114,206	7.3	602,391	8.5	64,545	5.5	1,133,839	7.4
30,000 - 34,999	357,066	6.4	100,033	6.4	542,527	7.7	68,865	5.9	1,068,491	7.0
35,000 - 39,999	329,540	5.9	85,383	5.5	461,150	6.5	59,440	5.1	935,513	6.1
40,000 - 44,999	310,645	5.6	76,426	4.9	406,046	5.8	57,581	4.9	850,698	5.5
45,000 - 49,999	270,430	4.9	62,686	4.0	331,942	4.7	50,899	4.4	715,957	4.7
50,000 - 59,999	493,888	8.9	104,940	6.7	523,791	7.4	98,566	8.4	1,221,185	8.0
60,000 - 74,999	577,075	10.4	108,117	6.9	500,184	7.1	116,900	10.0	1,302,276	8.5
75,000 - 99,999	593,024	10.6	90,175	5.8	382,371	5.4	116,582	10.0	1,182,152	7.7
100,000 - 124,999	294,585	5.3	84,981	5.5	138,172	2.0	63,588	5.5	581,326	3.8
125,000 - 149,999	158,650	2.8	14,737	0.9	58,439	0.8	37,850	3.2	269,676	1.8
150,000 - 199,999	145,214	2.6	10,301	0.7	45,860	0.7	31,736	2.7	233,111	1.5
200,000+	160,474	2.9	11,919	0.8	52,521	0.7	25,316	2.2	250,230	1.6
Total	5,571,513	100.0	1,557,897	100.0	7,051,958	100.0	1,166,697	100.0	15,348,065	100.0

Table 4.6, Panel B continued

Household Income	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
2040										
$ < 10,000	479,999	8.4	345,355	19.5	1,540,524	15.2	261,203	14.8	2,627,081	13.5
10,000 - 14,999	361,915	6.5	161,709	9.3	979,973	9.6	116,647	6.5	1,620,244	8.4
15,000 - 19,999	346,318	6.2	142,557	8.2	954,754	9.3	115,100	6.4	1,558,729	8.0
20,000 - 24,999	363,863	6.5	137,322	7.9	949,951	9.3	113,497	6.3	1,564,633	8.1
25,000 - 29,999	356,443	6.4	127,449	7.3	868,319	8.5	98,960	5.5	1,451,171	7.5
30,000 - 34,999	360,076	6.4	111,475	6.4	779,413	7.6	106,393	6.0	1,357,357	7.0
35,000 - 39,999	331,945	5.9	95,017	5.4	663,002	6.5	90,019	5.0	1,179,983	6.1
40,000 - 44,999	312,427	5.6	84,978	4.9	583,013	5.7	86,739	4.9	1,067,157	5.5
45,000 - 49,999	271,793	4.8	69,708	4.0	475,753	4.6	76,016	4.3	893,270	4.6
50,000 - 59,999	495,547	8.8	116,574	6.7	750,555	7.3	146,538	8.2	1,509,214	7.8
60,000 - 74,999	577,848	10.3	119,819	6.9	715,510	7.0	172,258	9.6	1,585,435	8.2
75,000 - 99,999	592,918	10.6	99,976	5.7	547,548	5.4	170,647	9.5	1,411,089	7.3
100,000 - 124,999	294,570	5.3	93,514	5.4	197,864	1.9	93,764	5.2	679,712	3.5
125,000 - 149,999	158,617	2.8	16,318	0.9	83,926	0.8	55,573	3.1	314,434	1.6
150,000 - 199,999	145,232	2.6	11,492	0.7	65,928	0.6	47,049	2.6	269,701	1.4
200,000+	160,811	2.9	13,467	0.8	75,847	0.7	37,462	2.1	287,587	1.5
Total	5,610,322	100.0	1,746,730	100.0	10,231,880	100.0	1,787,865	100.0	19,376,797	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Table 4.7

Aggregate Household Income in Texas by Race/Ethnicity and Mean Household Income in Texas in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other	Total	Mean Household Income
			All Scenarios			
2000	$ 286,552,620,249	$ 33,203,781,019	$ 69,526,069,600	$ 13,220,870,332	$ 402,503,341,200	$ 54,441
			Assuming Rates of Zero Net Migration (0.0 Scenario)			
2010	$ 300,614,916,930	$ 38,469,636,101	$ 89,532,350,817	$ 16,091,410,349	$ 444,708,314,197	$ 53,498
2020	311,350,230,745	43,286,181,978	109,542,400,441	18,157,004,154	482,335,817,318	52,688
2030	313,737,223,555	46,138,746,436	129,748,018,760	19,535,469,281	509,159,458,032	51,913
2040	304,651,136,905	46,832,289,058	147,790,648,868	19,791,121,304	519,065,196,135	51,138
			Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)			
2010	$ 306,472,734,502	$ 40,227,990,772	$ 101,289,199,501	$ 20,054,046,756	$ 468,043,971,531	$ 53,074
2020	323,553,438,787	47,506,666,086	140,429,356,171	28,073,393,263	539,562,854,307	51,805
2030	332,150,942,678	53,183,853,376	187,322,409,122	37,139,993,365	609,797,198,541	50,591
2040	328,448,165,762	56,739,090,676	240,870,586,283	46,319,421,788	672,377,264,509	49,380
			Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)			
2010	$ 312,451,798,357	$ 42,069,029,041	$ 114,842,024,584	$ 24,893,041,225	$ 494,255,893,207	$ 52,639
2020	336,247,375,540	52,143,047,512	181,679,937,595	43,151,272,280	613,221,632,927	50,903
2030	351,652,911,889	61,310,104,441	273,965,479,168	70,131,306,822	757,059,802,320	49,326
2040	354,102,389,770	68,741,514,189	397,504,055,893	107,470,327,661	927,818,287,513	47,883

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Table 4.8

Number of Families in Poverty and Poverty Rates for Family Households in Texas
by Family Type and Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Family Type	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
All Scenarios										
2000										
Family households	155,348	5.1	109,693	19.0	316,590	21.6	16,694	10.4	598,325	11.4
Married couple	80,583	3.2	24,876	8.5	183,992	17.7	10,787	8.2	300,238	7.5
With own children	40,388	3.7	13,885	8.9	145,613	21.1	7,207	9.1	207,093	10.3
No own children	40,195	2.8	10,991	8.0	38,379	11.0	3,580	6.7	93,145	4.7
Other family	74,765	14.3	84,817	30.0	132,598	31.3	5,907	20.4	298,087	23.7
Male householder, no spouse present	12,920	9.3	9,225	20.5	24,480	19.4	1,306	12.5	47,931	15.0
With own children	8,684	11.9	5,515	24.4	16,315	27.8	620	18.1	31,134	19.8
No own children	4,236	6.4	3,710	16.6	8,165	12.0	686	9.8	16,797	10.3
Female householder, no spouse present	61,845	16.1	75,592	31.7	108,118	36.4	4,601	24.7	250,156	26.7
With own children	49,968	23.0	59,600	39.9	88,414	47.1	3,493	35.0	201,475	35.7
No own children	11,877	7.2	15,992	18.0	19,704	18.0	1,108	12.9	48,681	13.0
Panel A: Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)										
2010										
Family households	165,431	5.1	132,969	19.0	459,751	21.6	24,907	10.2	783,058	12.3
Married couple	86,457	3.2	30,463	8.5	268,777	17.7	16,180	8.1	401,877	8.4
With own children	43,016	3.7	17,132	8.9	213,214	21.1	10,419	9.1	283,781	11.5
No own children	43,441	2.8	13,331	8.0	55,563	11.0	5,761	6.7	118,096	5.1
Other family	78,974	14.2	102,506	30.0	190,974	31.1	8,727	19.9	381,181	24.5
Male householder, no spouse present	13,687	9.3	11,169	20.5	36,221	19.3	1,928	12.4	63,005	15.6
With own children	9,172	11.9	6,706	24.4	23,931	27.8	887	18.1	40,696	20.8
No own children	4,515	6.4	4,463	16.6	12,290	12.0	1,041	9.8	22,309	10.6
Female householder, no spouse present	65,287	16.0	91,337	31.8	154,753	36.4	6,799	24.0	318,176	27.7
With own children	52,477	23.0	72,148	39.9	126,540	47.1	4,984	35.0	256,149	37.0
No own children	12,810	7.2	19,189	18.0	28,213	18.0	1,815	12.9	62,027	13.6
2020										
Family households	169,300	4.9	153,380	18.7	627,155	21.3	33,963	10.0	983,798	13.1
Married couple	90,193	3.2	35,882	8.5	368,423	17.6	22,210	8.0	516,708	9.2
With own children	42,490	3.7	19,545	8.9	289,065	21.1	13,402	9.1	364,502	12.7
No own children	47,703	2.8	16,337	8.0	79,358	11.0	8,808	6.7	152,206	5.5
Other family	79,107	13.8	117,498	29.5	258,732	30.6	11,753	19.2	467,090	24.9
Male householder, no spouse present	13,756	9.2	12,982	20.4	50,022	19.1	2,599	12.3	79,359	16.0
With own children	8,990	11.9	7,566	24.4	32,478	27.8	1,140	18.1	50,174	21.9
No own children	4,766	6.4	5,416	16.6	17,544	12.0	1,459	9.8	29,185	10.9
Female householder, no spouse present	65,351	15.5	104,516	31.3	208,710	35.8	9,154	22.9	387,731	28.1
With own children	50,991	23.0	80,725	39.9	167,997	47.1	6,340	35.0	306,053	38.3
No own children	14,360	7.2	23,791	18.0	40,713	18.0	2,814	12.9	81,678	14.0

Table 4.8, Panel A continued

Family Type	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
2030										
Family households	167,644	4.8	166,093	18.3	817,434	21.0	43,701	9.8	1,194,872	13.7
Married couple	91,199	3.1	39,768	8.4	482,128	17.4	28,757	7.9	641,852	9.9
With own children	40,127	3.7	20,554	8.9	371,164	21.1	16,078	9.1	447,923	13.8
No own children	51,072	2.8	19,214	8.0	110,964	11.0	12,679	6.7	193,929	5.9
Other family	76,445	13.4	126,325	28.8	335,306	29.9	14,944	18.6	553,020	25.0
Male householder, no spouse present	13,334	9.1	14,220	20.2	65,825	18.8	3,300	12.1	96,679	16.3
With own children	8,439	11.9	7,911	24.4	41,764	27.8	1,374	18.1	59,488	22.8
No own children	4,895	6.4	6,309	16.6	24,061	12.0	1,926	9.8	37,191	11.1
Female householder, no spouse present	63,111	14.8	112,105	30.5	269,481	34.9	11,644	21.8	456,341	28.2
With own children	47,460	23.0	83,600	39.9	211,558	47.1	7,559	35.0	350,177	39.5
No own children	15,651	7.2	28,505	18.0	57,923	18.0	4,085	12.9	106,164	14.5
2040										
Family households	165,594	4.8	175,157	18.1	1,031,181	20.7	53,203	9.6	1,425,135	14.3
Married couple	90,705	3.1	42,495	8.4	610,208	17.2	35,228	7.8	778,636	10.5
With own children	39,596	3.7	21,629	8.9	461,624	21.1	18,224	9.1	541,073	14.7
No own children	51,109	2.8	20,866	8.0	148,584	11.0	17,004	6.7	237,563	6.4
Other family	74,889	13.3	132,662	28.6	420,973	29.3	17,975	17.9	646,499	25.2
Male householder, no spouse present	13,108	9.1	15,052	20.1	83,576	18.6	3,954	12.0	115,690	16.5
With own children	8,284	11.9	8,254	24.4	51,987	27.8	1,563	18.1	70,088	23.5
No own children	4,824	6.4	6,798	16.6	31,589	12.0	2,391	9.8	45,602	11.3
Female householder, no spouse present	61,781	14.8	117,610	30.2	337,397	34.2	14,021	20.8	530,809	28.5
With own children	46,259	23.0	86,636	39.9	258,966	47.1	8,493	35.0	400,354	40.4
No own children	15,522	7.2	30,974	18.0	78,431	18.0	5,528	12.9	130,455	15.0
Panel B: Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)										
2010										
Family households	168,938	5.0	138,721	18.9	522,588	21.6	30,999	10.2	861,246	12.7
Married couple	88,764	3.2	32,123	8.5	306,668	17.8	20,170	8.1	447,725	8.7
With own children	44,253	3.7	18,137	8.9	244,690	21.1	13,037	9.1	320,117	11.9
No own children	44,511	2.8	13,986	8.0	61,978	11.0	7,133	6.7	127,608	5.2
Other family	80,174	14.3	106,598	30.0	215,920	31.1	10,829	19.9	413,521	24.8
Male householder, no spouse present	13,941	9.3	11,644	20.5	41,667	19.2	2,392	12.5	69,644	15.8
With own children	9,368	11.9	7,001	24.4	27,495	27.8	1,103	18.1	44,967	21.2
No own children	4,573	6.4	4,643	16.6	14,172	12.0	1,289	9.8	24,677	10.7
Female householder, no spouse present	66,233	16.0	94,954	31.8	174,253	36.5	8,437	24.1	343,877	28.1
With own children	53,284	23.0	75,006	39.9	143,215	47.1	6,207	35.0	277,712	37.5
No own children	12,949	7.2	19,948	18.0	31,038	18.0	2,230	12.9	66,165	13.7

Table 4.8, Panel B continued

Family Type	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
2020										
Family households	176,409	4.9	167,376	18.5	816,577	21.4	52,569	10.0	1,212,931	13.7
Married couple	95,051	3.2	40,125	8.5	483,452	17.7	34,486	8.0	653,114	9.9
With own children	45,026	3.7	22,088	8.9	384,250	21.1	21,051	9.1	472,415	13.5
No own children	50,025	2.8	18,037	8.0	99,202	11.0	13,435	6.7	180,699	5.8
Other family	81,358	13.9	127,251	29.5	333,125	30.7	18,083	19.4	559,817	25.5
Male householder, no spouse present	14,240	9.2	14,149	20.4	66,653	19.1	3,993	12.3	99,035	16.3
With own children	9,358	11.9	8,280	24.4	43,255	27.8	1,771	18.1	62,664	22.6
No own children	4,882	6.4	5,869	16.6	23,398	12.0	2,222	9.8	36,371	11.1
Female householder, no spouse present	67,118	15.5	113,102	31.3	266,472	36.2	14,090	23.1	460,782	29.0
With own children	52,498	23.0	87,384	39.9	217,091	47.1	9,882	35.0	366,855	39.2
No own children	14,620	7.2	25,718	18.0	49,381	18.0	4,208	12.9	93,927	14.3
2030										
Family households	178,023	4.8	189,598	18.0	1,209,505	21.2	83,426	9.8	1,660,552	14.6
Married couple	98,532	3.1	47,214	8.5	722,028	17.6	55,153	7.9	922,927	10.9
With own children	43,786	3.7	24,878	8.9	568,010	21.1	31,448	9.1	668,122	14.9
No own children	54,746	2.8	22,336	8.0	154,018	11.0	23,705	6.7	254,805	6.4
Other family	79,491	13.4	142,384	28.8	487,477	30.1	28,273	18.8	737,625	25.8
Male householder, no spouse present	13,999	9.1	16,203	20.2	100,735	18.8	6,227	12.2	137,164	16.7
With own children	8,928	11.9	9,080	24.4	64,114	27.8	2,647	18.1	84,769	23.8
No own children	5,071	6.4	7,123	16.6	36,621	12.0	3,580	9.8	52,395	11.3
Female householder, no spouse present	65,492	14.9	126,181	30.5	386,742	35.6	22,046	22.2	600,461	29.5
With own children	49,459	23.0	94,196	39.9	310,144	47.1	14,657	35.0	468,456	40.7
No own children	16,033	7.2	31,985	18.0	76,598	18.0	7,389	12.9	132,005	14.9
2040										
Family households	178,858	4.7	208,886	17.7	1,725,148	20.9	124,988	9.7	2,237,880	15.4
Married couple	100,174	3.1	53,644	8.5	1,037,529	17.5	83,248	7.8	1,274,595	11.8
With own children	44,198	3.7	28,039	8.9	806,828	21.1	44,082	9.1	923,147	15.9
No own children	55,976	2.8	25,605	8.0	230,701	11.0	39,166	6.7	351,448	7.0
Other family	78,684	13.3	155,242	28.6	687,619	29.6	41,740	18.2	963,285	26.1
Male householder, no spouse present	13,932	9.1	17,911	20.2	146,069	18.7	9,141	12.1	187,053	17.0
With own children	8,869	11.9	9,911	24.4	91,330	27.8	3,713	18.1	113,823	24.6
No own children	5,063	6.4	8,000	16.6	54,739	12.0	5,428	9.8	73,230	11.5
Female householder, no spouse present	64,752	14.8	137,331	30.2	541,550	35.1	32,599	21.3	776,232	30.0
With own children	48,693	23.0	101,255	39.9	427,232	47.1	20,374	35.0	597,554	41.8
No own children	16,059	7.2	36,076	18.0	114,318	18.0	12,225	12.9	178,678	15.4

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Table 4.9

Projected Total Annual Aggregate and Mean Household Income (in 2000 Dollars) in 2040 by Race/Ethnicity Assuming 2000 Aggregate Household Income Differentials by Race/Ethnicity, 1990-2000 Rates of Closure in Anglo-Black and Anglo-Hispanic Household Incomes, and Anglo Income Levels Obtained by All Race/Ethnicity Groups and Assuming Alternative Projection Scenarios

Race/ Ethnicity	Assuming 2000 Income Differentials		Assuming 1990-2000 Closure in Differentials		Assuming Anglo Incomes for All Race/Ethnicity Groups	
	Aggregate	Mean	Aggregate	Mean	Aggregate	Mean
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)						
Anglo	$ 328,448,165,762	$ 63,116	$ 328,448,165,762	$ 63,116	$ 328,448,165,762	$ 63,116
Black	56,739,090,676	39,354	76,055,826,991	52,753	90,997,639,377	63,116
Hispanic	240,870,586,283	38,850	282,772,173,821	45,608	391,326,008,610	63,116
Other	46,319,421,788	60,111	46,319,421,788	60,111	48,635,159,974	63,116
Total	672,377,264,509	49,380	733,595,588,362	53,876	859,406,973,723	63,116
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)						
Anglo	$ 354,102,389,770	$ 63,116	$ 354,102,389,770	$ 63,116	$ 354,102,389,770	$ 63,116
Black	68,741,514,189	39,354	92,144,457,162	52,753	110,247,017,423	63,116
Hispanic	397,504,055,893	38,850	466,653,432,958	45,608	645,797,720,672	63,116
Other	107,470,327,661	60,111	107,470,327,661	60,111	112,843,303,662	63,116
Total	927,818,287,513	47,883	1,020,370,607,551	52,659	1,222,990,431,527	63,116

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Table 4.10

State Tax Revenues in Texas by Race/Ethnicity in 2000 and Projections to 2040
Assuming 2000 Decile Tax Rates and Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other	Total
			All Scenarios		
2000	$ 21,009,609,146	$ 2,434,451,545	$ 5,097,547,355	$ 969,334,422	$ 29,510,942,468
			Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
2010	$ 22,470,122,125	$ 2,949,456,077	$ 7,426,372,487	$ 1,470,332,664	$ 34,316,283,353
2020	23,722,453,757	3,483,117,658	10,296,070,165	2,058,299,196	39,559,940,776
2030	24,352,809,913	3,899,360,514	13,734,198,619	2,723,048,736	44,709,417,782
2040	24,081,327,844	4,160,025,201	17,660,270,820	3,396,070,629	49,297,694,494
			Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
2010	$ 22,908,498,114	$ 3,084,438,259	$ 8,420,045,339	$ 1,825,120,545	$ 36,238,102,257
2020	24,653,154,239	3,823,050,177	13,320,501,062	3,163,786,695	44,960,492,173
2030	25,782,665,091	4,495,165,110	20,086,738,826	5,141,922,450	55,506,491,477
2040	25,962,257,147	5,040,024,925	29,144,402,323	7,879,563,563	68,026,247,958

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Comptroller of Public Accounts, Tax Exemptions and Tax Incidence [online], 2001.

Table 4.11

Projected Annual State Tax Revenues (in 2000 Dollars) in 2040 by Race/Ethnicity Assuming 2000 Aggregate Household Income Differentials by Race/Ethnicity, 1990-2000 Rates of Closure in Anglo-Black and Anglo-Hispanic Household Incomes, and Anglo Income Levels Obtained by All Race/Ethnicity Groups and Assuming Alternative Projection Scenarios

Race/ Ethnicity	Assuming 2000 Income Differentials	Assuming 1990-2000 Closure in Differentials	Assuming Anglo Incomes for All Race/Ethnicity Groups
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)			
Anglo	$ 24,081,327,844	$ 24,081,327,844	$ 24,081,327,844
Black	4,160,025,201	5,576,299,395	6,671,810,718
Hispanic	17,660,270,820	20,732,432,489	28,691,437,154
Other	3,396,070,629	3,396,070,629	3,565,857,144
Total	49,297,694,494	53,786,130,357	63,010,432,860
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)			
Anglo	$ 25,962,257,147	$ 25,962,257,147	$ 25,962,257,147
Black	5,040,024,925	6,755,893,668	8,083,146,292
Hispanic	29,144,402,323	34,214,331,123	47,348,922,147
Other	7,879,563,563	7,879,563,563	8,273,502,115
Total	68,026,247,958	74,812,045,501	89,667,827,701

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Chapter 5

Implications of Population Change for the Private Sector in Texas

The data discussed in the preceding chapter indicate that changes in the population of Texas may affect the total level of resources available in Texas and the ability of State government to pay for service needs in the coming years. The results point to substantial declines in per-household resources and tax revenues if 2000 differentials do not change but to more positive effects if closure in differentials among racial/ethnic groups occurs.

In this chapter we examine the effects of population change on private-sector markets for goods and services. We examine the effects of changes in the population on two key factors impacting Texas businesses: consumer expenditures and households' net worth and assets. We then examine specific effects within two broad sectors of the economy, housing and health care.

The items and sectors examined are only some of those relevant to businesses, and a large number of other factors are equally deserving of attention (Pol 1987; Pol and Thomas 1992; Kintner et al. 1994). The intent here is to demonstrate how the private sector may be impacted by population change in Texas. It is obvious that the demographic are only some of the many factors affecting future markets for goods and services and that the overall state of the economy, technological developments, regulatory and policy considerations, and numerous other factors also will impact Texas markets and the private sector. The analysis presented here is only a partial analysis but is one that should indicate the relevance of population change for Texas markets and businesses.

Historical Patterns of Economic and Business Expansion in Texas

Texas has shown extensive economic expansion in the last two decades (Texas Comptroller of Public Accounts 2002c). 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 (see Table 5.1), outpacing the State's 46.5 percent rate of population growth. As with income (see Chapter 4), the data on gross state product, employment, and retail sales for the 1990s revealed different patterns from those for the 1980s. In the 1980s, the gross state product increased by 26.1 percent, employment by 21.3 percent, and retail sales by 29.9 percent, but in the 1990s the gross state product increased by 59.1 percent, employment by 32.3 percent, and retail sales by 29.7 percent. The generally faster growth in the economy in the 1990s is evident in these data.

The growth in economic activity was only partially due to population growth. Percentage changes in all three indicators were greater than the 19.4 percent rate of population increase from 1980 to 1990 or the 22.8 percent growth in population from 1990 to 2000, and both per capita gross state product and retail sales values increased during the 1980s and 1990s. Texas exports increased by 169.1 percent from 1980 to 2000 compared to a 46.5 percent increase in population, further indicating that the State's businesses were producing products and services beyond those needed by its own population. The Texas economy is driven by numerous factors in addition to those related to the population. Population change, however, plays a role in changing markets.

Projections of Consumer Expenditures

In this section we examine the effects of projected demographic change on expenditures for goods and services. To complete projections of expenditures, data on consumer expenditures from the 2000 Consumer Expenditure Survey (Bureau of Labor Statistics 2002) for households differentiated by age, race/ethnicity, tenure, and income category of the householder and also household type of the householder were used in various combinations to compute average expenditures by age, race/ethnicity, tenure, and income level and by household type for each expenditure category. These average expenditures were then multiplied by the projections of households by age, race/ethnicity, tenure of the householder, and household type and summed across household and income categories to obtain the projected expenditures by categories shown in the tables presented below. The expenditure data utilized are national-level data because data on expenditure patterns for persons with specific age and race/ethnicity characteristics were not available for Texas. We believe, however, that patterns of expenditures within age, sex, race/ethnicity, and household types are likely to be sufficiently similar across the United States to make the results of the analysis useful for examining the effects of population change on expenditures in Texas households.

Substantial increases are projected to occur in the level of consumer expenditures over time, from $274.3 billion in 2000 to $341.5 billion in 2040 under the 0.0 scenario, $458.7 billion under the 0.5 scenario, and $656.3 billion under the 1.0 scenario, increases of 24.5 percent, 67.2 percent, and 139.3 percent (see Tables 5.2 and 5.3). These rates of growth would be less than projected household growth, which is projected to be 37.3 percent under the 0.0 scenario, 84.2 percent under the 0.5 scenario, and 162.1 percent under the 1.0 scenario (see Table 3.4),

suggesting that reduced income levels associated with socioeconomic differentials among racial/ethnic groups would reduce relative growth in expenditures.

Total expenditures will increase more for non-Anglos than for Anglos because of the faster growth in the number of non-Anglo households (see Table 5.3). For example, under the 1.0 scenario, the increase in expenditures among Anglos would be 15.0 percent, the increase among Blacks 97.0 percent, the increase among Hispanics 463.7 percent, and the increase among persons from the Other racial/ethnic group would be 634.0 percent from 2000-2040. Because of the faster growth in expenditures among non-Anglo populations, the proportion of total expenditures accounted for by Anglos decreases from 66.4 percent in 2000 to 31.9 percent in 2040 under the 1.0 scenario, the proportion accounted for by Blacks decreases from 8.7 in 2000 to 7.1 percent in 2040, the proportion due to the Hispanic population increases from 21.9 percent to 51.7 percent, and the proportion accounted for by the Other population increases from 3.0 percent to 9.3 percent (see Table 5.4 and Figure 5.1). Since under the 1.0 scenario Anglo households are projected to be approximately 29.0 percent of all households, Black households to account for about 9.0 percent of all households, Hispanic households for about 53.0 percent, and the Other population for about 9.0 percent of households by 2040, Anglo households and households with householders from the Other racial/ethnic group will account for larger proportions of expenditures than their proportions of households while Blacks, but particularly Hispanics, will account for lower proportions of all expenditures than their proportions of households. Nevertheless it is evident that a majority of the increase in consumer expenditures will involve non-Anglo populations, with 92.8 percent of the net change in expenditures, under the 1.0 scenario, being due to non-Anglo households (see Table 5.5).

The projections of expenditures within individual categories also show the effects of demographic and socioeconomic characteristics. For example, if one examines the proportion of expenditures accounted for by each racial/ethnic group (see Table 5.4), one finds that Hispanics tend to account for proportions of such basic categories as food, apparel, housing, and transportation that are larger than their proportion of all expenditures, while Anglos show larger proportionate expenditures in areas such as health. In fact, reflecting the relative age differences in the populations in different racial/ethnic groups, Anglos (who would account for only 7.2 percent of the net change in all expenditures) would account for 19.6 percent of the net change in expenditures for health from 2000 to 2040 under the 1.0 scenario, while Hispanics (who account for 73.0 percent of the net change in expenditures) would account for only 60.9 percent of the net change in expenditures for health (see Table 5.5). Age and race/ethnicity will affect the types as well as the levels of consumer expenditures in the State.

Consumer expenditures will also vary across different types of households (see Tables 5.6 and 5.7). Because data were not available by age, sex, race/ethnicity, and household type, these values were computed using data on only household-type differences, and total values will vary somewhat from those presented above. Married-couple families are clearly dominant among purchasers of goods and services. This finding reflects their greater numbers and the differences in average size between married-couple and other households. The household change noted in Chapter 3, however, points out that the diversity of households is expected to increase, with single-parent householder families increasing rapidly. The increase in total expenditures as well as virtually all categories of expenditures will increase faster for single-parent families than for married-couple households. For example, under the 1.0 scenario, whereas total household expenditures would increase by 136.9 percent from 2000 to 2040, the increase for married-couple

families is 141.5 percent, while that for male-householder families is 200.5 percent and that for female-householder families is 151.3 percent. The higher proportion of family households among the most rapidly growing segments of Texas population results in slower growth in expenditures among nonfamily households, in which expenditures increase by 111.7 percent. Changes in household type will alter the type of consuming unit in Texas in the coming years with clear implications for the State's businesses.

Overall, the data show that consumer expenditures for goods and services will increase substantially but less than would be expected given the projected increase in the number of households. This finding suggests that although the absolute volume of future expenditures will increase, the expenditures per household will decline, given the projected change in household composition and the existent differentials in household incomes. The increase in expenditures will be largely due to non-Anglo households, particularly to Hispanic household growth. Of the total net change in expenditures between 2000 and 2040, nearly 93 percent (under the 1.0 scenario) would be due to non-Anglo households and, by 2040, more than 68 percent of all household expenditures in Texas would involve non-Anglo households. Similarly, expenditures will increasingly involve male- and female-householder households. Such data point to rapidly changing household markets and market segments for Texas businesses.

Projections of Asset Accumulation

Although there are marked differences in the incomes and expenditures of Anglo and non-Anglo households, racial/ethnic differences are particularly large when one examines the net worth and assets of households. In 2000 for example, the average (mean) net worth of Anglo households in the United States was $126,618; it was $34,259 for Blacks and $43,746 for

Hispanics (Davern and Fisher 2001). As a result, demographic change involving diverse populations can have substantial impacts on the level of assets in a population.

In this section, we examine the implications of population change for the assets of Texans. For this purpose, data on average dollars of net worth and assets by age and race/ethnicity of householder were obtained from the U.S. Bureau of the Census Survey of Income and Program Participation for 1995 (Davern and Fisher 2001) inflated to be in 2000 dollars and multiplied by households by age and race/ethnicity. Because data on net worth were available by age and by race/ethnicity separately but not by age and race/ethnicity jointly, the effects of these two variables are examined separately in the analysis. In addition, because separate data were not available on persons from the Other racial/ethnic group, Anglo values were assumed to apply to Other households. Due to space limitations, the analysis in this section is restricted to an examination of change in net worth and assets under the 1.0 scenario only.

The net worth of households in Texas is projected to increase from $709.9 billion to $1.4 trillion from 2000 to 2040 based on the race/ethnicity effects of population growth under the 1.0 scenario, an increase of 103.4 percent (see Table 5.8). Net worth would increase at a slower rate than the increase in the number of households, which is projected to be 162.1 percent. The assets of the average household would thus decrease, from about $96,000 in 2000 to roughly $74,500 in 2040, a decrease of 22.4 percent. The values would also show substantial changes relative to the proportion of net worth and assets resulting from Anglo versus non-Anglo households. Although net worth and assets will remain disproportionately Anglo, with Anglo households accounting for only 29 percent of households but 49.2 percent of net worth in 2040 (see Table 5.9), the proportion of all net worth accounted for by Anglos would decline by 31.8 percent from 2000 to 2040. By contrast, Hispanics who are projected to account for 52.8 percent of all households in

2040 would account for only 31.0 percent of net worth, but that percentage would represent an increase of 20.0 percent from 2000 to 2040.

The data in Table 5.10 show the effects of changes in the age distribution on net worth and assets. Because older householders have larger assets, the effect of the aging of the population is to substantially increase the level of assets. The resulting percentage increases in net worth and all asset categories are greater than the 162.1 percent increase in the number of households. The proportion of net worth and assets accounted for by the older population would also increase (see Table 5.11), with the total percentage of net worth accounted for by the population 55 years of age or older increasing from 49.6 percent in 2000 to 59.9 percent in 2040. This effect of the aging of the population is evident for interest-earning assets, stocks and mutual funds, and U.S. Savings Bonds, for which the proportions owned by households with a householder 55 years of age or older are greater than 60 percent, and least obvious relative to equity in businesses, equity in motor vehicles, and equity in other real estate, for which the proportion owned by those 55 years of age or older is roughly 40 percent. For all assets, however, the percentage owned by older householders increases over time. Overall, these data suggest that net worth and assets will generally be increased by an aging population, and households with older householders will come to play an increasingly larger role in asset ownership in the coming decades.

In Table 5.12 we examine the effects of age and race/ethnicity on net worth and assets by assuming that 2000 distributions for race/ethnicity (in Panel A) and age (in Panel B) apply in 2040. The extent to which the change in the racial/ethnic composition of the population would decrease net worth and assets and the aging of the population would increase net worth and assets is evident. Under existent relationships with race/ethnicity, net worth is reduced by 26.5

percent and all assets by at least 7.8 percent relative to what would occur if the race/ethnicity of householders in 2040 were the same as in 2000. On the other hand, the aging of the population increases net worth by 11.4 percent and positively increases equity in all asset categories.

The data on consumer expenditures, net worth, and assets suggest that in the absence of change in the socioeconomic differentials between age and race/ethnicity groups, the projected population changes will markedly impact consumer markets and investments resulting in decreased per-household expenditures and investments. Although change in socioeconomic differentials could change the overall effects on the total volume of future expenditures and investments, under any alternative, expenditures and assets will increasingly involve older and non-Anglo households.

Table 5.13 shows total consumer expenditures in 2040 by race/ethnicity for alternative simulations, like those discussed in Chapter 4. The first two columns present information for the baseline projection scenario in which 2000 differentials are assumed to continue throughout the projection period. In the second two columns we assume that the same closure in expenditures that occurred in income from 1990 to 2000 continues for each decade from 2000 to 2040. In the final two columns, we examine the implications if all groups came to have the expenditure levels of Anglos in 2000.

Expenditure levels would increase substantially if expenditure patterns were to follow income changes (see Table 5.13 and Figure 5.2). Under the 0.5 projection scenario, expenditures would increase by more than $16 billion per year, from $458.7 billion under the baseline scenario to $474.9 under the 1990-2000 level of closure scenario. Assuming Anglo expenditure patterns for all racial/ethnic groups, expenditures would increase to $513.2 billion, an increase of more than $54 billion per year compared to expenditures under 2000 differentials. Under the 1.0

projection scenario, the increase is to $679.3 billion in 2040 under the 1990-2000 closure scenario compared to $656.3 billion in 2040 assuming 2000 income differentials, an increase of nearly $23 billion, and to $740.7 billion assuming Anglo income for all groups, an increase of more than $84 billion per year. As a result, under the 1.0 projection scenario, average per-household expenditures would change from $37,096 in 2000 to $33,872 in 2040 under the scenario assuming 2000 rates, to $35,057 assuming 1990-2000 rates of closure, and to $38,226 assuming 2000 Anglo expenditures for all race/ethnicity groups. In sum, these changes in socioeconomic differentials among racial/ethnic groups in the population of Texas would increase the total expenditures into the Texas economy.

Implications for Specific Private-Sector Markets

The general implications for consumer expenditures and asset ownership shown above are indicative of general changes likely to affect overall markets for a variety of goods and services. The effects of population change will vary in different sectors of the economy, however, and thus examinations of selected sectors can be informative. In this section we examine the implications for two major sectors of the economy, housing and health care.

Effects on Housing

Effects on Housing Demand by Tenure

Population change may substantially impact housing demands and the markets for real estate. Table 5.14 indicates some of the differences in housing characteristics among age and race/ethnicity groups evident in data from the 2000 Census. Median housing values vary from one racial/ethnic group to another, with values for Blacks being only 65.9 percent of those for Anglos and 54.9 percent of those for Asians, and Hispanic-owned units having median values

that are only 59.5 percent of the value for Anglo and 49.5 percent of the value for Asian-owned units. Differences are less for rents, with median rents for Blacks being 85.2 percent of the median for Anglos and 86.4 percent of the median for Asians, and median rents for Hispanics being 79.2 percent and 80.4 percent of Anglo and Asian median rents, respectively. Ownership rates are also widely different, with Anglo ownership rates exceeding those for Blacks by 24.3 percent, those for Hispanics by 14.7 percent, and those for Asians by 18.1 percent. Finally, age differences are also apparent, with ownership rates peaking in older ages and rentership rates peaking at younger ages. Demographic factors affect the number of households in different types of housing units and the values and rents associated with such units.

The data in Tables 5.15-5.19 in which the projected number of households by tenure are presented show some of these differences. Under the 0.5 scenario, the number of owner households increases from 4,716,959 in 2000 to 8,896,581 in 2040 and the number of renter households from 2,676,395 in 2000 to 4,719,678 in 2040. These represent increases of 88.6 percent and 76.3 percent, respectively. Under the 1.0 scenario, the number of owner-occupied units would increase from 4,716,959 in 2000 to 12,404,843 in 2040 and the number of renter units from 2,676,395 in 2000 to 6,971,954 in 2040, increases of 163.0 percent for owner-occupied housing and 160.5 percent for renter housing. Growth in both owner and renter market segments are projected to largely parallel growth in the number of households, which increases by 84.2 percent under the 0.5 scenario and 162.1 percent under the 1.0 scenario. Under the 0.5 scenario, however, growth in renter housing is more than 12 percent lower than that for owner households, compared to less than a 2.5 percent difference in the 1.0 scenario. The higher relative proportion of renter households is due to the higher proportion of non-Anglos projected under the 1.0 scenario and the higher probability that non-Anglos will live in rental housing. The

fact that growth in rental housing is slower than that for owner housing in both scenarios reflects the aging of the population and the higher proportions of owners among older age groups (see Table 5.14)

Growth in both owner and renter markets will increasingly reflect the racial/ethnic diversity of the population base of the State (see Tables 5.15-5.18). For example, under the 1.0 scenario, the 2000 to 2040 increase in the number of Anglo owners is only 28.9 percent, but that for Blacks is 136.8 percent, that for Hispanics 521.1 percent, and that for householders from the Other racial/ethnic group is 867.5 percent. Similarly, the renter components of these groups increase by 10.6 percent, 81.6 percent, 408.6 percent, and 544.4 percent, respectively. As a result, by 2040 under the 1.0 scenario, only 33.4 percent of owners would be Anglo, 7.4 percent would be Black, 50.3 percent Hispanic, and 8.9 percent members of the Other racial/ethnic group. Among renters, the non-Anglo percentages are even higher with the percentage of Anglos being only 21.1 percent, while 11.9 percent of renters would be Black, 57.3 percent Hispanic, and 9.7 percent members of the Other racial/ethnic group. Although Anglo proportions are higher under the 0.5 scenario, the general patterns are the same as under the 1.0 scenario, with non-Anglo population growth exceeding population growth. Of the net change in the number of owner households from 2000 to 2040 (see Table 5.18), only 12.1 percent under the 1.0 scenario and 14.9 percent under the 0.5 scenario would be due to Anglo households. For the net change in renter units, only 3.4 percent under the 1.0 scenario and 2.0 percent under the 0.5 would be due to Anglo households. Both owner and rental housing markets will increasingly involve non-Anglos.

The effects of the projected aging of the population are also apparent (see Table 5.19). The percentage of all households with a householder 65 years of age or older would increase

from 17.6 percent in 2000 to 27.9 percent by 2040 under the 0.5 scenario. For owners the increase is from 22.5 percent in 2000 to 33.6 percent in 2040, and for renters from 9.1 to 17.2 percent. Under the 1.0 scenario, the increases in households with a householder 65 years of age or older are to 24.5 percent by 2040 for all householders, to 29.8 percent for owner householders, and to 15.1 percent for renter householders. The aging of householders is less under the 1.0 scenario because of the larger proportion of household growth that is projected to be due to non-Anglo populations, which have younger age distributions.

Overall, the basic projections of households by tenure suggest slightly faster increases in owner than rental housing but with renter householders remaining younger than owner householders. Because of the projected aging and racial/ethnic diversification of householders, the percentage of both owner and renter households involving older and non-Anglo householders increases substantially. By 2040 under the 1.0 scenario, 29.8 percent of owners and 15.1 percent of renters will be 65 years of age or older (compared to 22.5 and 9.1 percent in 2000) and roughly two-thirds of home owners and nearly 79 percent of renters will be non-Anglo (compared to roughly 32 and 50 percent, respectively, in 2000).

Effects on Housing Expenditures

The effects of population and household change on housing expenditures are examined in this section. Annual expenditures for housing by age, race/ethnicity, and tenure of householder as reported in the Consumer Expenditure Survey for 2000 (Bureau of Labor Statistics 2002) were multiplied by the projections of households by age, race/ethnicity, and tenure. Because the values are dollar values from the 2000 survey, expenditures are in 2000 constant dollars. Because patterns are similar across scenarios, we present data only for projections from the 1.0 scenario.

The data in Table 5.20 show substantial increases in total expenditures for both owner and renter housing. Owner expenditures would increase from $33.1 billion in 2000 to $79.0 billion in 2040 and renter expenditures from $15.8 billion in 2000 to $41.0 billion in 2040, representing increases of 138.7 percent for owner expenditures and 160.2 percent for renter expenditures. Such data suggest that there will be substantial increases in the dollars spent on real estate products and related services in the coming decades.

These expenditures, like household growth as a whole, will come increasingly from non-Anglo households and older households. By 2040, under the 1.0 scenario, 67.2 percent of owner expenditures and 78.7 percent of renter expenditures would come from non-Anglo households, with Hispanics responsible for 51.5 percent of owner and 58.4 percent of renter expenditures (see Table 5.21). Also by 2040, 35.9 percent of owner expenditures and 21.6 percent of renter expenditures will come from households with a householder who is 55 years of age or older (see Table 5.22). These data show that the amount of money spent on housing will reflect the aging and racial/ethnic diversification of the population.

The effects of the aging and diversification of the populations on expenditures are demonstrated in Table 5.23. In this table, the first column in the top panel shows the expenditures that would occur if the racial/ethnic composition of the population in 2000 existed in 2040 but the number of households was the total projected in 2040. The second column shows the projected expenditures as presented in the preceding tables in which the 1990-2000 pattern of racial/ethnic change is assumed to occur. In the bottom panel, the first column shows the effects of assuming that the 2000 age distribution exists in 2040 but the number of households is as projected in 2040, and the second column shows the effects of the baseline age assumptions contained in the baseline projections for 2040. The effects of the change in

racial/ethnic composition are to reduce owner expenditures by more than $7.0 billion annually and to increase renter expenditures by $910.7 million annually, with a net loss across both tenure types of roughly $6.1 billion annually. The aging of the population shows losses for both owner and renter households and total loss of $9.7 billion overall because of the lower expenditures of older persons (whether owner or renter) and the large growth in older population groups. In sum, in the absence of changes in differentials, projected demographic growth, while leading to extensive absolute increases in expenditures, will be less than would occur if the same numerical increase were to occur and 2000 demographic characteristics prevailed throughout the projection period.

The expenditure data coupled with data on households by tenure suggest that population changes projected to occur in Texas will substantially alter the nature of housing markets. Not only is it likely that markets will grow substantially, but also that older and more racial/ethnically diverse segments will come to play increasingly important roles. Marketing to older and more diverse groups with products created to address their needs will obviously become of increased importance to the real estate industry.

Implications for Health and Health Care

Effects on the Incidence of Diseases/Disorders and Disabilities

Health care needs are projected to change substantially during the coming years and demographic factors are expected to play a major role in such changes (Pol and Thomas 1992; Kintner et al. 1994). To examine the implications for health care in Texas, we utilized data from the 2000 National Health Interview Survey (National Center for Health Statistics 2002a) that allow us to obtain estimates of the percentage of persons in various age, sex, and race/ethnicity groups who have certain diseases/disorders. Such rates were then applied to the population

projections by age, sex, and race/ethnicity to obtain projections of the number of incidences of diseases/disorders by type of disease/disorder and the age and race/ethnicity of the persons experiencing the incidence of the disease/disorder. Although these data are national in scope, we believe that the incidences within age, sex, and race/ethnicity groups are sufficiently similar across the nation to merit their application to the same age, sex, and race/ethnicity groups in Texas. In addition to this analysis, we examine the implications of population change in Texas for the number of persons with disabilities, health professionals, physician office visits, hospital stays, and nursing home residents using a variety of State-based rates and ratios. Because of the volume of information examined and the similarity of patterns across scenarios, results are discussed for only the 1.0 scenario.

Table 5.24 provides the number of incidences of diseases/disorders projected to occur in Texas. Since an individual may have multiple occurrences of more than one disease/disorder per year, the number of incidences exceeds the number of persons in the population. The incidences of diseases/disorders are projected to increase rapidly in Texas as a result of the growth and aging of the population. The projected 161.4 percent increase in the number of diseases/disorders from 2000 to 2040 exceeds the 142.6 percent increase in the total population as a result of the aging of the population, and this aging effect is evident across racial/ethnic groups. Anglos whose population increases by only 10.4 percent from 2000 to 2040 under the 1.0 scenario show a 24.9 percent increase in the number of occurrences, Blacks whose population increases by 65.0 percent show an increase of 105.7 percent in incidences, Hispanics with a population increase of 348.7 percent show a 458.1 percent increase in the number of incidences, and the Other population, which increases by 546.8 percent, shows an 821.9 percent increase in the number of incidences.

The increases in incidences are evident across different types of diseases/disorders (see Tables 5.25 and 5.26). Across all diseases/disorders, the percentage of incidences involving Anglos declines and the percentages involving Hispanics and persons from the Other racial ethnic group increase. For example, the percentage of all adults with high blood pressure disorders who are Anglo decreases from 63.0 percent in 2000 to 30.9 percent in 2040 and the percentage with pregnancy-related disorders declines from 39.0 to 15.4 percent (see Table 5.26). On the other hand, the percentage involving Hispanics increases from 19.1 percent in 2000 to 44.3 percent in 2040 for high blood pressure and from 41.4 percent to 69.1 percent for pregnancy-related disorders. Similar trends are evident for nearly all diseases/disorders.

Such trends are particularly obvious if we examine the incidences of disabilities in the population (see Table 5.27). The total number of incidences involving disabilities will increase by 202.2 percent from 2000 to 2040, and the increases, as for total diseases and disorders, will be faster for non-Anglo than for Anglo populations. The increase from 2000 to 2040 would be 52.8 percent for Anglos, 146.5 percent for Blacks, 538.9 percent for Hispanics, and 1,277.6 percent for persons from the Other racial/ethnic group. These increases are faster than the 24.9 percent increase for all diseases/disorders for Anglos, and similarly than the 105.7 percent increase for Blacks, 458.1 percent increase for Hispanics, and 821.9 percent increase for Others because the aging of the population substantially increases the growth in the number of persons with disabilities.

The number and prevalence of persons with disabilities would shift toward non-Anglos. By 2040, 31.3 percent of all conditions involving a disability would involve an Anglo compared to 62.0 in 2000, while the percentages would decrease from 13.5 percent in 2000 to 11.0 percent

in 2040 for Blacks, increase from 22.2 percent to 46.9 percent for Hispanics, and increase from 2.4 percent to 10.8 percent in 2040 for Others (see Figure 5.3).

Incidences of diseases/disorders, both in general and relative to those related to disabilities, will increase substantially in the coming years and will come to involve larger numbers and proportions of non-Anglos, particularly Hispanics. Patients will come to reflect increasing racial/ethnic diversity.

Effects on Health Care Personnel and Costs

The effects of the demographic changes have obvious implications for health care personnel and health care operations and costs. In this section we utilize standard population-based rates from the Texas Department of Health and the National Center for Health Statistics to delineate such effects. As with the data on taxes, it should be noted that the projections provided here are simply exemplary and not intended to substitute for the more elaborate data on such issues prepared by the State's health agency. We provide data only for the 1.0 scenario.

The data in Table 5.28 show the implications of population change for health care personnel assuming the 1.0 population projection scenario and applying the population-to-health-professionals ratios that existed in 2000. The first two panels of this table show the 2000 data. In the top panel, we show the actual number of personnel by race/ethnicity as reported by the Texas Department of Health. In the second panel, we show the distribution as if the number of health professionals by race/ethnicity reflected the composition of the population by race/ethnicity. Values assuming that health personnel reflect the race/ethnicity distribution of the population are then also shown for 2010 and 2040. In presenting data in this manner, we are not suggesting that persons from one racial/ethnic group cannot provide services to persons from

another racial/ethnic group but wish only to describe the current and potential changes in the future characteristics of health care professionals in Texas.

Substantial growth in the number of health care professionals will be necessary if Texas is to have adequate health care personnel. Texas would need to add 276,840 health professionals by 2040, representing a 142.6 percent increase that is equal to that for the population. The data in Table 5.28 suggest that the challenges may be particularly acute relative to the training and recruitment of Black and Hispanic professionals. For example, the number of Hispanic physicians in 2000 was 2,482, only 21.8 percent of the 11,412 that would reflect the proportion of Hispanics in the total population in 2000. By 2040, the proportionate figure would rise to 51,186, representing a nearly twenty-fold increase from the current number of Hispanic physicians. Increases exceeding 229.8 percent would be required in the number of Black physicians. Such data make it clear that extensive increases in the number and diversity of health care personnel are likely to occur in the coming years.

Tables 5.29, 5.30, and 5.31 show projected numbers of physician contacts and associated costs, days of hospital care and associated costs, and nursing home residents and costs. The number of physician visits was computed by multiplying the average number of physician visits per population unit for persons of a given age by the number of persons of that age projected for each time period. Costs were obtained by multiplying the number of visits by the average costs per visit for persons of that age. For hospital days of care and costs a similar methodology was used, with the average days of care per population unit for persons of a given age multiplied by the projections of the number of persons of each age. Average costs per day of care by age of patient were then used to project total costs. For nursing homes, the percentage of persons in each age group in nursing homes was multiplied by the population in each age group and then

average monthly costs were multiplied by the number of persons projected to be in nursing homes. As with other projections, it must be recognized that these projections are quite simple and do not take into account many other factors likely to impact actual costs. Rather, they are an attempt to indicate how population change will impact health care operations and costs in general in the coming years.

The data in these tables show very substantial increases in health care costs and demonstrate the effects of the aging of the population on health care costs in Texas. Under the 1.0 scenario, costs for physician visits would exceed $20.9 billion per year (in 2000 constant dollars) and hospital care costs $59 billion per year by 2040. Nursing home costs would be more than $867 million per month by 2040 (more than $10.4 billion per year). Because the elderly population increases more rapidly than the total population, increases in health-related factors exceed the 142.6 percent increase in the population from 2000 to 2040 projected under the 1.0 scenario. The number of physician contacts and related costs would increase by 170.2 percent, the number of days of hospital care would increase by 208.9 percent, and the number of nursing home residents and related costs by 280.2 percent (see Figure 5.4). For the population 75 years of age or older, the increases would be 300.9 percent for physician contacts, 302.0 percent for days of hospital care, and 315.2 percent for nursing home residents and associated costs.

Overall, the data on health care point to rapid growth in the markets for health care products in the coming years, particularly those tied to older populations and to conditions affecting disabilities and nursing home and other forms of long-term care. At the same time, the data show that the racial/ethnic diversification of the population will lead to patient populations with different socioeconomic and other characteristics and to the need for substantial training and

recruitment of non-Anglo health care professionals. These changes represent both challenges and opportunities for the State's public and private health care sectors in the coming decades.

Summary

In this chapter we have examined the implications of population-related socioeconomic change for factors likely to impact private-sector markets for goods and services. The data suggest that:

1. 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.

2. 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, suggesting that the per-household dollar value of markets and the dollars available for investment will decline. 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. Household change would also impact consumer expenditures, with increasing proportions of all expenditures involving households other than married-couple households.

3. 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. Average per-household expenditures would change from $37,096 in 2000 to $33,872 in 2040 under the scenario assuming 2000 rates, to $35,057 under the scenario assuming 1990-2000 rates of closure, and to $38,226 under the scenario assuming 2000 Anglo expenditures for all racial/ethnic groups. Clearly, increases in non-Anglo incomes would substantially impact the level of expenditures into the Texas economy.

4. Housing demand will increase substantially in the coming years with contradictory trends resulting from population change. The aging of the population leads to growth in owner households because of the higher rates of ownership among older households, but the rapid growth of non-Anglo populations with higher rates of rentership 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. For both owner and renter housing, the growth in those units with non-Anglo householders increases such that by 2040 under the 1.0 scenario only 33.4 percent of owners and 21.1 percent of renters would be Anglo, 7.4 percent of owners and 11.9 percent of renters would be Black, 50.3 percent of owners and 57.3 percent of renters would be Hispanic, and 8.9 percent of owners and 9.7 percent of renters would be householders from the Other racial/ethnic group. Similarly, householders will get older such that by 2040 under the 1.0

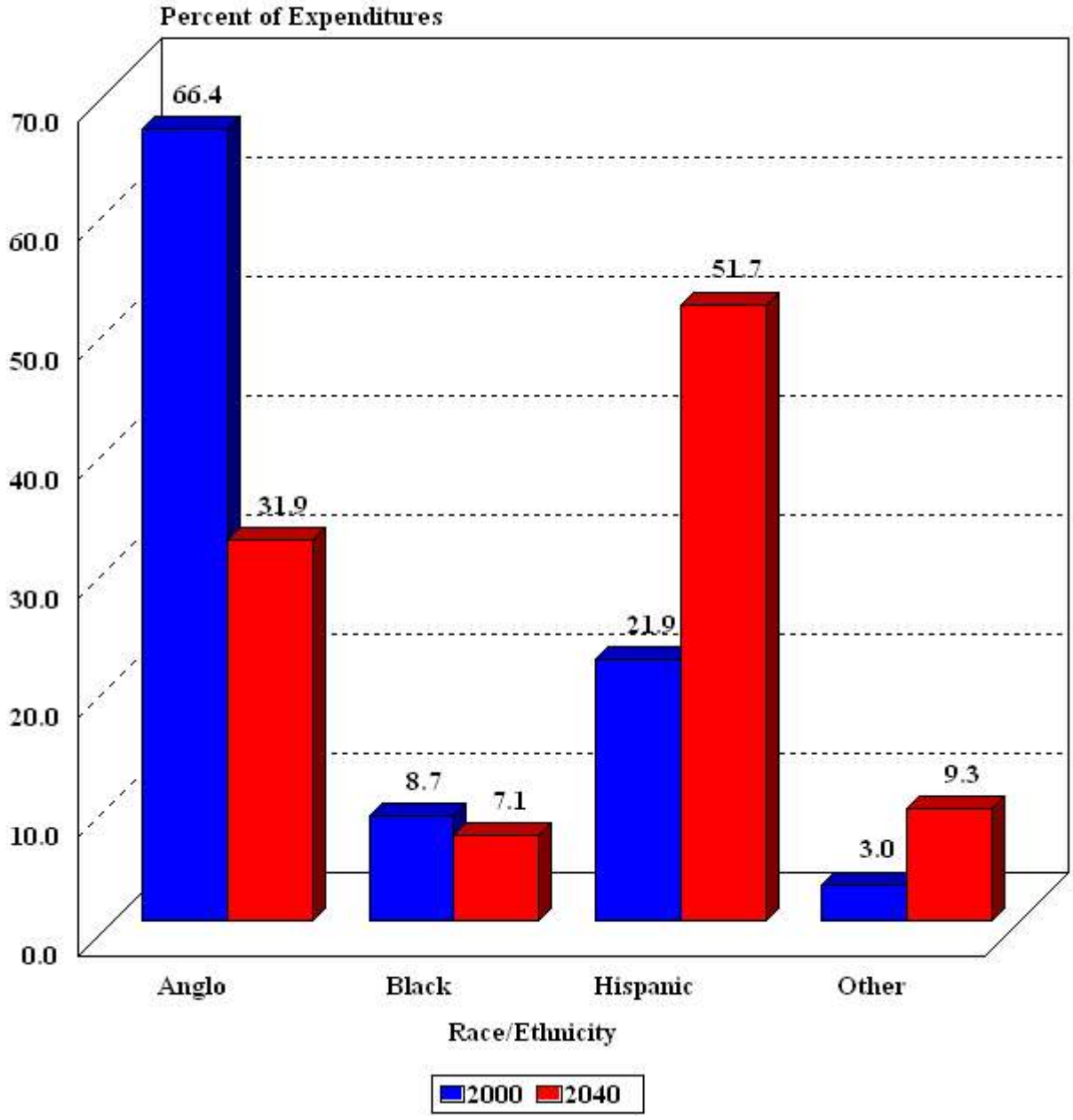
scenario 29.8 percent of owners and 15.1 percent of renters would involve a household with a householder who is 65 years of age or older. Expenditures for housing will also reflect such patterns. By 2040 under the 1.0 scenario, 67.2 percent of owner expenditures and 78.7 percent of renter expenditures 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.

5. 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, 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 and 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. Related costs grow in a similar manner. 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. Similarly, if health care personnel are to come to reflect the racial/ethnic characteristics of their patients, substantial increases in non-Anglo health care personnel will be required, with a nearly twenty-fold increase needed in the number of Hispanic physicians and a more than 200 percent increase in the number of Black physicians. Health care markets will show particularly rapid growth in the coming decades because of the aging of the population and markets will become increasingly diverse.

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 also involve an increasing diversity of household types. These markets will reflect the Texas population in terms of its age, race/ethnicity, and household characteristics. Per-household expenditures will fail to keep pace with the rate of growth of households if the socioeconomic characteristics of the population do not change, and in the absence of socioeconomic change, such markets are likely to involve higher demands for goods and services required to meet the basic needs of less affluent households. If the socioeconomic differentials among Texas households decrease as a result of relative increases in non-Anglo incomes, Texas will experience rapidly expanding markets and potential increases in per-household expenditures for nearly all goods and services. Under any set of socioeconomic conditions, understanding Texas demographics is of clear importance to understanding the future of Texas businesses.

Figure 5.1

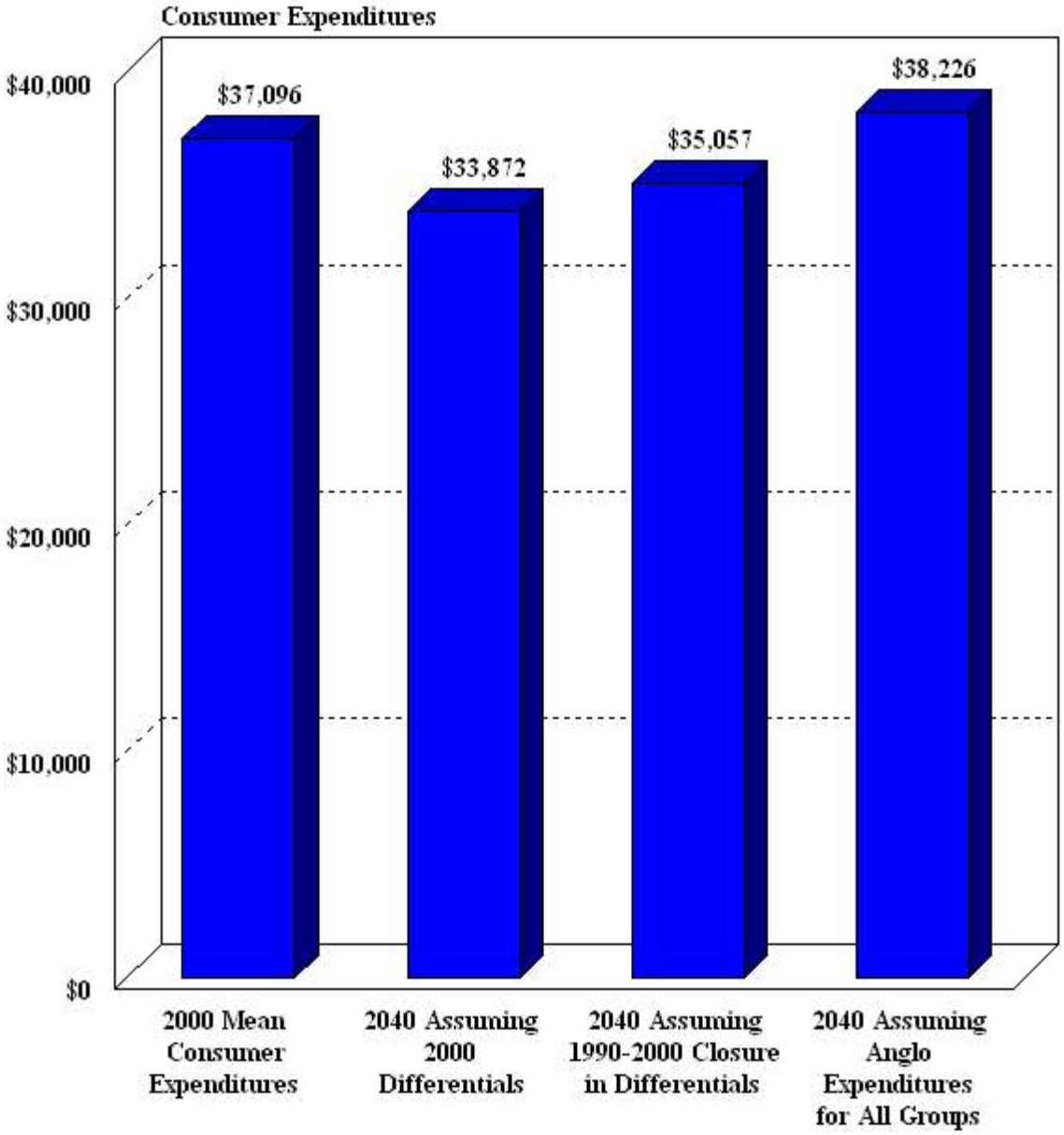
Percent of Total Consumer Expenditures in Texas by Race/Ethnicity for 2000 and Projections for 2040*



*** Projections are shown for the 1.0 scenario**

Figure 5.2

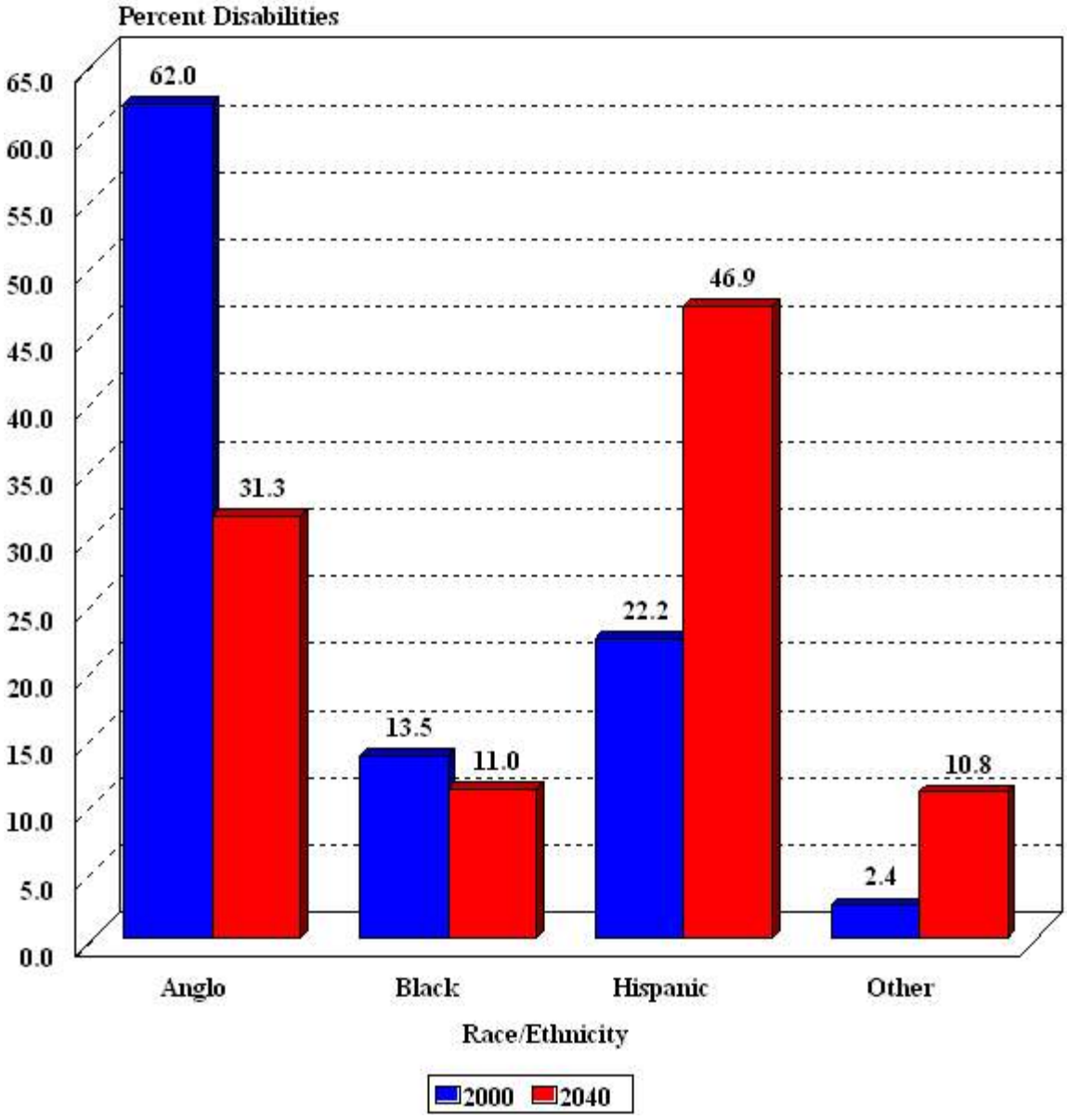
Mean Per-Household Consumer Expenditures in Texas in 2000 and Projections for 2040* Assuming 2000 Rates, 1990-2000 Rates of Closure between Anglo-Black and Anglo-Hispanic Expenditures, and Anglo Expenditures for All Race/Ethnicity Groups



*** Projections are shown for the 1.0 scenario**

Figure 5.3

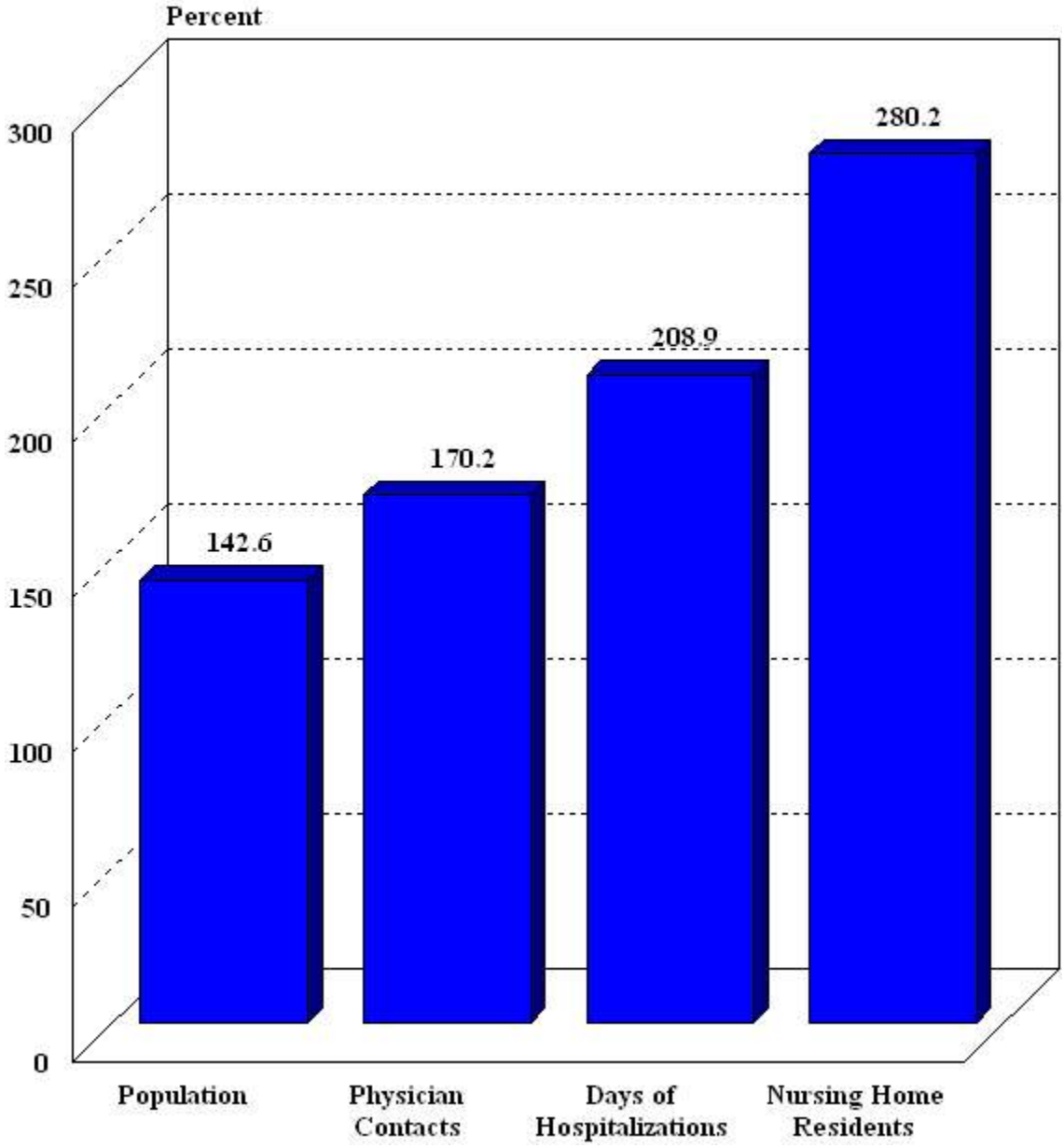
Projected Percent of Persons with Disabilities in Texas Who Are from Each Racial/Ethnic Group, 2000 and 2040*



*** Projections are shown for the 1.0 scenario**

Figure 5.4

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



*** Projections are shown for the 1.0 scenario**

Table 5.1

Gross State Product, Nonfarm Employment, and Total Retail Sales in Texas and Texas Exports, 1980-2000

Economic Indicator	1980	1990	2000	Percent Change 1980-1990	Percent Change 1990-2000	Percent Change 1980-2000
Gross State Product (Billions of 1992 Constant Dollars)	$ 320.9	$ 404.5	$ 643.4	26.1	59.1	100.5
Per Capita Gross State Product	$ 23,552	$ 23,813	$ 30,856	1.1	29.6	31.0
Nonfarm Employment (in thousands)	5,852.2	7,096.8	9,388.3	21.3	32.3	60.4
Retail Sales (Millions of 1992 Constant Dollars)	$ 109,378	$ 142,039	$ 184,271	29.9	29.7	68.5
Per Capita Sales	$ 7,687	$ 8,362	$ 8,837	8.8	5.7	15.0
Texas Exports (Billions of 1992 Constant Dollars)	$ 24.6	$ 43.4	$ 66.2	76.4	52.5	169.1

Source: Texas Comptroller of Public Accounts, Texas Economy, Spring 2000 Forecast [online], 2002c. Per capita figures derived by the authors.

Table 5.2

Consumer Expenditures in Texas by Category in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Panel A: Assuming Rates of Zero Net Migration (0.0 Scenario)

Year	Total	Food	Alcohol	Housing	Apparel	Transportation	Health	Entertainment
2000	$ 274,265,682,934	$ 38,053,143,362	$ 2,143,069,608	$ 85,328,176,564	$ 10,350,255,239	$ 55,817,921,054	$ 13,676,738,921	$ 13,045,403,093
2010	304,408,037,781	42,463,824,157	2,320,523,421	94,459,148,597	11,403,959,526	61,983,612,114	15,597,619,961	14,200,581,406
2020	325,728,978,365	45,985,971,174	2,433,780,860	101,252,569,531	12,096,800,421	66,255,028,340	17,518,021,613	14,979,029,754
2030	337,568,032,433	48,275,548,478	2,455,034,555	105,401,731,406	12,467,419,384	68,485,931,869	18,990,155,561	15,225,055,528
2040	341,451,043,503	49,242,459,522	2,434,598,918	107,100,427,889	12,572,632,227	69,089,196,054	19,507,118,525	15,180,047,132

Year	Personal	Reading	Education	Tobacco	Miscellaneous	Cash	Insurance
2000	$ 2,318,450,982	$ 1,054,567,252	$ 3,978,240,771	$ 2,316,386,339	$ 5,450,349,331	$ 9,213,797,339	$ 31,519,183,079
2010	2,609,150,308	1,166,281,234	4,318,623,266	2,512,707,691	6,071,984,458	10,490,807,721	34,809,213,921
2020	2,847,685,553	1,246,792,272	4,245,324,676	2,635,820,611	6,551,735,392	11,638,669,183	36,041,748,985
2030	3,009,453,566	1,283,526,874	4,162,232,934	2,662,159,127	6,822,121,183	12,325,196,986	36,002,464,982
2040	3,072,438,597	1,280,140,804	4,131,166,382	2,648,387,453	6,903,033,792	12,259,906,646	36,029,489,562

Panel B: Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)

Year	Total	Food	Alcohol	Housing	Apparel	Transportation	Health	Entertainment
2000	$ 274,265,682,934	$ 38,053,143,362	$ 2,143,069,608	$ 85,328,176,564	$ 10,350,255,239	$ 55,817,921,054	$ 13,676,738,921	$ 13,045,403,093
2010	322,267,535,000	45,074,438,263	2,442,924,806	100,205,922,082	12,119,946,391	65,896,250,197	16,299,676,674	14,926,648,034
2020	370,284,637,550	52,544,774,766	2,724,324,280	115,541,028,062	13,858,555,986	75,932,311,351	19,356,128,760	16,763,946,598
2030	415,402,229,128	59,872,306,005	2,947,535,634	130,263,020,719	15,494,607,608	85,294,114,720	22,391,781,402	18,304,598,429
2040	458,666,100,348	66,886,863,214	3,165,381,335	144,609,478,525	17,072,612,823	94,371,818,252	24,837,798,258	19,792,307,998

Year	Personal	Reading	Education	Tobacco	Miscellaneous	Cash	Insurance
2000	$ 2,318,450,982	$ 1,054,567,252	$ 3,978,240,771	$ 2,316,386,339	$ 5,450,349,331	$ 9,213,797,339	$ 31,519,183,079
2010	2,758,834,339	1,217,007,970	4,558,488,901	2,629,008,879	6,423,410,163	10,937,144,860	36,777,833,441
2020	3,225,059,239	1,373,188,349	4,845,715,194	2,921,690,614	7,429,342,766	12,796,877,032	40,971,694,553
2030	3,679,051,062	1,502,992,455	5,177,620,610	3,154,350,808	8,349,665,384	14,442,230,449	44,528,353,843
2040	4,090,949,990	1,605,473,378	5,561,943,177	3,382,225,280	9,204,927,622	15,412,013,818	48,672,306,678

Table 5.2, continued

Panel C: Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)

Year	Total	Food	Alcohol	Housing	Apparel	Transportation	Health	Entertainment
2000	$ 274,265,682,934	$ 38,053,143,362	$ 2,143,069,608	$ 85,328,176,564	$ 10,350,255,239	$ 55,817,921,054	$ 13,676,738,921	$ 13,045,403,093
2010	342,400,706,209	48,020,461,647	2,580,535,158	106,695,778,967	12,929,310,336	70,331,926,796	17,075,396,895	15,739,286,253
2020	428,221,040,201	61,076,832,888	3,098,309,159	134,178,328,785	16,159,887,190	88,622,111,393	21,661,918,041	19,057,948,997
2030	530,863,859,206	77,067,344,600	3,664,855,396	167,204,028,295	20,000,219,592	110,451,047,871	27,236,277,213	22,808,284,448
2040	656,335,039,621	96,599,305,944	4,372,358,463	207,825,444,038	24,657,156,687	137,484,539,829	33,483,041,696	27,457,114,275

	Personal	Reading	Education	Tobacco	Miscellaneous	Cash	Insurance
2000	$ 2,318,450,982	$ 1,054,567,252	$ 3,978,240,771	$ 2,316,386,339	$ 5,450,349,331	$ 9,213,797,339	$ 31,519,183,079
2010	2,926,383,424	1,273,301,548	4,828,925,240	2,757,994,505	6,818,974,615	11,428,421,321	38,994,009,504
2020	3,708,497,933	1,533,787,902	5,638,464,011	3,284,041,291	8,566,627,361	14,234,935,030	47,399,350,220
2030	4,652,796,947	1,821,534,849	6,748,477,959	3,864,195,443	10,600,447,615	17,449,854,631	57,294,494,347
2040	5,767,619,893	2,143,330,942	8,102,489,112	4,584,992,290	13,043,885,740	20,555,530,420	70,258,230,292

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Bureau of Labor Statistics, 2000 Consumer Expenditure Survey, 2002.

Table 5.3

Percent Change in Projected Consumer Expenditures in Texas
by Expenditure Category and Race/Ethnicity Assuming Alternative Projection Scenarios, 2000-2040

Panel A: Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)

Time Period	Total	Food	Alcohol	Housing	Apparel	Transportation	Health	Entertainment
				Total				
2000-2010	17.5	18.5	14.0	17.4	17.1	18.1	19.2	14.4
2010-2020	14.9	16.6	11.5	15.3	14.3	15.2	18.8	12.3
2020-2030	12.2	13.9	8.2	12.7	11.8	12.3	15.7	9.2
2030-2040	10.4	11.7	7.4	11.0	10.2	10.6	10.9	8.1
2000-2040	67.2	75.8	47.7	69.5	64.9	69.1	81.6	51.7

	Personal	Reading	Education	Tobacco	Miscellaneous	Cash	Insurance
2000-2010	19.0	15.4	14.6	13.5	17.9	18.7	16.7
2010-2020	16.9	12.8	6.3	11.1	15.7	17.0	11.4
2020-2030	14.1	9.5	6.8	8.0	12.4	12.9	8.7
2030-2040	11.2	6.8	7.4	7.2	10.2	6.7	9.3
2000-2040	76.5	52.2	39.8	46.0	68.9	67.3	54.4

Time Period	Total	Food	Alcohol	Housing	Apparel	Transportation	Health	Entertainment
				Anglo				
2000-2010	6.0	5.8	5.2	5.4	5.0	5.8	10.5	5.2
2010-2020	2.9	3.5	2.2	2.9	1.4	2.6	9.6	2.4
2020-2030	-0.1	0.6	-2.0	0.2	-1.1	-1.1	5.9	-1.6
2030-2040	-2.3	-2.3	-3.3	-2.0	-2.9	-3.0	-0.2	-3.2
2000-2040	6.6	7.6	1.9	6.6	2.2	4.2	27.9	2.7

	Personal	Reading	Education	Tobacco	Miscellaneous	Cash	Insurance
2000-2010	7.2	8.5	4.9	4.4	5.9	11.2	5.4
2010-2020	5.0	5.3	-6.3	1.4	3.6	10.4	-1.1
2020-2030	2.3	1.4	-3.3	-2.0	0.8	6.4	-4.3
2030-2040	-1.5	-1.8	-2.1	-3.3	-2.2	-1.2	-2.8
2000-2040	13.4	13.8	-6.9	0.3	8.3	29.0	-3.0

Time Period	Total	Food	Alcohol	Housing	Apparel	Transportation	Health	Entertainment
				Black				
2000-2010	20.4	20.6	19.8	19.8	18.4	19.8	23.4	18.1
2010-2020	16.6	17.2	15.8	16.4	15.2	16.2	22.2	14.9
2020-2030	9.9	10.6	6.4	9.9	8.6	9.8	17.5	9.0
2030-2040	5.2	5.9	3.5	5.3	3.6	4.4	9.1	4.4
2000-2040	62.2	65.6	52.8	61.2	53.5	59.6	93.2	54.4

	Personal	Reading	Education	Tobacco	Miscellaneous	Cash	Insurance
2000-2010	19.9	23.6	19.5	24.4	26.4	23.0	21.5
2010-2020	16.1	19.2	11.0	18.7	21.7	18.8	15.2
2020-2030	9.8	11.1	3.6	9.8	10.2	9.9	7.6
2030-2040	5.0	6.4	3.9	4.7	5.6	5.6	4.6
2000-2040	60.4	74.3	42.8	69.7	79.1	69.5	57.6

Table 5.3, Panel A continued

Time Period	Total	Food	Alcohol	Housing	Apparel	Transportation	Health	Entertainment
				Hispanic				
2000-2010	46.6	46.3	44.5	46.2	44.6	45.7	50.6	46.9
2010-2020	37.5	38.1	35.6	37.5	36.2	36.5	43.3	38.2
2020-2030	30.8	31.6	29.3	30.7	29.8	30.3	36.2	30.9
2030-2040	26.2	26.7	25.1	26.3	25.6	25.7	30.0	26.4
2000-2040	232.6	236.9	216.9	231.8	221.2	225.8	281.8	235.8

	Personal	Reading	Education	Tobacco	Miscellaneous	Cash	Insurance
2000-2010	47.0	47.6	45.4	47.7	46.8	52.9	48.1
2010-2020	39.0	39.9	34.4	38.6	37.9	39.1	37.1
2020-2030	32.3	32.3	26.8	31.2	30.8	31.6	29.2
2030-2040	27.3	27.4	22.3	27.2	26.4	24.5	24.9
2000-2040	244.1	247.9	203.0	241.5	234.7	248.3	227.3

Time Period	Total	Food	Alcohol	Housing	Apparel	Transportation	Health	Entertainment
				Other				
2000-2010	49.7	52.4	41.2	47.5	49.2	51.9	65.5	50.0
2010-2020	36.2	38.2	31.3	34.7	34.8	36.9	50.6	36.5
2020-2030	27.3	30.0	26.1	26.5	24.0	27.6	39.5	27.0
2030-2040	20.2	22.0	18.6	20.5	15.8	19.3	30.1	19.8
2000-2040	211.8	234.1	177.3	203.0	188.7	216.6	352.2	211.5

	Personal	Reading	Education	Tobacco	Miscellaneous	Cash	Insurance
2000-2010	52.9	49.5	38.1	59.4	50.1	45.3	47.1
2010-2020	38.0	39.6	33.7	42.4	32.6	37.2	32.9
2020-2030	29.5	32.0	15.2	29.0	22.4	30.1	24.3
2030-2040	23.4	20.8	12.1	25.1	16.7	23.2	17.3
2000-2040	237.2	233.0	138.4	266.6	184.1	219.6	185.1

Panel B: Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)

Time Period	Total	Food	Alcohol	Housing	Apparel	Transportation	Health	Entertainment
				Total				
2000-2010	24.8	26.2	20.4	25.0	24.9	26.0	24.8	20.7
2010-2020	25.1	27.2	20.1	25.8	25.0	26.0	26.9	21.1
2020-2030	24.0	26.2	18.3	24.6	23.8	24.6	25.7	19.7
2030-2040	23.6	25.3	19.3	24.3	23.3	24.5	22.9	20.4
2000-2040	139.3	153.9	104.0	143.6	138.2	146.3	144.8	110.5

	Personal	Reading	Education	Tobacco	Miscellaneous	Cash	Insurance
2000-2010	26.2	20.7	21.4	19.1	25.1	24.0	23.7
2010-2020	26.7	20.5	16.8	19.1	25.6	24.6	21.6
2020-2030	25.5	18.8	19.7	17.7	23.7	22.6	20.9
2030-2040	24.0	17.7	20.1	18.7	23.1	17.8	22.6
2000-2040	148.8	103.2	103.7	97.9	139.3	123.1	122.9

Table 5.3, Panel B continued

Time Period	Total	Food	Alcohol	Housing	Apparel	Transportation	Health	Entertainment
				Anglo				
2000-2010	8.1	7.8	7.2	7.5	7.0	7.8	12.6	7.3
2010-2020	5.0	5.6	4.2	4.9	3.4	4.6	11.7	4.4
2020-2030	1.8	2.5	-0.2	2.1	0.7	0.8	7.9	0.3
2030-2040	-0.5	-0.5	-1.6	-0.3	-1.2	-1.2	1.7	-1.4
2000-2040	15.0	16.0	9.8	14.9	10.2	12.3	38.1	10.7

	Personal	Reading	Education	Tobacco	Miscellaneous	Cash	Insurance
2000-2010	9.3	10.6	6.8	6.5	8.0	13.3	7.4
2010-2020	7.0	7.3	-4.4	3.4	5.7	12.6	0.9
2020-2030	4.2	3.4	-1.4	-0.1	2.7	8.4	-2.4
2030-2040	0.3	0.0	-0.3	-1.6	-0.4	0.8	-1.1
2000-2040	22.4	22.8	0.3	8.1	16.8	39.3	4.6

Time Period	Total	Food	Alcohol	Housing	Apparel	Transportation	Health	Entertainment
				Black				
2000-2010	25.8	26.1	25.3	25.2	23.9	25.3	28.8	23.5
2010-2020	22.4	23.0	21.6	22.2	21.1	22.1	28.1	20.8
2020-2030	15.6	16.4	12.2	15.6	14.3	15.5	23.3	14.7
2030-2040	10.6	11.3	8.7	10.7	9.0	10.0	14.7	9.9
2000-2040	97.0	100.9	85.8	95.8	86.9	94.3	133.1	88.0

	Personal	Reading	Education	Tobacco	Miscellaneous	Cash	Insurance
2000-2010	25.4	29.1	25.0	30.0	32.0	28.4	27.0
2010-2020	21.9	25.1	17.0	24.3	27.6	24.6	21.0
2020-2030	15.5	16.8	8.9	15.6	15.8	15.7	13.4
2030-2040	10.4	11.9	9.5	10.1	11.1	11.0	10.1
2000-2040	94.8	111.1	74.6	105.8	116.8	105.5	91.7

Time Period	Total	Food	Alcohol	Housing	Apparel	Transportation	Health	Entertainment
				Hispanic				
2000-2010	66.7	66.1	65.7	66.4	65.4	66.4	68.0	67.0
2010-2020	58.3	58.6	56.0	58.3	57.3	57.2	62.7	58.9
2020-2030	49.2	49.8	47.1	48.9	47.8	48.4	54.8	49.2
2030-2040	43.1	43.6	42.2	43.1	42.0	42.8	47.6	43.5
2000-2040	463.7	466.9	440.8	461.3	446.1	454.3	524.7	468.1

	Personal	Reading	Education	Tobacco	Miscellaneous	Cash	Insurance
2000-2010	66.4	66.7	64.7	67.3	66.9	70.6	68.2
2010-2020	59.3	61.0	57.3	59.5	58.6	59.7	58.8
2020-2030	50.8	51.1	48.9	49.6	49.1	54.1	48.7
2030-2040	44.2	43.9	37.7	43.9	43.5	43.6	42.1
2000-2040	476.2	483.1	431.3	474.4	466.1	502.9	464.3

Table 5.3, Panel B continued

Time Period	Total	Food	Alcohol	Housing	Apparel	Transportation	Health	Entertainment
				Other				
2000-2010	86.0	89.1	76.4	83.6	85.3	88.5	103.8	86.4
2010-2020	70.0	72.1	63.6	68.2	68.4	70.9	86.1	70.3
2020-2030	56.9	60.2	54.8	55.7	53.8	57.6	71.3	56.8
2030-2040	48.0	50.2	45.8	48.1	43.4	47.2	60.0	47.8
2000-2040	634.0	682.7	551.0	612.4	588.4	647.3	939.8	635.8

	Personal	Reading	Education	Tobacco	Miscellaneous	Cash	Insurance
2000-2010	89.9	85.4	72.0	98.0	86.6	80.6	83.3
2010-2020	71.9	73.6	67.5	76.8	66.1	71.0	66.3
2020-2030	59.5	61.9	43.1	60.2	52.2	58.6	53.6
2030-2040	51.5	49.3	39.3	54.3	43.7	50.8	44.7
2000-2040	688.8	678.0	474.0	765.0	578.0	638.8	577.3

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Bureau of Labor Statistics, 2000 Consumer Expenditure Survey, 2002.

Table 5.4

Percent of Consumer Expenditures in Texas by Expenditure Category and Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Race/ Ethnicity	Total	Food	Alcohol	Housing	Apparel	Trans- portation	Health	Enter- tainment	Per- sonal	Reading	Edu- cation	Tobacco	Miscel- laneous	Cash	Insurance
All Scenarios															
2000															
Anglo	66.4	63.2	73.7	64.5	62.2	64.5	74.6	73.6	60.2	78.8	70.2	74.4	66.8	76.2	68.5
Black	8.7	9.3	6.0	9.4	11.4	8.0	6.5	6.6	15.6	6.2	7.6	9.6	8.5	7.5	8.1
Hispanic	21.9	24.5	18.2	22.9	23.5	24.2	16.8	17.4	21.8	12.0	16.7	13.9	22.0	14.1	20.1
Other	3.0	3.0	2.1	3.2	2.9	3.3	2.1	2.4	2.4	3.0	5.5	2.1	2.7	2.2	3.3
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)															
2010															
Anglo	59.8	56.6	68.0	57.9	55.7	57.9	69.2	67.7	54.2	74.1	64.3	68.5	60.1	71.3	61.9
Black	8.9	9.4	6.4	9.6	11.6	8.1	6.7	6.8	15.8	6.6	7.9	10.5	9.1	7.8	8.5
Hispanic	27.4	30.2	23.0	28.5	29.0	29.8	21.2	22.4	26.9	15.4	21.2	18.1	27.4	18.2	25.5
Other	3.9	3.8	2.6	4.0	3.7	4.2	2.9	3.1	3.1	3.9	6.6	2.9	3.4	2.7	4.1
2020															
Anglo	53.6	50.2	62.3	51.7	49.3	51.5	63.8	61.7	48.6	69.2	56.7	62.5	53.9	67.3	54.9
Black	9.0	9.5	6.6	9.7	11.7	8.2	6.9	7.0	15.7	7.0	8.2	11.2	9.6	7.9	8.8
Hispanic	32.8	35.8	28.0	34.0	34.6	35.3	25.6	27.5	32.0	19.0	26.8	22.6	32.6	21.6	31.4
Other	4.6	4.5	3.1	4.6	4.4	5.0	3.7	3.8	3.7	4.8	8.3	3.7	3.9	3.2	4.9
2030															
Anglo	47.8	44.4	56.4	45.9	43.7	45.3	58.4	55.5	43.6	64.1	51.4	56.8	48.3	63.4	48.4
Black	8.8	9.2	6.5	9.5	11.3	8.0	7.0	7.0	15.1	7.1	8.0	11.4	9.4	7.7	8.7
Hispanic	38.2	41.3	33.5	39.4	40.1	41.0	30.2	33.0	37.1	23.0	31.7	27.4	38.0	25.2	37.3
Other	5.2	5.1	3.6	5.2	4.9	5.7	4.4	4.5	4.2	5.8	8.9	4.4	4.3	3.7	5.6
2040															
Anglo	42.3	38.8	50.8	40.6	38.6	39.8	52.5	49.9	38.7	58.8	46.9	51.2	42.8	58.7	43.0
Black	8.4	8.7	6.3	9.0	10.6	7.6	6.9	6.7	14.2	7.1	7.7	11.1	9.0	7.6	8.3
Hispanic	43.6	46.9	39.0	44.8	45.7	46.5	35.4	38.5	42.4	27.5	36.1	32.5	43.6	29.4	42.6
Other	5.7	5.6	3.9	5.6	5.1	6.1	5.2	4.9	4.7	6.6	9.3	5.2	4.6	4.3	6.1

Table 5.4, continued

Race/ Ethnicity	Total	Food	Alcohol	Housing	Apparel	Trans- portation	Health	Enter- tainment	Per- sonal	Reading	Edu- cation	Tobacco	Miscel- laneous	Cash	Insurance
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)															
2010															
Anglo	57.5	54.1	65.6	55.5	53.3	55.2	67.3	65.4	52.1	72.2	61.9	66.5	57.7	69.6	59.5
Black	8.7	9.3	6.3	9.4	11.3	8.0	6.7	6.8	15.5	6.6	7.8	10.5	9.0	7.8	8.3
Hispanic	29.3	32.2	25.0	30.5	31.1	31.9	22.6	24.1	28.7	16.6	22.6	19.6	29.3	19.4	27.3
Other	4.5	4.4	3.1	4.6	4.3	4.9	3.4	3.7	3.7	4.6	7.7	3.4	4.0	3.2	4.9
2020															
Anglo	48.2	44.9	56.9	46.2	44.0	45.9	59.2	56.4	43.9	64.2	50.6	57.8	48.6	62.8	49.3
Black	8.6	8.9	6.4	9.2	11.0	7.7	6.8	6.8	15.0	6.9	7.8	10.9	9.1	7.8	8.3
Hispanic	37.1	40.2	32.5	38.4	39.1	39.8	29.0	31.6	36.1	22.2	30.5	26.2	37.0	24.9	35.7
Other	6.1	6.0	4.2	6.2	5.9	6.6	5.0	5.2	5.0	6.7	11.1	5.1	5.3	4.5	6.7
2030															
Anglo	39.6	36.4	48.1	38.0	35.8	37.1	50.9	47.3	36.5	56.0	41.7	49.1	40.3	55.6	39.8
Black	8.0	8.3	6.0	8.5	10.2	7.1	6.6	6.5	13.8	6.7	7.1	10.7	8.5	7.3	7.8
Hispanic	44.6	47.7	40.4	45.8	46.7	47.4	35.7	39.4	43.4	28.2	37.9	33.3	44.6	31.3	43.9
Other	7.8	7.6	5.5	7.7	7.3	8.4	6.8	6.8	6.3	9.1	13.3	6.9	6.6	5.8	8.5
2040															
Anglo	31.9	29.0	39.6	30.4	28.7	29.4	42.1	38.7	29.6	47.6	34.6	40.6	32.6	47.5	32.1
Black	7.1	7.3	5.5	7.6	9.0	6.3	6.2	5.9	12.3	6.4	6.5	10.0	7.7	6.9	7.0
Hispanic	51.7	54.6	48.2	52.8	53.8	54.4	42.9	47.0	50.4	34.5	43.5	40.4	52.0	38.2	50.9
Other	9.3	9.1	6.7	9.2	8.5	9.9	8.8	8.4	7.7	11.5	15.4	9.0	7.7	7.4	10.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Bureau of Labor Statistics, 2000 Consumer Expenditure Survey, 2002.

Table 5.5

Percent of Net Change in Consumer Expenditures in Texas
by Expenditure Category and Race/Ethnicity Assuming Alternative Projection Scenarios, 2000-2040

Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)

Race/Ethnicity	Total	Food	Alcohol	Housing	Apparel	Transportation	Health	Entertainment
Anglo	6.5	6.4	2.9	6.1	2.1	4.0	25.5	3.8
Black	8.0	8.0	6.7	8.3	9.4	6.9	7.4	7.0
Hispanic	75.9	76.5	82.6	76.4	80.0	78.9	58.1	79.4
Other	9.6	9.1	7.8	9.2	8.5	10.2	9.0	9.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

	Personal	Reading	Education	Tobacco	Miscellaneous	Cash	Insurance
Anglo	10.5	20.8	-12.2	0.6	8.1	32.8	-3.8
Black	12.4	8.8	8.1	14.5	9.8	7.8	8.6
Hispanic	69.5	57.0	85.1	73.0	74.9	52.1	84.0
Other	7.6	13.4	19.0	11.9	7.2	7.3	11.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)

Race/Ethnicity	Total	Food	Alcohol	Housing	Apparel	Transportation	Health	Entertainment
Anglo	7.2	6.6	6.9	6.6	4.5	5.4	19.6	7.1
Black	6.0	6.1	5.0	6.3	7.2	5.2	6.0	5.3
Hispanic	73.0	74.2	77.0	73.6	75.8	75.0	60.9	73.8
Other	13.8	13.1	11.1	13.5	12.5	14.4	13.5	13.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

	Personal	Reading	Education	Tobacco	Miscellaneous	Cash	Insurance
Anglo	9.0	17.4	0.2	6.2	8.1	24.3	2.5
Black	10.0	6.6	5.4	10.4	7.1	6.4	6.1
Hispanic	69.7	56.2	69.4	67.4	73.6	57.7	76.0
Other	11.3	19.8	25.0	16.0	11.2	11.6	15.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Bureau of Labor Statistics, 2000 Consumer Expenditure Survey, 2002.

Table 5.6

Consumer Expenditures by Household Type and Expenditure Category in 2000
and Projections to 2040 Assuming Alternative Projection Scenarios

Expenditure Category	All Households	Married-Couple Families	Male-Householder Families	Female-Householder Families	Nonfamily Households
			All Scenarios		
2000					
Food	$ 39,590,873,274	$ 25,248,286,981	$ 1,146,076,207	$ 3,179,981,344	$ 10,016,528,742
Alcohol	2,164,016,013	1,189,442,348	128,503,397	132,246,659	713,823,609
Housing	87,379,449,746	55,779,805,114	2,465,410,201	8,169,791,416	20,964,443,015
Apparel	10,792,601,303	6,937,670,116	258,901,976	1,002,018,300	2,594,010,911
Transportation	58,640,079,320	39,500,160,512	1,375,351,521	3,550,097,302	14,214,469,985
Health	13,973,384,032	9,470,223,806	291,103,215	930,171,620	3,281,885,391
Entertainment	13,512,098,724	9,214,876,739	359,725,287	920,014,318	3,017,482,380
Personal	2,410,215,769	1,508,290,675	51,931,921	241,656,838	608,336,335
Reading	1,076,868,633	689,458,019	29,240,197	87,525,829	270,644,588
Education	4,337,820,877	2,740,822,058	115,866,007	253,967,231	1,227,165,581
Tobacco	2,579,278,489	1,364,079,456	80,838,424	162,098,195	972,262,414
Miscellaneous	5,475,094,954	3,468,784,915	223,213,065	481,424,810	1,301,672,164
Cash	8,402,547,034	6,300,312,412	343,217,636	465,643,433	1,293,373,553
Insurance	32,159,494,816	23,129,944,617	839,312,933	1,986,705,199	6,203,532,067
Total	282,493,822,984	186,542,157,768	7,708,691,987	21,563,342,494	66,679,630,735
			Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
2010					
Food	$ 46,934,127,727	$ 30,049,381,437	$ 1,437,607,072	$ 3,880,136,367	$ 11,567,002,851
Alcohol	2,485,123,756	1,369,293,167	157,203,055	153,526,765	805,100,769
Housing	103,117,452,469	66,055,966,950	3,054,820,528	9,953,839,092	24,052,825,899
Apparel	12,756,039,305	8,208,989,226	329,960,300	1,212,349,047	3,004,740,732
Transportation	69,168,240,728	46,832,198,998	1,667,020,749	4,289,750,545	16,379,270,436
Health	16,201,625,470	11,011,851,099	355,858,310	1,110,186,149	3,723,729,912
Entertainment	15,539,129,249	10,600,688,905	436,967,131	1,099,858,298	3,401,614,915
Personal	2,854,226,814	1,790,639,662	66,603,132	290,488,447	706,495,573
Reading	1,225,939,943	784,669,468	34,870,954	102,726,843	303,672,678
Education	4,982,502,295	3,181,848,067	136,280,832	294,984,991	1,369,388,405
Tobacco	2,927,520,370	1,562,808,386	98,199,603	189,254,394	1,077,257,987
Miscellaneous	6,439,048,614	4,060,003,592	288,143,737	589,834,240	1,501,067,045
Cash	9,709,137,055	7,276,696,359	414,037,625	551,988,855	1,466,414,216
Insurance	37,395,400,355	26,955,428,774	1,009,384,184	2,381,754,986	7,048,832,411
Total	331,735,514,150	219,740,464,090	9,486,957,212	26,100,679,019	76,407,413,829
2040					
Food	$ 69,536,122,603	$ 44,588,922,368	$ 2,385,285,969	$ 5,918,937,459	$ 16,642,976,807
Alcohol	3,240,962,585	1,803,573,372	242,542,583	201,020,597	993,826,033
Housing	148,263,249,290	94,707,936,648	4,949,661,206	15,108,082,168	33,497,569,268
Apparel	18,069,248,297	11,698,781,036	562,266,158	1,737,791,778	4,070,409,325
Transportation	99,038,383,290	67,669,425,558	2,516,787,780	6,170,350,645	22,681,819,307
Health	24,349,495,515	16,348,301,917	615,714,248	1,757,252,960	5,628,226,390
Entertainment	20,617,213,857	13,920,838,154	664,251,924	1,564,933,228	4,467,190,551
Personal	4,221,744,039	2,645,746,247	116,306,583	417,443,701	1,042,247,508
Reading	1,637,345,739	1,037,622,412	51,153,031	145,163,173	403,407,123
Education	6,117,331,061	4,044,851,284	182,216,731	373,955,839	1,516,307,207
Tobacco	3,738,975,633	1,997,282,622	145,142,101	247,174,535	1,349,376,375
Miscellaneous	9,206,868,496	5,735,939,225	494,225,932	912,105,152	2,064,598,187
Cash	13,704,458,091	10,317,220,096	607,030,098	854,283,737	1,925,924,160
Insurance	49,324,985,618	35,558,773,861	1,434,320,444	3,290,467,645	9,041,423,668
Total	471,066,384,114	312,075,214,800	14,966,904,788	38,698,962,617	105,325,301,909

Table 5.6, continued

Expenditure Category	All Households	Married-Couple Families	Male-Householder Families	Female-Householder Families	Nonfamily Households
		Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)			
2010					
Food	$ 50,009,245,207	$ 32,188,339,351	$ 1,568,858,803	$ 4,137,316,484	$ 12,114,730,569
Alcohol	2,619,625,350	1,449,427,409	170,366,027	161,416,365	838,415,549
Housing	109,799,793,041	70,749,576,980	3,315,437,227	10,611,089,609	25,123,689,225
Apparel	13,593,343,798	8,782,780,151	362,013,209	1,289,912,058	3,158,638,380
Transportation	73,729,597,163	50,152,778,730	1,797,767,669	4,572,800,077	17,206,250,687
Health	17,044,392,418	11,643,329,428	381,605,620	1,169,415,964	3,850,041,406
Entertainment	16,393,257,758	11,226,343,488	471,529,923	1,167,682,736	3,527,701,611
Personal	3,029,765,238	1,910,972,906	73,158,975	306,792,441	738,840,916
Reading	1,286,327,229	825,729,927	37,401,396	108,218,555	314,977,351
Education	5,291,661,953	3,403,523,661	145,791,707	310,110,074	1,432,236,511
Tobacco	3,064,179,327	1,652,280,485	105,806,635	199,263,681	1,106,828,526
Miscellaneous	6,845,277,623	4,318,424,902	319,427,804	632,402,361	1,575,022,556
Cash	10,223,087,347	7,670,139,361	445,970,621	583,397,327	1,523,580,038
Insurance	39,740,463,817	28,758,120,134	1,087,751,791	2,533,778,138	7,360,813,754
Total	352,670,017,269	234,731,766,913	10,282,887,407	27,783,595,870	79,871,767,079
2040					
Food	$ 99,574,809,489	$ 65,048,780,792	$ 3,766,775,461	$ 8,323,494,099	$ 22,435,759,137
Alcohol	4,460,515,757	2,492,922,993	378,293,483	269,673,910	1,319,625,371
Housing	211,875,286,653	138,457,678,264	7,669,361,702	21,225,399,405	44,522,847,282
Apparel	25,918,908,461	16,995,994,861	901,145,939	2,423,407,813	5,598,359,848
Transportation	142,714,994,725	98,744,955,287	3,831,729,172	8,737,563,289	31,400,746,977
Health	32,562,430,249	22,393,395,462	900,128,183	2,333,937,160	6,934,969,444
Entertainment	28,331,132,675	19,351,941,694	1,015,441,124	2,180,874,387	5,782,875,470
Personal	5,893,399,479	3,773,788,756	186,403,510	560,322,615	1,372,884,598
Reading	2,173,182,102	1,392,603,502	76,029,066	195,403,842	509,145,692
Education	8,830,484,467	5,948,976,799	272,508,678	500,668,492	2,108,330,498
Tobacco	4,977,645,152	2,760,111,703	220,832,530	331,335,738	1,665,365,181
Miscellaneous	12,992,010,910	8,078,212,167	823,446,493	1,313,259,480	2,777,092,770
Cash	18,233,249,897	13,680,726,482	925,480,956	1,166,282,771	2,460,759,688
Insurance	70,567,209,833	51,469,016,485	2,198,833,442	4,631,586,164	12,267,773,742
Total	669,105,259,849	450,589,105,247	23,166,409,739	54,193,209,165	141,156,535,698

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Bureau of Labor Statistics, 2000 Consumer Expenditure Survey, 2002.

Table 5.7

Percent Change in Consumer Expenditures in Texas
by Household Type and Expenditure Category Assuming Alternative Projection Scenarios, 2000-2040

Expenditure Category	All Households	Married-Couple Families	Male-Householder Families	Female-Householder Families	Nonfamily Households
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Food	75.6	76.6	108.1	86.1	66.2
Alcohol	49.8	51.6	88.7	52.0	39.2
Housing	69.7	69.8	100.8	84.9	59.8
Apparel	67.4	68.6	117.2	73.4	56.9
Transportation	68.9	71.3	83.0	73.8	59.6
Health	74.3	72.6	111.5	88.9	71.5
Entertainment	52.6	51.1	84.7	70.1	48.0
Personal	75.2	75.4	124.0	72.7	71.3
Reading	52.0	50.5	74.9	65.9	49.1
Education	41.0	47.6	57.3	47.2	23.6
Tobacco	45.0	46.4	79.5	52.5	38.8
Miscellaneous	68.2	65.4	121.4	89.5	58.6
Cash	63.1	63.8	76.9	83.5	48.9
Insurance	53.4	53.7	70.9	65.6	45.7
Total	66.8	67.3	94.2	79.5	58.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Food	151.5	157.6	228.7	161.7	124.0
Alcohol	106.1	109.6	194.4	103.9	84.9
Housing	142.5	148.2	211.1	159.8	112.4
Apparel	140.2	145.0	248.1	141.9	115.8
Transportation	143.4	150.0	178.6	146.1	120.9
Health	133.0	136.5	209.2	150.9	111.3
Entertainment	109.7	110.0	182.3	137.0	91.6
Personal	144.5	150.2	258.9	131.9	125.7
Reading	101.8	102.0	160.0	123.3	88.1
Education	103.6	117.1	135.2	97.1	71.8
Tobacco	93.0	102.3	173.2	104.4	71.3
Miscellaneous	137.3	132.9	268.9	172.8	113.3
Cash	117.0	117.1	169.6	150.5	90.3
Insurance	119.4	122.5	162.0	133.1	97.8
Total	136.9	141.5	200.5	151.3	111.7

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Bureau of Labor Statistics, 2000 Consumer Expenditure Survey, 2002.

Table 5.8

Race/Ethnicity Effects on Projections of Net Worth and Assets for Households in Texas in 2000 and 2040 Using the Population Projection That Assumes 1990-2000 Rates of Net Migration (1.0 Scenario)

Categories of Assets	2000	2040	Percent Difference
Net worth	$ 709,896,741,518	$ 1,444,188,603,304	103.4
Interest-earning assets	416,444,678,728	694,962,422,140	66.9
Regular checking accounts	9,244,116,349	22,283,154,883	141.1
Stocks and mutual funds	299,940,052,315	741,082,606,568	147.1
Equity in business or profession	381,371,946,690	842,735,848,416	121.0
Equity in motor vehicles	71,669,400,586	167,421,386,886	133.6
Equity in own home	534,802,097,857	1,289,022,675,470	141.0
Rental property equity	652,387,202,487	1,499,319,943,638	129.8
Other real estate equity	469,675,888,497	1,108,933,471,751	136.1
U.S. Saving Bonds	28,313,691,464	58,822,167,660	107.8
IRA or KEOGH accounts	263,269,325,874	652,626,452,944	147.9
Other assets	371,673,948,422	577,668,570,957	55.4

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Davern, M.E. and P.J. Fisher, Household Net Worth and Asset Ownership: 1995, 2001.

Table 5.9

Projected Proportion of Net Worth and Assets of Householders in Texas by Race/Ethnicity in 2000 and 2040 Using the Population Projection That Assumes 1990-2000 Rates of Net Migration (1.0 Scenario)

Race/ Ethnicity	Net worth	Interest-earning assets	Regular checking accounts	Stocks and mutual fund shares	Equity in business or profession	Equity in motor vehicles	Equity in own home	Rental property equity	Other real estate equity	U.S. Savings Bonds	IRA or KEOGH accounts
					2000						
Anglo	81.0	92.1	68.2	71.2	76.4	69.7	69.6	74.2	58.5	77.0	71.1
Black	4.1	0.8	9.1	3.9	4.8	9.3	7.4	4.9	22.0	7.7	3.8
Hispanic	11.0	2.6	19.4	21.5	15.1	17.6	19.6	17.3	16.7	11.6	21.7
Other	3.9	4.5	3.3	3.4	3.7	3.4	3.4	3.6	2.8	3.7	3.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
					2040						
Anglo	49.2	68.2	35.0	35.6	42.7	36.9	35.7	39.9	30.6	45.7	35.4
Black	4.1	1.0	7.8	3.3	4.5	8.2	6.3	4.4	19.3	7.7	3.2
Hispanic	31.0	9.1	46.1	49.8	39.2	43.1	46.6	43.0	40.3	32.0	50.1
Other	15.7	21.7	11.1	11.3	13.6	11.8	11.4	12.7	9.8	14.6	11.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Davern, M.E. and P.J. Fisher, Household Net Worth and Asset Ownership: 1995, 2001.

Table 5.10

Age Effects on Projections of Net Worth and Assets for Households in Texas in 2000 and 2040 Using the Population Projection That Assumes 1990-2000 Rates of Net Migration (1.0 Scenario)

Categories of Assets	2000	2040	Percent Difference
Net worth	$ 824,089,496,224	$ 2,408,070,044,814	192.2
Interest-earning assets	498,981,723,740	1,467,689,335,728	194.1
Regular checking accounts	9,982,625,443	27,600,896,244	176.5
Stocks and mutual funds	301,581,086,876	875,405,769,599	190.3
Equity in business or profession	447,626,496,948	1,183,257,865,061	164.3
Equity in motor vehicles	79,012,319,385	209,168,096,100	164.7
Equity in own home	528,019,623,448	1,493,421,135,285	182.8
Rental property equity	617,595,519,367	1,742,579,793,986	182.2
Other real estate equity	478,931,445,892	1,256,164,778,275	162.3
U.S. Saving Bonds	33,215,100,269	99,370,800,082	199.2
IRA or KEOGH accounts	256,937,781,073	749,279,240,700	191.6
Other assets	477,013,213,831	1,339,570,325,232	180.8

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Davern, M.E. and P.J. Fisher, Household Net Worth and Asset Ownership: 1995, 2001.

Table 5.11

Projected Proportion of Net Worth and Assets in Texas by Age of Householder in 2000 and 2040
Using the Population Projection That Assumes 1990-2000 Rates of Net Migration (1.0 Scenario)

Age Group	Net worth	Interest-earning assets	Regular checking accounts	Stocks and mutual fund shares	Equity in business or profession	Equity in motor vehicles	Equity in own home	Rental property equity	Other real estate equity	U.S. Savings Bonds	IRA or KEOGH accounts	Other assets
					2000							
15-34	7.2	15.8	17.0	9.2	19.9	21.4	12.3	14.5	27.0	7.8	9.3	13.5
35-44	17.6	11.3	20.7	19.7	26.5	23.6	20.4	18.0	20.4	18.5	16.6	21.5
45-54	25.6	21.0	24.0	21.2	23.2	23.7	23.8	23.6	22.7	18.1	25.1	22.7
55-64	21.0	19.0	12.5	22.5	11.2	15.3	17.9	21.8	14.5	17.5	18.9	16.8
65+	28.6	32.9	25.8	27.4	19.2	16.0	25.6	22.1	15.4	38.1	30.1	25.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
					2010							
15-34	6.6	14.7	16.3	8.6	19.3	20.4	11.6	13.4	25.7	7.4	8.7	12.8
35-44	14.6	9.4	17.7	16.4	23.0	20.1	17.2	15.0	17.4	15.6	13.9	18.2
45-54	25.9	21.3	25.1	21.4	24.4	24.6	24.4	23.9	23.6	18.6	25.5	23.4
55-64	26.0	23.5	15.9	27.8	14.4	19.4	22.4	26.9	18.4	21.9	23.4	21.2
65+	26.9	31.1	25.0	25.8	18.9	15.5	24.4	20.8	14.9	36.5	28.5	24.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
					2020							
15-34	6.1	13.4	15.2	7.9	18.2	19.3	10.7	12.5	24.5	6.6	8.0	11.9
35-44	14.2	9.1	17.4	15.9	22.9	20.1	16.8	14.7	17.4	14.8	13.4	17.8
45-54	22.2	18.2	21.8	18.3	21.5	21.7	21.1	20.7	20.9	15.7	21.9	20.2
55-64	26.8	24.0	16.6	28.5	15.2	20.6	23.3	28.0	19.6	22.1	24.1	22.0
65+	30.7	35.3	29.0	29.4	22.2	18.3	28.1	24.1	17.6	40.8	32.6	28.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 5.11, continued

Age Group	Net worth	Interest-earning assets	Regular checking accounts	Stocks and mutual fund shares	Equity in business or profession	Equity in motor vehicles	Equity in own home	Rental property equity	Other real estate equity	U.S. Savings Bonds	IRA or KEOGH accounts	Other assets
					2030							
15-34	5.4	11.8	13.5	7.0	16.4	17.5	9.5	11.3	22.4	5.8	7.0	10.5
35-44	13.9	8.9	17.1	15.6	22.8	20.3	16.6	14.7	17.6	14.3	13.1	17.6
45-54	22.1	18.1	21.7	18.3	21.7	22.2	21.1	21.0	21.5	15.3	21.7	20.2
55-64	23.7	21.2	14.7	25.4	13.6	18.7	20.7	25.2	17.9	19.1	21.3	19.5
65+	34.9	40.0	33.0	33.7	25.5	21.3	32.1	27.8	20.6	45.5	36.9	32.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
					2040							
15-34	5.1	11.2	12.9	6.6	15.8	16.9	9.1	10.7	21.6	5.5	6.7	10.1
35-44	12.7	8.2	15.8	14.4	21.3	18.9	15.3	13.6	16.4	13.1	12.0	16.2
45-54	22.3	18.2	22.1	18.5	22.2	22.7	21.4	21.2	22.0	15.4	21.9	20.5
55-64	24.2	21.6	15.2	26.0	14.2	19.4	21.2	25.9	18.6	19.5	21.7	20.1
65+	35.7	40.8	34.0	34.5	26.5	22.1	33.0	28.6	21.4	46.5	37.7	33.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Davern, M.E. and P.J. Fisher, Household Net Worth and Asset Ownership: 1995, 2001.

Table 5.12

Race/Ethnicity and Age of Householder Effects on Projected Net Worth and Assets in Texas in 2040 by Category Assuming 2000 Distribution and Using the Population Projection That Assumes 1990-2000 Rates of Net Migration (1.0 Scenario)

Panel A: Race/Ethnicity of Householder Effects

Categories of Assets	Assuming 2000 Distribution in 2040	Assuming 1990-2000 Net Migration in 2040	Percent Difference
Net worth	$ 1,964,136,197,568	$ 1,444,188,603,304	-26.5
Interest-earning assets	1,185,077,261,707	694,962,422,140	-41.4
Regular checking accounts	24,685,669,400	22,283,154,883	-9.7
Stocks and mutual funds	812,650,712,861	741,082,606,568	-8.8
Equity in business or profession	1,043,447,475,392	842,735,848,416	-19.2
Equity in motor vehicles	191,975,005,903	167,421,386,886	-12.8
Equity in own home	1,436,382,249,445	1,289,022,675,470	-10.3
Rental property equity	1,777,052,556,302	1,499,319,943,638	-15.6
Other real estate equity	1,202,342,306,782	1,108,933,471,751	-7.8
U.S. Saving Bonds	77,246,732,029	58,822,167,660	-23.9
IRA or KEOGH accounts	713,215,489,070	652,626,452,944	-8.5
Other assets	1,066,229,371,207	577,668,570,957	-45.8

Panel B: Age of Householder Effects

Categories of Assets	Assuming 2000 Distribution in 2040	Assumption of 1990-2000 Net Migration in 2040	Percent Difference
Net worth	$ 2,161,693,227,502	$ 2,408,070,044,814	11.4
Interest-earning assets	1,308,581,443,078	1,467,689,335,728	12.2
Regular checking accounts	26,173,753,757	27,600,896,244	5.5
Stocks and mutual funds	791,013,176,266	875,405,769,599	10.7
Equity in business or profession	1,173,396,439,476	1,183,257,865,061	0.8
Equity in motor vehicles	207,115,773,249	209,168,096,100	1.0
Equity in own home	1,384,715,739,926	1,493,421,135,285	7.9
Rental property equity	1,619,529,987,935	1,742,579,793,986	7.6
Other real estate equity	1,255,196,925,034	1,256,164,778,275	0.1
U.S. Saving Bonds	87,128,726,816	99,370,800,082	14.1
IRA or KEOGH accounts	673,932,682,945	749,279,240,700	11.2
Other assets	1,250,875,279,147	1,339,570,325,232	7.1

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Davern, M.E. and P.J. Fisher, Household Net Worth and Asset Ownership: 1995, 2001.

Table 5.13

Projected Total Annual Aggregate Consumer Expenditures and Mean Household Expenditures (in 2000 Dollars) in Texas in 2040 by Race/Ethnicity Assuming 2000 Income Differentials, 1990-2000 Rates of Closure between Anglo-Black and Anglo-Hispanic Household Incomes, and Anglo Income Levels Obtained by All Race/Ethnicity Groups and Assuming Alternative Projection Scenarios

Race/ Ethnicity	Assuming 2000 Income Differentials		Assuming 1990-2000 Closure in Differentials		Assuming Anglo Incomes for All Race/Ethnicity Groups	
	Aggregate	Mean	Aggregate	Mean	Aggregate	Mean
Assuming Rates of Zero Net Migration (0.0 Scenario)						
Anglo	$ 179,964,569,421	$ 37,284	$ 179,964,569,421	$ 37,284	$ 179,964,569,421	$ 37,284
Black	31,721,131,208	26,656	37,103,861,070	31,179	42,904,226,236	36,054
Hispanic	118,858,767,657	31,244	125,307,459,143	32,939	143,349,075,149	37,682
Other	10,906,575,217	33,126	10,906,575,217	33,126	11,719,593,746	35,596
Total	341,451,043,503	33,640	353,282,464,851	34,805	377,937,464,552	37,234
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)						
Anglo	$ 194,047,194,758	$ 37,289	$ 194,047,194,758	$ 37,289	$ 194,047,194,758	$ 37,289
Black	38,541,473,667	26,732	45,047,329,796	31,245	52,082,147,798	36,124
Hispanic	200,144,473,821	32,281	209,905,559,437	33,855	239,215,582,187	38,583
Other	25,932,958,102	33,654	25,932,958,102	33,654	27,856,346,839	36,151
Total	458,666,100,348	33,685	474,933,042,093	34,880	513,201,271,582	37,690
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)						
Anglo	$ 209,227,135,221	$ 37,293	$ 209,227,135,221	$ 37,293	$ 209,227,135,221	$ 37,293
Black	46,816,461,358	26,802	54,679,665,736	31,304	63,209,682,840	36,187
Hispanic	339,241,150,187	33,155	354,335,709,010	34,631	402,694,994,879	39,357
Other	61,050,292,855	34,147	61,050,292,855	34,147	65,569,333,322	36,675
Total	656,335,039,621	33,872	679,292,802,822	35,057	740,701,146,262	38,226

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Bureau of Labor Statistics, 2000 Consumer Expenditure Survey, 2002.

Table 5.14

Median Owner-Occupied Housing Values, Median Monthly Rents, Ownership Rates, and Renter Rates in Texas by Race/Ethnicity, and Tenure by Age, 2000

Housing Characteristic	Race/Ethnicity				Age Groups				
	Anglo	Black	Hispanic	Asian	15-59	60-64	65-74	75+	Total
Median Housing Values	$ 94,700	$ 62,400	$ 56,300	$ 113,700	—	—	—	—	$ 82,500
Median Gross Rents	636	542	504	627	—	—	—	—	574
Tenure									
Percent Owner	70.8	46.5	56.1	52.7	58.5	81.3	83.3	78.1	63.8
Percent Renter	29.2	53.5	43.9	47.3	41.5	18.7	16.7	21.9	36.2

Source: U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Table 5.15

Number of Households in Texas by Race/Ethnicity and Housing Tenure
in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other	Total
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Total					
2000	4,540,078	843,712	1,789,623	219,941	7,393,354
2010	4,855,688	1,022,198	2,607,216	333,617	8,818,719
2020	5,126,311	1,207,150	3,614,696	467,026	10,415,183
2030	5,262,528	1,351,408	4,821,738	617,857	12,053,531
2040	5,203,862	1,441,747	6,200,085	770,565	13,616,259
Owner					
2000	3,209,443	388,743	1,004,091	114,682	4,716,959
2010	3,494,994	487,745	1,507,071	191,984	5,681,794
2020	3,744,777	598,662	2,151,436	279,777	6,774,652
2030	3,876,811	697,514	2,930,642	377,188	7,882,155
2040	3,834,180	763,891	3,822,205	476,305	8,896,581
Renter					
2000	1,330,635	454,969	785,532	105,259	2,676,395
2010	1,360,694	534,453	1,100,145	141,633	3,136,925
2020	1,381,534	608,488	1,463,260	187,249	3,640,531
2030	1,385,717	653,894	1,891,096	240,669	4,171,376
2040	1,369,682	677,856	2,377,880	294,260	4,719,678
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Total					
2000	4,540,078	843,712	1,789,623	219,941	7,393,354
2010	4,950,419	1,068,979	2,956,070	414,118	9,389,586
2020	5,327,431	1,324,961	4,676,499	717,860	12,046,751
2030	5,571,513	1,557,897	7,051,958	1,166,697	15,348,065
2040	5,610,322	1,746,730	10,231,880	1,787,865	19,376,797
Owner					
2000	3,209,443	388,743	1,004,091	114,682	4,716,959
2010	3,562,473	508,827	1,683,602	236,909	5,991,811
2020	3,892,076	653,916	2,735,480	428,350	7,709,822
2030	4,107,312	800,023	4,227,907	713,393	9,848,635
2040	4,137,975	920,475	6,236,864	1,109,529	12,404,843
Renter					
2000	1,330,635	454,969	785,532	105,259	2,676,395
2010	1,387,946	560,152	1,272,468	177,209	3,397,775
2020	1,435,355	671,045	1,941,019	289,510	4,336,929
2030	1,464,201	757,874	2,824,051	453,304	5,499,430
2040	1,472,347	826,255	3,995,016	678,336	6,971,954

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Table 5.16

Percent Change in Projected Number of Households in Texas by Race/Ethnicity and Housing Tenure Assuming Alternative Projection Scenarios, 2000-2040

Time Period	Anglo	Black	Hispanic	Other	Total
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Total					
2000-2010	7.0	21.2	45.7	51.7	19.3
2010-2020	5.6	18.1	38.6	40.0	18.1
2020-2030	2.7	12.0	33.4	32.3	15.7
2030-2040	-1.1	6.7	28.6	24.7	13.0
2000-2040	14.6	70.9	246.4	250.4	84.2
Owner					
2000-2010	8.9	25.5	50.1	67.4	20.5
2010-2020	7.1	22.7	42.8	45.7	19.2
2020-2030	3.5	16.5	36.2	34.8	16.3
2030-2040	-1.1	9.5	30.4	26.3	12.9
2000-2040	19.5	96.5	280.7	315.3	88.6
Renter					
2000-2010	2.3	17.5	40.1	34.6	17.2
2010-2020	1.5	13.9	33.0	32.2	16.1
2020-2030	0.3	7.5	29.2	28.5	14.6
2030-2040	-1.2	3.7	25.7	22.3	13.1
2000-2040	2.9	49.0	202.7	179.6	76.3
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Total					
2000-2010	9.0	26.7	65.2	88.3	27.0
2010-2020	7.6	23.9	58.2	73.3	28.3
2020-2030	4.6	17.6	50.8	62.5	27.4
2030-2040	0.7	12.1	45.1	53.2	26.2
2000-2040	23.6	107.0	471.7	712.9	162.1
Owner					
2000-2010	11.0	30.9	67.7	106.6	27.0
2010-2020	9.3	28.5	62.5	80.8	28.7
2020-2030	5.5	22.3	54.6	66.5	27.7
2030-2040	0.7	15.1	47.5	55.5	26.0
2000-2040	28.9	136.8	521.1	867.5	163.0
Renter					
2000-2010	4.3	23.1	62.0	68.4	27.0
2010-2020	3.4	19.8	52.5	63.4	27.6
2020-2030	2.0	12.9	45.5	56.6	26.8
2030-2040	0.6	9.0	41.5	49.6	26.8
2000-2040	10.6	81.6	408.6	544.4	160.5

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Table 5.17

Percent of Households in Texas by Race/Ethnicity of Householder and Housing Tenure in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
Total				
2000	61.4	11.4	24.2	3.0
2010	55.0	11.6	29.6	3.8
2020	49.2	11.6	34.7	4.5
2030	43.7	11.2	40.0	5.1
2040	38.2	10.6	45.5	5.7
Owner				
2000	68.1	8.2	21.3	2.4
2010	61.5	8.6	26.5	3.4
2020	55.3	8.8	31.8	4.1
2030	49.2	8.8	37.2	4.8
2040	43.0	8.6	43.0	5.4
Renter				
2000	49.7	17.0	29.4	3.9
2010	43.4	17.0	35.1	4.5
2020	38.0	16.7	40.2	5.1
2030	33.2	15.7	45.3	5.8
2040	29.0	14.4	50.4	6.2
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
Total				
2000	61.4	11.4	24.2	3.0
2010	52.7	11.4	31.5	4.4
2020	44.2	11.0	38.8	6.0
2030	36.3	10.2	45.9	7.6
2040	29.0	9.0	52.8	9.2
Owner				
2000	68.1	8.2	21.3	2.4
2010	59.4	8.5	28.1	4.0
2020	50.4	8.5	35.5	5.6
2030	41.8	8.1	42.9	7.2
2040	33.4	7.4	50.3	8.9
Renter				
2000	49.7	17.0	29.4	3.9
2010	40.8	16.5	37.5	5.2
2020	33.0	15.5	44.8	6.7
2030	26.6	13.8	51.4	8.2
2040	21.1	11.9	57.3	9.7

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002.a

Table 5.18

Number and Percent of Net Change in Texas Households by Race/Ethnicity and Housing Tenure Assuming Alternative Projection Scenarios, 2000-2040

Race/ Ethnicity	Number	Percent
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
Total		
Anglo	663,784	10.7
Black	598,035	9.6
Hispanic	4,410,462	70.9
Other	550,624	8.8
Total	6,222,905	100.0
Owner		
Anglo	624,737	14.9
Black	375,148	9.0
Hispanic	2,818,114	67.4
Other	361,623	8.7
Total	4,179,622	100.0
Renter		
Anglo	39,047	2.0
Black	222,887	10.9
Hispanic	1,592,348	77.9
Other	189,001	9.2
Total	2,043,283	100.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
Total		
Anglo	1,070,244	9.0
Black	903,018	7.5
Hispanic	8,442,257	70.4
Other	1,567,924	13.1
Total	11,983,443	100.0
Owner		
Anglo	928,532	12.1
Black	531,732	6.9
Hispanic	5,232,773	68.1
Other	994,847	12.9
Total	7,687,884	100.0
Renter		
Anglo	141,712	3.4
Black	371,286	8.6
Hispanic	3,209,484	74.7
Other	573,077	13.3
Total	4,295,559	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Table 5.19

Percent of Texas Households by Age and Race/Ethnicity of Householder and Housing Tenure in 2000 and Projections for 2040 Assuming Alternative Projection Scenarios

Age Group	Anglo		Black		Hispanic		Other		Total	
	2000	2040	2000	2040	2000	2040	2000	2040	2000	2040
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)										
Total										
15-24	5.5	4.1	7.4	4.6	8.9	5.5	7.4	3.4	6.6	4.7
25-34	16.3	12.8	21.8	15.0	26.0	17.9	26.2	11.9	19.6	15.3
35-44	22.2	14.7	25.7	17.5	26.3	20.8	27.6	16.6	23.8	17.9
45-54	20.6	16.3	19.8	20.1	18.0	19.0	21.9	16.6	19.8	18.0
55-64	14.0	15.9	11.2	17.3	9.7	16.1	10.3	16.7	12.6	16.2
65-74	11.3	15.7	8.3	14.1	6.8	12.1	4.6	18.5	9.6	14.0
75-84	7.8	15.2	4.4	9.2	3.5	6.9	1.7	12.1	6.2	10.6
85+	2.3	5.3	1.4	2.2	0.8	1.7	0.3	4.2	1.8	3.3
Owner										
15-24	1.3	1.0	1.2	0.6	3.0	1.7	1.8	0.8	1.7	1.2
25-34	11.1	8.4	11.1	6.4	19.1	11.9	16.6	6.6	12.9	9.7
35-44	22.6	14.2	24.7	14.6	27.9	20.2	30.5	15.5	24.1	16.9
45-54	22.9	17.6	24.4	21.7	22.0	21.1	28.4	18.2	23.0	19.5
55-64	16.8	18.1	16.3	21.6	13.0	19.6	14.2	19.6	15.8	19.1
65-74	13.8	18.5	12.9	19.2	9.4	15.2	6.0	21.3	12.7	17.3
75-84	9.2	17.1	7.1	12.8	4.5	8.3	2.1	13.4	7.8	12.7
85+	2.3	5.1	2.3	3.1	1.1	2.0	0.4	4.6	2.0	3.6
Renter										
15-24	15.6	13.0	12.7	9.1	16.5	11.5	13.4	7.7	15.3	11.3
25-34	28.7	25.1	31.0	24.7	34.9	27.5	36.8	20.3	31.2	26.0
35-44	21.5	15.7	26.5	20.7	24.1	22.0	24.4	18.4	23.3	19.8
45-54	14.7	13.1	15.8	18.5	12.9	15.6	14.8	14.1	14.3	15.1
55-64	7.6	9.6	6.9	12.3	5.5	10.3	6.1	12.1	6.8	10.6
65-74	5.0	7.7	4.3	8.5	3.6	7.3	3.0	13.9	4.4	8.0
75-84	4.6	9.9	2.1	5.0	2.0	4.6	1.2	9.8	3.3	6.5
85+	2.3	5.9	0.7	1.2	0.5	1.2	0.3	3.7	1.4	2.7
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)										
Total										
15-24	5.5	4.1	7.4	4.7	8.9	5.3	7.4	3.2	6.6	4.7
25-34	16.3	12.7	21.8	15.2	26.0	19.1	26.2	11.6	19.6	16.2
35-44	22.2	14.6	25.7	17.8	26.3	22.5	27.6	16.7	23.8	19.2
45-54	20.6	16.4	19.8	20.4	18.0	20.8	21.9	18.2	19.8	19.3
55-64	14.0	15.9	11.2	16.8	9.7	15.7	10.3	17.7	12.6	16.1
65-74	11.3	15.8	8.3	14.1	6.8	10.3	4.6	18.4	9.6	12.9
75-84	7.8	15.3	4.4	9.0	3.5	5.2	1.7	11.1	6.2	9.0
85+	2.3	5.2	1.4	2.0	0.8	1.1	0.3	3.1	1.8	2.6
Owner										
15-24	1.3	0.9	1.2	0.6	3.0	1.7	1.8	0.7	1.7	1.3
25-34	11.1	8.4	11.1	6.5	19.1	12.8	16.6	6.5	12.9	10.3
35-44	22.6	14.2	24.7	14.9	27.9	22.0	30.5	15.5	24.1	18.3
45-54	22.9	17.6	24.4	22.1	22.0	23.4	28.4	19.9	23.0	21.0
55-64	16.8	18.1	16.3	21.2	13.0	19.4	14.2	20.6	15.8	19.3
65-74	13.8	18.6	12.9	19.2	9.4	13.0	6.0	21.2	12.7	16.0
75-84	9.2	17.2	7.1	12.7	4.5	6.4	2.1	12.2	7.8	10.9
85+	2.3	5.0	2.3	2.8	1.1	1.3	0.4	3.4	2.0	2.9
Renter										
15-24	15.6	12.8	12.7	9.3	16.5	10.9	13.4	7.3	15.3	10.8
25-34	28.7	25.0	31.0	24.9	34.9	28.9	36.8	19.9	31.2	26.7
35-44	21.5	15.8	26.5	20.9	24.1	23.2	24.4	18.7	23.3	20.9
45-54	14.7	13.2	15.8	18.6	12.9	16.8	14.8	15.5	14.3	16.1
55-64	7.6	9.6	6.9	11.9	5.5	10.0	6.1	12.9	6.8	10.4
65-74	5.0	7.7	4.3	8.4	3.6	6.0	3.0	13.9	4.4	7.5
75-84	4.6	10.1	2.1	4.9	2.0	3.4	1.2	9.1	3.3	5.5
85+	2.3	5.8	0.7	1.1	0.5	0.8	0.3	2.7	1.4	2.1

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Table 5.20

Aggregate Annual Expenditures for Housing in Texas by Race/Ethnicity and Housing Tenure in 2000 and Projections to 2040 Using the Population Projection That Assumes 1990-2000 Rates of Net Migration (1.0 Scenario)

Year	Anglo	Black	Hispanic	Other	Total
			Total		
2000	$ 30,899,141,048	$ 4,527,454,222	$ 11,674,055,046	$ 1,765,610,468	$ 48,866,260,784
2010	32,884,943,501	5,640,338,693	19,390,811,337	3,187,531,920	61,103,625,451
2020	34,187,450,530	6,830,075,433	30,581,823,538	5,288,623,425	76,887,972,926
2030	34,778,528,532	7,837,931,995	45,300,526,994	8,172,424,205	96,089,411,726
2040	34,688,437,042	8,653,849,466	64,615,873,425	12,069,782,638	120,027,942,571
			Owner		
2000	$ 22,965,134,432	$ 2,187,249,167	$ 6,880,234,714	$ 1,064,116,688	$ 33,096,735,001
2010	24,625,716,897	2,795,197,014	11,608,543,481	2,012,260,131	41,041,717,523
2020	25,662,579,363	3,440,781,915	18,717,492,742	3,409,745,955	51,230,599,975
2030	26,125,372,698	4,059,927,662	28,212,190,505	5,319,885,455	63,717,376,320
2040	25,952,680,000	4,574,046,496	40,646,046,781	7,820,789,558	78,993,562,835
			Renter		
2000	$ 7,934,006,616	$ 2,340,205,055	$ 4,793,820,332	$ 701,493,780	$ 15,769,525,783
2010	8,259,226,604	2,845,141,679	7,782,267,856	1,175,271,789	20,061,907,928
2020	8,524,871,167	3,389,293,518	11,864,330,796	1,878,877,470	25,657,372,951
2030	8,653,155,834	3,778,004,333	17,088,336,489	2,852,538,750	32,372,035,406
2040	8,735,757,042	4,079,802,970	23,969,826,644	4,248,993,080	41,034,379,736

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Table 5.21

Percent of Annual Expenditures for Housing in Texas by Race/Ethnicity and Housing Tenure in 2000 and Projections to 2040 Using the Population Projection That Assumes 1990-2000 Rates of Net Migration (1.0 Scenario)

Year	Anglo	Black	Hispanic	Other
		Total		
2000	63.2	9.3	23.9	3.6
2010	53.9	9.2	31.7	5.2
2020	44.4	8.9	39.8	6.9
2030	36.2	8.2	47.1	8.5
2040	28.9	7.2	53.8	10.1
		Owner		
2000	69.4	6.6	20.8	3.2
2010	60.0	6.8	28.3	4.9
2020	50.1	6.7	36.5	6.7
2030	41.0	6.4	44.3	8.3
2040	32.8	5.8	51.5	9.9
		Renter		
2000	50.4	14.8	30.4	4.4
2010	41.1	14.2	38.8	5.9
2020	33.3	13.2	46.2	7.3
2030	26.7	11.7	52.8	8.8
2040	21.3	9.9	58.4	10.4

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Table 5.22

Proportion of Annual Expenditures for Housing in Texas by Age of Householder and Housing Tenure in 2000 and Projections to 2040 Using the Population Projection That Assumes 1990-2000 Rates of Net Migration (1.0 Scenario)

	Age of Householder						
Year	15-24	25-34	35-44	45-54	55-64	65-74	75+
				Total			
2000	4.4	22.2	29.2	22.3	11.5	6.3	4.1
2010	4.3	21.7	25.3	23.4	15.0	6.4	3.9
2020	3.8	21.5	25.5	20.6	16.3	8.3	4.0
2030	3.7	19.7	26.0	21.0	15.3	9.1	5.2
2040	3.5	19.5	24.5	21.5	16.4	8.6	6.0
				Owner			
2000	1.1	16.4	31.2	25.7	13.9	7.5	4.2
2010	1.1	15.9	26.4	26.8	18.1	7.8	3.9
2020	1.0	15.7	26.2	23.3	19.7	10.0	4.1
2030	0.9	14.4	26.5	23.6	18.5	10.8	5.3
2040	0.8	14.4	24.8	24.1	19.8	10.1	6.0
				Renter			
2000	11.2	34.3	25.2	15.1	6.7	3.5	4.0
2010	10.8	33.5	23.1	16.5	8.7	3.6	3.8
2020	9.5	32.9	24.1	15.2	9.5	4.9	3.9
2030	9.2	30.0	25.0	15.9	9.2	5.6	5.1
2040	8.6	29.5	23.8	16.5	9.8	5.7	6.1

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Table 5.23

Annual Expenditures for Housing in Texas by Tenure in 2040
Assuming Projected Patterns by Race/Ethnicity and Age of Householder
and Assuming 2000 Distribution and Using the Population Projection
That Assumes 1990-2000 Rates of Net Migration (1.0 Scenario)

Housing Tenure	Assuming 2000 Distribution in 2040	Assuming 1990-2000 Net Migration in 2040	Numerical Difference	Percent Difference
		Race/Ethnicity of Householder		
Owner	$ 86,002,893,862	$ 78,993,562,835	$ -7,009,331,027	-8.2
Renter	40,123,679,836	41,034,379,736	910,699,900	2.3
Total	126,126,573,698	120,027,942,571	-6,098,631,127	-4.8
		Age of Householder		
Owner	$ 87,819,664,906	$ 78,993,562,835	$ -8,826,102,071	-10.1
Renter	41,929,844,581	41,034,397,736	-895,446,845	-2.1
Total	129,749,509,487	120,027,942,571	-9,721,566,916	-7.5

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Table 5.24

Projections of Incidences of Diseases/Disorders and Percent Change in Incidences of Diseases/Disorders in Texas by Race/Ethnicity Assuming Alternative Projection Scenarios, 2000-2040

Year	Anglo	Black	Hispanic	Other	Total
Panel A: Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Number of Incidences					
2000	30,537,363	5,556,360	12,113,489	1,337,956	49,545,168
2010	32,815,173	6,729,420	17,379,242	2,089,911	59,013,746
2020	34,609,373	7,905,458	24,206,953	3,072,330	69,794,114
2030	35,687,450	8,818,573	32,601,663	4,219,656	81,327,342
2040	35,408,753	9,451,641	42,190,077	5,408,100	92,458,571
Percent Change in Incidences					
2000-2010	7.5	21.1	43.5	56.2	19.1
2010-2020	5.5	17.5	39.3	47.0	18.3
2020-2030	3.1	11.6	34.7	37.3	16.5
2030-2040	-0.8	7.2	29.4	28.2	13.7
2000-2040	16.0	70.1	248.3	304.2	86.6
Panel B: Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Number of Incidences					
2000	30,537,363	5,556,360	12,113,489	1,337,956	49,545,168
2010	33,431,265	7,039,340	19,445,990	2,564,319	62,480,914
2020	35,922,188	8,668,908	30,458,779	4,630,554	79,680,429
2030	37,739,292	10,150,936	46,188,995	7,819,412	101,898,635
2040	38,131,230	11,428,001	67,601,403	12,334,621	129,495,255
Percent Change in Incidences					
2000-2010	9.5	26.7	60.5	91.7	26.1
2010-2020	7.5	23.1	56.6	80.6	27.5
2020-2030	5.1	17.1	51.6	68.9	27.9
2030-2040	1.0	12.6	46.4	57.7	27.1
2000-2040	24.9	105.7	458.1	821.9	161.4

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. National Center for Health Statistics, 2000 National Health Interview Survey (NHIS), 2002a.

Table 5.25

Projections of the Prevalence of Diseases/Disorders in Texas by Race/Ethnicity and Type of Disease/Disorder for Adults (18 Years of Age and Older) and Children (17 Years of Age and Younger) in 2000 and 2040 Using the Population Projection That Assumes 1990-2000 Rates of Net Migration (1.0 Scenario)

Disease/Disorder	Anglo	Black	Hispanic	Other	Total
		2000 Adult Prevalence			
High Blood Pressure	1,939,471	463,141	589,252	85,017	3,076,881
Coronary Heart Disease	327,186	38,536	69,985	9,410	445,117
Angina Pectoris	228,192	25,698	63,558	7,399	324,847
Heart Attack	293,123	40,618	66,568	7,654	407,963
Other Heart Condition/Disease	664,265	95,383	138,298	20,331	918,277
Stroke	187,050	39,504	54,196	8,790	289,540
Emphysema	155,943	14,198	19,797	3,472	193,410
Asthma	819,635	154,380	306,790	37,754	1,318,559
Asthma Attack Past Year	308,234	54,820	116,999	12,758	492,811
Ulcer	688,299	100,773	158,782	21,839	969,693
Ulcer Past Year	185,954	44,906	83,527	7,968	322,355
Cancer	653,957	44,365	81,899	13,755	793,976
Diabetes	457,316	134,905	252,845	25,326	870,392
Hayfever Past Year	861,905	127,354	245,728	45,494	1,280,481
Sinusitis Past Year	1,490,866	261,996	372,942	48,885	2,174,689
Chronic Bronchitis Past Year	437,046	65,679	113,715	10,888	627,328
Weak/Failing Kidneys Past Year	124,328	31,675	67,045	7,707	230,755
Liver Condition Past Year	92,677	18,750	43,259	6,547	161,233
Joint Pain Past Year	2,883,965	395,834	717,173	97,158	4,094,130
Neck Pain Past 3 Months	1,323,388	165,246	507,667	60,035	2,056,336
Low Back Pain Past 3 Months	2,437,078	391,953	997,487	103,170	3,929,688
Low Back Pain Spread to Leg	751,089	133,248	357,069	31,304	1,272,710
Facial Pain Past 3 Months	402,091	44,512	142,352	18,144	607,099
Severe Headaches Past 3 Months	1,297,869	237,991	595,490	66,721	2,198,071
Head or Chest Cold 2 Weeks	1,059,931	210,300	463,951	46,581	1,780,763
Stomach or Intestinal Illness 2 Weeks	396,006	66,076	131,589	23,721	617,392
Pregnancy-related	81,920	33,319	86,914	7,830	209,983
Ever Worn Hearing Aid	339,789	26,443	76,137	10,134	452,503
Vision Impairment	779,066	155,458	312,905	33,266	1,280,695
Blindness	29,050	9,054	23,672	1,110	62,886
Lost All Teeth	849,970	142,861	232,246	29,523	1,254,600
Sad Past Month	857,631	219,026	587,046	56,094	1,719,797
Nervous Past Month	1,351,610	202,706	629,180	58,317	2,241,813
Restless Past Month	1,436,584	255,868	613,082	61,684	2,367,218
Hopeless Past Month	435,789	93,213	330,293	32,033	891,328
Everything an Effort Past Month	1,009,821	241,560	452,801	61,577	1,765,759
Worthlessness Past Month	377,760	74,674	232,841	27,263	712,538
Total	28,015,854	4,856,023	10,335,080	1,206,659	44,413,616

Table 5.25, continued

Disease/Disorder	Anglo	Black	Hispanic	Other	Total
	2040 Adult Prevalence				
High Blood Pressure	2,910,502	1,149,826	4,163,892	1,186,024	9,410,244
Coronary Heart Disease	576,449	116,098	576,035	153,982	1,422,564
Angina Pectoris	397,467	73,326	481,877	143,499	1,096,169
Heart Attack	512,741	117,372	536,960	142,977	1,310,050
Other Heart Condition/Disease	987,558	236,207	929,659	215,290	2,368,714
Stroke	340,670	123,280	438,483	157,650	1,060,083
Emphysema	262,345	42,240	157,065	55,137	516,787
Asthma	944,698	307,475	1,707,609	308,019	3,267,801
Asthma Attack Past Year	344,766	111,432	664,096	145,572	1,265,866
Ulcer	915,903	229,634	1,001,959	228,440	2,375,936
Ulcer Past Year	226,971	105,236	497,331	74,603	904,141
Cancer	1,065,680	130,317	601,515	217,222	2,014,734
Diabetes	694,074	366,699	1,852,985	308,863	3,222,621
Hayfever Past Year	960,205	247,620	1,413,213	402,648	3,023,686
Sinusitis Past Year	1,749,666	527,799	2,162,815	357,712	4,797,992
Chronic Bronchitis Past Year	557,584	145,288	703,825	107,022	1,513,719
Weak/Failing Kidneys Past Year	179,826	82,619	439,581	107,696	809,722
Liver Condition Past Year	107,996	41,358	271,303	64,578	485,235
Joint Pain Past Year	3,793,795	924,900	4,672,781	1,028,411	10,419,887
Neck Pain Past 3 Months	1,549,726	356,627	3,044,372	528,478	5,479,203
Low Back Pain Past 3 Months	2,948,238	799,203	5,645,426	925,323	10,318,190
Low Back Pain Spread to Leg	944,707	317,363	2,200,743	351,936	3,814,749
Facial Pain Past 3 Months	446,546	94,393	857,350	144,091	1,542,380
Severe Headaches Past 3 Months	1,366,188	435,009	3,145,693	484,378	5,431,268
Head or Chest Cold 2 Weeks	1,179,258	409,673	2,503,092	355,831	4,447,854
Stomach or Intestinal Illness 2 Weeks	453,542	132,876	722,992	170,179	1,479,589
Pregnancy-related	76,556	47,214	342,455	29,816	496,041
Ever Worn Hearing Aid	645,467	70,324	489,994	245,359	1,451,144
Vision Impairment	1,107,859	365,809	2,028,079	391,424	3,893,171
Blindness	51,687	19,155	180,082	18,708	269,632
Lost All Teeth	1,408,771	408,777	1,657,192	523,382	3,998,122
Sad Past Month	1,040,933	440,609	3,371,359	490,823	5,343,724
Nervous Past Month	1,559,237	418,182	3,552,913	422,053	5,952,385
Restless Past Month	1,635,905	498,214	3,332,767	444,609	5,911,495
Hopeless Past Month	504,114	190,237	1,902,216	268,056	2,864,623
Everything an Effort Past Month	1,183,414	461,534	2,543,465	429,572	4,617,985
Worthlessness Past Month	453,500	159,791	1,350,204	247,371	2,210,866
Total	36,084,544	10,703,716	62,143,378	11,876,734	120,808,372

Table 5.25, continued

Disease/Disorder	Anglo	Black	Hispanic	Other	Total
2000 Child Prevalence					
Attention deficit disorder	175,111	32,566	74,096	3,104	284,877
Mental retardation age <2 years	176	257	934	14	1,381
Mental retardation age 2-17 years	18,720	7,840	11,441	1,249	39,250
Anemia age <3 years	4,392	2,997	7,296	245	14,930
Anemia age 3-17 years	18,037	12,767	25,886	1,132	57,822
Developmental delay age <2 years	4,081	1,050	185	323	5,639
Developmental delay age 2-17 years	84,042	26,051	44,185	1,996	156,274
Asthma	136,423	59,217	101,101	10,210	306,951
Down's syndrome	2,177	1,291	5,186	215	8,869
Cerebral palsy	18,082	5,047	10,520	1,183	34,832
Muscular dystrophy	709	605	1,930	46	3,290
Cystic fibrosis	571	-	-	42	613
Sickle cell anemia	657	10,277	12,337	44	23,315
Autism	8,510	2,184	4,646	603	15,943
Diabetes	9,175	1,772	5,035	600	16,582
Arthritis	3,358	1,348	1,635	226	6,567
Congenital heart disease	5,274	1,039	9,237	362	15,912
Other heart disease	31,524	8,759	20,080	2,294	62,657
Food or digestive disorder age <3 years	16,043	3,625	10,800	480	30,948
Food or digestive disorder age 3-17 years	80,770	17,772	40,030	7,399	145,971
Diarrhea or colitis age <3 years	11,164	4,021	13,614	1,265	30,064
Diarrhea or colitis age 3-17 years	24,262	8,429	22,112	1,064	55,867
Ear infections age <3 years	66,807	14,131	68,002	3,463	152,403
Ear infections age 3-17 years	123,328	29,844	100,608	6,413	260,193
Headaches or migraines age 3-17 years	131,196	35,113	103,140	4,654	274,103
Hayfever age <3 years	12,687	1,667	18,210	1,352	33,916
Hayfever age 3-17 years	271,540	62,963	143,536	13,803	491,842
Respiratory allergy age <3 years	29,576	9,717	28,044	2,267	69,604
Respiratory allergy age 3-17 years	303,641	65,955	167,375	11,652	548,623
Eczema or skin allergy age <3 years	30,850	11,536	22,697	1,919	67,002
Eczema or skin allergy age 3-17 years	161,786	54,561	96,361	12,400	325,108
Seizures age <3 years	3,294	997	6,568	705	11,564
Seizures age 3-17 years	13,288	3,796	9,436	985	27,505
Stuttered or stammered age 3-17 years	26,059	14,932	28,877	889	70,757
Trouble seeing age 3-17 years	44,268	18,524	46,321	5,225	114,338
Blind age 3-17 years	1,899	2,736	4,691	378	9,704
Head/Chest Cold Past 2 Weeks age 3-17 years	497,272	136,367	404,421	23,538	1,061,598
Stomach/Intestinal Illness Past 2 Weeks age 3-17 years	150,760	28,584	107,836	7,558	294,738
Total	2,521,509	700,337	1,778,409	131,297	5,131,552

Table 5.25, continued

Disease/Disorder	Anglo	Black	Hispanic	Other	Total
2040 Child Prevalence					
Attention deficit disorder	139,754	33,254	227,735	10,664	411,407
Mental retardation age <2 years	149	265	2,865	50	3,329
Mental retardation age 2-17 years	15,067	8,448	35,887	4,374	63,776
Anemia age <3 years	3,714	3,083	22,174	856	29,827
Anemia age 3-17 years	14,806	13,269	79,880	3,974	111,929
Developmental delay age <2 years	3,455	1,084	568	1,156	6,263
Developmental delay age 2-17 years	67,744	27,356	136,340	6,771	238,211
Asthma	110,279	61,337	311,424	35,754	518,794
Down's syndrome	1,741	1,371	15,983	756	19,851
Cerebral palsy	14,737	5,242	31,596	4,160	55,735
Muscular dystrophy	556	594	5,694	165	7,009
Cystic fibrosis	478	0	0	145	623
Sickle cell anemia	520	10,387	37,888	158	48,953
Autism	6,851	2,235	14,091	2,107	25,284
Diabetes	7,273	1,737	14,656	2,155	25,821
Arthritis	2,737	1,433	5,173	819	10,162
Congenital heart disease	4,248	1,114	27,619	1,273	34,254
Other heart disease	25,638	8,850	61,691	7,993	104,172
Food or digestive disorder age <3 years	13,559	3,716	33,050	1,615	51,940
Food or digestive disorder age 3-17 years	65,351	18,114	123,723	25,920	233,108
Diarrhea or colitis age <3 years	9,438	4,120	41,606	4,387	59,551
Diarrhea or colitis age 3-17 years	19,593	8,810	68,675	3,722	100,800
Ear infections age <3 years	56,457	14,511	207,733	11,929	290,630
Ear infections age 3-17 years	100,409	30,240	305,332	21,810	457,791
Headaches or migraines age 3-17 years	105,067	36,654	320,141	16,070	477,932
Hayfever age <3 years	10,714	1,714	55,496	4,632	72,556
Hayfever age 3-17 years	218,541	66,531	445,508	48,980	779,560
Respiratory allergy age <3 years	24,993	9,982	85,676	7,901	128,552
Respiratory allergy age 3-17 years	244,321	68,526	517,554	40,991	871,392
Eczema or skin allergy age <3 years	26,060	11,872	69,274	6,598	113,804
Eczema or skin allergy age 3-17 years	130,622	55,627	293,597	42,949	522,795
Seizures age <3 years	2,780	1,022	19,989	2,439	26,230
Seizures age 3-17 years	10,698	3,813	28,934	3,466	46,911
Stuttered or stammered age 3-17 years	21,041	15,467	89,239	3,154	128,901
Trouble seeing age 3-17 years	35,588	19,435	142,452	18,237	215,712
Blind age 3-17 years	1,540	2,826	14,236	1,388	19,990
Head/Chest Cold Past 2 Weeks age 3-17 years	407,330	140,583	1,235,553	82,056	1,865,522
Stomach/Intestinal Illness Past 2 Weeks age 3-17 years	122,837	29,663	328,993	26,313	507,806
Total	2,046,686	724,285	5,458,025	457,887	8,686,883

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. National Center for Health Statistics, 2000 National Health Interview Survey (NHIS), 2002a.

Table 5.26

Projected Percent of the Prevalence of Diseases/Disorders in Texas by Race/Ethnicity and Type of Disease/Disorder for Adults (18 Years of Age and Older) and Children (17 Years of Age and Younger) in 2000 and 2040 Using the Population Projection That Assumes 1990-2000 Rates of Net Migration (1.0 Scenario)

	Anglo		Black		Hispanic		Other	
Disease/Disorder	2000	2040	2000	2040	2000	2040	2000	2040
Adults								
High Blood Pressure	63.0	30.9	15.1	12.2	19.1	44.3	2.8	12.6
Coronary Heart Disease	73.5	40.5	8.7	8.2	15.7	40.5	2.1	10.8
Angina Pectoris	70.2	36.3	7.9	6.7	19.6	43.9	2.3	13.1
Heart Attack	71.8	39.1	10.0	9.0	16.3	41.0	1.9	10.9
Other Heart Condition/Disease	72.3	41.7	10.4	10.0	15.1	39.2	2.2	9.1
Stroke	64.6	32.1	13.6	11.6	18.7	41.4	3.1	14.9
Emphysema	80.6	50.7	7.3	8.2	10.3	30.4	1.8	10.7
Asthma	62.1	28.9	11.7	9.4	23.3	52.3	2.9	9.4
Asthma Attack Past Year	62.6	27.2	11.1	8.8	23.7	52.5	2.6	11.5
Ulcer	71.0	38.5	10.4	9.7	16.4	42.2	2.2	9.6
Ulcer Past Year	57.7	25.1	13.9	11.6	25.9	55.0	2.5	8.3
Cancer	82.4	52.9	5.6	6.5	10.3	29.8	1.7	10.8
Diabetes	52.5	21.5	15.5	11.4	29.1	57.5	2.9	9.6
Hayfever Past Year	67.3	31.8	9.9	8.2	19.2	46.7	3.6	13.3
Sinusitis Past Year	68.6	36.5	12.1	11.0	17.1	45.1	2.2	7.4
Chronic Bronchitis Past Year	69.7	36.8	10.5	9.6	18.1	46.5	1.7	7.1
Weak/Failing Kidneys Past Year	53.9	22.2	13.7	10.2	29.1	54.3	3.3	13.3
Liver Condition Past Year	57.5	22.3	11.6	8.5	26.8	55.9	4.1	13.3
Joint Pain Past Year	70.4	36.4	9.7	8.9	17.5	44.8	2.4	9.9
Neck Pain Past 3 Months	64.4	28.3	8.0	6.5	24.7	55.6	2.9	9.6
Low Back Pain Past 3 Months	62.0	28.6	10.0	7.7	25.4	54.7	2.6	9.0
Low Back Pain Spread to Leg	59.0	24.8	10.5	8.3	28.0	57.7	2.5	9.2
Facial Pain Past 3 Months	66.2	29.0	7.3	6.1	23.5	55.6	3.0	9.3
Severe Headaches Past 3 Months	59.1	25.2	10.8	8.0	27.1	57.9	3.0	8.9
Head or Chest Cold 2 Weeks	59.5	26.5	11.8	9.2	26.1	56.3	2.6	8.0
Stomach or Intestinal Illness 2 Weeks	64.2	30.6	10.7	9.0	21.3	48.9	3.8	11.5
Pregnancy related	39.0	15.4	15.9	9.5	41.4	69.1	3.7	6.0
Ever Worn Hearing Aid	75.1	44.5	5.9	4.8	16.8	33.8	2.2	16.9
Vision Impairment	60.8	28.5	12.2	9.4	24.4	52.1	2.6	10.0
Blindness	46.2	19.2	14.4	7.1	37.6	66.8	1.8	6.9
Lost All Teeth	67.7	35.2	11.4	10.2	18.5	41.5	2.4	13.1
Sad Past Month	49.9	19.5	12.7	8.2	34.1	63.1	3.3	9.2
Nervous Past Month	60.3	26.2	9.0	7.0	28.1	59.7	2.6	7.1
Restless Past Month	60.7	27.7	10.8	8.4	25.9	56.4	2.6	7.5
Hopeless Past Month	48.9	17.6	10.4	6.6	37.1	66.4	3.6	9.4
Everything an Effort Past Month	57.2	25.6	13.7	10.0	25.6	55.1	3.5	9.3
Worthlessness Past Month	53.0	20.5	10.5	7.2	32.7	61.1	3.8	11.2
Total	63.1	29.9	10.9	8.9	23.3	51.4	2.7	9.8

Table 5.26, continued

Disease/Disorder	Anglo		Black		Hispanic		Other	
	2000	2040	2000	2040	2000	2040	2000	2040
Children								
Attention deficit disorder	61.5	34.0	11.4	8.1	26.0	55.3	1.1	2.6
Mental retardation age <2 years	12.8	4.5	18.6	8.0	67.6	86.0	1.0	1.5
Mental retardation age 2-17 years	47.7	23.6	20.0	13.2	29.1	56.3	3.2	6.9
Anemia age <3 years	29.4	12.5	20.1	10.3	48.9	74.3	1.6	2.9
Anemia age 3-17 years	31.2	13.2	22.1	11.8	44.8	71.4	1.9	3.6
Developmental delay age <2 years	72.4	55.2	18.6	17.3	3.3	9.1	5.7	18.4
Developmental delay age 2-17 years	53.8	28.5	16.7	11.5	28.2	57.2	1.3	2.8
Asthma	44.5	21.3	19.3	11.8	32.9	60.0	3.3	6.9
Down's syndrome	24.5	8.8	14.6	6.9	58.5	80.5	2.4	3.8
Cerebral palsy	51.9	26.4	14.5	9.4	30.2	56.7	3.4	7.5
Muscular dystrophy	21.5	7.9	18.4	8.5	58.7	81.2	1.4	2.4
Cystic fibrosis	93.1	76.7	0.0	0.0	0.0	0.0	6.9	23.3
Sickle cell anemia	2.8	1.1	44.1	21.2	52.9	77.4	0.2	0.3
Autism	53.4	27.1	13.7	8.9	29.1	55.7	3.8	8.3
Diabetes	55.3	28.2	10.7	6.7	30.4	56.8	3.6	8.3
Arthritis	51.1	26.9	20.5	14.1	24.9	50.9	3.5	8.1
Congenital heart disease	33.1	12.4	6.5	3.3	58.1	80.6	2.3	3.7
Other heart disease	50.3	24.6	14.0	8.5	32.0	59.2	3.7	7.7
Food or digestive disorder age <3 years	51.8	26.1	11.7	7.2	34.9	63.6	1.6	3.1
Food or digestive disorder age 3-17 years	55.3	28.0	12.2	7.8	27.4	53.1	5.1	11.1
Diarrhea or colitis age <3 years	37.1	15.8	13.4	6.9	45.3	69.9	4.2	7.4
Diarrhea or colitis age 3-17 years	43.4	19.5	15.1	8.7	39.6	68.1	1.9	3.7
Ear infections age <3 years	43.8	19.4	9.3	5.0	44.6	71.5	2.3	4.1
Ear infections age 3-17 years	47.4	21.9	11.5	6.6	38.7	66.7	2.4	4.8
Headaches or migraines age 3-17 years	47.9	22.0	12.8	7.7	37.6	67.0	1.7	3.3
Hayfever age <3 years	37.4	14.8	4.9	2.3	53.7	76.5	4.0	6.4
Hayfever age 3-17 years	55.2	28.0	12.8	8.5	29.2	57.2	2.8	6.3
Respiratory allergy age <3 years	42.5	19.4	13.9	7.8	40.3	66.7	3.3	6.1
Respiratory allergy age 3-17 years	55.3	28.0	12.1	7.9	30.5	59.4	2.1	4.7
Eczema or skin allergy age <3 years	46.0	22.9	17.2	10.4	33.9	60.9	2.9	5.8
Eczema or skin allergy age 3-17 years	49.8	25.0	16.8	10.6	29.6	56.2	3.8	8.2
Seizures age <3 years	28.5	10.6	8.6	3.9	56.8	76.2	6.1	9.3
Seizures age 3-17 years	48.3	22.8	13.8	8.1	34.3	61.7	3.6	7.4
Stuttered or stammered age 3-17 years	36.8	16.3	21.1	12.0	40.8	69.2	1.3	2.5
Trouble seeing age 3-17 years	38.7	16.5	16.2	9.0	40.5	66.0	4.6	8.5
Blind age 3-17 years	19.6	7.7	28.2	14.2	48.3	71.2	3.9	6.9
Head/Chest Cold Past 2 Weeks age 3-17 years	46.8	21.8	12.9	7.6	38.1	66.2	2.2	4.4
Stomach/Intestinal Illness Past 2 Weeks age 3-17 years	51.1	24.2	9.7	5.8	36.6	64.8	2.6	5.2
Total	49.1	23.6	13.6	8.3	34.7	62.8	2.6	5.3

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. National Center for Health Statistics, 2000 National Health Interview Survey (NHIS), 2002a.

Table 5.27

Projections of the Prevalence of Conditions Associated with Disabilities and Percent Change in Prevalence of Conditions Associated with Disabilities in Texas by Race/Ethnicity from 2000 to 2040 Using the Population Projection That Assumes 1990-2000 Rates of Net Migration (1.0 Scenario)

Year	Anglo	Black	Hispanic	Other	Total
			Number of Incidences		
2000	2,240,626	486,601	801,140	85,730	3,614,097
2010	2,525,027	625,836	1,283,148	181,153	4,615,164
2020	2,854,845	799,421	2,069,464	372,396	6,096,126
2030	3,239,208	1,009,514	3,329,050	688,951	8,266,723
2040	3,422,904	1,199,594	5,118,692	1,181,022	10,922,212
			Percent Change in Incidences		
2000-2010	12.7	28.6	60.2	111.3	27.7
2010-2020	13.1	27.7	61.3	105.6	32.1
2020-2030	13.5	26.3	60.9	85.0	35.6
2030-2040	5.7	18.8	53.8	71.4	32.1
2000-2040	52.8	146.5	538.9	1,277.6	202.2

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. National Center for Health Statistics, 2000 National Health Interview Survey (NHIS), 2002a.

Table 5.28

Health Personnel in Texas by Type in 2000 and Projections for 2010 and 2040
Using the Population Projection That Assumes 1990-2000 Rates of Net Migration (1.0 Scenario)

Health Personnel	Race/Ethnicity of Person Served				
	Anglo	Black	Hispanic	Other	Total
2000 Actual					
Physicians	23,805	574	2,482	4,905	31,766
Dentists	6,601	148	297	371	7,417
Optometrists	1,697	48	159	273	2,177
Pharmacists	12,940	1,680	1,344	236	16,200
Registered Nurses	103,016	8,788	9,160	10,244	131,208
Veterinarians	4,450	15	31	16	4,512
Podiatrists	708	73	49	60	890
Total	153,217	11,326	13,522	16,105	194,170
Projected to Reflect Population's Race/Ethnicity Distribution					
2000					
Physicians	16,032	1,146	11,412	1,941	30,531
Dentists	4,433	290	1,364	146	6,233
Optometrists	1,150	100	729	108	2,087
Pharmacists	8,706	3,343	6,171	96	18,316
Registered Nurses	69,338	17,492	42,070	4,057	132,957
Veterinarians	2,995	33	146	7	3,181
Podiatrists	480	142	219	24	865
Total	103,134	22,546	62,111	6,379	194,170
2010					
Physicians	16,926	1,352	17,386	3,308	38,972
Dentists	4,693	347	2,071	255	7,366
Optometrists	1,205	114	1,123	186	2,628
Pharmacists	9,215	3,961	9,409	154	22,739
Registered Nurses	73,239	20,677	64,111	6,919	164,946
Veterinarians	3,169	37	218	14	3,438
Podiatrists	514	171	338	38	1,061
Total	108,961	26,659	94,656	10,874	241,150
2040					
Physicians	17,692	1,893	51,186	12,577	83,348
Dentists	4,905	480	6,107	952	12,444
Optometrists	1,250	161	3,285	697	5,393
Pharmacists	9,618	5,514	27,699	605	43,436
Registered Nurses	76,550	28,865	188,745	26,264	320,424
Veterinarians	3,307	45	635	45	4,032
Podiatrists	534	244	1,008	147	1,933
Total	113,856	37,202	278,665	41,287	471,010

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Department of Health, Health Professions Resource Center [online], 2002. U.S. Department of Health and Human Services, State Health Workforce Profiles: Texas, 2000c.

Table 5.29

Number of Physician Office Contacts and Associated Costs
in Texas by Age of Patient in 2000 and Projections for 2010 and 2040
Using the Population Projection That Assumes 1990-2000 Rates
of Net Migration (1.0 Scenario)

Age of Patient	Number of Contacts	Total Costs* (in thousands)
	2000	
<18	11,068,534	$ 1,536,202
18-44	18,018,157	2,500,745
45-54	7,955,812	1,104,199
55-64	6,464,474	897,204
65-74	5,952,126	826,098
75+	6,317,815	876,846
Total	55,776,918	7,741,294
	2010	
<18	12,618,491	$ 1,751,323
18-44	21,587,911	2,996,186
45-54	10,678,480	1,482,068
55-64	10,584,743	1,469,065
65-74	7,693,700	1,067,816
75+	7,601,209	1,054,976
Total	70,764,534	9,821,434
	2040	
<18	20,319,756	$ 2,820,181
18-44	39,664,811	5,505,078
45-54	20,696,918	2,872,530
55-64	22,540,343	3,128,368
65-74	22,134,347	3,072,025
75+	25,327,337	3,515,179
Total	150,683,512	20,913,361

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. National Center for Health Statistics, Health, United States, 2001: With Urban and Rural Health Chartbook, 2001. Cohen et al., Health Care Expenses in the United States: 1996, 2000.

* Total costs in thousands of constant 2000 CPI-U-RS dollars.

Table 5.30

Days of Hospital Care and Associated Costs in Texas
by Age of Patient in 2000 and Projections for 2010 and 2040
Using the Population Projection That Assumes 1990-2000 Rates of
Net Migration (1.0 Scenario)

Age of Patient	Days of Care	Total Costs* (in thousands)
	2000	
<18	1,091,994	$ 230,894
18-44	2,751,707	993,942
45-54	1,177,623	605,353
55-64	1,270,721	1,151,621
65-74	1,803,150	3,243,392
75+	2,801,768	9,621,665
Total	10,896,963	15,846,867
	2010	
<18	1,244,929	$ 263,223
18-44	3,313,361	1,196,817
45-54	1,584,346	814,428
55-64	2,082,853	1,887,624
65-74	2,332,088	4,194,788
75+	3,374,192	11,587,451
Total	13,931,769	19,944,331
	2040	
<18	2,004,738	$ 423,877
18-44	6,116,316	2,209,268
45-54	3,096,606	1,591,811
55-64	4,464,463	4,046,013
65-74	6,715,870	12,080,036
75+	11,263,916	38,681,860
Total	33,661,909	59,032,865

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. National Center for Health Statistics, Health, United States, 2001: With Urban and Rural Health Chartbook, 2001.

*Total costs in thousands of constant 2000 dollars.

Table 5.31

Number of Nursing Home Residents and Total Monthly Costs in Texas by Age of Resident in 2000 and Projections for 2010 and 2040 Using the Population Projection That Assumes 1990-2000 Rates of Net Migration (1.0 Scenario)

Age of Resident	Number of Residents	Total Costs*
	2000	
0-64	12,394	$ 34,748,450
65-74	12,041	33,758,760
75-84	24,674	69,177,287
85+	32,228	90,356,063
Total	81,337	228,040,560
	2010	
0-64	15,378	$ 43,114,542
65-74	15,583	43,689,294
75-84	29,703	83,276,850
85+	40,411	113,298,343
Total	101,075	283,379,029
	2040	
0-64	28,109	$ 78,807,821
65-74	44,928	125,962,438
75-84	101,743	285,251,865
85+	134,491	377,065,828
Total	309,271	867,087,952

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. National Center for Health Statistics, National Nursing Home Survey 1999, [online], 2002b. Texas Health and Human Services Commission, Nursing Facility Program, 1999. Rate Analysis for Long-Term Care Services [online], 2002.

*Total costs in constant 2000 dollars.

Chapter 6

The Labor Force and Labor Force-Related Programs

In this chapter, we examine the implications of population change for the labor force and for State programs aimed at assisting Texas residents in obtaining labor force training, including those receiving such training as a result of welfare reform legislation (see Chapter 8 for a discussion of the human service implications of these reforms). After reviewing recent changes in the labor force, we provide projections of the labor force and examine the implications of the projected changes for several characteristics of the labor force.

Historical Trends in the Labor Force of Texas

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 (see Table 6.1). 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. The rate of growth in the labor force has slowed over the past decade both in percentage terms and relative to population growth as a result of the aging of the population out of the initial labor force entrance years of age. In the United States, the 9.8 percent increase in the population in the 1980s and the 13.2 percent increase in the 1990s was accompanied by 18.2 percent and 11.5 percent increases in the labor force. The labor force in Texas increased by 25.0 percent in the 1980s but by 19.6 percent in the 1990s whereas the population of Texas increased by 19.4 percent in the 1980s and by 22.8 percent in the 1990s. Despite the recent patterns of slower growth, the 1980-2000 increase in the labor force resulted in 3,255,883 new members being added to the Texas labor force and 33,218,981 to the labor force of the United States.

The data in Table 6.2 provide a comparison of the occupational and industrial characteristics of the labor forces in Texas and in the United States in 2000. Unfortunately, changes in categories between 1990 and 2000 make longitudinal comparisons impossible, and therefore data for earlier periods are not shown. The data in this table indicate that the labor force of Texas was quite similar to that in the nation in 2000. Only its somewhat smaller level of employment in manufacturing and larger percentage employed in construction industries, and related differences in construction and production related occupations, show distributional differences that are greater than 1.0 percent. Texas labor force has come to increasingly reflect the national labor force.

Overall, such data suggest that the labor force of Texas has increased substantially in the past several decades but, like that in the nation, is showing slower rates of growth relative to the population because the baby-boom generation has passed beyond those ages associated with initial labor force entrance and is followed by a relatively smaller cohort. The historical levels of growth in the labor force of Texas make it clear, however, that changes in it are of importance for understanding the future of Texas.

Projections of the Civilian Labor Force and Related Factors

The projections of the civilian labor force (shown in Tables 6.3-6.7) required the use of relatively elaborate procedures because appropriate data were not yet available from the 2000 Census at the time this volume was completed. Additionally, industry and related classification systems were substantially revised during the 1990s as federal agencies (including the U.S. Census Bureau and Bureau of Labor Statistics) converted from the Standard Industrial Code

(SIC) system to the North American Industrial Classification System (NAICS), making historical comparisons nearly impossible.

The projections of the labor force were completed by applying age-, sex-, and race/ethnicity-specific labor force participation rates to age-, sex-, and race/ethnicity-specific projected population values. Because data were not available on the labor force by age, sex, and race/ethnicity, it was necessary to develop such data as a basis for computing labor force participation rates. To simulate labor force values by age, sex, and race/ethnicity for 2000, 2000 Census data were employed on the total labor force by age and on the total labor force by sex and race/ethnicity. The number of persons in the labor force by age, sex, and race/ethnicity was then estimated using 1990 labor force participation rates to obtain initial age-, sex-, and race/ethnicity-specific values that were then raked to adjust the values to reflect the 2000 Census data that were available on the total labor force by age and on the labor force by sex and race/ethnicity. These values were then examined for reasonableness relative to 1990 and other 2000 data and used as the numerators for the computation of age-, sex-, and race/ethnicity-specific labor force participation rates. These rates were obtained by dividing the labor force values by the population in 2000. These age-, sex-, and race/ethnicity-specific rates were assumed to remain constant across the projected period and applied to the projections of the population to obtain projections of the labor force by age, sex, and race/ethnicity. Because of the assumption of constancy in rates, sex ratios by age and race/ethnicity for the labor force remain constant and sex differences in employment patterns are therefore not discussed.

Data on the educational attainment of the labor force and on the occupational structure of the labor force by demographic characteristic were not available in the 2000 Census. These were simulated using Current Population Survey (CPS) data for Texas averaged for the years of 1999-

2001 to obtain baseline rates that were applied to the labor force projections. They are, therefore, affected by differences between census and CPS data for these years (see Tables 6.8-6.11).

The projections of wages and salary income were obtained by using 2000 Census data. Age-, sex-, race/ethnicity-, and salary-and-wage-level-specific rates for 2000 were developed and applied to the projections of the labor force to obtain projections of the wage and income levels of future members of the labor force (see Tables 6.12 and 6.13).

The projections of the levels of involvement in specific labor force training programs were computed using data on the number of participants in 2000 in each of the categories of programs shown obtained from the Texas Workforce Commission (2002a). These values were divided by 2000 population values to obtain age-, sex-, and race/ethnicity-specific participation rates, and these rates were applied to projections of the population to obtain projections of the number of participants in each program across the projection period, assuming that the rates of participation remain constant (see Tables 6.14-6.16).

Because several elements of the 2000 base data required estimation, occupational classification categories were different (and largely noncomparable) for the labor force in 2000 from those used in 1990, and labor force training programs had been restructured in the latter part of the 1990s due to welfare reform and other factors, insufficient comparable data were available for 1990 from which to derive rates for alternative simulations; therefore no alternative projection simulations are provided for the labor force.

As in other chapters, those projections provided here are intended to be simply exemplary and are not appropriate for short-term planning purposes. Near-term projections, and more detailed data on the Texas labor force in general, should be obtained from the Texas Workforce Commission.

Projections of the Labor Force

The total labor force increases 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 (see Tables 6.3 and 6.4). These increases are slower rates of growth 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 labor force will have characteristics reflective of the population. The non-Anglo labor force grows more rapidly than the Anglo labor force. For example, whereas the number of Anglos declines by 5.2 percent from 2000 to 2040 under the 0.5 scenario and increases by only 2.0 percent under the 1.0 scenario, the increases for the Black population are 43.1 percent and 74.9 percent, the increases for the Hispanic population are 193.6 and 406.0 percent, and the increases for the Other population are 142.2 and 470.5 percent under the 0.5 and 1.0 scenarios, respectively. As a result, whereas the percentage of the labor force composed of Anglos was 58.4 percent in 2000, with Blacks accounting for 10.7 percent, Hispanics for 27.5 percent, and persons from the Other racial/ethnic group for 3.4 percent, by 2040 under the 0.5 scenario, 34.7 percent of the labor force would be composed of Anglos, 9.6 percent of Blacks, 50.5 percent of Hispanics, and 5.2 percent of persons from the Other racial/ethnic group. Under the 1.0 scenario, the 2040 percentages are 25.2 percent, 7.9 percent, 58.7 percent, and 8.2 percent for Anglos, Blacks, Hispanics, and persons from the Other racial/ethnic group, respectively (see Table 6.5). Overall, under the 0.5 scenario all of the net change in the labor force from 2000 to 2040 is attributable to the non-Anglo labor force (because the number of Anglos in the labor force decreases by 5.2 percent), and 89.2 percent is attributable to the Hispanic labor force. Under the

1.0 scenario, 99.2 percent of the net change from 2000 to 2040 is attributable to non-Anglos and 81.6 percent to Hispanics (see Table 6.6). The change in the labor force reflects the change in the population of Texas, growing substantially and diversifying rapidly.

Table 6.7 also shows that 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, 41.2 percent of the labor force will be 45 years or older by 2040 under the 0.5 scenario, and 40.6 percent under the 1.0 scenario (in which there is faster growth in younger non-Anglo populations). Similarly, the workforce less 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 aging of the population results in an aging of the labor force.

The projections point to a labor force that is likely to grow substantially, although less rapidly than the population due to the aging of the population. The labor force will become increasingly non-Anglo such that it changes from roughly 58 percent Anglo in 2000 to between 65.3 percent (under the 0.5 scenario) and 74.8 percent (under the 1.0 scenario) non-Anglo by 2040. Similarly, the labor force ages, with more than 40 percent of all workers being 45 years of age or older (under both scenarios) by 2040.

Implications of Population Change for the Future Characteristics of the Labor Force

In this section, we examine the implications of the change in the labor force for a variety of socioeconomic factors. Tables 6.8 and 6.9 show data on the projected changes in the educational level of the labor force, Tables 6.10 and 6.11 projected changes in the occupational distribution of the labor force, and Tables 6.12 and 6.13 projected changes in the salary and wages of the labor force in the coming decades. All projections assume that 2000 age and

race/ethnicity patterns for education, occupation, and salaries and wages prevail throughout the entire projection period. Due to space limitations only data for the 1.0 scenario are shown.

Implications for the Educational Level of the Work Force

Hispanics come to form a larger percentage of the total number of people at all educational levels than they were in 2000. When compared to their proportions of the total labor force, however, Anglos and persons from the Other racial/ethnic group form larger proportions in the categories with the highest levels of education, but the opposite is generally true for Hispanics. For example, in 2040 under the 1.0 scenario, Hispanics would account for 58.7 percent of the labor force but would make up 58.7 percent or more of the labor force only in the categories of less than a ninth grade education and 9 to 12 years of education (but no high school diploma). Anglo percentages exceed their percentage of the labor force (25.2 percent) under the 1.0 scenario only for the educational levels higher than high school, and among persons from the Other racial/ethnic group, the percentage is higher only in the bachelor's and graduate and professional degree categories of educational attainment. The data in Table 6.8 suggest continuing differentials in educational attainment among racial/ethnic groups in Texas.

Table 6.9 shows data on educational attainment level by race/ethnicity and for the total labor force. Because of the assumption that educational levels of the labor force remain constant across the projection period within racial/ethnic groups, the percentages of the labor force in educational attainment levels within race/ethnicity remain relatively constant. An examination of the total percentages by educational level in Table 6.9 and Figure 6.1, however, shows that, in the absence of change in the educational characteristics of Blacks and Hispanics, populations that are projected to grow more rapidly than the Anglo population, the labor force in Texas in the future will be less well educated than it was in 2000. For example, 5.3 percent of the labor force had a

graduate degree and 18.2 percent a bachelor's degree in 2000, but under the 1.0 scenario, 4.4 would have a graduate degree and 12.9 percent a bachelor's degree in 2040. On the other hand, only 18.8 percent had less than a high school level of education in 2000, but 30.1 percent would have that level of education in 2040 under the 1.0 scenario. Demographic change, in the absence of socioeconomic change, will lead to a less well educated labor force in Texas.

Implications for Occupational Skill Levels

Tables 6.10 and 6.11 show data similar in form to those in Tables 6.8 and 6.9 but they are for occupational characteristics of the labor force. The data in Table 6.10 show that the percentage of non-Anglos increases over time under both scenarios. What is also obvious, however, is that, in the absence of changes in the occupational distribution of the non-Anglo labor force, Anglos would continue to occupy a disproportionate share of executive and professional positions while non-Anglos would continue to occupy a disproportionate share of the nontechnical and non-managerial occupations. For example, by 2040 under the 1.0 scenario, although Anglos would make up only 25.2 percent of the labor force, they would still account for 39.4 percent of those in executive positions and for 42.2 percent of those in professional positions, while Hispanics who would make up 58.7 percent of the labor force would account for only 40.0 percent of those in executive positions and 39.0 percent of those in professional positions. On the other hand, Anglos would account for only 10.2 percent of machine operators, 10.9 percent of handlers and equipment cleaners, and 14.8 percent of the unemployed, but Hispanics would account for 72.2 percent of machine operators, 76.4 percent of handlers, and for 68 percent of the unemployed. Blacks show similar disproportionate shares of the unemployed and are unrepresented in the executive, professional, and technical occupations. Labor force members from the Other racial/ethnic group are disproportionately concentrated in executive,

professional, and technical occupations at levels similar (proportionate to their share of the population) to Anglos.

The data in Table 6.11 again show relatively constant proportions across years within race/ethnicity categories because of the assumption of constancy in age- and race/ethnicity-specific rates over time. The total column in Table 6.11 and Figure 6.2 show that, in the absence of change in the occupational structure of Black and Hispanic populations, the growth in these populations will lead to declines in the percentages of the labor force in executive, professional, and technical occupations, to increases in the percentages in less technical jobs, and to an increase in the percentage of the labor force that is unemployed. By 2040 under the 1.0 scenario, the percentages of the labor force in executive and professional positions decline about 2 to 4 percent compared to the percentages in these categories in 2000, while the percentages in the operator, handler, and similar positions increase. Current demographic patterns, if accompanied by current occupational differentials among race/ethnicity groups, will lead to a labor force that is generally less skilled in the future than it is today.

Implications for Earnings

Tables 6.12 and 6.13 present data on earnings (salary and wages) in the labor force that are similar to those for education and occupation. Because earnings (i.e., salary and wages) are not reported for all positions and the source for these data is different (the 2000 Census) from the source for the two preceding items examined (the Current Population Survey), the values for the total labor force presented in these tables are slightly different from those in the preceding tables. Anglos and persons from the Other racial/ethnic group are proportionately overrepresented at upper salary and wage levels and underrepresented at lower salary and wage levels in 2000 and are projected to continue to be so in the future (see Table 6.12). For example, Anglos who would

account for 25.8 percent of the labor force with earnings in 2040 under the 1.0 scenario would form a percentage of the labor force larger than 25.8 percent for only those salary and wage levels of $25,000 or more. Similarly, labor force members in the Other racial/ethnic group would account for 8.6 percent of the labor force in 2040 under the 1.0 scenario and would account for a percentage larger than the 8.6 percent for only those salary and wage categories of $35,000 or more. On the other hand, the patterns for Blacks and Hispanics are quite different. For Blacks, the proportion of the total labor force in 2040 under the 1.0 scenario would be 7.7 percent, but they would account for more than 7.7 percent of labor force members in four of the six categories below $50,000 and are under represented at all higher salary and wage levels. Hispanics, who are 57.9 percent of all labor force members with earnings in 2040 under the 1.0 scenario, would account for that percentage or more of the number of labor force members only in those earnings categories less than $25,000. Overall, then, the data in Table 6.12 suggest a continuation of lower earnings among two of the three non-Anglo groups with the pattern of lower earnings being particularly evident among Hispanics.

Table 6.13 shows earnings within race/ethnicity groups and the implications of population change for the earnings of the total labor force. Again, because of the use of constant age- and race/ethnicity-specific rates across time, percentages by salary and wage level within race/ethnicity group are relatively constant. The values for the total wage-earning labor force are presented in the final columns of the table. Projected demographic change will markedly impact the earnings structure of employees if the salary and wage differentials among racial/ethnic groups remain as they were in 2000. For example, the median wage and salary level of all workers with earnings was $23,398 in 2000 but would be $20,129 (in 2000 constant dollars) in 2040 under the 1.0 scenario. Similarly, whereas 17 percent of the labor force was earning

$50,000 or more in 2000, 12.3 percent would have earnings at that level in 2040 under the 1.0 scenario; 33.5 percent had earnings below $15,000 per year in 2000, but 38.4 percent would have earnings below $15,000 in 2040 under the 1.0 scenario. Unless there are changes in earnings differentials, the relative earnings of the labor force in 2040 would be less (in 2000 constant dollars) than they were in 2000 (see Table 6.13 and Figure 6.3).

Implications for Labor Force Training Programs

The data in Tables 6.14-6.18 and Figure 6.4 show the implications of the projected labor force for a variety of work force training programs in Texas. As noted above, these projections indicate the percentage of the labor force that would be in specific programs given the 2000 rates of participation in these programs as projected from Texas Workforce Commission data.

The total number of participants in all labor force training programs would increase from 273,411 in 2000 to 480,202 in 2040 under the 0.5 scenario and to 739,959 in 2040 under the 1.0 scenario (see Table 6.14), numerical increases of 206,791 and 466,548, and percentage increases of 75.6 percent and 170.6 percent under the 0.5 and 1.0 scenarios, respectively (see Table 6.15). Enrollment in these programs, which are intended to serve those with the highest level of need for training, is projected to grow more rapidly than the population, which increases by 67.9 and 142.6 percent from 2000 to 2040 under the 0.5 and 1.0 scenarios, and faster than the 59.6 percent and 136.7 percent rate of growth projected in the labor force under the 0.5 and 1.0 scenarios, respectively.

Total enrollment in these programs involves larger proportions of participants who are non-Anglo than in the labor force as a whole. For example, whereas 21.7 percent of all participants were Anglo in 2000, 29.0 percent were Black, 47.9 percent were Hispanic, and 1.4 percent were from the Other racial/ethnic group (see Table 6.16), 58.4 percent of the labor force

as a whole was Anglo, 10.7 percent Black, 27.5 percent Hispanic, and 3.4 percent from the Other racial/ethnic group. The higher proportions of non-Anglos in these programs than in the labor force continue into the future. Under the 0.5 scenario in 2040, 10.9 percent of all participants in these training programs would be Anglo, 18.8 percent Black, 68.5 percent Hispanic, and 1.8 percent members of the Other racial/ethnic group, and under the 1.0 scenario the 2040 values would be 7.6 percent, 15.1 percent, 74.6 percent, and 2.7 percent for Anglo, Black, Hispanic, and Other participants, respectively. By comparison, the workforce in 2040 under the 0.5 scenario is 34.7 percent Anglo, 9.6 percent Black, 50.5 percent Hispanic, and 5.2 percent from the Other racial/ethnic group, while under the 1.0 scenario, the percentage composition of the labor force is 25.2 percent Anglo, 7.9 percent Black, 58.7 percent Hispanic, and 8.2 percent members of the Other racial/ethnic group.

Enrollment data for specific programs are shown in Table 6.17 and Figure 6.4. The data show rapid growth in virtually all programs with the most rapid growth in Title III and IV programs (related to veterans and defense closures) and the Workforce Investment Act (WIA) dislocated worker program and the slowest growth in the WIA Youth program and programs resulting from welfare reform legislation. The number of participants in the Title III and IV programs increases by 350.7 and the number in the dislocated worker program by 202.6 percent from 2000 to 2040 under the 1.0 scenario while the percentage increase for the same period for the same scenario for the WIA Youth program is 134.2 percent and that for the welfare-related programs is 162.5 percent. In all programs, however, absolute growth in the number of participants is extensive, and these programs have, and are projected to continue to have, largely non-Anglo participants. More than 86 percent of all of the participants in each of these programs in 2040 under the 1.0 scenario are projected to be non-Anglo and at least 50 percent in all

programs are projected to be Hispanic, with Hispanics accounting for approximately 70 percent or more of all participants in five of the six program areas.

Table 6.18 shows the fiscal implications of growth in these specialized programs. State expenditures for all of these programs would increase from $97.1 million in 2000 to $177.4 million by 2040 under the 0.5 scenario and to $276.8 million under the 1.0 scenario. The increase in expenditures from 2000 to 2040 would be approximately $80.3 million under the 0.5 scenario and $179.8 million under the 1.0 scenario. The changing characteristics of the Texas population are likely to have substantial implications for the costs for work force training programs.

The data on work force programs indicate that such programs will grow rapidly in the coming years as a result of the higher levels of involvement of the fastest growing segments of Texas labor force in these programs. The extensive growth of non-Anglo, particularly Hispanic, labor force members will lead such programs to have higher percentages of growth than either the population or the labor force. The increase in the number of participants in these programs will bring comparable increases in costs. Such programs will play an increasing role in addressing the training needs of the Texas work force in the coming years.

Summary

In this chapter we have examined the implications of population change for the labor force of Texas. Projections of the labor force were provided and the implications of the projected changes in the labor force traced across several dimensions. Because of a lack of sufficient 2000 Census data on the labor force at the time this publication was prepared and categories for several labor force characteristics that were used for the first time in the 2000 Census, historical

comparisons for several labor force characteristics were not possible. The results of the analysis indicate that:

1. 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. The rate of growth in the labor force has slowed over the past decade, both in percentage terms and relative to population growth, as a result of the aging of the population out of the initial labor force entrance years of age. The Texas labor force increased by 25.0 percent in the 1980s but by 19.6 percent in the 1990s, whereas the population of Texas increased by 19.4 percent in the 1980s and by 22.8 percent in the 1990s. Despite the recent patterns of slower growth, 3,255,883 new persons were added to the Texas labor force between 1980 and 2000. These patterns are similar to those in the nation. In addition, a comparison of Texas and national employment data indicate that the Texas labor force is similar to that in the nation in terms of the percentages of the labor force employed in different occupations and industries.

2. 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 percentage increases of 59.6 percent under the 0.5 scenario and 136.7 percent increase under the 1.0 scenario. These are slower rates of growth than the 67.9 and 142.6 percent increases projected for the total population, reflecting the continuing influence of the aging of the population.

3. The non-Anglo labor force grows more rapidly than the Anglo labor force. The number of Anglos declines by 5.2 percent from 2000 to 2040 under the 0.5 scenario and

increases by only 2.0 percent under the 1.0 scenario, the increases for the Black population are 43.1 percent and 74.9 percent, the increases for the Hispanic population are 193.6 and 406.0 percent, and the increases for the Other population are 142.2 and 470.5 percent under the 0.5 and 1.0 scenarios, respectively. As a result, whereas 58.4 percent of the labor force was Anglo in 2000, with Blacks accounting for 10.7 percent, Hispanics for 27.5 percent, and persons from the Other racial/ethnic group for 3.4 percent, by 2040 under the 0.5 scenario, Anglos will compose 34.7 percent of the labor force, Blacks 9.6 percent, Hispanics 50.5 percent, and persons from the Other racial/ethnic group 5.2 percent. Under the 1.0 scenario in 2040 the labor force will be 25.2 percent Anglo, 7.9 percent Black, 58.7 percent Hispanic, and 8.2 percent persons from the Other racial/ethnic group. All of the net change in the labor force from 2000 to 2040 under the 0.5 scenario is attributable to the non-Anglo population (because the number of Anglos in the labor force decreases by 5.2 percent), and 89.2 percent is due to the Hispanic population, while under the 1.0 scenario, 99.2 percent of the net change from 2000 to 2040 is attributable to non-Anglos and 81.6 percent to Hispanics.

4. 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 the percentage 45 years of age or older would be 41.2 under the 0.5 scenario and 40.6 under the 1.0 scenario. The workforce less 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.

5. Projections of the educational characteristics of the labor force show that Hispanics come to form a larger percentage of the total number of labor force members at all educational levels than they were in 2000. Anglos and persons from the Other racial/ethnic group form larger proportions of the labor force in the categories with the highest levels of education than they are

of the total labor force, but the opposite is true for Hispanics. In 2040, under the 1.0 scenario, Hispanics would account for 58.7 percent of the labor force but would make up that percent or more only in the educational categories of less than a ninth grade education and 9 to 12 years of education (but no high school diploma); Blacks, who account for 7.9 percent of the labor force, exceed their share of the labor force for the educational categories of high school graduate, some college, associate degree, and graduate degree; Anglos exceed their percentage of the labor force (25.2 percent) only for the educational levels higher than high school; and among persons from the Other racial/ethnic group, the percentage is higher only in the bachelor's and graduate or professional degree categories of educational attainment. 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, in 2040 under the 1.0 scenario, 4.4 percent would have a graduate degree and 12.9 percent a bachelor's degree. In addition, while only 18.8 percent had less than a high school level of education in 2000, by 2040 under the 1.0 scenario, 30.1 percent would have only that level of education.

6. Projections of the occupational characteristics of the labor force show that the percentage of non-Anglos increases over time under both scenarios. In the absence of changes in the occupational distribution of the labor force, Anglos would continue to occupy a disproportionate share of executive and professional positions while non-Anglos would continue to occupy a disproportionate share of the nontechnical and non-managerial occupations. For example, under the 1.0 scenario, although Anglos would make up only 25.2 percent of the labor force, they would still account for more than 39.4 percent of those in executive positions and for

42.2 percent of those in professional positions, but for only 10.2 percent of machine operators, 10.9 percent of handlers and equipment cleaners, and 14.8 percent of the unemployed, while Hispanics who would make up 58.7 percent of the labor force would account for only 40.0 percent of those in executive positions, 39.0 percent of those in professional positions, 72.2 percent of machine operators, 76.4 percent of handlers, and 68 percent of the unemployed. 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.

7. Projections of the earnings of the labor force show that Anglos and persons from the Other racial/ethnic group are proportionately over represented at upper wage and salary levels and under represented at lower wage levels in 2000 and are projected to continue to be so in the future, while the opposite is true for Blacks and Hispanics. Anglos who account for 25.8 percent of the labor force in 2040 under the 1.0 scenario would account for a larger percentage of the labor force only for wage levels above $25,000; labor force members in the Other racial/ethnic category would account for 8.6 percent of the labor force but account for a percentage larger than that for only those income categories above $35,000; Blacks' proportion of the total labor force would be 7.7 percent but they would account for a larger percentage in four of the six categories below $50,000 and are under represented at all higher wage levels; and Hispanics, who would be 57.9 percent of the labor force in 2040, would account for that percentage or more only in those salary and wage categories of less than $25,000. Projected demographic change will reduce the average level of salary and wages. The median wage level of all workers with earnings was $23,398 in 2000 but would be $20,129 in 2040 (in 2000 constant dollars) under the 1.0 scenario.

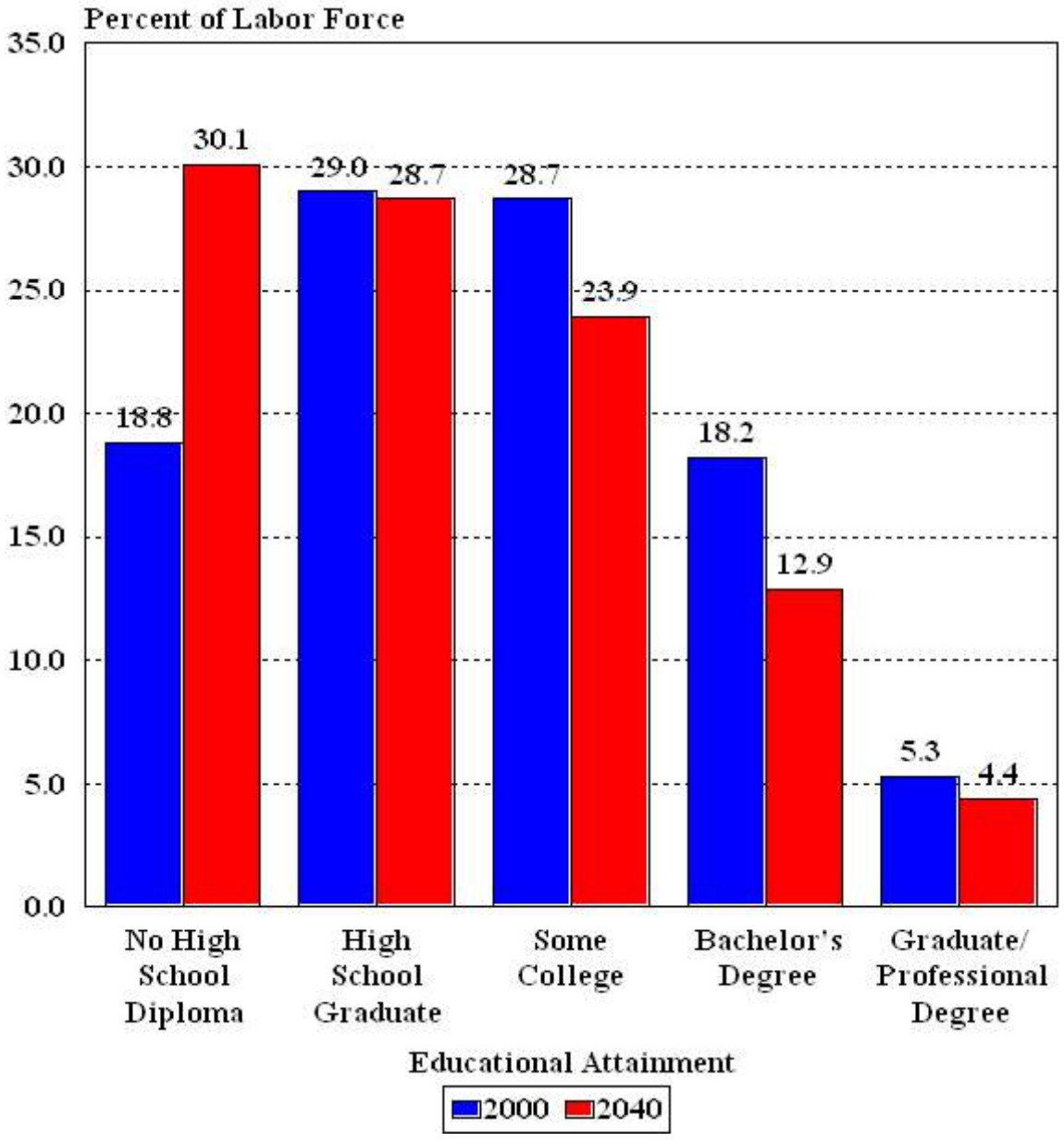
8. Projections of the number of persons in labor force training programs indicate that the total number of participants in all programs would increase from 273,411 in 2000 to 480,202 in 2040 under the 0.5 scenario and to 739,959 in 2040 under the 1.0 scenario, numerical increases of 206,791 and 466,548, and percentage increases of 75.6 percent and 170.6 percent, under the 0.5 and 1.0 scenarios, respectively. Growth in the enrollment in these programs exceeds increases in the population (of 67.9 and 142.6 percent from 2000 to 2040 under the 0.5 and 1.0 scenarios), and the 59.6 percent and 136.7 percent rates of growth projected in the labor force from 2000 to 2040 under the 0.5 and 1.0 scenarios, respectively. These programs involve larger proportions of participants who are non-Anglo than the labor force as a whole, reflecting the fact that they are intended to serve those with the highest levels of need for such training. Whereas 21.7 percent of participants in these programs were Anglo in 2000, 29.0 percent were Black, 47.9 percent were Hispanic, and 1.4 percent were from the Other racial/ethnic group, 58.4 percent of the labor force as a whole were Anglo, 10.7 percent Black, 27.5 percent Hispanic, and 3.4 percent from the Other racial/ethnic group. The higher proportions of Blacks and Hispanics in these training programs than in the labor force as a whole continue into the future such that under the 1.0 scenario in 2040, 7.6 percent, 15.1 percent, 74.6 percent, and 2.7 percent of all participants would be Anglo, Black, Hispanic, and Other participants, respectively, while the workforce in 2040 would be 25.2 percent Anglo, 7.9 percent Black, 58.7 percent Hispanic, and 8.2 percent members of the Other racial/ethnic group. All of the individual programs show relatively rapid growth and large proportions of non-Anglos with more than 80 percent of the participants in all of these programs in 2040 being non-Anglo (under the 1.0 scenario). State expenditures for these programs would increase from $97.1 million in 2000 to $177.4 million

under the 0.5 scenario by 2040 and to $276.8 million under the 1.0 scenario, 2000 to 2040 increases of $80.3 million under the 0.5 scenario and $179.8 million under the 1.0 scenario.

Overall, the results in this chapter point to a labor force that would grow rapidly in the future, although slower than the population, and 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). The demographics of the State have substantial implications for the future of the Texas labor force, and through the labor force, the economic competitiveness of Texas.

Figure 6.1

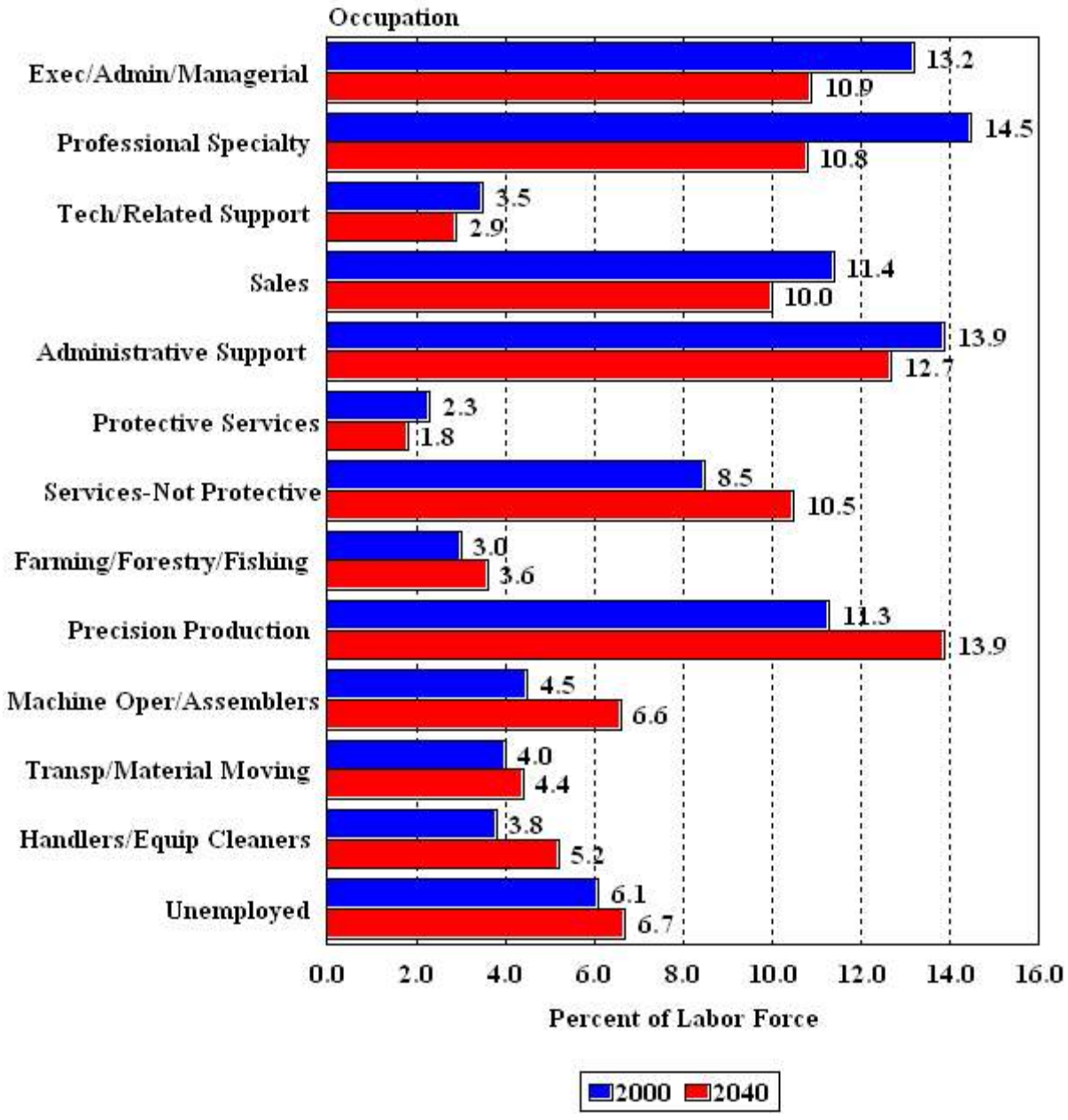
Percent of Civilian Labor Force in Texas by Educational Attainment in 2000 and Projections for 2040*



*** Projections are shown for the 1.0 scenario**

Figure 6.2

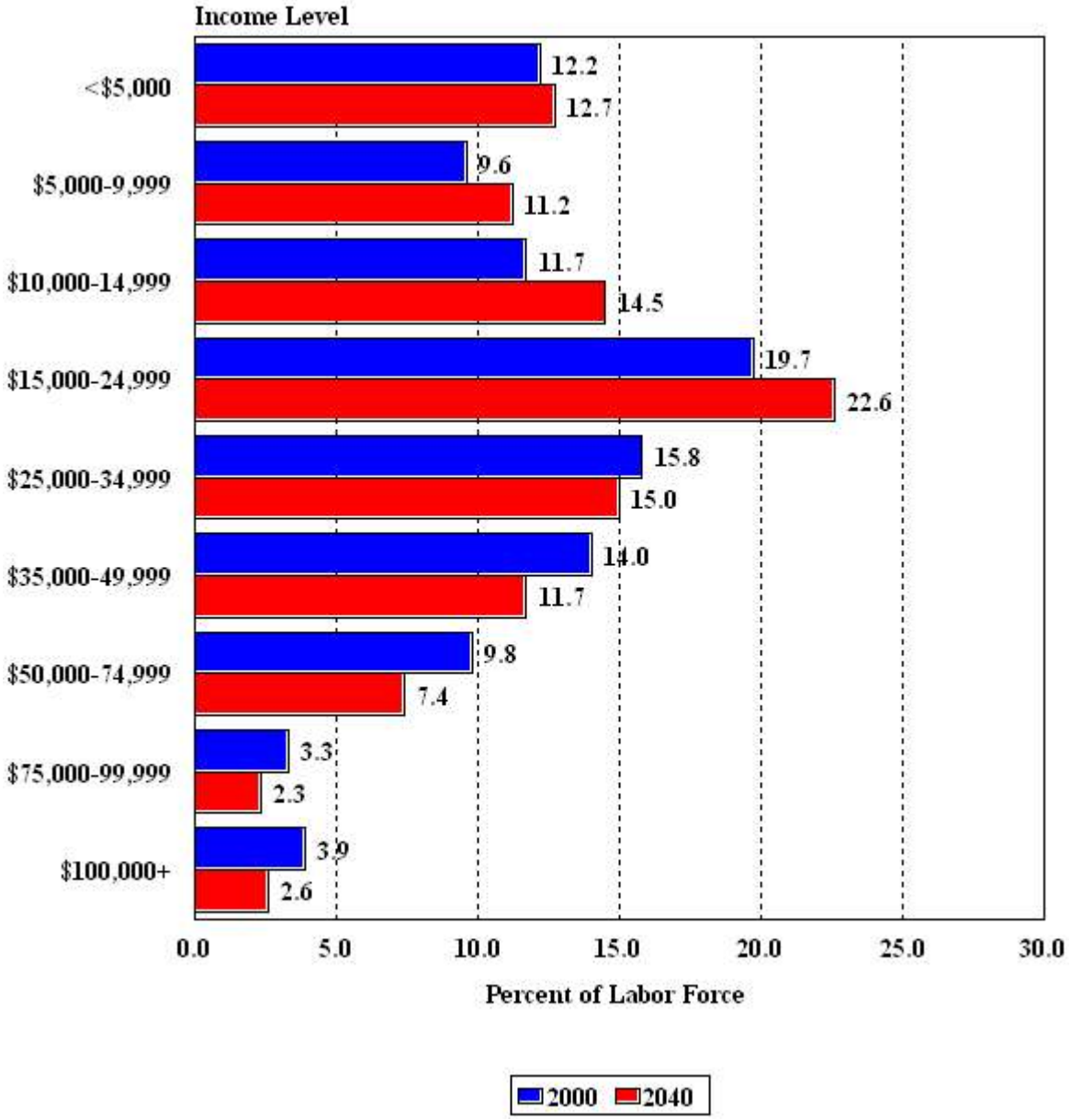
Percent of Civilian Labor Force in Texas by Occupation in 2000 and Projections for 2040*



*** Projections are shown for the 1.0 scenario**

Figure 6.3

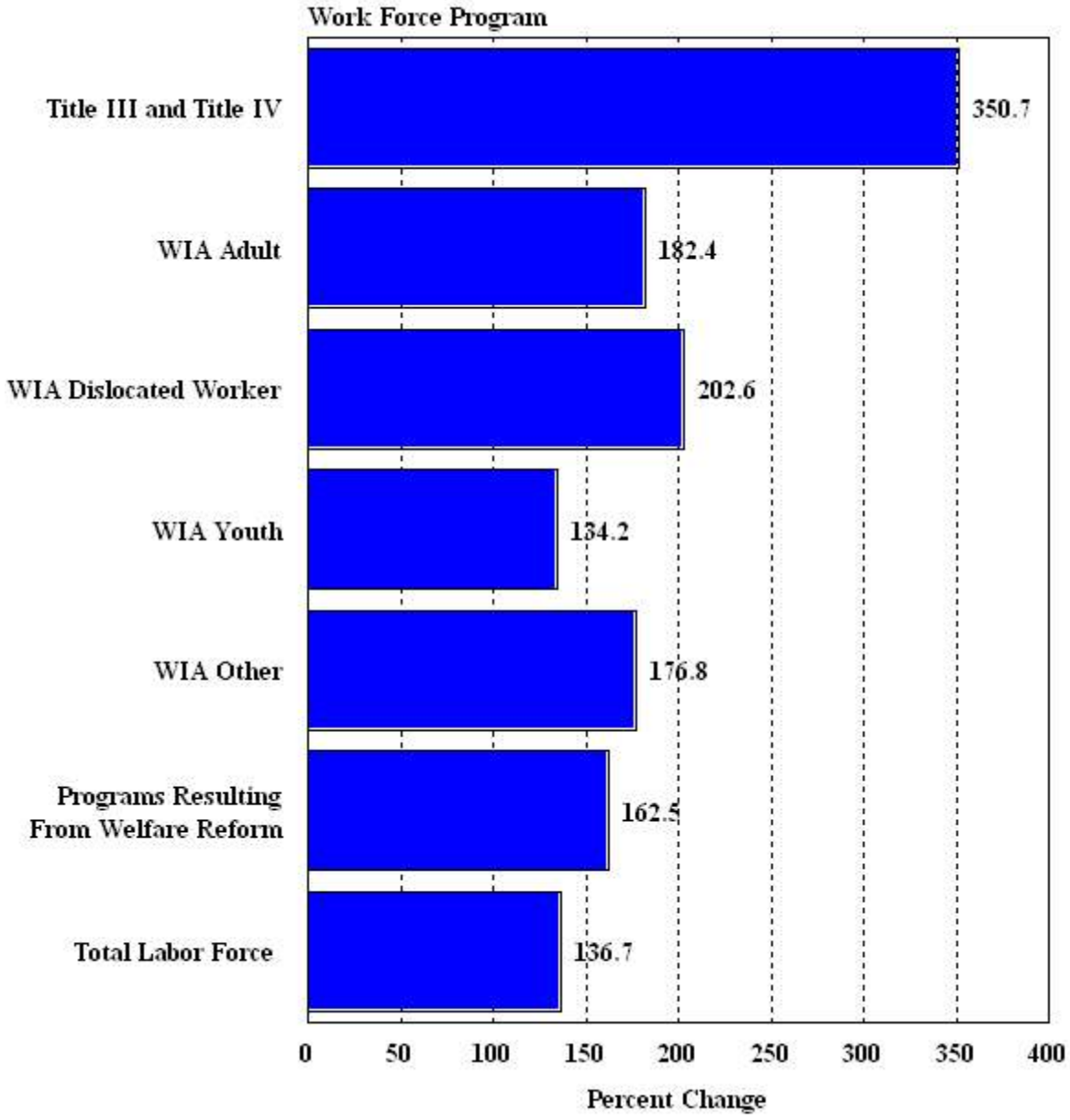
Percent of Civilian Labor Force in Texas by Earnings in 2000 and Projections for 2040*



*** Projections are shown for the 1.0 scenario**

Figure 6.4

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



*** Projections are shown for the 1.0 scenario**

Table 6.1

Civilian Labor Force in the United States and Texas, 1980-2000

Civilian Labor Force	1980	1990	2000	Percent Change 1980-1990	Percent Change 1990-2000	Percent Change 1980-2000
United States	104,449,817	123,478,450	137,668,798	18.2	11.5	31.8
Texas	6,574,676	8,219,028	9,830,559	25.0	19.6	49.5

Sources: U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a; Census of Population and Housing, 1990: Summary Tape File 3, [machine readable data files], 1991c; and Census of Population and Housing, 1980: Summary Tape File 3, [machine readable data files], 1983.

Table 6.2

Percent of Employed Persons 16 Years of Age or Older in the United States and Texas in 2000 by Occupation and Industry of Employment

	Percent		Percent Difference
	United States	Texas	
Occupation			
Employed civilian population 16 years and older	129,721,512	9,234,372	—
Management, professional, and related	33.6	33.3	-0.3
Service	14.9	14.7	-0.2
Sales and office	26.7	27.2	0.5
Farming, fishing, and forestry	0.7	0.7	0.0
Construction, extraction, and maintenance	9.5	10.9	1.4
Production, transportation, and material moving	14.6	13.2	-1.4
Industry			
Employed civilian population 16 years and older	129,721,512	9,234,372	—
Agriculture, forestry, fishing and hunting, and mining	1.9	2.7	0.8
Construction	6.8	8.0	1.2
Manufacturing	14.1	11.9	-2.2
Wholesale trade	3.5	3.9	0.4
Retail trade	11.8	12.0	0.2
Transportation and warehousing, and utilities	5.2	5.8	0.6
Information	3.1	3.1	0.0
Finance, insurance, real estate, and rental and leasing	6.8	6.8	0.0
Professional, scientific, management, administrative, and waste management services	9.3	9.5	0.2
Educational, health and social services	20.0	19.3	-0.7
Arts, entertainment, recreation, accommodation and food services	7.8	7.3	-0.5
Other services (except public administration)	4.9	5.2	0.3
Public administration	4.8	4.5	-0.3

Source: U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Table 6.3

Civilian Labor Force in Texas by Race/Ethnicity in 2000
and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other	Total
			Assuming Rates of Zero Net Migration (0.0 Scenario)		
2000	5,741,765	1,053,552	2,700,075	335,167	9,830,559
2010	5,811,724	1,198,932	3,298,073	368,436	10,677,165
2020	5,559,312	1,259,250	3,831,918	370,692	11,021,172
2030	5,279,065	1,252,736	4,260,825	358,061	11,150,687
2040	5,058,191	1,233,430	4,616,453	342,043	11,250,117
			Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
2000	5,741,765	1,053,552	2,700,075	335,167	9,830,559
2010	5,923,856	1,257,844	3,803,488	464,118	11,449,306
2020	5,774,312	1,389,297	5,047,718	583,281	12,794,608
2030	5,584,578	1,454,344	6,433,953	696,647	14,169,522
2040	5,441,430	1,508,040	7,927,467	811,942	15,688,879
			Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
2000	5,741,765	1,053,552	2,700,075	335,167	9,830,559
2010	6,038,211	1,319,679	4,392,161	581,844	12,331,895
2020	5,997,764	1,532,682	6,691,490	911,887	15,133,823
2030	5,907,902	1,687,921	9,764,451	1,344,888	18,705,162
2040	5,853,781	1,842,923	13,661,252	1,912,166	23,270,122

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Table 6.4

Percent Change in Projected Civilian Labor Force in Texas by Race/Ethnicity Assuming Alternative Projection Scenarios, 2000-2040

Year	Anglo	Black	Hispanic	Other	Total
Assuming Rates of Zero Net Migration (0.0 Scenario)					
2000-2010	1.2	13.8	22.1	9.9	8.6
2010-2020	-4.3	5.0	16.2	0.6	3.2
2020-2030	-5.0	-0.5	11.2	-3.4	1.2
2030-2040	-4.2	-1.5	8.3	-4.5	0.9
2000-2040	-11.9	17.1	71.0	2.1	14.4
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
2000-2010	3.2	19.4	40.9	38.5	16.5
2010-2020	-2.5	10.5	32.7	25.7	11.8
2020-2030	-3.3	4.7	27.5	19.4	10.7
2030-2040	-2.6	3.7	23.2	16.5	10.7
2000-2040	-5.2	43.1	193.6	142.2	59.6
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
2000-2010	5.2	25.3	62.7	73.6	25.4
2010-2020	-0.7	16.1	52.4	56.7	22.7
2020-2030	-1.5	10.1	45.9	47.5	23.6
2030-2040	-0.9	9.2	39.9	42.2	24.4
2000-2040	2.0	74.9	406.0	470.5	136.7

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Table 6.5

Percent of Civilian Labor Force in Texas by Race/Ethnicity in 2000
and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other
		All Scenarios		
2000	58.4	10.7	27.5	3.4
		Assuming Rates of Zero Net Migration (0.0 Scenario)		
2010	54.4	11.2	30.9	3.5
2020	50.4	11.4	34.8	3.4
2030	47.4	11.2	38.2	3.2
2040	45.0	11.0	41.0	3.0
		Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
2010	51.7	11.0	33.2	4.1
2020	45.0	10.9	39.5	4.6
2030	39.4	10.3	45.4	4.9
2040	34.7	9.6	50.5	5.2
		Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
2010	49.0	10.7	35.6	4.7
2020	39.7	10.1	44.2	6.0
2030	31.6	9.0	52.2	7.2
2040	25.2	7.9	58.7	8.2

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Table 6.6

Number and Percent of Net Change in the Civilian Labor Force in Texas Due To Each Race/Ethnicity Group, Assuming Alternative Projection Scenarios, 2000-2040

Race/ Ethnicity	Number	Percent
Assuming Rates of Zero Net Migration (0.0 Scenario)		
Anglo	-683,574	-48.2
Black	179,878	12.7
Hispanic	1,916,378	135.0
Other	6,876	0.5
Total	1,419,558	100.0
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
Anglo	-300,335	-5.1
Black	454,488	7.8
Hispanic	5,227,392	89.2
Other	476,775	8.1
Total	5,858,320	100.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
Anglo	112,016	0.8
Black	789,371	5.9
Hispanic	10,961,177	81.6
Other	1,576,999	11.7
Total	13,439,563	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Table 6.7

Percent of the Civilian Labor Force in Texas by Age and Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Age Group	Percent Labor Force				Total
	Anglo	Black	Hispanic	Other	
All Scenarios					
2000					
16-19	5.1	6.3	8.1	4.9	6.1
20-24	9.0	11.8	14.8	9.8	10.9
25-34	21.9	25.6	26.7	25.0	23.7
35-44	26.9	26.7	25.4	32.9	26.6
45-54	22.4	18.7	16.5	20.3	20.4
55-59	6.8	5.5	4.5	3.8	5.9
60-64	4.0	2.9	2.4	1.9	3.3
65+	3.9	2.5	1.6	1.4	3.1
Assuming Rates of Zero Net Migration (0.0 Scenario)					
2010					
16-19	4.8	5.9	7.1	4.3	5.6
20-24	9.8	12.1	11.9	7.7	10.6
25-34	20.6	23.2	23.2	17.5	21.7
35-44	20.9	21.6	25.3	33.9	22.7
45-54	24.5	22.2	20.6	24.1	23.0
55-59	9.1	8.5	6.6	6.4	8.2
60-64	5.9	4.0	3.4	3.6	4.9
65+	4.4	2.5	1.9	2.5	3.3
2040					
16-19	4.3	4.2	6.3	3.8	5.1
20-24	8.9	9.4	11.2	7.1	9.9
25-34	21.0	20.8	21.0	17.0	20.8
35-44	21.4	21.6	23.0	29.0	22.3
45-54	21.5	22.6	19.7	20.8	20.8
55-59	8.9	10.1	8.4	6.8	8.8
60-64	5.8	5.6	5.5	5.2	5.6
65+	8.2	5.7	4.9	10.3	6.7
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
2010					
16-19	4.8	6.0	7.1	4.3	5.7
20-24	9.8	12.4	12.4	7.8	10.8
25-34	20.7	23.1	25.0	18.0	22.3
35-44	21.0	21.7	25.3	34.4	23.1
45-54	24.3	21.9	19.3	23.6	22.3
55-59	9.1	8.4	6.1	6.1	7.9
60-64	5.9	4.0	3.1	3.4	4.7
65+	4.4	2.5	1.7	2.4	3.2

Table 6.7, continued

Age Group	Percent Labor Force				Total
	Anglo	Black	Hispanic	Other	
2040					
16-19	4.3	4.3	5.7	3.5	5.0
20-24	8.8	9.6	10.8	6.7	9.7
25-34	20.9	20.9	21.7	16.5	21.1
35-44	21.3	21.7	23.7	28.5	23.0
45-54	21.7	22.7	20.8	22.6	21.3
55-59	8.9	9.9	8.4	7.2	8.7
60-64	5.8	5.4	5.1	5.5	5.4
65+	8.3	5.5	3.8	9.5	5.8
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
2010					
16-19	4.8	6.2	7.1	4.3	5.7
20-24	9.8	12.5	12.8	8.0	11.1
25-34	20.8	23.1	26.9	18.4	23.1
35-44	21.0	21.8	25.3	34.8	23.3
45-54	24.2	21.7	18.0	23.2	21.7
55-59	9.1	8.3	5.5	5.8	7.6
60-64	5.9	3.9	2.9	3.3	4.4
65+	4.4	2.5	1.5	2.2	3.1
2040					
16-19	4.3	4.3	5.2	3.2	4.7
20-24	8.6	9.9	10.3	6.3	9.5
25-34	20.8	21.0	22.3	15.8	21.3
35-44	21.4	21.9	24.6	28.4	23.9
45-54	21.8	22.7	21.8	24.3	22.1
55-59	8.9	9.6	8.3	7.5	8.5
60-64	5.8	5.2	4.6	5.8	5.0
65+	8.4	5.4	2.9	8.7	5.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Bureau of Labor Statistics and U.S. Census Bureau, Current Population Survey: Annual Demographic File (March Supplement) 1999 and 2000, 2002.

Table 6.8

Civilian Labor Force in Texas by Level of Educational Attainment and Race/Ethnicity in 2000 and Projections to 2040
Assuming the 1990-2000 (1.0) Population Projection Scenario (Percentaged within Level of Educational Attainment)

Level of Educational Attainment	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
2000										
Less than 9th grade	64,146	9.5	19,976	3.0	542,133	80.9	43,982	6.6	670,237	100.0
9th to 12th grade, no diploma	480,025	40.7	116,227	9.9	546,132	46.4	35,419	3.0	1,177,803	100.0
High school graduate	1,601,107	56.0	373,673	13.1	796,273	27.9	84,449	3.0	2,855,502	100.0
Some college, no degree	1,336,364	62.3	308,940	14.4	451,937	21.1	47,384	2.2	2,144,625	100.0
Associate degree	461,422	67.8	71,848	10.5	129,772	19.0	18,321	2.7	681,363	100.0
Bachelors degree	1,414,037	79.2	114,476	6.4	185,394	10.4	70,653	4.0	1,784,560	100.0
Graduate or professional degree	384,664	74.4	48,412	9.4	48,434	9.4	34,959	6.8	516,469	100.0
Total civilian labor force	5,741,765	58.4	1,053,552	10.7	2,700,075	27.5	335,167	3.4	9,830,559	100.0
2010										
Less than 9th grade	77,504	7.1	26,223	2.4	918,201	83.8	73,209	6.7	1,095,137	100.0
9th to 12th grade, no diploma	506,432	32.0	153,823	9.7	860,141	54.4	62,145	3.9	1,582,541	100.0
High school graduate	1,675,311	46.8	464,554	13.0	1,284,099	35.9	154,463	4.3	3,578,427	100.0
Some college, no degree	1,413,052	54.2	388,018	14.9	726,149	27.9	78,234	3.0	2,605,453	100.0
Associate degree	476,648	59.3	84,141	10.5	211,581	26.4	30,432	3.8	802,802	100.0
Bachelors degree	1,472,411	72.2	136,228	6.7	307,123	15.1	122,069	6.0	2,037,831	100.0
Graduate or professional degree	416,853	66.2	66,692	10.6	84,867	13.5	61,292	9.7	629,704	100.0
Total civilian labor force	6,038,211	49.0	1,319,679	10.7	4,392,161	35.6	581,844	4.7	12,331,895	100.0
2040										
Less than 9th grade	93,104	2.5	49,827	1.4	3,240,568	89.4	242,998	6.7	3,626,497	100.0
9th to 12th grade, no diploma	478,499	14.3	192,737	5.7	2,483,330	74.0	202,303	6.0	3,356,869	100.0
High school graduate	1,626,899	24.3	657,836	9.9	3,868,828	58.0	521,098	7.8	6,674,661	100.0
Some college, no degree	1,349,303	31.7	532,691	12.5	2,153,615	50.5	225,870	5.3	4,261,479	100.0
Associate degree	460,233	35.2	120,565	9.2	637,312	48.6	92,291	7.0	1,310,401	100.0
Bachelors degree	1,441,381	47.9	189,573	6.3	971,824	32.3	405,469	13.5	3,008,247	100.0
Graduate or professional degree	404,362	39.2	99,694	9.7	305,775	29.6	222,137	21.5	1,031,968	100.0
Total civilian labor force	5,853,781	25.2	1,842,923	7.9	13,661,252	58.7	1,912,166	8.2	23,270,122	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Bureau of Labor Statistics and U.S. Census Bureau, Current Population Survey: Annual Demographic File (March Supplement) 1999 and 2000, 2002.

Table 6.9

Civilian Labor Force in Texas by Level of Educational Attainment and Race/Ethnicity in 2000 and Projections to 2040 Assuming the 1990-2000 (1.0) Population Projection Scenario (Percentaged within Race/Ethnicity Group)

Level of Educational Attainment	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
2000										
Less than 9th grade	64,146	1.1	19,976	1.9	542,133	20.1	43,982	13.1	670,237	6.8
9th to 12th grade, no diploma	480,025	8.4	116,227	11.0	546,132	20.2	35,419	10.6	1,177,803	12.0
High school graduate	1,601,107	27.9	373,673	35.5	796,273	29.5	84,449	25.2	2,855,502	29.0
Some college, no degree	1,336,364	23.3	308,940	29.3	451,937	16.7	47,384	14.1	2,144,625	21.8
Associate degree	461,422	8.0	71,848	6.8	129,772	4.8	18,321	5.5	681,363	6.9
Bachelors degree	1,414,037	24.6	114,476	10.9	185,394	6.9	70,653	21.1	1,784,560	18.2
Graduate or professional degree	384,664	6.7	48,412	4.6	48,434	1.8	34,959	10.4	516,469	5.3
Total civilian labor force	5,741,765	100.0	1,053,552	100.0	2,700,075	100.0	335,167	100.0	9,830,559	100.0
2010										
Less than 9th grade	77,504	1.3	26,223	1.9	918,201	21.0	73,209	12.7	1,095,137	9.0
9th to 12th grade, no diploma	506,432	8.4	153,823	11.7	860,141	19.6	62,145	10.7	1,582,541	12.8
High school graduate	1,675,311	27.7	464,554	35.2	1,284,099	29.2	154,463	26.5	3,578,427	29.0
Some college, no degree	1,413,052	23.4	388,018	29.4	726,149	16.5	78,234	13.4	2,605,453	21.1
Associate degree	476,648	7.9	84,141	6.4	211,581	4.8	30,432	5.2	802,802	6.5
Bachelors degree	1,472,411	24.4	136,228	10.3	307,123	7.0	122,069	21.0	2,037,831	16.5
Graduate or professional degree	416,853	6.9	66,692	5.1	84,867	1.9	61,292	10.5	629,704	5.1
Total civilian labor force	6,038,211	100.0	1,319,679	100.0	4,392,161	100.0	581,844	100.0	12,331,895	100.0
2040										
Less than 9th grade	93,104	1.5	49,827	2.7	3,240,568	23.7	242,998	12.7	3,626,497	15.7
9th to 12th grade, no diploma	478,499	8.2	192,737	10.5	2,483,330	18.2	202,303	10.6	3,356,869	14.4
High school graduate	1,626,899	27.8	657,836	35.7	3,868,828	28.3	521,098	27.3	6,674,661	28.7
Some college, no degree	1,349,303	23.1	532,691	28.9	2,153,615	15.8	225,870	11.8	4,261,479	18.3
Associate degree	460,233	7.9	120,565	6.5	637,312	4.7	92,291	4.8	1,310,401	5.6
Bachelors degree	1,441,381	24.6	189,573	10.3	971,824	7.1	405,469	21.2	3,008,247	12.9
Graduate or professional degree	404,362	6.9	99,694	5.4	305,775	2.2	222,137	11.6	1,031,968	4.4
Total civilian labor force	5,853,781	100.0	1,842,923	100.0	13,661,252	100.0	1,912,166	100.0	23,270,122	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Bureau of Labor Statistics and U.S. Census Bureau, Current Population Survey: Annual Demographic File (March Supplement) 1999 and 2000, 2002.

Table 6.10

Civilian Labor Force in Texas by Occupation and Race/Ethnicity
in 2000 and Projections to 2040 Assuming the 1990-2000 (1.0) Population Projection Scenario (Percentaged within Occupation)

	Anglo		Black		Hispanic		Other		Total	
Occupation	Number	%	Number	%	Number	%	Number	%	Number	%
2000										
Executive, administrative, and managerial	971,174	74.5	102,536	7.9	188,972	14.5	40,467	3.1	1,303,149	100.0
Professional specialty	1,076,671	75.4	103,966	7.3	189,265	13.3	56,983	4.0	1,426,885	100.0
Technicians and related support	233,928	67.4	26,892	7.7	68,259	19.7	18,058	5.2	347,137	100.0
Sales	748,950	67.0	80,392	7.2	256,351	23.0	30,952	2.8	1,116,645	100.0
Administrative support	794,101	58.2	188,818	13.9	347,712	25.5	32,416	2.4	1,363,047	100.0
Protective service	145,983	65.5	45,195	20.2	29,929	13.4	2,090	0.9	223,197	100.0
Other services, except protective	292,729	35.2	165,638	19.9	334,162	40.2	38,709	4.7	831,238	100.0
Precision production	580,636	52.1	57,697	5.2	444,917	39.9	31,056	2.8	1,114,306	100.0
Machine operators and assemblers	158,877	35.7	48,385	10.9	203,461	45.7	34,378	7.7	445,101	100.0
Transportation and material moving	196,397	49.9	71,266	18.1	117,557	29.8	8,767	2.2	393,987	100.0
Handlers and equipment cleaners	136,106	36.0	34,959	9.3	186,727	49.4	20,067	5.3	377,859	100.0
Farming, forestry and fishing	171,646	58.8	17,592	6.0	98,914	33.9	3,669	1.3	291,821	100.0
Unemployed, no recent occupation	234,567	39.4	110,216	18.5	233,849	39.2	17,555	2.9	596,187	100.0
Total civilian labor force	5,741,765	58.4	1,053,552	10.7	2,700,075	27.5	335,167	3.4	9,830,559	100.0
2010										
Executive, administrative, and managerial	1,019,430	66.1	132,089	8.6	313,736	20.4	76,208	4.9	1,541,463	100.0
Professional specialty	1,108,237	67.3	130,700	7.9	310,687	18.9	97,109	5.9	1,646,733	100.0
Technicians and related support	234,875	57.6	33,671	8.2	109,889	26.9	29,755	7.3	408,190	100.0
Sales	793,343	58.5	103,492	7.6	405,388	29.9	54,966	4.0	1,357,189	100.0
Administrative support	841,564	50.1	225,902	13.5	555,333	33.1	56,053	3.3	1,678,852	100.0
Protective service	161,087	59.9	54,211	20.1	48,041	17.9	5,719	2.1	269,058	100.0
Other services, except protective	314,806	28.0	213,202	18.9	535,883	47.6	62,266	5.5	1,126,157	100.0
Precision production	603,350	40.8	74,561	5.1	741,694	50.3	55,897	3.8	1,475,502	100.0
Machine operators and assemblers	162,159	26.0	61,955	9.9	340,550	54.5	60,267	9.6	624,931	100.0
Transportation and material moving	219,303	42.1	87,552	16.9	198,297	38.2	14,338	2.8	519,490	100.0
Handlers and equipment cleaners	145,274	27.7	43,492	8.3	302,558	57.6	33,796	6.4	525,120	100.0
Farming, forestry and fishing	189,096	49.4	23,227	6.1	164,346	42.9	6,010	1.6	382,679	100.0
Unemployed, no recent occupation	245,687	31.6	135,625	17.5	365,759	47.1	29,460	3.8	776,531	100.0
Total civilian labor force	6,038,211	49.0	1,319,679	10.7	4,392,161	35.6	581,844	4.7	12,331,895	100.0

Table 6.10, continued

Occupation	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
2040										
Executive, administrative, and managerial	990,549	39.4	191,811	7.6	1,004,100	40.0	325,726	13.0	2,512,186	100.0
Professional specialty	1,063,200	42.2	179,159	7.1	981,398	39.0	293,345	11.7	2,517,102	100.0
Technicians and related support	220,697	32.3	45,801	6.7	332,434	48.7	84,198	12.3	683,130	100.0
Sales	779,523	33.5	138,061	5.9	1,200,456	51.6	208,616	9.0	2,326,656	100.0
Administrative	805,998	27.3	297,334	10.1	1,660,681	56.2	188,552	6.4	2,952,565	100.0
Protective service	165,206	39.7	77,271	18.5	142,057	34.1	32,299	7.7	416,833	100.0
Other services, except protective	300,492	12.3	327,548	13.3	1,651,826	67.3	173,988	7.1	2,453,854	100.0
Precision production	583,594	18.2	107,105	3.3	2,366,635	73.3	169,269	5.2	3,226,603	100.0
Machine operators and assemblers	154,316	10.2	90,793	5.9	1,102,847	72.2	178,909	11.7	1,526,865	100.0
Transportation and material moving	214,079	20.6	124,876	12.1	657,027	63.5	38,895	3.8	1,034,877	100.0
Handlers and equipment cleaners	131,689	10.9	55,093	4.5	928,067	76.4	99,984	8.2	1,214,833	100.0
Farming, forestry and fishing	211,961	25.4	36,170	4.3	566,337	67.8	20,855	2.5	835,323	100.0
Unemployed, no recent occupation	232,477	14.8	171,901	11.0	1,067,387	68.0	97,530	6.2	1,569,295	100.0
Total civilian labor force	5,853,781	25.2	1,842,923	7.9	13,661,252	58.7	1,912,166	8.2	23,270,122	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Bureau of Labor Statistics and U.S. Census Bureau, Current Population Survey: Annual Demographic File (March Supplement) 1999 and 2000, 2002.

Table 6.11

Civilian Labor Force in Texas by Occupation and Race/Ethnicity
in 2000 and Projections to 2040 Assuming the 1990-2000 (1.0) Population Projection Scenario (Percentaged within Race/Ethnicity Group)

	Anglo		Black		Hispanic		Other		Total	
Occupation	Number	%	Number	%	Number	%	Number	%	Number	%
2000										
Executive, administrative, and managerial	971,174	16.9	102,536	9.6	188,972	6.9	40,467	12.1	1,303,149	13.2
Professional specialty	1,076,671	18.8	103,966	9.9	189,265	7.0	56,983	17.0	1,426,885	14.5
Technicians and related support	233,928	4.1	26,892	2.6	68,259	2.5	18,058	5.4	347,137	3.5
Sales	748,950	13.0	80,392	7.6	256,351	9.5	30,952	9.2	1,116,645	11.4
Administrative support	794,101	13.8	188,818	17.9	347,712	12.9	32,416	9.7	1,363,047	13.9
Protective service	145,983	2.5	45,195	4.3	29,929	1.1	2,090	0.6	223,197	2.3
Other services, except protective	292,729	5.1	165,638	15.7	334,162	12.4	38,709	11.5	831,238	8.5
Precision production	580,636	10.1	57,697	5.5	444,917	16.5	31,056	9.3	1,114,306	11.3
Machine operators and assemblers	158,877	2.8	48,385	4.6	203,461	7.5	34,378	10.3	445,101	4.5
Transportation and material moving	196,397	3.4	71,266	6.8	117,557	4.4	8,767	2.6	393,987	4.0
Handlers and equipment cleaners	136,106	2.4	34,959	3.3	186,727	6.9	20,067	6.0	377,859	3.8
Farming, forestry and fishing	171,646	3.0	17,592	1.7	98,914	3.7	3,669	1.1	291,821	3.0
Unemployed, no recent occupation	234,567	4.1	110,216	10.5	233,849	8.7	17,555	5.2	596,187	6.1
Total civilian labor force	5,741,765	100.0	1,053,552	100.0	2,700,075	100.0	335,167	100.0	9,830,559	100.0
2010										
Executive, administrative, and managerial	1,019,430	16.9	132,089	10.0	313,736	7.2	76,208	13.1	1,541,463	12.4
Professional specialty	1,108,237	18.4	130,700	9.9	310,687	7.1	97,109	16.7	1,646,733	13.4
Technicians and related support	234,875	3.9	33,671	2.6	109,889	2.5	29,755	5.1	408,190	3.3
Sales	793,343	13.1	103,492	7.8	405,388	9.2	54,966	9.4	1,357,189	11.0
Administrative support	841,564	13.9	225,902	17.1	555,333	12.6	56,053	9.6	1,678,852	13.6
Protective service	161,087	2.7	54,211	4.1	48,041	1.1	5,719	1.0	269,058	2.2
Other services, except protective	314,806	5.2	213,202	16.2	535,883	12.2	62,266	10.7	1,126,157	9.1
Precision production	603,350	10.0	74,561	5.6	741,694	16.9	55,897	9.6	1,475,502	12.0
Machine operators and assemblers	162,159	2.7	61,955	4.7	340,550	7.8	60,267	10.4	624,931	5.1
Transportation and material moving	219,303	3.6	87,552	6.6	198,297	4.5	14,338	2.5	519,490	4.2
Handlers and equipment cleaners	145,274	2.4	43,492	3.3	302,558	6.9	33,796	5.8	525,120	4.3
Farming, forestry and fishing	189,096	3.1	23,227	1.8	164,346	3.7	6,010	1.0	382,679	3.1
Unemployed, no recent occupation	245,687	4.1	135,625	10.3	365,759	8.3	29,460	5.1	776,531	6.3
Total civilian labor force	6,038,211	100.0	1,319,679	100.0	4,392,161	100.0	581,844	100.0	12,331,895	100.0

Table 6.11, continued

Occupation	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
2040										
Executive, administrative, and managerial	990,549	16.9	191,811	10.4	1,004,100	7.4	325,726	17.0	2,512,186	10.9
Professional specialty	1,063,200	18.2	179,159	9.7	981,398	7.2	293,345	15.3	2,517,102	10.8
Technicians and related support	220,697	3.8	45,801	2.5	332,434	2.4	84,198	4.4	683,130	2.9
Sales	779,523	13.3	138,061	7.5	1,200,456	8.8	208,616	10.9	2,326,656	10.0
Administrative support	805,998	13.8	297,334	16.1	1,660,681	12.2	188,552	9.9	2,952,565	12.7
Protective service	165,206	2.8	77,271	4.2	142,057	1.0	32,299	1.7	416,833	1.8
Other services, except protective	300,492	5.1	327,548	17.8	1,651,826	12.1	173,988	9.1	2,453,854	10.5
Precision production	583,594	10.0	107,105	5.8	2,366,635	17.3	169,269	8.9	3,226,603	13.9
Machine operators and assemblers	154,316	2.6	90,793	4.9	1,102,847	8.1	178,909	9.4	1,526,865	6.6
Transportation and material moving	214,079	3.7	124,876	6.8	657,027	4.8	38,895	2.0	1,034,877	4.4
Handlers and equipment cleaners	131,689	2.2	55,093	3.0	928,067	6.8	99,984	5.2	1,214,833	5.2
Farming, forestry and fishing	211,961	3.6	36,170	2.0	566,337	4.1	20,855	1.1	835,323	3.6
Unemployed, no recent occupation	232,477	4.0	171,901	9.3	1,067,387	7.8	97,530	5.1	1,569,295	6.7
Total civilian labor force	5,853,781	100.0	1,842,923	100.0	13,661,252	100.0	1,912,166	100.0	23,270,122	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Bureau of Labor Statistics and U.S. Census Bureau, Current Population Survey: Annual Demographic File (March Supplement) 1999 and 2000, 2002.

Table 6.12

Wage and Salary Incomes of Civilian Labor Force Members in Texas by Race/Ethnicity
in 2000 and Projections to 2040 Assuming the 1990-2000 (1.0) Population Projection Scenario (Percentaged within Income Group)

Wage and Salary Incomes	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
2000										
$ < 5,000	463,095	54.7	102,915	12.2	253,297	29.9	27,502	3.2	846,809	100.0
5,000-9,999	328,033	48.9	74,329	11.1	246,033	36.7	22,232	3.3	670,627	100.0
10,000-14,999	353,512	43.8	90,401	11.2	336,770	41.7	26,824	3.3	807,507	100.0
15,000-24,999	679,598	49.6	167,627	12.2	476,527	34.7	47,882	3.5	1,371,634	100.0
25,000-34,999	672,193	61.4	127,481	11.6	261,239	23.8	34,805	3.2	1,095,718	100.0
35,000-49,999	684,438	70.2	92,109	9.4	165,553	17.0	33,089	3.4	975,189	100.0
50,000-74,999	523,784	77.2	46,356	6.8	78,038	11.5	30,868	4.5	679,046	100.0
75,000-99,999	191,235	82.2	10,951	4.7	19,834	8.5	10,761	4.6	232,781	100.0
100,000 or more	235,002	85.6	8,751	3.2	20,019	7.3	10,725	3.9	274,497	100.0
Labor Force with earnings	4,130,890	59.4	720,920	10.4	1,857,310	26.7	244,688	3.5	6,953,808	100.0
2040										
$ < 5,000	470,179	22.6	179,527	8.7	1,269,979	61.2	155,675	7.5	2,075,360	100.0
5,000-9,999	332,930	18.2	129,466	7.1	1,239,177	67.8	125,728	6.9	1,827,301	100.0
10,000-14,999	359,063	15.1	157,313	6.6	1,710,399	71.9	152,799	6.4	2,379,574	100.0
15,000-24,999	691,753	18.7	292,652	7.9	2,441,013	66.0	273,853	7.4	3,699,271	100.0
25,000-34,999	686,144	27.9	223,315	9.1	1,343,187	54.8	200,337	8.2	2,452,983	100.0
35,000-49,999	701,221	36.8	162,069	8.5	853,780	44.7	190,880	10.0	1,907,950	100.0
50,000-74,999	540,037	44.8	82,131	6.8	404,602	33.5	179,700	14.9	1,206,470	100.0
75,000-99,999	197,753	51.5	19,467	5.1	103,051	26.9	63,356	16.5	383,627	100.0
100,000 or more	243,528	57.1	15,578	3.7	104,313	24.4	63,268	14.8	426,687	100.0
Labor Force with earnings	4,222,608	25.8	1,261,518	7.7	9,469,501	57.9	1,405,596	8.6	16,359,223	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Bureau of Labor Statistics and U.S. Census Bureau, Current Population Survey: Annual Demographic File (March Supplement) 1997-2001, 2002.

Table 6.13

Wage and Salary Incomes of Civilian Labor Force Members in Texas by Race/Ethnicity in 2000 and Projections to 2040
Assuming the 1990-2000 (1.0) Population Projection Scenario (Percentaged within Race/Ethnicity Group)

Wage and Salary Incomes	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
2000										
$ <5,000	463,095	11.2	102,915	14.3	253,297	13.6	27,502	11.2	846,809	12.2
5,000-9,999	328,033	7.9	74,329	10.3	246,033	13.2	22,232	9.1	670,627	9.6
10,000-14,999	353,512	8.5	90,401	12.5	336,770	18.1	26,824	11.0	807,507	11.7
15,000-24,999	679,598	16.5	167,627	23.3	476,527	25.7	47,882	19.6	1,371,634	19.7
25,000-34,999	672,193	16.3	127,481	17.7	261,239	14.1	34,805	14.2	1,095,718	15.8
35,000-49,999	684,438	16.6	92,109	12.8	165,553	8.9	33,089	13.5	975,189	14.0
50,000-74,999	523,784	12.7	46,356	6.4	78,038	4.2	30,868	12.6	679,046	9.8
75,000-99,999	191,235	4.6	10,951	1.5	19,834	1.1	10,761	4.4	232,781	3.3
100,000 or more	235,002	5.7	8,751	1.2	20,019	1.1	10,725	4.4	274,497	3.9
Median Wage and Salary Income	28,588	—	20,537	—	16,942	—	24,562	—	23,398	—
Labor Force with earnings	4,130,890	100.0	720,920	100.0	1,857,310	100.0	244,688	100.0	6,953,808	100.0
2040										
$ <5,000	470,179	11.1	179,527	14.2	1,269,979	13.4	155,675	11.1	2,075,360	12.7
5,000-9,999	332,930	7.9	129,466	10.3	1,239,177	13.1	125,728	8.9	1,827,301	11.2
10,000-14,999	359,063	8.5	157,313	12.6	1,710,399	18.0	152,799	10.8	2,379,574	14.5
15,000-24,999	691,753	16.4	292,652	23.2	2,441,013	25.8	273,853	19.5	3,699,271	22.6
25,000-34,999	686,144	16.2	223,315	17.7	1,343,187	14.2	200,337	14.3	2,452,983	15.0
35,000-49,999	701,221	16.6	162,069	12.8	853,780	9.0	190,880	13.6	1,907,950	11.7
50,000-74,999	540,037	12.8	82,131	6.5	404,602	4.3	179,700	12.8	1,206,470	7.4
75,000-99,999	197,753	4.7	19,467	1.5	103,051	1.1	63,356	4.5	383,627	2.3
100,000 or more	243,528	5.8	15,578	1.2	104,313	1.1	63,268	4.5	426,687	2.6
Median Wage and Salary Income	28,751	—	20,619	—	17,111	—	24,808	—	20,129	—
Labor Force with earnings	4,222,608	100.0	1,261,518	100.0	9,469,501	100.0	1,405,596	100.0	16,359,223	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Bureau of Labor Statistics and U.S. Census Bureau, Current Population Survey: Annual Demographic File (March Supplement) 1997-2001, 2002.

Table 6.14

Participants in Labor Force Training Programs in Texas by Race/Ethnicity
in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other	Total
			All Scenarios		
2000	59,504	79,292	130,872	3,743	273,411
			Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
2010	59,611	89,137	173,244	5,060	327,052
2020	56,946	91,721	220,530	6,338	375,535
2030	54,782	91,519	273,075	7,432	426,808
2040	52,575	90,401	328,705	8,521	480,202
			Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
2010	60,793	94,363	201,249	6,341	362,746
2020	59,082	102,139	289,254	9,874	460,349
2030	57,777	107,128	406,966	14,324	586,195
2040	56,369	111,558	551,963	20,069	739,959

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Workforce Commission, Labor Force Training Program Participants: 1999, 2000, and 2001, [machine readable data files], 2002a.

Table 6.15

Percent Change in Participants in Labor Force Training Programs
in Texas by Race/Ethnicity in 2000 and Projections to 2040
Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other	Total
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
2000-2010	0.2	12.4	32.4	35.2	19.6
2010-2020	-4.5	2.9	27.3	25.3	14.8
2020-2030	-3.8	-0.2	23.8	17.3	13.7
2030-2040	-4.0	-1.2	20.4	14.7	12.5
2000-2040	-11.6	14.0	151.2	127.7	75.6
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
2000-2010	2.2	19.0	53.8	69.4	32.7
2010-2020	-2.8	8.2	43.7	55.7	26.9
2020-2030	-2.2	4.9	40.7	45.1	27.3
2030-2040	-2.4	4.1	35.6	40.1	26.2
2000-2040	-5.3	40.7	321.8	436.2	170.6

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Workforce Commission, Labor Force Training Program Participants: 1999, 2000, and 2001, [machine readable data files], 2002a.

Table 6.16

Percent of Participants in Labor Force Training Programs in Texas by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other
		All Scenarios		
2000	21.7	29.0	47.9	1.4
		Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
2010	18.2	27.3	53.0	1.5
2020	15.2	24.4	58.7	1.7
2030	12.9	21.4	64.0	1.7
2040	10.9	18.8	68.5	1.8
		Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
2010	16.8	26.0	55.5	1.7
2020	12.9	22.2	62.8	2.1
2030	9.9	18.3	69.4	2.4
2040	7.6	15.1	74.6	2.7

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Workforce Commission, Labor Force Training Program Participants: 1999, 2000, and 2001, [machine readable data files], 2002a.

Table 6.17

Number of Participants, Percent Change in the Number of Participants, and Percent of Participants in Labor Force Training Programs in Texas by Race/Ethnicity and Program in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Time Period	Anglo	Black	Hispanic	Other	Total
Panel A: Title III and Title IV					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Number of Participants					
2000	1,118	406	2,734	83	4,341
2010	1,217	510	4,271	121	6,119
2020	1,145	552	6,028	161	7,886
2030	1,083	583	7,905	196	9,767
2040	1,077	631	9,828	214	11,750
Percent Change in the Number of Participants					
2000-2010	8.9	25.6	56.2	45.8	41.0
2010-2020	-5.9	8.2	41.1	33.1	28.9
2020-2030	-5.4	5.6	31.1	21.7	23.9
2030-2040	-0.6	8.2	24.3	9.2	20.3
2000-2040	-3.7	55.4	259.5	157.8	170.7
Percent of Participants by Race/Ethnicity					
2000	25.7	9.4	63.0	1.9	100.0
2010	19.9	8.3	69.8	2.0	100.0
2020	14.6	7.0	76.4	2.0	100.0
2030	11.1	6.0	80.9	2.0	100.0
2040	9.2	5.4	83.6	1.8	100.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Number of Participants					
2000	1,118	406	2,734	83	4,341
2010	1,239	530	4,731	154	6,654
2020	1,191	612	7,674	254	9,731
2030	1,146	676	11,879	367	14,068
2040	1,165	771	17,108	521	19,565
Percent Change in the Number of Participants					
2000-2010	10.8	30.5	73.0	85.5	53.3
2010-2020	-3.9	15.5	62.2	64.9	46.2
2020-2030	-3.8	10.5	54.8	44.5	44.6
2030-2040	1.7	14.1	44.0	42.0	39.1
2000-2040	4.2	89.9	525.7	527.7	350.7
Percent of Participants by Race/Ethnicity					
2000	25.7	9.4	63.0	1.9	100.0
2010	18.6	8.0	71.1	2.3	100.0
2020	12.2	6.3	78.9	2.6	100.0
2030	8.2	4.8	84.4	2.6	100.0
2040	6.0	3.9	87.4	2.7	100.0

Table 6.17, continued

Time Period	Anglo	Black	Hispanic	Other	Total
Panel B: WIA Adult					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Number of Participants					
2000	7,333	7,714	15,761	431	31,239
2010	7,370	8,720	20,736	585	37,411
2020	7,047	9,293	26,284	732	43,356
2030	6,802	9,332	32,661	891	49,686
2040	6,533	9,325	39,391	1,054	56,303
Percent Change in the Number of Participants					
2000-2010	0.5	13.0	31.6	35.7	19.8
2010-2020	-4.4	6.6	26.8	25.1	15.9
2020-2030	-3.5	0.4	24.3	21.7	14.6
2030-2040	-4.0	-0.1	20.6	18.3	13.3
2000-2040	-10.9	20.9	149.9	144.5	80.2
Percent of Participants by Race/Ethnicity					
2000	23.4	24.7	50.5	1.4	100.0
2010	19.7	23.3	55.4	1.6	100.0
2020	16.3	21.4	60.6	1.7	100.0
2030	13.7	18.8	65.7	1.8	100.0
2040	11.5	16.6	70.0	1.9	100.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Number of Participants					
2000	7,333	7,714	15,761	431	31,239
2010	7,520	9,200	24,460	731	41,911
2020	7,317	10,352	35,330	1,144	54,143
2030	7,173	10,915	49,374	1,706	69,168
2040	6,999	11,506	67,261	2,468	88,234
Percent Change in the Number of Participants					
2000-2010	2.6	19.3	55.2	69.6	34.2
2010-2020	-2.7	12.5	44.4	56.5	29.2
2020-2030	-2.0	5.4	39.8	49.1	27.8
2030-2040	-2.4	5.4	36.2	44.7	27.6
2000-2040	-4.6	49.2	326.8	472.6	182.4
Percent of Participants by Race/Ethnicity					
2000	23.4	24.7	50.5	1.4	100.0
2010	17.9	22.0	58.4	1.7	100.0
2020	13.5	19.1	65.3	2.1	100.0
2030	10.3	15.8	71.4	2.5	100.0
2040	8.0	13.0	76.2	2.8	100.0

Table 6.17, continued

Time Period	Anglo	Black	Hispanic	Other	Total
Panel C: WIA Dislocated Worker					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Number of Participants					
2000	17,952	7,132	17,220	1,844	44,148
2010	18,504	8,280	25,151	2,632	54,567
2020	17,617	8,976	33,884	3,373	63,850
2030	16,835	9,415	43,254	3,999	73,503
2040	16,491	9,706	53,401	4,603	84,201
Percent Change in the Number of Participants					
2000-2010	3.1	16.1	46.1	42.7	23.6
2010-2020	-4.8	8.4	34.7	28.2	17.0
2020-2030	-4.4	4.9	27.7	18.6	15.1
2030-2040	-2.0	3.1	23.5	15.1	14.6
2000-2040	-8.1	36.1	210.1	149.6	90.7
Percent of Participants by Race/Ethnicity					
2000	40.6	16.2	39.0	4.2	100.0
2010	33.9	15.2	46.1	4.8	100.0
2020	27.5	14.1	53.1	5.3	100.0
2030	23.0	12.8	58.8	5.4	100.0
2040	19.6	11.5	63.4	5.5	100.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Number of Participants					
2000	17,952	7,132	17,220	1,844	44,148
2010	18,847	8,681	28,644	3,292	59,464
2020	18,306	9,918	44,794	5,288	78,306
2030	17,835	10,944	66,216	7,803	102,798
2040	17,756	11,901	92,948	10,999	133,604
Percent Change in the Number of Participants					
2000-2010	5.0	21.7	66.3	78.5	34.7
2010-2020	-2.9	14.2	56.4	60.6	31.7
2020-2030	-2.6	10.3	47.8	47.6	31.3
2030-2040	-0.4	8.7	40.4	41.0	30.0
2000-2040	-1.1	66.9	439.8	496.5	202.6
Percent of Participants by Race/Ethnicity					
2000	40.6	16.2	39.0	4.2	100.0
2010	31.7	14.6	48.2	5.5	100.0
2020	23.3	12.7	57.2	6.8	100.0
2030	17.4	10.6	64.4	7.6	100.0
2040	13.3	8.9	69.6	8.2	100.0

Table 6.17, continued

Time Period	Anglo	Black	Hispanic	Other	Total
Panel D: WIA Youth					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Number of Participants					
2000	3,066	11,925	20,348	202	35,541
2010	2,891	12,827	25,473	253	41,444
2020	2,803	11,858	31,461	315	46,437
2030	2,650	11,958	37,165	315	52,088
2040	2,412	11,137	43,213	355	57,117
Percent Change in the Number of Participants					
2000-2010	-5.7	7.6	25.2	25.2	16.6
2010-2020	-3.0	-7.6	23.5	24.5	12.0
2020-2030	-5.5	0.8	18.1	0.0	12.2
2030-2040	-9.0	-6.9	16.3	12.7	9.7
2000-2040	-21.3	-6.6	112.4	75.7	60.7
Percent of Participants by Race/Ethnicity					
2000	8.5	33.6	57.3	0.6	100.0
2010	6.9	31.0	61.5	0.6	100.0
2020	6.1	25.5	67.7	0.7	100.0
2030	5.0	23.0	71.4	0.6	100.0
2040	4.2	19.5	75.7	0.6	100.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Number of Participants					
2000	3,066	11,925	20,348	202	35,541
2010	2,943	13,650	28,648	313	45,554
2020	2,874	13,099	37,658	437	54,068
2030	2,771	14,021	51,790	556	69,138
2040	2,555	13,707	66,225	755	83,242
Percent Change in the Number of Participants					
2000-2010	-4.0	14.5	40.8	55.0	28.2
2010-2020	-2.3	-4.0	31.5	39.6	18.7
2020-2030	-3.6	7.0	37.5	27.2	27.9
2030-2040	-7.8	-2.2	27.9	35.8	20.4
2000-2040	-16.7	14.9	225.5	273.8	134.2
Percent of Participants by Race/Ethnicity					
2000	8.5	33.6	57.3	0.6	100.0
2010	6.4	30.0	62.9	0.7	100.0
2020	5.4	24.2	69.6	0.8	100.0
2030	4.0	20.3	74.9	0.8	100.0
2040	3.0	16.5	79.6	0.9	100.0

Table 6.17, continued

Time Period	Anglo	Black	Hispanic	Other	Total
Panel E: WIA Other					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Number of Participants					
2000	483	696	394	92	1,665
2010	488	848	594	131	2,061
2020	466	924	826	169	2,385
2030	442	975	1,070	206	2,693
2040	440	1,041	1,304	226	3,011
Percent Change in the Number of Participants					
2000-2010	1.0	21.8	50.8	42.4	23.8
2010-2020	-4.5	9.0	39.1	29.0	15.7
2020-2030	-5.2	5.5	29.5	21.9	12.9
2030-2040	-0.5	6.8	21.9	9.7	11.8
2000-2040	-8.9	49.6	231.0	145.7	80.8
Percent of Participants by Race/Ethnicity					
2000	29.0	41.8	23.7	5.5	100.0
2010	23.7	41.1	28.8	6.4	100.0
2020	19.6	38.7	34.6	7.1	100.0
2030	16.5	36.2	39.7	7.6	100.0
2040	14.6	34.6	43.3	7.5	100.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Number of Participants					
2000	483	696	394	92	1,665
2010	494	892	673	166	2,225
2020	480	1,015	1,086	269	2,850
2030	474	1,131	1,649	400	3,654
2040	470	1,272	2,329	538	4,609
Percent Change in the Number of Participants					
2000-2010	2.3	28.2	70.8	80.4	33.6
2010-2020	-2.8	13.8	61.4	62.0	28.1
2020-2030	-1.3	11.4	51.8	48.7	28.2
2030-2040	-0.8	12.5	41.2	34.5	26.1
2000-2040	-2.7	82.8	491.1	484.8	176.8
Percent of Participants by Race/Ethnicity					
2000	29.0	41.8	23.7	5.5	100.0
2010	22.2	40.1	30.2	7.5	100.0
2020	16.9	35.6	38.1	9.4	100.0
2030	13.0	31.0	45.1	10.9	100.0
2040	10.2	27.6	50.5	11.7	100.0

Table 6.17, continued

Time Period	Anglo	Black	Hispanic	Other	Total
Panel F: Programs Resulting from Welfare Reform [1]					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Number of Participants					
2000	29,552	51,419	74,415	1,091	156,477
2010	29,135	57,951	97,022	1,333	185,441
2020	27,866	60,116	122,054	1,584	211,620
2030	26,970	59,253	151,016	1,842	239,081
2040	25,629	58,563	181,562	2,072	267,826
Percent Change in the Number of Participants					
2000-2010	-1.4	12.7	30.4	22.2	18.5
2010-2020	-4.4	3.7	25.8	18.8	14.1
2020-2030	-3.2	-1.4	23.7	16.3	13.0
2030-2040	-5.0	-1.2	20.2	12.5	12.0
2000-2040	-13.3	13.9	144.0	89.9	71.2
Percent of Participants by Race/Ethnicity					
2000	18.8	32.9	47.6	0.7	100.0
2010	15.7	31.3	52.3	0.7	100.0
2020	13.2	28.4	57.7	0.7	100.0
2030	11.2	24.8	63.2	0.8	100.0
2040	9.5	21.9	67.8	0.8	100.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Number of Participants					
2000	29,552	51,419	74,415	1,091	156,477
2010	29,749	61,415	114,088	1,691	206,943
2020	28,898	67,142	162,714	2,476	261,230
2030	28,386	69,431	226,056	3,493	327,366
2040	27,412	72,405	306,088	4,799	410,704
Percent Change in the Number of Participants					
2000-2010	0.7	19.4	53.3	55.0	32.3
2010-2020	-2.9	9.3	42.6	46.4	26.2
2020-2030	-1.8	3.4	38.9	41.1	25.3
2030-2040	-3.4	4.3	35.4	37.4	25.5
2000-2040	-7.2	40.8	311.3	339.9	162.5
Percent of Participants by Race/Ethnicity					
2000	18.8	32.9	47.6	0.7	100.0
2010	14.4	29.7	55.1	0.8	100.0
2020	11.1	25.7	62.3	0.9	100.0
2030	8.6	21.2	69.1	1.1	100.0
2040	6.7	17.6	74.5	1.2	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Workforce Commission, Labor Force Training Program Participants: 1999, 2000, and 2001, [machine readable data files], 2002a.

[1] Choices, Food Stamp Employment and Training, and Welfare to Work.

Table 6.18

Total State Expenditures and State Expenditures for Selected Labor Force Training Programs in Texas (in 2000 Dollars) and Projections to 2040 Assuming Alternative Projection Scenarios

Year	All Programs	Title III and IV	WIA Adult	WIA Dislocated Worker	WIA Youth	WIA Other	All Welfare
				All Scenarios			
2000	$ 97,089,943	$ 4,212,333	$ 20,488,411	$ 29,977,375	$ 7,666,905	$ 792,540	$ 33,952,379
				Assuming Rates of Zero Net Migration (0.0 Scenario)			
2010	$ 106,823,955	$ 5,476,712	$ 21,988,362	$ 34,126,866	$ 8,146,234	$ 916,300	$ 36,169,481
2020	112,586,857	6,260,763	23,124,968	35,950,035	8,607,228	964,852	37,679,011
2030	115,737,987	6,683,840	23,973,651	36,910,169	8,527,843	982,940	38,659,544
2040	118,016,824	7,039,962	24,403,895	37,927,341	8,584,146	995,316	39,066,164
				Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)			
2010	$ 117,684,419	$ 5,937,633	$ 24,536,378	$ 37,052,084	$ 8,940,300	$ 981,036	$ 40,236,988
2020	136,513,110	7,652,259	28,435,466	43,355,427	10,017,390	1,135,260	45,917,308
2030	156,368,659	9,477,506	32,587,060	49,910,007	11,236,423	1,281,868	51,875,795
2040	177,370,179	11,401,730	36,926,886	57,174,163	12,321,279	1,433,236	58,112,885
				Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)			
2010	$ 130,110,269	$ 6,456,775	$ 27,487,748	$ 40,377,245	$ 9,826,909	$ 1,059,100	$ 44,902,492
2020	167,825,975	9,442,573	35,510,228	53,171,340	11,663,549	1,356,600	56,681,685
2030	216,503,074	13,651,024	45,364,524	69,801,898	14,914,449	1,739,304	71,031,875
2040	276,839,434	18,985,093	57,869,151	90,719,788	17,956,964	2,193,884	89,114,554

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Workforce Commission, Workforce Investment Act: Program Year 2000 Annual Report: An Investment in Texas' Economy, 2001a; Welfare-to-Work Status Report as Required by Rider 40, [online], 2002b; and Texas Workforce Commission Letter 09-01, [online], 2001b.

Chapter 7

Public Elementary, Secondary, and Higher Education

Population change affects both educational demands and costs. In this chapter, we examine the implications of population patterns in Texas on the demand for, and costs of, public elementary and secondary education and selected aspects of higher education. Because data on enrollment by age, sex, and race/ethnicity were not available from the 2000 Census at the time this volume was completed, it was not possible to project total enrollment changes for the State that would include both public- and private-sector forms of educational involvement as reported in the Census. The emphasis in this chapter is thus on the effects of population change on public education enrollment and costs.

This chapter follows the pattern in previous chapters in that we first provide a brief history of recent patterns of change in education in Texas and then present projections of the number of persons enrolled in public elementary and secondary schools and public community colleges and public universities. We examine the implications of such enrollment changes for enrollment in selected specialized elementary and secondary programs, for public education costs, for the number of college students with unmet financial need, and for the level of financial assistance needed from all sources and from the State. We then present alternative projections based on recent historical patterns in higher education to indicate the effects of potential changes in levels of educational involvement on the demand for higher education. As with other projections in this volume, the projections provided here are intended to be exemplary of only the population-related changes in educational enrollment and costs. They should not be confused with the official projections provided by the Texas Education Agency or the Texas Higher

Education Coordinating Board, which are more inclusive and take into account a number of additional considerations not examined here. The projections from these agencies are more appropriate for short-term planning purposes.

Historical Patterns of Educational Involvement, Attainment, and Costs in Texas

The 1980s and 1990s witnessed dramatic changes in education in Texas. Elementary and secondary education experienced substantial changes resulting from increased testing and increased accountability at all levels. The Hopwood decision (*Hopwood v. Texas* (21 F.3d 603 (5th Cir. 1994))), the development of the TEXAS Grant Program (Acts 1999, 76th Leg., ch. 1590, §§ 1, eff. June 19, 1999), and the creation of the Closing the Gaps Program (Texas Higher Education Coordinating Board 2001c) were a few of the changes that impacted higher education. These and other policy changes and conditions have markedly affected education in Texas. Population-related change is clearly only one of many factors impacting education in Texas.

Enrollment in education has increased rapidly in the past two decades (see Tables 7.1 and 7.2). The number of persons enrolled in elementary and secondary schools increased by 45.3 percent from 1980 to 2000, only slightly less than the 46.5 percent rate of growth in the population. Growth was faster in the 1990s than in the 1980s, and a comparison of Tables 7.1 and 7.2 suggests that, while much of the growth in both decades was in public education, private and other forms of education have become larger parts of total elementary and secondary enrollment in the State over the last decade. Nearly 3.3 million of the 3.6 million persons (90.2 percent) enrolled in elementary and secondary education were in public schools in 1990 and 4.0 million of the 4.7 million persons enrolled in elementary and secondary education in 2000 (84.3 percent) were accounted for by public education. Care must be taken in interpreting such data,

however, because census data are self-reported for a somewhat different time period than the data on public enrollment, which are actual agency enrollment data. Available data are insufficient to allow us to examine the implications of private education for the State's future education needs.

The bottom panels of Table 7.2 show that there have been increases in enrollment in specialized elementary and secondary educational programs as well. In the 1990s, growth in all of these programs was faster than growth in enrollment generally and than the 22.8 percent rate of population increase. The data on costs in Table 7.3 show that costs in each of these specialized program areas also increased faster than population. As is also obvious, however, many of these costs were driven by growth in the specific populations needing such services. For example, although costs for Bilingual and English as a Second Language (ESL) education increased by 66.7 percent from 1990 to 2000, per-student costs declined by 11.1 percent from 1990 to 2000. Overall, expenditures on elementary and secondary education increased from $17.5 to $23.1 billion (31.6 percent) in 2000 constant dollar terms from 1990 to 2000, and per-student expenditures increased by 7.0 percent.

These data show rapid growth in higher education enrollment in the 1980s but much slower growth in the 1990s. The 1980s were impacted by the entrance of the last of the baby boomers into higher education, while the 1990s were impacted by the much smaller baby-bust generation. Total enrollment in higher education increased by 63.8 percent in the 1980s but by 0.3 percent in the 1990s, while public higher education enrollment increased by 34.0 percent in the 1980s and 8.6 percent in the 1990s. Because enrollment in higher education as self-reported in the census can include any involvement in any post-secondary course or curriculum, it is difficult to directly compare public to total enrollment data, but relative patterns of change across the two decades are similar in census and agency data.

The data in Table 7.3 indicate that general revenue expenditures on public higher education increased by 18.3 percent and that per-student expenditures increased by 8.7 percent between 1990 and 2000. These values include only general revenue costs for higher education programs and do not include any tuition or fee increases instituted by colleges or universities, local tax funds (for community colleges), research funds, endowment funds, or other funds generated by college or university activities. Total expenditures from all sources are significantly higher than those shown here.

As for income, educational attainment and enrollment in the 1990s showed patterns of progress, but continued disparity existed among the State's racial/ethnic groups (see Table 7.4). In comparison to 12.8 percent of Anglos and 19.3 percent of Asians, 24.2 percent of Blacks and 50.7 percent of Hispanics 25 years of age or older had less than a high school level of education. Thirty percent of Anglos and 47.8 percent of Asians had a bachelor's degree or higher but only 15.4 percent of Blacks and 9.0 percent of Hispanics held such degrees. There was progress in the 1990s, however (see Table 7.5). The percentage increase in the proportion of high school graduates was 14.5 percent from 1990 to 2000 for Blacks and 10.5 percent for Hispanics compared to a 7.0 percent increase for Anglos and a 2 percent increase for Asians. Similarly, the percentage increase in the proportion of college graduates from 1990 to 2000 was 15.7 percent for Asians and 19.0 percent for Anglos but 27.5 percent for Blacks and 21.9 percent for Hispanics. The total percentages of persons with high school diplomas increased by 9.6 percent for Blacks from 1990 to 2000, by 5.7 percent for Anglos, by 4.7 percent for Hispanics, and by 1.6 percent for Asians. The percentage of persons 25 years of age or older who are college graduates increased from 1990 to 2000 by 6.5 percent for Asians, 4.8 percent for Anglos, 3.3 percent for Blacks, and by 1.6 percent for Hispanics. These differentials reflect not only educational

achievement but also population change because inmigrating persons may either enhance or reduce the educational levels that a group would otherwise have shown. Nevertheless, these data suggest that the 1990s witnessed improvements in educational attainment, while 2000 data point to the need for additional improvements if gaps in attainment are to be decreased.

Table 7.6 provides another measure of change in educational involvement in Texas. This table shows the percentage of persons in major college-attending ages (18-35 years of age) enrolled in public community colleges and universities in both 1990 and 2000. These data again provide both positive and negative indications relative to educational progress in the State in the 1990s. Enrollment in community colleges increased for all racial/ethnic groups and, as a result, the total enrollment rate increased. Increases were generally larger for non-Anglos than Anglos. For public universities, however, the rates of enrollment for Hispanics declined from 1990 to 2000, while those for other groups, particularly Blacks, increased. Because of the large size of the Hispanic population among college age persons, these changes led to a decrease in the total enrollment rate in public universities between 1990 and 2000.

Texas educational programs have shown significant increases in the past two decades, increasing both in the number of persons involved in education and in the expenditures for education. The data on achievement, however, are very mixed relative to educational attainment while showing substantial continuing educational differentials. The historical data on education suggest that future population change may be of particular importance for understanding the future of education in Texas and that public interest in, and concern about, education is likely to continue to be based on its recognized importance in achieving adequate socioeconomic resources. As shown in Figure 7.1, income levels vary substantially by level of education. In the United States in 2000, the average income of a household in which the householder was without

a high school degree was only $28,974 compared to $45,368 for a household in which the householder was a high school graduate and $84,029 for a householder with a bachelor's degree. Such differences when experienced over a lifetime have implications for the quality of life of the individuals involved and for the private- and public-sector economies to which they contribute. Education is likely to continue to be an area of concern for both public policy makers and private-sector decision makers.

Projections of Enrollment, Costs, Need, and Financial Assistance

The projections in this chapter were completed using a variety of data sources and methods. The projections of enrollment by educational level were completed by developing age-, sex-, and race/ethnicity-specific rates of participation in public schools at each level from data provided by the Texas Education Agency (2001) and the Texas Higher Education Coordinating Board (2001a). These projections are of Texas residents enrolled in public elementary and secondary schools, public community colleges, and public universities in Texas. Public college enrollments exclude persons enrolled in the health-related institutions (whose enrollment patterns are different from those for public colleges and universities), out-of-state students, international students, and, of course, students enrolled in private colleges and universities. In the set of projections used here, 2000 age, sex, and race/ethnicity rates of enrollment are assumed to prevail throughout the projection period. These rates were applied to the population projections to obtain projections of those enrolled across the projection period. The alternative projections used 1990-2000 trends in crude rates of enrollment and assumed that these changes would occur in each decade period from 2000 to 2040.

The projections of costs use 2000 per-student costs as computed from expenditure data provided by the Texas Education Agency (2002a, 2002b) and the Texas Higher Education Coordinating Board (2002c) and assume these per-student costs continue over the projection period. All cost data are, therefore, in 2000 constant dollars. The projections of number of students in specialized elementary and secondary programs were completed by computing age-, sex-, and race/ethnicity-specific rates of participation in such programs for all students and multiplying these rates by the projections of the total number of students.

The projections of the number of students with unmet financial need and financial assistance involved the use of three data bases and corresponding assumptions. Data on the income distributions of students by race/ethnicity in Texas public community colleges and universities were obtained from the Comptroller's disparity study (Texas Comptroller of Public Accounts 1998, Murdock et al. 1998) and updated appropriately. Data on financial need and assistance were obtained from the Texas Higher Education Coordinating Board's Financial Aid Data Base (2002b) on programs available to students at various income levels, the contributions of federal and state sources to each program, and the average costs for attending public community colleges and universities. Data on family contributions to total costs were determined using Federal guidelines (U.S. Department of Education 2000).

Given these data sources, the income distributions were applied to the projections of the number of students to obtain income distributions for students. These race/ethnicity-specific income distributions were assumed to apply to the racial/ethnic groups across the projection period. For each income level, the amount of expected household contribution to college costs was determined for each household income category using federal guidelines. This step was taken to eliminate students without unmet need. The number of students with any level of unmet

need was therefore determined for each income level in 2000 and this proportion assumed for subsequent years in the projections for each income category. Since each income level can be used to determine amount of unmet need, we were able to project the number of students with different amounts of (dollars of) unmet need. Financial assistance was determined by analyzing expected assistance from Federal and State sources for each aid program available to persons qualifying at each income level. Because of the assumption of constant income distributions for each race/ethnicity group over time and the fact that the number of persons with unmet financial need and financial assistance (including State assistance levels) are determined by income levels, it is population change that drives the projections of all other factors. Similarly, because of the assumption that the aid programs available by income level are fixed over time and the State's assistance levels within programs are fixed, the State's proportion of assistance remains at a relatively fixed level over time, except for the period from 2000 to 2010 during which we assume that the $300 million TEXAS Grant Program becomes fully utilized. The projections provided here will not reflect any changes in the income distributions by race/ethnicity, financial assistance programs available, and federal/state proportions of assistance.

Projections of Public School Enrollment

Projections of the number of persons enrolled in each level of education are shown in Tables 7.7-7.10. Total enrollment at all levels of education would increase from roughly 4.8 million residents in public educational institutions in 2000 to nearly 6.2 million in 2040 under the 0.5 scenario and to nearly 8.6 million under the 1.0 scenario. These represent increases of 28.3 percent under the 0.5 scenario and 79.0 percent under the 1.0 scenario. These increases are slower than the 67.9 and 142.6 percent increases projected to occur in the total population and

suggest that the aging of the population leads educational enrollment to slow in the coming years. Nevertheless, as many as 3.8 million additional students (under the 1.0 scenario) may be added to the Texas educational system over the next 40 years.

Non-Anglo population growth will account for a majority of the projected increase. For example, under the 1.0 scenario, Anglo enrollment declines by 16.2 percent but Black enrollment increases by 7.5 percent, Hispanic enrollment increases by 205.6 percent, and Other enrollment increases by 260.4 percent. Overall, because Anglo enrollment declines, all of the net increase in enrollment will be due to non-Anglo populations, and by 2040, under the 1.0 scenario, only 21.4 percent of the persons enrolled would be Anglo while 8.3 percent would be Black, 63.6 percent Hispanic, and 6.7 would be persons from the Other racial/ethnic group. Non-Anglos will largely determine the future of educational enrollment in Texas.

Enrollment in elementary and secondary education increases 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 under the 1.0 scenario (see Figure 7.2). Since the total growth in enrollment at all levels of education is 1.4 million under the 0.5 scenario and 3.8 million under the 1.0 scenario, elementary and secondary enrollment will be responsible for the vast majority of enrollment growth in the State (more than 78 percent under both scenarios). The projected changes represent 2000 to 2040 increases in enrollment of 27.1 percent and 76.2 percent for the 0.5 and 1.0 scenarios, respectively.

The extent to which enrollment increases will result from non-Anglo populations is even more apparent for elementary and secondary education than for total public education because of the younger age structure of the non-Anglo population (see Figure 7.3). 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 would be Hispanic, and 5.5 percent would be persons from the Other racial/ethnic group. Of the total net increase in public elementary and secondary enrollment from 2000 to 2040 under the 1.0 scenario, non-Anglos would account for all of the increase with Hispanics accounting for the vast majority of the non-Anglo increase.

The data show quite different patterns between public community colleges and universities. 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 a marked expansion in this difference over time. Under the 0.5 scenario, community college enrollment in 2040 would be 587,621 compared to 477,670 for universities while under the 1.0 scenario community college enrollment would be 848,867 compared to 676,942 (see Figure 7.4). Overall, these data suggest that public community colleges and universities will increase their combined resident enrollment from 792,048 in 2000 to 1,065,291 in 2040 under the 0.5 scenario and to 1,525,809 in 2040 under the 1.0 scenario. Under the 0.5 scenario, total enrollment would increase by 34.5 percent from 2000 to 2040 with community college enrollment increasing by 39.6 percent and universities by 28.8 percent, while under the 1.0 scenario, total enrollment would increase by 92.6 percent with community college enrollment increasing by 101.6 percent and university enrollment by 82.5 percent.

Both community college and university enrollment will become more diverse but the diversity will be greater in community colleges than in universities. Under the 0.5 scenario, 65.3 percent of the persons enrolled in community colleges in 2040, compared to 45.3 percent in 2000, would be non-Anglo, while in public universities, the non-Anglo proportion would be 57.1 percent in 2040 compared to 38.5 percent in 2000. Under the 1.0 scenario, 74.3 percent of

community college students and 67.7 percent of public university students in 2040 would be non-Anglo (see Figure 7.5). Under the 0.5 and 1.0 scenarios, all of the net change in enrollment from 2000 to 2040 would be due to non-Anglo populations.

For all enrollment categories, the data in these tables suggest that enrollment will grow more slowly than population and that enrollment will increasingly involve non-Anglo populations. Among colleges and universities, community colleges will increase enrollment more rapidly than public universities because of their higher rates of enrollment for Hispanics and other non-Anglo groups, which are the fastest growing components of the population. Public education at all levels in Texas will be altered significantly by changes in non-Anglo populations.

Implications of Projected Change in Public Enrollment

The implications of the projected changes in enrollment are examined relative to three factors. First, we examine the implications of change in public elementary and secondary education for enrollment in specialized programs. Second, we examine the implications of public elementary and secondary school and college and university enrollment for total educational costs. We then examine the implications of projected change in public higher education for the level of financial need for students attending public colleges and universities and for likely levels of unmet financial need. Finally, we describe the implications of alternative rates of enrollment for total enrollment and enrollment in community colleges and public universities.

Tables 7.11-7.13 and Figure 7.6 show projected changes in enrollment in several specialized public elementary and secondary education programs. These data suggest that the projected population changes would increase enrollment in these programs. Although total

enrollment in public elementary and secondary schools increases by 27.1 percent under the 0.5 scenario and by 76.2 percent under the 1.0 scenario, enrollment in the Bilingual/ESL, Economically Disadvantaged, Immigrant, Limited English Proficiency, and Title I programs would all increase by larger percentages than total enrollment under either the 0.5 or 1.0 scenario. These are programs most used by the components of the Texas population projected to grow most rapidly: that is, those programs projected to increase most rapidly are those with the largest percentage of Hispanic participants and those projected to grow least rapidly are those with the highest proportion of Anglo participants. For all programs, however, the percentage of non-Anglo participants increases over time. For example, although the percentage of non-Anglos in the Gifted and Talented Program was only 41.0 percent in 2000, by 2040 the percentage of non-Anglos would be 60.0 percent under the 0.5 scenario and 68.6 percent under the 1.0 scenario. In sum, these programs will grow significantly given the projected changes in the population and will, like total enrollment, come to reflect the racial/ethnic composition of the population and of public elementary and secondary enrollment.

Table 7.14 provides data showing the implications of the projected changes in enrollment for public costs for public elementary and secondary schools, community colleges, and universities, and several of the above-noted specialized elementary and secondary programs. Because these projections are based on per-student costs, they grow as enrollment grows such that their percentage changes are the same as the percentage changes in enrollments in these programs. The costs of such programs can be expected to show significant increases in the coming years. Total elementary and secondary school costs would increase by $6.3 billion from 2000 to 2040 under the 0.5 scenario and by roughly $17.6 billion under the 1.0 scenario; public college and university costs increase by roughly $840 million under the 0.5 scenario and by $2.3

billion from 2000 to 2040 under the 1.0 scenario. Substantial increases are also shown for each of the programs for which specialized assistance would be provided.

Tables 7.15-7.17 present the projected number of college students with financial need unmet by household resources for the coming years. These data point to a rapid increase in the number of students requiring financial assistance. For example, under the 0.5 scenario, the total number of students requiring at least some assistance increases by nearly 255,000 from 625,873 in 2000 to 880,354 in 2040, while under the 1.0 scenario, the number increases by nearly 660,000 to 1,285,387 in 2040. These represent increases of 40.7 and 105.4 percent, respectively, greater than the 34.5 and 92.6 percent rates of growth in total enrollment projected under the same scenarios (see Table 7.8). Reflecting the higher proportion of non-Anglos (who tend to have lower incomes) enrolled, the increases are greater for public community colleges than for public universities. The increase from 2000 to 2040 in the number of students requiring at least some assistance is 48.7 percent for community colleges and 32.6 percent for public universities under the 0.5 scenario and 120.1 percent for community colleges and 90.6 percent for public universities under the 1.0 scenario.

Because of racial/ethnic differences in income, the percentage of all those with unmet financial need from non-Anglo groups is larger than their total percentage of enrollment. For example, of those enrolled in 2040 under the 0.5 scenario, 38.5 percent are projected to be Anglo, 9.4 percent Black, 44.2 percent Hispanic, and 7.9 percent persons from the Other racial/ethnic group. Under the 1.0 scenario these values for 2040 are 28.7 percent, 8.1 percent, 50.9 percent, and 12.3 percent for Anglos, Blacks, Hispanics, and persons from the Other racial/ethnic group, respectively. Of all persons requiring at least some assistance in 2040 under the 0.5 scenario, 33.1 percent would be Anglo, 10.3 percent Black, 48.5 percent Hispanic, and 8.1 percent students

from the Other racial/ethnic group. Of those projected to need at least some assistance under the 1.0 scenario, 24.2 percent would be Anglo, 8.7 percent Black, 54.7 percent Hispanic, and 12.4 percent persons from the Other racial/ethnic group.

Overall then, these data suggest that the number of persons requiring assistance will grow rapidly and will reflect the socioeconomic differences existent in the Texas population in 2000. The population of students requiring at least some assistance will increase faster than enrollment and will show even larger proportions of non-Anglos than total enrollment.

The data in Tables 7.18 and 7.19 show the projected number of persons by level of financial assistance required after household contributions have been taken into account. The percentage distributions across racial/ethnic groups remain constant over time and across scenarios because of the assumption in these projections that race/ethnicity specific income distributions for 2000 remain constant across the projection period.

Table 7.18 shows that the levels of need vary across racial/ethnic groups. For example, of those requiring financial assistance in community colleges in 2000, 21.0 percent of Anglos, 49.1 percent of Blacks, 51.6 percent of Hispanics, and 44.1 percent of persons from Other racial/ethnic groups required the maximum assistance of $7,500-9,999. In public universities, 62.6 percent of Blacks, 63.5 percent of Hispanics, and 53.8 percent of persons in the Other racial/ethnic group required more than $10,000 in assistance compared to 29.4 percent of Anglos.

The percentage distributions for the total population show changes over time that reflect the characteristics of the projected population. In both community colleges and public universities, the percentage of those with high levels of need is projected to increase over time. For example, whereas 36.6 percent of those from community colleges needing assistance in 2000 would require $7,500-9,999 in assistance, the percentage at this level of need in 2040 (under the

1.0 scenario and in 2000 constant dollars) would be 44.5 percent. In public universities, the percentage with the highest level of need (more than $10,000) is 43.0 percent in 2000 but is projected to be 52.0 percent in 2040 under the 1.0 scenario.

Levels of need will largely vary by race/ethnicity in accordance with the growth in their total populations and their socioeconomic resources (see Table 7.19). For example, whereas 26.9 percent of those with the highest level of need among community college enrollees needing assistance were Anglo in 2000, by 2040 under the 1.0 scenario, the percentage of participants who are Anglo would decline to only 9.6. For Blacks these proportions are 17.6 percent in 2000 but 9.6 percent in 2040, for Hispanics 49.5 percent in 2000 and 71.0 percent in 2040, and for the Other racial/ethnic group 6.0 percent in 2000 and 9.8 percent in 2040. Non-Anglos, particularly Hispanics, have higher levels of need and are likely to form increasing proportions of those with need.

The amounts of financial assistance projected to be provided in the future from all non-household sources and by the State of Texas are shown in Tables 7.20 and 7.21. Both the level of financial assistance required overall and that for the State are fixed per capita amounts within need levels. The amount of such aid provided is assumed to remain at the level of 2000 with the exception that the TEXAS Grant Program appropriation of $300 million enacted in the 1999 and 2001 sessions of the Texas Legislature is assumed to be included in the level of State assistance provided by 2010. All dollar values are in 2000 constant dollars.

The absolute level of financial assistance required will increase in the coming years. The total level of financial assistance estimated to be $671.9 million in 2000 would grow to nearly $1.1 billion under the 0.5 scenario and to nearly $1.2 billion under the 1.0 scenario by 2010 and to more than $1.4 billion under the 0.5 scenario and to nearly $2.2 billion under the 1.0 scenario

by 2040. These represent increases of 112.0 percent from 2000 to 2040 under the 0.5 scenario and of 219.9 percent under the 1.0 scenario. Reflecting the increasing level of need among students requiring financial assistance, these rates of increase are larger than the increase in enrollment of 34.5 percent from 2000 to 2040 under the 0.5 scenario and 92.6 percent under the 1.0 scenario or the total increases in the number of persons requiring at least some level of assistance of 40.7 percent from 2000 to 2040 under the 0.5 and 105.4 percent from 2000 to 2040 under the 1.0 scenario (see Figure 7.7).

The State's dollars of assistance grow as the total level of assistance grows because of the use of per capita values and show similar levels of percentage change by income category relative to total assistance. Whereas state aid was $164.9 million in 2000, it is projected to be $529.4 million under the 0.5 scenario and $581.1 million under the 1.0 scenario by 2010 and $661.6 million under the 0.5 scenario and $974.5 million under the 1.0 scenario in 2040. These represent 2000 to 2040 percentage increases of 301.2 percent under the 0.5 scenario and 490.8 percent under the 1.0 scenario. The large numerical and percentage increases between 2000 and 2010 are a result of the assumption that the $300 million TEXAS Grant Program would be fully utilized by 2010. Percentage increases are smaller for subsequent decades after 2000 to 2010.

A comparison of the 2000 to 2010 data shows how significant the TEXAS Grant Program is in increasing the State's support for financial assistance. In 2000, the State's contribution to the total financial assistance provided is approximately 24.5 percent, but with the TEXAS Grant Program in place, the State's contribution is more than 45 percent under all scenarios and years after 2010.

After 2010, the change in the dollar value of assistance provided by the State can be seen as what the State would need to contribute to maintain its (approximately 45 percent) share of

total financial assistance. A comparison of 2010 to 2040 under the 0.5 scenario indicates that the State would need to increase its expenditures by about $132 million between 2010 and 2040 to maintain its share under the level of need assumed on the basis of the 2000 income distributions by race/ethnicity. Under the 1.0 scenario, the State would need to increase its level of expenditures by about $393 million between 2010 and 2040. The average contribution per enrollee is $600 to $650 for the State and approximately $1,200 to $1,400 from all sources, compared to estimated costs of $8,200 for attending a community college and $11,555 for public universities in Texas in 2000-2001 (Texas Higher Education Coordinating Board 2002d). Most students will need to obtain substantial additional resources through loans, work-related income, and other sources. The total level of financial assistance required will increase significantly, and the State's expenditures on financial assistance will also have to increase if the financial assistance requirements of Texas students are to be addressed.

The data provided above suggest that significant change will occur in the number of, the demographic and financial characteristics of, and the total expenditures for persons enrolled in various levels of education in Texas in the coming years if 2000 differentials in enrollment levels continue. To examine the potential effects of alternative levels of enrollment on enrollment patterns we examined 1990 to 2000 race/ethnicity specific enrollment rates. These rates were quite stable across time for elementary and secondary students (when increases in prekindergarten were taken into account) so that alternative projections of such enrollments were not merited. As indicated in Table 7.6, however, relatively large 1990-2000 changes were evident in enrollment rates in both public community colleges and public universities. In this section, we examine the implications of the enrollment rates in public community colleges and public universities changing in each of the decades from 2000 to 2040 at the same rate as the

race/ethnicity-specific rates changed from 1990 to 2000. We examine the implications of these changes for the total number of persons enrolled in higher education and for enrollments in community colleges and public universities.

Tables 7.22-7.24 show the projected number of students enrolled in public colleges and universities assuming the 1990-2000 trends in enrollment, referred to throughout the discussion as the trend scenario. A comparison of the data in these tables to those in Tables 7.7-7.9 shows that such increases would markedly affect total enrollment in colleges and universities and lead to shifts in the level of growth in enrollment among different racial/ethnic groups within different types of institutions. For example, under the 1.0 scenario, the total enrollment shown in Table 7.22 for 2040 would be 1,936,166 instead of the 1,525,809 projected assuming 2000 rates (and shown in Table 7.7). Under this same 1.0 scenario, total community college enrollment in 2040 is projected to be 1,274,722 compared to 848,867 assuming 2000 rates, while 2040 enrollment in public universities is projected to be 661,445 using trends in rates of enrollment, but 676,942 assuming 2000 rates. Whereas community college enrollment increases by 425,855 from 2000 to 2040, under the trend scenario compared to the 2000-rates scenario, public university enrollment declines by 15,497.

A comparison of the data by race/ethnicity reveals that the growth in community college enrollment under the trend scenario is a result of an approximately 26,000 increase in Anglo enrollment but a 98,000 increase in Black enrollment, a more than 198,000 increase in Hispanic enrollment, and a more than 102,000 increase in Other enrollment. Under the 1.0 scenario and assuming 1990-2000 trends in enrollment, the data in Tables 7.22 and 7.23 suggest growth from 2000 to 2040 in community colleges of 6.2 percent for Anglos, 257.3 percent for Blacks, 443.4 percent for Hispanics, and 854.1 percent for persons from the Other racial/ethnic group, and a

total increase of 202.7 percent. These values compare to changes for 2000-2040 under the 1.0 scenario and assuming 2000 enrollment rates of a decrease of 5.2 percent in Anglo enrollment, an increase of 46.8 percent in Black enrollment, an increase of 283.4 percent in Hispanic enrollment, an increase of 336.1 percent for persons from the Other racial/ethnic group, and a total increase of 101.6 percent. Because of such relative changes, the percentage of Anglos under the 1.0 and the trend scenario would be 19.2 percent compared to 25.7 percent assuming 2000 rates while the comparisons would be 13.1 percent under the trend and 8.1 percent under the 2000-rates scenarios for Blacks, 52.9 percent under the trend and 56.0 percent under the 2000-rates scenarios for Hispanics, and 14.8 percent under the trend and 10.2 percent under the 2000-rates scenario for the Other racial/ethnic group.

The data for public universities are very different under the trend scenario. Not only is the total number enrolled under the 1.0 and trend scenario approximately 15,500 smaller than under the 1.0 and 2000-rates scenario by 2040 (total enrollment is projected to be 661,445 under the trend scenario and 676,942 assuming 2000 rates), but the differences are very marked for some racial/ethnic groups. The number of Anglos enrolled in 2040 increases by about 13,000 under the trend compared to the 2000-rates scenarios, 231,893 compared to 218,630, and the number of Blacks increases by more than 47,000 from 102,220 under the trend scenario compared to 54,782 in 2040 under the 2000-rates scenario. Similarly Other enrollment is approximately 9,000 greater in 2040 at 111,178 under the trend and 102,052 under the 2000-rates scenario. The modest growth for public universities is attributable to the projection that the number of Hispanics, by 2040 under the 1.0 and trend scenario is roughly 85,000 less than under the 2000-rates scenario (216,154 and 301,478, respectively). As a result of a continuation of the 1990-2000 trends, the 44.5 percent of Hispanics among those enrolled in public universities that

is projected for 2040 under the 1.0 and 2000-rates scenario would be only 32.7 percent under the trend scenario, while the Anglo percentage of enrollment would be 35.0 percent under the trend compared to 32.3 under the 2000 rates, the Black percentage would be 15.5 percent compared to 8.1 percent, and the percentage in the Other racial/ethnic group would be 16.8 percent compared to 15.1 percent.

In sum, the projections of enrollment assuming that the changes in enrollment rates from 1990-2000 continue over the projection period indicate larger increases in total enrollment as a result of increases in community college enrollment but a small decline in public university enrollment due to a decline in public university Hispanic enrollment. These changes also result in increased enrollment for Blacks and persons from the Other racial/ethnic group but lead to lower rates of increase in community college enrollment among Hispanics and to absolute declines in Hispanic enrollment in public universities.

Summary

The analysis in this chapter has examined the implications of population change for public education enrollment and costs in the coming decades. Projected elementary and secondary enrollment and public community college and public university enrollment were examined under projections that assume that 2000 rates of enrollment continue throughout the projection period from 2000 through 2040 and for a set of alternative projections which assume that 1990-2000 trends in race/ethnicity-specific enrollment rates continue throughout the projection period. Given these projections, the implications of such population-related changes are examined for the costs of educational programs, for the number of students requiring financial assistance in public community colleges and universities, and for the total level of

financial need likely to be provided from all sources including the State. The results of the analysis suggest that:

1. 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 education (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 public colleges and universities (at both the graduate and undergraduate levels) increased by 8.6 percent from 1990 to 2000 and stood at more than 835,000 in 2000. Public costs for education in 2000 were more than $23.0 billion for elementary and secondary education, having increased by 31.6 percent in real dollar terms from 1990 to 2000, and general revenue costs for educational programs at colleges and universities were more than $2.6 billion in 2000, having increased by more than 18.3 percent from 1990 to 2000 in 2000 constant dollars. The 1990-2000 decade brought increases in the number of high school and college graduates among all racial/ethnic groups, with the largest percentage increases for non-Anglo students. Large racial/ethnic differences in enrollment rates and in levels of educational attainment continued, however, suggesting the contradictory nature of change in the 1990s. The role of education as a determinant of the socioeconomic resources of individuals and areas is likely to make education of continuing importance to policy and other decision makers in the coming years.

2. Projections assuming 2000 age-, sex-, and race/ethnicity-specific rates of enrollment show increases in the total number of persons enrolled in public educational institutions 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 represent increases of 28.3 percent from 2000 to 2040 under the

0.5 and 79.0 percent under the 1.0 scenario. Enrollment is expected to increase more slowly than the population, which increases by 67.9 percent under the 0.5 and 142.6 percent under the 1.0 scenario from 2000 to 2040. Nearly 3.8 million students (under the 1.0 scenario) would be added to the student population in public elementary and secondary schools, colleges, and universities from 2000 to 2040.

3. A majority of the enrollment increase will be due to non-Anglos. In fact, under either the 0.5 or 1.0 scenario, the absolute number of Anglos decreases from 2000 to 2040. 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.

4. The data for public elementary and secondary enrollment show enrollment increasing 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. More than 80 percent of total public enrollment in all schools would be in elementary and secondary schools. The importance of non-Anglo populations is even more apparent for elementary and secondary education than for total public education because of the younger age structure of non-Anglo populations. 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.

5. The data on public colleges and universities show different patterns for community colleges and universities because of higher rates of enrollment for Black and Hispanic populations in community colleges than in universities. 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 over time. Under the 1.0 scenario, community college enrollment would be 848,867 in 2040 compared to 676,942 in public universities. Public community colleges and universities will increase their combined resident enrollment from 792,048 in 2000 to 1,525,809 in 2040 under the 1.0 scenario, an increase of 92.6 percent (with community college enrollments increasing by 101.6 percent and university enrollment by 82.5 percent). Both community college and university enrollment will become more diverse, but the diversity will be greater in community colleges than in universities. Under the 1.0 scenario, 74.3 percent of community college students and 67.7 percent of public university students in 2040 would be non-Anglo, compared to 45.3 percent and 38.5 percent in 2000.

6. The implications of such changes relative to enrollment in specialized elementary and secondary programs (Bilingual/ESL, Economically Disadvantaged, Gifted and Talented, Immigrant, Limited English Proficiency, Special Education, Title I, and Career and Technology Education) were examined. 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, compared to the overall rate of growth in elementary and secondary school enrollment of 76.2 percent.

7. The implications of enrollment growth (at all levels) for public education costs were also examined. These costs were calculated on a per-student basis and show percentage increases equivalent to increases in enrollment, but the absolute increases in costs are substantial. 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.

8. Projections of the number of persons attending college with levels of financial need unmet by household resources were made using federal guidelines and assuming the income distribution of students as identified in the disparity study conducted by the Texas Comptroller of Public Accounts (1998). In general, these data suggest that the number of students requiring at least some form of financial assistance to pay college costs will increase faster than total enrollment. For example, 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 also projected to be increasingly non-Anglo. Whereas 28.7 percent of all those enrolled in 2040 would be Anglo, 8.1 percent Black, 50.9 percent Hispanic, and 12.3 percent persons from the Other racial/ethnic group under the 1.0 scenario, of all those with at least some level of unmet need, 24.2 percent would be Anglo, 8.7 percent would be Black, 54.7 percent Hispanic, and 12.4 percent would be persons from the Other racial/ethnic group. Finally, because of the faster growth in non-Anglo enrollment, particularly Hispanic enrollment, and the lower socioeconomic resources among non-Anglo populations, the percentage of students with the highest level of

need increases. For example, under the 1.0 scenario, the percentage of community college students with any level of unmet need in the highest level-of-need category (of $7,500-9,999) increases from 36.6 percent in 2000 to 44.5 percent in 2040, and of all students with any level of unmet financial need in universities, 43 percent were in the highest need category (of $10,000 or more) in 2000 but 52 percent would be in 2040.

9. The total level of financial assistance to be provided to college students in Texas was also projected. The total level of financial need would increase from $671.9 million in 2000 to $1.2 billion under the 1.0 scenario by 2010 and to nearly $2.2 billion by 2040, a percentage increase of 219.9 percent from 2000 to 2040. This 2000 to 2040 rate of increase is larger than the increase in enrollment of 92.6 percent or the total increase in the number of persons requiring at least some level of assistance of 105.4 percent. The State's dollars of assistance grow as the total level of assistance grows because of the use of per capita values and show similar levels of percentage change by income category relative to total assistance. State aid was $164.9 million in 2000, but it is projected to be $581.1 million under the 1.0 scenario by 2010 and $974.5 million in 2040. This represents a 2000 to 2040 increase of 490.8 percent under the 1.0 scenario. The large increase between 2000 and 2010 is largely a result of assuming that the $300 million TEXAS Grant Program would be fully utilized by 2010. It increases the State's proportion of all assistance that would be required from approximately 24.5 percent in 2000 to more than 45 percent under all scenarios and years after 2010. Because the total dollars of need increase as the size and socioeconomic characteristics of those in colleges and universities change, to maintain its 2010 proportion of assistance the State's level of financial assistance would also increase such that by 2040 under the 1.0 scenario the State would need to increase its amount of aid by an additional $393 million compared to that provided in 2010. Despite this increase, given

estimated annual attendance costs of $8,200 for community colleges and $11,555 for senior colleges in 2000, the State's level of assistance of $600 to $650, and the approximately $1,200 to $1,400 in financial aid from all sources (in 2000 constant dollars), the amount students must obtain to attend college through loans, work, and other means is substantial. The total level of financial assistance required by students will increase, and the State's expenditures on financial assistance will also likely have to increase if the financial assistance requirements of Texas students are to be addressed.

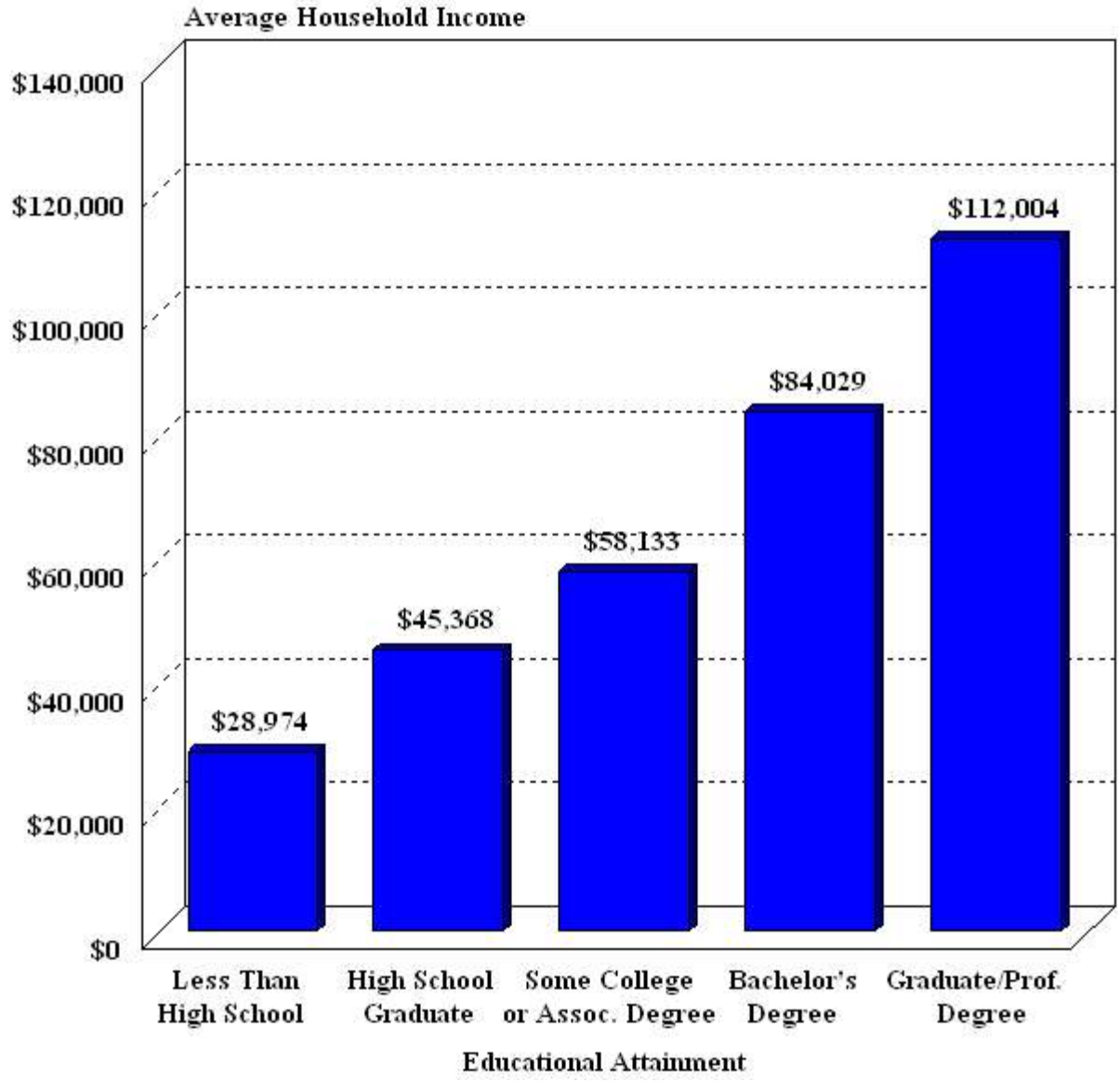
10. Under alternative enrollment projections for higher education in which the 1990-2000 trends in enrollment rates are assumed to apply over the projection period, the number of students would show larger increases compared to the projections made assuming that 2000 enrollment rates continue over the projection period. For example, under the 1.0 and 1990-2000 trend-in-rates scenario, total college and university enrollment would be 1,936,166 instead of the 1,525,089 projected assuming 2000 rates. Total community college enrollment in 2040 would be projected to be 1,274,722 compared to 848,867 assuming 2000 rates, while 2040 enrollment in public universities is projected to be 661,445 using trends in rates but 676,942 assuming 2000 rates. Whereas community college enrollment increases by 425,855 under the trend-in-rates scenario compared to the 2000-rates scenario, public university enrollment shows an increase that is 15,497 less under the trend scenario than under the 2000-rates scenario. The smaller increase in public universities under the trend scenario is because Hispanic enrollment rates in universities declined from 1990 to 2000, and such rates projected forward produce a substantial decline in Hispanic enrollment in public universities compared to the 2000-rates scenario. The number of Hispanics by 2040 under the 1.0 and 1990-2000 trend-in-rates scenario is roughly 85,000 less than under the 2000-rates scenario, that is 216,154 under the trend and 301,478 under

the 2000-rates scenarios. As a result, Hispanics who are projected to make up 44.5 percent of the total enrollment in 2040 under the 1.0 and 2000 rates scenario would be only 32.7 percent under the trend scenario. On the other hand, Anglos would make up 35.0 percent of the total enrollment under the trend scenario compared to 32.3 percent under the 2000-rates scenario, Blacks 15.5 percent compared to 8.1 percent, and persons from Other racial/ethnic group 16.8 percent compared to 15.1 percent. The 1990-2000 trends scenario increases total enrollment, increases Black relative to Hispanic enrollment, and decreases Hispanic enrollment in public universities compared to the 2000-rates scenario.

The data in this chapter suggest that the number of persons to be educated by Texas public elementary and secondary schools and public community colleges and public universities will increase in the coming years. 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. Educational change will represent a significant challenge for the State of Texas in the coming decades.

Figure 7.1

Average Annual Household Income in the United States by Educational Attainment in 2000*



*** From March 2001 Current Population Survey, U.S. Bureau of the Census**

Figure 7.2

Enrollment in Public Elementary and Secondary Schools in Texas for All Scenarios, 2000-2040

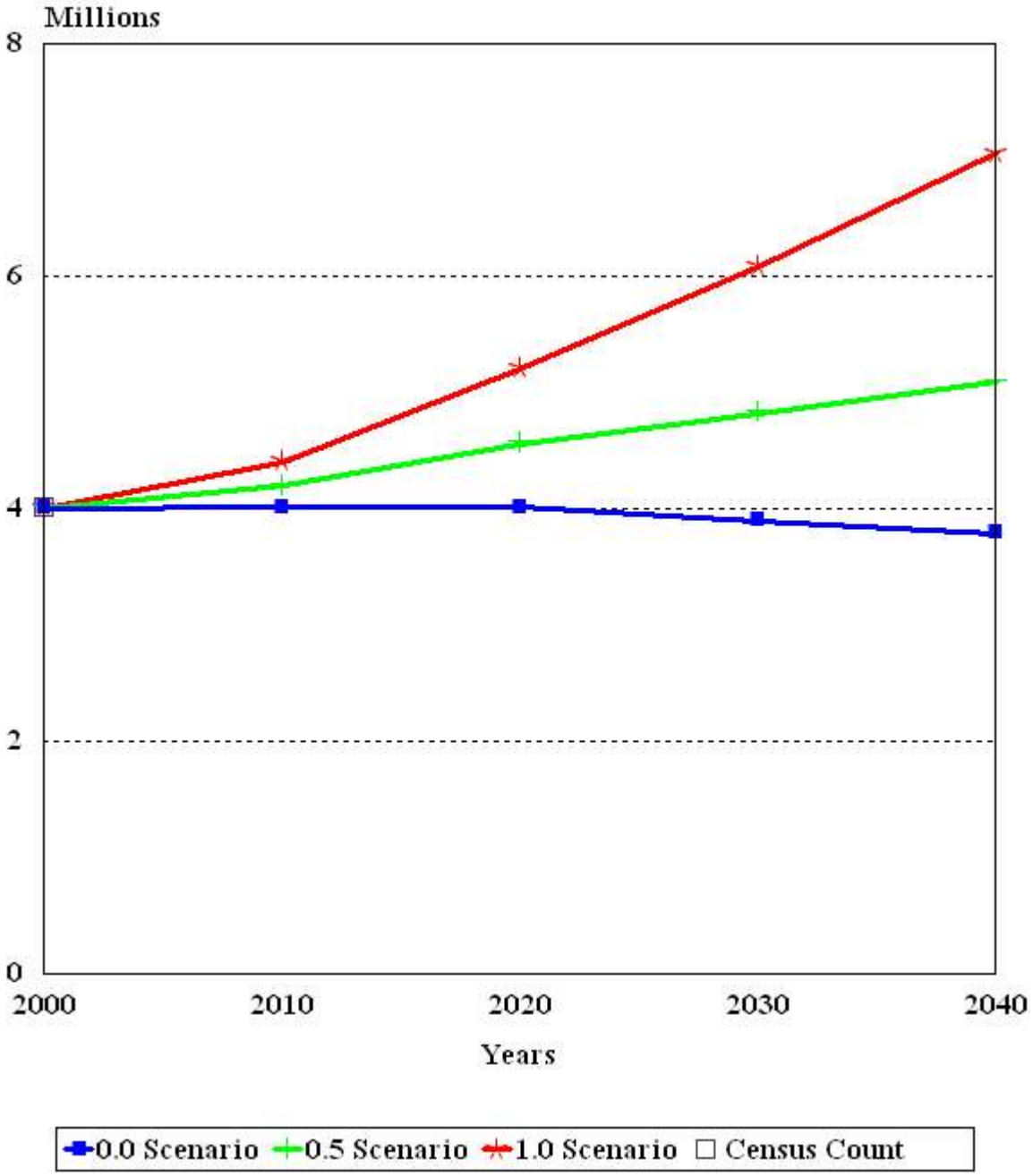
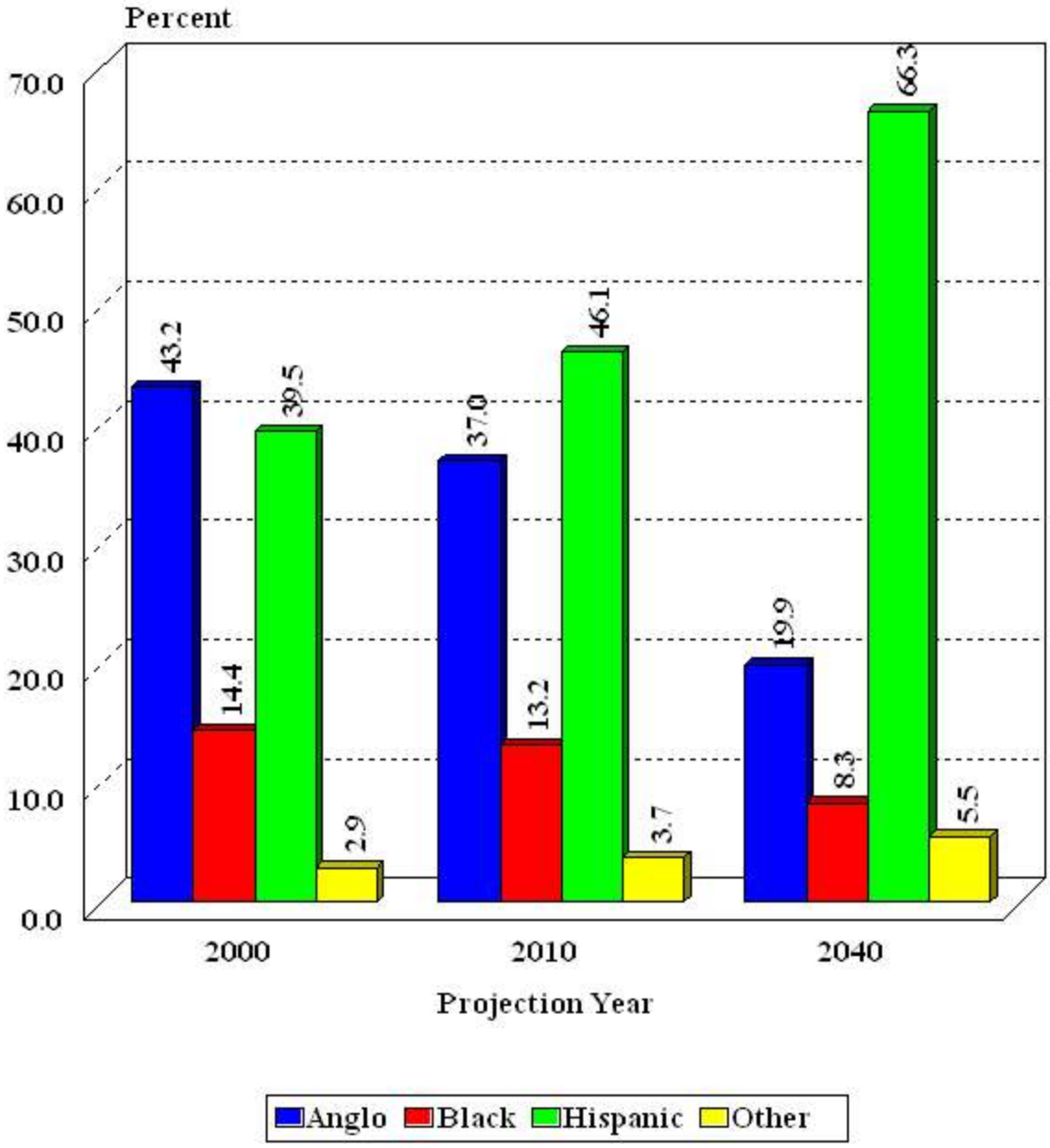


Figure 7.3

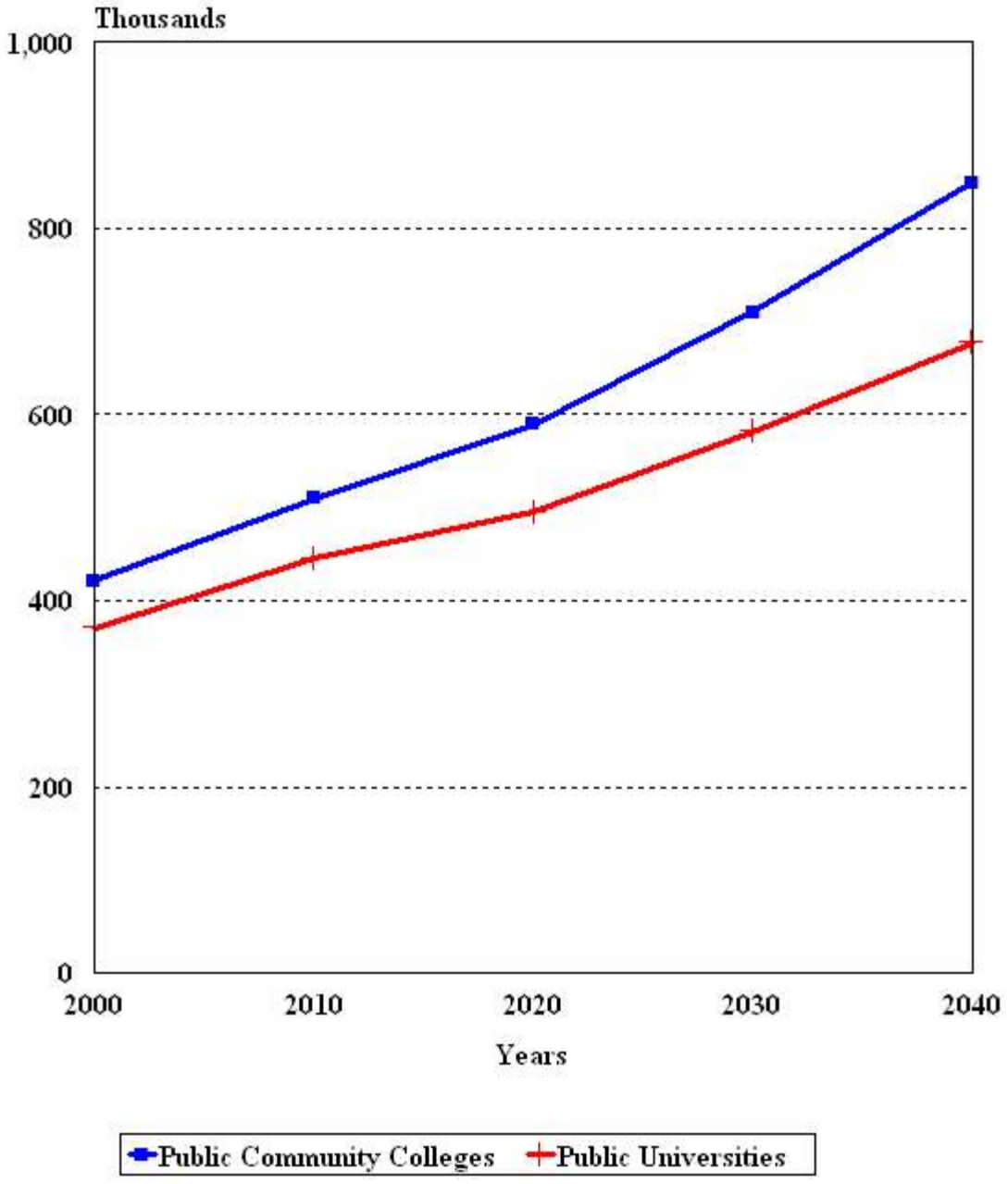
Percent of Public Elementary and Secondary Enrollment in Texas by Race/Ethnicity in 2000 and Projections for 2010 and 2040*



*** Projections are shown for the 1.0 scenario**

Figure 7.4

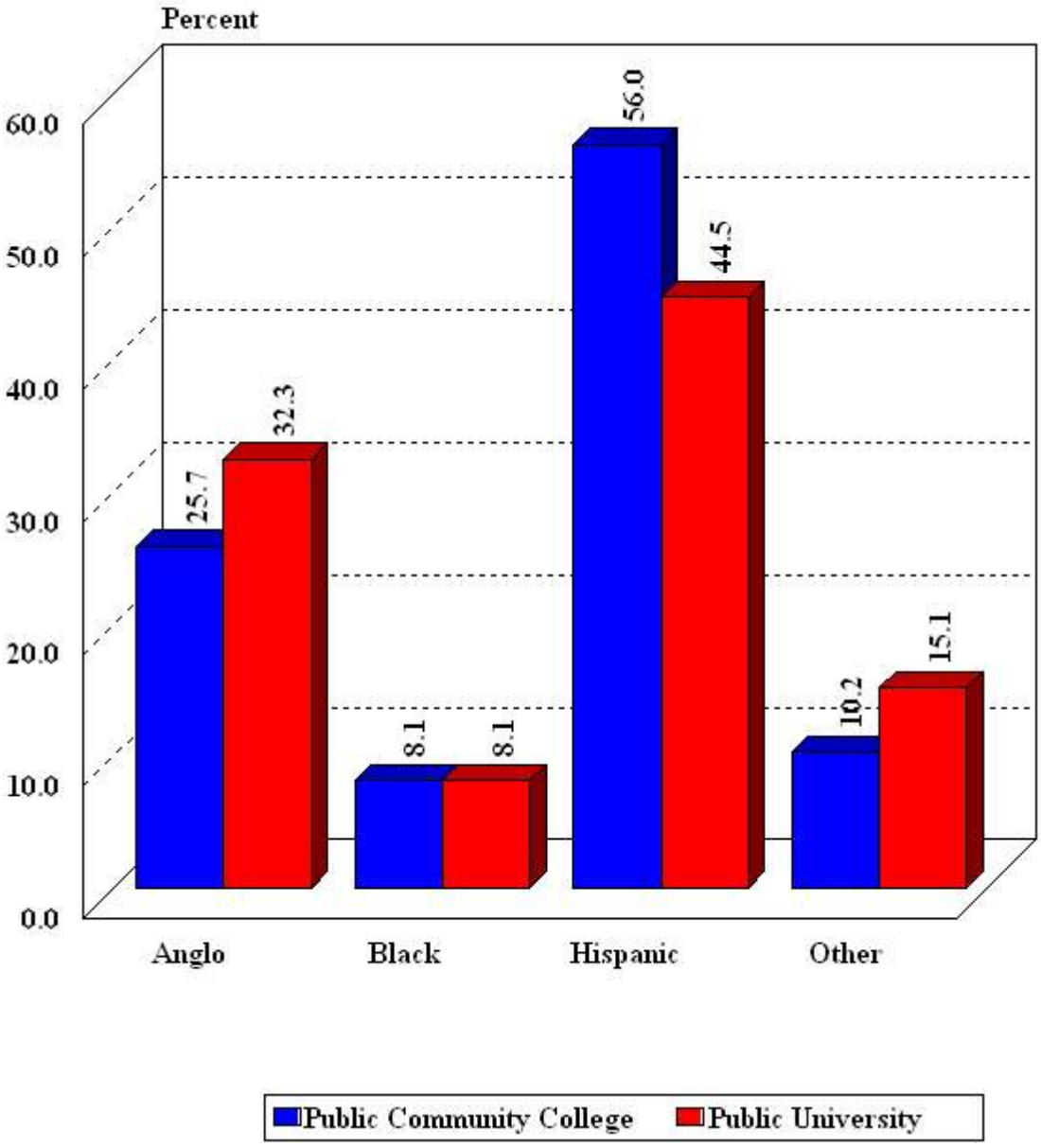
Enrollment in Public Community Colleges and Public Universities in Texas, 2000-2040*



*** Projections are shown for the 1.0 scenario**

Figure 7.5

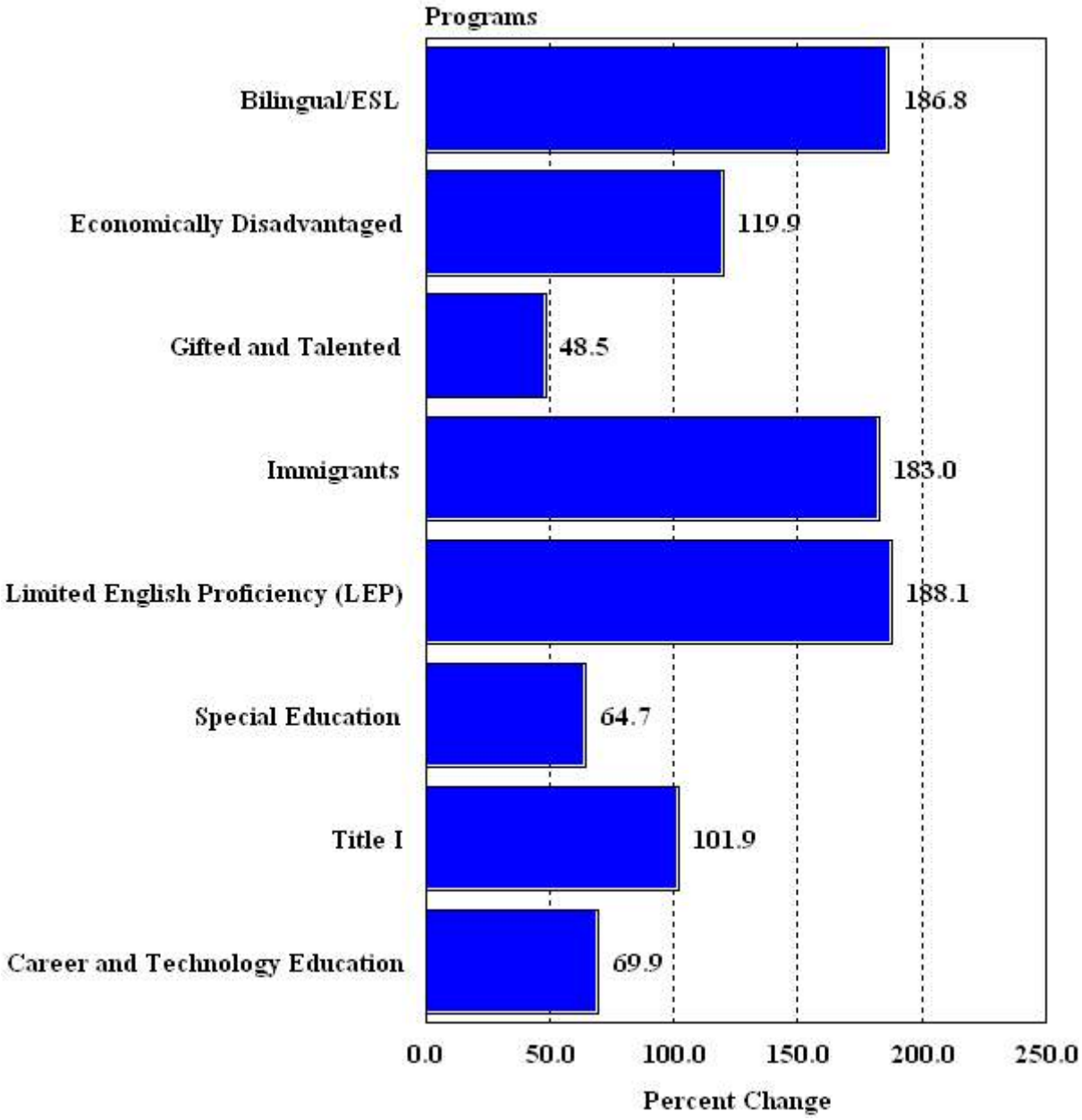
Projected Percent of Public Community College and Public University Enrollment in Texas by Race/Ethnicity, 2040*



*** Projections are shown for the 1.0 scenario**

Figure 7.6

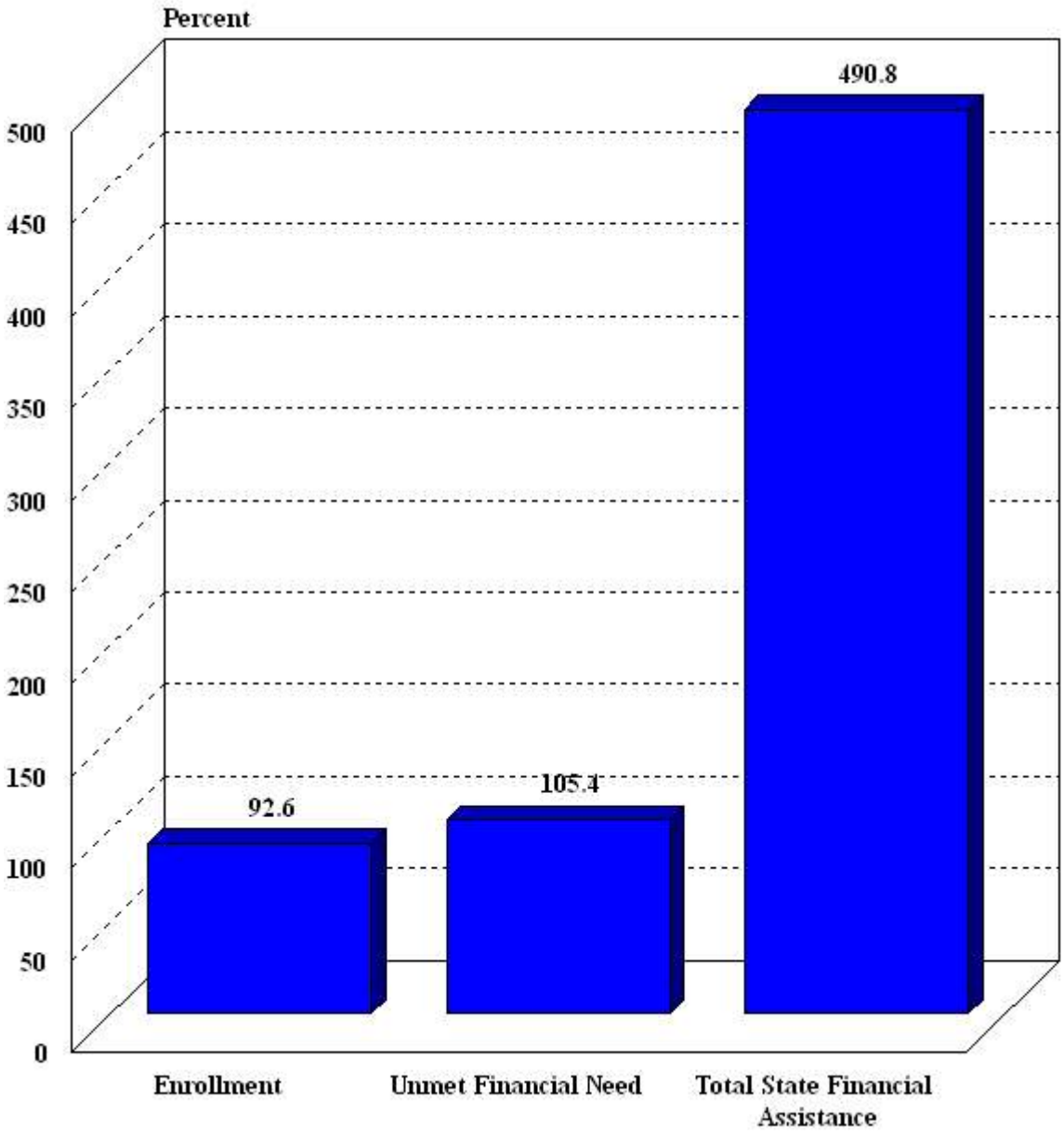
Percent Change in Enrollment in Selected Elementary and Secondary School Programs in Texas, 2000 to 2040*



*** Projections are shown for the 1.0 scenario**

Figure 7.7

Percent Change in Selected Education Factors for Public Colleges and Universities in Texas, 2000 to 2040*



*** Projections are shown for the 1.0 scenario**

Table 7.1

Enrollment and Percent Change in Enrollment for Texas Residents
Enrolled in Elementary and Secondary Schools and Colleges in Texas, 1980-2000[1]

School Level	1980	1990	2000	Percent Change 1980-1990	Percent Change 1990-2000	Percent Change 1980-2000
Elementary and Secondary[2]	3,264,840	3,606,848	4,745,370	10.5	31.6	45.3
College	732,217	1,199,047	1,202,890	63.8	0.3	64.3
Total	3,997,057	4,805,895	5,948,260	20.2	23.8	48.8

[1]Data shown are self-reported enrollment as presented in the decennial censuses for the census years indicated. The enrollment so reported includes enrollment in any type of institution or form of school (private, public, home school, etc.) and any level of involvement (post-graduate, part-time, full-time, etc.).

[2]Includes persons in preprimary education and related programs.

Sources: U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a; Census of Population and Housing, 1990: Summary Tape File 3, [machine readable data files], 1991c; and Census of Population and Housing, 1980: Summary Tape File 3, [machine readable data files], 1983.

Table 7.2

Enrollment in Texas Public Elementary and Secondary Schools, Selected Education Programs, and Public Community Colleges and Universities by Race/Ethnicity, and Percent Change in Enrollment, 1980-2000

Time Period	Anglo		Black		Hispanic		Other		Total
	Number	%	Number	%	Number	%	Number	%	Number
Total Public Colleges and Public Universities									
1980	435,157	75.8	52,555	9.2	77,071	13.4	8,957	1.6	573,740
1990	535,942	69.7	69,436	9.0	136,650	17.8	26,808	3.5	768,836
2000	484,891	58.1	90,921	10.9	212,427	25.4	46,914	5.6	835,153
Percent Change 1980-1990	23.2		32.1		77.3		199.3		34.0
Percent Change 1990-2000	-9.5		30.9		55.5		75.0		8.6
Total Elementary and Secondary									
1980	1,634,355	56.3	434,667	15.0	796,614	27.5	34,431	1.2	2,900,067
1990	1,632,005	50.2	471,191	14.5	1,081,368	33.2	69,767	2.1	3,254,331
2000	1,727,491	43.1	576,715	14.4	1,582,323	39.6	114,129	2.9	4,000,658
Percent Change 1980-1990	-0.1		8.4		35.7		102.6		12.2
Percent Change 1990-2000	5.9		22.4		46.3		63.6		22.9
Bilingual/ESL									
1990	3,479	1.3	940	0.3	254,940	93.8	12,582	4.6	271,941
2000	6,430	1.3	2,418	0.5	464,075	93.6	22,592	4.6	495,515
Percent Change 1990-2000	84.8		157.2		82.0		79.6		82.2
Gifted and Talented									
1990	147,713	71.2	14,193	6.9	36,366	17.6	8,857	4.3	207,129
2000	198,487	59.2	33,400	10.0	86,612	25.9	16,402	4.9	334,901
Percent Change 1990-2000	34.4		135.3		138.2		85.2		61.7
Special Education									
1990	168,155	50.9	58,362	17.7	100,574	30.5	2,832	0.9	329,923
2000	220,564	45.2	86,451	17.7	176,161	36.1	4,898	1.0	488,074
Percent Change 1990-2000	31.2		48.1		75.2		73.0		47.9
Career and Technology Education									
1990	206,947	50.2	69,756	16.9	129,769	31.4	6,311	1.5	412,783
2000	345,791	46.7	111,481	15.0	263,875	35.6	19,670	2.7	740,817
Percent Change 1990-2000	67.1		59.8		103.3		211.7		79.5

Sources: Texas Education Agency, Demographic data for public school students for the years specified, [machine readable data files], 1980-2000, 2001. Texas Higher Education Coordinating Board, Demographic data for public community college and university students for the years specified, [machine readable data files], 2001a.

Table 7.3

General Revenue Expenditures (in 2000 Dollars) for Texas Public Elementary and Secondary Schools, Selected Education Programs, and Public Colleges and Universities and Percent Change in Expenditures, 1990 and 2000

Program	Expenditures				Percent Change 1990-2000	
	1990		2000			
	Total	Per Student	Total	Per Student	Total	Per Student
Total Elementary and Secondary	$ 17,548,698,571	$ 5,392	$ 23,092,358,439	$ 5,772	31.6	7.0
Bilingual/ESL	354,346,821	1,303	590,748,041	1,159	66.7	-11.1
Gifted and Talented	135,356,821	653	245,961,232	717	81.7	9.8
Special Education	1,047,145,311	3,174	1,739,689,310	3,599	66.1	13.4
Career and Technology Education	408,431,566	989	566,681,113	738	38.7	-25.4
Total Public Colleges and Public Universities	2,207,969,578	3,032	2,611,362,728	3,297	18.3	8.7

Sources: Texas Education Agency, Academic Excellence Indicator System, 2000-01 AEIS Reports, [online] 2002a; and Pocket Edition: Texas Public School Statistics, 2002b. Texas Higher Education Coordinating Board, Statistical Report 1990, 1990; and Statistical Report 2000, 2002c.

Table 7.4

Percent of Population 25 Years of Age or Older in Texas
by Educational Attainment Level and Race/Ethnicity, 2000

Educational Attainment Level	Percent				
	Anglo	Black	Hispanic	Asian	Total
Less than 9th grade	3.5	6.5	31.5	9.0	11.5
9th to 12th grade, no diploma	9.3	17.7	19.2	10.3	12.9
High school graduate (includes equivalency)	25.7	29.9	22.0	14.3	24.8
Some college, no degree	25.6	24.8	14.9	12.7	22.4
Associate degree	5.9	5.7	3.4	5.9	5.2
Bachelor's degree	20.3	10.7	6.1	27.3	15.6
Graduate or professional degree	9.7	4.7	2.9	20.5	7.6

Source: U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a.

Table 7.5

Percent of Population 25 Years of Age or Older in Texas Who Are High School Graduates and Higher or College Graduates and Higher by Race/Ethnicity, and Percent Change, 1990-2000

Race/ Ethnicity	Percent High School Graduates and Higher	Percent College Graduates and Higher
	1990	
Anglo	81.5	25.2
Black	66.2	12.0
Hispanic	44.6	7.3
Asian	79.1	41.3
Total	72.1	20.3
	2000	
Anglo	87.2	30.0
Black	75.8	15.3
Hispanic	49.3	8.9
Asian	80.7	47.8
Total	75.7	23.2
	Percent Change in Percent	
Anglo	7.0	19.0
Black	14.5	27.5
Hispanic	10.5	21.9
Asian	2.0	15.7
Total	5.0	14.3

Sources: U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a; and Census of Population and Housing, 1990: Summary Tape File 3, [machine readable data files], 1991c.

Table 7.6

Public Community College and University Enrollment Rates (Per 100 Persons Ages 18 to 35) in Texas by Race/Ethnicity, 1990 and 2000

Year	Anglo	Black	Hispanic	Other	Total
Community College					
1990	6.3	4.1	4.4	5.6	5.5
2000	6.5	5.2	4.8	6.8	5.7
Public University					
1990	7.4	4.0	3.5	10.0	6.0
2000	7.5	4.7	3.3	10.3	5.7

Sources: Derived by the authors from U.S. Census Bureau, Census 2000 Summary File 3, [machine readable data files], 2002a. Texas Higher Education Coordinating Board, Demographic data for public community college and university students for the years specified, [machine readable data files], 2001a.

Table 7.7

Total Public Education (All Levels), Public Elementary and Secondary School, Public Community College, Public University, and Total Public College and University Enrollment in Texas by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other	Total
Panel A: Assuming Rates of Zero Net Migration (0.0 Scenario)					
Total Public Education (All Levels)					
2000	2,186,097	661,995	1,785,676	160,507	4,794,275
2010	2,061,871	619,414	1,971,978	162,972	4,816,235
2020	1,958,923	573,712	2,133,800	158,058	4,824,493
2030	1,804,868	533,952	2,232,525	136,883	4,708,228
2040	1,630,159	475,707	2,337,823	129,970	4,573,659
Public Elementary and Secondary Schools					
2000	1,727,733	576,977	1,582,538	114,979	4,002,227
2010	1,598,891	527,123	1,755,801	121,313	4,003,128
2020	1,525,445	483,662	1,886,446	112,907	4,008,460
2030	1,389,747	448,136	1,962,032	94,260	3,894,175
2040	1,246,433	394,847	2,050,503	92,427	3,784,210
Public Community Colleges					
2000	230,497	46,742	124,057	19,782	421,078
2010	229,652	50,388	132,645	18,499	431,184
2020	217,121	49,804	151,892	19,954	438,771
2030	207,153	47,797	165,685	18,928	439,563
2040	191,562	45,097	176,394	17,059	430,112
Public Universities					
2000	227,867	38,276	79,081	25,746	370,970
2010	233,328	41,903	83,532	23,160	381,923
2020	216,357	40,246	95,462	25,197	377,262
2030	207,968	38,019	104,808	23,695	374,490
2040	192,164	35,763	110,926	20,484	359,337
Total Public Colleges and Universities					
2000	458,364	85,018	203,138	45,528	792,048
2010	462,980	92,291	216,177	41,659	813,107
2020	433,478	90,050	247,354	45,151	816,033
2030	415,121	85,816	270,493	42,623	814,053
2040	383,726	80,860	287,320	37,543	789,449

Table 7.7, continued

Year	Anglo	Black	Hispanic	Other	Total
		Panel B: Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)			
		Total Public Education (All Levels)			
2000	2,186,097	661,995	1,785,676	160,507	4,794,275
2010	2,087,749	650,797	2,141,045	192,799	5,072,390
2020	2,013,525	633,062	2,613,308	223,889	5,483,784
2030	1,887,206	622,048	3,074,946	241,620	5,825,820
2040	1,728,262	582,114	3,567,578	274,685	6,152,639
		Public Elementary and Secondary Schools			
2000	1,727,733	576,977	1,582,538	114,979	4,002,227
2010	1,615,413	552,660	1,885,489	139,703	4,193,265
2020	1,566,432	532,648	2,294,948	157,459	4,551,487
2030	1,451,552	521,459	2,680,120	164,134	4,817,265
2040	1,318,744	482,215	3,096,238	190,151	5,087,348
		Public Community Colleges			
2000	230,497	46,742	124,057	19,782	421,078
2010	234,361	53,484	156,501	23,541	467,887
2020	224,032	55,484	195,110	29,518	504,144
2030	217,574	55,981	241,768	34,635	549,958
2040	204,551	55,628	288,890	38,552	587,621
		Public Universities			
2000	227,867	38,276	79,081	25,746	370,970
2010	237,975	44,653	99,055	29,555	411,238
2020	223,061	44,930	123,250	36,912	428,153
2030	218,080	44,608	153,058	42,851	458,597
2040	204,967	44,271	182,450	45,982	477,670
		Total Public Colleges and Universities			
2000	458,364	85,018	203,138	45,528	792,048
2010	472,336	98,137	255,556	53,096	879,125
2020	447,093	100,414	318,360	66,430	932,297
2030	435,654	100,589	394,826	77,486	1,008,555
2040	409,518	99,899	471,340	84,534	1,065,291

Table 7.7, continued

Year	Anglo	Black	Hispanic	Other	Total
		Panel C: Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)			
		Total Public Education (All Levels)			
2000	2,186,097	661,995	1,785,676	160,507	4,794,275
2010	2,114,040	683,790	2,328,788	228,599	5,355,217
2020	2,069,649	698,248	3,199,022	315,913	6,282,832
2030	1,973,400	724,415	4,246,985	422,932	7,367,732
2040	1,832,427	711,819	5,456,943	578,411	8,579,600
		Public Elementary and Secondary Schools			
2000	1,727,733	576,977	1,582,538	114,979	4,002,227
2010	1,632,174	579,433	2,026,823	161,258	4,399,688
2020	1,608,472	586,270	2,786,400	217,725	5,198,867
2030	1,516,195	606,549	3,670,164	283,491	6,076,399
2040	1,395,371	588,439	4,679,891	390,090	7,053,791
		Public Community Colleges			
2000	230,497	46,742	124,057	19,782	421,078
2010	239,162	56,778	184,574	29,805	510,319
2020	231,187	61,807	252,369	43,818	589,181
2030	228,522	65,548	353,220	62,823	710,113
2040	218,426	68,598	475,574	86,269	848,867
		Public Universities			
2000	227,867	38,276	79,081	25,746	370,970
2010	242,704	47,579	117,391	37,536	445,210
2020	229,990	50,171	160,253	54,370	494,784
2030	228,683	52,318	223,601	76,618	581,220
2040	218,630	54,782	301,478	102,052	676,942
		Total Public Colleges and Universities			
2000	458,364	85,018	203,138	45,528	792,048
2010	481,866	104,357	301,965	67,341	955,529
2020	461,177	111,978	412,622	98,188	1,083,965
2030	457,205	117,866	576,821	139,441	1,291,333
2040	437,056	123,380	777,052	188,321	1,525,809

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Education Agency, Demographic data for public school students, [machine readable data files]. 2001. Texas Higher Education Coordinating Board, Demographic data for public community college and university students, [machine readable data files]. 2001a.

Table 7.8

Percent Change in Projected Total Public Education (All Levels), Public Elementary and Secondary School, Public Community College, Public University, and Total Public College and University Enrollment in Texas Assuming Alternative Projection Scenarios, 2000-2040

Time Period	Anglo	Black	Hispanic	Other	Total
Panel A: Assuming Rates of Zero Net Migration (0.0 Scenario)					
Total Public Education (All Levels)					
2000-2010	-5.7	-6.4	10.4	1.5	0.5
2010-2020	-5.0	-7.4	8.2	-3.0	0.2
2020-2030	-7.9	-6.9	4.6	-13.4	-2.4
2030-2040	-9.7	-10.9	4.7	-5.1	-2.9
2000-2040	-25.4	-28.1	30.9	-19.0	-4.6
Public Elementary and Secondary Schools					
2000-2010	-7.5	-8.6	10.9	5.5	0.0
2010-2020	-4.6	-8.2	7.4	-6.9	0.1
2020-2030	-8.9	-7.3	4.0	-16.5	-2.9
2030-2040	-10.3	-11.9	4.5	-1.9	-2.8
2000-2040	-27.9	-31.6	29.6	-19.6	-5.4
Public Community Colleges					
2000-2010	-0.4	7.8	6.9	-6.5	2.4
2010-2020	-5.5	-1.2	14.5	7.9	1.8
2020-2030	-4.6	-4.0	9.1	-5.1	0.2
2030-2040	-7.5	-5.6	6.5	-9.9	-2.2
2000-2040	-16.9	-3.5	42.2	-13.8	2.1
Public Universities					
2000-2010	2.4	9.5	5.6	-10.0	3.0
2010-2020	-7.3	-4.0	14.3	8.8	-1.2
2020-2030	-3.9	-5.5	9.8	-6.0	-0.7
2030-2040	-7.6	-5.9	5.8	-13.6	-4.0
2000-2040	-15.7	-6.6	40.3	-20.4	-3.1
Total Public Colleges and Universities					
2000-2010	1.0	8.6	6.4	-8.5	2.7
2010-2020	-6.4	-2.4	14.4	8.4	0.4
2020-2030	-4.2	-4.7	9.4	-5.6	-0.2
2030-2040	-7.6	-5.8	6.2	-11.9	-3.0
2000-2040	-16.3	-4.9	41.4	-17.5	-0.3

Table 7.8, continued

Time Period	Anglo	Black	Hispanic	Other	Total
Panel B: Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Total Public Education (All Levels)					
2000-2010	-4.5	-1.7	19.9	20.1	5.8
2010-2020	-3.6	-2.7	22.1	16.1	8.1
2020-2030	-6.3	-1.7	17.7	7.9	6.2
2030-2040	-8.4	-6.4	16.0	13.7	5.6
2000-2040	-20.9	-12.1	99.8	71.1	28.3
Public Elementary and Secondary Schools					
2000-2010	-6.5	-4.2	19.1	21.5	4.8
2010-2020	-3.0	-3.6	21.7	12.7	8.5
2020-2030	-7.3	-2.1	16.8	4.2	5.8
2030-2040	-9.1	-7.5	15.5	15.9	5.6
2000-2040	-23.7	-16.4	95.7	65.4	27.1
Public Community Colleges					
2000-2010	1.7	14.4	26.2	19.0	11.1
2010-2020	-4.4	3.7	24.7	25.4	7.7
2020-2030	-2.9	0.9	23.9	17.3	9.1
2030-2040	-6.0	-0.6	19.5	11.3	6.8
2000-2040	-11.3	19.0	132.9	94.9	39.6
Public Universities					
2000-2010	4.4	16.7	25.3	14.8	10.9
2010-2020	-6.3	0.6	24.4	24.9	4.1
2020-2030	-2.2	-0.7	24.2	16.1	7.1
2030-2040	-6.0	-0.8	19.2	7.3	4.2
2000-2040	-10.0	15.7	130.7	78.6	28.8
Total Public Colleges and Universities					
2000-2010	3.0	15.4	25.8	16.6	11.0
2010-2020	-5.3	2.3	24.6	25.1	6.0
2020-2030	-2.6	0.2	24.0	16.6	8.2
2030-2040	-6.0	-0.7	19.4	9.1	5.6
2000-2040	-10.7	17.5	132.0	85.7	34.5

Table 7.8, continued

Time Period	Anglo	Black	Hispanic	Other	Total
Panel C: Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Total Public Education (All Levels)					
2000-2010	-3.3	3.3	30.4	42.4	11.7
2010-2020	-2.1	2.1	37.4	38.2	17.3
2020-2030	-4.7	3.7	32.8	33.9	17.3
2030-2040	-7.1	-1.7	28.5	36.8	16.4
2000-2040	-16.2	7.5	205.6	260.4	79.0
Public Elementary and Secondary Schools					
2000-2010	-5.5	0.4	28.1	40.2	9.9
2010-2020	-1.5	1.2	37.5	35.0	18.2
2020-2030	-5.7	3.5	31.7	30.2	16.9
2030-2040	-8.0	-3.0	27.5	37.6	16.1
2000-2040	-19.2	2.0	195.7	239.3	76.2
Public Community Colleges					
2000-2010	3.8	21.5	48.8	50.7	21.2
2010-2020	-3.3	8.9	36.7	47.0	15.5
2020-2030	-1.2	6.1	40.0	43.4	20.5
2030-2040	-4.4	4.7	34.6	37.3	19.5
2000-2040	-5.2	46.8	283.4	336.1	101.6
Public Universities					
2000-2010	6.5	24.3	48.4	45.8	20.0
2010-2020	-5.2	5.4	36.5	44.8	11.1
2020-2030	-0.6	4.3	39.5	40.9	17.5
2030-2040	-4.4	4.7	34.8	33.2	16.5
2000-2040	-4.1	43.1	281.2	296.4	82.5
Total Public Colleges and Universities					
2000-2010	5.1	22.7	48.7	47.9	20.6
2010-2020	-4.3	7.3	36.6	45.8	13.4
2020-2030	-0.9	5.3	39.8	42.0	19.1
2030-2040	-4.4	4.7	34.7	35.1	18.2
2000-2040	-4.6	45.1	282.5	313.6	92.6

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Education Agency, Demographic data for public school students, [machine readable data files]. 2001. Texas Higher Education Coordinating Board, Demographic data for public community college and university students, [machine readable data files]. 2001a.

Table 7.9

Percent of Total Public Education (All Levels), Public Elementary and Secondary School, Public Community College, Public University, and Total Public College and University Enrollment in Texas by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other
Panel A: Assuming Rates of Zero Net Migration (0.0 Scenario)				
Total Public Education (All Levels)				
2000	45.7	13.8	37.2	3.3
2010	42.8	12.9	40.9	3.4
2020	40.6	11.9	44.2	3.3
2030	38.4	11.3	47.4	2.9
2040	35.7	10.4	51.1	2.8
Public Elementary and Secondary Schools				
2000	43.2	14.4	39.5	2.9
2010	39.9	13.2	43.9	3.0
2020	38.0	12.1	47.1	2.8
2030	35.7	11.5	50.4	2.4
2040	33.0	10.4	54.2	2.4
Public Community Colleges				
2000	54.7	11.1	29.5	4.7
2010	53.2	11.7	30.8	4.3
2020	49.5	11.4	34.6	4.5
2030	47.1	10.9	37.7	4.3
2040	44.5	10.5	41.0	4.0
Public Universities				
2000	61.5	10.3	21.3	6.9
2010	61.0	11.0	21.9	6.1
2020	57.3	10.7	25.3	6.7
2030	55.5	10.2	28.0	6.3
2040	53.4	10.0	30.9	5.7
Total Public Colleges and Universities				
2000	58.0	10.7	25.6	5.7
2010	56.9	11.4	26.6	5.1
2020	53.2	11.0	30.3	5.5
2030	51.1	10.5	33.2	5.2
2040	48.6	10.2	36.4	4.8

Table 7.9, continued

Year	Anglo	Black	Hispanic	Other
Panel B: Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
Total Public Education (All Levels)				
2000	45.7	13.8	37.2	3.3
2010	41.2	12.8	42.2	3.8
2020	36.7	11.5	47.7	4.1
2030	32.4	10.7	52.8	4.1
2040	28.0	9.5	58.0	4.5
Public Elementary and Secondary Schools				
2000	43.2	14.4	39.5	2.9
2010	38.5	13.2	45.0	3.3
2020	34.4	11.7	50.4	3.5
2030	30.2	10.8	55.6	3.4
2040	25.9	9.5	60.9	3.7
Public Community Colleges				
2000	54.7	11.1	29.5	4.7
2010	50.2	11.4	33.4	5.0
2020	44.4	11.0	38.7	5.9
2030	39.5	10.2	44.0	6.3
2040	34.7	9.5	49.2	6.6
Public Universities				
2000	61.5	10.3	21.3	6.9
2010	57.8	10.9	24.1	7.2
2020	52.1	10.5	28.8	8.6
2030	47.6	9.7	33.4	9.3
2040	42.9	9.3	38.2	9.6
Total Public Colleges and Universities				
2000	58.0	10.7	25.6	5.7
2010	53.7	11.2	29.1	6.0
2020	48.0	10.8	34.1	7.1
2030	43.2	10.0	39.1	7.7
2040	38.5	9.4	44.2	7.9

Table 7.9, continued

Year	Anglo	Black	Hispanic	Other
Panel C: Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
Total Public Education (All Levels)				
2000	45.7	13.8	37.2	3.3
2010	39.4	12.8	43.5	4.3
2020	33.0	11.1	50.9	5.0
2030	26.9	9.8	57.6	5.7
2040	21.4	8.3	63.6	6.7
Public Elementary and Secondary Schools				
2000	43.2	14.4	39.5	2.9
2010	37.0	13.2	46.1	3.7
2020	30.9	11.3	53.6	4.2
2030	24.9	10.0	60.4	4.7
2040	19.9	8.3	66.3	5.5
Public Community Colleges				
2000	54.7	11.1	29.5	4.7
2010	46.9	11.1	36.2	5.8
2020	39.3	10.5	42.8	7.4
2030	32.3	9.2	49.7	8.8
2040	25.7	8.1	56.0	10.2
Public Universities				
2000	61.5	10.3	21.3	6.9
2010	54.5	10.7	26.4	8.4
2020	46.5	10.1	32.4	11.0
2030	39.3	9.0	38.5	13.2
2040	32.3	8.1	44.5	15.1
Total Public Colleges and Universities				
2000	58.0	10.7	25.6	5.7
2010	50.5	10.9	31.6	7.0
2020	42.5	10.3	38.1	9.1
2030	35.4	9.1	44.7	10.8
2040	28.7	8.1	50.9	12.3

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Education Agency, Demographic data for public school students, [machine readable data files]. 2001. Texas Higher Education Coordinating Board, Demographic data for public community college and university students, [machine readable data files]. 2001a.

Table 7.10

Number and Percent of Net Change in Projected Total Public Education (All Levels), Public Elementary and Secondary School, Public Community College, Public University and Total Public College and University Enrollment in Texas Due To Each Race/Ethnicity Group, Assuming Alternative Projection Scenarios, 2000-2040

Race/ Ethnicity	Number	Percent
Panel A: Assuming Rates of Zero Net Migration (0.0 Scenario)		
Total Public Education (All Levels)		
Anglo	-555,938	-252.0
Black	-186,288	-84.4
Hispanic	552,147	450.2
Other	-30,537	-13.8
Total	-220,616	-100.0
Public Elementary and Secondary Schools		
Anglo	-481,300	-220.8
Black	-182,130	-83.5
Hispanic	467,965	414.6
Other	-22,552	-10.3
Total	-218,017	-100.0
Public Community Colleges		
Anglo	-38,935	-431.0
Black	-1,645	-18.2
Hispanic	52,337	579.3
Other	-2,723	-30.1
Total	9,034	100.0
Public Universities		
Anglo	-35,703	-306.9
Black	-2,513	-21.6
Hispanic	31,845	473.7
Other	-5,262	-45.2
Total	-11,633	-100.0
Total Public Colleges and Universities		
Anglo	-74,638	-2871.8
Black	-4,158	-160.0
Hispanic	84,182	3439.0
Other	-7,985	-307.2
Total	-2,599	-100.0

Table 7.10, continued

Race/ Ethnicity	Number	Percent
Panel B: Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
Total Public Education (All Levels)		
Anglo	-457,835	-33.7
Black	-79,881	-5.9
Hispanic	1,781,902	131.2
Other	114,178	8.4
Total	1,358,364	100.0
Public Elementary and Secondary Schools		
Anglo	-408,989	-37.7
Black	-94,762	-8.7
Hispanic	1,513,700	139.5
Other	75,172	6.9
Total	1,085,121	100.0
Public Community Colleges		
Anglo	-25,946	-15.6
Black	8,886	5.3
Hispanic	164,833	99.0
Other	18,770	11.3
Total	166,543	100.0
Public Universities		
Anglo	-22,900	-21.5
Black	5,995	5.6
Hispanic	103,369	96.9
Other	20,236	19.0
Total	106,700	100.0
Total Public Colleges and Universities		
Anglo	-48,846	-17.9
Black	14,881	5.4
Hispanic	268,202	98.2
Other	39,006	14.3
Total	273,243	100.0

Table 7.10, continued

Race/ Ethnicity	Number	Percent
Panel C: Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
Total Public Education (All Levels)		
Anglo	-353,670	-9.3
Black	49,824	1.3
Hispanic	3,671,267	97.0
Other	417,904	11.0
Total	3,785,325	100.0
Public Elementary and Secondary Schools		
Anglo	-332,362	-10.9
Black	11,462	0.4
Hispanic	3,097,353	101.5
Other	275,111	9.0
Total	3,051,564	100.0
Public Community Colleges		
Anglo	-12,071	-2.8
Black	21,856	5.1
Hispanic	351,517	82.2
Other	66,487	15.5
Total	427,789	100.0
Public Universities		
Anglo	-9,237	-3.0
Black	16,506	5.4
Hispanic	222,397	72.7
Other	76,306	24.9
Total	305,972	100.0
Total Public Colleges and Universities		
Anglo	-21,308	-2.9
Black	38,362	5.2
Hispanic	573,914	78.2
Other	142,793	19.5
Total	733,761	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Education Agency, Demographic data for public school students, [machine readable data files]. 2001. Texas Higher Education Coordinating Board, Demographic data for public community college and university students, [machine readable data files]. 2001a.

Table 7.11

Enrollment in Selected Public Elementary and Secondary School Programs in Texas by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Program	Anglo	Black	Hispanic	Other	Total
All Scenarios					
2000					
Bilingual/ESL	7,336	2,766	464,459	23,714	498,275
Economically Disadvantaged	359,510	369,393	1,190,363	36,734	1,956,000
Gifted and Talented	198,574	33,827	86,807	17,354	336,562
Immigrants	3,587	1,837	61,917	6,463	73,804
Limited English Proficiency (LEP)	8,498	3,214	516,745	27,013	555,470
Special Education	220,853	86,806	176,391	6,170	490,220
Title I	513,926	319,111	1,149,095	30,568	2,012,700
Career and Technology Education	345,957	111,644	264,034	20,314	741,949
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
2040					
Bilingual/ESL	5,088	2,148	888,556	38,799	934,591
Economically Disadvantaged	277,832	305,321	2,323,194	61,757	2,968,104
Gifted and Talented	148,240	27,993	165,494	28,814	370,541
Immigrants	2,946	1,669	120,685	10,349	135,649
Limited English Proficiency (LEP)	5,961	2,519	993,206	44,511	1,046,197
Special Education	166,728	72,468	345,384	10,004	594,584
Title I	366,858	251,532	2,166,555	49,201	2,834,146
Career and Technology Education	260,238	97,704	521,432	32,334	911,708
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
2040					
Bilingual/ESL	5,382	2,614	1,342,446	78,683	1,429,125
Economically Disadvantaged	293,846	372,081	3,508,910	126,261	4,301,098
Gifted and Talented	156,840	34,167	249,133	59,549	499,689
Immigrants	3,119	2,039	182,485	21,211	208,854
Limited English Proficiency (LEP)	6,306	3,073	1,500,613	90,338	1,600,330
Special Education	176,432	88,561	521,844	20,487	807,324
Title I	387,810	306,010	3,270,388	99,764	4,063,972
Career and Technology Education	276,169	120,301	795,926	68,407	1,260,803

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Education Agency, Demographic data for public school students, [machine readable data files]. 2001.

Table 7.12

Percent Change in Projected Enrollment in Selected Public Elementary and Secondary School Programs in Texas by Race/Ethnicity, Assuming Alternative Projection Scenarios, 2000-2040

Program	Anglo	Black	Hispanic	Other	Total
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Bilingual/ESL	-30.6	-22.3	91.3	63.6	87.6
Economically Disadvantaged	-22.7	-17.3	95.2	68.1	51.7
Gifted and Talented	-25.3	-17.2	90.6	66.0	10.1
Immigrants	-17.9	-9.1	94.9	60.1	83.8
Limited English Proficiency (LEP)	-29.9	-21.6	92.2	64.8	88.3
Special Education	-24.5	-16.5	95.8	62.1	21.3
Title I	-28.6	-21.2	88.5	61.0	40.8
Career and Technology Education	-24.8	-12.5	97.5	59.2	22.9
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Bilingual/ESL	-26.6	-5.5	189.0	231.8	186.8
Economically Disadvantaged	-18.3	0.7	194.8	243.7	119.9
Gifted and Talented	-21.0	1.0	187.0	243.1	48.5
Immigrants	-13.0	11.0	194.7	228.2	183.0
Limited English Proficiency (LEP)	-25.8	-4.4	190.4	234.4	188.1
Special Education	-20.1	2.0	195.8	232.0	64.7
Title I	-24.5	-4.1	184.6	226.4	101.9
Career and Technology Education	-20.2	7.8	201.4	236.7	69.9

*Source*s: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Education Agency, Demographic data for public school students, [machine readable data files]. 2001.

Table 7.13

Percent of Enrollment in Selected Public Elementary and Secondary School Programs in Texas by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Program	Anglo	Black	Hispanic	Other
All Scenarios				
2000				
Bilingual/ESL	1.5	0.6	93.1	4.8
Economically Disadvantaged	18.4	18.9	60.8	1.9
Gifted and Talented	59.0	10.1	25.7	5.2
Immigrants	4.9	2.5	83.8	8.8
Limited English Proficiency (LEP)	1.5	0.6	93.0	4.9
Special Education	45.1	17.7	35.9	1.3
Title I	25.5	15.9	57.1	1.5
Career and Technology Education	46.6	15.0	35.7	2.7
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
2040				
Bilingual/ESL	0.5	0.2	95.1	4.2
Economically Disadvantaged	9.4	10.3	78.2	2.1
Gifted and Talented	40.0	7.6	44.6	7.8
Immigrants	2.2	1.2	89.0	7.6
Limited English Proficiency (LEP)	0.6	0.2	94.9	4.3
Special Education	28.0	12.2	58.1	1.7
Title I	12.9	8.9	76.5	1.7
Career and Technology Education	28.5	10.7	57.3	3.5
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
2040				
Bilingual/ESL	0.4	0.2	93.9	5.5
Economically Disadvantaged	6.8	8.7	81.6	2.9
Gifted and Talented	31.4	6.8	49.9	11.9
Immigrants	1.5	1.0	87.3	10.2
Limited English Proficiency (LEP)	0.4	0.2	93.8	5.6
Special Education	21.9	11.0	64.6	2.5
Title I	9.5	7.5	80.5	2.5
Career and Technology Education	21.9	9.5	63.2	5.4

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Education Agency, Demographic data for public school students, [machine readable data files]. 2001.

Table 7.14

State Education Expenditures (in 2000 Dollars) for Total Public Elementary and Secondary Schools, Total Community Colleges, Total Public Universities, Total Public Colleges and Universities, and Selected Elementary and Secondary Education Programs in Texas in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Total Public Elementary and Secondary	Total Community Colleges	Total Public Universities	Total Public Colleges and Universities	Selected Elementary and Secondary Education Programs			
					Bilingual/ ESL	Gifted and Talented	Special Education	Career and Technology Education
All Scenarios								
2000	$ 23,101,414,556	$ 825,704,483	$ 1,785,656,676	$ 2,611,361,159	$ 518,028,752	$ 244,720,917	$ 1,650,334,925	$ 537,903,489
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)								
2010	$ 24,204,112,637	$ 917,493,655	$ 1,979,485,888	$ 2,896,979,543	$ 611,795,309	$ 241,389,980	$ 1,693,298,440	$ 547,376,896
2020	26,271,820,172	988,591,094	2,060,905,902	3,049,496,996	729,467,447	256,877,634	1,820,717,816	594,392,313
2030	27,805,927,997	1,078,429,141	2,207,447,488	3,285,876,629	845,205,846	263,258,838	1,915,518,990	630,443,749
2040	29,364,884,885	1,152,283,648	2,299,254,992	3,451,538,640	971,642,185	269,427,723	2,001,678,310	660,976,582
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)								
2010	$ 25,395,615,092	$ 1,000,699,837	$ 2,143,009,431	$ 3,143,709,268	$ 653,056,711	$ 251,846,691	$ 1,772,822,351	$ 587,075,017
2020	30,008,588,165	1,155,342,698	2,381,632,888	3,536,975,586	895,899,940	287,389,765	2,056,313,546	669,941,773
2030	35,073,825,724	1,392,481,885	2,797,690,846	4,190,172,731	1,162,517,755	323,842,465	2,381,303,821	796,141,011
2040	40,715,469,183	1,664,568,766	3,258,446,778	4,923,015,544	1,485,781,627	363,333,799	2,717,871,554	914,065,971

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Education Agency, Academic Excellence Indicator System, 2000-01 AEIS Reports, [online], 2002a; and Pocket Edition: Texas Public School Statistics, [online], 2002b. Texas Higher Education Coordinating Board, Statistical Report 2000, [online], 2002c.

Table 7.15

Number of Students with Financial Need Unmet by Household Resources Enrolled at Public Colleges and Universities in Texas by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other	Total
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Public Community Colleges					
2000	146,761	41,091	110,268	15,732	313,852
2010	149,167	46,998	139,141	18,721	354,027
2020	142,614	48,754	173,475	23,475	388,318
2030	138,518	49,190	214,965	27,544	430,217
2040	130,233	48,876	256,867	30,661	466,637
Public Universities					
2000	179,581	36,082	73,575	22,783	312,021
2010	187,526	42,087	92,167	26,155	347,935
2020	175,780	42,348	114,682	32,666	365,476
2030	171,863	42,045	142,420	37,922	394,250
2040	161,530	41,725	169,769	40,693	413,717
Total Public Colleges and Universities					
2000	326,342	77,173	183,843	38,515	625,873
2010	336,693	89,085	231,308	44,876	701,962
2020	318,394	91,102	288,157	56,141	753,794
2030	310,381	91,235	357,385	65,466	824,467
2040	291,763	90,601	426,636	71,354	880,354
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Public Community Colleges					
2000	146,761	41,091	110,268	15,732	313,852
2010	152,222	49,889	164,064	23,704	389,879
2020	147,171	54,310	224,324	34,848	460,653
2030	145,488	57,594	313,971	49,963	567,016
2040	139,065	60,267	422,717	68,611	690,660
Public Universities					
2000	179,581	36,082	73,575	22,783	312,021
2010	191,252	44,843	109,218	33,218	378,531
2020	181,240	47,285	149,095	48,116	425,736
2030	180,218	49,310	208,034	67,806	505,368
2040	172,297	51,631	280,487	90,312	594,727
Total Public Colleges and Universities					
2000	326,342	77,173	183,843	38,515	625,873
2010	343,474	94,732	273,282	56,922	768,410
2020	328,411	101,595	373,419	82,964	886,389
2030	325,706	106,904	522,005	117,769	1,072,384
2040	311,362	111,898	703,204	158,923	1,285,387

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Murdock et al., An Analysis of First-Time Admissions to College; Junior/Community/Technical and Senior Colleges/Universities; and to Select and Other Senior Colleges/Universities in Texas Using Enrollment Data for 1995-1997, 1998. Texas Higher Education Coordinating Board, Enrollment of Texas Residents in Texas Public Community Colleges and Universities: School Years 1999-2000 and 2000-2001, [machine readable data files], 2001b. U.S. Department of Education, Office of Post Secondary Education. The EFC Formula, 2000-2001, 2000.

Table 7.16

Percent Change in Projected Number of Students with Financial Need Unmet by Household Resources Enrolled at Public Colleges and Universities in Texas, Assuming Alternative Projection Scenarios, 2000-2040

Year	Anglo	Black	Hispanic	Other	Total
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Public Community Colleges					
2000-2010	1.6	14.4	26.2	19.0	12.8
2010-2020	-4.4	3.7	24.7	25.4	9.7
2020-2030	-2.9	0.9	23.9	17.3	10.8
2030-2040	-6.0	-0.6	19.5	11.3	8.5
2000-2040	-11.3	18.9	132.9	94.9	48.7
Public Universities					
2000-2010	4.4	16.6	25.3	14.8	11.5
2010-2020	-6.3	0.6	24.4	24.9	5.0
2020-2030	-2.2	-0.7	24.2	16.1	7.9
2030-2040	-6.0	-0.8	19.2	7.3	4.9
2000-2040	-10.1	15.6	130.7	78.6	32.6
Total Public Colleges and Universities					
2000-2010	3.2	15.4	25.8	16.5	12.2
2010-2020	-5.4	2.3	24.6	25.1	7.4
2020-2030	-2.5	0.1	24.0	16.6	9.4
2030-2040	-6.0	-0.7	19.4	9.0	6.8
2000-2040	-10.6	17.4	132.1	85.3	40.7
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Public Community Colleges					
2000-2010	3.7	21.4	48.8	50.7	24.2
2010-2020	-3.3	8.9	36.7	47.0	18.2
2020-2030	-1.1	6.0	40.0	43.4	23.1
2030-2040	-4.4	4.6	34.6	37.3	21.8
2000-2040	-5.2	46.7	283.4	336.1	120.1
Public Universities					
2000-2010	6.5	24.3	48.4	45.8	21.3
2010-2020	-5.2	5.4	36.5	44.9	12.5
2020-2030	-0.6	4.3	39.5	40.9	18.7
2030-2040	-4.4	4.7	34.8	33.2	17.7
2000-2040	-4.1	43.1	281.2	296.4	90.6
Total Public Colleges and Universities					
2000-2010	5.2	22.8	48.6	47.8	22.8
2010-2020	-4.4	7.2	36.6	45.8	15.4
2020-2030	-0.8	5.2	39.8	42.0	21.0
2030-2040	-4.4	4.7	34.7	34.9	19.9
2000-2040	-4.6	45.0	282.5	312.6	105.4

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Murdock et al., An Analysis of First-Time Admissions to College; Junior/Community/Technical and Senior Colleges/Universities; and to Select and Other Senior Colleges/Universities in Texas Using Enrollment Data for 1995-1997, 1998. Texas Higher Education Coordinating Board, Enrollment of Texas Residents in Texas Public Community Colleges and Universities: School Years 1999-2000 and 2000-2001, [machine readable data files], 2001b. U.S. Department of Education, Office of Post Secondary Education. The EFC Formula, 2000-2001, 2000.

Table 7.17

Percent of Students with Financial Need Unmet by Household Resources Enrolled at Public Colleges and Universities by Race/Ethnicity in Texas in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
Public Community Colleges				
2000	46.8	13.1	35.1	5.0
2010	42.1	13.3	39.3	5.3
2020	36.7	12.6	44.7	6.0
2030	32.2	11.4	50.0	6.4
2040	27.9	10.5	55.0	6.6
Public Universities				
2000	57.5	11.6	23.6	7.3
2010	53.9	12.1	26.5	7.5
2020	48.1	11.6	31.4	8.9
2030	43.6	10.7	36.1	9.6
2040	39.1	10.1	41.0	9.8
Total Public Colleges and Universities				
2000	52.1	12.3	29.4	6.2
2010	47.9	12.7	33.0	6.4
2020	42.3	12.1	38.2	7.4
2030	37.7	11.1	43.3	7.9
2040	33.1	10.3	48.5	8.1
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
Public Community Colleges				
2000	46.8	13.1	35.1	5.0
2010	39.0	12.8	42.1	6.1
2020	31.9	11.8	48.7	7.6
2030	25.6	10.2	55.4	8.8
2040	20.2	8.7	61.2	9.9
Public Universities				
2000	57.5	11.6	23.6	7.3
2010	50.5	11.8	28.9	8.8
2020	42.6	11.1	35.0	11.3
2030	35.6	9.8	41.2	13.4
2040	28.9	8.7	47.2	15.2
Total Public Colleges and Universities				
2000	52.1	12.3	29.4	6.2
2010	44.7	12.3	35.6	7.4
2020	37.0	11.5	42.1	9.4
2030	30.3	10.0	48.7	11.0
2040	24.2	8.7	54.7	12.4

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Murdock et al., An Analysis of First-Time Admissions to College; Junior/Community/Technical and Senior Colleges/Universities; and to Select and Other Senior Colleges/Universities in Texas Using Enrollment Data for 1995-1997, 1998. Texas Higher Education Coordinating Board, Enrollment of Texas Residents in Texas Public Community Colleges and Universities, School Years 1999-2000, 2000-2001, [machine readable data files], 2001b. U.S. Department of Education, Office of Post Secondary Education, The EFC Formula, 2000-2001, 2000.

Table 7.18

Number and Percent of Students with Financial Need Unmet by Household Resources in Public Colleges and Universities
by Need Category within Race/Ethnicity Groups in Texas in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

	Anglo		Black		Hispanic		Other		Total	
Need Category	Number	%	Number	%	Number	%	Number	%	Number	%
All Scenarios										
2000				**Public Community Colleges**						
$ >10,000	—	—	—	—	—	—	—	—	—	—
7,500-9,999	30,860	21.0	20,158	49.1	56,943	51.6	6,930	44.1	114,891	36.6
6,000-7,499	54,329	37.0	13,374	32.5	33,852	30.7	5,135	32.6	106,690	34.0
4,000-5,999	31,692	21.6	4,261	10.4	11,450	10.4	2,149	13.7	49,552	15.8
<4,000	29,880	20.4	3,298	8.0	8,023	7.3	1,518	9.6	42,719	13.6
Total of Need Categories	146,761	100.0	41,091	100.0	110,268	100.0	15,732	100.0	313,852	100.0
				Public Universities						
$ >10,000	52,761	29.4	22,581	62.6	46,707	63.5	12,252	53.8	134,301	43.0
7,500-9,999	33,725	18.8	5,360	14.9	10,372	14.1	3,599	15.8	53,056	17.0
6,000-7,499	14,973	8.3	1,948	5.4	3,872	5.2	1,371	6.0	22,164	7.1
4,000-5,999	30,304	16.9	2,856	7.9	5,936	8.1	2,331	10.2	41,427	13.3
<4,000	47,818	26.6	3,337	9.2	6,688	9.1	3,230	14.2	61,073	19.6
Total of Need Categories	179,581	100.0	36,082	100.0	73,575	100.0	22,783	100.0	312,021	100.0
				Total Public Colleges and Universities						
$ >10,000	52,761	16.2	22,581	29.3	46,707	25.4	12,252	31.8	134,301	21.5
7,500-9,999	64,585	19.8	25,518	33.0	67,315	36.6	10,529	27.3	167,947	26.8
6,000-7,499	69,302	21.2	15,322	19.9	37,724	20.5	6,506	16.9	128,854	20.6
4,000-5,999	61,996	19.0	7,117	9.2	17,386	9.5	4,480	11.7	90,979	14.5
<4,000	77,698	23.8	6,635	8.6	14,711	8.0	4,748	12.3	103,792	16.6
Total of Need Categories	326,342	100.0	77,173	100.0	183,843	100.0	38,515	100.0	625,873	100.0

Table 7.18, continued

Need Category	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Panel A: Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)										
2010				**Public Community Colleges**						
$ >10,000	—	—	—	—	—	—	—	—	—	—
7,500-9,999	31,339	21.0	23,070	49.1	71,916	51.7	8,273	44.2	134,598	38.0
6,000-7,499	55,217	37.0	15,300	32.6	42,688	30.7	6,099	32.6	119,304	33.7
4,000-5,999	32,212	21.6	4,860	10.3	14,378	10.3	2,550	13.6	54,000	15.3
<4,000	30,399	20.4	3,768	8.0	10,159	7.3	1,799	9.6	46,125	13.0
Total of Need Categories	149,167	100.0	46,998	100.0	139,141	100.0	18,721	100.0	354,027	100.0
				Public Universities						
$ >10,000	55,041	29.4	26,335	62.6	58,521	63.5	14,082	53.8	153,979	44.3
7,500-9,999	35,227	18.8	6,268	14.9	12,984	14.1	4,114	15.7	58,593	16.8
6,000-7,499	15,645	8.3	2,255	5.3	4,878	5.3	1,583	6.1	24,361	7.0
4,000-5,999	31,638	16.9	3,352	8.0	7,387	8.0	2,664	10.2	45,041	12.9
<4,000	49,975	26.6	3,877	9.2	8,397	9.1	3,712	14.2	65,961	19.0
Total of Need Categories	187,526	100.0	42,087	100.0	92,167	100.0	26,155	100.0	347,935	100.0
				Total Public Colleges and Universities						
$ >10,000	55,041	16.3	26,335	29.6	58,521	25.3	14,082	31.4	153,979	21.9
7,500-9,999	66,566	19.8	29,338	32.9	84,900	36.7	12,387	27.6	193,191	27.5
6,000-7,499	70,862	21.0	17,555	19.7	47,566	20.6	7,682	17.1	143,665	20.5
4,000-5,999	63,850	19.0	8,212	9.2	21,765	9.4	5,214	11.6	99,041	14.1
<4,000	80,374	23.9	7,645	8.6	18,556	8.0	5,511	12.3	112,086	16.0
Total of Need Categories	336,693	100.0	89,085	100.0	231,308	100.0	44,876	100.0	701,962	100.0

Table 7.18, Panel A continued

Need Category	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
2040				**Public Community Colleges**						
$ >10,000	—	—	—	—	—	—	—	—	—	—
7,500-9,999	27,368	21.0	23,963	49.0	132,817	51.7	13,517	44.1	197,665	42.4
6,000-7,499	48,215	37.0	15,915	32.6	78,790	30.7	10,007	32.6	152,927	32.7
4,000-5,999	28,144	21.6	5,064	10.4	26,559	10.3	4,176	13.6	63,943	13.7
<4,000	26,506	20.4	3,934	8.0	18,701	7.3	2,961	9.7	52,102	11.2
Total of Need Categories	130,233	100.0	48,876	100.0	256,867	100.0	30,661	100.0	466,637	100.0
				Public Universities						
$ >10,000	47,421	29.4	26,107	62.6	107,780	63.5	21,914	53.9	203,222	49.1
7,500-9,999	30,341	18.7	6,213	14.9	23,966	14.1	6,402	15.7	66,922	16.2
6,000-7,499	13,466	8.3	2,247	5.4	8,934	5.3	2,453	6.0	27,100	6.5
4,000-5,999	27,250	16.9	3,310	7.9	13,631	8.0	4,149	10.2	48,340	11.7
<4,000	43,052	26.7	3,848	9.2	15,458	9.1	5,775	14.2	68,133	16.5
Total of Need Categories	161,530	100.0	41,725	100.0	169,769	100.0	40,693	100.0	413,717	100.0
				Total Public Colleges and Universities						
$ >10,000	47,421	16.3	26,107	28.8	107,780	25.3	21,914	30.7	203,222	23.1
7,500-9,999	57,709	19.8	30,176	33.3	156,783	36.7	19,919	27.9	264,587	30.0
6,000-7,499	61,681	21.1	18,162	20.1	87,724	20.6	12,460	17.5	180,027	20.4
4,000-5,999	55,394	19.0	8,374	9.2	40,190	9.4	8,325	11.7	112,283	12.8
<4,000	69,558	23.8	7,782	8.6	34,159	8.0	8,736	12.2	120,235	13.7
Total of Need Categories	291,763	100.0	90,601	100.0	426,636	100.0	71,354	100.0	880,354	100.0

Table 7.18, continued

Need Category	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Panel B: Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)										
2010				**Public Community Colleges**						
$ >10,000	—	—	—	—	—	—	—	—	—	—
7,500-9,999	31,976	21.0	24,459	49.0	84,730	51.6	10,453	44.1	151,618	38.9
6,000-7,499	56,340	37.0	16,244	32.6	50,375	30.7	7,744	32.7	130,703	33.5
4,000-5,999	32,895	21.6	5,177	10.4	16,986	10.4	3,210	13.5	58,268	15.0
<4,000	31,011	20.4	4,009	8.0	11,973	7.3	2,297	9.7	49,290	12.6
Total of Need Categories	152,222	100.0	49,889	100.0	164,064	100.0	23,704	100.0	389,879	100.0
				Public Universities						
$ >10,000	56,155	29.4	28,039	62.5	69,300	63.5	17,884	53.8	171,378	45.3
7,500-9,999	35,933	18.8	6,676	14.9	15,418	14.1	5,227	15.8	63,254	16.7
6,000-7,499	15,941	8.3	2,418	5.4	5,754	5.3	2,007	6.0	26,120	6.9
4,000-5,999	32,270	16.9	3,564	8.0	8,778	8.0	3,392	10.2	48,004	12.7
<4,000	50,953	26.6	4,146	9.2	9,968	9.1	4,708	14.2	69,775	18.4
Total of Need Categories	191,252	100.0	44,843	100.0	109,218	100.0	33,218	100.0	378,531	100.0
				Total Public Colleges and Universities						
$ >10,000	56,155	16.3	28,039	29.6	69,300	25.4	17,884	31.4	171,378	22.3
7,500-9,999	67,909	19.8	31,135	32.9	100,148	36.6	15,680	27.6	214,872	28.0
6,000-7,499	72,281	21.0	18,662	19.7	56,129	20.5	9,751	17.1	156,823	20.4
4,000-5,999	65,165	19.0	8,741	9.2	25,764	9.5	6,602	11.6	106,272	13.8
<4,000	81,964	23.9	8,155	8.6	21,941	8.0	7,005	12.3	119,065	15.5
Total of Need Categories	343,474	100.0	94,732	100.0	273,282	100.0	56,922	100.0	768,410	100.0

Table 7.18, Panel B continued

Need Category	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
2040				**Public Community Colleges**						
$ >10,000	—	—	—	—	—	—	—	—	—	—
7,500-9,999	29,235	21.0	29,549	49.0	218,274	51.6	30,270	44.1	307,328	44.5
6,000-7,499	51,493	37.0	19,617	32.6	129,811	30.7	22,365	32.6	223,286	32.3
4,000-5,999	30,020	21.6	6,236	10.3	43,778	10.4	9,339	13.6	89,373	13.0
<4,000	28,317	20.4	4,865	8.1	30,854	7.3	6,637	9.7	70,673	10.2
Total of Need Categories	139,065	100.0	60,267	100.0	422,717	100.0	68,611	100.0	690,660	100.0
				Public Universities						
$ >10,000	50,595	29.4	32,299	62.6	177,991	63.5	48,643	53.9	309,528	52.0
7,500-9,999	32,378	18.8	7,696	14.9	39,609	14.1	14,212	15.7	93,895	15.8
6,000-7,499	14,390	8.3	2,780	5.4	14,791	5.3	5,445	6.0	37,406	6.3
4,000-5,999	29,059	16.9	4,097	7.9	22,540	8.0	9,218	10.2	64,914	10.9
<4,000	45,875	26.6	4,759	9.2	25,556	9.1	12,794	14.2	88,984	15.0
Total of Need Categories	172,297	100.0	51,631	100.0	280,487	100.0	90,312	100.0	594,727	100.0
				Total Public Colleges and Universities						
$ >10,000	50,595	16.2	32,299	28.9	177,991	25.3	48,643	30.6	309,528	24.1
7,500-9,999	61,613	19.8	37,245	33.3	257,883	36.7	44,482	28.0	401,223	31.2
6,000-7,499	65,883	21.2	22,397	20.0	144,602	20.6	27,810	17.5	260,692	20.3
4,000-5,999	59,079	19.0	10,333	9.2	66,318	9.4	18,557	11.7	154,287	12.0
<4,000	74,192	23.8	9,624	8.6	56,410	8.0	19,431	12.2	159,657	12.4
Total of Need Categories	311,362	100.0	111,898	100.0	703,204	100.0	158,923	100.0	1,285,387	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Murdock et al., An Analysis of First-Time Admissions to College; Junior/Community/Technical and Senior Colleges/Universities; and to Select and Other Senior Colleges/Universities in Texas Using Enrollment Data for 1995-1997, 1998. Texas Higher Education Coordinating Board, Enrollment of Texas Residents in Texas Public Community Colleges and Universities, School Years 1999-2000, 2000-2001, [machine readable data files], 2001b; Financial Assistance by Income Group, Fiscal Year 2001, [machine readable data files], 2002a; Financial Aid Data Base Program File, Fiscal Year 2001, [machine readable data files], 2002b. U.S. Department of Education, Office of Post Secondary Education, The EFC Formula 2000-2001, [online], 2000.

Table 7.19

Percent of Students with Financial Need Unmet by Household Resources in Public Colleges and Universities by Race/Ethnicity within Need Category in Texas in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Need Category	Anglo	Black	Hispanic	Other	Total
		All Scenarios			
2000		**Public Community Colleges**			
$ >10,000	—	—	—	—	—
7,500-9,999	26.9	17.6	49.5	6.0	100.0
6,000-7,499	51.0	12.5	31.7	4.8	100.0
4,000-5,999	64.0	8.6	23.1	4.3	100.0
<4,000	69.9	7.7	18.8	3.6	100.0
Total of Need Categories	46.8	13.1	35.1	5.0	100.0
		Public Universities			
$ >10,000	39.3	16.8	34.8	9.1	100.0
7,500-9,999	63.5	10.1	19.6	6.8	100.0
6,000-7,499	67.5	8.8	17.5	6.2	100.0
4,000-5,999	73.2	6.9	14.3	5.6	100.0
<4,000	78.3	5.4	11.0	5.3	100.0
Total of Need Categories	57.5	11.6	23.6	7.3	100.0
		Total Public Colleges and Universities			
$ >10,000	39.3	16.8	34.8	9.1	100.0
7,500-9,999	38.4	15.2	40.1	6.3	100.0
6,000-7,499	53.8	11.9	29.3	5.0	100.0
4,000-5,999	68.2	7.8	19.1	4.9	100.0
<4,000	74.8	6.4	14.2	4.6	100.0
Total of Need Categories	52.1	12.3	29.4	6.2	100.0
		Panel A: Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)			
2010		**Public Community Colleges**			
$ >10,000	—	—	—	—	—
7,500-9,999	23.4	17.1	53.4	6.1	100.0
6,000-7,499	46.3	12.8	35.8	5.1	100.0
4,000-5,999	59.7	9.0	26.6	4.7	100.0
<4,000	65.9	8.2	22.0	3.9	100.0
Total of Need Categories	42.1	13.3	39.3	5.3	100.0
		Public Universities			
$ >10,000	35.8	17.1	38.0	9.1	100.0
7,500-9,999	60.1	10.7	22.2	7.0	100.0
6,000-7,499	64.3	9.3	19.9	6.5	100.0
4,000-5,999	70.3	7.4	16.4	5.9	100.0
<4,000	75.8	5.9	12.7	5.6	100.0
Total of Need Categories	53.9	12.1	26.5	7.5	100.0
		Total Public Colleges and Universities			
$ >10,000	35.8	17.1	38.0	9.1	100.0
7,500-9,999	34.4	15.2	44.0	6.4	100.0
6,000-7,499	49.4	12.2	33.1	5.3	100.0
4,000-5,999	64.4	8.3	22.0	5.3	100.0
<4,000	71.8	6.8	16.5	4.9	100.0
Total of Need Categories	47.9	12.7	33.0	6.4	100.0

Table 7.19, Panel A continued

Need Category	Anglo	Black	Hispanic	Other	Total
2040		**Public Community Colleges**			
$ >10,000	—	—	—	—	—
7,500-9,999	13.9	12.1	67.2	6.8	100.0
6,000-7,499	31.6	10.4	51.5	6.5	100.0
4,000-5,999	44.1	7.9	41.5	6.5	100.0
<4,000	50.9	7.5	35.9	5.7	100.0
Total of Need Categories	27.9	10.5	55.0	6.6	100.0
		Public Universities			
$ >10,000	23.4	12.8	53.0	10.8	100.0
7,500-9,999	45.3	9.3	35.8	9.6	100.0
6,000-7,499	49.7	8.3	33.0	9.0	100.0
4,000-5,999	56.3	6.9	28.2	8.6	100.0
<4,000	63.1	5.7	22.7	8.5	100.0
Total of Need Categories	39.1	10.1	41.0	9.8	100.0
		Total Public Colleges and Universities			
$ >10,000	23.4	12.8	53.0	10.8	100.0
7,500-9,999	21.9	11.4	59.2	7.5	100.0
6,000-7,499	34.3	10.1	48.7	6.9	100.0
4,000-5,999	49.3	7.5	35.8	7.4	100.0
<4,000	57.8	6.5	28.4	7.3	100.0
Total of Need Categories	33.1	10.3	48.5	8.1	100.0
		Panel B: Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)			
2010		**Public Community Colleges**			
$ >10,000	—	—	—	—	—
7,500-9,999	21.1	16.1	55.9	6.9	100.0
6,000-7,499	43.2	12.4	38.5	5.9	100.0
4,000-5,999	56.4	8.9	29.2	5.5	100.0
<4,000	63.0	8.1	24.3	4.6	100.0
Total of Need Categories	39.0	12.8	42.1	6.1	100.0
		Public Universities			
$ >10,000	32.8	16.4	40.4	10.4	100.0
7,500-9,999	56.7	10.6	24.4	8.3	100.0
6,000-7,499	61.1	9.2	22.0	7.7	100.0
4,000-5,999	67.2	7.4	18.3	7.1	100.0
<4,000	73.0	5.9	14.3	6.8	100.0
Total of Need Categories	50.5	11.8	28.9	8.8	100.0
		Total Public Colleges and Universities			
$ >10,000	32.8	16.4	40.4	10.4	100.0
7,500-9,999	31.6	14.5	46.6	7.3	100.0
6,000-7,499	46.1	11.9	35.8	6.2	100.0
4,000-5,999	61.4	8.2	24.2	6.2	100.0
<4,000	68.9	6.8	18.4	5.9	100.0
Total of Need Categories	44.7	12.3	35.6	7.4	100.0

Table 7.19, Panel B continued

Need Category	Anglo	Black	Hispanic	Other	Total
2040		**Public Community Colleges**			
$ >10,000	—	—	—	—	—
7,500-9,999	9.6	9.6	71.0	9.8	100.0
6,000-7,499	23.1	8.8	58.1	10.0	100.0
4,000-5,999	33.6	7.0	49.0	10.4	100.0
<4,000	40.0	6.9	43.7	9.4	100.0
Total of Need Categories	20.2	8.7	61.2	9.9	100.0
		Public Universities			
$ >10,000	16.4	10.4	57.5	15.7	100.0
7,500-9,999	34.5	8.2	42.2	15.1	100.0
6,000-7,499	38.4	7.4	39.6	14.6	100.0
4,000-5,999	44.8	6.3	34.7	14.2	100.0
<4,000	51.5	5.4	28.7	14.4	100.0
Total of Need Categories	28.9	8.7	47.2	15.2	100.0
		Total Public Colleges and Universities			
$ >10,000	16.4	10.4	57.5	15.7	100.0
7,500-9,999	15.3	9.3	64.3	11.1	100.0
6,000-7,499	25.2	8.6	55.5	10.7	100.0
4,000-5,999	38.3	6.7	43.0	12.0	100.0
<4,000	46.5	6.0	35.3	12.2	100.0
Total of Need Categories	24.2	8.7	54.7	12.4	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Murdock et al., An Analysis of First-Time Admissions to College; Junior/Community/Technical and Senior Colleges/Universities; and to Select and Other Senior Colleges/Universities in Texas Using Enrollment Data for 1995-1997, 1998. Texas Higher Education Coordinating Board, Enrollment of Texas Residents in Texas Public Community Colleges and Universities, School Years 1999-2000, 2000-2001, [machine readable data files], 2001b; Financial Assistance by Income Group, Fiscal Year 2001, [machine readable data files], 2002a; Financial Aid Data Base Program File, Fiscal Year 2001, [machine readable data files], 2002b. U.S. Department of Education, Office of Post Secondary Education, The EFC Formula 2000-2001, [online], 2000.

Table 7.20

Total and State Financial Assistance Expenditures (in 2000 Constant Dollars) for Public Higher Education Students in Texas in 2000 and Projections for 2010 and 2040 Assuming Alternative Projection Scenarios

Household Income	All Expenditures	State Expenditures
	All Scenarios	
2000		
$<10,000	$ 220,986,578	$ 47,918,456
10,000-19,999	182,282,208	37,470,863
20,000-29,999	143,411,299	33,714,407
30,000-39,999	64,709,606	18,998,756
40,000-49,999	29,741,063	10,756,151
50,000-59,999	13,573,506	5,899,333
60,000+	17,169,279	10,177,243
Total	671,873,539	164,935,209
Average	848	208
	Panel A: Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)	
2010		
$<10,000	$ 275,959,078	$ 90,068,727
10,000-19,999	247,873,989	90,350,323
20,000-29,999	208,276,085	90,576,743
30,000-39,999	120,407,100	72,175,127
40,000-49,999	68,003,749	47,729,702
50,000-59,999	47,077,419	38,566,755
60,000+	109,158,391	99,934,967
Total	1,076,755,811	529,402,344
Average	1,225	602
2040		
$<10,000	$ 408,904,440	$ 131,440,438
10,000-19,999	357,203,166	128,431,511
20,000-29,999	274,257,008	117,881,128
30,000-39,999	144,327,185	85,926,314
40,000-49,999	76,638,699	53,652,214
50,000-59,999	50,909,858	41,692,017
60,000+	112,080,257	102,625,612
Total	1,424,320,613	661,649,234
Average	1,337	621

Table 7.20, continued

Household Income	All Expenditures	State Expenditures
	Panel B: Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)	
2010		
$<10,000	$ 314,244,500	$ 102,565,379
10,000-19,999	279,774,850	101,956,862
20,000-29,999	230,691,527	100,271,779
30,000-39,999	130,930,283	78,447,374
40,000-49,999	73,064,445	51,271,670
50,000-59,999	50,177,410	41,105,459
60,000+	115,259,217	105,521,129
Total	1,194,142,232	581,139,652
Average	1,250	608
2040		
$<10,000	$ 651,719,974	$ 209,932,622
10,000-19,999	558,436,395	200,953,531
20,000-29,999	412,089,258	177,011,358
30,000-39,999	207,055,693	123,143,992
40,000-49,999	105,975,048	74,143,153
50,000-59,999	68,465,264	56,065,213
60,000+	145,504,855	133,234,982
Total	2,149,246,487	974,484,851
Average	1,409	639

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Murdock et al., An Analysis of First-Time Admissions to College; Junior/Community/Technical and Senior Colleges/Universities; and to Select and Other Senior Colleges/Universities in Texas Using Enrollment Data for 1995-1997, 1998. Texas Higher Education Coordinating Board, Enrollment of Texas Residents in Texas Public Community Colleges and Universities, School Years 1999-2000, 2000-2001, [machine readable data files], 2001b; Financial Assistance by Income Group, Fiscal Year 2001, [machine readable data files], 2002a; Financial Aid Data Base Program File, Fiscal Year 2001, [machine readable data files], 2002b. U.S. Department of Education, Office of Post Secondary Education, The EFC Formula 2000-2001, [online], 2000.

Table 7.21

Percent Change in Total and State Financial Assistance Expenditures for Public Higher Education Students in Texas, Assuming Alternative Projection Scenarios, 2000-2040

Household Income	All Expenditures	State Expenditures
Panel A: Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
2000-2010		
$ <10,000	24.9	88.0
10,000-19,999	36.0	141.1
20,000-29,999	45.2	168.7
30,000-39,999	86.1	279.9
40,000-49,999	128.7	343.7
50,000-59,999	246.8	553.7
60,000+	535.8	881.9
Total	60.3	221.0
Average	44.4	189.2
2010-2020		
$ <10,000	14.9	14.3
10,000-19,999	13.4	12.8
20,000-29,999	9.4	8.8
30,000-39,999	5.5	5.2
40,000-49,999	3.1	2.9
50,000-59,999	1.5	1.5
60,000+	-0.3	-0.3
Total	9.6	7.1
Average	3.3	1.0
2000-2040		
$ <10,000	85.0	174.3
10,000-19,999	96.0	242.8
20,000-29,999	91.2	249.6
30,000-39,999	123.0	352.3
40,000-49,999	157.7	398.8
50,000-59,999	275.1	606.7
60,000+	552.8	908.4
Total	112.0	301.2
Average	57.6	198.3
Panel B: Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
2000-2010		
$ <10,000	42.2	114.0
10,000-19,999	53.5	172.1
20,000-29,999	60.9	197.4
30,000-39,999	102.3	312.9
40,000-49,999	145.7	376.7
50,000-59,999	269.7	596.8
60,000+	571.3	936.8
Total	77.7	252.3
Average	47.3	192.1

Table 7.21, Panel B continued

Household Income	All Expenditures	State Expenditures
2010-2020		
$ <10,000	25.8	25.1
10,000-19,999	23.6	22.9
20,000-29,999	18.2	17.6
30,000-39,999	12.9	12.6
40,000-49,999	9.4	9.3
50,000-59,999	7.2	7.1
60,000+	4.5	4.5
Total	18.6	15.3
Average	4.5	1.7
2000-2040		
$ <10,000	194.9	338.1
10,000-19,999	206.4	436.3
20,000-29,999	187.3	425.0
30,000-39,999	220.0	548.2
40,000-49,999	256.3	589.3
50,000-59,999	404.4	850.4
60,000+	747.5	1,209.1
Total	219.9	490.8
Average	66.1	206.7

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Murdock et al., An Analysis of First-Time Admissions to College; Junior/Community/Technical and Senior Colleges/Universities; and to Select and Other Senior Colleges/Universities in Texas Using Enrollment Data for 1995-1997, 1998. Texas Higher Education Coordinating Board, Enrollment of Texas Residents in Texas Public Community Colleges and Universities, School Years 1999-2000, 2000-2001, [machine readable data files], 2001b; Financial Assistance by Income Group, Fiscal Year 2001, [machine readable data files], 2002a; Financial Aid Data Base Program File, Fiscal Year 2001, [machine readable data files], 2002b. U.S. Department of Education, Office of Post Secondary Education, The EFC Formula 2000-2001, [online], 2000.

Table 7.22

Public Community College and Public University Enrollment in Texas by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios and 1990-2000 Race/Ethnicity-Specific Trends in Enrollment Rates

Year	Anglo	Black	Hispanic	Other	Total
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Public Community Colleges					
2000	230,497	46,742	124,057	19,782	421,078
2010	241,133	66,809	170,768	28,631	507,341
2020	237,166	86,573	232,305	43,661	599,705
2030	236,985	109,110	314,100	62,306	722,501
2040	229,238	135,433	409,535	84,346	858,552
Public Universities					
2000	227,867	38,276	79,081	25,746	370,970
2010	241,505	52,189	91,149	30,195	415,038
2020	229,727	61,374	104,362	38,527	433,990
2030	227,928	71,217	119,258	45,694	464,097
2040	217,401	82,607	130,813	50,094	480,915
Total Public Colleges and Universities					
2000	458,364	85,018	203,138	45,528	792,048
2010	482,637	118,997	261,917	58,825	922,376
2020	466,893	147,947	336,667	82,188	1,033,695
2030	464,913	180,327	433,357	108,000	1,186,597
2040	446,639	218,040	540,348	134,440	1,339,467
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Public Community Colleges					
2000	230,497	46,742	124,057	19,782	421,078
2010	246,073	70,923	201,400	36,249	554,645
2020	244,740	96,439	300,480	64,813	706,472
2030	248,909	127,757	458,896	113,014	948,576
2040	244,787	167,010	674,181	188,744	1,274,722
Public Universities					
2000	227,867	38,276	79,081	25,746	370,970
2010	246,304	55,608	108,022	38,348	448,282
2020	236,863	68,533	135,694	56,749	497,839
2030	239,010	83,526	174,222	81,701	578,459
2040	231,893	102,220	216,154	111,178	661,445
Total Public Colleges and Universities					
2000	458,364	85,018	203,138	45,528	792,048
2010	492,376	126,531	309,422	74,597	1,002,926
2020	481,603	164,972	436,173	121,562	1,204,310
2030	487,919	211,283	633,118	194,715	1,527,035
2040	476,680	269,230	890,335	299,921	1,936,166

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Education Agency, Demographic data for public school students for 1980-2000, [machine readable data files], 2001. Texas Higher Education Coordinating Board, Demographic data for public community college and university students for 1980-2000, [machine readable data files], 2001a.

Table 7.23

Percent Change in Projected Public Community College and Public University Enrollment in Texas
by Race/Ethnicity Assuming Alternative Projection Scenarios
and 1990-2000 Race/Ethnicity-Specific Trends in Enrollment Rates, 2000-2040

Time Period	Anglo	Black	Hispanic	Other	Total
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Public Community Colleges					
2000-2010	4.6	42.9	37.7	44.7	20.5
2010-2020	-1.6	29.6	36.0	52.5	18.2
2020-2030	-0.1	26.0	35.2	42.7	20.5
2030-2040	-3.3	24.1	30.4	35.4	18.8
2000-2040	-0.5	189.7	230.1	326.4	103.9
Public Universities					
2000-2010	6.0	36.3	15.3	17.3	11.9
2010-2020	-4.9	17.6	14.5	27.6	4.6
2020-2030	-0.8	16.0	14.3	18.6	6.9
2030-2040	-4.6	16.0	9.7	9.6	3.6
2000-2040	-4.6	115.8	65.4	94.6	29.6
Total Public Colleges and Universities					
2000-2010	5.3	40.0	28.9	29.2	16.5
2010-2020	-3.3	24.3	28.5	39.7	12.1
2020-2030	-0.4	21.9	28.7	31.4	14.8
2030-2040	-3.9	20.9	24.7	24.5	12.9
2000-2040	-2.6	156.5	166.0	195.3	69.1
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Public Community Colleges					
2000-2010	6.8	51.7	62.3	83.2	31.7
2010-2020	-0.5	36.0	49.2	78.8	27.4
2020-2030	1.7	32.5	52.7	74.4	34.3
2030-2040	-1.7	30.7	46.9	67.0	34.4
2000-2040	6.2	257.3	443.4	854.1	202.7
Public Universities					
2000-2010	8.1	45.3	36.6	48.9	20.8
2010-2020	-3.8	23.2	25.6	48.0	11.1
2020-2030	0.9	21.9	28.4	44.0	16.2
2030-2040	-3.0	22.4	24.1	36.1	14.3
2000-2040	1.8	167.1	173.3	331.8	78.3
Total Public Colleges and Universities					
2000-2010	7.4	48.8	52.3	63.8	26.6
2010-2020	-2.2	30.4	41.0	63.0	20.1
2020-2030	1.3	28.1	45.2	60.2	26.8
2030-2040	-2.3	27.4	40.6	54.0	26.8
2000-2040	4.0	216.7	338.3	558.8	144.5

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Education Agency, Demographic data for public school students for 1980-2000, [machine readable data files], 2001. Texas Higher Education Coordinating Board, Demographic data for public community college and university students for 1980-2000, [machine readable data files], 2001a.

Table 7.24

Percent of Projected Public Community College and Public University Enrollment in Texas by Race/Ethnicity Assuming Alternative Projection Scenarios and 1990-2000 Race/Ethnicity-Specific Trends in Enrollment Rates, 2000-2040

Year	Anglo	Black	Hispanic	Other
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
Public Community Colleges				
2000	54.7	11.1	29.5	4.7
2010	47.5	13.2	33.7	5.6
2020	39.6	14.4	38.7	7.3
2030	32.8	15.1	43.5	8.6
2040	26.7	15.8	47.7	9.8
Public Universities				
2000	61.5	10.3	21.3	6.9
2010	58.1	12.6	22.0	7.3
2020	53.0	14.1	24.0	8.9
2030	49.2	15.3	25.7	9.8
2040	45.2	17.2	27.2	10.4
Total Public Colleges and Universities				
2000	58.0	10.7	25.6	5.7
2010	52.3	12.9	28.4	6.4
2020	45.1	14.3	32.6	8.0
2030	39.2	15.2	36.5	9.1
2040	33.4	16.3	40.3	10.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
Public Community Colleges				
2000	54.7	11.1	29.5	4.7
2010	44.4	12.8	36.3	6.5
2020	34.6	13.7	42.5	9.2
2030	26.2	13.5	48.4	11.9
2040	19.2	13.1	52.9	14.8
Public Universities				
2000	61.5	10.3	21.3	6.9
2010	54.9	12.4	24.1	8.6
2020	47.5	13.8	27.3	11.4
2030	41.4	14.4	30.1	14.1
2040	35.0	15.5	32.7	16.8
Total Public Colleges and Universities				
2000	58.0	10.7	25.6	5.7
2010	49.1	12.6	30.9	7.4
2020	40.0	13.7	36.2	10.1
2030	31.9	13.8	41.5	12.8
2040	24.6	13.9	46.0	15.5

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Education Agency, Demographic data for public school students for 1980-2000, [machine readable data files], 2001. Texas Higher Education Coordinating Board, Demographic data for public community college and university students for 1980-2000, [machine readable data files], 2001a.

Chapter 8

Human Services

In this chapter we examine the implications of population change for human services in Texas. Specifically, we examine the implications for three major federal-state programs: Food Stamps, Medicaid, and the Temporary Assistance for Needy Families (TANF). After reviewing historical patterns of change in these programs, we project the future number of participants in each program and associated costs.

Historical Patterns of Human Service Programs

During the past several decades, human services experienced unprecedented rates of growth and decline. Caseloads for TANF, Food Stamps, and Medicaid generally expanded rapidly in the late 1980s, peaked in the mid-1990s, and declined thereafter (see Figures 8.1 and 8.2). One result of these patterns is that by 2000 the TANF caseload in Texas was smaller than in 1975. Because of new welfare policy enacted in the mid-1990s, changes that occurred in the latter part of the 1990s are most critical to understanding the recent patterns in human services in Texas.

Between 1995 and 2000, the TANF caseload declined by more than 50 percent in both the United States and Texas. Similarly, the Texas Food Stamp caseload declined by almost 50 percent during the same period, while the caseload for the United States decreased by around 35 percent. For Medicaid enrollment, the change has not been as dramatic. The U.S. Medicaid caseload actually increased by about six percent between 1995 and 2000, but the Texas Medicaid caseload declined almost 15 percent, falling from around 2 million persons in 1995 to around 1.7

million in 2000 (see Table 8.1). Overall, then, during the latter half of the 1990s, Texas reduced its TANF caseload by more than half and experienced greater declines in its Food Stamp and Medicaid programs than in the United States as a whole.

The reasons for these declines were twofold. First, both the federal government and the majority of states, including Texas, enacted welfare reform legislation (most notably the Federal Personal Responsibility and Work Opportunity Reconciliation Act of 1996 [U.S. Public Law 104-193, 104th Cong., 2nd sess., 22 August 1996, PRWORA] and the Texas Achieving Change for Texas and Choices programs) that significantly altered the eligibility rules for human services. Second, the latter part of the 1990s experienced an unprecedented period of economic expansion. Welfare reform reduced caseloads through its emphasis on moving recipients into full-time employment as well as through a set of stricter rules governing both eligibility requirements and the receipt of benefits. The expanding economy reduced caseloads through the creation of jobs that reduced the levels of poverty for many human service recipients.

Similarly to caseload size, human service expenditures declined or slowed during the latter 1990s (see Table 8.2). The changes in expenditure patterns, however, did not necessarily parallel those for caseloads. For example, the United States TANF caseload declined almost 59 percent between 1995 and 2000 while program expenditures actually rose by almost 1 percent. In Texas, the TANF caseload declined 54.3 percent, and expenditures declined by 3.4 percent. For the Food Stamp program, the United States caseload declined 35.6 percent while expenditures fell by 37.4 percent. The Texas Food Stamp caseload decreased 48.0 percent and expenditures declined by 42.8 percent. The United States Medicaid program had a caseload increase of 6.2 percent and a 20.3 percent increase in expenditures between 1995 and 2000.

Texas had a 14.8 percent decline in its Medicaid caseload, but 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 for all three human service programs from 1995 to 2000. For example, between 1995 and 2000, Texas costs per recipient rose 81.3 percent for TANF, 139.9 percent for the Food Stamp program, and 34.5 percent for Medicaid. By the year 2000, Texas State expenditures per human service recipient were $735.87 for TANF, $158.56 for Food Stamps, and $2,510.67 for Medicaid. Much of the increase in costs per recipient can be traced to increasing program costs. For example, welfare reform initiated a variety of employment services for TANF recipients, and Medicaid costs were impacted by increases in the costs of medical services.

In summary, during the latter half of the 1990s as a result of federal and state policy changes, human service caseloads declined in Texas. Total expenditures either increased or declined more slowly than caseloads, however, and Texas expenditures per recipient increased. As a result, although this was a period of unprecedented caseload decline, human services continued to represent a large component in the State's budget. In 2000, expenditures on health and human services in Texas represented about one-third of total expenditures (see Table 4.4), more than any other functional area except for education. In spite of recent caseload declines, human services remain an important component in the State's system of revenues and expenditures. Because of such patterns, it is clearly important to understand how changes in the Texas population may impact the future demand for human services.

Projecting Human Service Enrollments and Costs

The projections of human service enrollments were completed using the average of 1999-2001 age-, sex-, and race/ethnicity-specific enrollment rates computed from data provided by the Texas Department of Human Services (TDHS) (2001a and 2001b). These values were divided by 2000 data from the 2000 Census to produce age-, sex-, and race/ethnicity-specific participation rates. The participation rates so obtained were then applied to the projections of the population used throughout this volume to obtain projections of future caseload populations assuming that the 2000 participation rates continue throughout the projection period. The projections of the number of participants were then used with per capita cost estimates (Texas Department of Human Services 2001) to project program costs (see Appendix B). As with other projections in this volume, the projections presented in this chapter are intended to be used only to explore the implications of long-term trends. They are not as inclusive as those provided by the Texas Health and Human Services Commission (THHSC) that are more appropriate for use for short-term planning purposes.

Projections of Future Demand for Human Service Programs

The projections of human service programs by race/ethnicity and program are shown in Tables 8.3 through 8.14 (see also Figures 8.3 and 8.4). Given the participation, programmatic, administrative, and other differences in these programs, we provide projections of the number of participants for each of the three programs separately.

Projections of TANF Recipients

The data in Tables 8.3 and 8.4 show increases in TANF participation from 405,287 recipients in 2000 to 674,416 in 2040 under the 0.5 scenario and to 1,008,932 by 2040 under the 1.0 scenario, increases of 66.4 percent and 148.9 percent respectively. The growth in TANF is

thus projected to be about the same as the increase in the population of 67.9 and 142.6 percent under the 0.5 and 1.0 scenarios, respectively.

The population of recipients will reflect general population change in that percentage increases are larger for Hispanics and persons from the Other racial/ethnic group and smaller for Blacks and Anglos. In fact, because of decreased rates of population growth, the number of Anglo recipients declines under either scenario and the number of Black recipients increases from 2000 to 2040 by only 0.1 percent under the 0.5 scenario and by 22.3 percent under the 1.0 scenario. The number of Hispanics increases by 125.1 percent from 2000 to 2040 under the 0.5 scenario and by 260.0 percent under the 1.0 scenario, and the number of persons from the Other racial/ethnic group increases by 106.8 percent and by 355.8 percent. As a result, by 2040 under the 0.5 scenario, the percentages of recipients who would be Anglo, Black, Hispanic, and Other are 8.3, 17.2, 73.5, and 1.0, respectively, and the percentages under the 1.0 scenario are 5.9, 14.0, 78.6, and 1.5. These compare to 16.4 percent Anglo, 28.5 percent Black, 54.3 percent Hispanic, and 0.8 percent of recipients who were from the Other racial/ethnic group in 2000 (see Table 8.5). Hispanics are projected to be an increasing proportion of all recipients and to account for at least 94 percent of all net additions to the number of recipients between 2000 and 2040 under both of the 0.5 and 1.0 scenarios (see Table 8.6).

Projections of Food Stamp Recipients

The number of Food Stamp recipients will increase more rapidly than the number of TANF recipients, from 1,007,067 recipients in 2000 to 2,126,142 in 2040 under the 0.5 scenario and to 3,229,632 under the 1.0 scenario (see Tables 8.7-8.10). These represent increases from 2000 to 2040 or 111.1 percent under the 0.5 scenario and 220.7 percent under the 1.0 scenario, increases that are significantly larger than the 67.9 and 142.6 percent increases in population or

the 66.4 and 148.9 percent increases in the number of TANF recipients. This change reflects the fact that rates of participation in the Food Stamp program are higher among Texas' fastest growing population group, Hispanics, and to a lesser extent among persons from the Other racial/ethnic group.

As with the data for the TANF program, the data for Food Stamps show that the recipients in the program will increasingly be non-Anglos, particularly Hispanic. Under the 0.5 scenario, the 2000 to 2040 increases are 1.4 percent for Anglos, 20.7 percent for Blacks, 164.5 percent for Hispanics, and 604.0 percent for persons from the Other racial/ethnic group. Under the 1.0 scenario, the 2000 to 2040 increases are 8.5 percent for Anglos, 46.4 percent for Blacks, 318.6 percent for Hispanics, and 1,436.8 percent for persons from the Other racial/ethnic group (see Table 8.8). By 2040 under the 0.5 scenario, the Food Stamp population would consist of 8.8 percent Anglos, 11.4 percent Blacks, 75.9 percent Hispanics, and 3.9 percent members of the Other racial/ethnic group, while under the 1.0 scenario, the 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. These compare to 18.3 percent Anglo, 19.9 percent Black, 60.6 percent Hispanic, and 1.2 percent from the Other racial/ethnic group in 2000 (see Table 8.9). Of the total net change in the number of Food Stamp recipients from 2000 to 2040 under both the 0.5 and the 1.0 scenarios, 99.3 or more percent would be due to non-Anglo populations and at least 87.6 percent would be due to the Hispanic population.

Projections of Medicaid Recipients

Medicaid enrollment would be substantially larger than that in any other human service program and would show rates of growth greater than TANF but less than Food Stamps. The total number of Medicaid recipients increases (see Table 8.11) from 1,886,937 in 2000 to

3,778,381 in 2040 under the 0.5 scenario and to 5,319,029 in 2040 under the 1.0 scenario (compared to 2040 TANF enrollments of 674,416 under the 0.5 and 1,008,932 under the 1.0 scenario and Food Stamp enrollments of 2,126,142 and 3,229,632, respectively). These are increases of 100.2 percent from 2000 to 2040 under the 0.5 scenario and of 181.9 percent under the 1.0 scenario (compared to increases of 66.4 percent for the 0.5 scenario and 148.9 percent for the 1.0 scenario for TANF and 111.1 percent and 220.7 percent for the same scenarios for Food Stamps).

As with other human service programs, enrollment in Medicaid will reflect increasing involvement of non-Anglo populations, but Anglo populations retain higher levels of involvement than for either TANF or Food Stamps. For example, under the 1.0 scenario, Anglo enrollment is projected to increase by 30.5 percent from 2000 to 2040, Black enrollment by 58.9 percent, Hispanic enrollment by 300.3 percent, and the enrollment of persons from the Other racial/ethnic group by 978.6 percent (see Table 8.12). However, the number of Anglo recipients declines from 2000 to 2040 under all scenarios for TANF and increases by only 1.4 percent under the 0.5 and 8.5 percent under the 1.0 scenario for Food Stamps. As a result of such patterns, although enrollment in the Medicaid program shows rapid increases in the percentage of Hispanics and persons from the Other racial/ethnic group, the changes are less dramatic than those for TANF and Food Stamps. By 2040 under the 1.0 scenario (see Table 8.13), 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 (these compare to 2040 percentages of 5.9, 14.0, 78.6, and 1.5 percent for TANF and 6.2, 9.1, 79.2, and 5.5 percent for Food Stamps for the same groups under the same scenario). Although Anglo involvement in the Medicaid program is projected to be roughly twice the percentage that it is in the other human service

programs, it is still evident that non-Anglo populations will come to increasingly dominate the number of participants in Medicaid, as in TANF and Food Stamps. Between 2000 and 2040 (see Table 8.14), more than 95 percent of the net additions to the number of Medicaid recipients (under the 1.0 scenario) would be non-Anglo with 81.1 percent being Hispanic.

In sum, the data on projected enrollment in TANF, Food Stamps, and Medicaid show rapid increases in the number of persons enrolled in these programs. Although TANF programs are projected to increase at about the same rate as the total population, enrollment in Food Stamps and Medicaid would increase more rapidly than the total population because of the high rates of involvement of the fastest growing segments of Texas population in these programs. But despite program differences, the absolute levels of growth will be extensive. Under the 0.5 scenario, the number of TANF recipients would increase from 2000 to 2040 by roughly 270,000, Food Stamp participants would increase by about 1.1 million, and Medicaid recipients would increase by nearly 1.9 million. Under the 1.0 scenario, the 2000 to 2040 increases would be more than 600,000 for TANF, more than 2.2 million for Food Stamps, and more than 3.4 million for Medicaid. The enrollment in all of these programs also comes to increasingly involve non-Anglo, particularly Hispanic, participants indicating potentially additional requirements for the delivery system due to language and other factors. Growth in human service programs is likely to challenge the State if the factors leading to the use of such programs do not change in the coming years.

Cost Implications of Change in Human Service Programs

The application of 2000 per-recipient costs to the number of projected recipients shown in Tables 8.3, 8.7, and 8.11 provides a projection of total expenditures for these programs per year in 2000 constant dollars (see Table 8.15). Because the costs shown are projected on a per-

recipient basis, the percentage changes in costs are identical to those for the percentage increases in the number of recipients. The total and State costs for these programs will be substantial. State costs under the 0.5 scenario would increase by roughly $35 million between 2000 and 2040 for TANF, by more than $93 million for Food Stamps, and by more than $2.0 billion for Medicaid. Under the 1.0 scenario, these increases in State costs would be roughly $375 million for TANF, $480 million for Food Stamps, and more than $7.9 billion for Medicaid.

Taken together, the data in Tables 8.3-8.15 suggest extensive increases in the number of human service recipients. This growth in the demand for human services will likely require increases in the personnel and facilities necessary to deliver such services and in the costs of such services in Texas.

Summary

In this chapter we have examined the implications of population change for human services in Texas. These include the implications for TANF, Food Stamps, and Medicaid. The results suggest:

1. During the latter part of the 1990s, human service programs showed dramatic changes as a result of welfare reform legislation and waivers enacted at both the Federal and State levels. As a result, between 1995 and 2000, the TANF caseload declined by more than 50 percent for both the United States and Texas, and the Texas Food Stamp caseload declined by almost 50 percent while that for the United States decreased by around 35 percent. The number of Medicaid recipients in the United States actually increased by about 6 percent between 1995 and 2000, while the Texas Medicaid caseload declined almost 15 percent, falling from around 2 million persons in 1995 to around 1.7 million in 2000. During the latter half of the 1990s, Texas

reduced its TANF caseload by more than half and experienced greater declines in its Food Stamp and Medicaid programs than those which occurred in the United States.

2. As with caseload numbers, human service expenditures declined or slowed during the latter part of the 1990s. The changes in expenditure patterns, however, did not necessarily parallel those for caseloads. The TANF caseload in the United States declined almost 59 percent between 1995 and 2000, but program expenditures rose by almost 1 percent. For Texas, the TANF caseload declined 54.3 percent in the 1995-2000 period while expenditures declined by 3.4 percent. For the Food Stamp program, the United States caseload declined 35.6 percent while expenditures fell by 37.4 percent. The Texas Food Stamp caseload decreased 48.0 percent and expenditures declined by 42.8 percent. The United States Medicaid program had a caseload increase of 6.2 percent but a 20.3 percent increase in expenditures between 1995 and 2000. In Texas, which had a 14.8 percent decline in its Medicaid caseload, 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 for all three human service programs from 1995 to 2000. Between 1995 and 2000, Texas costs per recipient rose 81.3 percent for TANF, 139.9 percent for the Food Stamp program, and 34.5 percent for Medicaid. By the year 2000, because of increased program costs related to the provision of new employment and other services, increased medical costs, and other factors, Texas State expenditures per human service recipient were $735.87 for TANF, $158.56 for the Food Stamp program, and $2,510.67 for Medicaid. As a result, although 1995-2000 was a period of unprecedented caseload decline, human services continued to represent a large component in the State's budget.

3. Projections of the future population of TANF recipients were completed assuming 2000 age-, sex-, and race/ethnicity-specific rates of participation in these programs. The projected number of TANF recipients increases from 405,287 recipients in 2000 to 1,008,932 by 2040 under the 1.0 scenario, a percentage increase of 148.9 percent. The growth in TANF is thus projected to be about the same as the increase in the population of 142.6 percent for the 1.0 scenario. The population of recipients will reflect general population change in that percentage increases are larger for Hispanics and persons from the Other racial/ethnic group and smaller for Blacks and Anglos. The number of Anglo recipients declines and the number of Black recipients increases from 2000 to 2040 by 22.3 percent under the 1.0 scenario. The number of Hispanics increases by 260.0 percent under the 1.0 scenario, and the number of persons from the Other racial/ethnic group increases by 355.8 percent. As a result, by 2040 under the 1.0 scenario, the percentage of recipients who would be Anglo, Black, Hispanic, and Other is 5.9, 14.0, 78.6, and 1.5 percent, respectively. Hispanics are projected to be an increasing proportion of all recipients and to account for at least 94 percent of all net additions to the number of TANF recipients between 2000 and 2040.

4. The number of Food Stamp recipients will 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. This represents an increase of 220.7 percent, an increase that is significantly larger than the 142.6 percent increase in population or the 148.9 percent increase in the number of TANF recipients. The recipients in the program will increasingly be non-Anglos, particularly Hispanics. Under the 1.0 scenario, the 2000 to 2040 increases are 8.5 percent for Anglos, 46.4 percent for Blacks, 318.6 percent for Hispanics, and 1,436.8 percent for persons from the Other racial/ethnic group. 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. These values compare to 18.3 percent Anglo, 19.9 percent Black, 60.6 percent Hispanic, and 1.2 percent from the Other racial/ethnic group in 2000. Of the total net change in the number of Food Stamp recipients from 2000 to 2040 under the 1.0 scenario, 99.3 percent would be due to non-Anglo populations and 87.6 percent would be due to the Hispanic population.

5. Medicaid enrollment would be substantially larger than that in any other human service program and would show rates of growth greater than TANF but less than Food Stamps. The total number of Medicaid recipients increases from 1,886,937 in 2000 to 5,319,029 in 2040 under the 1.0 scenario (compared to a 2040 TANF enrollment of 1,008,932 and a Food Stamp enrollment of 3,229,632). The increase in the number of Medicaid recipients is 181.9 percent under the 1.0 scenario (compared to increases of 148.9 percent for TANF and 220.7 percent for Food Stamps). Although Anglos account for a larger proportion of enrollment in Medicaid, the general pattern of increased enrollment by non-Anglos is evident for Medicaid as well. 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. Although Anglo involvement in the Medicaid program is projected to be roughly twice the percentage that it is in the other human service programs, it is still evident that non-Anglo populations will come to increasingly dominate the number of participants in Medicaid, as in TANF and Food Stamps. Between 2000 and 2040 more than 95 percent of the net additions to the number of Medicaid recipients (under the 1.0 scenario) would be non-Anglo with 81.1 percent being Hispanic.

6. The data on projected enrollment in TANF, Food Stamps, and Medicaid show rapid increases in the number of persons enrolled in these programs. Although TANF programs are projected to increase at about the same rate as the total population, enrollment in Food Stamps and Medicaid would increase more rapidly than the total population because of the high rates of involvement of the fastest growing segments of Texas population in these programs. Despite program differences, the absolute levels of growth will be extensive with the number of TANF recipients increasing from 2000 to 2040 by roughly 270,000, Food Stamp participants by about 1.1 million, and Medicaid recipients by nearly 1.9 million under the 0.5 scenario. Under the 1.0 scenario, the 2000 to 2040 increases would be more than 600,000 for TANF, more than 2.2 million for Food Stamps, and more than 3.4 million for Medicaid.

7. The application of 2000 per-recipient costs to the number of projected recipients shows that the total and State costs for these programs may be substantial. State costs for TANF under the 0.5 scenario would increase by roughly $35 million between 2000 and 2040, for Food Stamps by more than $93 million, and for Medicaid by more than $2.0 billion. Under the 1.0 scenario, these increases in State costs from 2000 to 2040 would be roughly $375 million for TANF, $480 million for Food Stamps, and more than $7.9 billion for Medicaid.

Overall, the results in this chapter point to a dramatically changing historical environment for human service programs in Texas, with resulting uncertainty for the future of such programs. Under the projections presented here, however, the number of TANF recipients would grow at about the same rate as the population, but the number of Food Stamp and Medicaid recipients would grow more rapidly. Under these projections, between 6.6 million (under the 0.5 scenario) and nearly 9.6 million persons (under the 1.0 scenario) would be involved in these programs by 2040 compared to about 3.3 million in 2000. Although the 0.5 and 1.0 projections produce very

different long-term values, under either scenario, the number of new enrollees and their associated costs will substantially impact the resources needed to provide these services in Texas.

Figure 8.1

TANF, Food Stamp, and Medicaid Enrollment in the United States, 1975-2000

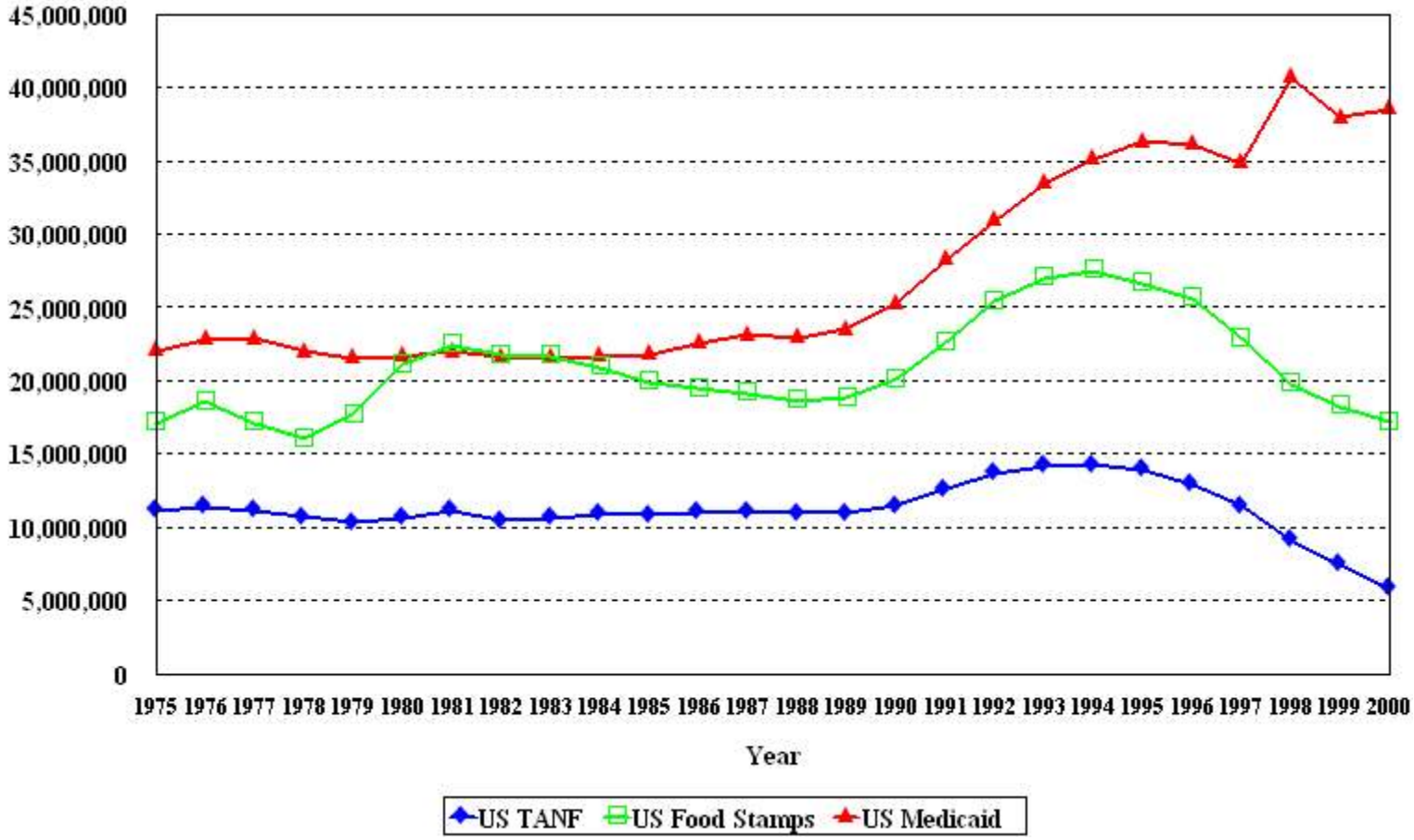


Figure 8.2

TANF, Food Stamp, and Medicaid Enrollment in Texas, 1975-2000

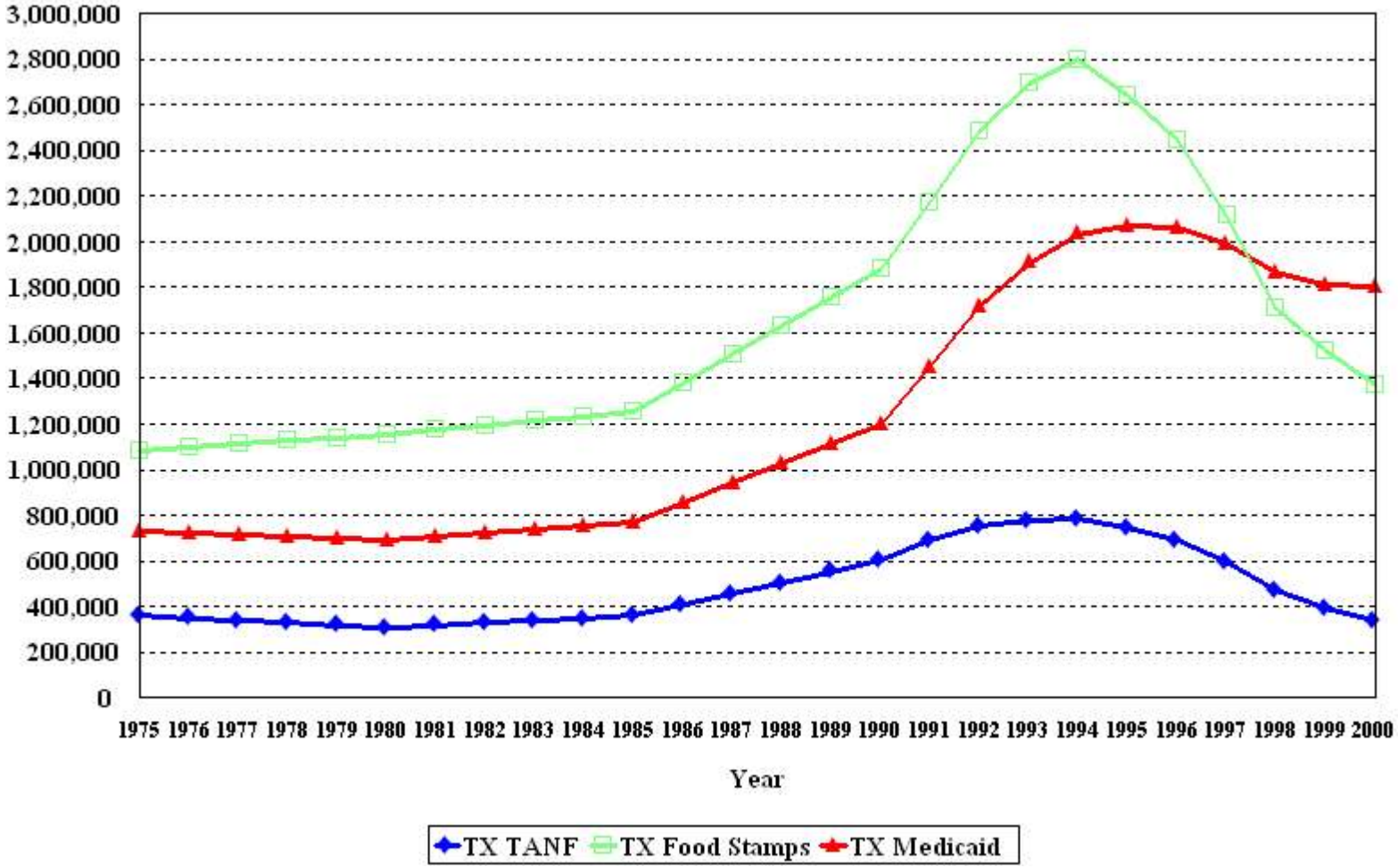


Figure 8.3

TANF, Food Stamp, and Medicaid Enrollment in Texas in 2000 and Projections to 2040 (1.0 Scenario)

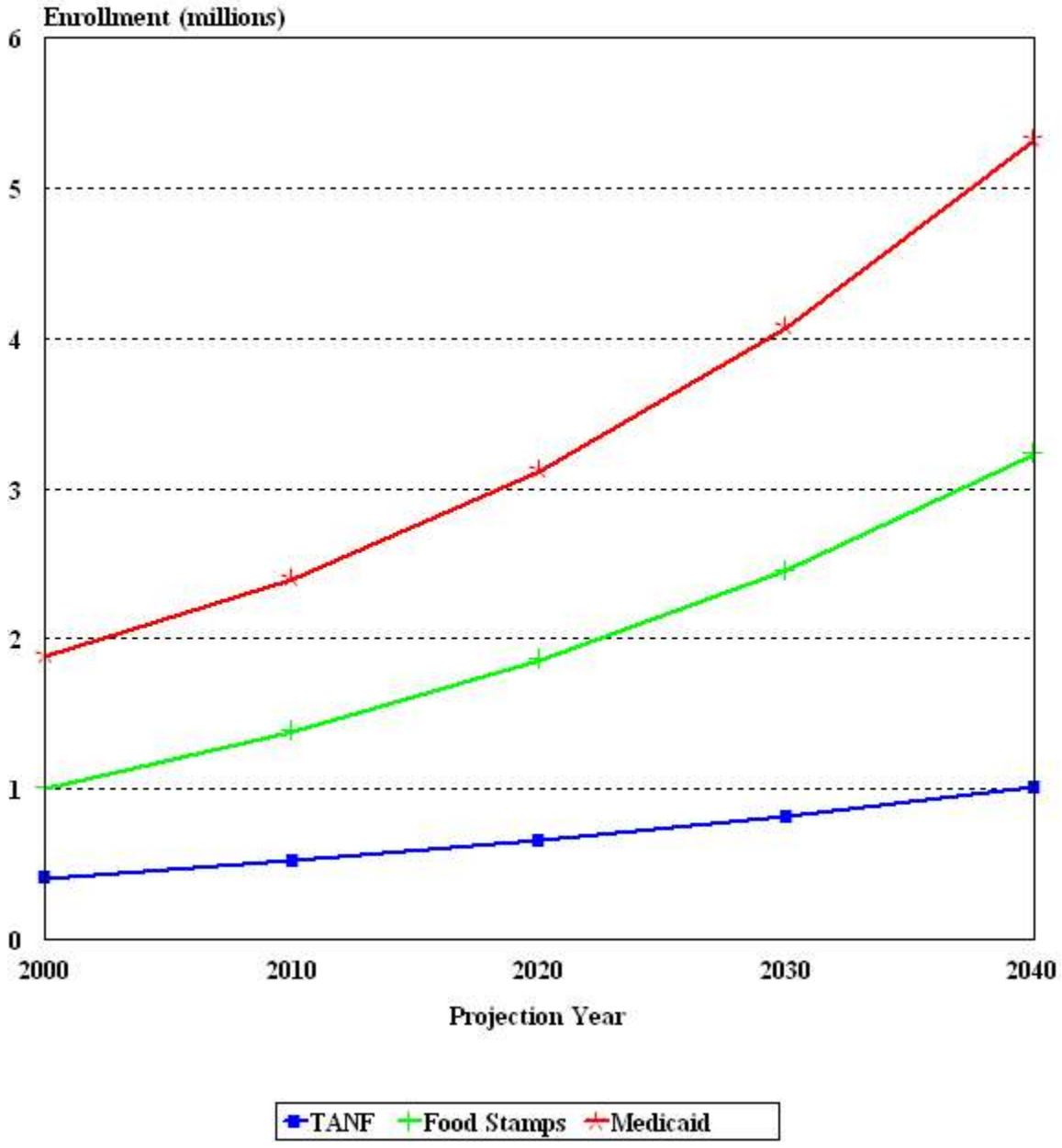


Figure 8.4

Percent of TANF, Food Stamp, and Medicaid Enrollment in Texas by Race/Ethnicity in 2000 and Projections for 2040 (1.0 Scenario)

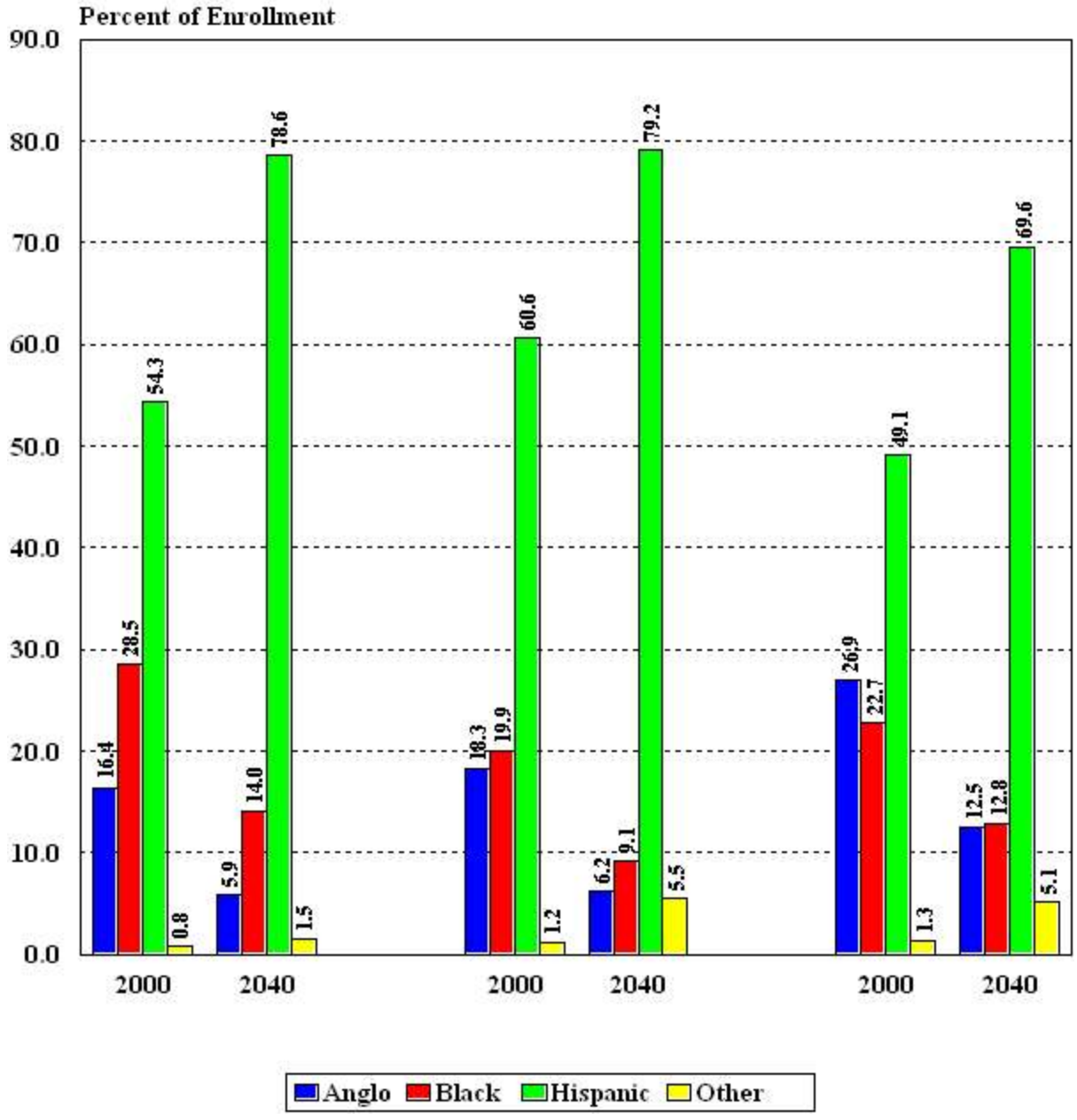


Table 8.1

Number and Percent Change in Enrollment for Aid to Families with Dependent Children (AFDC)/Temporary Assistance for Needy Families (TANF), Food Stamps, and Medicaid in the United States and Texas, 1995-2000

Area	Enrollment						Percent Change					
	1995	1996	1997	1998	1999	2000	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	1995-2000
Aid to Families with Dependent Children /Temporary Assistance for Needy Families												
United States	13,931,000	12,877,000	11,423,000	9,132,000	7,455,000	5,781,000	-7.6	-11.3	-20.1	-18.4	-22.5	-58.5
Texas	748,178	690,021	600,128	474,755	369,938	341,691	-7.8	-13.0	-20.9	-22.1	-7.6	-54.3
Food Stamps												
United States	26,619,000	25,542,000	22,858,000	19,788,000	18,183,000	17,155,000	-4.0	-10.5	-13.4	-8.1	-5.7	-35.6
Texas	2,637,195	2,467,550	2,117,429	1,705,795	1,457,347	1,372,616	-6.4	-14.2	-19.4	-14.6	-5.8	-48.0
Medicaid												
United States	36,281,586	36,117,956	34,872,275	40,649,482	37,958,192	38,535,065	-0.5	-3.4	16.6	-6.6	1.5	6.2
Texas	2,039,743	2,021,795	1,934,199	1,802,307	1,733,987	1,738,452	-0.9	-4.3	-6.8	-3.8	0.3	-14.8

Sources: U.S. Department of Health and Human Services, United States: AFDC/TANF State by State Welfare Caseloads Since 1963, [online], 2002a; HCFA-2082 Report, 1999-2000, 2000a; and 1999 HCFA Statistics, 2000b. U.S. Department of Agriculture, Food Stamp Program Participation and Costs, [online], 2002. Texas Department of Human Services, Expanded TDHS Annual Report Data: FY 1995-1999, 2001; Expanded TDHS Annual Report Data - 2000, 2000.

Table 8.2

Expenditures for Aid to Families with Dependent Children (AFDC)/Temporary Assistance for Needy Families (TANF), Food Stamps, and Medicaid in the United States and Texas, and Federal, State, and Per-Recipient Costs in Texas, 1995-2000

	Costs						Percent Change					
	1995	1996	1997	1998	1999	2000	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	1995-2000
Aid to Families with Dependent Children/Temporary Assistance for Needy Families												
United States	$ 16,978,091,439	$ 15,766,045,979	$ 15,997,938,853	$ 18,265,238,432	$ 17,344,733,015	$ 17,136,517,958	-7.1	1.5	14.2	-5.0	-1.2	0.9
Texas total expenditures	827,612,941	679,827,400	841,601,350	798,149,808	794,819,193	799,110,750	-17.9	23.8	-5.2	-0.4	0.5	-3.4
Federal costs	523,961,753	423,532,470	571,831,216	532,517,253	534,926,597	547,669,946	-19.2	35.0	-6.9	0.5	2.4	4.5
Texas state costs	303,651,188	256,294,930	269,770,134	265,632,555	259,892,596	251,440,804	-15.6	5.3	-1.5	-2.2	-3.3	-17.2
Texas annual costs per recipient	405.85	371.43	449.52	559.52	702.53	735.87	-8.5	21.0	24.5	25.6	4.7	81.3
Food Stamps												
United States	$ 27,891,821,825	$ 26,745,307,195	$ 23,122,090,015	$ 20,202,279,603	$ 18,990,965,315	$ 17,461,086,169	-4.1	-13.5	-12.6	-6.0	-8.1	-37.4
Texas total expenditures	2,886,818,792	2,672,143,676	2,212,513,762	1,810,675,416	1,689,884,907	1,650,457,337	-7.4	-17.2	-18.2	-6.7	-2.3	-42.8
Federal costs	2,712,514,221	2,510,504,628	2,062,542,726	1,658,000,998	1,499,390,505	1,432,808,822	-7.4	-17.8	-19.6	-9.6	-4.4	-47.2
Texas state costs	174,304,571	161,639,048	149,971,036	152,674,418	190,494,402	217,648,515	-7.3	-7.2	1.8	24.8	14.3	24.9
Texas annual costs per recipient	66.09	65.51	70.83	89.5	130.71	158.56	-0.9	8.1	26.4	46.0	21.3	139.9
Medicaid												
United States	$ 100,459,701,549	$ 101,211,636,274	$ 102,186,951,912	$ 104,869,626,016	$ 114,583,762,088	$ 120,898,665,587	0.7	1.0	2.6	9.3	5.5	20.3
Texas total expenditures	10,375,826,171	10,405,370,867	10,333,996,888	10,956,500,297	11,896,988,641	11,295,744,946	0.3	-0.7	6.0	8.6	-5.1	8.9
Federal costs	6,568,935,549	6,482,546,050	6,464,948,453	6,823,708,385	7,429,669,406	6,931,069,099	-1.3	-0.3	5.5	8.9	-6.7	5.5
Texas state costs	3,806,890,622	3,922,824,817	3,869,048,435	4,132,791,912	4,467,319,235	4,364,675,847	3.0	-1.4	6.8	8.1	-2.3	14.7
Texas annual costs per recipient	1,866.36	1,940.27	2,000.34	2,293.06	2,576.33	2,510.67	4.0	3.1	14.6	12.4	-2.5	34.5

Sources: U.S. Census Bureau, Consolidated Federal Funds Report: 1995-2000, [online], 2002b; and County Population Estimates and Demographic Components of Population Change: Annual Time Series, July 1, 1990 to July 1, 1999 (CO-99-8), 2000. U.S. Department of Health and Human Services, Fourth Quarter ACF-196 Report, Fiscal Year 2000, [online], 2001; and Federal Matching Percentages, [online], 2002b.

Table 8.3

TANF Enrollment in Texas by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	TANF Enrollment				
	Anglo	Black	Hispanic	Other	Total
All Scenarios					
2000	66,215	115,626	220,165	3,281	405,287
Assuming Rates of Zero Net Migration (0.0 Scenario)					
2010	65,695	114,230	255,858	3,613	439,396
2020	62,057	110,893	276,567	3,429	452,946
2030	57,212	103,029	297,246	3,213	460,700
2040	52,802	94,640	310,830	3,069	461,341
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
2010	66,711	119,819	285,769	4,319	476,618
2020	64,124	122,598	351,515	5,073	543,310
2030	60,015	119,752	421,950	5,865	607,582
2040	56,244	115,740	495,646	6,786	674,416
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
2010	67,744	125,651	319,685	5,164	518,244
2020	66,264	135,526	448,194	7,473	657,457
2030	62,971	139,129	601,647	10,657	814,404
2040	59,917	141,456	792,604	14,955	1,008,932

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Department of Human Services, Monthly Client Files for 1999, 2000, and 2001, [machine readable data files], 1999-2001a.

Table 8.4

Percent Change in Projected TANF Enrollment in Texas
by Race/Ethnicity Assuming Alternative Projection Scenarios, 2000-2040

Time Period	Anglo	Black	Hispanic	Other	Total
Assuming Rates of Zero Net Migration (0.0 Scenario)					
2000-2010	-0.8	-1.2	16.2	10.1	8.4
2010-2020	-5.5	-2.9	8.1	-5.1	3.1
2020-2030	-7.8	-7.1	7.5	-6.3	1.7
2030-2040	-7.7	-8.1	4.6	-4.5	0.1
2000-2040	-20.3	-18.1	41.2	-6.5	13.8
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
2000-2010	0.7	3.6	29.8	31.6	17.6
2010-2020	-3.9	2.3	23.0	17.5	14.0
2020-2030	-6.4	-2.3	20.0	15.6	11.8
2030-2040	-6.3	-3.4	17.5	15.7	11.0
2000-2040	-15.1	0.1	125.1	106.8	66.4
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
2000-2010	2.3	8.7	45.2	57.4	27.9
2010-2020	-2.2	7.9	40.2	44.7	26.9
2020-2030	-5.0	2.7	34.2	42.6	23.9
2030-2040	-4.8	1.7	31.7	40.3	23.9
2000-2040	-9.5	22.3	260.0	355.8	148.9

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Department of Human Services, Monthly Client Files for 1999, 2000, and 2001, [machine readable data files], 1999-2001a.

Table 8.5

Percent of TANF Enrollment in Texas by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other	Total
All Scenarios					
2000	16.4	28.5	54.3	0.8	100.0
Assuming Rates of Zero Net Migration (0.0 Scenario)					
2010	15.0	26.0	58.2	0.8	100.0
2020	13.7	24.5	61.0	0.8	100.0
2030	12.4	22.4	64.5	0.7	100.0
2040	11.4	20.5	67.4	0.7	100.0
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
2010	14.0	25.1	60.0	0.9	100.0
2020	11.8	22.6	64.7	0.9	100.0
2030	9.9	19.7	69.4	1.0	100.0
2040	8.3	17.2	73.5	1.0	100.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
2010	13.1	24.2	61.7	1.0	100.0
2020	10.1	20.6	68.2	1.1	100.0
2030	7.7	17.1	73.9	1.3	100.0
2040	5.9	14.0	78.6	1.5	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Department of Human Services, Monthly Client Files for 1999, 2000, and 2001, [machine readable data files], 1999-2001a.

Table 8.6

Number and Percent of Net Change in TANF Enrollment in Texas Due To Each Race/Ethnicity Group, Assuming Alternative Projection Scenarios, 2000-2040

Race/ Ethnicity	Number	Percent
Assuming Rates of Zero Net Migration (0.0 Scenario)		
Anglo	-13,413	-23.9
Black	-20,986	-37.4
Hispanic	90,665	161.7
Other	-212	-0.4
Total	56,054	100.0
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
Anglo	-9,971	-3.7
Black	114	0.0
Hispanic	275,481	102.4
Other	3,505	1.3
Total	269,129	100.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
Anglo	-6,298	-1.0
Black	25,830	4.3
Hispanic	572,439	94.8
Other	11,674	1.9
Total	603,645	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Department of Human Services, Monthly Client Files for 1999, 2000, and 2001, [machine readable data files], 1999-2001a.

Table 8.7

Food Stamp Recipients in Texas by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other	Total
			All Scenarios		
2000	184,521	199,980	610,921	11,645	1,007,067
			Assuming Rates of Zero Net Migration (0.0 Scenario)		
2010	193,532	209,407	746,588	16,801	1,166,328
2020	191,964	212,544	842,010	23,736	1,270,254
2030	184,785	207,989	944,919	31,588	1,369,281
2040	174,965	198,839	1,028,326	37,250	1,439,380
			Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
2010	196,744	219,368	832,079	20,132	1,268,323
2020	198,652	234,082	1,060,700	34,575	1,528,009
2030	194,427	240,440	1,324,361	56,228	1,815,456
2040	187,177	241,325	1,615,655	81,985	2,126,142
			Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
2010	200,005	229,812	929,245	24,108	1,383,170
2020	205,572	257,781	1,343,312	50,218	1,856,883
2030	204,578	277,960	1,871,591	99,488	2,453,617
2040	200,270	292,829	2,557,578	178,955	3,229,632

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Department of Human Services, Monthly Client Files for 1999, 2000, and 2001, [machine readable data files], 1999-2001a.

Table 8.8

Percent Change in Projected Number of Food Stamp Recipients in Texas by Race/Ethnicity Assuming Alternative Projection Scenarios, 2000-2040

Time Period	Anglo	Black	Hispanic	Other	Total
Assuming Rates of Zero Net Migration (0.0 Scenario)					
2000-2010	4.9	4.7	22.2	44.3	15.8
2010-2020	-0.8	1.5	12.8	41.3	8.9
2020-2030	-3.7	-2.1	12.2	33.1	7.8
2030-2040	-5.3	-4.4	8.8	17.9	5.1
2000-2040	-5.2	-0.6	68.3	219.9	42.9
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
2000-2010	6.6	9.7	36.2	72.9	25.9
2010-2020	1.0	6.7	27.5	71.7	20.5
2020-2030	-2.1	2.7	24.9	62.6	18.8
2030-2040	-3.7	0.4	22.0	45.8	17.1
2000-2040	1.4	20.7	164.5	604.0	111.1
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
2000-2010	8.4	14.9	52.1	107.0	37.3
2010-2020	2.8	12.2	44.6	108.3	34.2
2020-2030	-0.5	7.8	39.3	98.1	32.1
2030-2040	-2.1	5.3	36.7	79.9	31.6
2000-2040	8.5	46.4	318.6	1,436.8	220.7

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Department of Human Services, Monthly Client Files for 1999, 2000, and 2001, [machine readable data files], 1999-2001a.

Table 8.9

Percent of Food Stamp Recipients in Texas by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other	Total
All Scenarios					
2000	18.3	19.9	60.6	1.2	100.0
Assuming Rates of Zero Net Migration (0.0 Scenario)					
2010	16.6	18.0	64.0	1.4	100.0
2020	15.1	16.7	66.3	1.9	100.0
2030	13.5	15.2	69.0	2.3	100.0
2040	12.2	13.8	71.4	2.6	100.0
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
2010	15.5	17.3	65.6	1.6	100.0
2020	13.0	15.3	69.4	2.3	100.0
2030	10.8	13.2	72.9	3.1	100.0
2040	8.8	11.4	75.9	3.9	100.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
2010	14.5	16.6	67.2	1.7	100.0
2020	11.1	13.9	72.3	2.7	100.0
2030	8.3	11.3	76.3	4.1	100.0
2040	6.2	9.1	79.2	5.5	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Department of Human Services, Monthly Client Files for 1999, 2000, and 2001, [machine readable data files], 1999-2001a.

Table 8.10

Number and Percent of Net Change in Food Stamp Recipients
in Texas Due To Each Race/Ethnicity Group,
Assuming Alternative Projection Scenarios, 2000-2040

Race/ Ethnicity	Number	Percent
Assuming Rates of Zero Net Migration (0.0 Scenario)		
Anglo	-9,556	-2.2
Black	-1,141	-0.3
Hispanic	417,405	96.6
Other	25,605	5.9
Total	432,313	100.0
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
Anglo	2,656	0.2
Black	41,345	3.7
Hispanic	1,004,734	89.8
Other	70,340	6.3
Total	1,119,075	100.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
Anglo	15,749	0.7
Black	92,849	4.2
Hispanic	1,946,657	87.6
Other	167,310	7.5
Total	2,222,565	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Department of Human Services, Monthly Client Files for 1999, 2000, and 2001, [machine readable data files], 1999-2001a.

Table 8.11

Medicaid Recipients in Texas by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other	Total
			All Scenarios		
2000	508,077	428,061	925,836	24,963	1,886,937
			Assuming Rates of Zero Net Migration (0.0 Scenario)		
2010	528,543	443,891	1,112,937	23,985	2,109,356
2020	547,072	459,415	1,273,122	34,035	2,313,644
2030	569,479	471,061	1,472,226	47,892	2,560,658
2040	577,972	469,022	1,659,325	60,080	2,766,399
			Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
2010	537,204	464,397	1,217,178	28,383	2,247,162
2020	566,101	504,206	1,554,877	48,744	2,673,928
2030	599,619	541,751	1,976,265	83,098	3,200,733
2040	619,064	564,710	2,467,220	127,387	3,778,381
			Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
2010	546,054	485,930	1,333,515	33,572	2,399,071
2020	585,850	553,460	1,907,489	69,686	3,116,485
2030	631,453	623,279	2,676,028	143,793	4,074,553
2040	663,170	680,220	3,706,383	269,256	5,319,029

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Department of Human Services, Monthly Medical Eligibility Files for 1999, 2000, and 2001, [machine readable data files], 1999-2001b.

Table 8.12

Percent Change in the Projected Number of Medicaid Recipients in Texas by Race/Ethnicity Assuming Alternative Projection Scenarios, 2000-2040

Time Period	Anglo	Black	Hispanic	Other	Total
Assuming Rates of Zero Net Migration (0.0 Scenario)					
2000-2010	4.0	3.7	20.2	-3.9	11.8
2010-2020	3.5	3.5	14.4	41.9	9.7
2020-2030	4.1	2.5	15.6	40.7	10.7
2030-2040	1.5	-0.4	12.7	25.4	8.0
2000-2040	13.8	9.6	79.2	140.7	46.6
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
2000-2010	5.7	8.5	31.5	13.7	19.1
2010-2020	5.4	8.6	27.7	71.7	19.0
2020-2030	5.9	7.4	27.1	70.5	19.7
2030-2040	3.2	4.2	24.8	53.3	18.0
2000-2040	21.8	31.9	166.5	410.3	100.2
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
2000-2010	7.5	13.5	44.0	34.5	27.1
2010-2020	7.3	13.9	43.0	107.6	29.9
2020-2030	7.8	12.6	40.3	106.3	30.7
2030-2040	5.0	9.1	38.5	87.3	30.5
2000-2040	30.5	58.9	300.3	978.6	181.9

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Department of Human Services, Monthly Medical Eligibility Files for 1999, 2000, and 2001, [machine readable data files], 1999-2001b.

Table 8.13

Percent of Medicaid Recipients in Texas by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other	Total
All Scenarios					
2000	26.9	22.7	49.1	1.3	100.0
Assuming Rates of Zero Net Migration (0.0 Scenario)					
2010	25.1	21.0	52.8	1.1	100.0
2020	23.6	19.9	55.0	1.5	100.0
2030	22.2	18.4	57.5	1.9	100.0
2040	20.9	17.0	59.9	2.2	100.0
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
2010	23.9	20.7	54.1	1.3	100.0
2020	21.2	18.9	58.1	1.8	100.0
2030	18.8	16.9	61.7	2.6	100.0
2040	16.4	14.9	65.3	3.4	100.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
2010	22.8	20.3	55.5	1.4	100.0
2020	18.8	17.8	61.2	2.2	100.0
2030	15.5	15.3	65.7	3.5	100.0
2040	12.5	12.8	69.6	5.1	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Department of Human Services, Monthly Medical Eligibility Files for 1999, 2000, and 2001, [machine readable data files], 1999-2001b.

Table 8.14

Number and Percent of Net Change in Medicaid Recipients
in Texas Due To Each Race/Ethnicity Group,
Assuming Alternative Projection Scenarios, 2000-2040

Race/ Ethnicity	Number	Percent
Assuming Rates of Zero Net Migration (0.0 Scenario)		
Anglo	69,895	7.9
Black	40,961	4.7
Hispanic	733,489	83.4
Other	35,117	4.0
Total	879,462	100.0
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
Anglo	110,987	5.9
Black	136,649	7.2
Hispanic	1,541,384	81.5
Other	102,424	5.4
Total	1,891,444	100.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
Anglo	155,093	4.5
Black	252,159	7.3
Hispanic	2,780,547	81.1
Other	244,293	7.1
Total	3,432,092	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Department of Human Services, Monthly Medical Eligibility Files for 1999, 2000, and 2001, [machine readable data files], 1999-2001b.

Table 8.15

Total Costs and State Costs (in 2000 Dollars) for TANF, Food Stamps, and Medicaid in Texas by Race/Ethnicity of Recipient in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other	Total
Panel A: TANF					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Total Costs					
2000	$ 130,557,157	$ 227,981,602	$ 434,102,792	$ 6,469,199	$ 799,110,750
2010	129,531,864	225,229,087	504,479,241	7,123,809	866,364,001
2020	122,358,763	218,649,472	545,311,502	6,761,013	893,080,750
2030	112,805,800	203,143,899	586,084,612	6,335,123	908,369,434
2040	104,110,534	186,603,176	612,868,398	6,051,196	909,633,304
State Costs					
2000	$ 41,079,908	$ 71,734,584	$ 136,590,773	$ 2,035,538	$ 251,440,803
2010	40,757,299	70,868,503	158,734,776	2,241,512	272,602,090
2020	38,500,278	68,798,222	171,582,678	2,127,358	281,008,536
2030	35,494,431	63,919,382	184,411,968	1,993,351	285,819,132
2040	32,758,458	58,714,831	192,839,507	1,904,013	286,216,809
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Total Costs					
2000	$ 130,557,157	$ 227,981,602	$ 434,102,792	$ 6,469,199	$ 799,110,750
2010	133,571,910	247,748,052	630,327,941	10,181,940	1,021,829,843
2020	130,653,771	267,218,745	883,711,157	14,734,632	1,296,318,305
2030	124,160,911	274,322,837	1,186,276,849	21,012,574	1,605,773,171
2040	118,139,291	278,911,019	1,562,789,768	29,487,009	1,989,327,087
State Costs					
2000	$ 41,079,908	$ 71,734,584	$ 136,590,773	$ 2,035,538	$ 251,440,803
2010	42,028,503	77,954,113	198,333,165	3,203,755	321,519,536
2020	41,110,308	84,080,581	278,060,386	4,636,263	407,887,538
2030	39,067,325	86,315,889	373,262,911	6,611,623	505,257,748
2040	37,172,618	87,759,564	491,732,987	9,278,110	625,943,279

Table 8.15, continued

Year	Anglo	Black	Hispanic	Other	Total
Panel B: Food Stamps					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Total Costs					
2000	$ 302,406,929	$ 327,742,303	$ 1,001,223,401	$ 19,084,704	$ 1,650,457,337
2010	317,174,835	343,191,982	1,223,564,711	27,534,746	1,911,466,274
2020	314,605,078	348,333,134	1,379,949,479	38,900,347	2,081,788,038
2030	302,839,592	340,868,057	1,548,604,508	51,768,796	2,244,080,953
2040	286,745,835	325,872,347	1,685,298,189	61,048,109	2,358,964,480
State Costs					
2000	$ 39,878,897	$ 43,219,915	$ 132,032,971	$ 2,516,731	$ 217,648,514
2010	41,826,365	45,257,289	161,353,484	3,631,052	252,068,190
2020	41,487,487	45,935,261	181,976,200	5,129,852	274,528,800
2030	39,935,953	44,950,829	204,217,015	6,826,836	295,930,633
2040	37,813,643	42,973,321	222,243,035	8,050,514	311,080,513
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Total Costs					
2000	$ 302,406,929	$ 327,742,303	$ 1,001,223,401	$ 19,084,704	$ 1,650,457,337
2010	327,783,275	376,633,234	1,522,916,775	39,510,008	2,266,843,292
2020	336,906,895	422,470,941	2,201,520,997	82,301,045	3,043,199,878
2030	335,277,853	455,541,807	3,067,304,457	163,048,436	4,021,172,553
2040	328,217,577	479,910,246	4,191,551,679	293,284,948	5,292,964,450
State Costs					
2000	$ 39,878,897	$ 43,219,915	$ 132,032,971	$ 2,516,731	$ 217,648,514
2010	43,225,318	49,667,242	200,829,532	5,210,250	298,932,342
2020	44,428,465	55,711,936	290,318,183	10,853,174	401,311,758
2030	44,213,640	60,073,045	404,490,468	21,501,465	530,278,618
2040	43,282,590	63,286,551	552,746,792	38,675,967	697,991,900

Table 8.15, continued

Year	Anglo	Black	Hispanic	Other	Total
			Panel C: Medicaid		
			Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
Total Costs					
2000	$ 3,041,494,340	$ 2,562,495,662	$ 5,542,319,281	$ 149,435,663	$ 11,295,744,946
2010	3,164,009,673	2,657,258,573	6,662,359,418	143,581,075	12,627,208,739
2020	3,274,929,571	2,750,189,680	7,621,272,675	203,743,251	13,850,135,177
2030	3,409,064,286	2,819,905,969	8,813,166,205	286,695,219	15,328,831,679
2040	3,459,905,815	2,807,699,932	9,933,194,369	359,656,076	16,560,456,192
State Costs					
2000	$ 1,175,233,413	$ 990,148,324	$ 2,141,552,170	$ 57,741,940	$ 4,364,675,847
2010	1,222,573,338	1,026,764,713	2,574,335,679	55,479,727	4,879,153,457
2020	1,265,432,786	1,062,673,292	2,944,859,761	78,726,392	5,351,692,231
2030	1,317,262,440	1,089,611,667	3,405,407,421	110,779,033	5,923,060,561
2040	1,336,907,607	1,084,895,254	3,838,186,304	138,971,108	6,398,960,273
			Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
Total Costs					
2000	$ 3,041,494,340	$ 2,562,495,662	$ 5,542,319,281	$ 149,435,663	$ 11,295,744,946
2010	3,268,835,531	2,908,916,059	7,982,802,458	200,971,601	14,361,525,649
2020	3,507,065,777	3,313,169,967	11,418,775,100	417,160,341	18,656,171,185
2030	3,780,058,387	3,731,126,484	16,019,469,519	860,786,053	24,391,440,443
2040	3,969,925,427	4,071,991,607	22,187,469,449	1,611,843,480	31,841,229,963
State Costs					
2000	$ 1,175,233,413	$ 990,148,324	$ 2,141,552,170	$ 57,741,940	$ 4,364,675,847
2010	1,263,078,049	1,124,005,165	3,084,554,870	77,655,427	5,549,293,511
2020	1,355,130,216	1,280,208,875	4,412,214,699	161,190,756	7,208,744,546
2030	1,460,614,561	1,441,707,273	6,189,923,022	332,607,731	9,424,852,587
2040	1,533,979,185	1,573,417,557	8,573,238,195	622,816,321	12,303,451,258

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Department of Human Services, Monthly Client Files for 1999, 2000, and 2001, [machine readable data files], 1999-2001a; and Monthly Medical Eligibility Files for 1999, 2000, and 2001, [machine readable data files], 1999-2001b. U.S. Census Bureau, Consolidated Federal Funds Report: 1995-2000, [online], 2002b; and County Population Estimates and Demographic Components of Population Change: Annual Time Series, July 1, 1990 to July 1, 1999 (CO-99-8), 2000. U.S. Department of Health and Human Services, Fourth Quarter ACF-196 Report, Fiscal Year 2000, [online], 2001; and Federal Matching Percentages, [online], 2002b.

Chapter 9

Youth Correctional Services and the Prison System

In this chapter we examine the implication of population change for the number of persons in Texas adult prisons and youth correctional facilities. After briefly describing recent trends in the populations in such facilities, we provide projections of the number of Texas residents in the facilities. We then examine the cost implications of the projections.

Historical Trends in Texas Correctional Populations

According to 2000 Census data (U.S. Census Bureau 2001b), Texas ranked second in the nation in the number of people in correctional institutions and first in terms of incarceration rates, and the numbers of persons involved in the Texas juvenile correction system and in the adult prison system have grown rapidly. The number in the juvenile correction system more than doubled from 1979 to 1999, and the number in the adult prison system quintupled during the same period. Between 1979 and 1999, the population in juvenile correctional facilities in Texas increased by 155.1 percent compared to 51.5 percent for the nation (see Table 9.1). The prison population in Texas increased by 414.2 percent from 1980 to 2000, compared to a 310.6 percent increase in the nation.

Data on the demographic and offense characteristics of juvenile and adult offenders (see Tables 9.2 and 9.3) reveal that while many of the characteristics of offenders remained relatively stable across time, there are some exceptions. The percentage of all youth offenders who were Black showed a decline from 1990 to 2000, while the percentages who were Anglo, Hispanic, and members of the Other racial/ethnic group increased, and the age at commitment was

generally older in 2000 than in 1990. For adult offenders, the aging of prison populations is apparent; there was a 6.6 percent proportional decrease in offenders under 25 years of age, a 7.1 percent decrease in the proportion 25 to 29 years of age, and a 4.8 percent decrease in the percentage 30 to 34 years of age. On the other hand, the proportion 35 to 39 years of age increased by 3.5 percent, the proportion 40 to 59 increased by 14.3 percent, and the proportion of all prisoners 60 years of age or older increased by 0.7 percent. The 1990-2000 data suggest stability in the proportions of all prisoners who are Anglo and Other and a decline in the percentage of all prisoners who are Black, matched by a nearly equal increase in the proportion of prisoners who are Hispanic.

Table 9.3 shows offense characteristics of adult offenders. These data show an increase in the total percentage of inmates imprisoned for violent offenses from 44.8 percent in 1990 to 49.0 percent in 2000. The percentage imprisoned for property crimes decreased by 10.6 percent, the proportion imprisoned for drug related offenses increased by 1.2 percent, and the proportion in the other and unclassified offense category increased by 5.2 percent.

The Texas systems of juvenile and adult corrections have shown a rapid increase in the number of persons in these systems. Although some changes in the characteristics of these populations are evident, it is the large increases in the number of persons in the systems that are the most notable recent changes.

Projections of the Youth Facility and Adult Prison Populations

Projections of the future populations in the Texas Youth Commission (TYC) and Texas State Prison systems were completed using rates of involvement for youth and rates of incarceration for adults, derived from the number of persons in each of the systems at a given

time. The projections shown for TYC populations are of all persons involved in TYC programs, both residential and in other types of programs. To project the number of youth in TYC programs, age-, sex-, and race/ethnicity-specific rates were developed based on year-end (August 31) populations in TYC facilities (Texas Youth Commission 2002a). Because of substantial year-to-year fluctuations, average values for the three years of 1999, 2000, and 2001 were used and divided by 2000 population values.

The projections for adults include only the number of Texas residents incarcerated in State prison facilities and do not include persons on parole, those in non-state prisons, or other persons involved in other parts of the criminal justice system. Adult State prison incarceration rates were developed using 2000 data obtained from the Texas Department of Criminal Justice (2002) on the number and characteristics of on-hand prisoners in 2000. These values were divided by the appropriate 2000 population values to create age-, sex-, and race/ethnicity-specific incarceration rates. These rates were then applied to the projections of population by age, sex and race/ethnicity to obtain projections of the future number of prisoners in Texas State prisons. In sum, we project the number of persons who would be incarcerated, assuming that the 2000 rates of incarceration by age, sex, and race/ethnicity prevail during the projection period.

Given projections of the number of persons involved in each of the two correctional systems, we examined the cost implications of the projected changes in the number of participants. The projected costs for maintaining youth in TYC programs and prisoners in Texas State prisons were derived using 2000 per-youth and per-prisoner costs and assuming that these remain constant over the projection period. All projections shown are in 2000 dollars. Costs associated with capital construction and other non-maintenance costs were not projected. Adult prison costs were obtained from the Criminal Justice Policy Council (2001), which is mandated

to estimate such costs. The costs were estimated as $40.65 per day or $14,837.25 per year in 2000. Youth costs were compiled from data also obtained from the Criminal Justice Policy Council. Because our projections of TYC populations are of all those involved in TYC programs, whether in residential or other programs, we used an aggregated value of per-participant costs for projecting total TYC costs, computing an overall per-participant cost from cost estimates for different programs and the distribution of TYC youth in different types of programs in 2000. Using this sum entails the assumption that the relative mix of youth involved in the TYC programs by type of program will remain the same across the projection period. For 2000, these costs were estimated at $30,442.49 per youth per year.

As with other projections presented here, these should be seen as simply exemplary and not as substitutes for the more detailed and refined projections completed by the Texas Department of Criminal Justice, the Texas Youth Commission, or the Texas Criminal Justice Policy Council. The projections from these agencies are preferable for short-term planning purposes.

Projections of the Number of Persons in TYC Facilities

As shown in Table 9.4, the number of youth in TYC programs is projected to increase from 8,603 in 2000 to 11,771 in 2040 under the 0.5 scenario and to 17,118 under the 1.0 scenario. These values represent increases from 2000 to 2040 of 36.8 percent under the 0.5 scenario and 99.0 percent under the 1.0 scenario. The projected rate of growth under either scenario is smaller than that for the total population, reflecting the slowing growth of the juvenile age group in the population.

The data in Table 9.5 show rapid growth in the number of Hispanics and those from the Other racial/ethnic group. Under both the 0.5 and 1.0 scenarios, the number of Anglos declines;

Blacks show a small (-2.5 percent) decline under the 0.5 scenario and an increase of 21.6 percent under the 1.0 scenario. The number of Hispanics increases by 100.6 percent under the 0.5 scenario and by 215.4 percent under the 1.0 scenario, while the number of persons from the Other racial/ethnic group increases by 74.9 percent under the 0.5 scenario and 274.3 percent under the 1.0 scenario. As a result of such differentials, the proportion of Anglos declines from 23.0 percent in 2000 to 13.5 percent under the 0.5 scenario and to 9.9 percent in 2040 under the 1.0 scenario; the percentage of Blacks declines from 34.0 percent in 2000 to 24.2 percent in 2040 under the 0.5 scenario and to 20.8 percent under the 1.0 scenario; the percentage of Hispanics increases from 39.0 percent in 2000 to 57.2 percent in 2040 under the 0.5 scenario and to 61.8 percent under the 1.0 scenario; and the number of persons from the Other racial/ethnic group increases from 4.0 percent in 2000 to 5.1 percent under the 0.5 scenario and to 7.5 percent under the 1.0 scenario by 2040 (see Table 9.6). Of the total net change of 3,168 youth expected from 2000 to 2040 under the 0.5 scenario, Hispanics would account for virtually all of the net increase and persons from the Other racial/ethnic group for the remaining number, while the number of Anglos and Blacks would decline. Under the 1.0 scenario, Hispanics would account for 85.0 percent of the net increase of 8,515 youth expected from 2000 to 2040, persons from the Other racial/ethnic group would account for 11.0 percent of the increase, and Blacks would account for 7.4 percent of the increase, while the number of Anglos in TYC programs would decline (showing a negative percent change, see Table 9.7).

Overall, projections of the number of persons in TYC programs imply levels of growth slower than the projected population growth in the State and an increasing concentration of non-Anglo youth. Although growth is projected to be slower than that in the population, the results suggest that by 2040 the Texas Youth Commission may need a capacity capable of handling 36.8

percent more youth than are presently being served by the system under the 0.5 scenario and 99.0 percent more under the 1.0 scenario.

Projections of Prison Populations

Table 9.8 and Figure 9.1 present projections of the adult prison population. These data suggest that the number of persons incarcerated in State prisons could increase substantially if 2000 rates of incarceration continue for the next 40 years. From the 151,868 prisoners counted in 2000, the number of persons incarcerated is projected to increase to 234,257 in 2040 under the 0.5 scenario, an increase of 54.3 percent from 2000 to 2040. Under the 1.0 scenario, the number of persons in prison would increase to 340,723 in 2040, an increase of 124.4 percent. These rates of increase are less than the overall rates of projected population growth under the 0.5 and 1.0 scenarios, 67.9 and 142.6 percent, respectively.

As is evident from the data in Table 9.9 and Figures 9.2 and 9.3, prisons will continue to show an increase in their non-Anglo populations. Whereas the total number of prisoners would increase by 54.3 percent from 2000 to 2040 under the 0.5 scenario, Anglo numbers would decline by 11.1 percent, the number of Blacks would increase by 31.9 percent, the number of Hispanics would increase by 172.5 percent, and the number of persons from the Other racial/ethnic group is projected to increase by 91.3 percent. Under the 1.0 scenario, percent changes for non-Anglo group members are larger. The number of Blacks would increase by 62.2 percent, the number of Hispanics would increase by 386.5 percent, the number of persons from the Other racial/ethnic group would increase by 339.7 percent, while the number of Anglos would decline by 4.5 percent.

As a result of such patterns, the percentage of the prison population composed of Anglos would decline from 30.9 percent in 2000 to 17.8 percent in 2040 under the 0.5 scenario and to

13.1 percent in 2040 under the 1.0 scenario, while the percentage of Blacks would decline from 43.5 percent in 2000 to 37.2 percent under the 0.5 scenario and to 31.5 percent by 2040 under the 1.0 scenario. The percentage of Hispanics would increase from 25.2 percent in 2000 to 44.5 percent in 2040 under the 0.5 scenario and to 54.6 percent under the 1.0 scenario, and the percentage of persons from the Other racial/ethnic group would increase from 0.4 percent in 2000 to 0.5 percent under the 0.5 scenario and to 0.8 percent by 2040 under the 1.0 scenario. All of the net increase in the number of prisoners expected to occur from 2000 to 2040 under both alternative scenarios would be accounted for by non-Anglos (the percentage of the net change due to Anglos is -6.3 percent under the 0.5 scenario and -1.2 percent under the 1.0 scenario), with Blacks accounting for approximately 25.6 percent of the net increase under the 0.5 scenario and 21.8 percent under the 1.0 scenario, Hispanics for 80.0 percent under the 0.5 scenario and 78.3 percent under the 1.0 scenario, and persons from the Other racial/ethnic group for 0.7 percent under the 0.5 scenario and for 1.1 percent under the 1.0 scenario (see Table 9.11). With between 82 percent (under the 0.5 scenario) and nearly 87 percent (under the 1.0 scenario) of the prisoners projected to be members of non-Anglo groups in 2040, and all of the net increase from 2000 to 2040 projected to be due to non-Anglo populations, it is evident that non-Anglo population growth will have an extensive impact on the growth of the prison population if 2000 incarceration rates continue to characterize the incarceration levels of these populations.

Implications for State Costs for Corrections

Table 9.12 shows the projected increase in expenditures for TYC operational costs and for the costs of maintaining the number of adult prisoners projected to be in Texas prisons in the coming years. Because the costs are based on per capita costs and are estimated by multiplying

these costs by the projections of the number of persons receiving TYC services and persons incarcerated in prisons, the costs shown increase as a function of population growth in the youth and adult systems.

The absolute increase in costs will be extensive regardless of the population projection scenario. Costs for TYC services would increase from roughly $262 million in 2000 to nearly $354 million under the 0.5 scenario and to nearly $510 million under the 1.0 scenario in 2040, while prison costs would increase from $2.25 billion in 2000 to $3.48 billion in 2040 under the 0.5 scenario and to $5.06 billion under the 1.0 scenario. Such costs would represent substantial additions to the State appropriations for Youth Commission programs and for prisons. The projections shown here suggest that Texas is likely to need to maintain a continuing and increasing investment in criminal justice services in the coming decades.

Summary

In this chapter the implications of projected population change for criminal justice services in Texas are examined for both the number of youth likely to be served through Texas Youth Commission programs and the number of adults in future prison populations. The results suggest that:

1. 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 from 28,543 prisoners in 1980 to 146,761 at the end of 2000. The increase in the adult prisoner population of Texas was 414.2 percent from 1980 to 2000, exceeding the national rate of growth of 310.6 percent.

2. When the projected patterns for youth services are examined, the data suggest that growth in the number of youth in such programs will be less than total population growth, reflecting the slower growth of the juvenile segment of the correctional population. Nevertheless, the number of youth in such 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. 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.

3. The rapid growth in non-Anglo and non-Black populations is evident in the change in TYC population. For example, the number of Anglos in TYC would decrease by 19.9 percent under the 0.5 scenario and by 14.6 percent under the 1.0 scenario, and the number of Blacks would decrease by 2.5 percent under the 0.5 scenario and increase by 21.6 percent under the 1.0 scenario; the number of Hispanics, however, would increase by 100.6 percent and 215.4 percent under the 0.5 and 1.0 scenarios, respectively, and the number of persons from the Other racial/ethnic group would increase by 74.9 percent and 274.3 percent under the two scenarios. 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; of the total net increase in persons added to TYC programs from 2000 to 2040, Hispanics would account for most of the number under the 0.5 scenario and for 85.0 percent under the 1.0 scenario, with persons from the Other racial/ethnic group accounting for 11.0 percent and Blacks for 7.4 percent.

4. 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, 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).

5. The number of Anglo prisoners is projected to decline by 11.1 percent under the 0.5 scenario, and the Anglo proportion of the prison population declines from 30.9 percent of all prisoners in 2000 to 17.8 percent in 2040; under the 1.0 scenario, the number of Anglo inmates declines by 4.5 percent, and the proportion of Anglos declines to 13.1 percent by 2040. The projected number of Blacks increases between 31.9 percent (0.5 scenario) and 62.2 percent (1.0 scenario) but their proportion declines from 43.5 percent of the prisoner population in 2000 to 37.2 percent in 2040 under the 0.5 scenario and to 31.5 percent under the 1.0 scenario. The number of Hispanics increases by between 172.5 percent (0.5 scenario) and 386.5 percent (1.0 scenario) from 2000 to 2040, increasing from 25.2 percent of all prisoners in 2000 to between 44.5 percent (0.5 scenario) and 54.6 percent (1.0 scenario) of all prisoners by 2040. Persons from the Other racial/ethnic group increase by between 91.3 percent (0.5 scenario) and 339.7 percent (1.0 scenario), increasing to between 0.5 percent (0.5 scenario) and 0.8 percent (1.0 scenario) of all prisoners by 2040. Of the total net change of between 82,389 (0.5 scenario) and 188,855 (1.0 scenario) in the number of prisoners from 2000 to 2040, under the 0.5 scenario, Hispanics would account for 80.0 percent of the increase, Blacks for 25.6 percent, and persons from the Other racial/ethnic group for 0.7 percent, whereas under the 1.0 scenario, Hispanics would account for 78.3 percent, persons from the Other racial/ethnic group for 1.1 percent, and Blacks for 21.8 percent of the increase. In both scenarios the number of Anglos would decline and their net change values are negative.

6. The costs of providing TYC programs and incarcerating adult prisoners, as projected over time using 2000 per capita estimates from the Criminal Justice Policy Council and compiled

from data received from the Texas Youth Commission, would grow substantially. 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 in 2040.

Overall, the results in this chapter suggest that growth in criminal justice programs and the costs associated with them are likely to continue to be extensive in the coming years. The aging of the population results in slower growth in such programs than in the population, but increases in these programs are nevertheless extensive. Unless change occurs in rates of incarceration in prisons and of youth involvement in TYC programs, both the number of persons involved in these programs and the costs for providing these services will grow in the coming years, providing substantial challenges to the State in meeting the demands for such services.

Figure 9.1

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

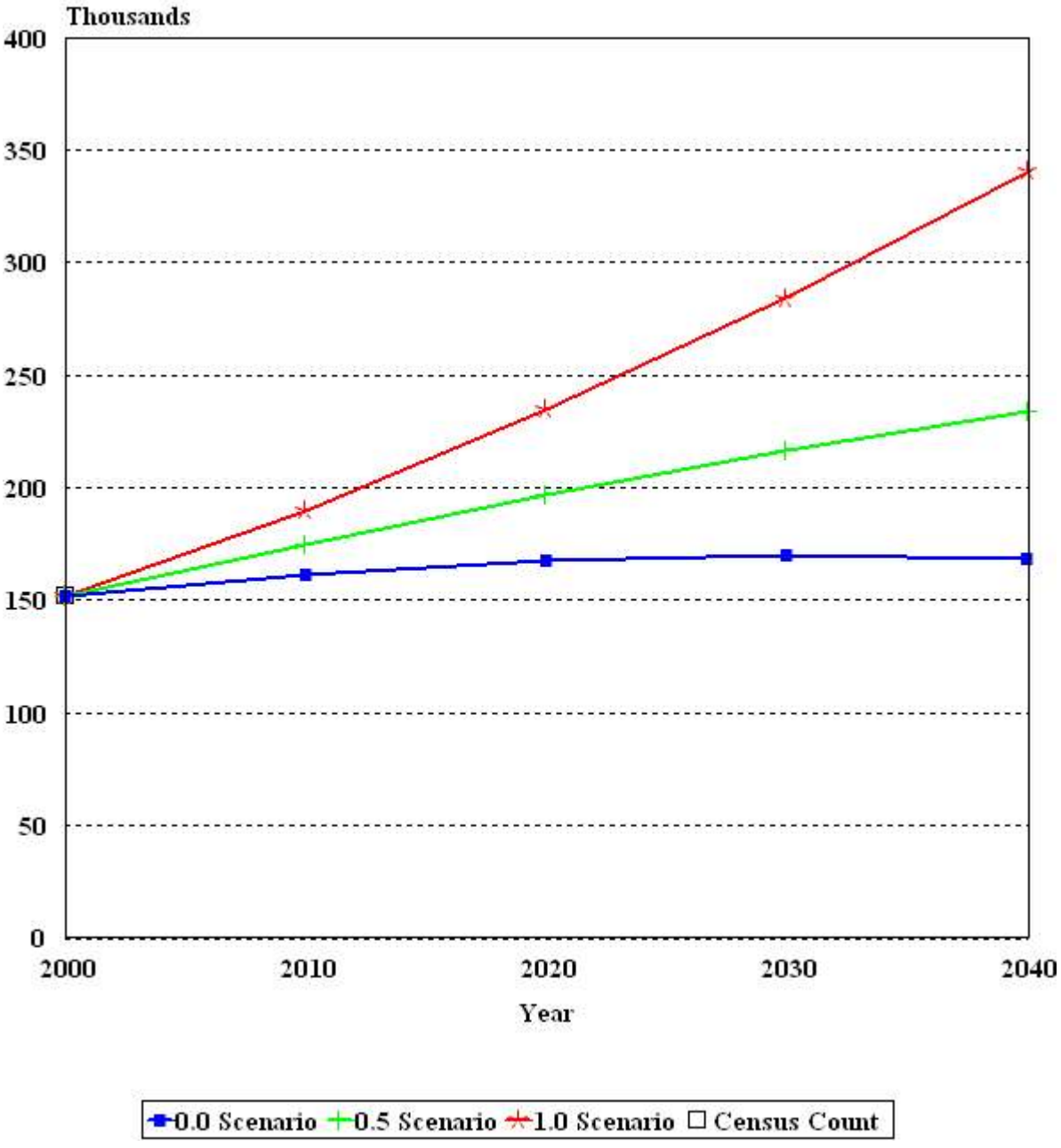


Figure 9.2

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

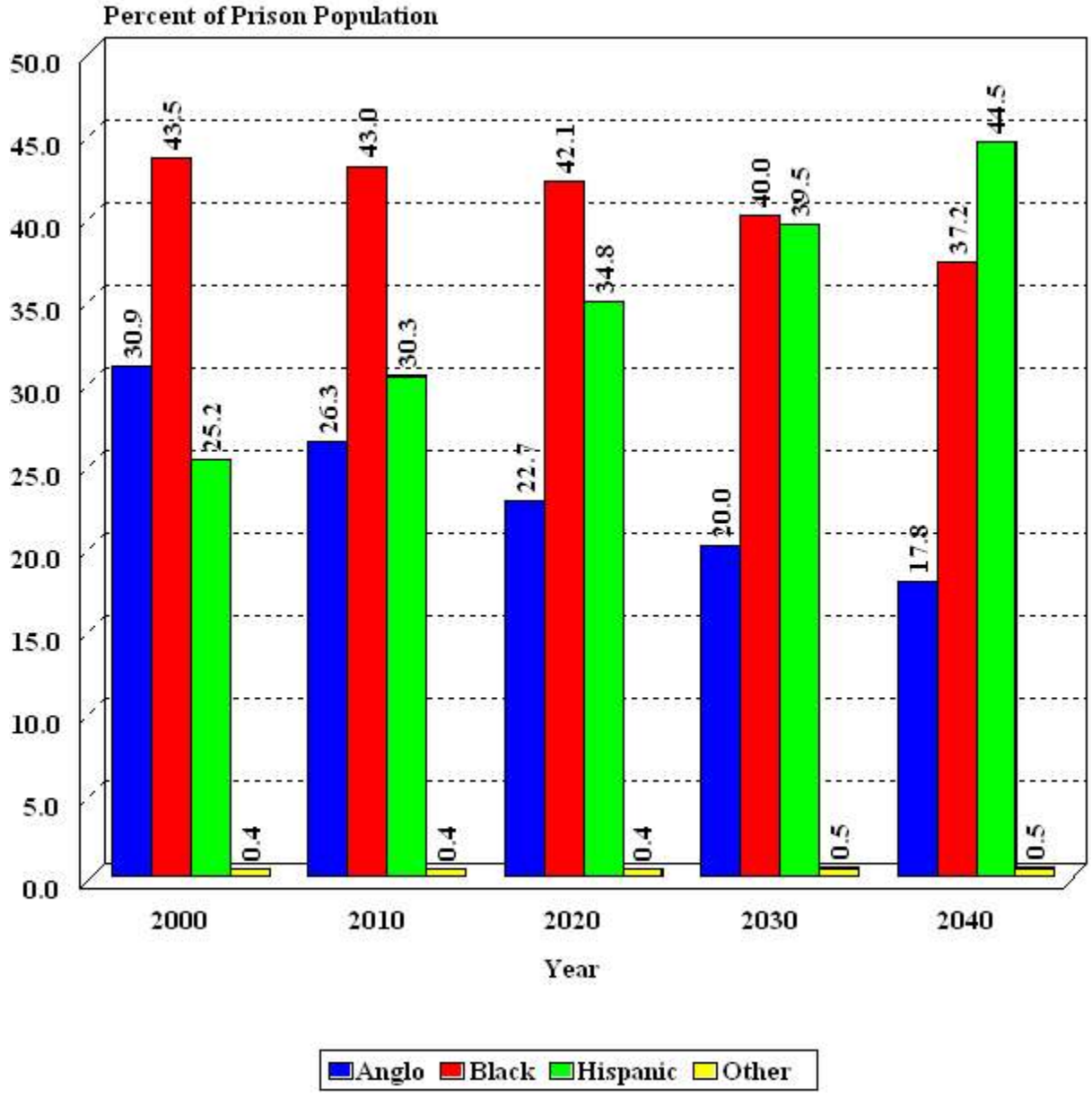


Figure 9.3

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

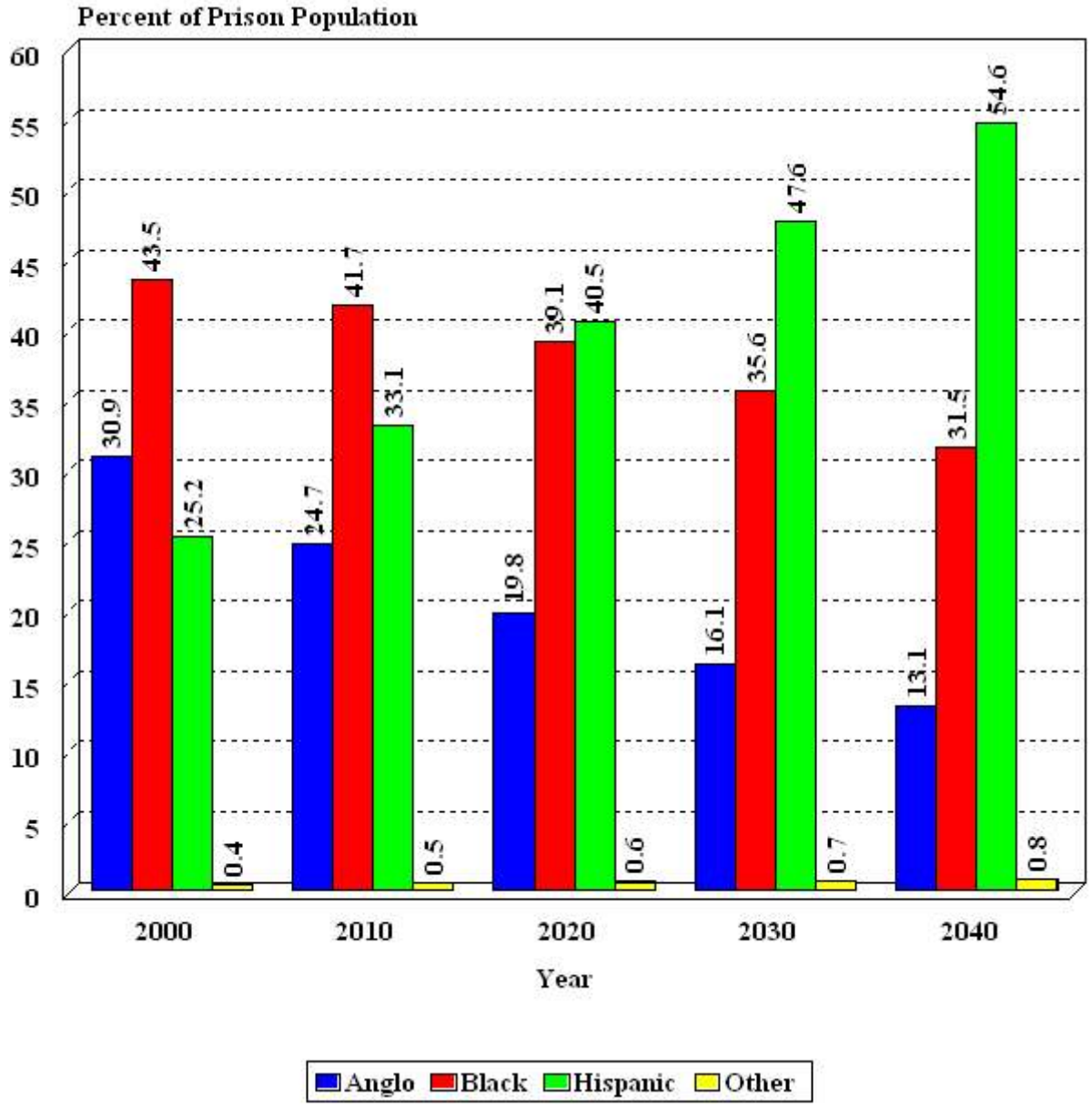


Table 9.1

Number of Persons in Juvenile Facilities in Texas, Adults in State Prisons in Texas, and Juveniles and Adults in Prisons in the United States, 1979-1999

Juvenile Offenders

	Year			Percent Change		
Area	1979	1989	1999	1979-1989	1989-1999	1979-1999
Texas	3,118	4,396	7,954	41.0	80.9	155.1
United States	71,922	93,945	108,931	30.6	16.0	51.5

Adult Offenders

	Year			Percent Change		
Area	1980	1990	2000	1980-1990	1990-2000	1980-2000
Texas	28,543	49,157	146,761	72.2	198.6	414.2
United States	319,598	743,382	1,312,354	132.6	76.5	310.6

Sources: U.S. Department of Justice, Census of Juveniles in Residential Placement Databook: 1999, 2001a; National Juvenile Custody Trends: 1979-89, 1992b; Children in Custody: 1975-1985, 1989; Key Facts at a Glance: Correctional Populations: 1980-2001, [online], 2002; Prisoners in 2000, 2001b; Prisoners in 1993, 1994; Prisons and Prisoners in the United States, 1992a; and Historical Statistics on Prisoners in State and Federal Institutions, Year-end 1925-86, 1988. Texas Department of Criminal Justice, Statistical Report: Fiscal Year 1980, 1981; Statistical Report: Fiscal Year 1990, 1991: Statistical Report: Fiscal Year 2000, 2001; and On-Hand Population, [machine readable data files], for each year indicated, 2002.

Table 9.2

Percent Juvenile and Adult Offenders in Texas by Selected Demographic Characteristics, 1990 and 2000

Characteristic	1990	2000
Panel A: Juvenile Offenders		
Age at Commitment to Texas Youth Commission Facilities		
<12	2.0	1.2
13	5.8	4.8
14	15.8	13.6
15	32.2	25.9
16	37.9	39.7
17	6.3	14.4
18+	0.0	0.4
Total Number	2,171	2,558
Persons Admitted by Race/Ethnicity to Texas Youth Commission Facilities[1]		
Anglo	21.8	25.2
Black	40.2	33.6
Hispanic	37.3	40.2
Other	0.7	1.0
Total Number	2,171	2,558
Panel B: Adult Offenders		
Age of Inmates On-Hand [2]		
<25	23.4	16.8
25-29	23.9	16.8
30-34	21.7	16.9
35-39	14.2	17.7
40-59	15.7	30.0
60+	1.1	1.8
Total Number	49,157	146,761
Inmates On-Hand [2] by Race/Ethnicity		
Anglo	30.8	30.7
Black	47.2	43.8
Hispanic	21.6	25.1
Other	0.4	0.4
Total Number	49,157	146,761

[1]Data do not include recommitments, revocation, or reclassifications. Data do include VCP (violator of CINS probation) admissions.

[2]On-hand counts are one-day counts as of August 31 for all years.

Sources: Texas Department of Criminal Justice, Statistical Report: Fiscal Year 1990, 1991; and Statistical Report: Fiscal Year 2000, 2001. Texas Youth Commission, Annual Evaluation Report: Fiscal Year 1990, 1990; Youth Commitment Profile: Fiscal Year 2000, 2002b; and Youth Commitment Profile: Fiscal Year 1995, 2002c.

Table 9.3

Percent of Inmates On-Hand in Adult Correctional Facilities in Texas by Offense Category, 1990 and 2000

Offense	1990	2000
Violent		
Homicide	11.9	10.4
Kidnapping	0.9	0.8
Sexual Assault	9.9	11.2
Robbery	17.6	16.8
Assault	4.5	9.8
Total	44.8	49.0
Property		
Arson	0.5	0.5
Burglary	20.2	14.5
Larceny	4.7	2.7
Stolen Vehicle	3.4	1.6
Forgery	2.2	1.3
Fraud	0.5	0.4
Total	31.5	20.9
Drugs		
Total	18.7	19.9
Other and Unclassified Offenses		
Sex Offense	1.7	2.5
Escape	0.4	0.5
Weapons	0.5	1.2
Traffic/DWI	1.2	4.4
Public Order Crime	0.4	0.6
All Other	0.0	0.4
Unknown	0.8	0.5
Total	5.0	10.2
Total Number of Inmates	49,157	133,680

Sources: Texas Department of Criminal Justice, Statistical Reports: Fiscal Year 1990, 1991; and Statistical Report: Fiscal Year 2000, 2001.

Note: All counts are for August 31.

Table 9.4

Texas Youth Commission Population by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other	Total
All Scenarios					
2000	1,978	2,925	3,358	342	8,603
Assuming Rates of Zero Net Migration (0.0 Scenario)					
2010	1,892	3,068	3,420	330	8,710
2020	1,781	2,686	3,983	376	8,826
2030	1,656	2,530	4,071	304	8,561
2040	1,485	2,294	4,303	277	8,359
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
2010	1,930	3,302	3,960	415	9,607
2020	1,826	2,997	4,840	532	10,195
2030	1,733	2,990	5,792	550	11,065
2040	1,585	2,853	6,735	598	11,771
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
2010	1,969	3,554	4,582	529	10,634
2020	1,876	3,347	5,868	730	11,821
2030	1,814	3,532	8,220	958	14,524
2040	1,689	3,557	10,592	1,280	17,118

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Youth Commission, On-Hand Populations, 1995-2001, [machine readable data files], 2002a.

Table 9.5

Percent Change in the Projected Texas Youth Commission Population by Race/Ethnicity Assuming Alternative Projection Scenarios, 2000-2040

Time Period	Anglo	Black	Hispanic	Other	Total
Assuming Rates of Zero Net Migration (0.0 Scenario)					
2000-2010	-4.3	4.9	1.8	-3.5	1.2
2010-2020	-5.9	-12.5	16.5	13.9	1.3
2020-2030	-7.0	-5.8	2.2	-19.1	-3.0
2030-2040	-10.3	-9.3	5.7	-8.9	-2.4
2000-2040	-24.9	-21.6	28.1	-19.0	-2.8
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
2000-2010	-2.4	12.9	17.9	21.3	11.7
2010-2020	-5.4	-9.2	22.2	28.2	6.1
2020-2030	-5.1	-0.2	19.7	3.4	8.5
2030-2040	-8.5	-4.6	16.3	8.7	6.4
2000-2040	-19.9	-2.5	100.6	74.9	36.8
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
2000-2010	-0.5	21.5	36.5	54.7	23.6
2010-2020	-4.7	-5.8	28.1	38.0	11.2
2020-2030	-3.3	5.5	40.1	31.2	22.9
2030-2040	-6.9	0.7	28.9	33.6	17.9
2000-2040	-14.6	21.6	215.4	274.3	99.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Youth Commission, On-hand populations, 1995-2001, [machine readable data files], 2002a.

Table 9.6

Percent of Texas Youth Commission Population by Race/Ethnicity
in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other	Total
All Scenarios					
2000	23.0	34.0	39.0	4.0	100.0
Assuming Rates of Zero Net Migration (0.0 Scenario)					
2010	21.7	35.2	39.3	3.8	100.0
2020	20.2	30.4	45.1	4.3	100.0
2030	19.3	29.6	47.5	3.6	100.0
2040	17.8	27.4	51.5	3.3	100.0
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
2010	20.1	34.4	41.2	4.3	100.0
2020	17.9	29.4	47.5	5.2	100.0
2030	15.7	27.0	52.3	5.0	100.0
2040	13.5	24.2	57.2	5.1	100.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
2010	18.5	33.4	43.1	5.0	100.0
2020	15.9	28.3	49.6	6.2	100.0
2030	12.5	24.3	56.6	6.6	100.0
2040	9.9	20.8	61.8	7.5	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Youth Commission, On-hand populations, 1995-2001, [machine readable data files], 2002a.

Table 9.7

Number and Percent of Net Change in the Texas Youth Commission Population Due To Each Race/Ethnicity Group, Assuming Alternative Projection Scenarios, 2000-2040

Race/ Ethnicity	Number	Percent
Assuming Rates of Zero Net Migration (0.0 Scenario)		
Anglo	-493	202.0
Black	-631	258.6
Hispanic	945	-387.2
Other	-65	26.6
Total	-244	100.0
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
Anglo	-393	-12.4
Black	-72	-2.3
Hispanic	3,377	106.6
Other	256	8.1
Total	3,168	100.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
Anglo	-289	-3.4
Black	632	7.4
Hispanic	7,234	85.0
Other	938	11.0
Total	8,515	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Youth Commission, On-hand populations, 1995-2001, [machine readable data files], 2002a.

Table 9.8

Prison Population in Texas by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other	Total
			All Scenarios		
2000	46,910	66,124	38,235	599	151,868
			Assuming Rates of Zero Net Migration (0.0 Scenario)		
2010	44,972	71,611	44,627	558	161,768
2020	42,860	74,755	49,359	542	167,516
2030	41,048	74,187	54,202	552	169,989
2040	38,825	70,876	58,459	495	168,655
			Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
2010	45,921	75,245	52,924	708	174,798
2020	44,606	82,873	68,367	854	196,700
2030	43,408	86,630	85,402	1,036	216,476
2040	41,698	87,227	104,186	1,146	234,257
			Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
2010	46,887	79,059	62,782	899	189,627
2020	46,425	91,848	95,152	1,339	234,764
2030	45,915	101,105	135,186	1,931	284,137
2040	44,785	107,286	186,018	2,634	340,723

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Department of Criminal Justice, On-hand Population: 2000, 2002.

Table 9.9

Percent Change in Projected Prison Population in Texas by Race/Ethnicity
Assuming Alternative Projection Scenarios, 2000-2040

Time Period	Anglo	Black	Hispanic	Other	Total
Assuming Rates of Zero Net Migration (0.0 Scenario)					
2000-2010	-4.1	8.3	16.7	-6.8	6.5
2010-2020	-4.7	4.4	10.6	-2.9	3.6
2020-2030	-4.2	-0.8	9.8	1.8	1.5
2030-2040	-5.4	-4.5	7.9	-10.3	-0.8
2000-2040	-17.2	7.2	52.9	-17.4	11.1
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
2000-2010	-2.1	13.8	38.4	18.2	15.1
2010-2020	-2.9	10.1	29.2	20.6	12.5
2020-2030	-2.7	4.5	24.9	21.3	10.1
2030-2040	-3.9	0.7	22.0	10.6	8.2
2000-2040	-11.1	31.9	172.5	91.3	54.3
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
2000-2010	0.0	19.6	64.2	50.1	24.9
2010-2020	-1.0	16.2	51.6	48.9	23.8
2020-2030	-1.1	10.1	42.1	44.2	21.0
2030-2040	-2.5	6.1	37.6	36.4	19.9
2000-2040	-4.5	62.2	386.5	339.7	124.4

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Department of Criminal Justice, On-hand Population: 2000, 2002.

Table 9.10

Percent of Prison Population in Texas by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other
Assuming Rates of Zero Net Migration (0.0 Scenario)				
2000	30.9	43.5	25.2	0.4
2010	27.8	44.3	27.6	0.3
2020	25.6	44.6	29.5	0.3
2030	24.2	43.6	31.9	0.3
2040	23.0	42.0	34.7	0.3
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
2000	30.9	43.5	25.2	0.4
2010	26.3	43.0	30.3	0.4
2020	22.7	42.1	34.8	0.4
2030	20.0	40.0	39.5	0.5
2040	17.8	37.2	44.5	0.5
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
2000	30.9	43.5	25.2	0.4
2010	24.7	41.7	33.1	0.5
2020	19.8	39.1	40.5	0.6
2030	16.1	35.6	47.6	0.7
2040	13.1	31.5	54.6	0.8

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Department of Criminal Justice, On-hand Population: 2000, 2002.

Table 9.11

Number and Percent of Net Change in Prison Population in Texas Due To Each Race/Ethnicity Group, Assuming Alternative Projection Scenarios, 2000-2040

Race/ Ethnicity	Number	Percent
Assuming Rates of Zero Net Migration (0.0 Scenario)		
Anglo	-8,085	-48.2
Black	4,752	28.3
Hispanic	20,224	120.5
Other	-104	-0.6
Total	16,787	100.0
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
Anglo	-5,212	-6.3
Black	21,103	25.6
Hispanic	65,951	80.0
Other	547	0.7
Total	82,389	100.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
Anglo	-2,125	-1.2
Black	41,162	21.8
Hispanic	147,783	78.3
Other	2,035	1.1
Total	188,855	100.0

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Department of Criminal Justice, On-hand Population: 2000, 2002.

Table 9.12

Expenditures (in 2000 Dollars) for Texas Youth Commission Services and Adult Prison Costs in Texas by Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Projection Scenarios

Year	Anglo	Black	Hispanic	Other	Total
Panel A: Texas Youth Commission Costs					
All Scenarios					
2000	$ 64,579,789	$ 89,384,766	$ 98,385,874	$ 9,546,352	$ 261,896,781
Assuming Rates of Zero Net Migration (0.0 Scenario)					
2010	$ 60,693,824	$ 93,566,108	$ 101,865,299	$ 9,576,406	$ 265,701,637
2020	57,492,059	81,895,313	118,462,860	10,914,186	268,764,418
2030	53,334,760	77,391,224	120,664,470	8,755,587	260,146,041
2040	47,809,682	69,881,097	127,829,369	8,081,534	253,601,682
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
2010	$ 61,900,197	$ 100,582,656	$ 117,181,140	$ 12,045,493	$ 291,709,486
2020	59,003,666	91,246,602	143,539,670	15,488,775	309,278,713
2030	55,862,903	91,432,215	170,893,482	15,798,441	333,987,041
2040	51,084,615	86,713,619	198,730,579	17,318,235	353,847,048
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
2010	$ 63,110,285	$ 108,091,093	$ 134,806,801	$ 15,364,766	$ 321,372,945
2020	60,590,872	101,703,337	173,223,927	21,172,898	356,691,034
2030	58,492,330	107,865,326	241,681,085	27,479,919	435,518,660
2040	54,285,651	107,989,959	310,559,385	36,945,479	509,780,474

Table 9.12, continued

Year	Anglo	Black	Hispanic	Other	Total
			Panel B: Adult Prison Costs		
			All Scenarios		
2000	$ 696,015,398	$ 981,098,319	$ 567,302,254	$ 8,887,513	$ 2,253,303,484
			Assuming Rates of Zero Net Migration (0.0 Scenario)		
2010	$ 667,260,807	$ 1,062,510,310	$ 662,141,956	$ 8,279,186	$ 2,400,192,259
2020	635,924,535	1,109,158,624	732,351,823	8,041,790	2,485,476,772
2030	609,039,438	1,100,731,066	804,208,625	8,190,162	2,522,169,291
2040	576,056,231	1,051,604,931	867,370,798	7,344,439	2,502,376,399
			Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)		
2010	$ 681,341,357	$ 1,116,428,876	$ 785,246,619	$ 10,504,773	$ 2,593,521,625
2020	661,830,374	1,229,607,419	1,014,378,271	12,671,012	2,918,487,076
2030	644,055,348	1,285,350,968	1,267,130,825	15,371,391	3,211,908,532
2040	618,683,651	1,294,208,806	1,545,833,729	17,003,489	3,475,729,675
			Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)		
2010	$ 695,674,141	$ 1,173,018,148	$ 931,512,230	$ 13,338,688	$ 2,813,543,207
2020	688,819,331	1,362,771,738	1,411,794,012	19,867,078	3,483,252,159
2030	681,252,334	1,500,120,161	2,005,788,479	28,650,730	4,215,811,704
2040	664,486,241	1,591,829,204	2,759,995,571	39,081,317	5,055,392,333

Sources: Derived by the authors from Texas Population Estimates and Projections Program, Projections of the Population of Texas and Counties in Texas by Age, Sex, and Race/Ethnicity for 2000-2040, 2001. Texas Youth Commission, On-hand populations, 1995-2001, [machine readable data files], 2002a. Texas Department of Criminal Justice, On-hand Population: 2000, 2002. Criminal Justice Policy Council, Limes to Limes: Comparing the Operational Costs of Juvenile and Adult Correctional Programs in Texas, [online], 2001.

Chapter 10

Summary, Implications, and Assessment of Alternative Futures

In this work we have provided an overview of the changes projected to occur in the population of Texas in the coming years and of the implications of such changes for a number of public services and private-sector dimensions. Alternative projections of the future population of Texas were examined as they are projected to impact the number of households and the characteristics of householders including the income, poverty, and tax revenues generated by households. Effects related to the private sector were analyzed, including effects on consumer expenditures, on assets and net worth of households, and on the health care and housing industries. The effects on the number and characteristics of persons in the labor force, including the levels of education, occupational skills, and salary and wages of those employed, as well as the implications for the number and percentage of persons unemployed and the demand for specific work force training programs, were examined. The implications of population change for key service areas were also described. The effects on public elementary and secondary education and higher education, including the levels of financial need and need unmet by household resources of students in public community colleges and universities, were discussed. The impacts on human service programs, including TANF, Food Stamps, and Medicaid, were described, as were the total and State costs associated with each. The potential effects on the number and characteristics of prison inmates and Texas Youth Commission participants and costs associated with such populations were also described.

For every topic, the effects of a set of projections, which use population-based rates computed from data from the 2000 Census and from agency data for 2000 and which assume that these rates remain constant across the projection period, are examined. In addition, in some

chapters alternative simulations examine the implications of alternative rates of acquisition or usage. Given the range of outcomes provided by both the use of alternative population projection scenarios and alternative acquisition or use rates, a range of alternative futures was examined. Thus, an attempt was made to ensure that the reader is aware of both the uncertainty of projections and a range of potential futures related to the material covered.

Demographic change is only one of many factors likely to affect the services and characteristics described in this volume. Economic, political, social, and other factors will impact these services and dimensions and may have as large, or even larger, effects on their scope and characteristics. The analysis provided here is not exhaustive but is simply an attempt to trace the effects of changes in the size and characteristics of the population and related socioeconomic characteristics on selected aspects of Texas.

The analysis is also limited by the fact that the projections presented, like all population projections, are subject to error, by the fact that the current relationships between demographic factors and other service and socioeconomic characteristics may change in ways not anticipated, by the fact that the data used in the analysis were limited in many ways, and by the fact that only a limited set of dimensions affecting the future could be examined due to space, time, and other considerations. Despite these limitations, the analysis has revealed several key issues that may warrant the attention of private- and public-sector decision makers.

In this chapter we describe some of the overall implications of the trends identified in this volume. Given the summaries provided at the end of previous chapters, we will not repeat that information here. Rather the intent of this final chapter is threefold. First we describe the overarching population trends examined in the analysis. Second, we explicate the implications of several general alternative futures for the numerous services and other factors discussed in the

volume. We examine a common set of alternative projections for all topical areas and then present an education alternative in which we examine some of the benefits and cost savings related to different levels of educational attainment. Finally, we discuss some of the issues suggested by the analysis that may be of interest to public- and private-sector decision makers.

Major Population and Socioeconomic Trends Impacting Texas

As noted in Chapter 2, 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, and 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 such that 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 in this volume project a continuation of such patterns, and in general, the pervasiveness of these patterns suggests that although the magnitude of such changes may not be exactly as projected, the direction of change is quite likely to occur as indicated and have clear implications for the services and characteristics examined in this work.

Thus, all of the services and other factors examined in this volume are affected by the State's rate of population growth, and growth is likely to continue to characterize statewide patterns of population change. Because of a high rate of natural increase, Texas population is projected to grow even in the absence of migration (the 0.0 migration scenario) by more than 4.7 million persons, 22.6 percent, in the next 40 years. This increase of nearly 1.2 million per decade

is greater than the growth that occurred in 45 of the 50 states in the 1990s. More likely are rates of growth of between 67.9 and 142.6 percent, resulting in an addition of between 14.2 and 29.7 million new residents. Although there is substantial variation in the absolute level of growth projected, growth is projected under all scenarios. Population growth is likely to have a continuing influence on the public and private sectors in Texas.

Similarly, the diversification of Texas population is likely to continue. Between 1990 and 2000, the Anglo population increased by only 7.6 percent while all non-Anglo populations increased by rates that were at least three times that rate. About 80 percent of net population growth in the State was non-Anglo, more than 60 percent of the births in the State in the past few years have been non-Anglo, and of the total population less than 18 years of age in Texas in 2000, 57 percent was non-Anglo. Although the total level of Anglo population growth may vary from that projected, Texas population will be less than 50 percent non-Anglo in the next few years and is quite likely to be a majority Hispanic by the end of the projection period.

The aging of the population is largely a function of the baby-boom generation, and since this generation is fully in place, there is little doubt that the general aging of the population will occur. By 2040, between 16 and 20 percent of Texans (compared to less than 10 percent in 2000) will be 65 years of age or older and the median age of Texans is likely to be nearly 40 years of age.

Although household patterns are more subject to reversal of historic trends than the other population dimensions noted here, the growth and diversification of households have continued for several decades, only slightly slowed by the aging of the population. The growth in the number of households has been greater than that in the population in three of the past four decades, and projected patterns suggest that the number of households will increase faster than

the population in the future. The 1990s witnessed a further decline in the percentage of married-couple households and showed substantial growth in nonfamily households. Therefore, the diversification of households appears to be continuing.

Overall, then, the major demographic trends driving the changes noted in this volume seem quite likely to continue. Although the magnitude of such changes cannot be errorlessly predicted, the direction of these trends suggest that the effects of a growing, diversifying, and aging population, and of a growing and diversifying base of households, will very likely impact Texas in the coming decades. The demographic trends identified as critical to understanding Texas population change are overarching trends that are almost certain to affect, at least in some degree, the future of Texas.

The effects of these demographic factors are evident in the data for the service areas and other dimensions described in this volume (see Table 10.1). The effects of rapid population growth are evident throughout. 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 under the 0.5 scenario, and all except school enrollment by more than 50 percent. Similarly, 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 under the 0.5 scenario and the 142.6 percent rate of growth under the 1.0 scenario and the 84.2 percent (0.5 scenario) and 162.1 percent (1.0 scenario) for households (see Table 10.1 and Figure 10.1-10.3) also shows the effects of the aging and diversification of the population. 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. Similarly, the fact that increases in the percentage of persons with diseases/disorders and disabilities, as well as the growth in households and housing expenditures, are more rapid than the population increases reflects the aging of the population because the incidences of diseases/disorders, disabilities, and home ownership increase with age. The growth in the use of most of the specialized labor force and educational programs and the increase in the number of persons in poverty and the number of TANF, Food Stamp, and Medicaid participants show the effects of higher rates of growth in the faster growing non-Anglo populations. The slower-than-household rates of growth in income, consumer expenditures, net worth, and tax revenues also show the effects of the rapid growth of non-Anglo populations, which have more limited socioeconomic resources.

In sum, then, the effects of the major population changes are evident in the growth in the demand for services and on the socioeconomic resources of populations. Demographic factors will play a major role in the future of Texas under existing conditions and relationships between population characteristics and socioeconomic resources.

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 this section, we examine the implications of several alternative futures. In these alternatives, we do not change the projected demographic patterns but only the socioeconomic differences that exist between key demographic groups. Specifically, we examine the effects of changing key socioeconomic

differentials between racial/ethnic groups. We present two sets of alternative futures, one of which examines the effects of simply altering the differences between Anglos and Blacks and between Anglos and Hispanics, and one in which we trace the effects of educational change on socioeconomic and service factors.

Changing the Differentials between Anglos, Blacks, and Hispanics

An examination of the racial/ethnic differences noted in this work indicates that the major socioeconomic differences are between Anglos (and sometimes persons from the Other racial/ethnic group) and Blacks and Hispanics. That is, 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 work force training programs. The lower levels of education and income historically exhibited by Blacks and Hispanics lead to opposite patterns of service usage.

As a result, one way to examine the implications of changing the socioeconomic differences among racial/ethnic groups is to examine the effects of changing the differentials between Anglos, Blacks, and Hispanics. In this section we examine the implications of reducing differentials in Anglo and Black and Anglo and Hispanic rates of occurrence by half by 2020 and, alternatively, to 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. Under both of these scenarios, rates remain at 2020 levels for the remainder of the projection period (through 2040). The closure to one-half is admittedly an arbitrary choice as is the selection of the date of 2020. There is no clear indication of how extensive and when such closure might occur, and the period and the extent of closure is intended only to provide some

acknowledgment of the fact that closure in such differentials will not be immediate. At the same time, by providing closure at halfway through the projection period, we allow time to see the effects of such changes during the remainder of the projection period.

The data in Table 10.2 and Figures 10.4-10.8 show that the effects of partial and full closure are extensive under both of the population projection scenarios. For example, under the 1.0 scenario, rates of enrollment in workforce training programs would either decline or grow relatively slowly. Enrollment would decline from 2000 to 2040 by more than 64 percent in the WIA Youth program under full closure with Anglo rates and by 17 percent in welfare-related programs, and only in the WIA Other and WIA Dislocated Worker programs (which have relatively high rates of enrollment among Anglos) would the rates of growth from 2000 to 2040 still exceed 50 percent.

Elementary and secondary school enrollment would change relatively little because of the mandatory enrollment required at this level. However, the specialized elementary and secondary school programs show substantial patterns of change. Bilingual/ESL, Economically Disadvantaged, and Limited English Proficiency program show net declines in the number of participants under full closure with Anglo rates; career and technology and special education show virtually no change; but the gifted and talented program, which is projected to increase by 48.5 percent from 2000 to 2040 under the baseline scenario, would increase by more than 129 percent under the complete closure scenario.

Total public community college and university enrollment would increase from 92.6 percent from 2000 to 2040 under the baseline to 172.2 percent under the 1.0 scenario and complete closure scenario. Public university enrollment, which has relatively large Anglo-Black and Anglo-Hispanic enrollment rate differentials would show a percentage increase from 2000 to

2040 that is more than double that in the baseline scenario, showing a 82.5 percent rate of growth between 2000 and 2040 under the baseline and 1.0 scenario compared to 195.2 percent under the complete closure (and 1.0) scenario. The number of students under the baseline rates for all public colleges and universities is 1.5 million in 2040, but under the full closure scenario it is nearly 2.2 million. For public universities, the comparable values are roughly 677,000 and 1.1 million. Substantial but smaller changes are evident for community colleges.

Under the same 1.0 scenario, the number of TANF and Food Stamp recipients declines and the increase in Medicaid enrollment under the complete closure scenario is less than one-sixth of that under the baseline scenario. Similarly, under the 1.0 scenario; the TYC enrollment increase under the full closure scenario is only 6.7 percent from 2000 to 2040 compared to 99 percent under the baseline scenario, and prison enrollment increases by about 36 percent under full closure but by more than 124 percent from 2000 to 2040 under the baseline projection.

On the other hand, aggregate household income increases by 202.5 percent from 2000 to 2040 under the 1.0 and full closure scenario compared to 130.5 percent under the baseline scenario, and average household income increases by 15.4 percent from 2000 to 2040 under the full closure scenario rather than decreasing by 12.1 percent under the baseline scenario. Family poverty continues to increase under the complete closure scenario but by approximately one-fifth of the amount of increase under the baseline scenario. Consumer expenditures increase by more than 30 percent more under the complete closure than under the baseline scenario and housing expenditures by about 20 percent more.

Finally under the 1.0 scenario, state tax revenues that are projected to increase by nearly 131 percent from 2000 to 2040 under baseline rates would increase by more than 202 percent

under complete closure and would be more than $21 billion more per year than under the baseline scenario.

In sum, the data for these two 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 Hispanics groups could substantially 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

As noted in Chapter 7, one of the reasons for the emphasis placed on education is that it is so closely tied to socioeconomic success. The average income for a household in which the householder is a high school graduate in the United States in 2000 was $45,368 but the average income for a householder who is a college graduate was $84,029 (see Figure 7.1). Higher levels of education are clearly related to socioeconomic success. Such success, in turn, tends to be associated with lower levels of public service usage particularly for those services that are usually required by persons or households that have a lack of socioeconomic resources. What effect would increasing educational attainment levels have on Texas?

In this final set of alternatives, we examine the implications of changing rates of educational attainment on selected service and socioeconomic factors. Educational attainment rates by race/ethnicity were computed for the population 25 years of age or older from the 2000 Census (see Table 10.3). Given these data, three alternative scenarios of attainment were developed (see Table 10.4) with the results applied to the population 25 years of age or older in the alternative population projection scenarios used throughout the volume. Under one of the alternative projections, 2000 rates of attainment by race/ethnicity were assumed to prevail

throughout the projection period--that is, the Anglo, Black, Hispanic, and Other populations' 2000 attainment rates were assumed to continue unchanged from 2000 through 2040. The second alternative assumed that 1990-2000 percentage changes in the number of persons within each educational attainment category within each race/ethnicity group continued for each decade from 2000 to 2040. The values so computed were controlled to the total projected population 25 years of age or older. These projected values and the percentage of persons 25 years of age or older projected to be at each educational level within each race/ethnicity group are shown for the years 2010 and 2040 in Table 10.3. The third scenario assumes that the projected Anglo proportions by attainment level as projected and shown in Table 10.3 apply to the Black and Hispanic groups (e.g., Anglo rates in 2010 apply to these groups in 2010, Anglo rates in 2020 apply to these groups in 2020, etc.). Rates for the Other group remained as projected.

Given the projections of persons 25 years of age or older by level of educational attainment, we projected total income, consumer expenditures, prison populations and costs, and human service participants and costs under the alternative population projection scenarios using data (averaged from the 1999-2001 current population survey) on income and consumer expenditures by level of educational attainment and 2000 data (from the agency sources noted in the chapters above) on human service and prison populations by educational attainment level. Income, consumer expenditures, incarceration, and human service usage rates by race/ethnicity and educational attainment level for persons 25 years of age or older were computed for 2000 and applied to the three scenarios of educational attainment for the population 25 years of age or older. All projections are for the population 25 years of age and older so they are not directly comparable to data presented elsewhere in this volume. The restriction to the population 25 years of age and older is necessary because census data on educational attainment are limited to

the population of that age. Because of this restriction, the data can only be used comparatively to indicate the effects of increased educational attainment.

The data in Table 10.4 and Figures 10.9-10.13 suggest that increasing educational attainment would lead to substantial change in key socioeconomic and service factors. These data show that maintaining the educational progression of the 1990s would result in a population 25 years of age or older in 2040 under the 1.0 scenario that would generate $143 billion more income than under 2000 attainment levels and that completely closing the educational attainment gap would result in more than $317 billion more in annual income than under the 2000 alternative scenario.

The second part of Table 10.4 shows the effects of alternative levels of educational attainment on consumer expenditures. Increased education at the levels of the 1990-2000 period would increase consumer expenditures by more than $100 billion per year in 2040 under the 1.0 scenario compared to those under the 2000 attainment level and by nearly $224 billion per year under the scenario which assumes Anglo rates. Increased educational attainment would clearly impact the private sector of Texas.

Increased educational attainment would not only increase the income and expenditures of the State's residents, it would reduce state costs in several key areas. Under the 1.0 scenario, prison populations are reduced by nearly one-third under the 1990-2000 trends in attainment scenario and to less than one-half the baseline levels under the scenario that provides Anglo levels of educational attainment for all persons 25 years of age or older. Similar patterns are found in terms of the number of participants in TANF, Food Stamps, and Medicaid. Costs are reduced accordingly. Under the 1.0 population projection scenario and the attainment scenario that assumes that Texas increases its rates of educational attainment at the level of the 1990-2000

trends throughout the projection period, State costs would be reduced from the levels under the 2000 attainment scenario by approximately $1.7 billion for prisons, $84 million for TANF, $47 million for Food Stamps, $1.0 billion for Medicaid, by a total of nearly $2.8 billion per year. Under the 1.0 population scenario and assuming Anglo attainment levels for Anglo, Black, and Hispanic groups, the savings from the 2000 attainment scenario levels would be more than $3.0 billion for prisons, nearly $214 million for TANF, nearly $123 million for Food Stamps, and nearly $2.2 billion in Medicaid costs, total savings approaching $5.5 billion per year.

The data in this section suggest that 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 the data presented here suggest that 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 alternatives examined above suggest that the demographic and socioeconomic characteristics of Texas will change rapidly in the coming years. Their implications may be substantial and deserve the attention of private- and public-sector decision makers.

Texas Population Size and Change

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. The projections presented here suggest that the 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. What seems apparent, however, is that 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

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 Texas is likely to remain somewhat younger than many other parts of the nation. In addition, 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. Under any scenario examined in this volume, the increases in the demands for, and costs of, services for the elderly are projected to be substantial. In Texas, as in nearly all other parts of the nation, the needs of the elderly are likely to place pressures on other service areas with slower growing requirements resulting from slower growth in younger populations. For Texas, however, there is the potential for tension between ages to be accentuated by differences in race/ethnicity. This is not to suggest that there are not common interests across racial/ethnic and age groups, but the fact that the State's older population is disproportionately Anglo and its younger population disproportionately non-Anglo raises the potential for differences in perspectives on the levels and forms of services required for the elderly and for youth to be clothed in racial/ethnic terms as well. The demographic reality of age and race/ethnicity differentials may become a factor impacting the decision making process at State and local levels.

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 by 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. The projections presented here suggest that, over time, all age groups in Texas will become increasingly diverse but during the interim period, private-sector marketers may find themselves challenged by the fact that they may need to develop more specialized and diverse product and service forms to adequately meet the demands of Texans.

Change in Texas Households

The number of Texas households has increased rapidly and is projected to grow rapidly in the future. As in other parts of the nation, households in Texas have changed substantially, coming to have increasingly diverse forms and reduced proportions of traditional married-couple-with-children families. Although Texas household patterns are such that they may partially abate the effects of such changes, the overall increase and diversification of Texas households is likely to continue. Since 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.

At the same time, higher rates of growth among non-Anglo households in Texas, particularly Hispanic households that have larger proportions of married couples, suggest that Texas demographics may reduce the proportion of need resulting from other household forms. The diverse patterns of growth in the State are likely to offset some of the changes resulting from overall household change.

Although Texas household forms may be less diverse than those in other parts of the nation, the growth in the number and diversity of Texas households will likely require increasing attention by public agencies to ensure that the needs of an increasing range of household types are addressed. 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

that are both household-type and racially/ethnically unique. Household change will present a variety of opportunities for the private sector of Texas.

The Racial/Ethnic Diversification of Texas

The analysis presented here shows that the diversification of Texas is the dominant demographic pattern impacting Texas. Texas will become more diverse, becoming less than one-half Anglo in the next few years, and is likely to be a majority Hispanic 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.

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

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.

The Socioeconomic Future of Texas

In this volume, we have described the effects of population change in Texas on a variety of service and socioeconomic conditions. We have examined demographic effects given existing socioeconomic differentials among age, households, and particularly racial/ethnic groups. We have noted that such socioeconomic differences 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 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.

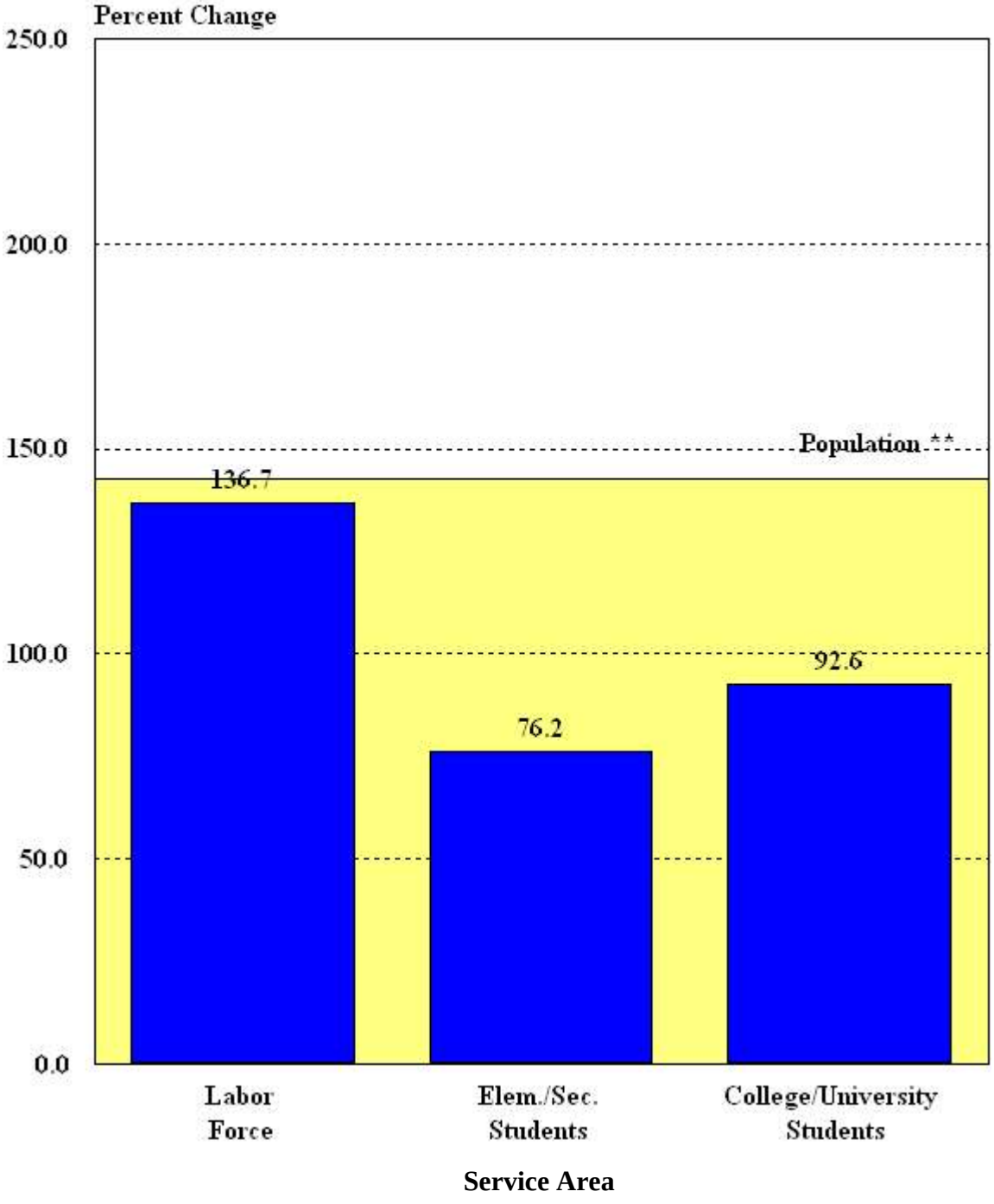
At the same time, our analysis has shown that if socioeconomic differentials between demographic groups were to be reduced through increased education and other means, Texas population growth could be a source of increased private- and public-sector resource growth. Coupled with such growth would be 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

We began by noting that demography is not destiny but that it plays an important role in determining the future. In many ways, how well Texas meets the challenges of the 21st 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

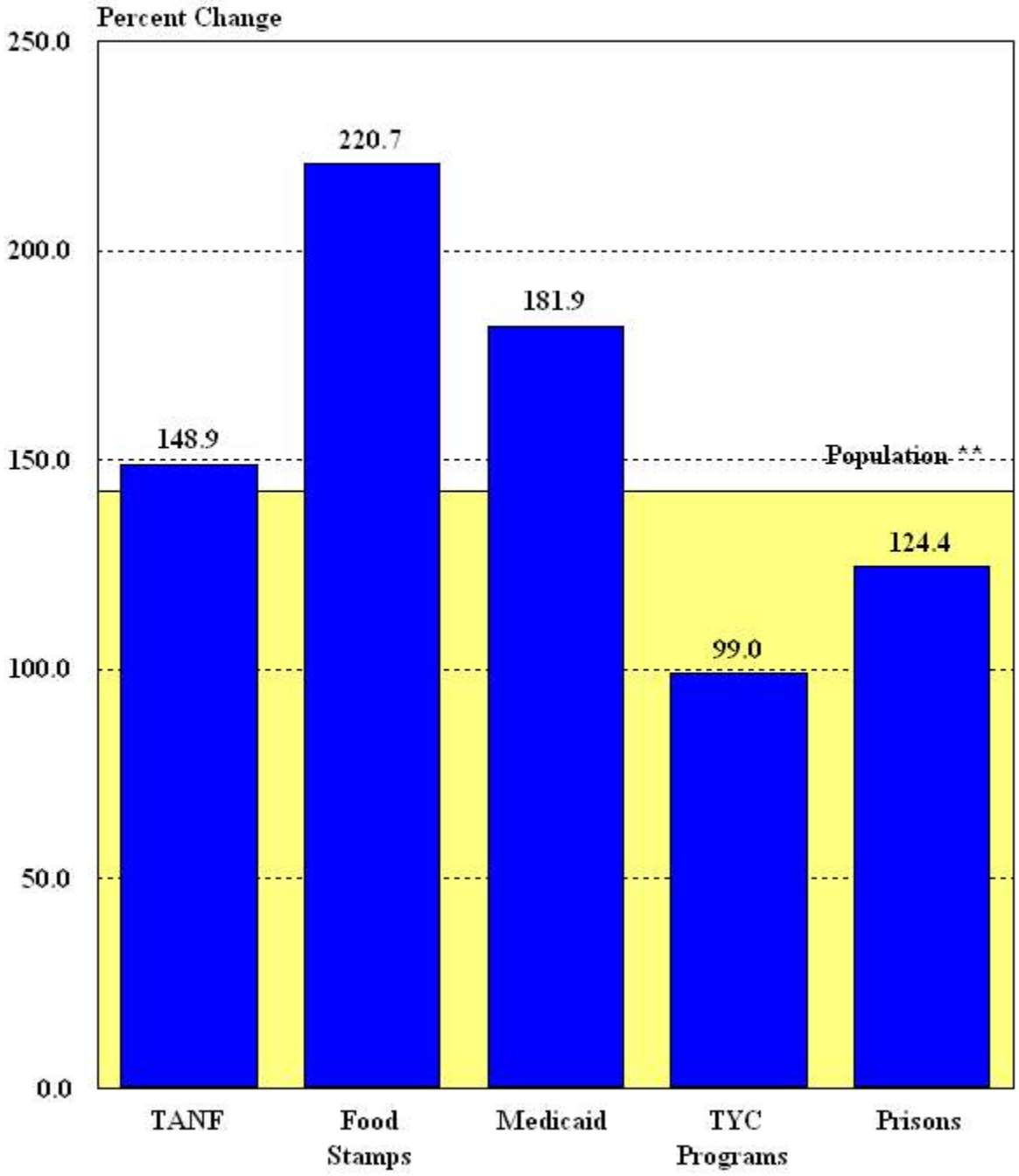
Percent Change in Selected State-Provided Services Compared To Percent Change in the Population, 2000 to 2040*



*** Projections are shown for the 1.0 scenario**
**** Yellow background indicates population change (142.6%)**

Figure 10.2

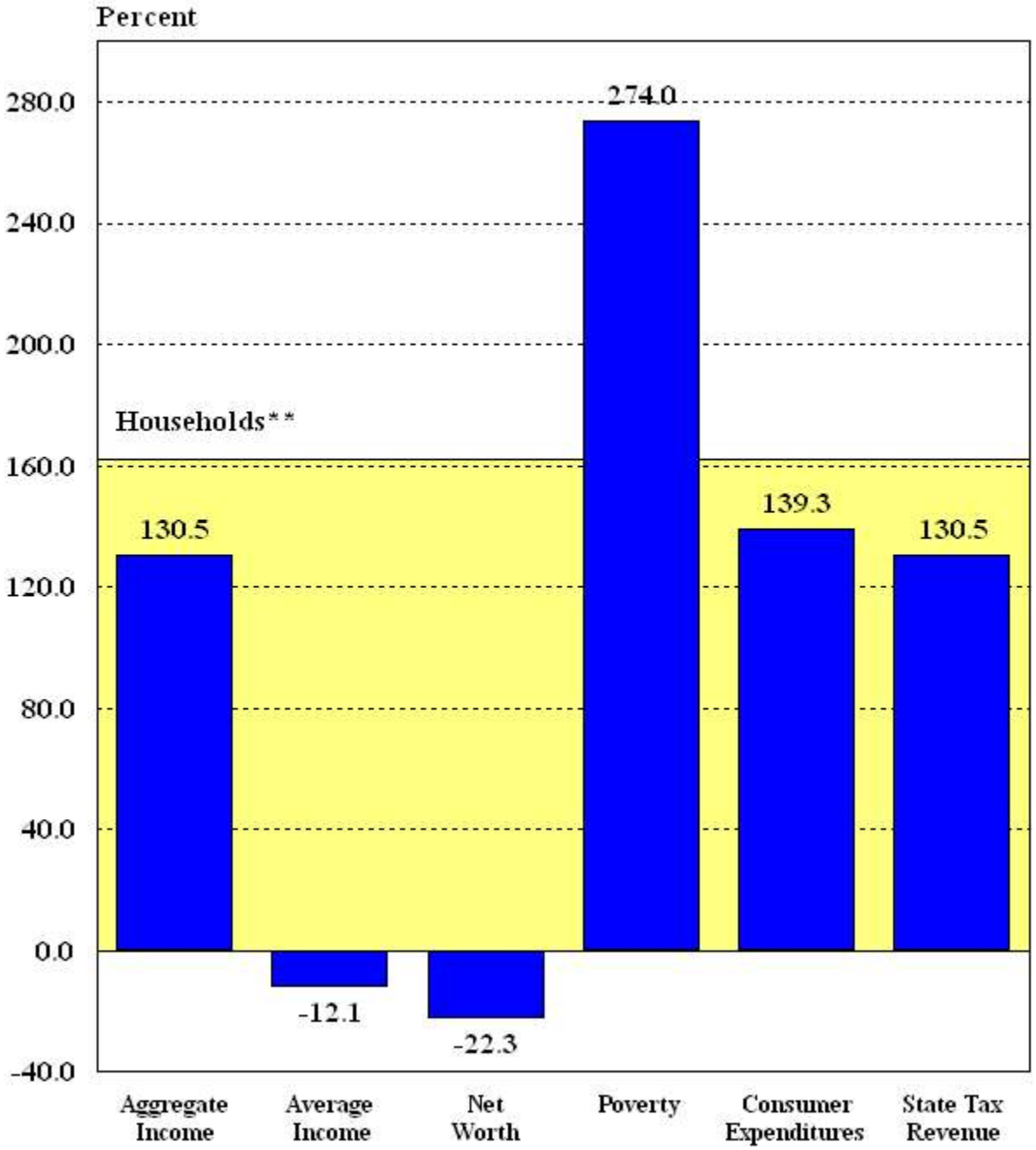
Percent Change in Selected State-Provided Services Compared To Percent Change in the Population, 2000 to 2040*



*** Projections are shown for the 1.0 scenario**
**** Yellow background indicates population change (142.6%)**

Figure 10.3

Percent Change in Total Households Compared To Socioeconomic Change for 2000-2040*

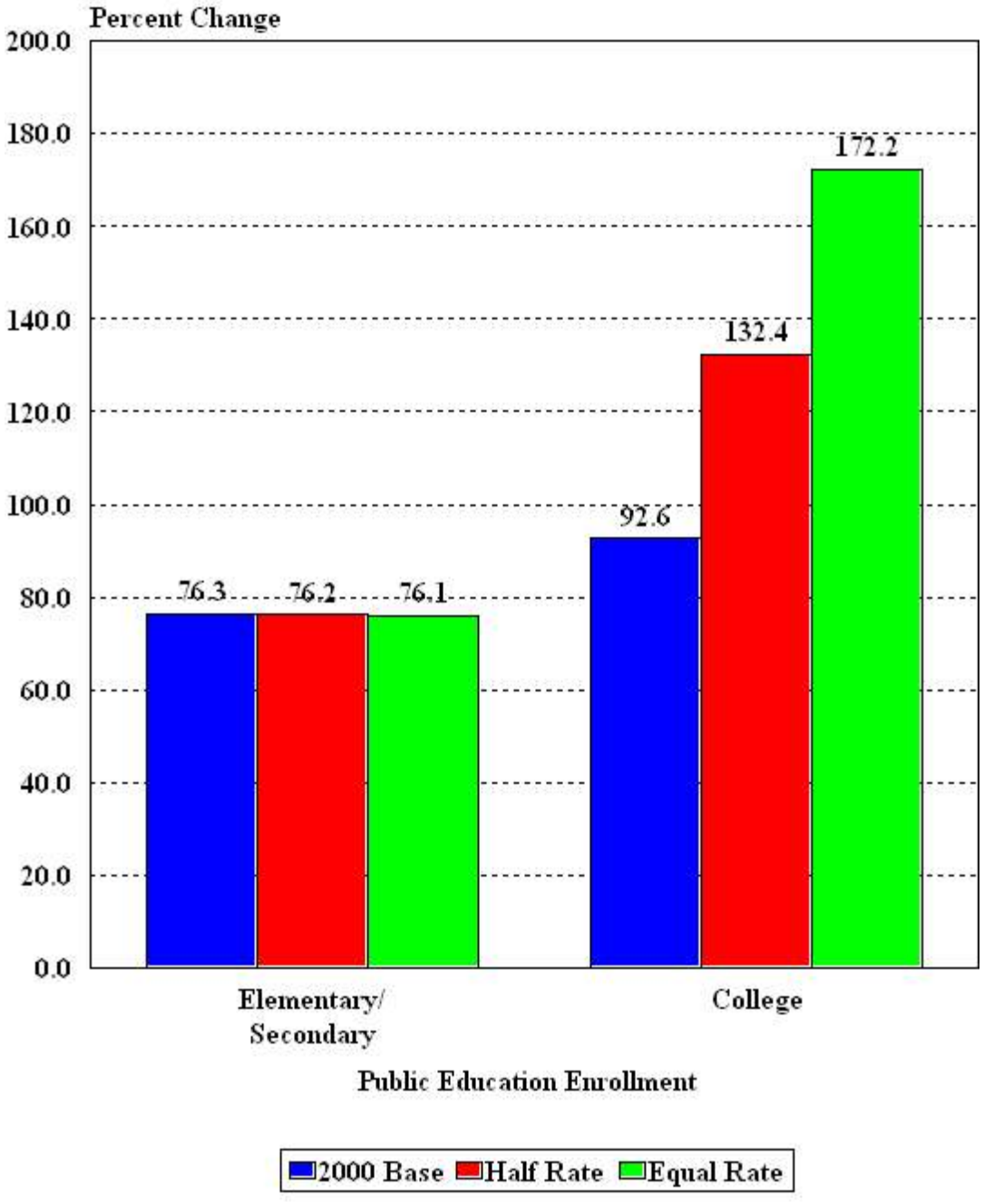


*** Projections are shown for the 1.0 scenario**

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

Figure 10.4

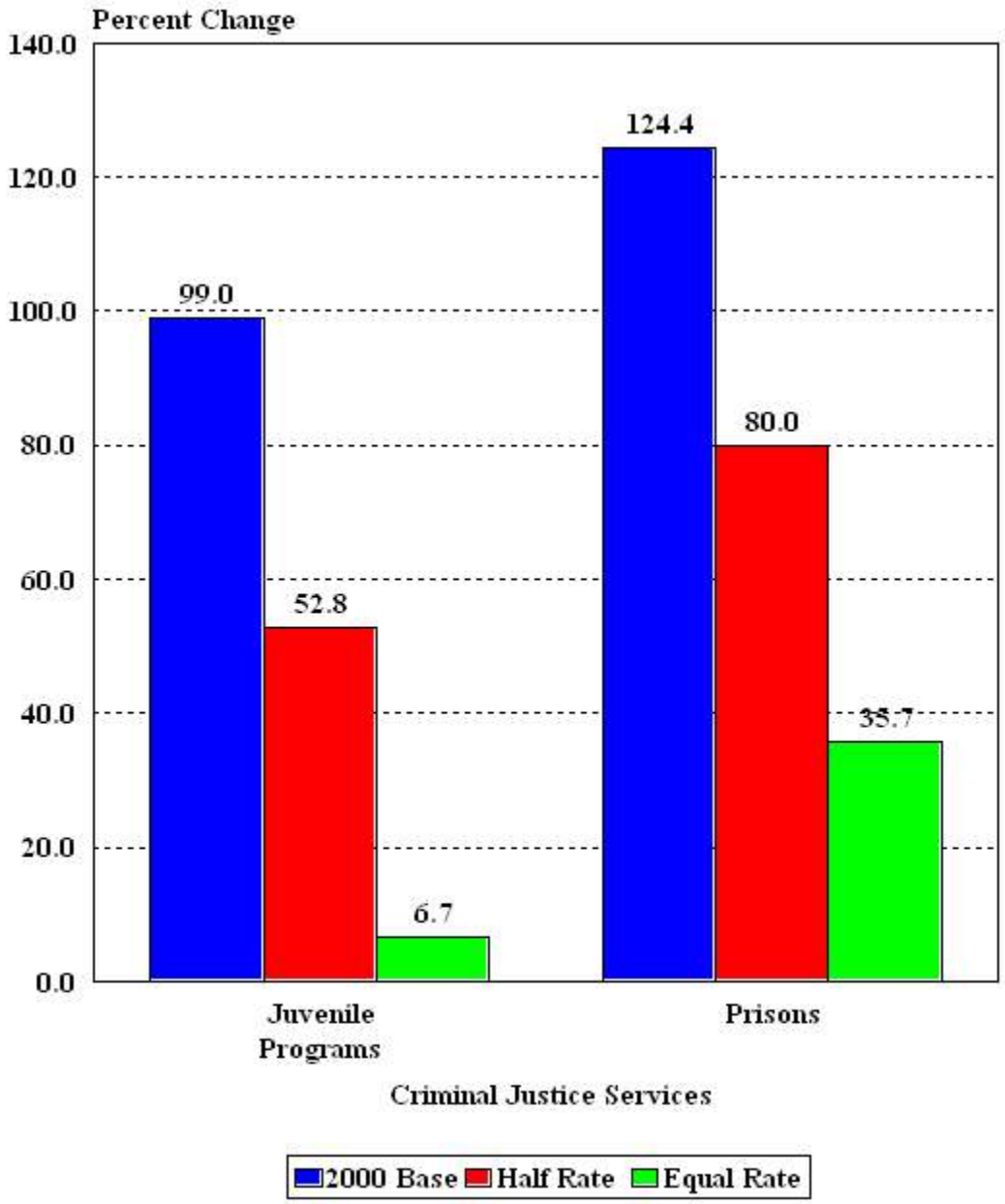
Projections of Percent Change in Educational Enrollment from 2000 to 2040 in Texas under the Base Projection Scenario and Alternative Scenarios of Black and Hispanic Rates at Half the Anglo Rate and Equal to the Anglo Rate by 2020*



* Projections are shown for the 1.0 scenario

Figure 10.5

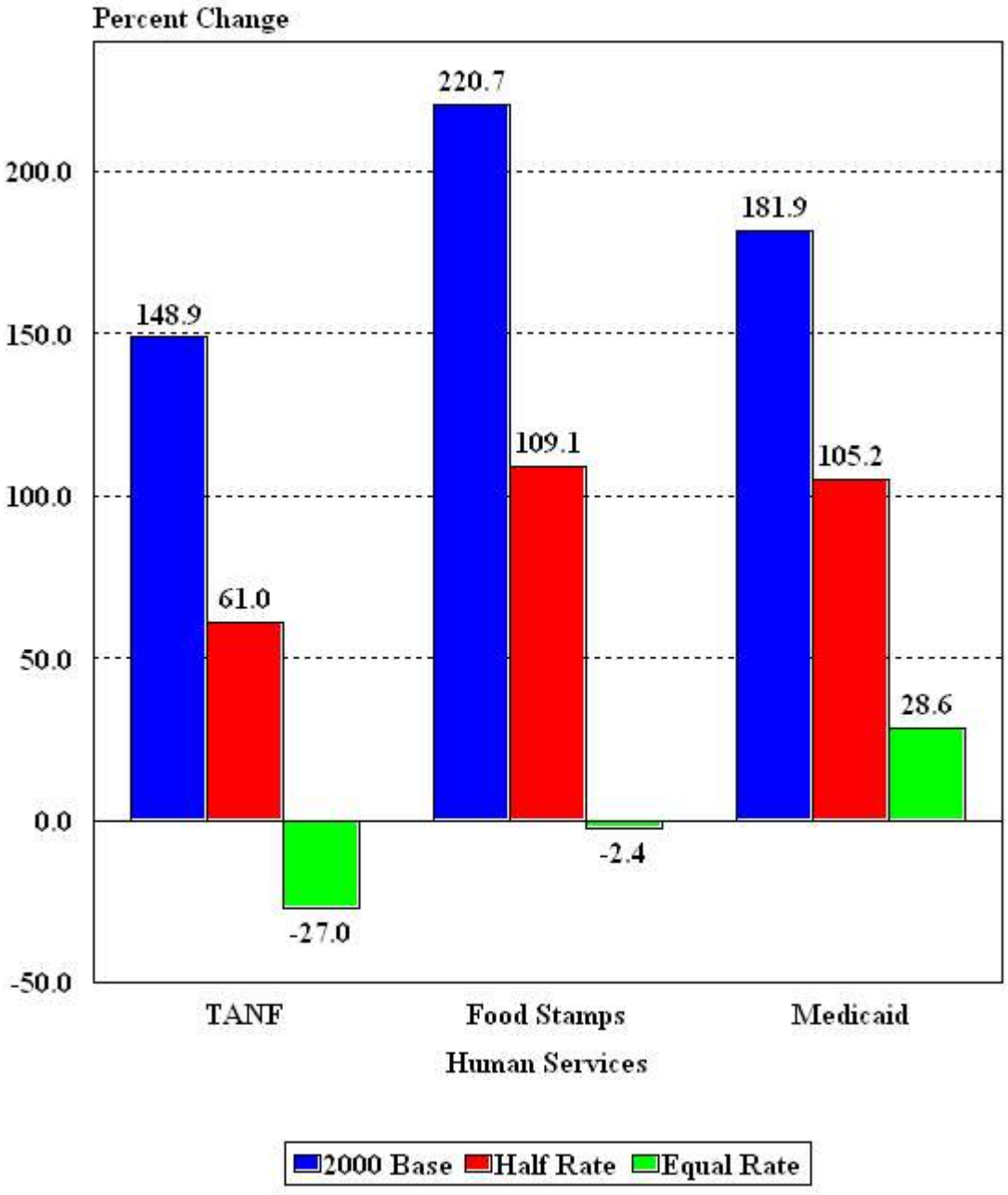
Projections of Percent Change in Criminal Justice Services from 2000 to 2040 in Texas under the Base Projection Scenario and Alternative Scenarios of Black and Hispanic Rates at Half the Anglo Rate and Equal to the Anglo Rate by 2020*



* Projections are shown for the 1.0 scenario

Figure 10.6

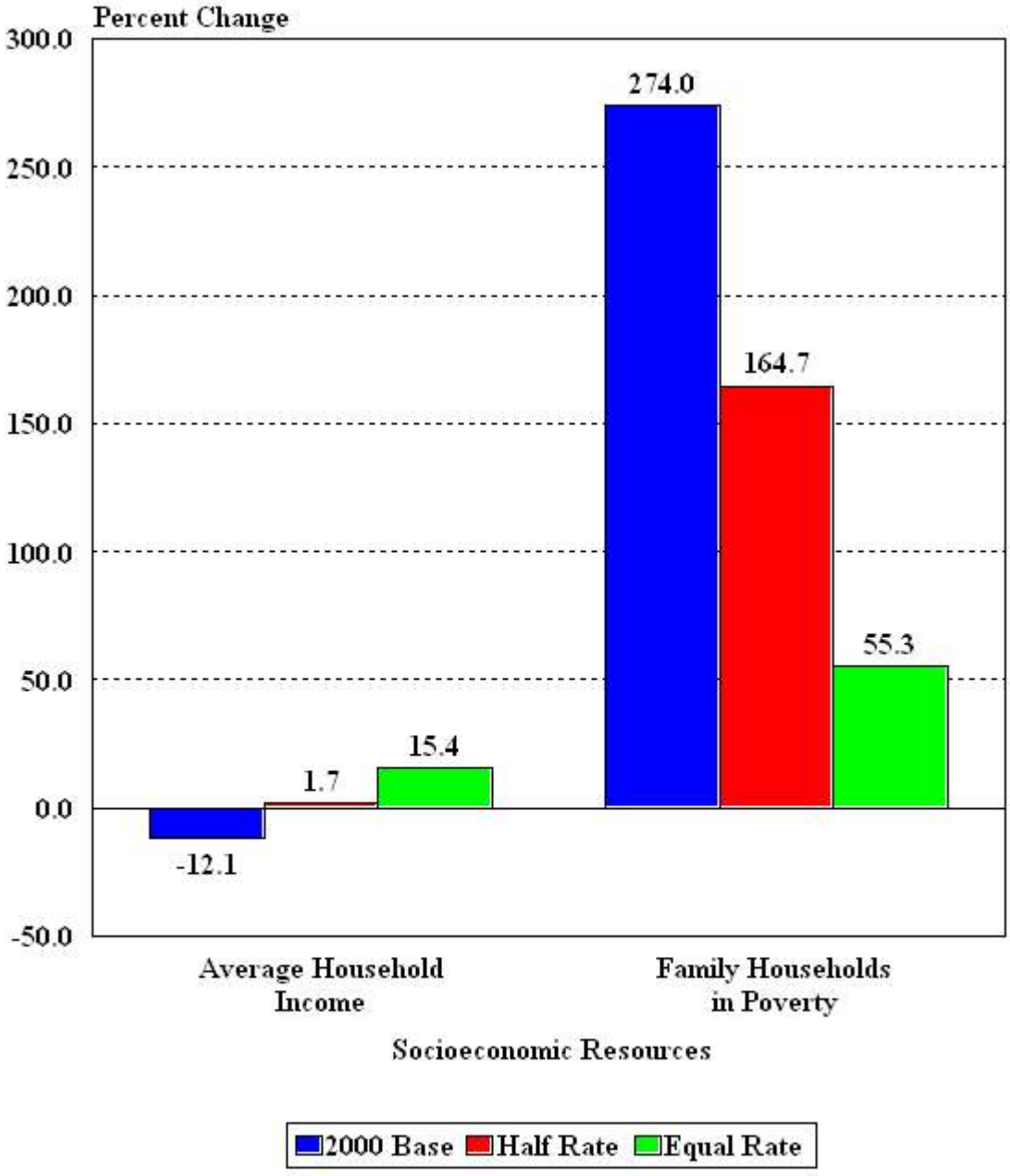
Projections of Percent Change in Human Services from 2000 to 2040 in Texas under the Base Projection Scenario and Alternative Scenarios of Black and Hispanic Rates at Half the Anglo Rate and Equal to the Anglo Rate by 2020*



* Projections are shown for the 1.0 scenario

Figure 10.7

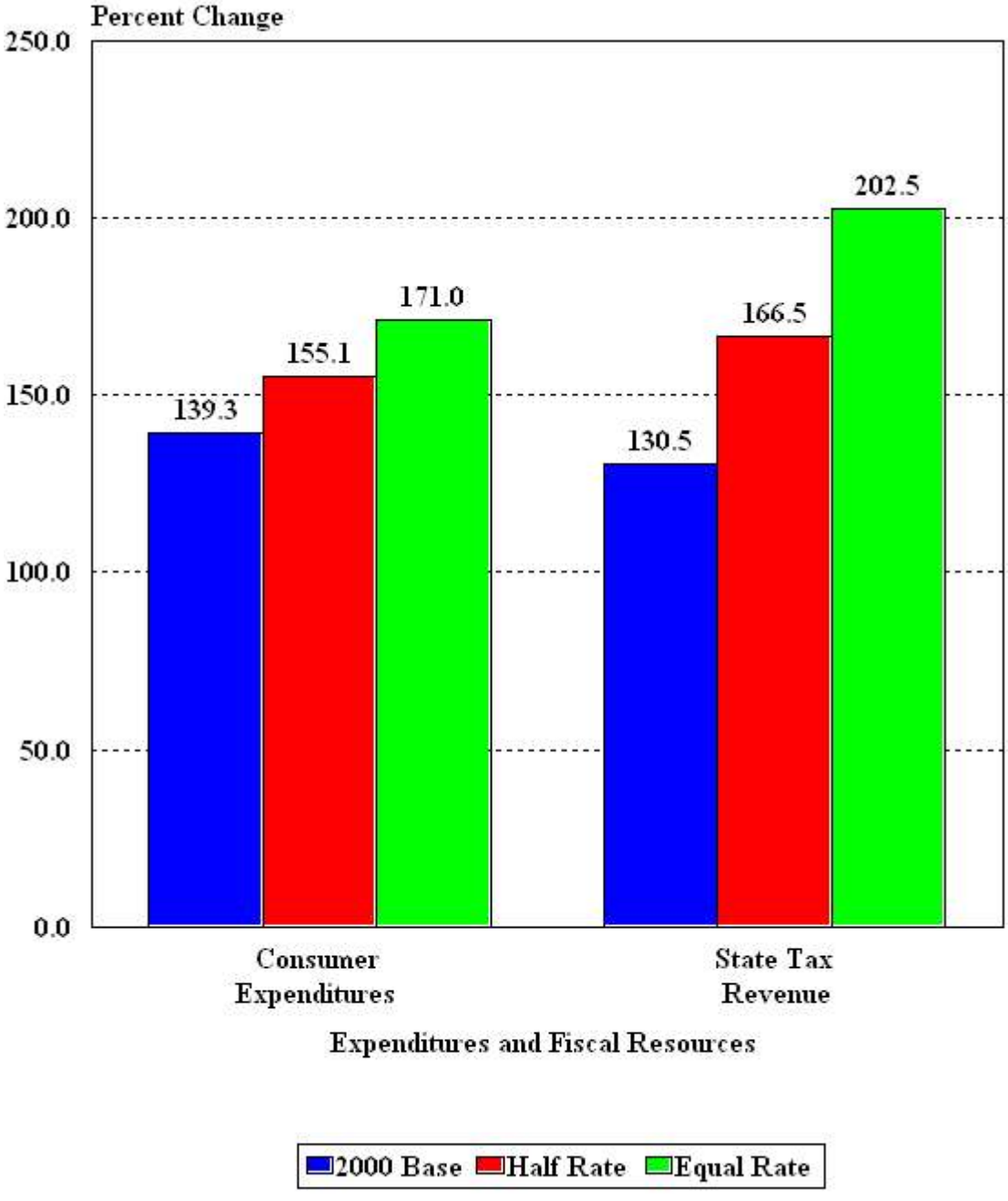
Projections of Percent Change in Socioeconomic Resources from 2000 to 2040 in Texas under the Base Projection Scenario and Alternative Scenarios of Black and Hispanic Rates at Half the Anglo Rate and Equal to the Anglo Rate by 2020*



* Projections are shown for the 1.0 scenario

Figure 10.8

Projections of Percent Change in Expenditures and Fiscal Resources from 2000 to 2040 in Texas 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

Total Income for Persons 25+ Years of Age in Texas in 2000 and Projected for 2040 under Alternative Assumptions of Educational Attainment and Alternative Population Projection Scenarios

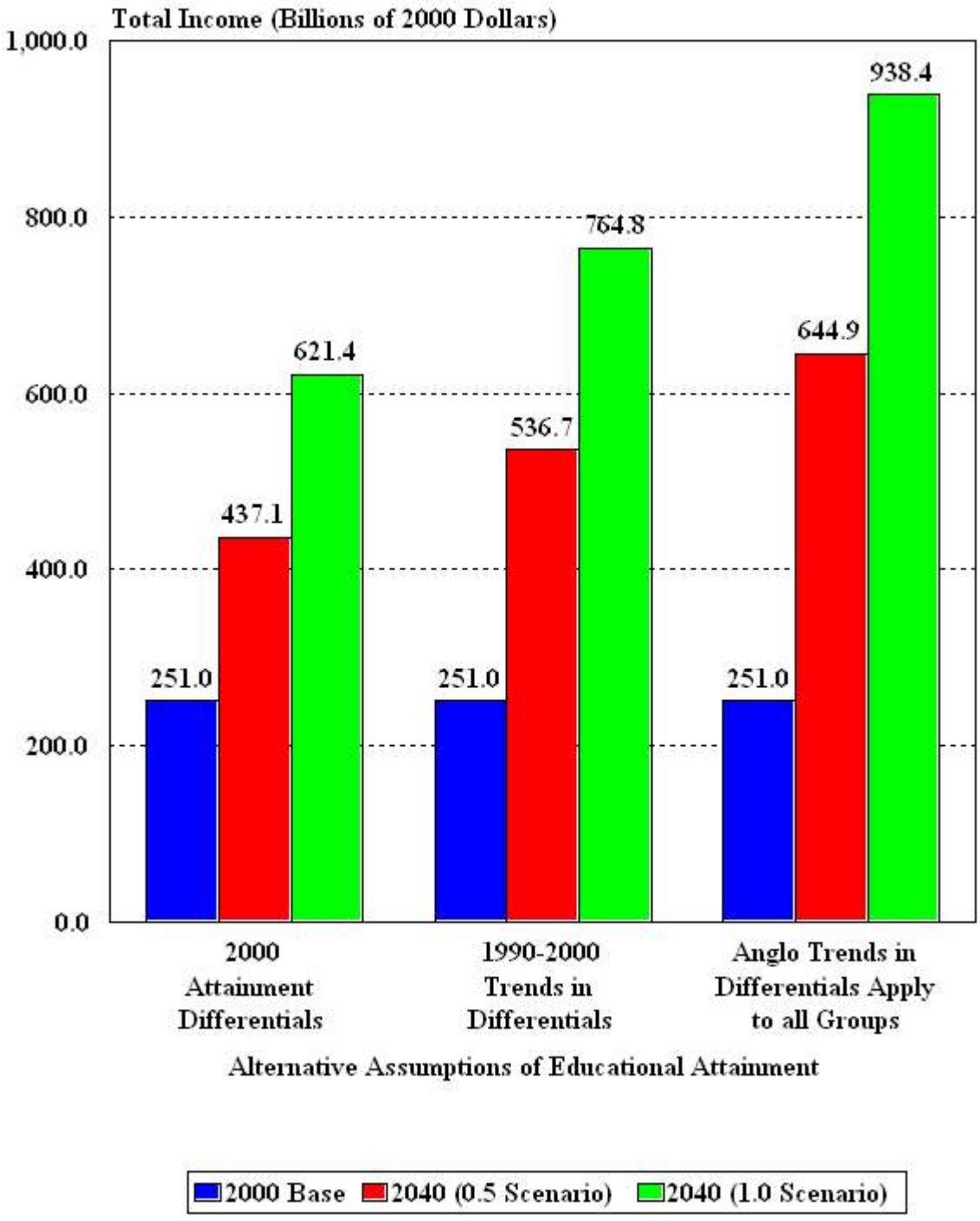


Figure 10.10

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

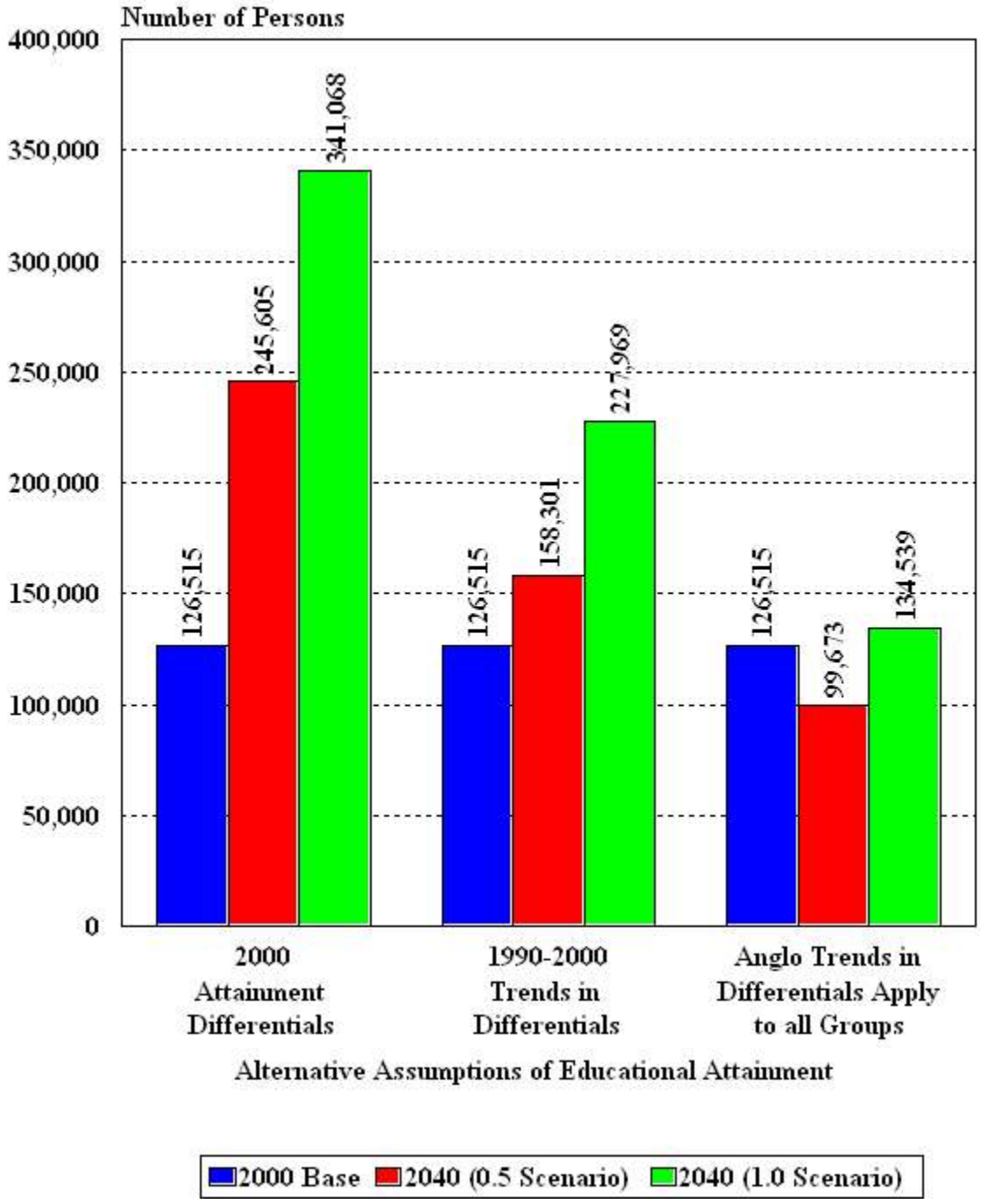


Figure 10.11

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

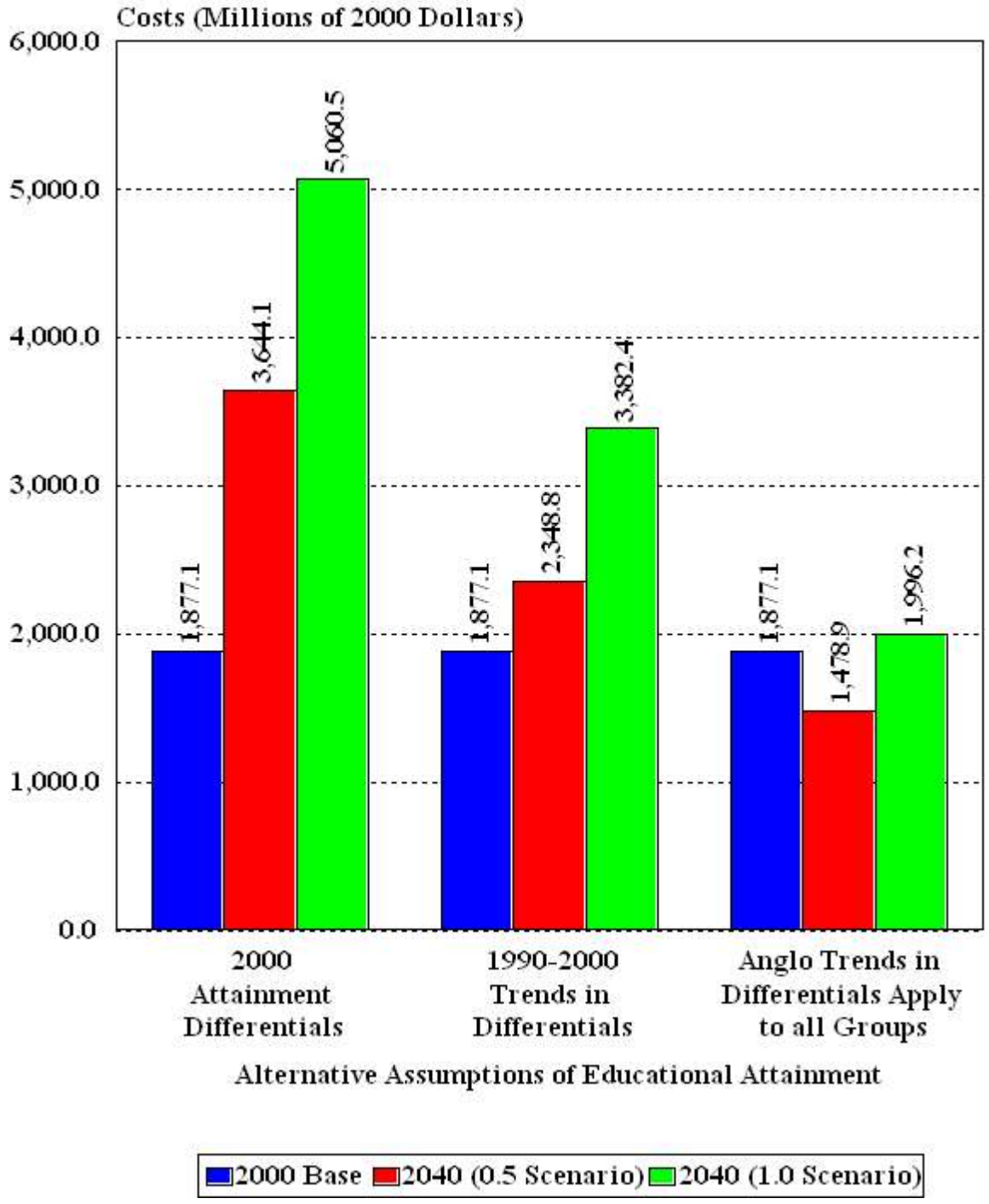


Figure 10.12

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

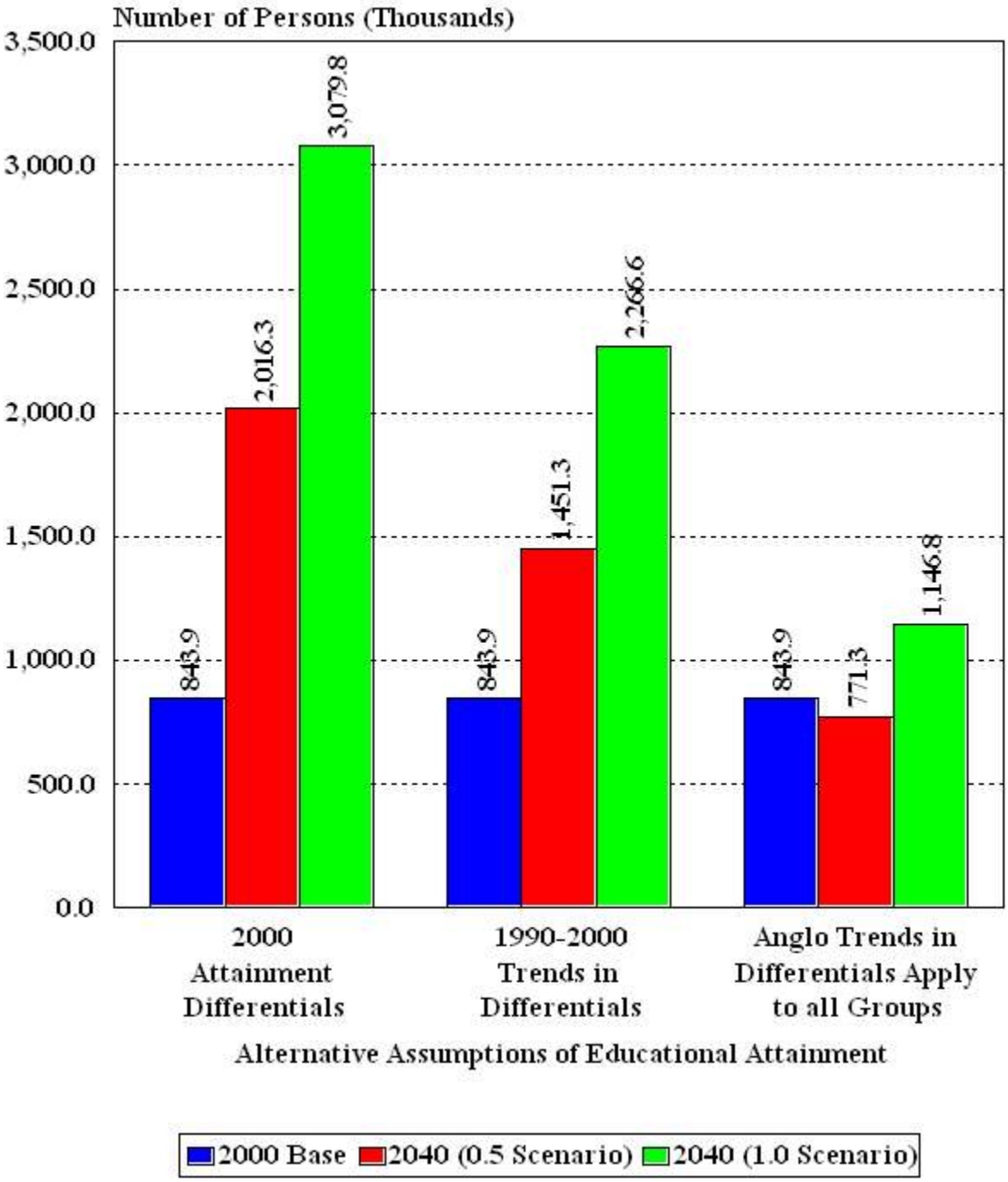


Figure 10.13

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

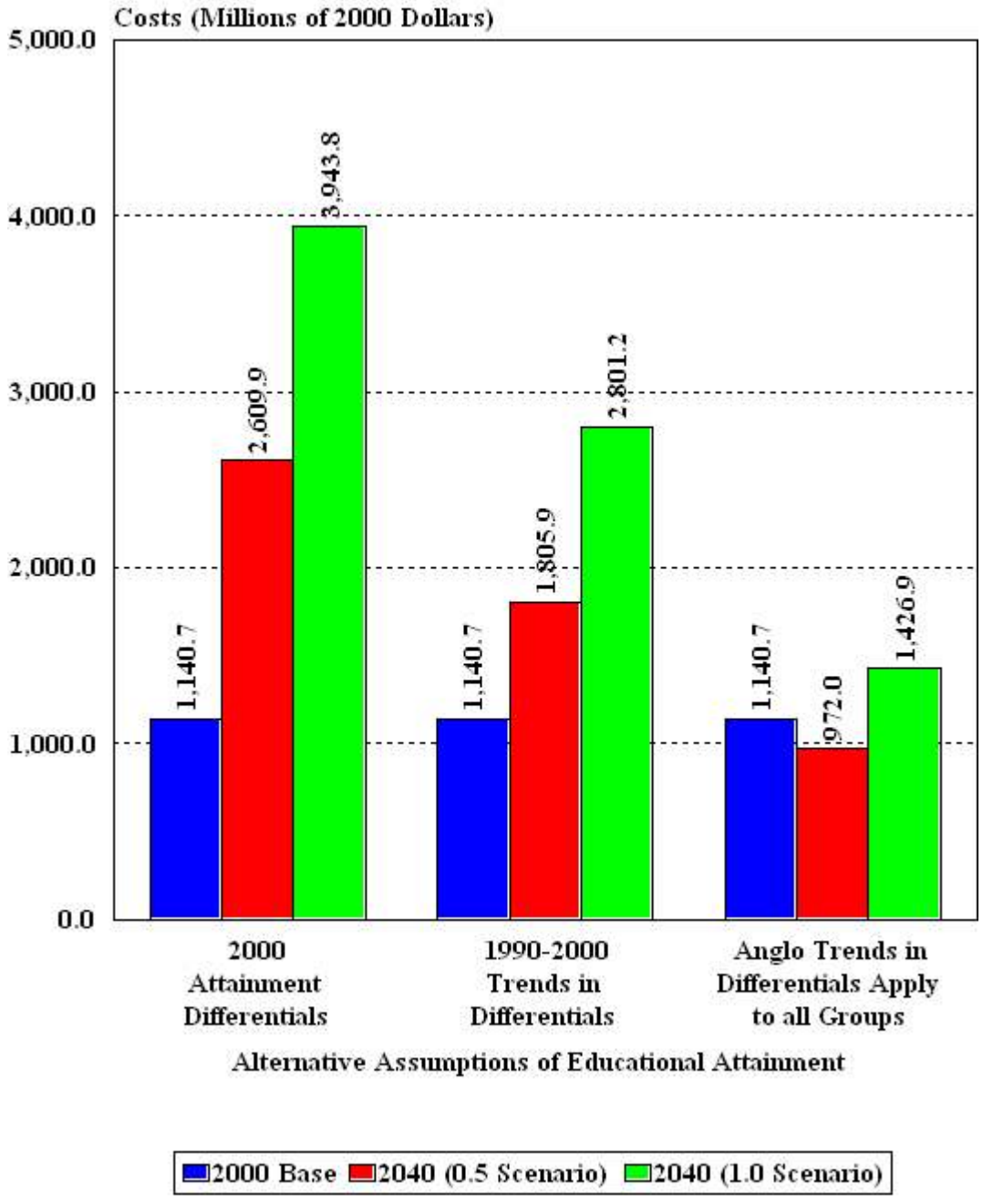


Table 10.1

Summary of Projected Changes in Population, Labor Force, Education, Human Services, Criminal Justice, and Socioeconomic and Fiscal Resources in Texas Assuming Alternative Projection Scenarios, 2000-2040

Characteristic	2000	2010	2040	Percent Change 2000-2040
Panel A: Population				
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
Total	20,851,820	24,178,507	35,012,330	67.9
Median age	32.3	34.1	38.8	20.1
Households	7,393,354	8,818,719	13,616,259	84.2
Median age of householder	45.0	47.7	51.7	14.9
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
Total	20,851,820	25,897,018	50,582,961	142.6
Median age	32.3	33.6	38.3	18.6
Households	7,393,354	9,389,586	19,376,797	162.1
Median age of householder	45.0	47.0	50.1	11.3
Population by Race/Ethnicity				
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
Anglo	11,074,716	11,494,673	11,382,992	2.8
Black	2,421,653	2,730,659	3,283,413	35.6
Hispanic	6,669,666	8,999,827	18,391,333	175.7
Other	685,785	953,348	1,954,592	185.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
Anglo	11,074,716	11,700,471	12,225,486	10.4
Black	2,421,653	2,863,397	3,995,349	65.0
Hispanic	6,669,666	10,164,378	29,926,210	348.7
Other	685,785	1,168,772	4,435,916	546.8
Panel B: Labor Force				
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
Labor force	9,830,559	11,449,306	15,688,879	59.6
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
Labor force	9,830,559	12,331,895	23,270,122	136.7

Table 10.1, Panel B continued

Characteristic	2000	2010	2040	Percent Change 2000-2040
Labor Force by Level of Educational Attainment				
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
Less than 9th grade	670,237	972,406	2,134,841	218.5
9th to 12th, no diploma	1,177,803	1,429,711	2,144,990	82.1
High school graduate	2,855,502	3,314,758	4,504,923	57.8
Some college, no degree	2,144,625	2,441,718	3,030,883	41.3
Associate degree	681,363	753,749	930,235	36.5
Bachelor's degree	1,784,560	1,938,204	2,215,670	24.2
Graduate or professional degree	516,469	598,760	727,337	40.8
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
Less than 9th grade	670,237	1,095,137	3,626,497	441.1
9th to 12th, no diploma	1,177,803	1,582,541	3,356,869	185.0
High school graduate	2,855,502	3,578,427	6,674,661	133.7
Some college, no degree	2,144,625	2,605,453	4,261,479	98.7
Associate degree	681,363	802,802	1,310,401	92.3
Bachelor's degree	1,784,560	2,037,831	3,008,247	68.6
Graduate or professional degree	516,469	629,704	1,031,968	99.8
Labor Force by Occupation				
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
Executive	1,303,149	1,461,973	1,789,112	37.3
Professional	1,426,885	1,560,428	1,827,578	28.1
Technician	347,137	380,810	470,540	35.5
Sales	1,116,645	1,270,994	1,637,405	46.6
Administrative support	1,363,047	1,566,987	2,051,505	50.5
Protective services	223,197	225,547	309,283	38.6
Service, except protective	831,238	1,028,224	1,605,718	93.2
Precision production	1,114,306	1,345,464	2,040,511	83.1
Machine operators	445,101	562,574	923,411	107.5
Transport/material moving	393,987	481,744	692,957	75.9
Handlers	377,859	469,975	741,981	96.4
Farming, forestry, fishing	291,821	356,052	567,009	94.3
Unemployed	596,187	708,534	1,031,869	73.1

Table 10.1, Panel B continued

Characteristic	2000	2010	2040	Percent Change 2000-2040
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
Executive	1,303,149	1,541,463	2,512,186	92.8
Professional	1,426,885	1,646,733	2,517,102	76.4
Technician	347,137	408,190	683,130	96.8
Sales	1,116,645	1,357,189	2,326,656	108.4
Administrative support	1,363,047	1,678,852	2,952,565	116.6
Protective services	223,197	269,058	416,833	86.8
Service, except protective	831,238	1,126,157	2,453,854	195.2
Precision production	1,114,306	1,475,502	3,226,603	189.6
Machine operators	445,101	624,931	1,526,865	243.0
Transport/material moving	393,987	519,490	1,034,877	162.7
Handlers	377,859	525,120	1,214,833	221.5
Farming, forestry, fishing	291,821	382,679	835,323	186.2
Unemployed	596,187	776,531	1,569,295	163.2
Labor Force by Salary and Wages				
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
$ <5,000	846,809	993,987	1,390,558	64.2
5,000-9,999	670,627	803,517	1,189,649	77.4
10,000-14,999	807,507	984,043	1,518,103	88.0
15,000-24,999	1,371,634	1,640,485	2,406,501	75.4
25,000-34,999	1,095,718	1,263,798	1,678,677	53.2
35,000-49,999	975,189	1,097,601	1,355,962	39.0
50,000-74,999	679,046	751,340	877,118	29.2
75,000-99,999	232,781	254,430	285,541	22.7
100,000 or more	274,497	297,532	325,462	18.6
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
$ <5,000	846,809	1,073,259	2,075,360	145.1
5,000-9,999	670,627	875,393	1,827,301	172.5
10,000-14,999	807,507	1,079,572	2,379,574	194.7
15,000-24,999	1,371,634	1,786,497	3,699,271	169.7
25,000-34,999	1,095,718	1,355,337	2,452,983	123.9
35,000-49,999	975,189	1,165,620	1,907,950	95.6
50,000-74,999	679,046	793,305	1,206,470	77.7
75,000-99,999	232,781	267,304	383,627	64.8
100,000 or more	274,497	311,236	426,687	55.4

Table 10.1, Panel B continued

Characteristic	2000	2010	2040	Percent Change 2000-2040
Labor Force Members in Work Force Training Programs				
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
Title III and Title IV	4,341	6,119	11,750	170.7
WIA adult	31,239	37,411	56,303	80.2
WIA dislocated worker	44,148	54,567	84,201	90.7
WIA youth	35,541	41,444	57,117	60.7
WIA other	1,665	2,061	3,011	80.8
Welfare reform programs	156,477	185,441	267,826	71.2
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
Title III and Title IV	4,341	6,654	19,565	350.7
WIA adult	31,239	41,911	88,234	182.4
WIA dislocated worker	44,148	59,464	133,604	202.6
WIA youth	35,541	45,554	83,242	134.2
WIA other	1,665	2,225	4,609	176.8
Welfare reform programs	156,477	206,943	410,704	162.5
Panel C: Elementary, Secondary, and Higher Education				
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
Public education enrollment total	4,794,275	5,072,390	6,152,639	28.3
Elementary and secondary	4,002,227	4,193,265	5,087,348	27.1
Community college	421,078	467,887	587,621	39.6
University	370,970	411,238	477,670	28.8
College and university	792,048	879,125	1,065,291	34.5
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
Public education enrollment total	4,794,275	5,355,217	8,579,600	79.0
Elementary and secondary	4,002,227	4,399,688	7,053,791	76.2
Community college	421,078	510,319	848,867	101.6
University	370,970	445,210	676,942	82.5
College and university	792,048	955,529	1,525,809	92.6

Table 10.1, Panel C continued

Characteristic	2000	2010	2040	Percent Change 2000-2040
Specialized Elementary and Secondary Programs				
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
Bilingual/ESL	498,275	588,466	934,591	87.6
Economically disadvantaged	1,956,000	2,156,531	2,968,104	51.7
Gifted and talented	336,562	331,981	370,541	10.1
Immigrants	73,804	86,939	135,649	83.8
Limited English proficiency	555,470	657,722	1,046,197	88.3
Special education	490,220	502,982	594,584	21.3
Title I	2,012,700	2,107,939	2,834,146	40.8
Career and technology	741,949	755,016	911,708	22.9
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
Bilingual/ESL	498,275	628,154	1,429,125	186.8
Economically disadvantaged	1,956,000	2,283,807	4,301,098	119.9
Gifted and talented	336,562	346,362	499,689	48.5
Immigrants	73,804	93,667	208,854	183.0
Limited English proficiency	555,470	702,915	1,600,330	188.1
Special education	490,220	526,604	807,324	64.7
Title I	2,012,700	2,218,796	4,063,972	101.9
Career and technology	741,949	809,773	1,260,803	69.9
Public College/University Students with Unmet Financial Need				
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
Community college	313,852	354,027	466,637	48.7
University	312,021	347,935	413,717	32.6
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
Community college	313,852	389,879	690,660	120.1
University	312,021	378,531	594,727	90.6
Panel D: Human Services and Criminal Justice Programs				
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
TANF	405,287	476,618	674,416	66.4
Food Stamp program	1,007,067	1,268,323	2,126,142	111.1
Medicaid	1,886,937	2,247,162	3,778,381	100.2
TYC population	8,603	9,607	11,771	36.8
Prison population	151,868	174,798	234,257	54.3

Table 10.1, Panel D continued

Characteristic	2000	2010	2040	Percent Change 2000-2040
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
TANF	405,287	518,244	1,008,932	148.9
Food Stamp program	1,007,067	1,383,170	3,229,632	220.7
Medicaid	1,886,937	2,399,071	5,319,029	181.9
TYC population	8,603	10,634	17,118	99.0
Prison population	151,868	189,627	340,723	124.4
Panel E: Income and Tax Revenues				
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
Aggregate household income	$ 402,503,341,200	$ 468,043,971,531	$ 672,377,264,509	67.0
Average household income	$ 54,441	$ 53,074	$ 49,380	-9.3
Family households in poverty	598,325	783,058	1,425,135	138.2
Tax revenues	$ 29,510,942,468	$ 34,316,283,353	$ 49,297,694,494	67.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
Aggregate household income	$ 402,503,341,200	$ 494,255,893,207	$ 927,818,287,513	130.5
Average household income	$ 54,441	$ 52,639	$ 47,883	-12.1
Family households in poverty	598,325	861,246	2,237,880	274.0
Tax revenues	$ 29,510,942,468	$ 36,238,102,257	$ 68,026,247,958	130.5
Panel F: Private-Sector Dimensions				
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)				
Consumer expenditures	$ 274,265,682,934	$ 322,267,535,000	$ 458,666,100,348	67.2
Net worth	$ 709,896,741,518	$ 806,133,276,607	$ 1,077,091,260,797	51.7
Housing expenditures	$ 48,866,260,784	$ 57,191,824,467	$ 82,522,294,131	68.9
Incidences of diseases/disorders	49,545,168	59,013,746	92,458,571	86.6
Incidences of disabilities	3,614,097	4,413,276	8,116,066	124.6
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)				
Consumer expenditures	$ 274,265,682,934	$ 342,400,706,209	$ 656,335,039,621	139.3
Net worth	$ 709,896,741,518	$ 845,184,456,768	$ 1,444,188,603,304	103.4
Housing expenditures	$ 48,866,760,784	$ 61,103,625,451	$ 120,027,942,571	145.6
Incidences of diseases/disorders	49,545,168	62,480,914	129,495,255	161.4
Incidences of disabilities	3,614,097	4,615,164	10,922,212	202.2

Table 10.2

Comparison of Projected Changes in Service, Health, and Financial Characteristics in Texas under Baseline (2000) Rates of Occurrence by Race/Ethnicity, under an Assumption That Differences between Anglo-Black and Anglo-Hispanic Rates Close to One-Half of 2000 Levels by 2020, and under an Assumption That Black and Hispanic Rates Become Equal to Anglo Rates by 2020 and Assuming Alternative Projection Scenarios

Assumption	Number				Percent Change
	2000	2010	2020	2040	2000-2040
Panel A: Workforce Training Programs					
Title III and Title IV					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	4,341	6,119	7,886	11,750	170.7
Partial Closure with Anglo Rates by 2020	4,341	5,184	5,287	7,557	74.1
Full Closure with Anglo Rates by 2020	4,341	4,261	2,689	3,369	-22.4
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	4,341	6,654	9,731	19,565	350.7
Partial Closure with Anglo Rates by 2020	4,341	5,629	6,456	12,366	184.9
Full Closure with Anglo Rates by 2020	4,341	4,609	3,188	5,162	18.9
WIA Adult					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	31,239	37,411	43,356	56,303	80.2
Partial Closure with Anglo Rates by 2020	31,239	32,168	30,751	39,243	25.6
Full Closure with Anglo Rates by 2020	31,239	26,912	18,145	22,171	-29.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	31,239	41,911	54,143	88,234	182.4
Partial Closure with Anglo Rates by 2020	31,239	35,920	38,018	60,761	94.5
Full Closure with Anglo Rates by 2020	31,239	29,944	21,892	33,316	6.7

Table 10.2, Panel A continued

Assumption	Number				Percent Change
	2000	2010	2020	2040	2000-2040
WIA Dislocated Worker					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	44,148	54,567	63,850	84,201	90.7
Partial Closure with Anglo Rates by 2020	44,148	50,718	53,898	69,429	57.3
Full Closure with Anglo Rates by 2020	44,148	46,869	43,944	54,670	23.8
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	44,148	59,464	78,306	133,604	202.6
Partial Closure with Anglo Rates by 2020	44,148	55,209	65,748	109,177	147.3
Full Closure with Anglo Rates by 2020	44,148	50,971	53,192	84,752	92.0
WIA Youth					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	35,541	41,444	46,437	57,117	60.7
Partial Closure with Anglo Rates by 2020	35,541	32,900	27,163	33,042	-7.0
Full Closure with Anglo Rates by 2020	35,541	24,353	7,891	8,963	-74.8
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	35,541	45,554	54,068	83,242	134.2
Partial Closure with Anglo Rates by 2020	35,541	36,125	31,513	47,923	34.8
Full Closure with Anglo Rates by 2020	35,541	26,702	8,950	12,599	-64.6
WIA Other					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	1,665	2,061	2,385	3,011	80.8
Partial Closure with Anglo Rates by 2020	1,665	1,822	1,816	2,276	36.7
Full Closure with Anglo Rates by 2020	1,665	1,585	1,242	1,566	-6.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	1,665	2,225	2,850	4,609	176.8
Partial Closure with Anglo Rates by 2020	1,665	1,969	2,195	3,568	114.3
Full Closure with Anglo Rates by 2020	1,665	1,713	1,541	2,534	52.2

Table 10.2, Panel A continued

Assumption	Number 2000	2010	2020	2040	Percent Change 2000-2040
Programs Resulting from Welfare Reform					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	156,477	185,441	211,620	267,826	71.2
Partial Closure with Anglo Rates by 2020	156,477	155,779	142,367	177,853	13.7
Full Closure with Anglo Rates by 2020	156,477	126,094	73,119	87,885	-43.8
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	156,477	206,943	261,230	410,704	162.5
Partial Closure with Anglo Rates by 2020	156,477	173,527	174,469	269,982	72.5
Full Closure with Anglo Rates by 2020	156,477	140,120	87,714	129,262	-17.4
Panel B: Educational Enrollment					
Total Public Elementary, Secondary, and Higher Education					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	4,794,275	5,072,390	5,483,784	6,152,639	28.3
Partial Closure with Anglo Rates by 2020	4,794,275	5,125,624	5,615,155	6,345,067	32.4
Full Closure with Anglo Rates by 2020	4,794,275	5,178,490	5,746,152	6,537,160	36.4
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	4,794,275	5,355,217	6,282,832	8,579,600	79.0
Partial Closure with Anglo Rates by 2020	4,794,275	5,418,152	6,447,588	8,890,906	85.5
Full Closure with Anglo Rates by 2020	4,794,275	5,480,717	6,611,943	9,201,802	91.9
Total Public Colleges and Universities					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	792,048	879,125	932,297	1,065,291	34.5
Partial Closure with Anglo Rates by 2020	792,048	940,338	1,075,924	1,262,570	59.4
Full Closure with Anglo Rates by 2020	792,048	1,001,549	1,219,551	1,459,842	84.3
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	792,048	955,529	1,083,965	1,525,809	92.6
Partial Closure with Anglo Rates by 2020	792,048	1,026,822	1,263,596	1,840,771	132.4
Full Closure with Anglo Rates by 2020	792,048	1,098,132	1,443,233	2,155,726	172.2

Table 10.2, Panel B continued

Assumption	Number 2000	2010	2020	2040	Percent Change 2000-2040
Public Community Colleges					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	421,078	467,887	504,144	587,621	39.6
Partial Closure with Anglo Rates by 2020	421,078	489,500	553,829	654,563	55.5
Full Closure with Anglo Rates by 2020	421,078	511,109	603,518	721,508	71.4
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	421,078	510,319	589,181	848,867	101.6
Partial Closure with Anglo Rates by 2020	421,078	535,329	650,454	954,767	126.7
Full Closure with Anglo Rates by 2020	421,078	560,352	711,725	1,060,660	151.9
Public Universities					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	370,970	411,238	428,153	477,670	28.8
Partial Closure with Anglo Rates by 2020	370,970	450,838	522,095	608,007	63.9
Full Closure with Anglo Rates by 2020	370,970	490,440	616,033	738,334	99.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	370,970	445,210	494,784	676,942	82.5
Partial Closure with Anglo Rates by 2020	370,970	491,493	613,142	886,004	138.8
Full Closure with Anglo Rates by 2020	370,970	537,780	731,508	1,095,066	195.2
Public Elementary and Secondary Schools					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	4,002,227	4,193,265	4,551,487	5,087,348	27.1
Partial Closure with Anglo Rates by 2020	4,002,227	4,185,286	4,539,231	5,082,497	27.0
Full Closure with Anglo Rates by 2020	4,002,227	4,176,941	4,526,601	5,077,318	26.9
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	4,002,227	4,399,688	5,198,867	7,053,791	76.3
Partial Closure with Anglo Rates by 2020	4,002,227	4,391,330	5,183,992	7,050,135	76.2
Full Closure with Anglo Rates by 2020	4,002,227	4,382,585	5,168,710	7,046,076	76.1

Table 10.2, Panel B continued

Assumption	Number				Percent Change
	2000	2010	2020	2040	2000-2040
Specialized Elementary and Secondary School Programs					
Bilingual/ESL					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	498,275	588,466	701,651	934,591	87.6
Partial Closure with Anglo Rates by 2020	498,275	452,997	375,709	497,346	-0.2
Full Closure with Anglo Rates by 2020	498,275	317,528	49,780	60,101	-87.9
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	498,275	628,154	861,737	1,429,125	186.8
Partial Closure with Anglo Rates by 2020	498,275	483,895	463,245	768,593	54.3
Full Closure with Anglo Rates by 2020	498,275	339,625	64,744	108,055	-78.3
Economically Disadvantaged					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	1,956,000	2,156,531	2,444,632	2,968,104	51.7
Partial Closure with Anglo Rates by 2020	1,956,000	1,856,401	1,741,477	2,068,214	5.7
Full Closure with Anglo Rates by 2020	1,956,000	1,556,264	1,038,327	1,168,332	-40.3
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	1,956,000	2,283,807	2,879,203	4,301,098	119.9
Partial Closure with Anglo Rates by 2020	1,956,000	1,963,520	2,038,835	2,971,926	51.9
Full Closure with Anglo Rates by 2020	1,956,000	1,643,222	1,198,468	1,642,753	-16.0
Gifted and Talented					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	336,562	331,981	353,281	370,541	10.1
Partial Closure with Anglo Rates by 2020	336,562	362,893	425,641	462,827	37.5
Full Closure with Anglo Rates by 2020	336,562	393,807	497,997	555,102	64.9
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	336,562	346,362	395,244	499,689	48.5
Partial Closure with Anglo Rates by 2020	336,562	379,481	481,014	635,267	88.8
Full Closure with Anglo Rates by 2020	336,562	412,595	566,775	770,855	129.0

Table 10.2, Panel B continued

Assumption	Number				Percent Change 2000-2040
	2000	2010	2020	2040	
Immigrant					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	73,804	86,939	103,409	135,649	83.8
Partial Closure with Anglo Rates by 2020	73,804	69,407	60,930	78,542	6.4
Full Closure with Anglo Rates by 2020	73,804	51,876	18,455	21,440	-71.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	73,804	93,667	126,300	208,854	183.0
Partial Closure with Anglo Rates by 2020	73,804	74,853	74,688	122,597	66.1
Full Closure with Anglo Rates by 2020	73,804	56,039	23,068	36,342	-50.8
Limited English Proficiency (LEP)					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	555,470	657,722	785,207	1,046,197	88.3
Partial Closure with Anglo Rates by 2020	555,470	506,711	421,360	557,739	0.4
Full Closure with Anglo Rates by 2020	555,470	355,704	57,528	69,280	-87.5
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	555,470	702,915	963,568	1,600,330	188.1
Partial Closure with Anglo Rates by 2020	555,470	541,918	519,148	862,399	55.3
Full Closure with Anglo Rates by 2020	555,470	380,918	74,732	124,462	-77.6
Special Education					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	490,220	502,982	540,831	594,584	21.3
Partial Closure with Anglo Rates by 2020	490,220	510,527	559,792	621,660	26.8
Full Closure with Anglo Rates by 2020	490,220	518,058	578,761	648,727	32.3
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	490,220	526,604	610,813	807,324	64.7
Partial Closure with Anglo Rates by 2020	490,220	534,895	635,141	850,481	73.5
Full Closure with Anglo Rates by 2020	490,220	543,172	659,463	893,643	82.3

Table 10.2, Panel B continued

Assumption	Number 2000	2010	2020	2040	Percent Change 2000-2040
Title I					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	2,012,700	2,107,939	2,368,546	2,834,146	40.8
Partial Closure with Anglo Rates by 2020	2,012,700	1,885,634	1,842,649	2,153,740	7.0
Full Closure with Anglo Rates by 2020	2,012,700	1,663,316	1,316,748	1,473,333	-26.8
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	2,012,700	2,218,796	2,774,260	4,063,972	101.9
Partial Closure with Anglo Rates by 2020	2,012,700	1,981,447	2,143,166	3,053,616	51.7
Full Closure with Anglo Rates by 2020	2,012,700	1,744,083	1,512,056	2,043,257	1.5
Career and Technology					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	741,949	755,016	819,866	911,708	22.9
Partial Closure with Anglo Rates by 2020	741,949	756,812	824,931	919,483	23.9
Full Closure with Anglo Rates by 2020	741,949	758,614	829,990	927,266	25.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	741,949	809,773	924,074	1,260,803	69.9
Partial Closure with Anglo Rates by 2020	741,949	811,864	930,341	1,273,211	71.6
Full Closure with Anglo Rates by 2020	741,949	813,944	936,605	1,285,616	73.3
Panel C: Human and Criminal Justice Services					
TANF					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	405,287	476,618	543,310	674,416	66.4
Partial Closure with Anglo Rates by 2020	405,287	398,387	360,862	440,389	8.7
Full Closure with Anglo Rates by 2020	405,287	320,141	178,415	206,342	-49.1
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	405,287	518,244	657,457	1,008,932	148.9
Partial Closure with Anglo Rates by 2020	405,287	432,493	433,502	652,455	61.0
Full Closure with Anglo Rates by 2020	405,287	346,744	209,531	295,957	-27.0

Table 10.2, Panel C continued

Assumption	Number 2000	2010	2020	2040	Percent Change 2000-2040
Food Stamps					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	1,007,067	1,268,323	1,528,009	2,126,142	111.1
Partial Closure with Anglo Rates by 2020	1,007,067	1,063,169	1,021,141	1,394,021	38.4
Full Closure with Anglo Rates by 2020	1,007,067	857,989	514,282	661,913	-34.3
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	1,007,067	1,383,170	1,856,883	3,229,632	220.7
Partial Closure with Anglo Rates by 2020	1,007,067	1,157,088	1,230,327	2,106,178	109.1
Full Closure with Anglo Rates by 2020	1,007,067	930,990	603,791	982,726	-2.4
Medicaid					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	1,886,937	2,247,162	2,673,928	3,778,381	100.2
Partial Closure with Anglo Rates by 2020	1,886,937	1,962,701	1,980,960	2,767,646	46.7
Full Closure with Anglo Rates by 2020	1,886,937	1,678,223	1,288,006	1,756,922	-6.9
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	1,886,937	2,399,071	3,116,485	5,319,029	181.9
Partial Closure with Anglo Rates by 2020	1,886,937	2,092,951	2,294,481	3,872,478	105.2
Full Closure with Anglo Rates by 2020	1,886,937	1,786,829	1,472,475	2,425,909	28.6
Texas Youth Commission					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	8,603	9,607	10,195	11,771	36.8
Partial Closure with Anglo Rates by 2020	8,603	8,464	7,824	9,014	4.8
Full Closure with Anglo Rates by 2020	8,603	7,334	5,461	6,250	-27.4
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	8,603	10,634	11,821	17,118	99.0
Partial Closure with Anglo Rates by 2020	8,603	9,370	9,069	13,147	52.8
Full Closure with Anglo Rates by 2020	8,603	8,100	6,314	9,182	6.7

Table 10.2, Panel C continued

Assumption	Number 2000	2010	2020	2040	Percent Change 2000-2040
Prisons					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	151,868	174,798	196,700	234,257	54.3
Partial Closure with Anglo Rates by 2020	151,868	155,973	153,888	185,151	21.9
Full Closure with Anglo Rates by 2020	151,868	137,154	111,082	136,041	-10.4
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	151,868	189,627	234,764	340,723	124.4
Partial Closure with Anglo Rates by 2020	151,868	169,509	185,292	273,378	80.0
Full Closure with Anglo Rates by 2020	151,868	149,393	135,815	206,033	35.7
Panel D: Incidences of Diseases/Disorders					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	49,545,168	59,013,746	69,794,114	92,458,571	86.6
Partial Closure with Anglo Rates by 2020	49,545,168	60,030,515	72,190,352	95,720,309	93.2
Full Closure with Anglo Rates by 2020	49,545,168	61,047,300	74,586,540	98,982,050	99.8
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	49,545,168	62,480,914	79,680,429	129,495,255	161.4
Partial Closure with Anglo Rates by 2020	49,545,168	63,669,222	82,951,811	135,206,702	172.9
Full Closure with Anglo Rates by 2020	49,545,168	64,857,554	86,223,160	140,918,160	184.4
Panel E: Income, Expenditures, and Tax Revenues					
Aggregate Household Income					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	$ 402,503,341,200	$ 468,043,971,531	$ 539,562,854,307	$ 672,377,264,509	67.1
Partial Closure with Anglo Rates by 2020	402,503,341,200	489,933,408,754	597,763,220,653	764,734,250,023	90.0
Full Closure with Anglo Rates by 2020	402,503,341,200	511,822,845,978	655,963,587,000	857,091,235,537	112.9
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	$ 402,503,341,200	$ 494,255,893,207	$ 613,221,632,927	$ 927,818,287,513	130.5
Partial Closure with Anglo Rates by 2020	402,503,341,200	518,539,612,290	685,704,913,802	1,072,717,871,519	166.5
Full Closure with Anglo Rates by 2020	402,503,341,200	542,823,331,372	758,188,194,678	1,217,617,455,526	202.5

Table 10.2, Panel E continued

Assumption	Number				Percent Change 2000-2040
	2000	2010	2020	2040	
Average Household Income					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	$ 54,441	$ 53,074	$ 51,805	$ 49,380	-9.3
Partial Closure with Anglo Rates by 2020	54,441	55,556	57,393	56,163	3.2
Full Closure with Anglo Rates by 2020	54,441	58,038	62,981	62,946	15.6
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	$ 54,441	$ 52,639	$ 50,903	$ 47,883	-12.1
Partial Closure with Anglo Rates by 2020	54,441	55,225	56,920	55,361	1.7
Full Closure with Anglo Rates by 2020	54,441	57,811	62,937	62,839	15.4
Poverty - Family Households					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	598,325	783,058	983,798	1,425,135	138.2
Partial Closure with Anglo Rates by 2020	598,325	686,803	727,768	1,022,707	70.9
Full Closure with Anglo Rates by 2020	598,325	590,548	471,736	620,277	3.7
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	598,325	861,246	1,212,931	2,237,880	274.0
Partial Closure with Anglo Rates by 2020	598,325	753,298	887,115	1,583,468	164.7
Full Closure with Anglo Rates by 2020	598,325	645,349	561,301	929,053	55.3
Consumer Expenditures					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	$ 274,265,682,934	$ 322,267,535,000	$ 370,284,637,550	$ 458,666,100,348	67.2
Partial Closure with Anglo Rates by 2020	274,265,682,934	329,074,237,536	388,275,217,968	487,116,844,245	77.6
Full Closure with Anglo Rates by 2020	274,265,682,934	335,880,940,047	406,265,798,366	515,567,588,131	88.0
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	$ 274,265,682,934	$ 342,400,706,209	$ 428,221,040,201	$ 656,335,039,621	139.3
Partial Closure with Anglo Rates by 2020	274,265,682,934	349,855,104,173	450,215,951,889	699,780,790,340	155.1
Full Closure with Anglo Rates by 2020	274,265,682,934	357,309,502,115	472,210,863,578	743,226,541,048	171.0

Table 10.2, Panel E continued

Assumption	Number				Percent Change 2000-2040
	2000	2010	2020	2040	
Net Worth					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	$ 709,896,741,518	$ 806,133,276,607	$ 907,700,557,207	$ 1,077,091,260,797	51.7
Partial Closure with Anglo Rates by 2020	709,896,741,518	883,751,577,736	1,113,223,870,159	1,400,575,764,711	97.3
Full Closure with Anglo Rates by 2020	709,896,741,518	961,369,878,865	1,318,747,183,112	1,724,060,268,626	142.9
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	$ 709,896,741,518	$ 845,184,456,768	$ 1,015,411,866,157	$ 1,444,188,603,304	103.4
Partial Closure with Anglo Rates by 2020	709,896,741,518	931,110,438,628	1,270,372,270,620	1,948,817,656,463	174.5
Full Closure with Anglo Rates by 2020	709,896,741,518	1,017,036,420,487	1,525,332,675,084	2,453,446,709,622	245.6
Housing Expenditures					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	$ 48,866,260,784	$ 57,191,824,467	$ 65,714,783,340	$ 82,522,294,131	68.9
Partial Closure with Anglo Rates by 2020	48,866,260,784	58,017,605,196	67,862,898,811	85,875,618,509	75.7
Full Closure with Anglo Rates by 2020	48,866,260,784	58,843,385,925	70,011,014,281	89,228,942,886	82.6
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	$ 48,866,260,784	$ 61,103,625,451	$ 76,887,972,926	$ 120,027,942,571	145.6
Partial Closure with Anglo Rates by 2020	48,866,260,784	62,000,565,996	79,493,504,501	125,101,748,975	156.0
Full Closure with Anglo Rates by 2020	48,866,260,784	62,897,506,540	82,099,036,076	130,175,555,378	166.4
Total State Taxes					
Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)					
Base Projection	$ 29,510,942,468	$ 34,316,283,353	$ 39,559,940,776	$ 49,297,694,494	67.1
Partial Closure with Anglo Rates by 2020	29,510,942,468	35,921,184,101	43,827,104,487	56,069,170,404	90.0
Full Closure with Anglo Rates by 2020	29,510,942,468	37,526,084,867	48,094,268,221	62,840,646,325	112.9
Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)					
Base Projection	$ 29,510,942,468	$ 36,238,102,257	$ 44,960,492,173	$ 68,026,247,958	130.5
Partial Closure with Anglo Rates by 2020	29,510,942,468	38,018,548,119	50,274,857,781	78,650,068,479	166.5
Full Closure with Anglo Rates by 2020	29,510,942,468	39,798,994,050	55,589,223,426	89,273,889,064	202.5

Table 10.3

Number and Percent of Persons 25 Years of Age or Older in Texas by Level of Educational Attainment and Race/Ethnicity in 2000 and Projections to 2040 Assuming Alternative Population Projection Scenarios and 1990-2000 Trends in Educational Attainment Rates

Educational Attainment Level	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
All Scenarios										
2000										
Less than High School	957,552	12.7	332,414	24.0	1,726,690	50.7	90,520	21.0	3,107,176	24.3
High School	1,939,975	25.7	412,996	29.9	747,931	22.0	68,920	16.1	3,169,822	24.9
Some College and Associate	2,384,508	31.6	423,000	30.6	624,105	18.4	88,641	20.6	3,520,254	27.5
Bachelor and Above	2,268,766	30.0	214,275	15.5	303,894	8.9	181,993	42.3	2,968,928	23.3
Total	7,550,801	100.0	1,382,685	100.0	3,402,620	100.0	430,074	100.0	12,766,180	100.0
Panel A: Assuming Rates of Net Migration Equal to One-Half of 1990-2000 (0.5 Scenario)										
2010										
Less than High School	677,287	8.4	270,822	16.4	2,292,385	46.0	124,459	19.3	3,364,953	22.0
High School	1,907,930	23.8	499,407	30.1	1,160,158	23.2	88,309	13.7	3,655,804	23.8
Some College and Associate	2,653,534	33.0	569,670	34.4	994,603	20.0	116,610	18.1	4,334,417	28.3
Bachelor and Above	2,795,764	34.8	316,263	19.1	539,381	10.8	315,628	48.9	3,967,036	25.9
Total	8,034,515	100.0	1,656,162	100.0	4,986,527	100.0	645,006	100.0	15,322,210	100.0
2040										
Less than High School	187,571	2.2	99,360	4.3	3,766,440	32.1	203,600	13.4	4,256,971	17.6
High School	1,420,441	16.6	599,098	25.6	3,040,233	25.8	116,918	7.6	5,176,690	21.4
Some College and Associate	2,861,965	33.4	944,035	40.5	2,826,509	24.1	167,090	11.0	6,799,599	28.2
Bachelor and Above	4,094,444	47.8	689,913	29.6	2,117,574	18.0	1,036,192	68.0	7,938,123	32.8
Total	8,564,421	100.0	2,332,406	100.0	11,750,756	100.0	1,523,800	100.0	24,171,383	100.0

Table 10.3, continued

Educational Attainment Level	Anglo		Black		Hispanic		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Panel B: Assuming Rates of Net Migration Equal to 1990-2000 (1.0 Scenario)										
2010										
Less than High School	690,545	8.4	282,710	16.4	2,613,077	46.0	154,488	19.3	3,740,820	22.8
High School	1,945,279	23.8	521,330	30.1	1,322,457	23.2	109,615	13.7	3,898,681	23.8
Some College and Associate	2,705,479	33.0	594,677	34.4	1,133,743	20.0	144,747	18.1	4,578,646	27.9
Bachelor and Above	2,850,493	34.8	330,146	19.1	614,837	10.8	391,781	48.9	4,187,257	25.5
Total	8,191,796	100.0	1,728,863	100.0	5,684,114	100.0	800,631	100.0	16,405,404	100.0
2040										
Less than High School	202,278	2.2	120,392	4.3	6,276,216	32.1	471,407	13.4	7,070,293	20.1
High School	1,531,809	16.6	725,908	25.6	5,066,097	25.8	270,705	7.6	7,594,519	21.6
Some College and Associate	3,086,352	33.4	1,143,860	40.5	4,709,964	24.1	386,876	11.0	9,327,052	26.5
Bachelor and Above	4,415,464	47.8	835,946	29.6	3,528,622	18.0	2,399,148	68.0	11,179,180	31.8
Total	9,235,903	100.0	2,826,106	100.0	19,580,899	100.0	3,528,136	100.0	35,171,044	100.0

Table 10.4

Projected Aggregate Income, Consumer Expenditures, and Prison and Human Services Populations and Costs for the Population 25+ Years of Age in Texas under Alternative Assumptions of Educational Attainment and Alternative Population Projection Scenarios, 2000 and 2040

Economic or Service Factor	2000 Attainment Differentials	1990-2000 Trends in Differentials	Anglo Trends in Differentials Apply to all Groups
AGGREGATE INCOME			
2000	$ 251,003,110,398	$ 251,003,110,398	$ 251,003,110,398
2040 (0.5 Scenario)	437,058,033,773	536,717,799,250	644,944,464,061
2040 (1.0 Scenario)	621,420,399,115	764,801,856,645	938,439,061,623
CONSUMER EXPENDITURES			
2000	$ 210,437,031,544	$ 210,437,031,544	$ 210,437,031,544
2040 (0.5 Scenario)	370,648,281,960	440,693,835,879	516,721,798,842
2040 (1.0 Scenario)	528,409,337,699	629,290,664,927	751,866,155,896
PRISON			
Populations			
2000	126,515	126,515	126,515
2040 (0.5 Scenario)	245,605	158,301	99,673
2040 (1.0 Scenario)	341,068	227,969	134,539
Costs			
2000	$ 1,877,134,686	$ 1,877,134,686	$ 1,877,134,686
2040 (0.5 Scenario)	3,644,102,789	2,348,751,515	1,478,873,222
2040 (1.0 Scenario)	5,060,511,184	3,382,433,047	1,996,188,779
HUMAN SERVICES			
TANF			
Participants			
2000	122,772	122,772	122,772
2040 (0.5 Scenario)	306,503	228,081	120,309
2040 (1.0 Scenario)	469,976	356,127	179,697
Costs			
2000	$ 90,344,231	$ 90,344,231	$ 90,344,231
2040 (0.5 Scenario)	225,546,362	167,837,965	88,531,782
2040 (1.0 Scenario)	345,841,238	262,063,175	132,233,633

Table 10.4, continued

Economic or Service Factor	2000 Attainment Differentials	1990-2000 Trends in Differentials	Anglo Trends in Differentials Apply to all Groups
Food Stamps			
Participants			
2000	323,194	323,194	323,194
2040 (0.5 Scenario)	811,382	609,209	319,237
2040 (1.0 Scenario)	1,256,109	959,744	481,898
Costs			
2000	$ 51,245,641	$ 51,245,641	$ 51,245,641
2040 (0.5 Scenario)	128,652,731	96,596,180	50,618,221
2040 (1.0 Scenario)	199,168,643	152,177,008	76,409,746
Medicaid			
Participants			
2000	397,959	397,959	397,959
2040 (0.5 Scenario)	898,449	613,969	331,715
2040 (1.0 Scenario)	1,353,742	950,713	485,228
Costs			
2000	$ 999,143,721	$ 999,143,721	$ 999,143,721
2040 (0.5 Scenario)	2,255,708,951	1,541,473,551	832,826,900
2040 (1.0 Scenario)	3,398,799,426	2,386,926,609	1,218,247,382

Appendix A:

Comparing Race/Ethnicity between the 2000 Census and Earlier Censuses

Appendix A:

Comparing Race/Ethnicity between the 2000 Census and Earlier Censuses

Introduction

The 2000 Census provides the most complete data ever made available for examining the racial and ethnic diversity of the population of the United States. By allowing respondents to mark one or more racial categories on the census questionnaire, it allowed respondents for the first time in decennial census history to indicate multiple racial backgrounds. It thus provides an essential set of data for bench marking the racial and ethnic diversity of the U.S. population.

For those who wish to assess changes in racial/ethnic groups between 2000 and earlier censuses, the data present certain challenges, however. The difficulty lies in knowing how to combine 2000 race/ethnicity categories so that they are comparable to those used for earlier periods. The problem arises because the combinations of the six racial groups used in the 2000 Census result in 63 separate racial categories, and if these are divided into those of Hispanic and those not of Hispanic origin, there are 126 combinations of race/ethnicity. This is a substantially larger number of categories than the 10 racial/ethnic categories available from the 1990 Census. It is impossible to make the results of the 2000 racial/ethnic categories completely comparable to those for earlier censuses because the census did not ask respondents indicating membership in multiple racial groups in 2000 to indicate how they responded to the race question in earlier censuses. In attempting to compare race/ethnicity data from the 2000 Census to those for earlier periods, it is thus essential to realize that any comparisons to periods before 2000 will be approximations with greater or lesser degrees of comparability. Absolute comparability is not possible.

We believe, however, that it is possible in most areas in Texas to construct categories that are at least roughly comparable to those for earlier decades.

2000 Census Data on Race and Ethnicity for Texas

In the 2000 Census, data for the Texas population are distributed among the 63 racial categories (for Hispanics and non-Hispanics, a total of 126 categories). Table 1 shows data on the total number of persons in each of the 63 race categories for persons of Hispanic Origin and Not of Hispanic Origin for the State of Texas from the 2000 Census. Overall, an examination of these data for the total population show substantial concentration of the Texas population in a relatively few racial/ethnic groups, most of which are single race groups. Thus of the total population of Texas in 2000, 97.5 percent is accounted for by the six single race groups of White; Black; American Indian and Alaska Native; Asian; Native Hawaiian and Pacific Islander; and Some Other Race. The 15 categories of two-race combinations account for only 2.4 percent of the Texas population and the 42 categories involving three or more races account for only 0.1 percent of the population. Examined alternatively, although there are one or more persons in 62 of the 63 categories, there are 500 or fewer persons (0.02 percent of the population) in 36 of these categories and less than 10,000 persons (10,000 being equal to 0.05 percent of the population) in 51 categories. The Texas population is therefore substantially concentrated in a few racial groups.

Assumptions Underlying Allocation Alternatives

Our analyses for several years have examined four large mutually exclusive race/ethnicity groups--Anglos (non-Hispanic Whites), Blacks (non-Hispanic Blacks), Hispanics (of all races), and Others (non-Hispanic persons from all other racial categories, a majority of which consists of

Asians). Although this categorization results in a lack of detailed data for some groups, it has allowed for comparisons across time that are based on sufficiently large numbers of persons to allow meaningful comparisons to be made and provides totals across race and Hispanic Origin groups that equal the total population. In the analysis reported here, we attempt to maintain comparability with these categories. To do so it is necessary to make certain assumptions about how specific multi-race categories of persons should be allocated, and these assumptions are noted below. It is necessary to make specific allocation assumptions about:

1. the Hispanic population;
2. the population of non-Hispanic persons indicating three or more racial groups;
3. the population of non-Hispanic persons in single race groupings; and
4. the population of non-Hispanic persons in categories involving two racial groups.

Assumptions About the Hispanic Population

In our historical analyses, we have used Hispanics as a category such that all Hispanics, no matter what their race, were placed in the Hispanic group. This decision was based on the fact that Hispanics are relatively concentrated in just a few racial groups and most indicate Mexican or Mexican-American, Puerto Rican or Cuban origins. For example, in 1990, 57.2 percent of Hispanics were White, 41.1 percent were members of the Other racial group, 1.0 percent were Black, and about 0.3 percent were of American Indian heritage and 0.4 percent of Asian or Pacific Islander heritage. More than 90 percent were Mexican American, Puerto Rican, or Cuban.

In 2000, the patterns for persons of Hispanic Origin are similar to those in 1990. An examination of the Hispanic Origin subsection of Table 1 indicates that the three categories of White and Some Other Race, alone and in combination with each other, account for 97.7 percent

of all Hispanics. Only 0.7 percent indicate they are American Indian or Alaska Natives, 0.6 percent indicate that they are Black, 0.1 percent Asian, and 0.1 percent indicate that they are Native Hawaiian and Pacific Islander; that is 99.2 percent of all Hispanics are in these seven categories. Only 0.8 percent are in the remaining 56 categories. We therefore assume that Hispanics of all races can be used as a group in 2000 as they were in earlier censuses.

Assumptions about Non-Hispanic Populations Indicating Membership in Three or More Race Groups

Forty-two of the 63 racial groups involve persons who identify themselves as members of 3 or more racial/ethnic groups. However, in Texas only 0.093 percent of the non-Hispanic population (and, as noted above, only 0.09 percent of the total population) was in such groups. These groups are very diverse and cannot be easily allocated to any of the Hispanic, Anglo, or Black groups. In addition any attempt to allocate parts of these groups to the subcategories leads to extensive difficulties in using such data for other purposes. For example, if parts of a three-race subgroup are allocated to different race groups, then any data on other characteristics will require similar allocations that may be extremely difficult to actuate. Given the small size and diversity of these groups, we allocate persons in all of these three or more racial group categories of non-Hispanics to the Other category.

Assumptions About Single Race Groups of Non-Hispanics

The six single race groups included in the 2000 Census are: White, Black, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, and persons from Some Other Race. Consistent with 1990 we allocate these single race non-Hispanics to the four racial/ethnic groups we have used historically as follows: non-Hispanic Whites are allocated to the Anglo category; non-Hispanic Blacks to the Black category; and non-Hispanic persons of

American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, or Some Other Race to the Other category.

Assumptions About Non-Hispanic Populations Indicating Membership in Two Race Groups Only

To summarize, to this point, Hispanics have been considered as a single group, all persons with three or more racial group identities have been placed in the Other category and all of the single race categories allocated as noted above. All 63 racial categories of Hispanics and 6 single race and 42 three or more race groups of Hispanics have thus been allocated.

This leaves 15 categories of two-race combinations of non-Hispanics to be allocated to one of the four groups (Anglo, Black, Hispanic, or Other). These 15 categories include:

(1) White and Some Other Race;

(2) Black and Some Other Race;

(3) American Indian and Alaskan Native and Some Other Race;

(4) Asian and Some Other Race;

(5) Native Hawaiian and Other Pacific Islander and Some Other Race;

(6) White/Black;

(7) White/American Indian or Alaska Native;

(8) White/Asian;

(9) White/Native Hawaiian or Other Pacific Islander;

(10) Black/American Indian or Alaska Native;

(11) Black/Asian;

(12) Black/Native Hawaiian or Other Pacific Islander;

(13) American Indian and Alaska Native and Asian;

(14) American Indian and Alaska Native and Native Hawaiian and Other Pacific Islander; and

(15) Asian and Native Hawaiian and Other Pacific Islander.

Although these 15 categories include only 2.4 percent of Texas residents, we believe that it is the allocation of these groups that represent the major challenges for those wishing to compare 2000 race/ethnicity data to those for earlier periods. As an illustration of the problem, if we place all of these persons in the Other category and separate those identifiable as "American Indian or Alaska Native" or "Asian, Native Hawaiian or Pacific Islander," the population growth of persons in the remainder of the category between 1990 and 2000 is 1,042 percent. We believe that this very high percentage growth rate is likely to indicate changes in categorizations rather than a true numerical increase. For this analysis, in contrast, we allocated all non-Hispanic persons in a combination of one of the five major race groups with some other race (categories 1-5 above) to the major race group (White, Black, etc.) and assumed that within two-race categories that include Whites or Blacks, White and Black are dominant in terms of identification and that Black identification is dominant in the White/Black combination. Persons in two-race combinations involving component groups both of which are in the Other category were placed in that category. The results of this analysis are shown in Appendix Table 2. We believe that this allocation procedure provides values that are most reasonable relative to population change in the Anglo, Black, and Hispanic groups and within the Other group.

Conclusion

It is important to again acknowledge that the assumptions made in this analysis are only some of numerous alternative sets of assumptions that might be made. We believe those employed here are reasonable and produce a measured set of values with high levels of

comparability to data for past periods. However, the advantage of the detailed data provided in the 2000 Census is that it allows users to examine numerous alternatives representing different assumptions about racial identification. Therefore, users who disagree with the assumptions made here have, in the data provided in Appendix Table 1, the information necessary to examine numerous other sets of alternatives for allocating racial groups.

For a more detailed description of the assumptions made for this analysis and of three alternative assumptions examined, please see the Texas State Data Center website (txsdc.tamu.edu) and go to the redistricting data idem of "Comparing Race/Ethnicity between the 2000 Census and Earlier Censuses."

Table A-1

Persons, Percent of Persons, and Cumulative Percent of Persons in Racial Categories Used in the 2000 Census for the Total, non-Hispanic, and Hispanic Population for the State of Texas and Counties in Texas

Racial Categories	Total Population			Non-Hispanic Population			Hispanic Population		
	Number	Percent	Cumulative Percent	Number	Percent	Cumulative Percent	Number	Percent	Cumulative Percent
White Alone	14,799,505	70.975	70.975	10,933,313	77.092	77.092	3,866,192	57.967	57.967
Black or African American Alone	2,404,566	11.532	82.506	2,364,255	16.671	93.763	40,311	0.604	58.571
American Indian or Alaska Native (AIAN)	118,362	0.568	83.074	68,859	0.486	94.248	49,503	0.742	59.313
Asian Alone	562,319	2.697	85.771	554,445	3.909	98.158	7,874	0.118	59.431
Native Hawaiian or Pacific Islander (NHPI)	14,434	0.069	85.840	10,757	0.076	98.234	3,677	0.055	59.487
Some Other Race (SOR)	2,438,001	11.692	97.532	19,958	0.141	98.374	2,418,043	36.254	95.741
White and Black	40,094	0.192	97.724	34,828	0.246	98.620	5,266	0.079	95.820
White and AIAN	67,407	0.323	98.047	57,684	0.407	99.027	9,723	0.146	95.966
White and Asian	44,486	0.213	98.261	40,487	0.285	99.312	3,999	0.060	96.026
White and NHPI	3,498	0.017	98.278	2,879	0.020	99.332	619	0.009	96.035
White and SOR	267,739	1.284	99.562	40,353	0.285	99.617	227,386	3.409	99.444
Black and AIAN	7,563	0.036	99.598	6,848	0.048	99.665	715	0.011	99.455
Black and Asian	5,348	0.026	99.624	4,931	0.035	99.700	417	0.006	99.461
Black and NHPI	1,137	0.005	99.629	1,046	0.007	99.707	91	0.001	99.462
Black and SOR	23,062	0.111	99.740	9,745	0.069	99.776	13,317	0.200	99.662
AIAN and Asian	2,847	0.014	99.753	2,104	0.015	99.791	743	0.011	99.673
AIAN and NHPI	228	0.001	99.754	129	0.001	99.792	99	0.001	99.675
AIAN and SOR	8,579	0.041	99.795	1,346	0.009	99.801	7,233	0.108	99.783
Asian and NHPI	3,418	0.016	99.812	3,196	0.023	99.824	222	0.003	99.787
Asian and SOR	17,067	0.082	99.894	11,436	0.081	99.904	5,631	0.084	99.871
NHPI and SOR	2,499	0.012	99.906	423	0.003	99.907	2,076	0.031	99.902
White, Black, and AIAN	4,446	0.021	99.927	3,516	0.025	99.932	930	0.014	99.916
White, Black, and Asian	1,007	0.005	99.932	852	0.006	99.938	155	0.002	99.918
White, Black, and NHPI	116	0.001	99.932	93	0.001	99.939	23	0.000	99.919
White, Black, and SOR	2,551	0.012	99.945	1,556	0.011	99.950	995	0.015	99.934
White, AIAN, and Asian	992	0.005	99.949	738	0.005	99.955	254	0.004	99.937
White, AIAN, and NHPI	137	0.001	99.950	100	0.001	99.956	37	0.001	99.938
White, AIAN, and SOR	2,457	0.012	99.962	1,079	0.008	99.963	1,378	0.021	99.959

Table A-1, continued

Racial Categories	Total Population			Non-Hispanic Population			Hispanic Population		
	Number	Percent	Cumulative Percent	Number	Percent	Cumulative Percent	Number	Percent	Cumulative Percent
White, Asian, and NHPI	1,462	0.007	99.969	1,282	0.009	99.972	180	0.003	99.961
White, Asian, and SOR	2,207	0.011	99.979	1,162	0.008	99.981	1,045	0.016	99.977
White, NHPI, and SOR	378	0.002	99.981	109	0.001	99.981	269	0.004	99.981
Black, AIAN, and Asian	215	0.001	99.982	182	0.001	99.983	33	0.000	99.982
Black, AIAN, and NHPI	28	0.000	99.982	22	0.000	99.983	6	0.000	99.982
Black, AIAN, and SOR	355	0.002	99.984	224	0.002	99.984	131	0.002	99.984
Black, Asian, and NHPI	297	0.001	99.986	275	0.002	99.986	22	0.000	99.984
Black, Asian, and SOR	415	0.002	99.988	306	0.002	99.988	109	0.002	99.986
Black, NHPI, and SOR	91	0.000	99.988	57	0.000	99.989	34	0.001	99.986
AIAN, Asian, and NHPI	73	0.000	99.988	51	0.000	99.989	22	0.000	99.986
AIAN, Asian, and SOR	144	0.001	99.989	25	0.000	99.989	119	0.002	99.988
AIAN, NHPI, and SOR	40	0.000	99.989	5	0.000	99.989	35	0.001	99.989
Asian, NHPI, and SOR	153	0.001	99.990	78	0.001	99.990	75	0.001	99.990
White, Black, AIAN, and Asian	500	0.002	99.992	396	0.003	99.993	104	0.002	99.991
White, Black, AIAN, and NHPI	33	0.000	99.992	27	0.000	99.993	6	0.000	99.991
White, Black, AIAN, and SOR	274	0.001	99.994	123	0.001	99.994	151	0.002	99.994
White, Black, Asian, and NHPI	93	0.000	99.994	76	0.001	99.994	17	0.000	99.994
White, Black, Asian, and SOR	63	0.000	99.995	33	0.000	99.995	30	0.000	99.994
White, Black, NHPI, and SOR	18	0.000	99.995	10	0.000	99.995	8	0.000	99.995
White, AIAN, Asian, and NHPI	132	0.001	99.995	101	0.001	99.995	31	0.000	99.995
White, AIAN, Asian, and SOR	71	0.000	99.996	17	0.000	99.996	54	0.001	99.996
White, AIAN, NHPI, and SOR	10	0.000	99.996	5	0.000	99.996	5	0.000	99.996
White, Asian, NHPI, and SOR	92	0.000	99.996	49	0.000	99.996	43	0.001	99.997
Black, AIAN, Asian, and NHPI	38	0.000	99.996	24	0.000	99.996	14	0.000	99.997
Black, AIAN, Asian, and SOR	16	0.000	99.996	10	0.000	99.996	6	0.000	99.997
Black, AIAN, NHPI, and SOR	19	0.000	99.996	13	0.000	99.996	6	0.000	99.997
Black, Asian, NHPI, and SOR	90	0.000	99.997	68	0.000	99.997	22	0.000	99.997
AIAN, Asian, NHPI, and SOR	9	0.000	99.997	3	0.000	99.997	6	0.000	99.997
White, Black, AIAN, Asian, and NHPI	453	0.002	99.999	341	0.002	99.999	112	0.002	99.999
White, Black, AIAN, Asian, and SOR	68	0.000	99.999	48	0.000	99.999	20	0.000	99.999

Table A-1, continued

Racial Categories	Total Population			Non-Hispanic Population			Hispanic Population		
	Number	Percent	Cumulative Percent	Number	Percent	Cumulative Percent	Number	Percent	Cumulative Percent
White, Black, AIAN, NHPI and SOR	0	0.000	99.999	0	0.000	99.999	0	0.000	99.999
White, Black, Asian, NHPI, and SOR	15	0.000	100.000	7	0.000	100.000	8	0.000	99.999
White, AIAN, Asian, NHPI, and SOR	17	0.000	100.000	15	0.000	100.000	2	0.000	100.000
Black, AIAN, Asian, NHPI, and SOR	20	0.000	100.000	16	0.000	100.000	4	0.000	100.000
White, Black, AIAN, Asian, NHPI, and SOR	66	0.000	100.000	38	0.000	100.000	28	0.000	100.000
Total	20,851,820	100.000	100.000	14,182,154	100.000	100.000	6,669,666	100.000	100.000

Table A-2

Total 1990 Population and Population by Race/Ethnicity in Texas and Allocation for 2000, Numerical and Percent Population Change 1990-2000, and Proportion of the Population by Race/Ethnicity for 1990 and 2000

Race/Ethnicity	Population		Population Change		Proportion of Population	
	1990	2000	Numerical	Percent	1990	2000
State of Texas						
Anglo	10,291,680	11,074,716	783,036	7.61	60.59	53.11
Black	1,976,360	2,421,653	445,293	22.53	11.63	11.61
Hispanic	4,339,905	6,669,666	2,329,761	53.68	25.55	31.99
Other	378,565	685,785	307,220	81.15	2.23	3.29
American Indian or Alaska Native	52,803	70,205	17,402	32.96	0.31	0.34
Asian, Native Hawaiian or Pacific Islander	303,825	577,061	273,236	89.93	1.79	2.77
Remaining Multi-Racial and Some Other Race	21,937	38,519	16,582	75.59	0.13	0.18
Remaining Multi-Racial	—	18,561	—	—	—	0.08
Some Other Race	21,937	19,958	-1,979	-9.02	0.13	0.10
Total	16,986,510	20,851,820	3,865,310	22.76	100.00	100.00

Appendix B:

Data Sources and Data Adjustment Procedures

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Data Sources and Data Adjustment Procedures

Chapter and Topic	*Source*
Chapters 1- 3	
Population and Household	The population and household data were derived from a variety of U.S. Census Bureau data including the 2000 Summary File 3, the Census of Population and Housing for various years, and the 2000 Redistricting data. Projections were based on the 2000 Redistricting data and the 2000 Summary File 1 Census data and were derived from the Texas Population Estimates and Projections Program.
Chapter 4:	
Income Data	Summary File 3 from the U.S. Census Bureau's 2000 Census, provided income means, medians, per capita, aggregates, values by income categories, and income by various population characteristics. Data were also obtained for selected income characteristics from the U.S. Census Bureau's *Current Population Survey* for the years 1999-2001. All income data provided in the 2000 Census are for 1999.
Poverty Data	Summary File 3 from the U.S. Census Bureau's 2000 Census, provided values on population below the poverty level in 1999.
State Tax Data	The Texas Comptroller of Public Accounts was the source for total tax collections, per capita collections, expenditures by function, and state revenues. These data include values derived by the Comptroller's Office from the agency's own data along with population and personal income values from the U.S. Bureau of the Census and the Bureau of Economic Analysis.

Current vs. Constant Dollars	Data reported as "Current Dollars" are the reported income values for the year the data were collected. Historic data for income are not directly comparable to more recent incomes because of inflation; therefore, a factor of 1.297861 was used to adjust 1989 dollars to 1999 constant values. The Bureau of Labor Statistics released this revised CPI-U-RS adjustment factor in May 2002.
Income Projections	Baseline rates for income categories were obtained from the age-, sex-, and race/ethnicity-specific household income data from Summary File 3 of the 2000 Census. These rates were applied to the Texas household projections to obtain projections of future income categories, aggregate income levels, and average household incomes by age, sex, and race/ethnicity.
Tax Revenue Projections	Baseline tax payment rates by income category were obtained from the Texas Comptroller of Public Accounts' publication *Tax Exemptions and Tax Incidence, 2001*. First, the tax payment rates by income decile were derived from the Comptroller report. Next, the projected household income data were sorted into deciles, and the aggregate income per decile was calculated. Finally, the tax payment rates by decile were multiplied by the aggregate income per decile to obtain the estimates of taxes.
Chapter 5:	
Consumer Expenditures	National-level data from the Bureau of Labor Statistics' *2000 Consumer Expenditure Survey* were used to compute baseline household expenditures by age, race/ethnicity, tenure, and income category. These expenditure data were then applied to the projections of Texas households by age, race/ethnicity, tenure, and income level to derive the expenditure projections.

Asset Accumulation	National level data from the U.S. Census Bureau's Survey of Income and Program Participation (see, for example, Davern and Fisher 2001) were used to develop baseline estimates of net worth and assets. Separate baselines were developed by age and by race/ethnicity. For race/ethnicity, the Anglo rates were assumed to apply to the Other category. The baseline net worth and asset data were applied to the projections of Texas households by age and by race/ethnicity.
Housing Demand by Tenure	Data from the Census Bureau's 2000 Summary File 3 were used to develop age-, race/ethnicity-, and tenure-specific rates of housing occupancy for Texas households. These rates were applied to the projections of Texas households by age, race/ethnicity, and tenure to derive the projections of housing demand.
Housing Expenditures	National-level data on housing expenditures from the Bureau of Labor Statistics' *2000 Consumer Expenditure Survey* were used to compute baseline expenditures by age, race/ethnicity, and tenure. These expenditures were applied to the projections of Texas households by age, race/ethnicity, and tenure to derive the projections of housing expenditures. All expenditures are presented in constant year 2000 CPI-U-RS dollars.

Health and Health Care

For incidences of diseases and disorders, baseline rates by age, sex, and race/ethnicity were obtained from the National Center for Health Statistics' *2000 National Health Interview Survey* (NHIS). The rates for conditions associated with disability were also obtained from the 2000 NHIS. The baseline data for health personnel were obtained from Texas Department of Health's Health Professions Resource Center and the U.S. Department of Health and Human Services' *State Health Workforce Profiles: Texas, 2000.* These data were available by race/ethnicity. Physician contacts and costs were derived from the National Center for Health Statistics' publication *Health, United States, 2001*. These data were available by age and sex. Days of hospital care and related costs were derived from *Health, United States, 2001* which provided data by age. Nursing home residents were derived from the National Center for Health Statistics' *National Nursing Home Survey, 1999.* The resident data were available by age, sex, and race/ethnicity. Nursing home costs were derived from the Texas Health and Human Services Commission's rate analysis for long-term care services. Separate daily rates were available for Medicaid and non-Medicaid residents. The baseline rates described above were then applied to the appropriate combinations of age-, sex-, and race/ethnicity-specific projections of the Texas population. Where applicable, costs are expressed in constant year 2000 CPI-U-RS dollars.

Chapter 6:

Labor Force Projections	Baseline labor force participation rates were computed using the Census Bureau's 2000 Summary File 3 and 1990 STF-3 for Texas. The 2000 data were used to obtain crude participation rates and the 1990 data were used to develop age-, sex-, and race/ethnicity-specific rates for the 2000 labor force which were adjusted to equal 2000 Census values for the computation of 2000 participation rates. The derived participation rates were used with the age-, sex-, and race/ethnicity-specific Texas population projections to obtain projections of the labor force.
Education, Occupation, and Income	The baselines for the projections of the labor force's education and occupations were developed from the Census Bureau's annual March demographic survey of the *Current Population Survey* for the years 1999-2001. These data were then used to project the age-, sex-, and race/ethnicity-specific education and occupation characteristics of the Texas labor force. Salary and wage data for the labor force were derived from the Census Bureau's 2000 Summary File 3.

Labor Force Training Programs	Detailed demographic data for 26 employment-related Texas programs were provided for 1999-2001 by the Texas Workforce Commission. These 26 programs were combined into the following six groups: Title III and Title IV (veterans and defense closure-related); WIA Adult (adults receiving training under the Workforce Investment Act); WIA Dislocated Workers (for laid-off and terminated workers); WIA Youth (for low-income individuals 14-21); WIA Other (primarily for enhancing worker skills); and Welfare-related (job training related to the receipt of TANF or Food Stamp benefits). Baseline age-, sex-, and race/ethnicity-specific participation rates by program group were developed, and these were used with the Texas population projections to derive projections of future labor force training participants by age, sex, race/ethnicity, and program type. Costs were developed from various Texas Workforce Commission publications and reports (Texas Legislative Budget Board 2001; Texas Workforce Commission 2001a, 2001b). Costs were estimated on a per-recipient basis by program. Costs are expressed in constant year 2000 CPI-U-RS dollars.
Chapter 7:	
Public Education Enrollment Projections	Baseline public school enrollment rates for Texas residents by age, sex, and race/ethnicity were developed using electronic data provided by the Texas Education Agency (elementary and secondary) and the Texas Higher Education Coordinating Board (community college and university). The college and university enrollment rates do not include health-related institutions or out-of-state enrollees. These baseline year 2000 rates were then applied to the Texas population projections to derive future enrollment by age, sex, and race/ethnicity in the state's public education system.

Program Enrollment Projections	Enrollment rates in elementary and secondary special programs were estimated from data provided by the Texas Education Agency. The programs included: Bilingual/ESL; economically disadvantaged; gifted and talented; immigrants; Limited English Proficiency; special education; Title I; and career and technology education. Enrollees can participate in more than one special program, and the data report the total number of program participants. The data were used to generate baseline participation rates by age, sex, race/ethnicity, and program type. Baseline rates were applied to the Texas population projections to derive projections of the future numbers of participants by age, sex, race/ethnicity, and program type.

Financial Need	Rates for the unmet financial need of college and university students were derived from several sources. First, the household income available to Texas higher education students were estimated using data developed from an earlier study on disparity among first-time enrollees in Texas institutions of higher learning (Murdock et al. 1998). Data on income distribution by race/ethnicity were then applied to the expected family contribution formula (U.S. Department of Education 2000) to determine the numbers of students whose financial needs exceeded their available financial resources. To quantify the amount of financial need, two files from the Texas Higher Education Coordinating Board were utilized. These were: *Financial Assistance by Income Group* (the number of students by income class that qualify for financial assistance); and the *Financial Aid Data Base Program File* (the total amounts of assistance by type and by institution). Together, these two files provided a means for estimating the dollar amounts of assistance by household income level. The files also provided a means to distinguish total assistance and Texas-provided assistance. Final dollar amounts of assistance were developed by estimating the assistance by enrollee by income group. The numbers of students and costs of assistance were applied to the income levels of students by age, sex, and race/ethnicity to derive the baseline rates. Baseline rates were used with the Texas population projections to obtain projections of the numbers of students with unmet financial need and the amounts of financial assistance.
Cost Data	Per-student costs for elementary and secondary students were obtained from various editions of the Texas Education Agency's annual *Texas Public School Statistics: Pocket Edition*. Per student costs for colleges and universities were obtained from various editions of the Texas Higher Education Coordinating Board's annual publication *Statistical Report.* Cost data for the elementary and secondary special programs were obtained from the Texas Education Agency publication *2001 State Academic Excellence Indicator System Report.*

Chapter 8:

Projections of Human Service Demand	Data for AFDC/TANF, Food Stamp, and Medicaid participation rates were calculated from monthly client files provided by the Texas Department of Human Services. April files for 1999, 2000, and 2001 were used to derive average participation rates by age, sex, and race/ethnicity. The rates are based on active cases that receive benefits. These rates were then applied to the population projections to obtain the projected numbers of participants in each of the three human service programs.
Cost Data	Total and State costs per recipient were calculated for 2000. The primary source for Federal expenditures was the Consolidated Federal Funds Report, which is published on an annual basis by the U.S. Census Bureau. The Consolidated Federal Funds Report was also used to determine the State fund matching requirements for the Food Stamp Program. The State's TANF share was obtained from the *4th Quarter ACF-196 Report, FY 2000* which is published by the U.S. Department of Health and Human Services. The State's Medicaid share was calculated by applying the Medicaid federal matching percentage to the federal Medicaid funds. The derived costs per recipient were used with the projections of recipients to estimate the future costs of the human service programs. All projected costs are constant year 2000 CPI-U-RS dollars.

Chapter 9:

TYC and Prison Populations Projections	The baseline participation rates for juvenile offenders were based on 1999, 2000, and 2001 data provided by the Texas Youth Commission. Adult prison participation rates were calculated from data on the 2000 prison population provided by the Texas Department of Criminal Justice. All of these data were based on the on-hand August 31 populations. The data provided age-, sex-, and race/ethnicity-specific demographic information on the juvenile and adult populations which were used to create baseline participation rates. The baseline rates were applied to the population projections to obtain the projected number of juvenile and adult offenders by age, sex, and race/ethnicity. The juvenile projections include all participants in TYC-based programs, while the adult projections are only for institutionalized participants.
Cost Data	Daily costs for juvenile and adult offenders were obtained from the Texas Criminal Justice Policy Council's 2001 publication *Limes to Limes: Comparing the Operational Costs of Juvenile and Adult Correctional Programs in Texas*. The daily costs were converted to annual costs and applied to the projections of juvenile and adult offenders to obtain estimates of the future costs for the state's correctional system. All costs are constant year 2000 CPI-U-RS dollars.

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