

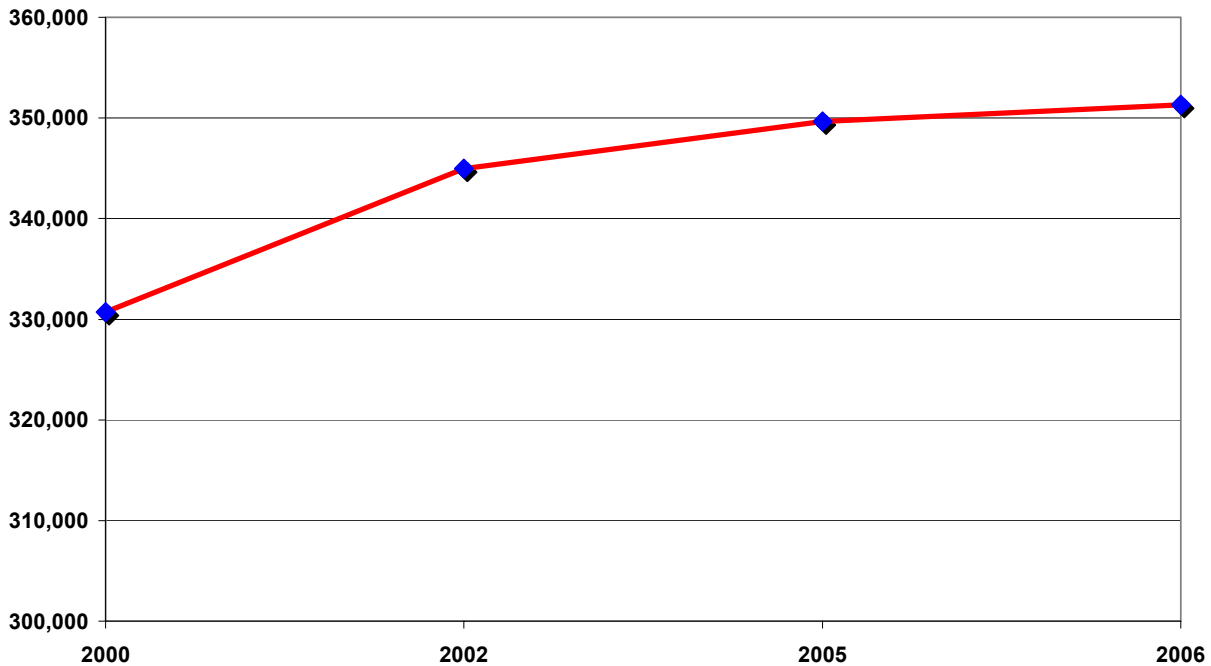
Executive Summary

Introduction

To better portray the situation in the Central Texas labor shed, this report first presents population growth. The Chart below shows changes in population back to 2000 for Bell, Coryell, and Lampasas Counties. As shown in the Chart, growth has been consistent. From 2000 to 2006, the Region's growth rate totaled 6.2%.

**Population Growth in Central Texas Region
2000-2006**

Source: Texas
Comptroller



Executive Summary

The analysis of the Central Texas labor force leads to several conclusions: the area has a highly skilled and very well-educated labor pool; the majority of unemployed will work for under \$20 per hour; and has a good supply of available part-time and shift labor. The rationale for this conclusion is discussed throughout the study.

The data collected in the surveys displays many characteristics of the work force (defined as anyone willing and able to work; and between the ages of 16 and 75). The following percentages used in the summary reflect the percent of respondents for the Central Texas labor shed (n=2073).

Central Texas Workforce Profile

Employment

- ◆ Total available Workforce (15.5%)
 - ◆ Unemployment (4.2%)¹
 - ◆ Unemployed as a result of personal choice (11.3%)²
- ◆ Part-time labor availability (48%)
- ◆ Underemployment
 - ◆ Education attained (14.27 years)
 - ◆ Education required (13.36 years)

Demographic Profile of the typical employee

- ◆ Average age (47.8 years)
- ◆ Caucasian (69%), Black (15%), and Hispanic (9%)
- ◆ Average Annual Household Income (\$55,340)

Workforce Capabilities

Education

- ◆ High School or some College (51%)
- ◆ Associate degree (14%)
- ◆ Bachelor degree and/or higher (32%)
- ◆ Average years of school completed
 - ◆ Central Texas (14.4 years)

Skills

- ◆ Basic Computer (58%)
- ◆ Clerical (41%)
- ◆ Executive/Professional (28%)
- ◆ Machine Operation with Computer (21%)
- ◆ Advanced Computer (17%)
- ◆ Medical/Healthcare (17%)

Foreign Language

- ◆ Total of those surveyed (26%)

Job Tenure

- ◆ Average time with present company (7.3 years)

¹ This number includes laborers that are unemployed due to lack of opportunity.

² In general, this percentage represents the number of respondents that are currently not working as a result of personal choice, but are willing/able/available for work under opportune circumstances.

Survey Results and Analysis

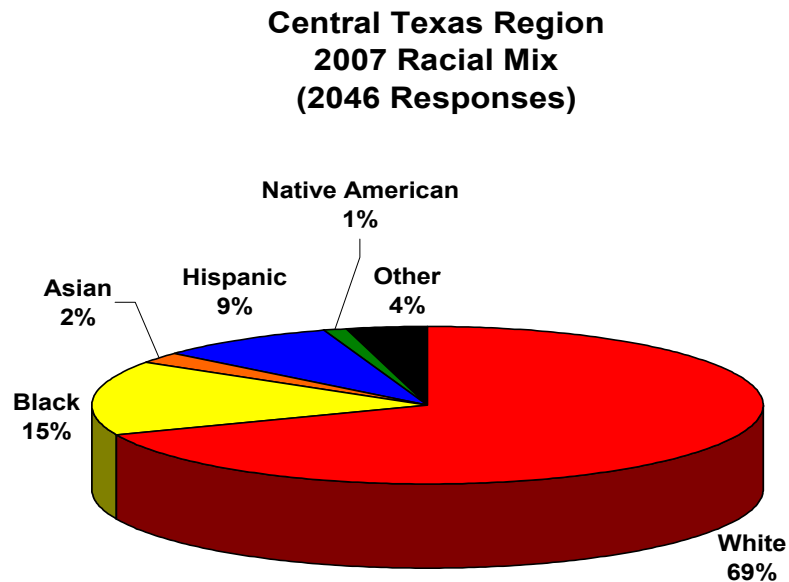
Labor Pool Characteristics

Demographics

The following analysis will explore the specific results of the survey, beginning with three demographic factors: age, race, and income. The survey area is defined as all 2073 interviews within the Central Texas Region. Throughout this analysis, when practical, we will compare data from our 2004 labor study of Central Texas.

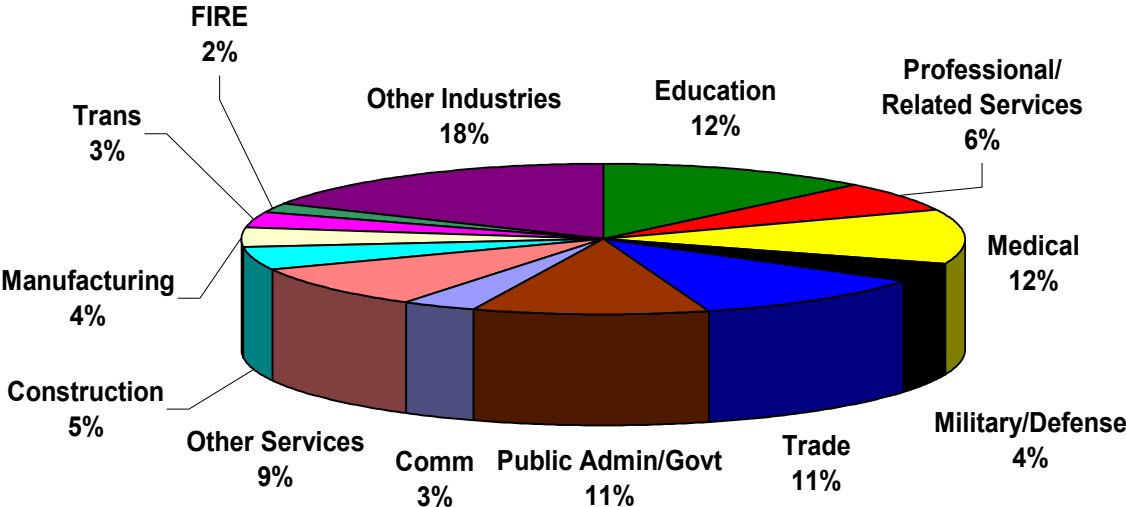
Ethnic diversity of the workforce in the Central Texas labor shed, which is predominantly Caucasian, is shown in Chart 1. Unlike the US Census Bureau procedure, the Central Texas survey includes Hispanics as a race, allowing for a true picture of ethnic/racial mix. The Central Texas Region has an incredibly ethnically and racially diverse labor force.

Chart 1



As shown in the Chart below, employment in the area centers around several primary industries: education, other industries, trade, and public administration/government.³

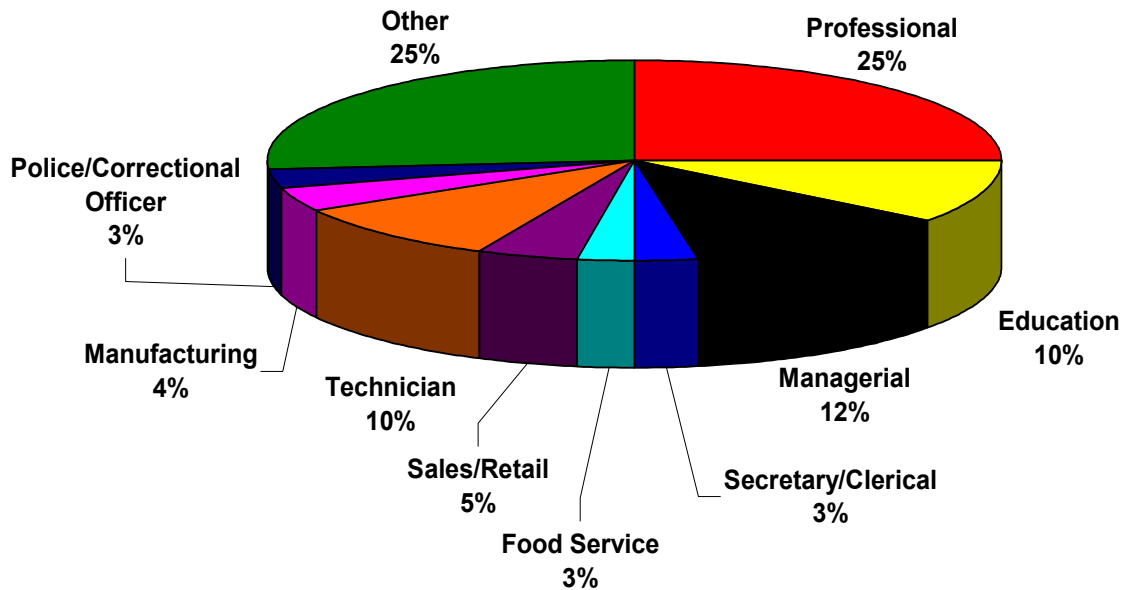
**Central Texas Region
2007 Industry Employment
(1329 Responses)**



³ Other industries include: home-based businesses, high tech/technology, criminal justice, other public utilities, and other non-classifiable industry segments. Other Services are business and repair, personal, and entertainment/recreational services.

Occupation, another valuable set of data, is shown below. Professional, managerial, and other account for the largest number of respondents. Occupational categories are detailed in the survey analysis to allow a more complete picture of the labor force.⁴

**Central Texas Region
2007 Occupational Distribution
(1321 Responses)**



Finally, the study found that Central Texas respondents are employed in a variety of counties. Most employed people that live in Central Texas work in Bell County (69.8%). Coryell County draws a significant number of area residents (16.9%). Other employment locations for Central Texas include: Lampasas County (7.3%), McLennan County (1.4%), and Other (1.4%).

⁴ Other occupations include: public administration, homemaker, non-classifiable, and food service.

As shown in Chart 2a, the largest segment of 2007 workers falls into the 35 to 54 year old group (48%), with significant numbers also between 55 and 64 years of age (19%). Predictably, the Central Texas labor shed has aged since 2004, with average age increasing from 40.3 years in 2004 to 47.8 years in 2006. Chart 2b shows the number of workers under 24 years of age has drastically dropped from 17% of the labor force in 2004 to only 4% of the labor force in 2007. The Region witnessed a corresponding increase in older workers with the percent of folks over 65 years of age doubling in just a few years.

Chart 2a

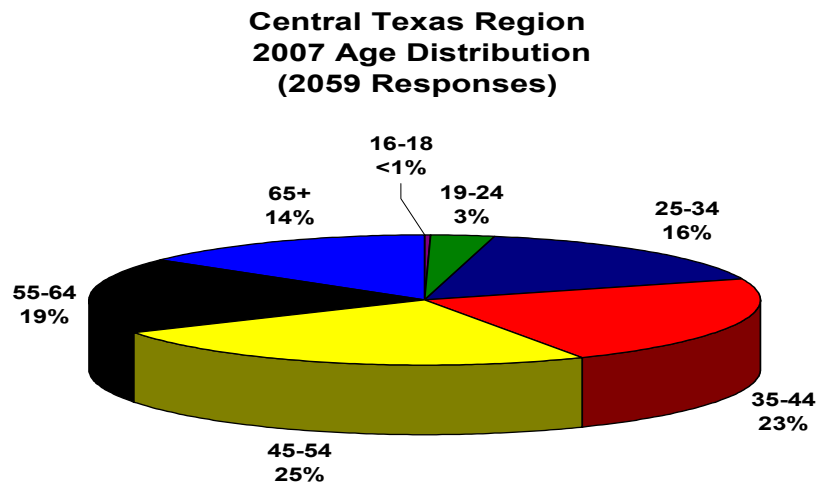
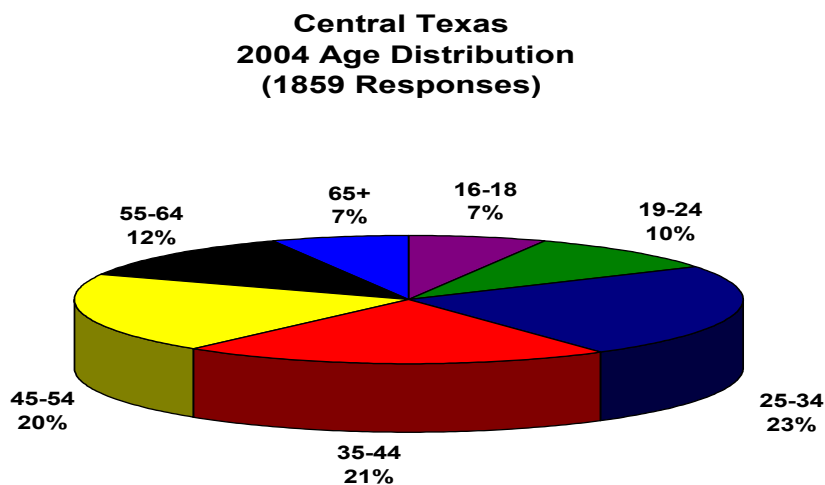


Chart 2b



Annual household income data shows a large high-income workforce, and very few low-income homes. The majority of workers, as shown in Chart 3a, earn over \$35,000 (70%). The percent of households with income under \$25,000 decreased from 24% of homes in 2004 to only 17% in 2007. Average 2007 household income for the Central Texas labor shed totals \$55,340. Average household income has grown 18% since 2004 when average income totaled \$46,766.

Chart 3a

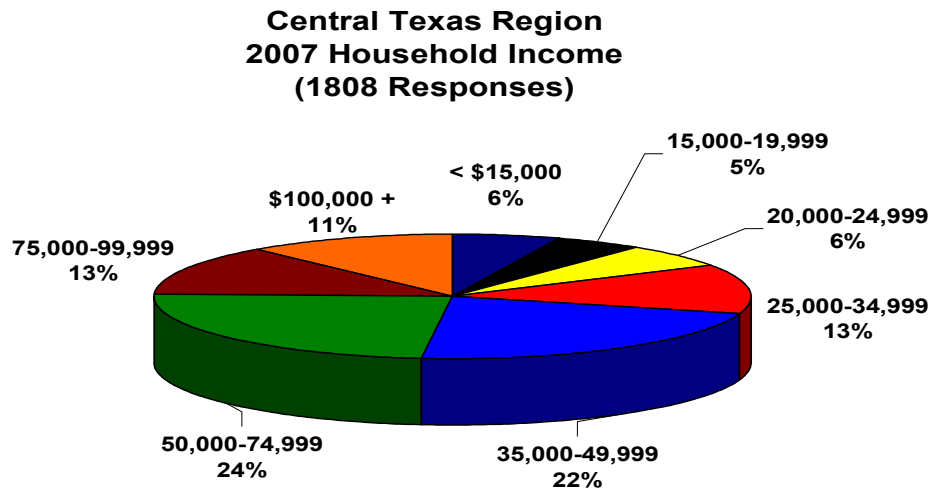
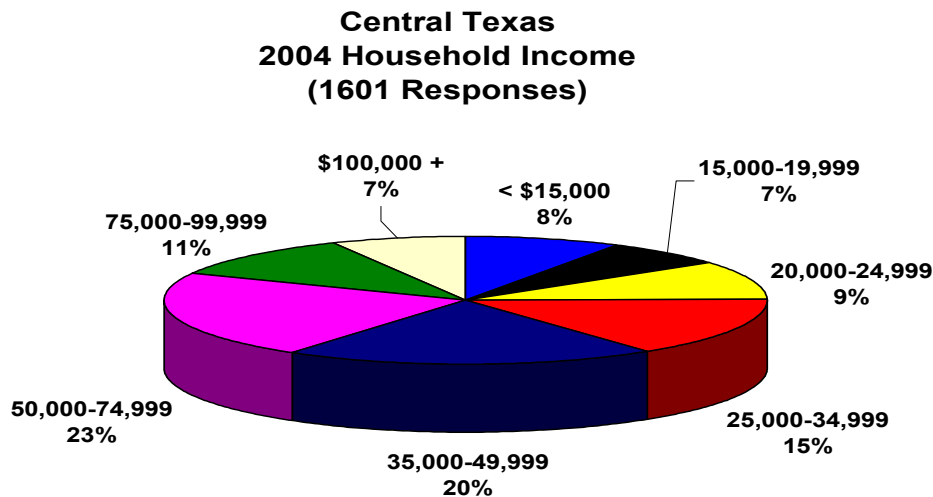


Chart 3b



Workforce Capabilities

Available data allows a description of labor force capabilities through educational attainment, skill levels, foreign language skills, job tenure, industry employment, and occupational categories. The goal of this section is to describe the workforce in terms of competitive advantage.

Education

Education levels are displayed in Chart 4a. A large number of respondents in the Central Texas labor shed have a high school diploma and/or some college (51%). Additionally, a significant portion of workers in the Central Texas labor shed has attained a bachelor degree or higher education (32%).

Chart 4a

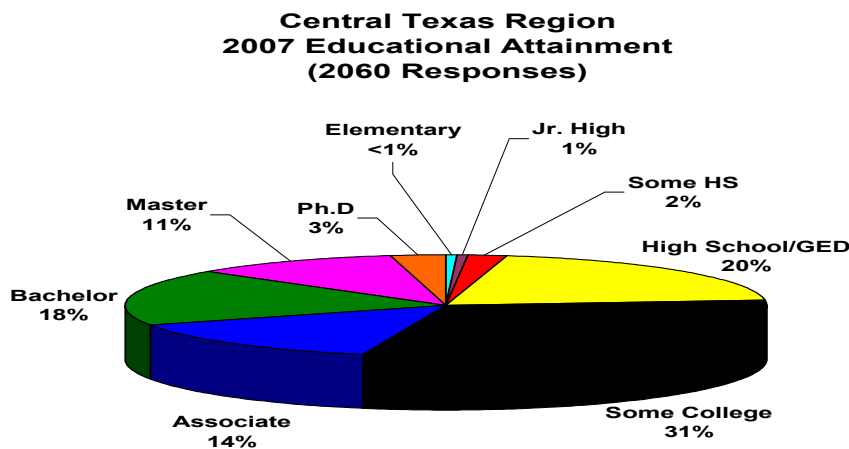
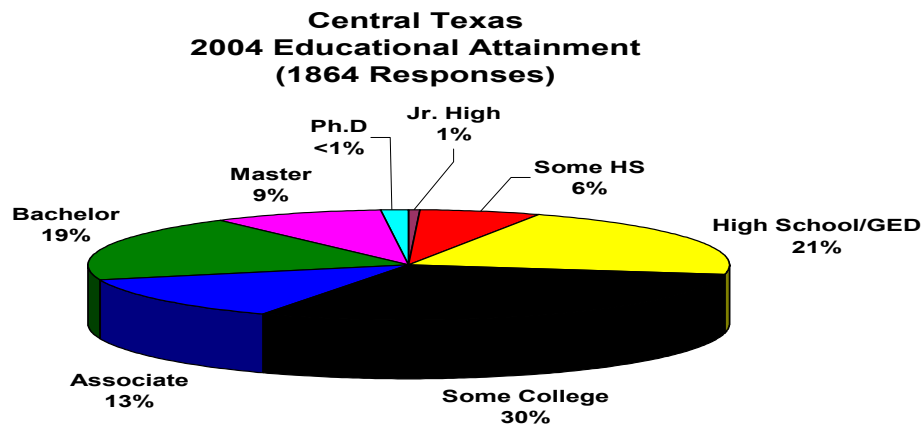


Chart 4b



The average years of education completed also give an overall view of labor force capabilities. For the Central Texas labor shed, the average amount of school completed was 14.4 years.

People in the area have become slightly better educated during the past few years. Average educational attainment totaled 14.1 years for the Region in 2004.

Skills

Skill levels are of crucial concern for both existing and prospective industry. On the survey, the skill level question allowed for multiple responses; therefore, the number of skills reported will not total the 2073 interviewed in the Region. Their responses allow for considerable analysis, most efficiently accomplished through the use of cross-tabulations.¹ This section of the report will discuss the skills possessed by a majority of respondents. For more detailed information, see the cross-tabs in the appendix.

The skill reported by the largest percentage of workers in the Central Texas labor shed was general basic computer skills. Of those reporting this skill, 5% are unemployed. People with general computer skills have a college education, are between 35 and 54 years of age, and earn over \$50,000 (annual household income). About thirty-eight percent of workers with basic computer knowledge are not utilizing all of their skills in their current job.

Clerical skills rank second in the Central Texas labor shed. Six percent of these respondents are unemployed. They have some college or more education, are over 45 years of age, and earn over \$25,000 annually. Thirty-five percent of these workers are not using all their skills.

Executive/professional skills are frequently reported in the Central Texas labor shed. Workers with this skill are over 55 years of age and have a college education. The majority earns over \$50,000 annually, and 5% of these people are unemployed. Additionally, thirty-seven percent are not utilizing all of their skills.

The survey reported a considerable number of workers with computer-based machine operation skills. Most of these respondents are between 35 and 54 years of age and earn over \$50,000 per year. These workers have some college or more education. Only three percent of these workers are unemployed and 46% have underutilized skills.

The next most frequently reported skill is advanced computer. Most workers with this skill have a college degree or higher education, are 35 to 54 years of age, and earn over \$50,000 annually. Only 3% of workers with this skill are unemployed and forty-three percent are not utilizing all of their skills.

Finally, medical/healthcare skills are also important in the Central Texas labor shed. These workers have some college or more education and earn over \$50,000 per year. Workers with advanced computer skills are over 35 years old, and 42% are not utilizing all of their skills. Three percent of these workers are currently unemployed.

¹ Cross tabulations are tables showing aggregated survey results. These tables allow for cross comparison of various survey questions, giving users power to analyze data in depth.

Foreign Language

The language skills profile shows several language skills available in the area. Of the 2073 people interviewed in the Central Texas labor shed, 25.9% speak a foreign language. The majority of respondents speak Spanish (60%). Other respondents speak German (28%), French (12%), Italian (3.4%), Korean (3%), and other languages (2.6%).

Job Tenure

Job tenure, in this context used to describe job longevity, provides a good indication of the dependability of the labor pool. During interviews, respondents were asked the length of time spent with their current employer. The majority of responses for the Central Texas labor shed (35%) indicated over 10 years of tenure. Almost thirty percent have one to five years of tenure, and another 27% replied they have five to ten years.

The average length of time spent with an employer in 2007 totaled 7.3 years in the Central Texas labor shed. The Region's job tenure in 2004 totaled 6.0 years. This increase correlates with the aging labor pool.

Other Labor Force Information

Industry Employment and Occupation

Employment by industry sector for the Central Texas labor shed is displayed in Chart 5a. The survey found education, public administration/government, trade, and other industries to be the largest individual segments.² The Region has a small professional/related services sector. Unfortunately, it appears that the area has lost a number of professional/related jobs since 2004, as this sector declined from eight percent to six percent today. Conversely, the other industries sector grew considerably in the past few years.

² Other industries include: agriculture, high tech/technology, law enforcement, other public utilities, and other non-classifiable industry segments. Other Services are business and repair, personal, and entertainment/recreational services.

Chart 5a

**Central Texas Region
 2007 Industry Employment
 (1329 Responses)**

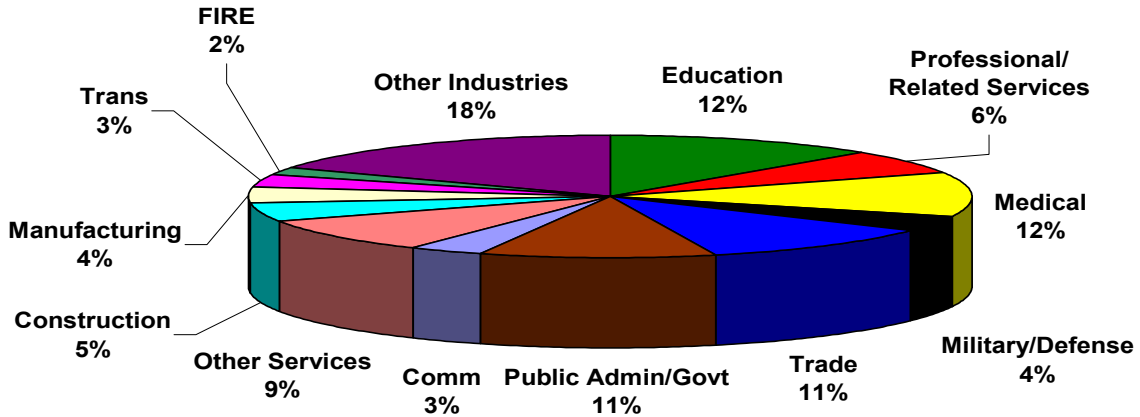
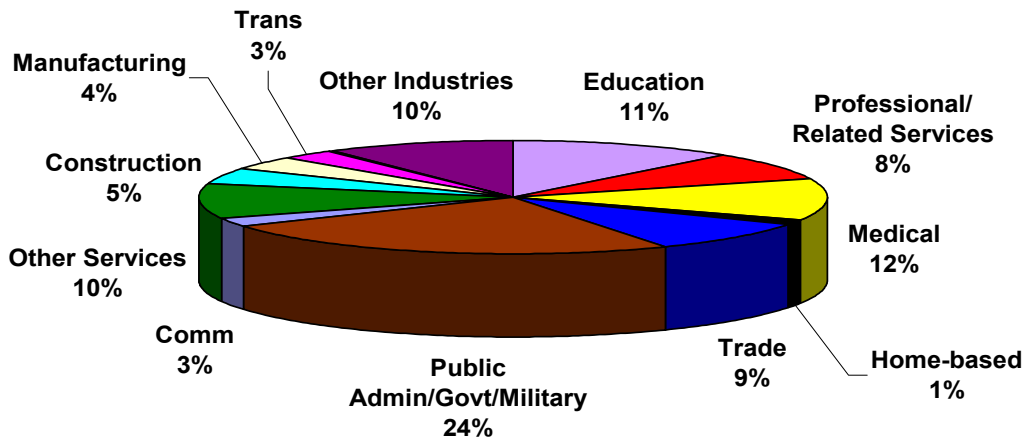


Chart 5b

**Central Texas
 2004 Industry Employment
 (1216 Responses)**



Occupational distribution is shown in Chart 6a. Primary occupations include: professional, managerial, and other.³ Since 2004, the other occupations sector has grown while the public administration/government sector declined.

Chart 6a

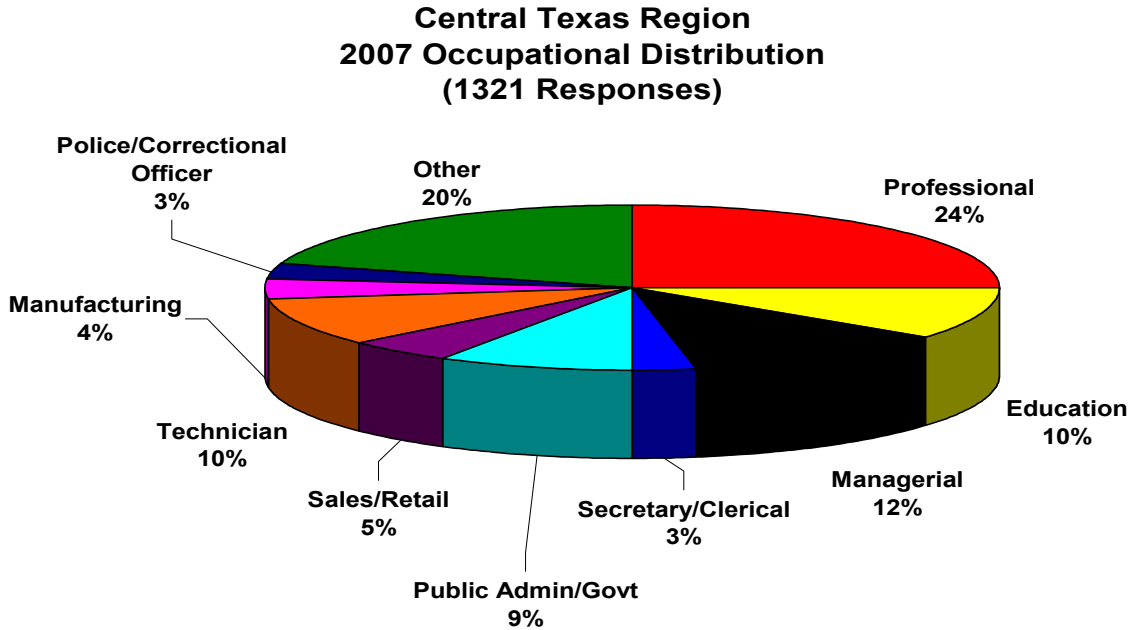
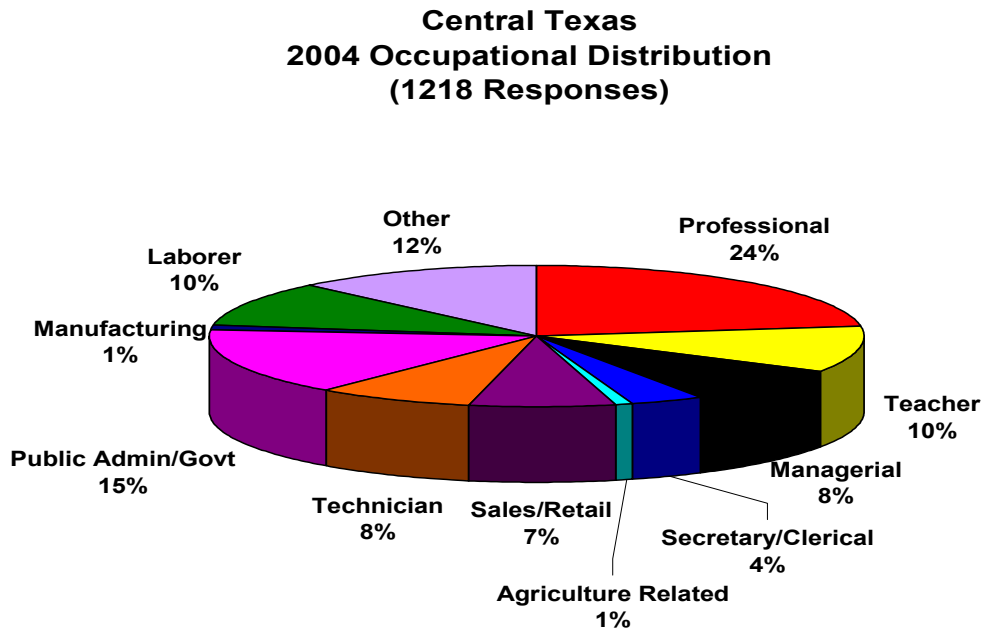


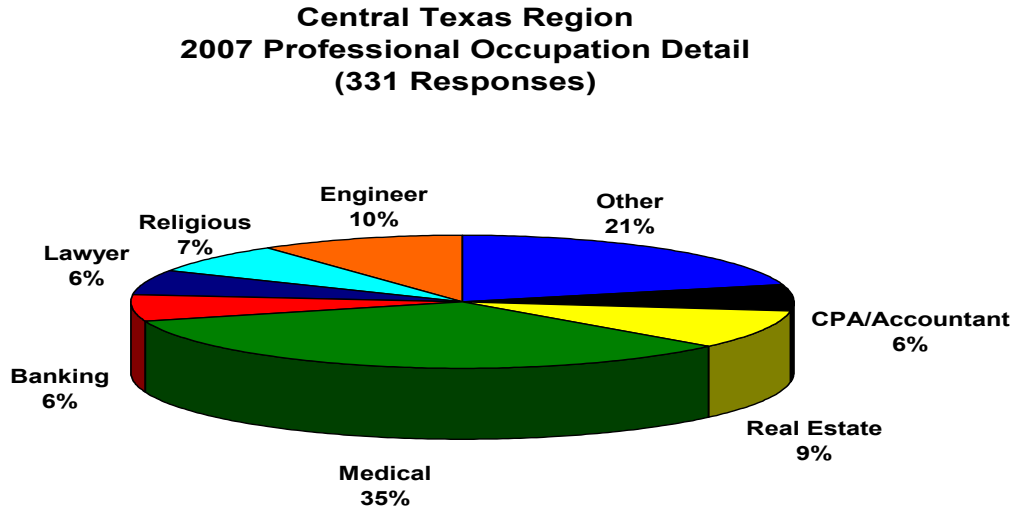
Chart 6b



³ Other occupations include: public administration, homemaker, non-classifiable, and food service.

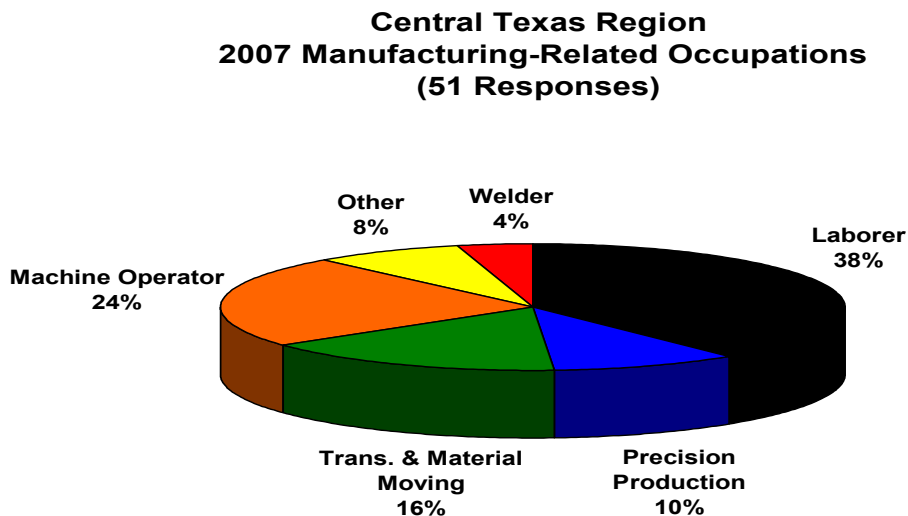
To gain a better understanding of occupational distribution, we include several Charts (7-10). These Charts give a detailed description of professionals, manufacturing-related workers, managers, and technicians for the Central Texas labor shed. Professional occupations are shown in Chart 7. Medical, engineer, and other are the largest professional occupations.

Chart 7



Manufacturing-related occupations are detailed in Chart 8. The largest occupations in this category are laborers and machine operators. Transportation & material moving also represent a large portion of these workers.

Chart 8



Managerial occupations are shown in Chart 9. Of these, other managers account for the greatest number of managers. Retail managers are also significant.

Chart 9

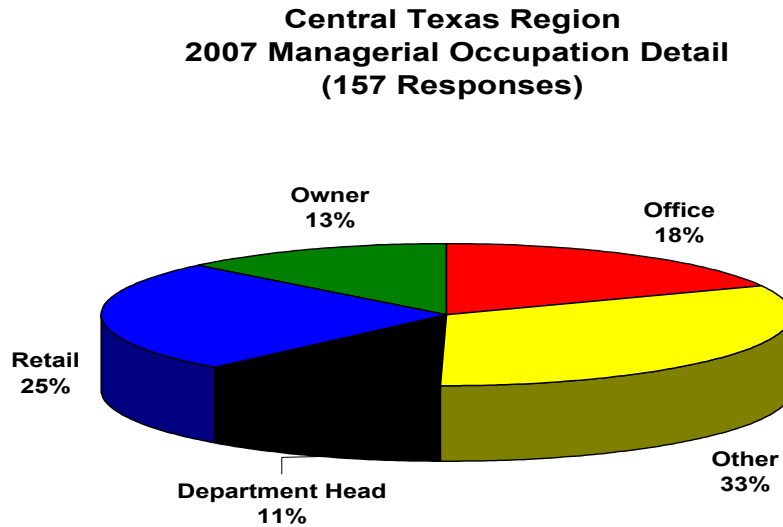
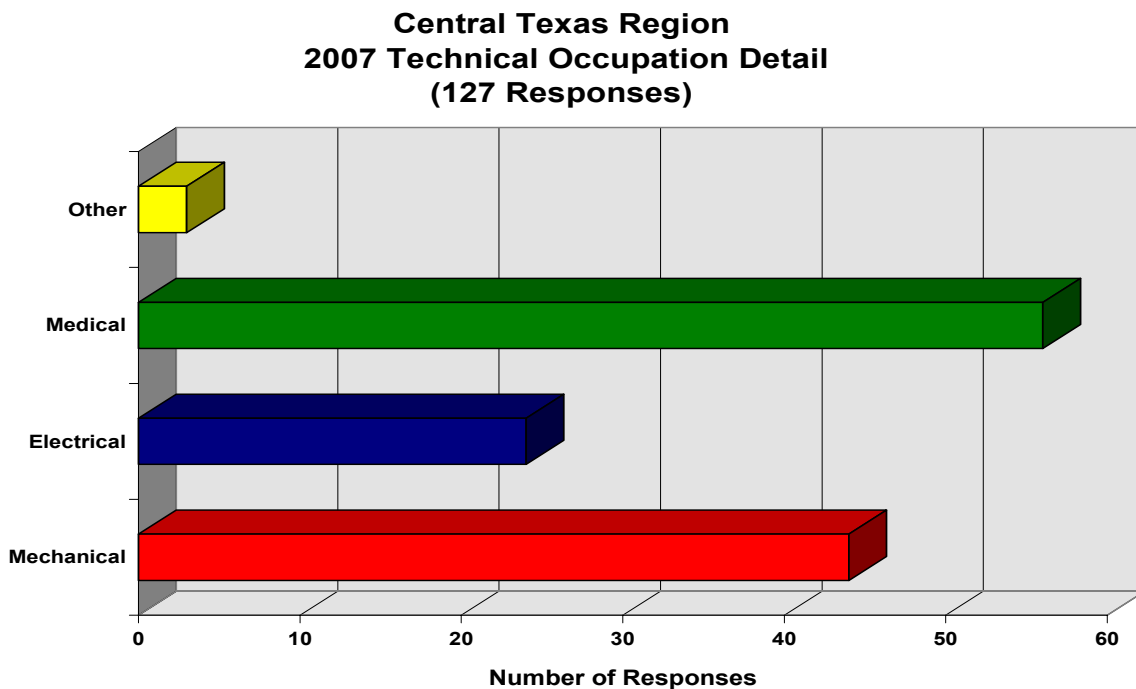


Chart 10 depicts various types of technicians. Medical technicians are the most dominant group. Mechanical technicians represent a significant number in this sector.

Chart 10



Available Workforce/Unemployment

A commonly held belief is that officially estimated unemployment data fails to show the true level of workforce availability. This is mainly due to data collection methods used by state and national employment agencies. With data collected from this study, we calculate two different rates: an availability rate and an unemployment rate.

The 2006 annual average unemployment rate for Central Texas, as estimated by the TWC, was 5.3%. The survey interviewed 2,073 people in Central Texas, 744 of who are not currently working. In estimating the **available workforce rate**, we asked jobless respondents their reasons for not working. Next, we removed people who are truly out of the job market (due to retirement, home duties, health reasons, and school), allowing us to estimate the **available workforce rate for the Central Texas labor shed at 15.5% (4.2% were unemployed and 11.3% personal choice).**

To allow a better description of available laborers versus unemployed workers, we include an additional analysis. We consider people who are out of the labor pool due to *personal choice* available workers, but not truly unemployed. **The unemployment rate for Central Texas' labor shed totals 4.2%.⁴**

A description of the available workforce/unemployed allows a better picture of the potential labor pool. First, available workers possess carpentry, clerical, education, finance/accounting, and personal service skills. Second, the majority of these people have high school or some college education. Proportionately, most available workers are between 25 and 44 years old.

The survey also asked unemployed respondents the hourly rate at which they would re-enter the workforce. Unemployed people would work for \$14.01 per hour on average. As one would expect, wages required generally increased with age and education level. Since 2004, the average wage to re-enter the workforce has increased 23% from the previous average of \$11.36 per hour.

Thirteen percent of all unemployed respondents would re-enter the labor pool for wages between minimum wage and \$7.99 per hour. Additionally, thirty percent would re-enter between \$8 and \$10.99 per hour. Overall, a significant number of workers (63%) could be employed for less than \$15 per hour.

Finally, nineteen percent of all respondents are enrolled in continuing education courses. Furthermore, fifty-six percent of all respondents are interested in pursuing higher education opportunities in Central Texas.

Underemployment

The definition of underemployment, for the purpose of this study, is when actual education levels exceed education requirements for current occupations. Employees in the Central Texas labor shed are underemployed, based on research and statistical analysis from the compiled surveys. This conclusion indicates the Central Texas labor pool should be able to adequately provide workers for industries requiring more formal education than firms currently operating in

⁴ In other words, we remove anyone not currently working for the following reasons: health, home duties, retirement, school, and personal choice. The numbers translate into 88 workers out of 2073 calls that are truly unemployed.

the area. This section outlines the methodology, data, and results of a statistical test used to analyze the relative relationship between the average level of education attained and the average level of education required to obtain a particular job in the region.

A paired t-test for differences in two sample means was used to determine the relative relationship between attained and required education levels. A two-tailed test was used in order to access the validity of three possible relationships between attained and required education levels. If the results of the test indicate that there is not a significant difference between the average levels of education attained and the average level of education required, we will take this as evidence that the average respondent is adequately educated for the occupation they currently hold. If the results indicate that the average level of education attained is significantly greater than the average level of education required, we will take this as evidence that the population is, on average, over-educated relative to what is required in their current occupation. Conversely, if the results indicate that the average level of education attained is significantly less than the average level of education required, we will take this as evidence that the population is, on average, under-educated relative to the required level of education for their current occupation. A 5% level of significance is used throughout this section.

The data used in this analysis is taken from the portion of our survey regarding required education levels and attained education levels, in Central Texas. A single test was conducted for the entire sample (1291 paired responses).⁵

Each response was converted to a yearly education equivalent based on the following scale:

- Elementary = 6 years
- Junior High School = 8 years
- High School Diploma/GED = 12 years
- Some College = 13 years
- Associate Degree = 14 years
- Bachelors Degree = 16 years
- Masters Degree = 18 years
- Ph.D. = 22 years

The paired t-test for differences in two sample means produced the following results. For the entire Central Texas labor shed, the average education level attained, 14.27 years, was significantly greater than the average education level required, 13.36 years.⁶ Therefore, these results show the average respondent has attained or completed significantly more years of education than is required to serve their current occupation.

Since 2004, both attained and required education has increased. Three years ago, the education attained in Central Texas totaled 14.03 years. Additionally in 2004, education required totaled 13.01.

Finally, the survey asked respondents: *Do you have skills you do not utilize in your current job?* Fifty-seven percent of Central Texas area respondents answered yes.

⁵ Missing observations from either question (due to non-response) were omitted from the test, since it requires paired data. The analysis was conducted on 1291 paired observations.

⁶ The test statistic for this analysis is -18.3321 and is distributed as a t-statistic with $n-1$ degrees of freedom. The test statistic is less than the two-tailed critical value of -1.9618 and has a p-value of less than 0.0001 .

Commuting and Workforce Drawing Area

Analyzing commuting practices allows one to determine the workforce drawing area within the surveyed region. To accomplish this, we asked respondents: 1) *Where do you live?* and 2) *Where do you work?* The study found that Central Texas labor shed respondents are employed mainly in Bell County (70%) and Coryell County (17%). Additionally, 7% travel to Lampasas County and 1.4% to McLennan County for work.

Respondents were also asked the length of their commute to work in minutes. Seventy-two percent of respondents in the Central Texas labor shed commute less than 20 minutes. Additionally, 11% of respondents commute over 31 minutes. Average commute in the Region totals 16.7 minutes.

Part-time employment

One of the objectives of our research was to determine the availability and skills of the part-time labor pool. The data-driven profile of a part-time laborer follows: college education, over 55 years of age, household income over \$25,000 annually. Forty-eight percent of respondents in the Central Texas labor shed would consider additional part-time employment.

Shift Work

A significant number of respondents indicated they could work late shifts. Thirty-two percent of Central Texas labor shed respondents could work the 3 p.m. to 11 p.m. shift. The 11 p.m. to 7 a.m. shift had fewer interested respondents at 26%. Of those interested in working these late shifts, about 9% are unemployed.