

A INDUSTRY SECTOR ANALYSIS OF TOM GREEN COUNTY FOR THE

CONCHO VALLEY WORKFORCE DEVELOPMENT BOARD



PREPARED BY:

T·I·P STRATEGIES

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Concho Valley Workforce Development Board Members

Mr. Dick Baggett	Mr. Ignacio Gonzalez
Ms. Mary Bessent	Ms. Sandra Gray
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Ms. Jenifer Gierisch	Mr. Hayden Woodard
Ms. Marilynn Hale Golightly	

CVWDB Staff:

Johnny Griffin, Executive Director

Mary Kay Kuss, Director of Planning & Resource Development

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TIP Strategies – Project Team:

Tom Stellman, President/CEO

Alan Cox, Project Director



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Federal funding for workforce training continues to decline even as employers demand workers with higher skill levels. This situation demands a targeted approach to the allocation of workforce training funds. The application of target industry methodology to workforce investment decisions places the CVWDB at the forefront of workforce development.

introduction

TIP Strategies, Inc. was engaged by the Concho Valley Workforce Development Board (CVWDB), the local workforce board serving the 13-county Concho Valley region, to conduct an industry sector analysis for Tom Green County. The purpose of the analysis is to help identify those industries and occupations that represent the greatest potential for contributing to the local economy and for leveraging existing resources. This project reflects the ongoing commitment of the Board of Directors and staff to create a responsive workforce development system that is aligned with economic conditions in the region.



approach

The project began with an assessment of Tom Green County from an economic development perspective. Although CVWDB serves a 13-county area, the assessment focused primarily on Tom Green County, the economic hub of the region. The results of this assessment are presented in the *demographic analysis* of this report.

Industry sectors were selected using a three-pronged approach: quantitative, qualitative, and strategic. The quantitative approach used standard statistical techniques to analyze historical employment patterns, as well as a review of employment projections for the county. The findings from this quantitative analysis were supplemented by interviews with employers and the local economic development organization. Finally, the experience of the consultants combined with national and global trends were considered. The analysis is detailed in the *industry analysis* section.

The next step was to conduct an *occupational analysis* translating employment growth into occupations and skill sets. Data maintained by the U.S. Department of Labor were used to create a list of key occupations within each sector. To supplement the findings from analysis of secondary data, we interviewed a number of local employers within key industries to develop a deeper understanding of the challenges facing them. The last step was the development of a survey of local employers within each of the selected industry sectors was conducted from January to March 2005. We received responses from over 40 area employers. Respondents were asked to provide information regarding the number of employees at local operations, future hiring intentions, and training and skills needs.



key findings

Slower employment growth rates in Tom Green County largely reflect a gradual transition away from a natural resources dependent economy to a more diversified services-oriented one.

The following represents key findings of the economic assessment, target industry clusters, and occupational analysis. We have also included a summary of strategic considerations that we believe are critical to understanding the challenges and opportunities facing organizations charged with enhancing Tom Green County's workforce.

demographic & economic analysis >

During the last three decades, San Angelo, Tom Green County, and the surrounding Concho Valley have experienced both economic prosperity and decline. During the 1970s, Tom Green County nearly matched the fast pace of employment growth set by the state and doubled the national employment growth rate. Since the mid-1980s, however, statewide employment growth has more than doubled rates seen in the local economy. For example, from 1993 to 2003, Tom Green County added approximately 5,500 wage and salary jobs—a 12 percent increase. During the same period, Texas enjoyed a 24 percent increase. In addition, the average wage for a job in Tom Green County rose at a seven percent rate (adjusted for inflation) during those ten years, while wages throughout the state increased 14 percent. As a result, the wage gap between the county and the state rose from 19 percent to 24 percent. This imbalance appears to have prompted many area residents to search elsewhere for job opportunities and higher wages. For example, between 2000 and 2004, approximately 2,600 more people moved away from Tom Green County than moved in. Consequently, the area's population growth has remained relatively stagnant since the late 1990s.

In spite of this climate of slower growth, several opportunities for economic vitality exist in San Angelo and Tom Green County. Chief among them are leveraging educational assets (e.g. Angelo State University and Howard College), a burgeoning telecommunications/information technology cluster, a strong healthcare/medical complex, a healthy retail trade sector, and various opportunities in manufacturing. In large part, slower local growth rates largely reflect a gradual transition away from a natural resources dependent economy to a more diversified services-oriented one. Tom Green County appears especially suited for growth in a services-oriented economy due to very competitive educational attainment rates—a difficult achievement for communities of similar size. However, the area's lower cost of living and housing prices have not been sufficient to retain these workers due to the lack of higher wage job opportunities in the area.



industry sector analysis >

Unlike industry sector analyses performed for economic developers, which seek to pinpoint narrowly defined industry sub-sectors, our task was to identify growth industries and, more importantly, key occupations within those industries. This task requires a different mindset than that used in economic development analyses, as occupational categories and skills cross industry lines and workers are much more fluid than companies. While this analysis will ultimately contribute to the development of policies to support the target industry clusters, it is not intended to be a mechanism for excluding support for all others. The following industry sectors and sub-sectors were identified as a result of this work:

EDUCATION >> The presence of Angelo State University, San Angelo ISD, and Howard College-San Angelo make the community a true center for education serving the Concho Valley and the greater West Texas region. Due to slow population growth rates, however, Angelo State University and the local school district have not seen significant enrollment rate increases in the past several years. In fact, declining enrollment within the San Angelo Independent School District has recently led to layoffs and school closures. Regardless, this cluster of educational institutions results in an indispensable asset for workforce development and training in the community. Education provides indispensable workforce training services for employers—especially Howard College’s rapid response capacity to training requests. It also plays a major direct role in San Angelo’s economy with San Angelo ISD and Angelo State University ranking among the top five employers in the community.

Economy.com projects moderate growth in the number of education-related jobs in Tom Green County over the next 10 years. These projections, however, should be considered with some skepticism due to a lack of enrollment growth at Angelo State University, declining enrollment in the school district, and moderate growth at Howard College. Despite this lack of growth, a focus should remain on strengthening the existing training programs for teachers due to the overall critical role that education plays in the community and economy. Regardless, employment opportunities in education will continue to remain present in Tom Green County due to the likely retirement of many of the school district’s experienced faculty. For example, more than 200 teachers (22 percent) in the school district have over 20 years teaching experience. Further, approximately 50 percent of all teachers in the district have over 10 years teaching experience, compared to 46 percent statewide.

HEALTHCARE >> San Angelo is home to an enviable concentration of healthcare providers for a community its size. Home to Shannon Health System, San Angelo Community Medical Center, Baptist Memorials, Rivercrest Hospital, and the West Texas Rehabilitation Center, San Angelo offers a diverse and well-established healthcare base providing a critical service for the community and the surrounding area. With an aging population, it is certain that demand for healthcare services will continue to increase. As a result, employment opportunities within healthcare are expected to remain fairly abundant in San Angelo for the foreseeable future. Employment forecasts provided by Economy.com predict that employment within healthcare in Tom Green County will increase 22 percent by 2014, making it one of the fastest growing industry sectors. The local healthcare sector is fortunate to be able to rely on education and training resources provided by Angelo State University and Howard College-San Angelo.



MANUFACTURING >> While manufacturing employment has fallen dramatically in the last five years and is projected to continue to fall according to estimates by Economy.com, this sector remains a critical driver for the local economy. Manufacturers typically serve larger regional, national, and international markets through exports, and, therefore, bring needed outside dollars into the local economy. As a result, great care and attention should be paid to meeting the needs of San Angelo's remaining manufacturers. It should be recognized, however, that that nation as a whole has also lost a great number of manufacturing jobs during the last five years. While employment in manufacturing is down, actual production has not changed significantly. In other words, American manufacturing continues to transition toward greater automation and requires fewer production workers. The production losses that are occurring nationally tend toward sectors where cheaper labor costs in foreign countries offset any profit gains that would result in upgrading domestic equipment and processes. The implications for these trends are that remaining American manufacturing jobs will require higher technical training and skills, and unskilled manufacturing positions will continue to be shifted offshore or replaced by automation technology.

RETAIL >> Employment and other data, concerning the retail trade in Tom Green County, reveal a sector undergoing a significant structural shift. San Angelo remains, without a doubt, the retail trade center for the region and has enjoyed growing sales activity and per capita retail sales on par with the state as a whole. At the same time, the overall number of retail establishments has fallen, despite a recent influx of national “big box” chain stores—especially along the new Houston Harte Freeway. While these newer establishments will without a doubt further solidify San Angelo's position within the region, their arrival may prove harmful to smaller “mom and pop” retail stores in the community. Larger retailers often operate more efficiently than smaller ones and are able to sell larger amount of goods with fewer employees. Despite a rise of 250 retail jobs in Tom Green County during the last five years, Economy.com projects a loss of an equal amount over the next ten, resulting in an overall five percent employment decrease. These projections indicate that the largest employment losses will occur among automotive and parts dealers and grocery stores.

TELECOMMUNICATIONS/INFORMATION TECHNOLOGY >> The telecom/IT industry sector includes data processing, wired and wireless telecommunications, call centers, internet service providers, software, computer services, administrative support services (back office), and other similar service providers. Recent growth in San Angelo's telecom/IT industry sector has provided an important new source for job creation. Today, the community is home to several major telecom/IT operations, including Verizon, SITEL, Blue Cross/Blue Shield, as well as Lockheed Martin and Northrop Grumman. Angelo State University also hosts the state data center. The community has seen growth in this sector thanks to its strong telecom infrastructure, remote location, and available workforce, including students and military spouses. For the time being, it appears that San Angelo will continue to benefit from the location of Goodfellow Air Force Base and will be able to call upon this resource for talent to full further growth in the telecom/IT sector. As a result, employment forecasts provided by Economy.com predict Tom Green County will enjoy the creation of at least 500 net new jobs stemming from growth in Information and Administrative and Support Services by 2014.



economic development targets >

In addition to the broader sectoral targets analyzed in this report for the CVWDB, the San Angelo Chamber of Commerce has developed a list of more specific target industries for its economic development recruitment efforts. While the Chamber's targets were not part of this analysis, their existence provides additional opportunities for training considerations and should be supported as a means of diversifying San Angelo's economy. These targets include:

AUTOMOTIVE PARTS MANUFACTURING >> Automotive manufacturing is an industry with a fairly brief history in Texas and the US Southwest. Increasingly, however, automotive manufacturers are looking to Texas and the South as the preferred choice for new facilities. The most recent example is Toyota's decision to build its new Tundra truck manufacturing plant in San Antonio. As a result of the automotive industry's shifting center of gravity toward the South, supplier facilities are expected to join their customers in this migration at an increasing rate. To further highlight the overall southern migration of the industry, prior to 1950, 78 percent of all North American auto assembly plants were built in the Midwest and Northeast. Since 1990, however, 78 percent of all new facilities have been destined for the southern US or Mexico.

The San Angelo Chamber of Commerce is not alone in its recognition of these trends and opportunities for industry recruitment. Statewide, economic development organizations are making concerted efforts at pursuing private investments from the industry. As a result, competition in recruitment will be intense. Given the San Angelo's relatively small concentration of manufacturing jobs, compared to more recognized industrial centers in the state, the community will have to overcome a significant *perception* disadvantage. In other words, if a firm believes that a proven, trainable workforce is not available within a community, it is unlikely they will risk making an investment there. To confront this perception issue head-on, the Chamber should highlight its close working partnership with the CVWDB, Howard College-San Angelo, and the West Texas Training Center, all of which combined provide San Angelo with an unmatched capacity for responsive workforce training needs.

MEDICAL DEVICE MANUFACTURING >> According to the Advanced Medical Technology Association, the manufacture of medical devices is a nearly \$70 billion industry in the US. In addition, national healthcare spending on medical devices is projected to increase at an average annual rate of 5.4 percent, according to the Centers for Medicare & Medicaid Services. The graying of the industrial world's population, growth in incomes, and healthcare expenditures are forecast to provide a platform for stable and steady growth for medical devices in the foreseeable future. As an industry, medical devices provides a good source of high-paying American jobs, with workers earning nearly 50 percent more than private sector employees overall and almost 20 percent more than general manufacturing workers.

San Angelo's greatest existing asset for attracting local investment from medical devices firms may be the available workforce offered by Ethicon. A greater share of that operation's production will soon be moved offshore to lower cost labor markets. As a result, an existing workforce, trained in the manufacture of plastics-based medical devices exists in San Angelo. Unfortunately, trends in the medical devices industry point to the wide movement of non-research dependent production moving offshore. In addition, medical device product life



cycles are becoming shorter because device makers are continually developing smaller, faster, and cheaper improvements of existing devices. Due to this, most medical device manufacturers that are on the leading edge of developing new products tend to be located near biotechnology and medical research clusters located near major research universities.

DATA PROCESSING/DATA RECOVERY CENTERS >> Perhaps no other industry represents the aspirations of the New Economy greater than information technology. The ubiquity of telecommunications and internet access has allowed the transfer vast amounts of information over long distance and stored at far-flung locations. This revolutionary transformation is the result of the convergence of computers, software, and telecommunications. As such, the applications are endless, and the implications are enormous. This New Economy is fundamentally altering the way the world gathers, digests, and manipulates data, and as well as design and create new concepts.

A major result of these trends is the transfer of data processing and call center activity to rural and smaller metropolitan areas providing OTJ computer and customer support training to workforces that are traditionally accustomed to manufacturing and natural resource extraction. San Angelo has clearly benefited from the location of several of these activities to the community during the last decade, ranging from the Texas State Data Center to several call center operations, which has resulted in the formation of an emerging telecommunications/information technology cluster. The additional defense-related intelligence activities occurring on Goodfellow AFB have only added to San Angelo's overall strength in this broad New Economy sector. For the Chamber to continue to remain successful in targeting this industry, it will need to focus on the provision inexpensive land, flex/office space, and telecom infrastructure that can all be easily and quickly accessed by potential industry recruits. The CVWDB and Howard College-San Angelo, on the other hand, should support workforce development in occupations that service this cluster of industries. Angelo State University could also work to build this local cluster by strengthening computer science and software related programs, as well as seeking funding for research and technology commercialization.

AVIATION-RELATED ACTIVITIES >> Aviation-related activities include the manufacture of aircraft, engines, parts, and auxiliary equipment, as well as those establishments engaged in servicing, repairing, rebuilding, maintaining, and storing aircraft or in providing flight training. Aviation-related companies are often a third-party contractor (e.g. defense contractors), affiliated with an air carrier, or an original equipment manufacturer. Competitive market pressures have forced air carriers to outsource maintenance to third-party repair stations, which decreases equipment and facility overhead and labor costs. These contract repair stations can range from being either small, specialized operations employing few workers for specific maintenance contracts to large facilities employing thousands at maintenance bases which often have multiple service bays. Contract repair stations experienced a sharp increase in demand during the 1990s and now account for approximately half of the inspection, maintenance, repair, and renovation work performed on the nation's airline and cargo aircraft. The costs of maintaining aircraft continue to lead to an expanding market for aircraft maintenance, repair, and operations (MRO) industry, including OEMs, suppliers, and service providers, which is today a \$90 billion industry (\$37 billion commercial; \$53 billion military aerospace).



Due to its lack of a skilled manufacturing workforce trained in the manufacture of aircraft parts and equipment, it is unlikely that San Angelo will receive major announcements from this segment of the industry. The community, however, appears very well suited to other aviation-related activities, especially flight training and light maintenance and storage. Due San Angelo's relative isolation, excellent flying weather, long history as a host to Goodfellow AFB, and Mathis Field, the community could be quite competitive in certain types of aviation related activities. To support this target, the CVWDB and Howard College-San Angelo should remain responsive to the needs of existing aviation-related companies, as well as the Chamber's efforts to expand this emerging cluster.



occupational analysis >

TIP Strategies performed an assessment of the demand for occupations within Tom Green County. This assessment included an analysis of secondary data that projected employment growth in the area for the next ten years, interviews with local employers, and a survey of employers in each of the targeted industry sectors.

SECONDARY DATA ANALYSIS >> Based on the employment forecasts for Tom Green County provided by Economy.com, TIP Strategies translated employment changes within industries to determine demand for specific occupations using standards supplied by the US Bureau of Labor Statistics for each industry. According to this analysis, healthcare-related occupations dominate the list of those projected to gain the most in Tom Green County during the next ten years. Projections indicate several healthcare related occupations that add 100 positions in the next ten years including: registered nurses; home health aids; personal and home care aids; nursing aids, orderlies, & attendants; and licensed practical & licensed vocational nurses. In addition, several occupations related to food services and restaurants are also expected to make large gains (100+), including: waiters & waitresses; combined food preparation & serving workers; and cooks, restaurants. Finally, a number of occupations related to education and telecommunications will gain at least 25 positions in the coming decade.

EMPLOYER INTERVIEWS & FOCUS GROUPS >> Over the course of the project, we met with several companies and organizations representing some of Tom Green County's key industry groups. The two overarching themes that emerged from these interviews was the difficulty in attracting and retaining skilled and educated workers, and competition from international markets—especially among companies that employed large numbers of low skilled positions. This latter group of employers often cited that the availability of low skilled workers in Tom Green County was not among their chief concerns.

EMPLOYER SURVEY >> TIP Strategies, with the assistance of the San Angelo Chamber of Commerce and the Concho Valley Workforce Development Board, also conducted a survey of San Angelo Chamber of Commerce members who had operations in the community. The companies and organizations that were selected for the survey were identified as a being part of one of five broad employment sectors: **EDUCATION, HEALTHCARE, MANUFACTURING, RETAIL, or TELECOMMUNICATIONS/INFORMATION TECHNOLOGY.**

The survey was sent to 419 companies and organizations from January to March 2005, and 41 completed surveys were received, resulting in a 9.8 percent overall response rate. Respondents to the survey reported they represented 5,670 full- and part-time jobs, more than ten percent of all positions in Tom Green County.

The overall findings from the survey indicate that (put into a text box) labor shortages in Tom Green County are present in occupations that require more extensive training and education, such as supervisor/management, professional, and technical occupations across all surveyed employment sectors. Additionally, employers indicated some difficulty in skilled positions, especially within the manufacturing sector. Those occupations that require more extensive training are also the ones that offer the highest hourly wages.

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The survey also found that, over the short-term, a higher demand for skilled and semi-skilled occupations exists in Tom Green County. Over a longer period, however, it appears demand will decrease somewhat and will shift toward those occupations that require more highly educated workers, especially within the professional occupation category. While this can be interpreted as a good sign for raising overall income levels in the San Angelo area due to higher wages being paid in these occupational categories and industries, it may also indicate further workforce shortages as employers are already finding it difficult to fill similar positions.



recommendations >

Our analysis of the data (demographic and economic), interviews and focus groups with employers, and survey results reveals that workforce-related challenges facing area employers are largely the result of an overall lack of growth in Tom Green County. In other words, area workers are choosing to relocate outside the community to seek job opportunities that pay higher wages elsewhere. While the county is enjoying renewed growth in a few key sectors, which happen to pay above average wages for the area, earnings in the state's larger metropolitan area appear to offset any cost of living increases. In addition, larger cities in the state also offer workers greater opportunities for career advancement.

It is certain that the services provided by the Concho Valley Workforce Development Board are undoubtedly valuable to the area's employers. The CVWDB is, by all indicators, responsive to the long-term needs in the community. An innovative partnership between the CVWDB and other area entities has resulted in the establishment of the West Texas Training Center (WTTC), providing just one example of the board's value to the area's economy. The WTTC not only provides space for ongoing instructional programs, but also offers opportunities for quick response training for potential economic development recruitments to the area.

In light of these more fundamental, structural economic issues facing Tom Green County and the greater Concho Valley region, we recommend the following steps be taken by the CVWDB:

- Continue to support the West Texas Training Center
- Continue to remain responsive to the needs of existing area employers
- Continue to strengthen ties with the San Angelo Chamber of Commerce and other regional economic development agencies to support their target recruitment efforts
- Focus limited training resources toward in-demand occupations, especially within the healthcare, education, and telecom/IT employment sectors to strengthen San Angelo's role as a regional center for the Concho Valley and West Texas
- Build greater awareness within the community regarding the services offered by the CVWDB through proactive marketing efforts
- Establish an ongoing system for updating data regarding area labor market conditions to remain responsive to the evolving nature of the community's economy and workforce



strategic considerations

During the course of our work, a number of overarching themes became apparent. Although our task was, strictly speaking, to identify growth industries and occupations, we would be remiss if our analysis did not include a discussion of these points. Allocating training funds in a targeted, business-driven manner is an admirable goal. However, the impact of this strategy will be greatly diminished if nothing is done to address these issues:

services sector >

Most of the fastest growing jobs, both nationally and locally, are projected to occur in the services sector. In Tom Green County, the majority of high demand positions, according to employment forecasts, is concentrated within only a few employment sectors (healthcare, education, and telecom/IT). While this can be interpreted as good news for the local economy due to prevailing higher wages in these industries and job categories, local employers—especially within these industries—cited labor shortages for these occupations. Most employers that were interviewed or surveyed felt that the presence of higher education opportunities in San Angelo made it possible for them to tap into a supply of educated workers, but felt that they were often in competition with employers elsewhere in the state—especially along the I-35 corridor from San Antonio to Dallas/Fort Worth—who could offer a higher wage and quality of life to recent graduates. In effect, San Angelo is largely acting as a training ground for a mobile, educated workforce and is suffering from the “brain drain” to larger metropolitan areas.

Due to this situation of growing demand, but limited supply, San Angelo and Tom Green County face the long-term risk of dampening future employment growth prospects. In other words, if employers continue to struggle to fill positions, investment may go elsewhere. While there is obviously little risk of a school district relocating to a larger community, private sector employers are not similarly tied to the community. In addition, if local medical facilities are not able to attract the necessary talent to San Angelo to offer specialized healthcare services, the community could see a larger share of healthcare spending go to medical centers in other parts of the state. As a result, finding the means to address current and growing workforce shortages in more highly skilled positions will have a significant impact on the future of the Concho Valley.

labor market >

While we believe this report will provide the CVWDB will valuable information regarding the existing labor market and current needs of employers in Tom Green County, we believe it will be essential for the CVWDB to continuously monitor the situation in order to be responsive to ongoing developments. The forecast data provided by Economy.com indicate that employment growth in the area will be primarily concentrated in the healthcare, education, and telecom/IT fields. While we believe these figures to be generally accurate, a forecast should be considered within the context of national and global trends. In other words, these figures could be subject to change as the nation's and Tom Green County's economies continue to evolve and future conditions cannot be guaranteed. For example, occupations that do not appear to be high-growth candidates based on



employment forecasts for the region, such as retail workers, may actually be in high demand by local businesses. And new occupations that cannot be envisioned today will become the demand occupations of tomorrow. This project was an important first step in creating the mindset. As a result, developing a mechanism for continuing this process should be among the CVWDB highest priorities.

higher education >

Without a doubt, the presence of a higher education cluster—Angelo State University and Howard College-San Angelo—presents the community with one its greatest potential assets for growth and economic vitality. Nationwide, cities fortunate enough to be home to institutions of higher learning—and are able to leverage these assets—are the ones experiencing the greatest economic growth. TIP Strategies feels that currently San Angelo has not yet been able to fully leverage these assets to achieve higher growth. A sustained community-wide effort, incorporating both public and private entities, should be focused toward maximizing higher education assets for economic prosperity in San Angelo.

Howard College-San Angelo provides Tom Green County and the greater Concho Valley region with an indispensable resource for technical and vocational training for job seekers. In addition, the institution provides continuing and basic education services for the community. While Howard College's offerings in industrial production technology and partnership in the 102,000 square foot WTTC provide the capacity to meet most of the area's manufacturing training needs, the institution also plays a key role in filling the needs of San Angelo's healthcare providers with its abundance of medical-related programs. Howard College is also atypical of most community colleges in that its close partnership with other area entities has enabled it to provide a rapid response for training requests by existing employers and new industrial prospects.

Currently, Angelo State University is regionally recognized for programs in nursing and teaching. While these fields continue to serve important local workforce needs, they have not resulted in significant enrollment increases at the university. Opportunities for raising the university's profile and expanding programs to build a niche identity that will result in growth at the university—and having a positive economic impact on the community—should be a priority for San Angelo. For example, the school is currently home to the backup data center for the State of Texas. At the same time, San Angelo has recently seen growth among employers in the telecom/IT field. Instruction and research programs geared toward this sector may result in a new image of the university as an innovation center that could increase its profile, enrollment, and positively affect economic development in the region. For example, technology transfer and the commercialization of research has become one of the more important drivers for employment growth and economic prosperity nationwide, and places such as Austin, Raleigh-Durham, and San Jose have obviously greatly benefited from university-driven economic development. We believe that Angelo State University—while not in the same class as first tier universities in these areas—is a strong, but underutilized, asset that should be more fully leveraged for growth in San Angelo and the surrounding region.

A sustained community-wide effort, incorporating both public and private entities, should be focused toward maximizing higher education assets for economic prosperity in San Angelo.



strategic planning >

TIP Strategies recognizes that many of the issues identified in this report cannot be addressed by a single organization. Some speak to things beyond the control of the CVWDB, such as improving leveraging Angelo State University for economic development, and will require the formation of partnerships with schools, businesses, and local organizations. By partnering with others in the community, CVWDB can maximize its resources and establish a new image in the region as an organization with a vision that is responsive to employer needs. The formation of the West Texas Training Center and its innovative partnership with other entities in the community reflects a strong commitment to a new direction for workforce training. Exploring other best practices for strengthening existing relationships and forming new ones with both employers and public organizations that can positively affect job growth and prosperity in San Angelo should be part of the follow-up to this report.

Finally, while it is important to identify training programs and career paths that will meet the needs of local residents and businesses, the issues are not always clear cut. The impact of individual decisions, technological advances, and national trends will require a flexible approach to developing the region's workforce. This report and related documents are intended to provide the CVWDB and its staff with a common foundation from which to develop targeted strategies to prepare the Concho Valley for the future. Flexibility will be essential in the development and implementation of these strategies if the process is to be successful.



assessment

demographic & industry analysis

The following is a summary of consultant findings based on the analysis of data for Tom Green County:

POPULATION

- Tom Green County's population growth rate has slowed since 1998.
- Population growth in Tom Green County peaked during the 1970s.
- Since 2000, more people have moved out of Tom Green County than have moved in.
- If the county continues to grow according to current rates, its population is expected to increase slowly through 2020 and begin to fall after that.
- The county's racial and ethnic composition is similar to the state.
- The county's population is – on average –slightly older than the state as a whole.
- A relatively high concentration of low-income households is present in Tom Green County.

WORKFORCE & EDUCATION

- Tom Green County's labor force is growing slowly.
- Commuting patterns for 2000 reveal that most workers who lived in Tom Green County worked in San Angelo.
- Nearly 95 percent of the county's workforce is comprised of local residents.
- A small share of the county residents is employed in professional occupations.
- The average wage for a job located in Tom Green County was 26 percent lower than the national average in 2003.
- The median hourly wage in the San Angelo MSA is 24 percent less than the nation's.
- Educational attainment levels in Tom Green County are competitive with the state and nation.
- In 2000, a higher share of Tom Green County residents was enrolled in college or graduate school than in the state and nation.

OTHER INDICATORS

- Taxable retail sales increased nearly 37 percent from 1993 to 2003 in Tom Green County.
- Sales per capita in Tom Green County closely reflects statewide figures in spite of lower local income and wage rates.
- San Angelo residents enjoy a relatively low cost of living.
- A greater percentage of households can afford a median priced home in San Angelo than statewide.



INDUSTRY CLUSTERS

- The number of jobs in Tom Green County increased 18 percent from 1990 to 2004.
- During the last five years, employment in Tom Green County increased three percent.
- Tom Green County's highest location quotients (LQs) are in the natural resources, information, and government sectors.

EMPLOYMENT FORECASTS

- Employment in Tom Green County is forecast to grow 7.3 percent from 2004 to 2014.
- Industries within the overall services sector are expected to lead growth in Tom Green County.
- The majority of new jobs within services is expected to occur within just two industries: Healthcare/Social Assistance and Accommodation/Food Services.
- Only a handful of industries are expected to account for the majority of job growth in the coming decade.



DEMOGRAPHIC ANALYSIS

population

TOM GREEN COUNTY'S POPULATION GROWTH RATE HAS SLOWED SINCE 1998.

- In 2004, Tom Green County was home to approximately 103,800 residents, a two percent increase in ten years.
- From 1992 through 1998, Tom Green County enjoyed several years of consecutive growth.
- Since 1998, the county's population growth rate has leveled.

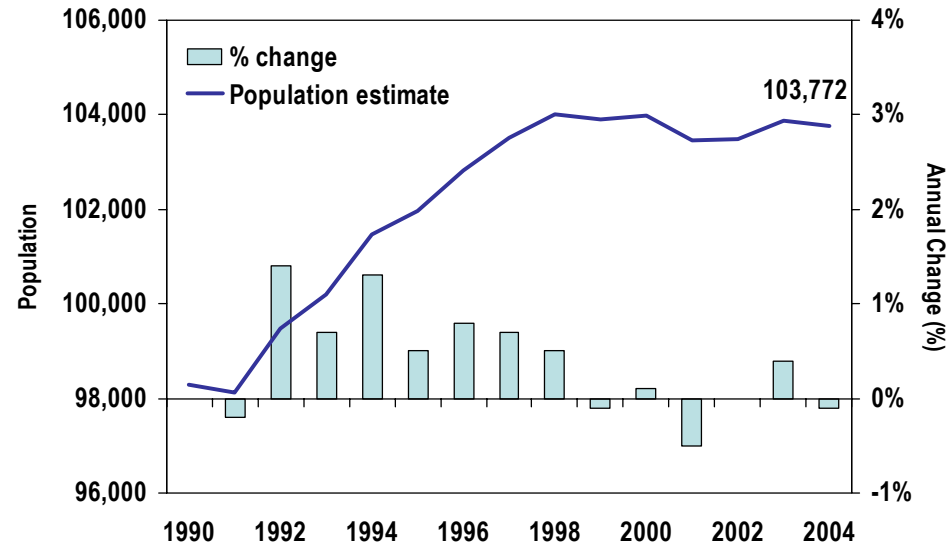
POPULATION GROWTH IN TOM GREEN COUNTY PEAKED DURING THE 1970S.

- During the 1950s and 1960s, population growth in Tom Green County and the surrounding Concho Valley was slower than the nation and state.
- During the 1970s and 1980s, area population growth increased at a more rapid pace than the nation.
- Since then, the region's population growth rate has declined rapidly.

The Concho Valley includes the 13 counties within the workforce development area.

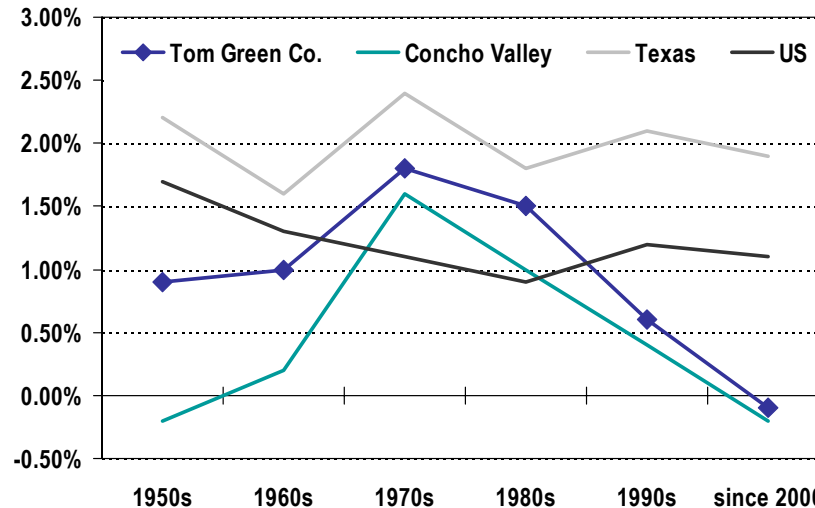
Coke	Menard
Concho	Reagan
Crockett	Schleicher
Irion	Sterling
Kimble	Sutton
McCulloch	Tom Green
Mason	

TOM GREEN CO. POPULATION, 1990-2004



Source: US Census Bureau

ANNUAL GROWTH RATES, 1950-2004



Source: US Census Bureau



population (cont'd)

SINCE 2000, MORE PEOPLE HAVE MOVED OUT OF TOM GREEN COUNTY THAN HAVE MOVED IN.

- For every 1,000 residents living in Tom Green County, approximately six have moved away on an annual basis.
- By contrast, Texas has attracted nearly eight new residents per year for every 1,000 existing residents.
- In addition, Tom Green County has a lower birth rate and higher death rate than the state.

IF TOM GREEN COUNTY CONTINUES TO GROW ACCORDING TO CURRENT RATES, ITS POPULATION IS EXPECTED TO INCREASE SLOWLY THROUGH 2020 AND BEGIN TO FALL AFTER THAT.

- Scenario '00-'02, based on 2000-2002 trends, indicate that the county's population will begin to steadily decline after 2020.
- Scenario 1.0, based on 1990-2000 trends, is the projection that predicts the most rapid growth in the county.
- Scenario 0.0, based on natural increase, projects a more moderate growth rate.

Texas State Data Center Population Projection Scenarios:

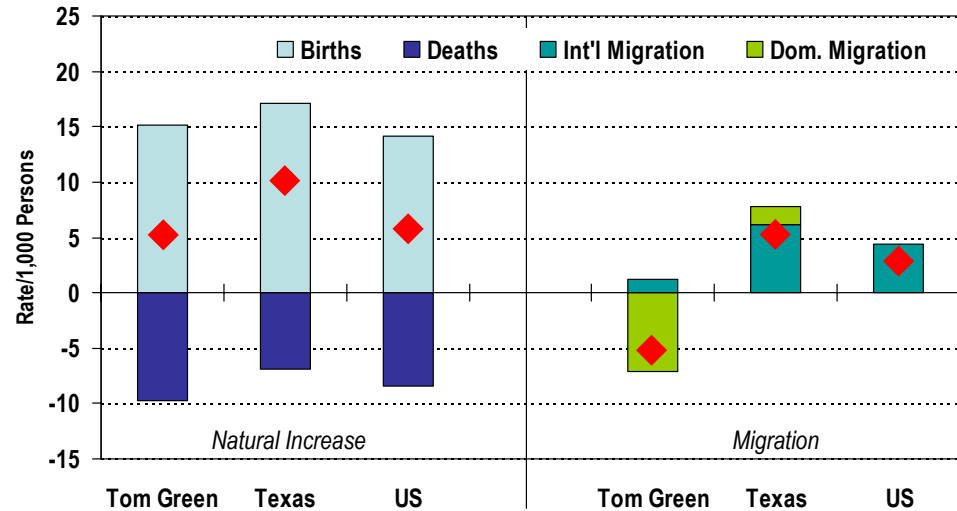
Scenario 0.0 – immigration & outmigration (net migration) are equal resulting in growth only through natural increase (births minus deaths)

Scenario 0.5 – migration one-half of those of the 1990s

Scenario 1.0 – trends in the age, sex and race/ethnicity net migration rates of the 1990s will characterize those occurring in the future

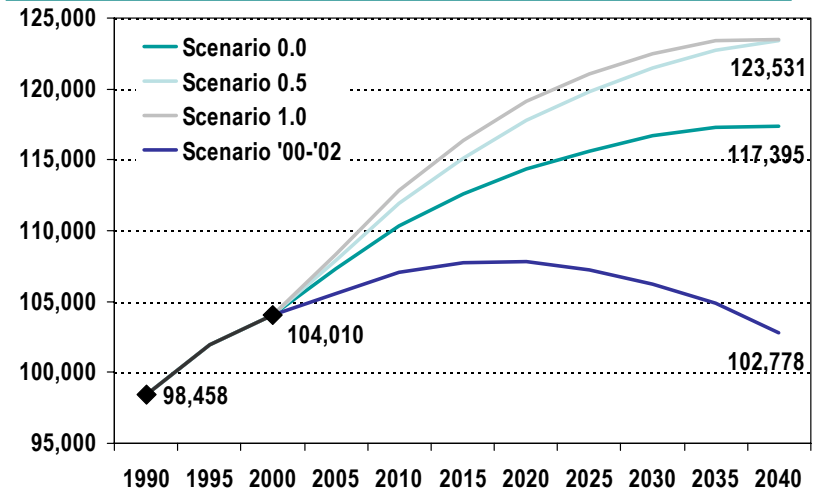
Scenario 00-02 – takes into account post-2000 population trends

COMPONENTS OF POPULATION CHANGE, 2000-2004



Source: US Census Bureau

TOM GREEN CO. POPULATION PROJECTIONS



Source: Texas State Data Center



population (cont'd)

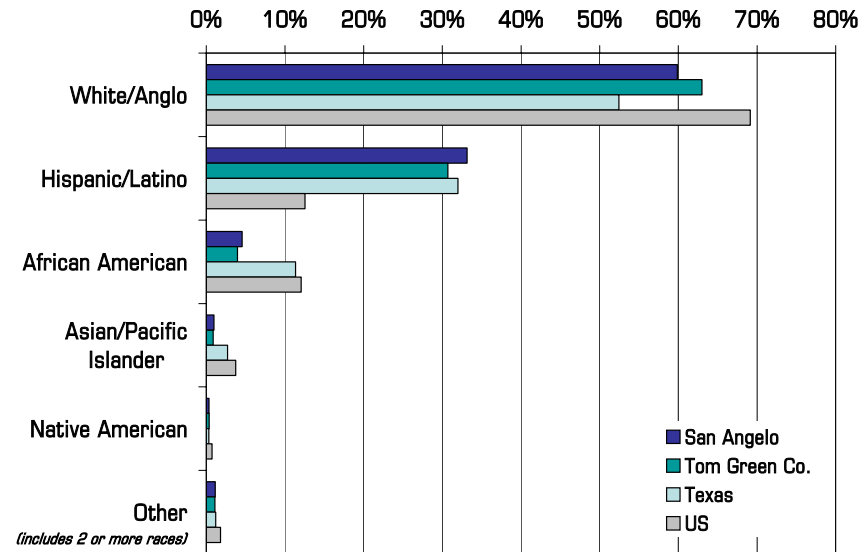
TOM GREEN COUNTY'S RACIAL AND ETHNIC COMPOSITION IS SIMILAR TO THE STATE.

- Anglos (non-Hispanic whites) accounted for 63 percent of the county's population in 2000, compared to 52 percent statewide.
- Hispanics comprised approximately one third of the county's and state's respective populations in 2000.
- Only four percent of the county's population classified itself as African American or Black in the 2000 census, compared to 11 percent statewide.

TOM GREEN COUNTY'S POPULATION IS SLIGHTLY OLDER THAN THE STATE AS A WHOLE.

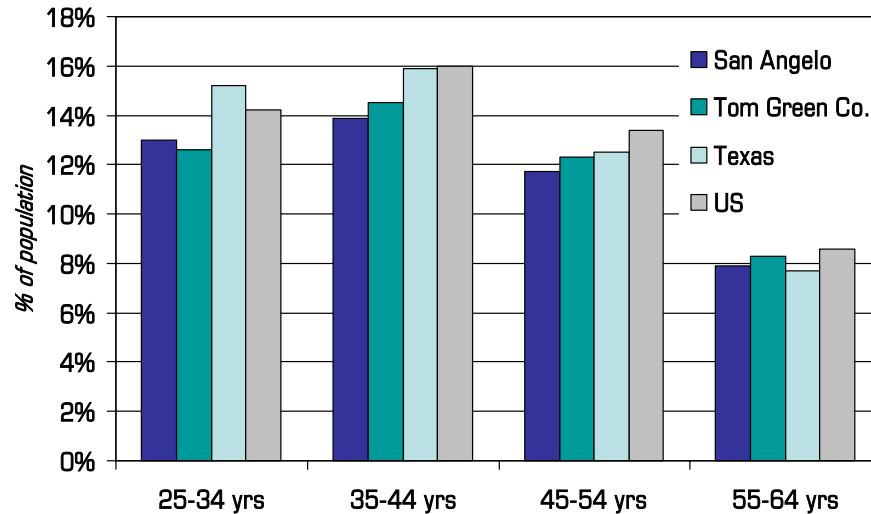
- Only 48 percent of Tom Green County's population is between 25 and 65 years of age.
- This is compared with Texas and the US, both with approximately 51-52 percent of their populations in this age group.
- Approximately 13 percent of Tom Green County residents are 65 or older, compared to 10 percent statewide and 12 percent nationally.

RACIAL & ETHNIC COMPOSITION, 2000



Source: US Census Bureau

WORKING AGE POPULATION, 2000



Source: US Census Bureau

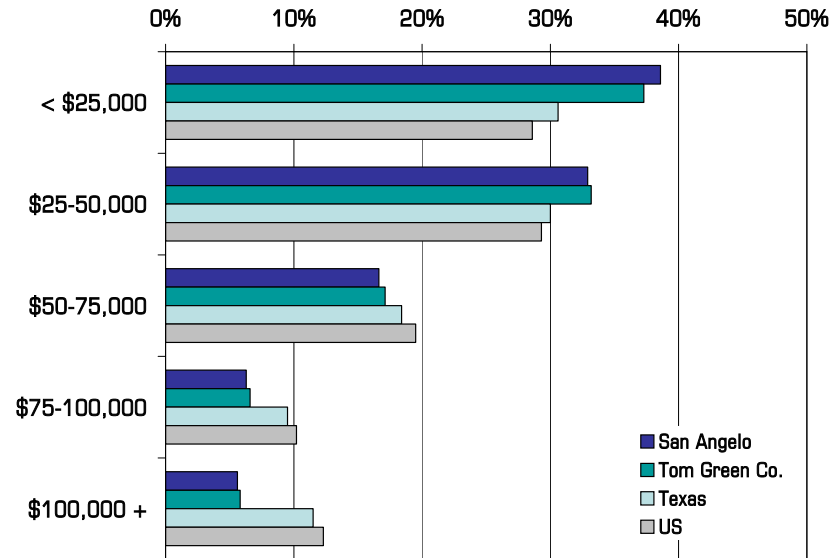


population (cont'd)

A RELATIVELY HIGH CONCENTRATION OF LOW-INCOME HOUSEHOLDS IS PRESENT IN TOM GREEN COUNTY.

- Approximately 37 percent of households in Tom Green County earned less than \$25,000 in 1999, compared to 31 percent statewide, and 29 percent nationally.
- Nationally and statewide, nearly 60 percent of households make up the broad “middle class,” defined here as an income between \$25,000 and \$100,000.
- In Tom Green County, 57 percent of households were in this category in 1999 with a higher share at the lower end of the scale.
- Only six percent of Tom Green County households earned \$100,000 or more in 1999, compared to approximately 12 percent nationally and statewide.

HOUSEHOLD INCOME DISTRIBUTION, 1999



Source: US Census Bureau

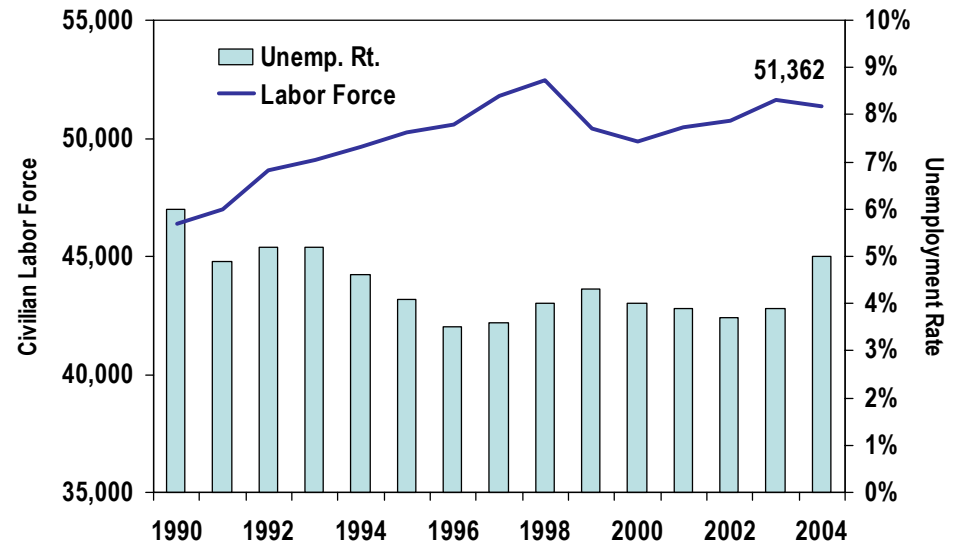


workforce & education

TOM GREEN COUNTY'S LABOR FORCE IS GROWING SLOWLY.

- From 1990 through 1998, Tom Green County's labor force grew at an annual rate of 1.6 percent, reaching a peak count of approximately 52,400 in 1998.
- After falling for two consecutive years, the county's labor force began a new growth cycle and has expanded at a 0.8 percent annual rate since 2000.
- Throughout the 1990s, Tom Green County's unemployment rate fell, rising slightly in 1998 and 1999.

TOM GREEN CO. LABOR FORCE, 1990-2004



Source: Texas Workforce Commission



workforce & education (cont'd)

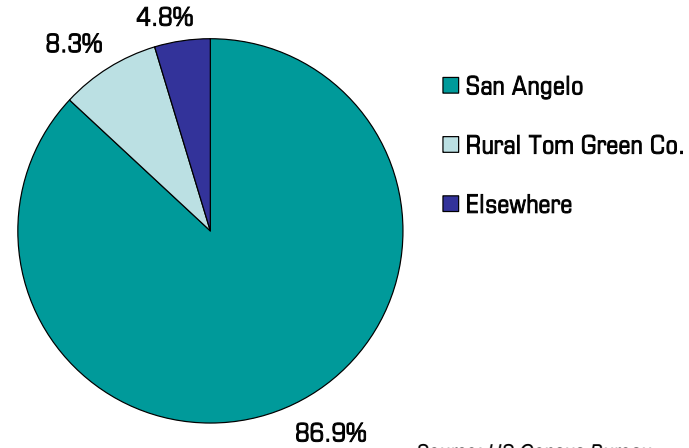
COMMUTING PATTERNS FOR 2000 REVEAL THAT MOST WORKERS WHO LIVED IN TOM GREEN COUNTY WORKED IN SAN ANGELO.

- Nearly 87 percent of Tom Green County workers worked in San Angelo.
- Just over eight percent worked in the county outside San Angelo.
- Only about five percent worked commuted outside the county for their work.

NEARLY 95 PERCENT OF TOM GREEN COUNTY'S WORKFORCE IS COMPRISED OF LOCAL RESIDENTS.

- The largest share of commuters from outside Tom Green County comes from Runnels Co.
- Other major contributors to Tom Green County's workforce include Coke, Irion, and Concho counties.

PLACE OF WORK FOR TOM GREEN CO. RESIDENTS



Source: US Census Bureau

County of Residence for Workers 16+ Years Working in Tom Green Co., 2000

COUNTY OF RESIDENCE	WORKERS	%
Tom Green Co.	44,999	94.8%
Runnels Co.	561	1.2%
Coke Co.	294	0.6%
Irion Co.	274	0.6%
Concho Co.	206	0.4%
Schleicher Co.	143	0.3%
Taylor Co.	140	0.3%
Sterling Co.	56	0.1%
Elsewhere	798	1.7%
TOTAL WORKERS EMPLOYED IN TOM GREEN CO.	47,471	

Source: U.S. Census Bureau



workforce & education (cont'd)

A SMALL SHARE OF TOM GREEN COUNTY RESIDENTS IS EMPLOYED IN PROFESSIONAL OCCUPATIONS.

- Only 6.6 percent of employed Tom Green County residents classify their occupation as management.
- Only one percent of employed residents work in computer and mathematical occupations.
- A relatively high share (19%) of county workers is employed in service-related occupations, compared to approximately 15 percent statewide and nationally.
- Among service-related occupations, Tom Green County leads the state and nation in food preparation and building and grounds maintenance occupations.
- The county also leads the nation in the share of workers employed in sales and related occupations.
- Among “blue collar” occupations, Tom Green County leads the nation but lags the state in its share of workers employed in construction, extraction, and maintenance occupations.
- Tom Green County lags the nation but has the same share of workers as the state employed in production, transportation, and material moving occupations.

SHARE OF EMPLOYMENT BY OCCUPATION, 2000

OCCUPATIONAL CLASSIFICATION	SAN ANGELO	TOM GREEN CO.	TEXAS	US
MGMT., PROF. & RELATED:	27.8%	27.9%	33.3%	33.6%
Mgmt. (exc. farmers & farm mgrs.)	6.6%	6.6%	8.6%	8.6%
Farmers & farm mgrs.	0.3%	0.8%	0.6%	0.6%
Business operation specialists	1.7%	1.7%	2.1%	2.1%
Financial specialists	1.4%	1.3%	2.2%	2.2%
Computer & math	1.1%	1.0%	2.5%	2.4%
Architects, surveyors & engineers	0.6%	0.6%	1.6%	1.5%
Drafters, engineering & map techs	0.4%	0.4%	0.6%	0.6%
Life, physical & social science	0.4%	0.4%	0.8%	0.9%
Community & social svcs.	1.9%	1.8%	1.3%	1.5%
Legal	0.7%	0.7%	1.0%	1.1%
Educational, training & library	6.1%	6.1%	6.1%	5.7%
Arts, design, entertainment, sports & media	1.1%	1.1%	1.6%	1.9%
Health diagnosing & treating pracs & tech.	3.3%	3.3%	2.8%	3.2%
Health technologists & technicians	2.2%	2.1%	1.4%	1.4%
SERVICE:	19.4%	18.9%	14.6%	14.9%
Healthcare support	2.7%	2.6%	1.9%	2.0%
Fire fighting, prevention & law enforcement	1.3%	1.4%	1.3%	1.2%
Other protective service	0.6%	0.6%	0.7%	0.8%
Food prep. & serving related	6.3%	6.0%	4.7%	4.8%
Building & grounds cleaning & maintenance	4.8%	4.5%	3.4%	3.3%
Personal care & service	3.7%	3.7%	2.6%	2.8%
SALES & OFFICE:	29.2%	28.5%	27.2%	26.7%
Sales & related	12.9%	12.5%	11.8%	11.2%
Office & admin. Support	16.4%	16.0%	15.4%	15.4%
FARMING & FISHING:	0.6%	0.9%	0.7%	0.7%
CONST., EXTRACTION & MAINTENANCE:	9.8%	10.7%	10.9%	9.4%
Supervisors, construction & extraction	0.6%	0.8%	0.9%	0.7%
Construction trades	4.9%	5.1%	5.5%	4.7%
Extraction	0.4%	0.5%	0.2%	0.1%
Installation, maintenance & repair	3.9%	4.2%	4.3%	3.9%
PRODUCTION, TRANSPORT. & MTRL. MOV.:	13.1%	13.2%	13.2%	14.6%
Production	7.8%	7.7%	7.2%	8.5%
Supervisors, transport. & material moving	0.1%	0.1%	0.2%	0.2%
Aircraft & traffic control	0.2%	0.2%	0.2%	0.1%
Motor vehicle operators	2.8%	3.0%	3.0%	3.0%
Rail, water & other transportation	0.1%	0.1%	0.3%	0.3%
Material moving	2.0%	2.0%	2.3%	2.6%

Source: US Census Bureau

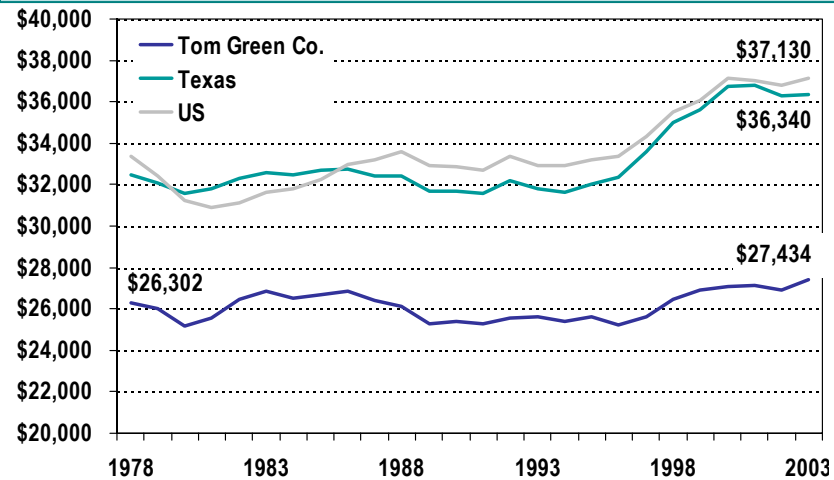


workforce & education (cont'd)

THE AVERAGE WAGE FOR A JOB LOCATED IN TOM GREEN COUNTY WAS 26 PERCENT LOWER THAN THE NATIONAL AVERAGE IN 2003.

- Real wages in Tom Green County rose only four percent between 1978 and 2003, compared to 11.9 percent rise statewide and 11.3 percent nationally.
- Local wages fell during the late 1980s, remained stagnant through the early 1990s, only to rise in the latter half of the last decade.

AVG. ANNUAL WAGES (adj. for inflation), 1978-2003



Source: US Bureau of Economic Analysis

THE MEDIAN HOURLY WAGE IN THE SAN ANGELO MSA IS 24 PERCENT LESS THAN THE NATION'S.

- Only legal and healthcare practitioner and technical occupations pay a higher median hourly wage in the San Angelo MSA than in both the state and the nation as a whole.
- Five occupational groups (computer & mathematical, architecture and engineering, management, business and financial, and legal) offer median average salaries greater than \$20 in the San Angelo MSA.
- Two occupational groups (personal care and service, and food preparation and serving related) pay less than \$7 per hour in the San Angelo MSA.

Median Hourly Wage by Occupation, May 2003

	San Angelo MSA	Texas	US
ALL OCCUPATIONS	\$10.28	\$12.50	\$13.53
Computer & mathematical science	\$27.56	\$31.64	\$34.07
Architecture & engineering	\$25.50	\$28.62	\$28.46
Management	\$24.57	\$28.67	\$28.87
Business & financial operations	\$22.19	\$23.56	\$23.68
Legal	\$22.05	\$20.53	\$21.63
Healthcare practitioner & technical	\$17.69	\$15.92	\$15.58
Life, physical, & social science	\$16.98	\$17.71	\$18.00
Protective service	\$16.93	\$22.02	\$22.58
Community & social services	\$14.25	\$26.89	\$26.89
Installation, maintenance, & repair	\$13.27	\$13.96	\$14.25
Construction & extraction	\$12.78	\$15.59	\$16.88
Office & administrative support	\$10.51	\$14.99	\$16.49
Production	\$9.85	\$11.88	\$12.52
Transportation & material moving	\$9.26	\$12.60	\$16.04
Healthcare support	\$9.04	\$11.21	\$12.32
Sales & related	\$8.11	\$10.46	\$11.31
Arts, design, entertainment, sports, & media	\$7.72	\$9.58	\$10.20
Farming, fishing, & forestry	\$7.23	\$8.87	\$10.27
Building & grounds cleaning & maintenance	\$7.06	\$7.82	\$9.02
Personal care & service	\$6.61	\$6.78	\$7.40
Food preparation & serving related	\$6.47	\$7.23	\$8.13
Education, training, & library	NA	\$6.87	\$8.48

Source: US Bureau of Labor Statistics



workforce & education (cont'd)

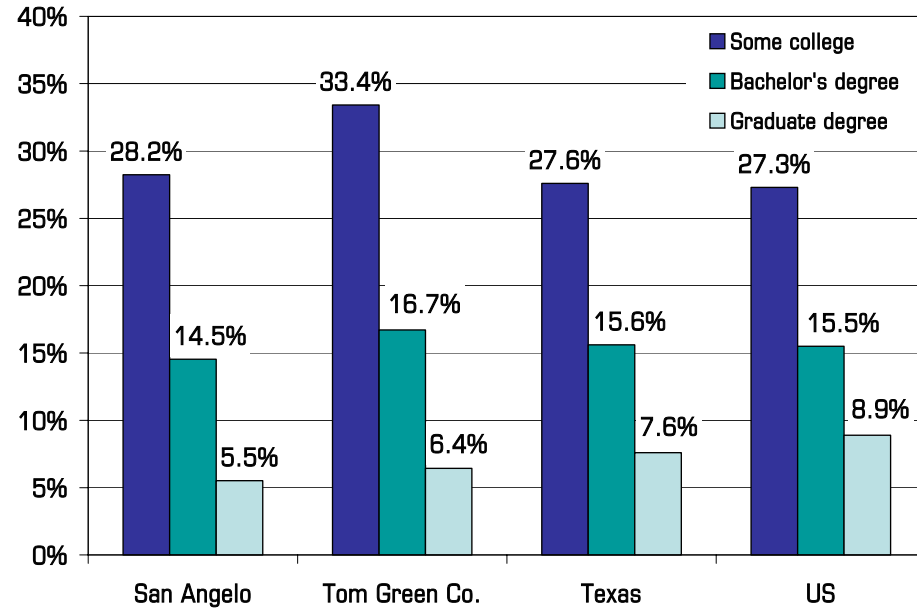
EDUCATIONAL ATTAINMENT LEVELS IN TOM GREEN COUNTY ARE COMPETITIVE WITH THE STATE AND NATION.

- Twenty-eight percent of adults 25 years or older had not graduated from high school in 2000, compared to 24 percent statewide and 20 percent nationally.
- On the other hand, 57 percent of area adults have at least some college experience, compared to 51 percent statewide and 52 percent nationally.

IN 2000, A HIGHER SHARE OF TOM GREEN COUNTY RESIDENTS WAS ENROLLED IN COLLEGE OR GRADUATE SCHOOL THAN IN THE STATE AND NATION.

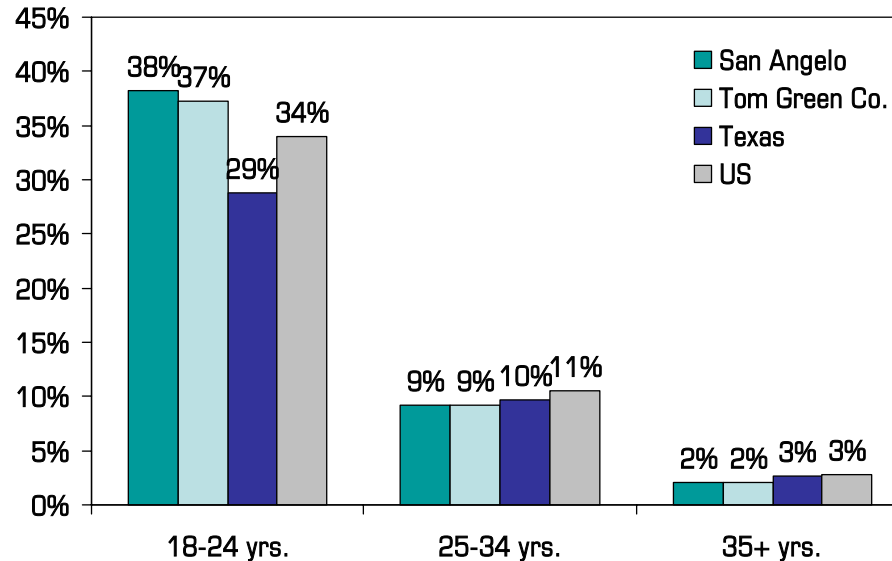
- In 2000, 38 percent of Tom Green County residents aged 18-24 years or older were enrolled in college or graduate school, compared to 37 percent in the county, 29 percent statewide, and 34 percent nationally.
- The local area lagged the nation and state only slightly among older population groups.

EDUCATIONAL ATTAINMENT, 2000



Source: US Census Bureau

SHARE OF POPULATION ENROLLED IN COLLEGE BY AGE, 2000



Source: US Census Bureau



other indicators

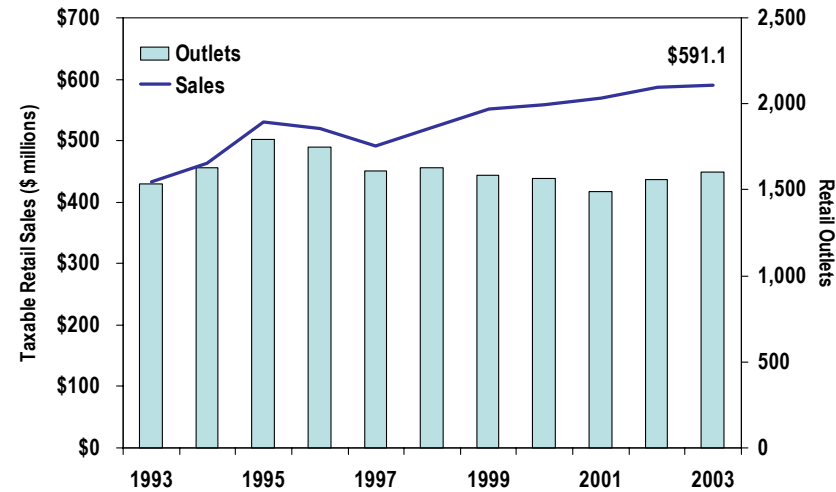
TAXABLE RETAIL SALES INCREASED NEARLY 37 PERCENT FROM 1993 TO 2003 IN TOM GREEN COUNTY.

- Taxable retail sales steadily increased during the last ten years for which data were available, except for two-year decline from 1995 to 1997.
- While sales growth has remained constant, the number of retail outlets in the county has declined since a 1995 high.
- As a result, the amount of sales per retail outlet increased 30 percent during that period.
- These trends are similar to state and national retail trends where a greater share of retail activity is occurring in larger “big box” stores.

SALES PER CAPITA IN TOM GREEN COUNTY CLOSELY REFLECTS STATEWIDE FIGURES IN SPITE OF LOWER LOCAL INCOME AND WAGE RATES.

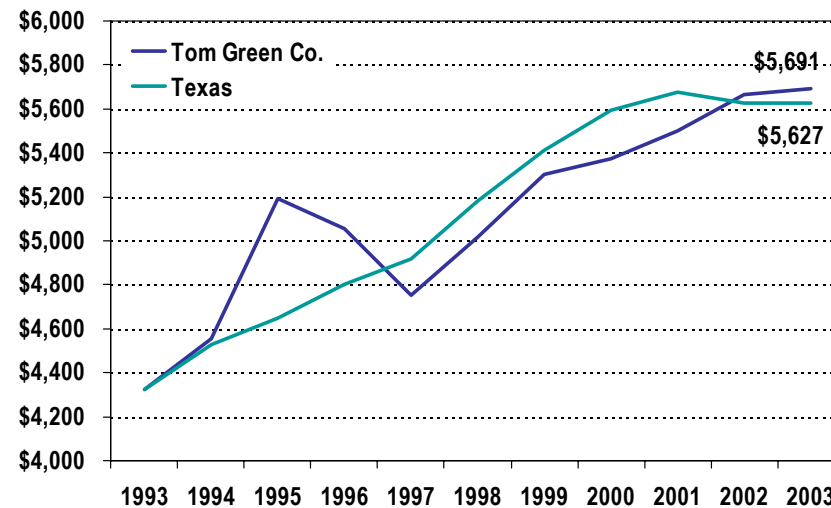
- Taxable retail sales per capita increased nearly 32 percent in Tom Green County from 1993 to 2003, mirroring a 30 percent statewide increase.
- Sales per capita at the statewide level declined slightly after 2001, while local sales increased slightly.
- These figures imply that Tom Green County has successfully retained its status as the region’s retail hub during the last decade.

TOM GREEN CO. TAXABLE RETAIL SALES, 1993-2003



Source: Texas Comptroller's Office

TAXABLE RETAIL SALES PER CAPITA



Source: Texas Comptroller's Office

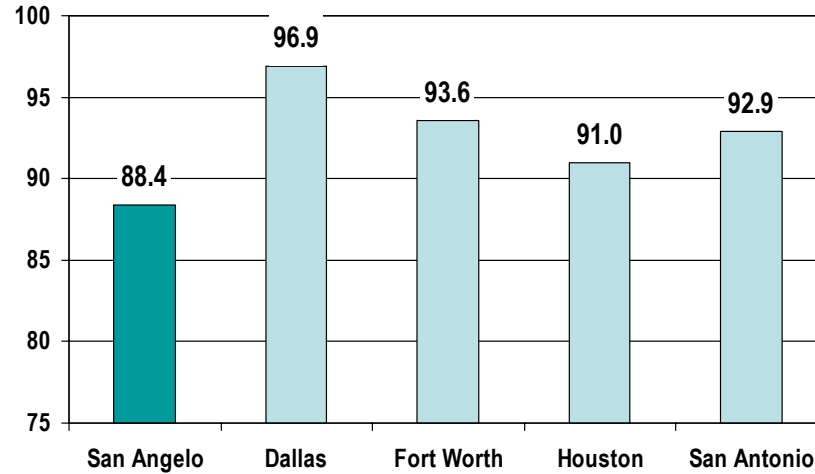


other indicators (cont'd)

SAN ANGELO RESIDENTS ENJOY A RELATIVELY LOW COST OF LIVING.

- According to ACCRA (formerly American Chamber of Commerce Researchers Association), San Angelo's composite cost of living was 88.4 percent that of all metropolitan areas measured in the second quarter of 2003.
- All the state's major metropolitan regions scored lower than the national average.
- Among these, Houston had the lowest score 91.0, only slightly higher than San Angelo.

COST OF LIVING INDEX, 2003-2nd quarter

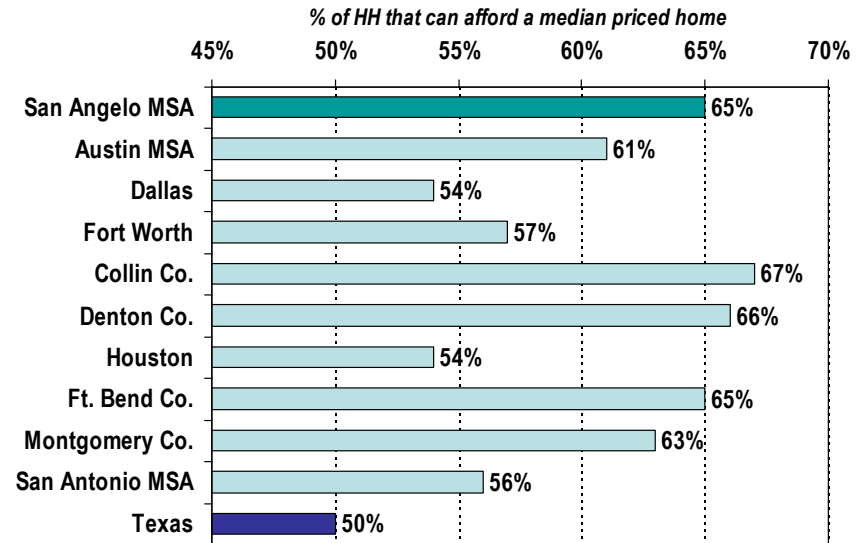


Source: ACCRA

A GREATER PERCENTAGE OF HOUSEHOLDS CAN AFFORD A MEDIAN PRICED HOME IN SAN ANGELO THAN STATEWIDE.

- Nearly two-thirds of households earn enough income to purchase a median priced home in San Angelo.
- Households living in larger, central cities (e.g. Dallas, Fort Worth, and Houston) find it more difficult to purchase homes.
- However, lower prices in suburban areas (e.g. Collin, Denton, Montgomery, and Fort Bend counties) allow a approximately two-thirds of households to purchase a median priced home.

HOUSING AFFORDABILITY 2004-4th quarter



Source: Texas Real Estate Center



INDUSTRY ANALYSIS

THE NUMBER OF JOBS IN TOM GREEN COUNTY INCREASED 18 PERCENT FROM 1990 TO 2004.

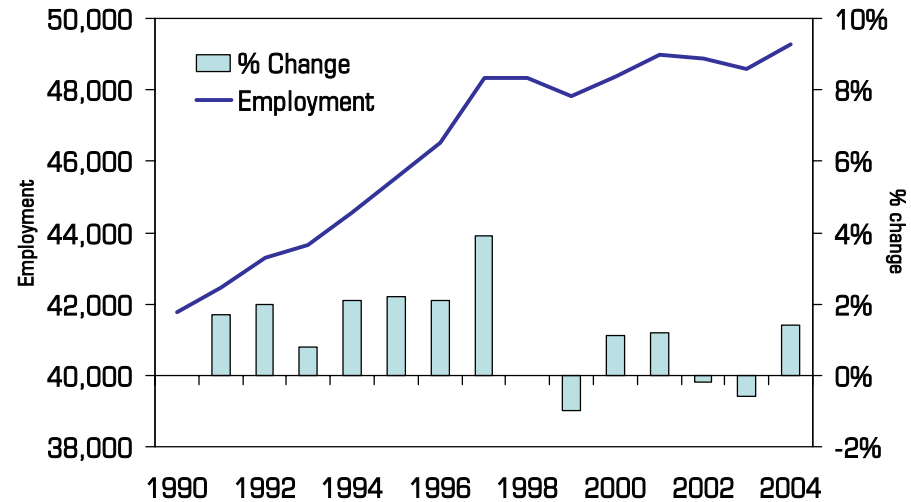
- During the first seven years of that period, the county enjoyed a strong and steady growth rate in which an employment increase of 16 percent was reached.
- During the last seven years, however, employment growth was slower and inconsistent and accounted for an overall rate of only two percent.
- Economy.com estimates that current total employment in Tom Green County is approximately 49,300.

DURING THE LAST FIVE YEARS, EMPLOYMENT IN TOM GREEN COUNTY INCREASED THREE PERCENT.

- The three sectors that contributed the most to local employment growth were Government, Health & Social Services, and Leisure & Hospitality.
- Other locally growing sectors included Professional & Business Services, Retail Trade, and Natural Resources.
- During the last five years, Tom Green County experienced significant employment decreases in Manufacturing and Information. Local losses in these industries reflect national and state trends during the same period.

TOTAL EMPLOYMENT, 1990 to 2004

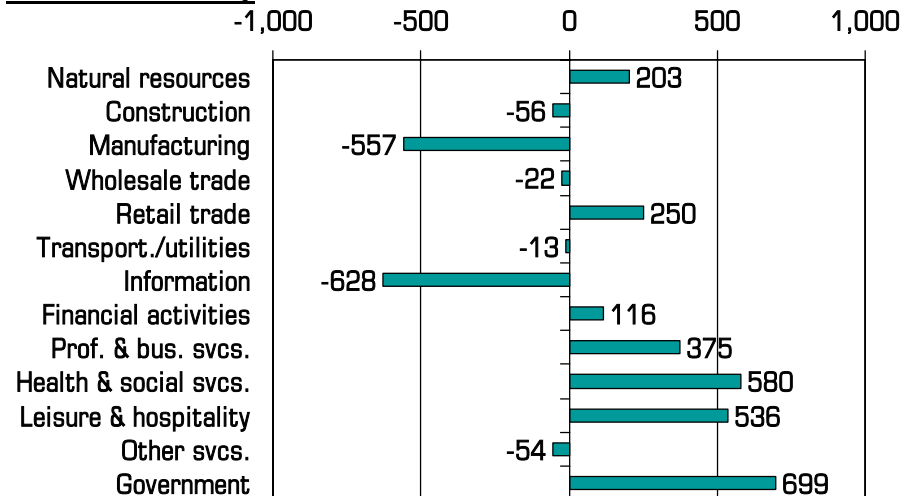
Tom Green County



Source: Economy.com

JOB CHANGE BY INDUSTRY, 1999 to 2004

Tom Green County



Source: Economy.com

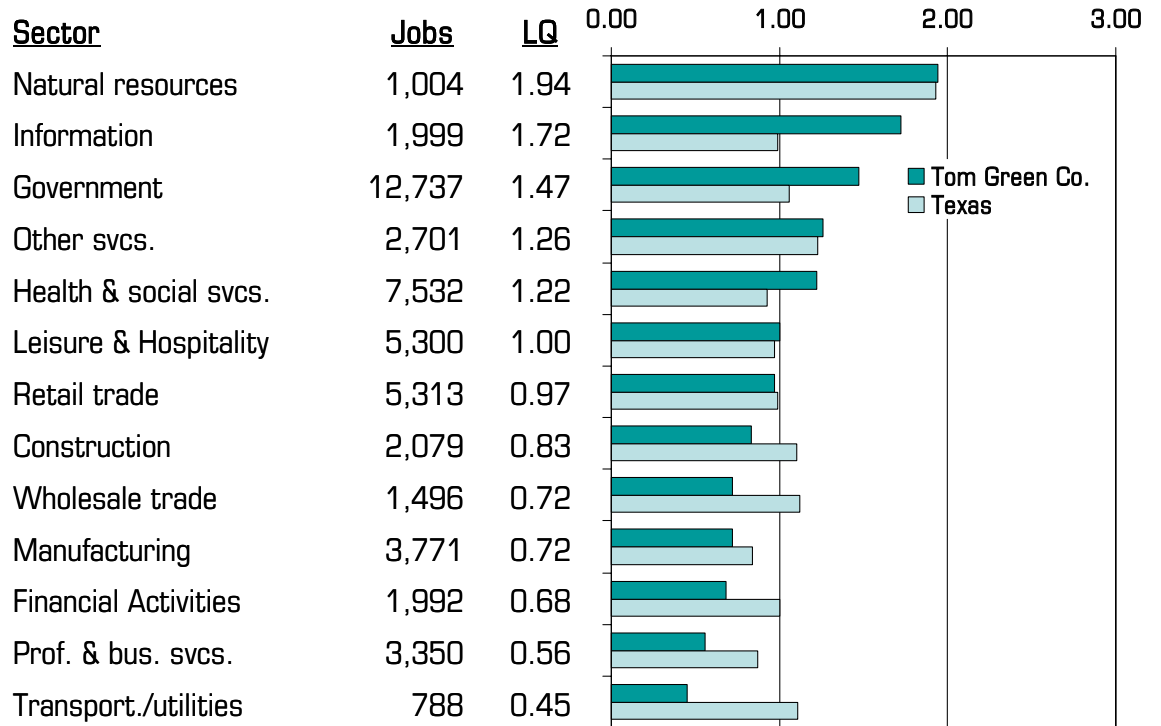


industry clusters (cont'd)

TOM GREEN COUNTY'S HIGHEST LOCATION QUOTIENTS (LQS) ARE IN THE NATURAL RESOURCES, INFORMATION, AND GOVERNMENT SECTORS.

- Tom Green County's highest LQ (1.94) is in the Natural Resources sector, meaning the county has 94 percent more jobs than would be expected given national employment rates.
- The area's other high LQs are in Information (1.72) and Government (1.47). The government sector encompasses federal, state, and local government, including public schools and the university.
- The industries with the lowest concentrations in Tom Green County are Financial Activities, Professional & Business Services, and Transportation & Utilities.

LOCATION QUOTIENT COMPARISON, 2004



Source: Economy.com; TIP Strategies

Location quotients (LQs) are ratios generally used to measure the relative concentration of an industry in a region versus its concentration in the nation by measuring employment. While an LQ equal to 1.00 indicates an industry's regional concentration is the same as the nation, an LQ greater than 1.25 generally indicates a regional specialization in that industry.



industry clusters (cont'd)

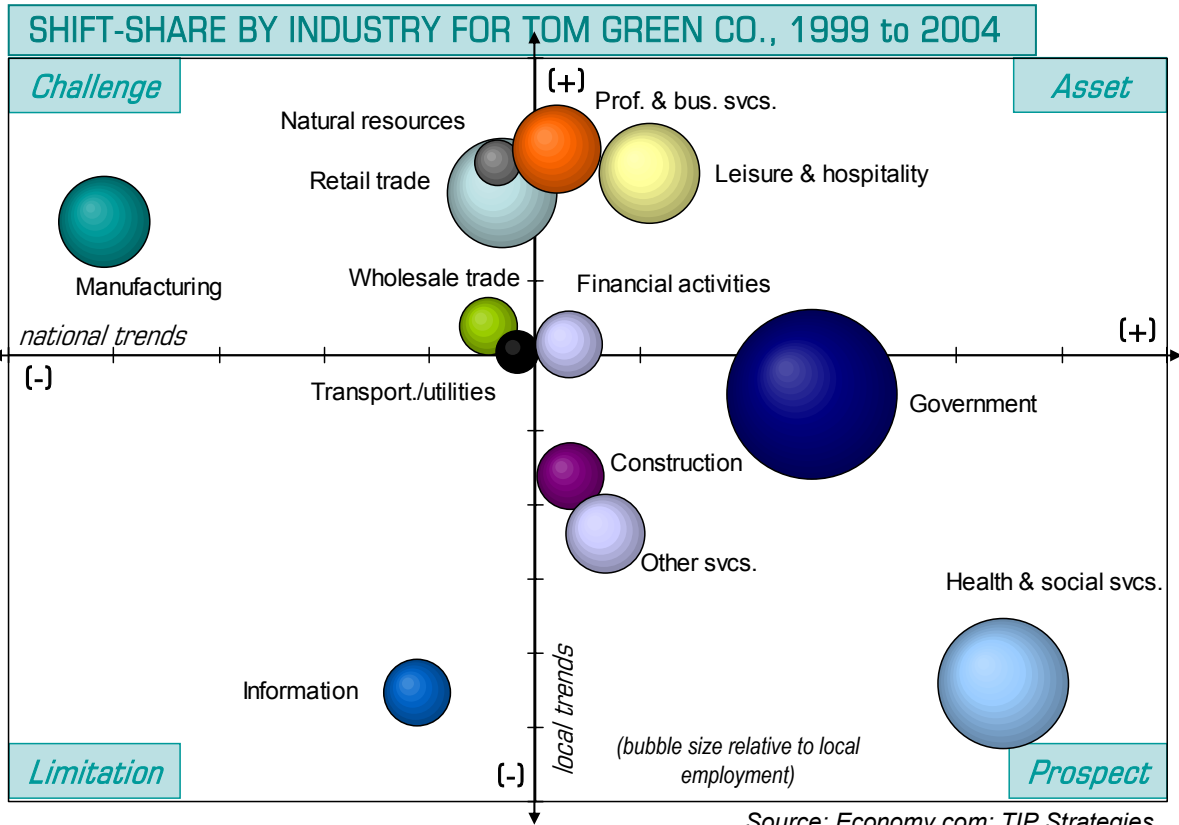
The figure to the right places Tom Green County's major sectors in quadrants according to their economic performance from 1999 to 2004 at the national and local levels.

ASSETS: Professional & Business Services, Leisure & Hospitality, and Financial Activities are all considered assets to Tom Green County. During the last five years, each of these industries expanded employment at both the national and local levels.

PROSPECTS: The local sectors in this quadrant are Government, Health & Social Services, Construction, and Other Services. Government is, by far, the largest local employer in this category, followed by health and social services.

CHALLENGES: Several local industries are in this quadrant, including Natural Resources, Retail Trade, Wholesale Trade, Transportation & Utilities, and Manufacturing. While the local manufacturing sector declined during the last five years, the nation's manufacturers struggled even more. This indicates the possibility that Tom Green County manufacturers could be faced with future layoffs to remain competitive with their national counterparts.

LIMITATIONS: Only one major industry sector falls within this category in Tom Green County: Information. During the late 1990s, this industry was considered a major driver in the national economy due to increased business and personal expenditures in technology. But as the dot.com bubble burst, major layoffs were experienced in Information. While some recovery is being experienced in the industry, off-shoring of certain services (e.g., customer service and software support) may limit future growth potential.



Shift-share analysis is a comparative tool used to measure the economic linkages between changes in the structure of a local economy and that of a higher-level or parent economy, in this case the United States. Shift-share analysis is a technique that determines the source of changes in a given industry in the local economy by allocating shifts in employment among three components: national, industry mix, and regional competitive share.

<p>Challenge</p> <p>The local industry's performance was stronger relative to a national industry that is lagging.</p> <p>"Red flag" industries (those that are sensitive to changes in the external economy).</p>	<p>Asset</p> <p>Both the local and national industry exhibited strong employment growth.</p> <p>Opportunities for retention and expansion of existing firms.</p>
<p>Limitation</p> <p>Both the local and national industry were lagging.</p> <p>Few opportunities for further development in this industry.</p>	<p>Prospect</p> <p>The national industry exhibited strong growth, but the local industry did not match the national industry's performance.</p> <p>Opportunities for attracting and/or starting up new firms (if local development factors are conducive to growth in this industry).</p>



employment forecasts

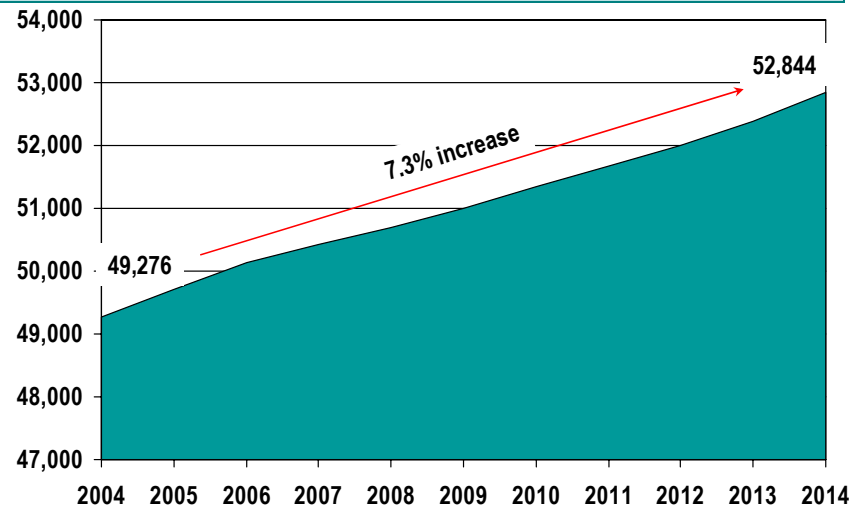
EMPLOYMENT IN TOM GREEN COUNTY IS FORECAST TO GROW 7.3 PERCENT FROM 2004 TO 2014.

- This translates into a net gain of approximately 3,600 jobs.
- Statewide, employment is expected to increase 21 percent during the same period, resulting in a net gain of over 2 million jobs.
- The US economy is forecast to increase employment 13.8 percent.

INDUSTRIES WITHIN THE OVERALL SERVICES SECTOR ARE EXPECTED TO LEAD GROWTH IN TOM GREEN COUNTY.

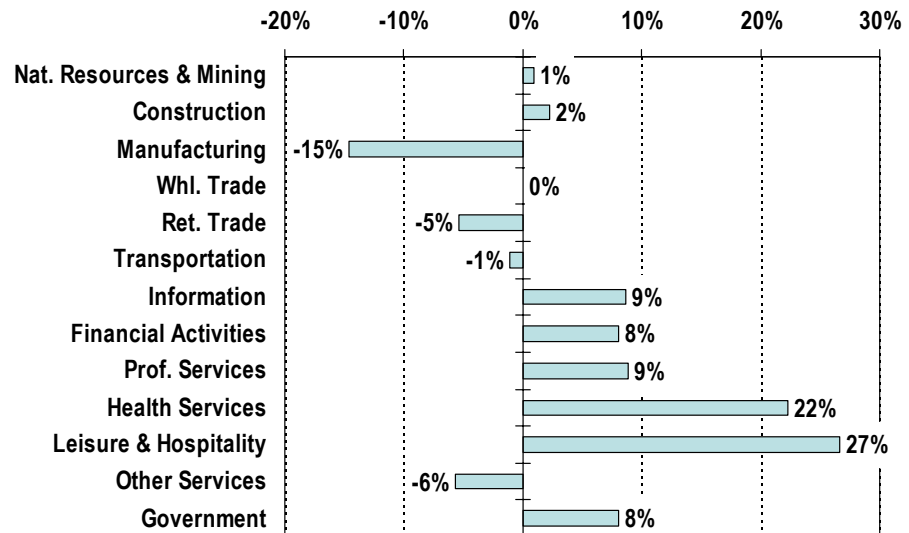
- Leisure and Hospitality is forecast to grow at the fastest pace among all industries in Tom Green County, following closely by Health Services.
- Information, Professional Services, Financial Activities, and Government are also forecast to grow at a faster pace than the overall economy in Tom Green County.
- Economy.com forecasts that Manufacturing, Retail, and Other Services will shed jobs between 2004 and 2014.
- Employment in Natural Resources and Mining, Construction, Wholesale Trade, and Transportation is expected to remain stable.

TOM GREEN CO. EMPLOYMENT FORECAST, 2004-2014



Source: Economy.com

TOM GREEN CO. FORECAST BY SECTOR, 2004-2014



Source: Economy.com

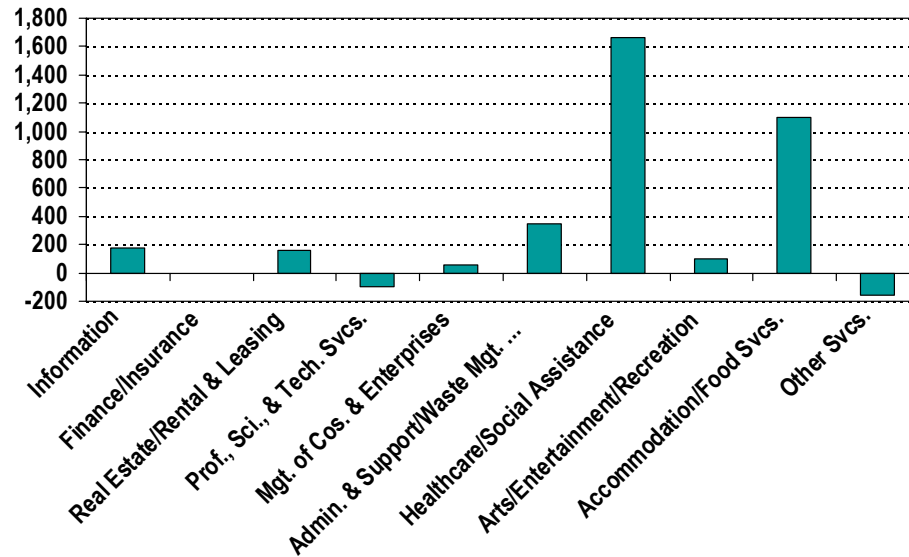


employment forecasts (cont'd)

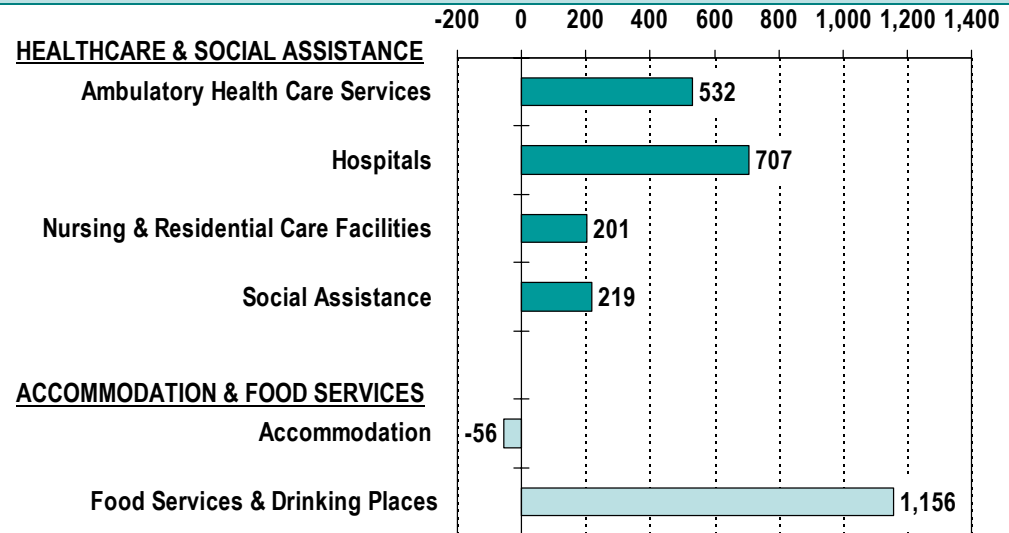
THE MAJORITY OF NEW JOBS WITHIN SERVICES IS EXPECTED TO OCCUR WITHIN JUST TWO INDUSTRIES.

- Healthcare/Social Assistance and Accommodation/Food Services are forecast to gain nearly 2,800 net jobs by 2014, representing 77 percent of all employment gains in Tom Green County.
- Information, Administrative and Support Services, and Real Estate/Rental and Leasing are also expected to enjoy healthy net job increases during the decade.
- Within Healthcare/Social Assistance, Hospital and Ambulatory Healthcare Services are expected to generate the greatest number of new jobs.
- Within Accommodation/Food Services, Accommodation (includes hotels and motels) is actually forecast to shed approximately 50 jobs, while Food Services/Drinking Places is forecast to create 1,156 net jobs in Tom Green County.

TOM GREEN CO. SERVICES SECTOR JOB CREATION, 2004-2014



TOM GREEN CO. JOB CREATION (HEALTHCARE & LEISURE), 2004-2014





employment forecasts (cont'd)

ONLY A HANDFUL OF INDUSTRIES ARE EXPECTED TO ACCOUNT FOR THE MAJORITY OF JOB GROWTH IN THE COMING DECADE.

- Only 21 private sector industries in Tom Green County are forecast to experience a net increase of 50 or more jobs between 2004 and 2014.
- Collectively, these industries (listed to the right) are forecast to gain over 4,200 jobs, while total employment among all industries is forecast to increase only 3,576.
- Healthcare related industries dominate the list of growth industries. These include: Home Healthcare Services; General Medical and Surgical Hospitals; Residential Mental Retardation, Mental Health and Substance Abuse Facilities; and Community Care Facilities for the Elderly.
- Within Information, Wired Telecommunications Carriers and Data Processing are forecast to gain nearly 260 net new jobs.
- Other notable expanding industries include Business Support Services; Facilities Support Services; Management of Companies and Enterprises; and Scientific Research and Development Services.

TOP PRIVATE-SECTOR GROWTH INDUSTRIES FOR TOM GREEN Co., 2004 to 2014

NAICS (4-DIGIT)	Activity or Product	TOM GREEN EMP.		Job Growth	
		2004	2014	%	#
6216	Home Health Care Services	1,518	2,397	57.9%	879
7221	Full-Service Restaurants	2,101	2,870	36.6%	769
6221	General Medical & Surgical Hospitals	2,182	2,844	30.4%	663
6244	Child Day Care Services	473	748	58.2%	275
7222	Limited-Service Eating Places	1,280	1,539	20.3%	259
5614	Business Support Services	602	780	29.7%	179
5171	Wired Telecommunications Carriers	991	1,168	17.8%	177
2381	Foundation, Structure, & Building Exterior Contractors	381	513	34.6%	132
6232	Residential Mental Retardation, Mental Health & Substance Abuse Facilities	221	338	52.9%	117
8111	Automotive Repair & Maintenance	679	773	13.8%	94
4441	Building Materials & Supplies Dealers	366	453	23.8%	87
5182	Data Processing, Hosting, & Related Services	70	152	115.7%	82
5311	Lessors of Real Estate	425	493	16.2%	69
7111	Performing Arts Companies	96	164	70.8%	68
7224	Drinking Places (Alcoholic Beverages)	175	242	38.6%	67
8123	Drycleaning & Laundry Services	249	311	25.0%	62
7223	Special Food Services	212	272	28.5%	60
5612	Facilities Support Services	69	123	79.4%	54
5511	Management of Companies & Enterprises	83	135	63.5%	53
6233	Community Care Facilities for the Elderly	224	275	22.6%	51
5417	Scientific Research & Development Services	90	140	55.7%	50
TOP GROWTH INDUSTRIES		12,487	16,730	34.0%	4,247
TOTAL PAYROLL EMPLOYMENT (ALL INDUSTRIES)		49,267	52,844	7.3%	3,576

Source: Economy.com



occupational analysis

methodology >

As part of the overall industry sector analysis, TIP prepared a detailed quantitative forecast of occupational changes for the 2004-2014 period. We emphasize that this is a quantitative forecast, meaning it is based on existing data, existing trends, and existing industry employment forecasts that are translated into occupational terms. This occupational forecast was prepared as follows:

- 1) TIP reviewed Economy.com's forecast of employment by industry (2004-2014) for Tom Green County and compared it to the employment levels of the county's major employers to identify discrepancies or deficiencies that could be corrected. This process resulted in the following adjustments:
 - a) Employment for the San Angelo ISD in 2004 (classified by Economy.com as "Local Government" employment) was moved to NAICS code 6111 ("Elementary and Secondary Schools"). Employment growth for the San Angelo ISD was assumed to equal the Tom Green County average for the 10-year forecast period.
 - b) Employment for Angelo State University in 2004 (classified by Economy.com as "State Government" employment) was moved to NAICS code 6113 ("Colleges, Universities, and Professional Schools"). Employment growth for ASU was assumed to equal the Tom Green County average for the 10-year forecast period.
 - c) Employment for the San Angelo State School in 2004 (classified by Economy.com as "State Government" employment) was moved to NAICS code 6116 ("Other Schools and Instruction"). The 2004 employment level at the San Angelo State School was assumed to remain flat over the 10-year forecast period.
 - d) Employment at Goodfellow Air Force Base is split by Economy.com into two sectors, "Military" reflecting noncivilian jobs and "Federal Government" reflecting civilian jobs. These classifications were not changed. However, TIP did change the growth assumption for the military portion of employment to be flat over the 10-year forecast period.
- 2) TIP's adjusted version of Economy.com's forecast of employment by industry (2004-2014) was used to calculate a ten-year net change in jobs by industry for Tom Green County. These calculations were done at the highly detailed four-digit NAICS level. Results were then sorted in descending order by the 10-year forecast net change in industry employment. Home Health Care Services was the leader in this list with a projected 879 jobs. All industries that are forecast to add or shed 25 or more jobs over the next 10 years were selected for further analysis. *(Note: Any industry in which ten-year net job change fell in the +24 to -24 range was considered stagnant or insignificant for further analysis.)* In total, 72 four-digit NAICS



industries were selected for further analysis. Of these, 36 industries are forecast to gain 25 or more jobs and 36 industries are forecast to shed 25 or more jobs.

- 3) Next, TIP consulted the U.S. Bureau of Labor Statistics' Industry-Occupation Matrix. For most industries at the four-digit NAICS level, the BLS provides a schedule that shows the typical occupational composition of each industry. TIP went through all 72 industries that were selected in step two (above) and pulled the top 10 occupations for each, as tabulated in the BLS's Industry-Occupation Matrix. We then created our own matrix for the county's 72 industries under examination. The BLS's Industry-Occupation Matrix provides the share of employment that a single occupation typically accounts for in a given industry. Again, we took these percentages for the top 10 occupations in each industry. *(Note: In most cases, the top 10 occupations account for the lion's share of the industry's total employment. Analyzing more than the top 10 occupations in each industry would add needless complexity while providing little insightful information.)*
- 4) In steps two and three, we gathered the necessary tools and data to begin calculating occupational changes. In the fourth step of this process, we used the BLS's occupational percentages and multiplied those against Economy.com's industry employment forecast for 2004-2014 to calculate actual anticipated occupational changes in each industry.
- 5) Finally, we took the results and rolled up the overlapping occupations. *(Note: Many occupations, such as nurses, clerks, accountants, cashiers, waiters, etc., may appear in more than one industry and must be rolled up and totaled to complete the analysis.)* After rolling these occupations up, we were able to identify more than 250 different occupations in Tom Green County. Of these, we found 40 occupations that forecast to add 25 or more jobs in the next 10 years, while only 11 occupations are forecast to lose 25 or more jobs. The result of this occupational roll-up is our *preliminary* occupational forecast for Tom Green County. We refer to this as preliminary, or unadjusted, because the tally of these occupations represents not quite 60% of Economy.com's forecast of net job gains over the next 10 years. Because this nearly 60% sample size represents a huge cross-section of the local economy, we assume that it is an excellent proxy for the true distribution of occupations countywide. With this in mind, we have adjusted the sample of occupational changes to reflect 100% (rather than three-fifths) of Economy.com's job forecast. In addition, the major occupational changes are charted in Top Projected Occupational Gains and Top Projected Occupational Losses. The former shows the occupations that are expected to gain 25 or more jobs in the next 10 years. The latter shows the occupations that are forecast to lose 25 or more jobs.



employer interviews & focus groups >

Over the course of the project, TIP Strategies interviewed several companies and organizations representing some of Tom Green County's key industry groups to garner a more complete understanding of labor market conditions and challenges in the area. Among these were:

- Angelo State University
- Concho Valley Business Solutions
- Conner Steel Products
- Coverlay Manufacturing
- Ethicon
- Goodwill Industries of San Angelo
- JC Penney
- Howard College-San Angelo
- Lone Star Beef Processors
- Multi-Chem
- Shannon Health
- San Angelo Community Medical Center
- San Angelo Independent School District
- SITEL
- Tabors Incorporated of San Angelo



in-demand occupations >

Our analysis of growing industries and the occupations that are prevalent within them revealed that the list in-demand occupations was dominated by positions within healthcare, education, and telecom/IT. Below is the list of the top 20 occupations that are projected to be most in-demand in Tom Green County based on this data analysis:

- Registered nurses
- Home health aides
- Personal and home care aides
- Nursing aides, orderlies, and attendants
- Preschool teachers, except special education
- Licensed practical and licensed vocational nurses
- Teacher assistants
- Machine operators and tenders
- Office clerks, general
- Postsecondary teachers
- Telemarketers
- Elementary school teachers, except special education
- Medical and health service managers
- Counter and rental clerks
- All other business operations specialists
- Customer service representatives
- Bill and account collectors
- Telecommunications equipment installers, except line installers
- Secondary school teachers, except special and vocational education
- Radiologic technologists and technicians



training & skills analysis >

The final list of occupations was then used to conduct an analysis of the types of training and skills development that would be needed to prepare the local workforce. Using public databases, we pulled detailed information about the characteristics of each occupation. From that list, we compiled a profile of the skills and training levels of the in-demand occupations.

SKILLS >> Perhaps more important than an understanding of demand occupations is an understanding of the skills that they require. Requirements for each occupation were combined, along with a ranking of their importance, to arrive at a list of necessary skills to support in-demand occupations.

The following is a list of the top skills identified by this analysis:

- Active listening: Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
- Reading comprehension: Understanding written sentences and paragraphs in work related documents.
- Speaking: Talking to others to convey information effectively.
- Critical thinking: Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- Writing: Communicating effectively in writing as appropriate for the needs of the audience.
- Mathematics: Using mathematics to solve problems.
- Coordination: Adjusting actions in relation to others' actions.
- Monitoring: Monitoring or assessing the performance of yourself, other individuals, or organizations to make improvements or take corrective action.
- Judgment and decision making: Considering the relative costs and benefits of potential actions to choose the most appropriate one.
- Active learning: Understanding the implications of new information for both current and future problem-solving and decision-making.

These results are in line with comments that we have heard during interviews with employers throughout the country: some of the most critical skills they need in the labor force are so-called “soft skills.” While industry-specific skills can frequently be taught on-the-job, employers are looking to hire workers who are already proficient in standard skills, such as the ability to understand directions, solve problems, and communicate effectively with others.



KNOWLEDGE >> Data were also analyzed on the particular areas of knowledge required by the target occupations. Our approach to this analysis was identical to that described for skills and resulted in the following list of the top areas of knowledge required by employers of in-demand occupations:

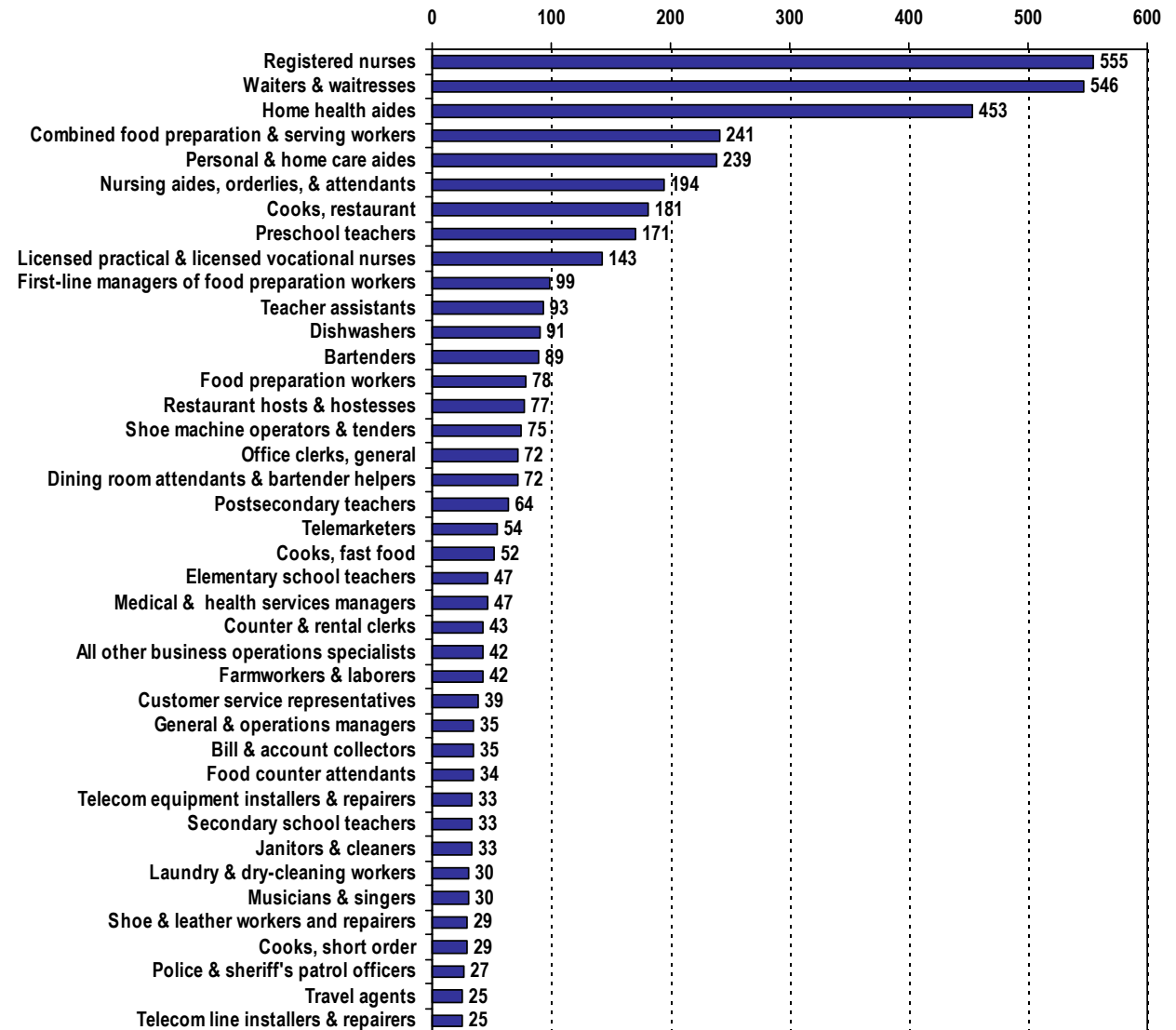
- English language: Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
- Customer and personal service: Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
- Mathematics: Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.
- Clerical: Knowledge of administrative and clerical procedures and systems such as word processing, managing files and records, stenography and transcription, designing forms, and other office procedures and terminology.
- Administration and management: Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.
- Computers and electronics: Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
- Education and training: Knowledge of principles and methods for curriculum and training design, teaching and instruction for individuals and groups, and the measurement of training effects.
- Mechanical: Knowledge of machines and tools, including their designs, uses, repair, and maintenance.



Healthcare-related occupations dominate the list of those projected to gain the most in Tom Green County during the next ten years.

- Projections indicate several healthcare related occupations that add 100 positions in the next ten year, including: registered nurses; home health aids; personal and home care aids; nursing aides, orderlies, & attendants; and licensed practical & licensed vocational nurses.
- Several occupations related to food services and restaurants are also expected to make large gains (100+), including: waiters & waitresses; combined food preparation & serving workers; and cooks, restaurants.
- Several occupations related to education and telecommunications will gain at least 25 positions in the coming decade.

TOP PROJECTED OCCUPATIONAL GAINS FOR TOM GREEN CO., 2004-2014



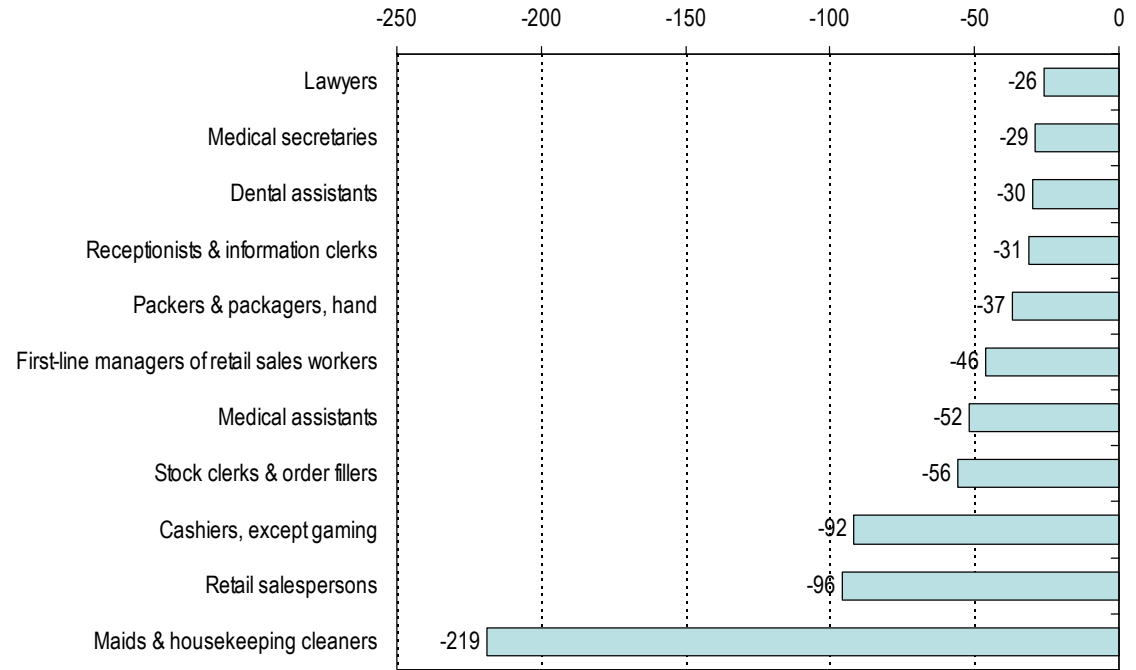
Sources: Economy.com; TIP Strategies



- Due to projected decreases in retail employment in Tom Green County, related occupations dominate the list of those which are expected to see the largest losses during the next ten years.
- Despite projections for healthy growth in the healthcare sector, a number of related occupations are expected to see losses, including: medical assistants; dental assistants; and medical secretaries.

NOTE: An electronic version of the occupational analysis data findings will be provided.

TOP PROJECTED OCCUPATIONAL LOSSES FOR TOM GREEN CO., 2004-2014



Sources: Economy.com; TIP Strategies



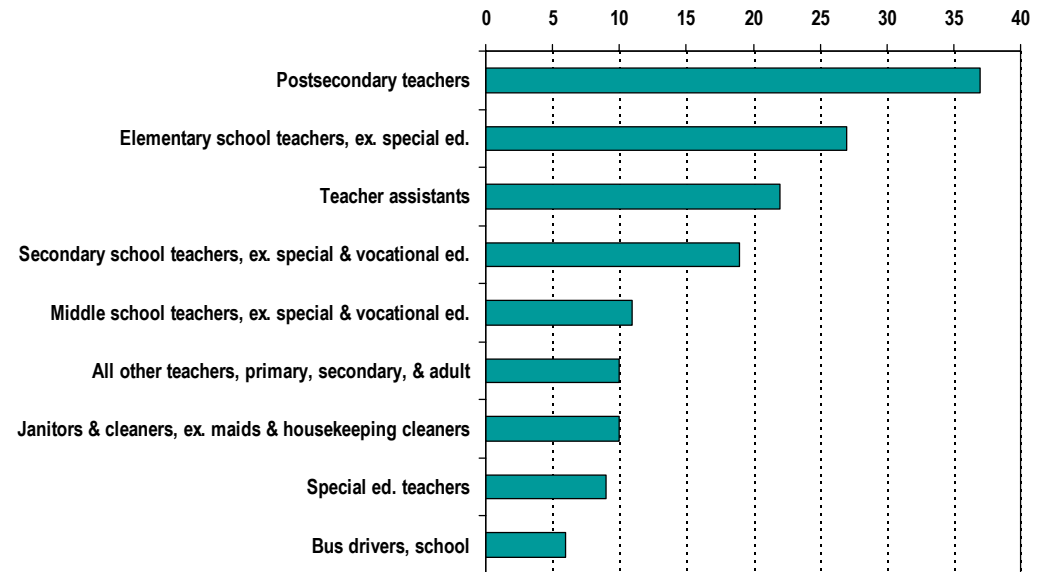
Education-related occupations

- Postsecondary teachers
- Elementary school teachers, except special education
- Teachers assistants
- Secondary school teachers, except special & vocational education

EDUCATION-RELATED INDUSTRIES GAINING 25+ JOBS, 2004-2014

NAICS	Industry Description	Net Chg.
6111	Elementary & Secondary Schools	168
6113	Colleges, Universities, & Professional Schools	87

TOP EDUCATION OCCUPATION GAINS FOR TOM GREEN CO., 2004-2014



Sources: Economy.com; TIP Strategies

NOTE: Included in chart are only those occupations which are projected to gain five or more positions and are from industries in education that are expected to gain at least 25 jobs in the next 10 years.



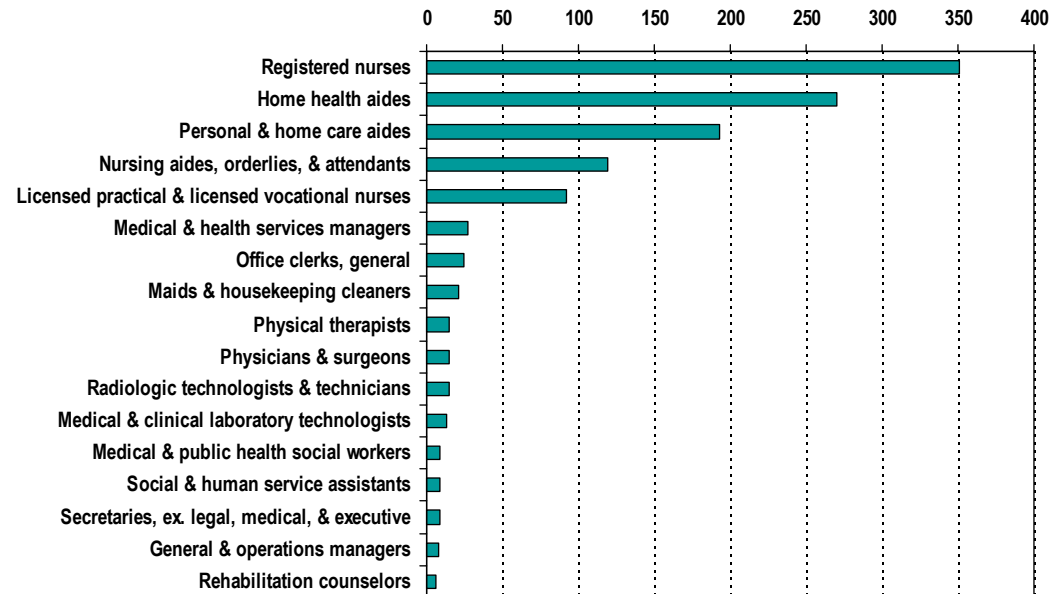
Healthcare-related occupations

- Registered nurses
- Home health aides
- Personal & home care aides
- Nursing aides, orderlies, & attendants
- Licensed practical & licensed vocational nurses

HEALTHCARE-RELATED INDUSTRIES GAINING 25+ JOBS, 2004-2014

NAICS	Industry Description	Net Chg.
6216	Home Health Care Services	879
6221	General Medical & Surgical Hospitals	663
6232	Residential Mental Retardation, Mental Health & Substance Abuse Facilities	117
6233	Community Care Facilities for the Elderly	51
6222	Psychiatric & Substance Abuse Hospitals	34

TOP HEALTHCARE OCCUPATION GAINS FOR TOM GREEN CO., 2004-2014



Sources: Economy.com; TIP Strategies

NOTE: Included in chart are only those occupations which are projected to gain five or more positions and are from industries in healthcare that are expected to gain at least 25 jobs in the next 10 years.



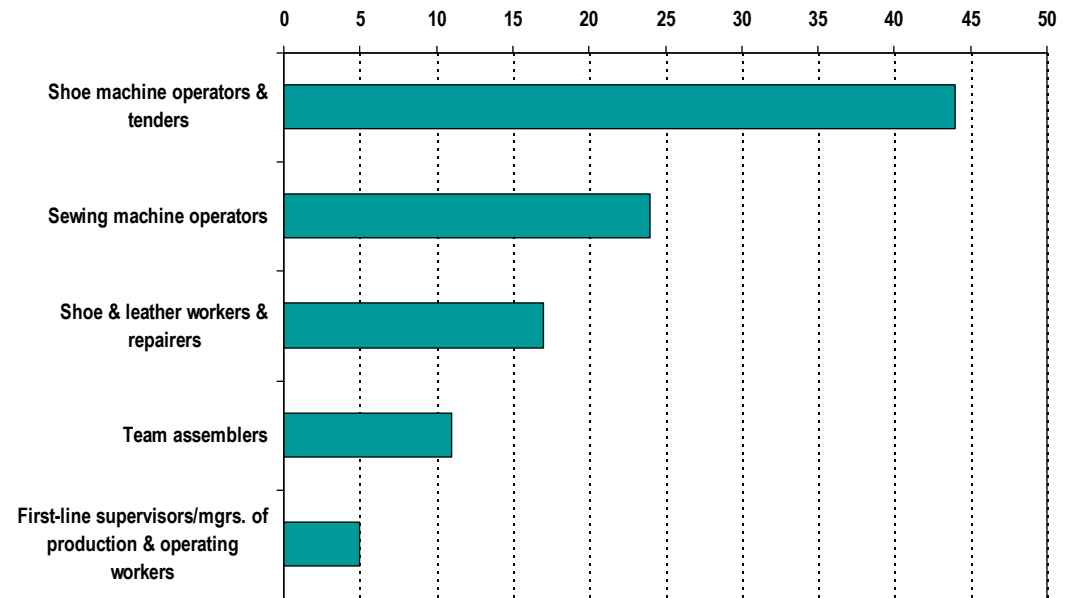
Manufacturing-related occupations

- Machine operators
- Team assemblers
- First-line supervisors/managers of production & operating workers

MANUFACTURING-RELATED INDUSTRIES GAINING 25+ JOBS, 2004-2014

NAICS	Industry Description	Net Chg.
3162	Footwear Manufacturing	41

TOP MANUFACTURING OCCUPATION GAINS FOR TOM GREEN CO., 2004-2014



Sources: Economy.com; TIP Strategies

NOTE: Included in chart are only those occupations which are projected to gain five or more positions and are from industries in manufacturing that are expected to gain at least 25 jobs in the next 10 years.



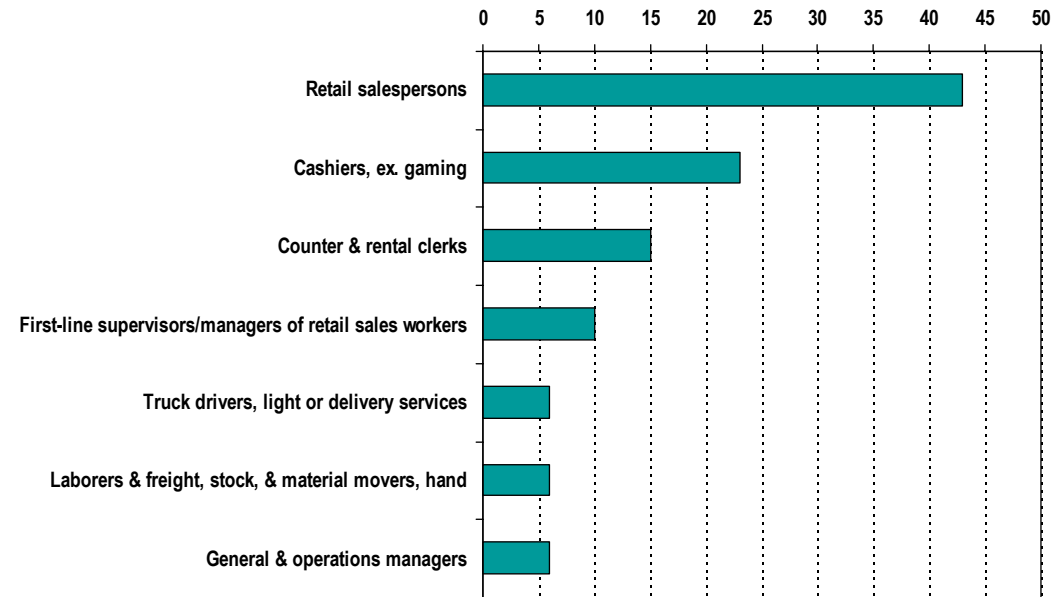
Retail-related occupations

- Retail salespersons
- Cashiers
- Counter & rental clerks
- First-line supervisors/managers of retail sales workers

RETAIL-RELATED INDUSTRIES GAINING 25+ JOBS, 2004-2014

NAICS	Industry Description	Net Chg.
4441	Building Materials & Supplies Dealers	87
5322	Consumer Goods Rental	42
4512	Books, Periodicals & Music Stores	38
5324	Commercial & Industrial Machinery & Equipment Rental & Leasing	25

TOP RETAIL OCCUPATION GAINS FOR TOM GREEN CO., 2004-2014



Sources: Economy.com; TIP Strategies

NOTE: Included in chart are only those occupations which are projected to gain five or more positions and are from industries in retail that are expected to gain at least 25 jobs in the next 10 years.



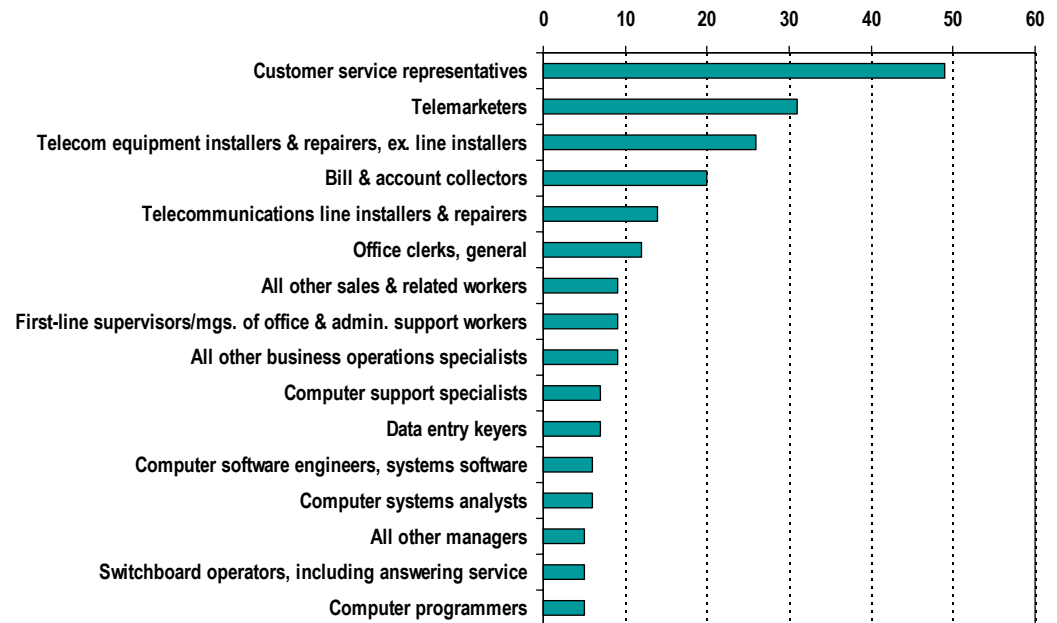
Telecom/IT-related occupations

- Customer service representatives
- Telemarketers
- Telecommunications equipment installers & repairers, except line installers
- Telecommunications line installers & repairers
- Office clerks, general
- First-line supervisors/managers of office & administrative support workers

TELECOM/IT-RELATED INDUSTRIES GAINING 25+ JOBS, 2004-2014

NAICS	Industry Description	Net Chg.
5614	Business Support Services	179
5171	Wired Telecommunications Carriers	177
5182	Data Processing, Hosting, & Related Services	82

TOP TELECOM/IT OCCUPATION GAINS FOR TOM GREEN CO., 2004-2014



Sources: Economy.com; TIP Strategies

NOTE: Included in chart are only those occupations which are projected to gain five or more positions and are from industries in telecom/IT that are expected to gain at least 25 jobs in the next 10 years.



employment survey

methodology

TIP Strategies, with the assistance of the San Angelo Chamber of Commerce and the Concho Valley Workforce Development Board, conducted a survey of San Angelo Chamber of Commerce members who had operations in the community. The companies and organizations that were selected for the survey were identified as being part of one of five broad employment sectors: EDUCATION, HEALTHCARE, MANUFACTURING, RETAIL, or TELECOMMUNICATIONS/INFORMATION TECHNOLOGY.

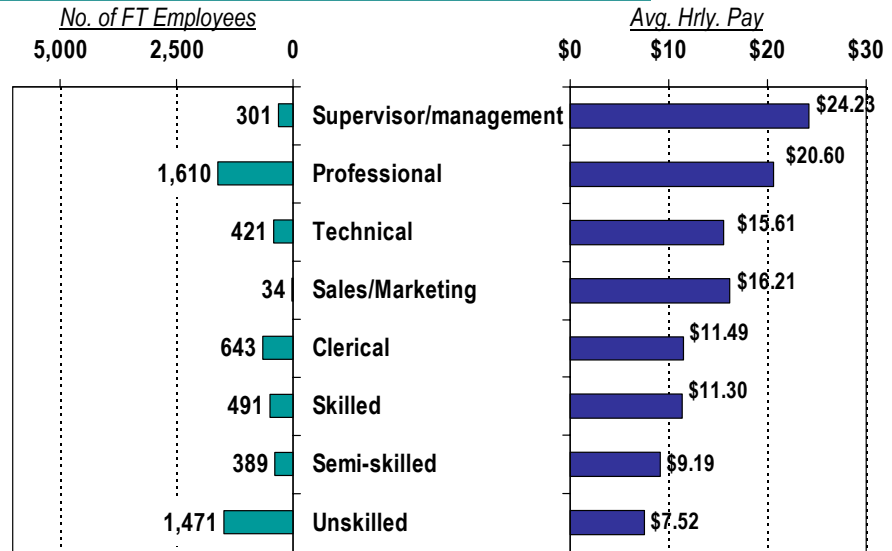
The survey was sent to 419 companies and organizations from January to March 2005, and 41 completed surveys were received, resulting in a 9.8 percent overall response rate. Respondents to the survey reported they represented 5,670 full- and part-time jobs, more than ten percent of all positions in Tom Green County.

SURVEY SNAPSHOT

Employment Sector	Universe	Respondents	Response Rate	Employment (Full- & Part-time)
All Companies	419	41	9.8 %	5,670
Education	12	7	58.3 %	1,954
Healthcare	80	11	13.8 %	2,049
Manufacturing	105	10	9.5 %	1,310
Retail	205	10	4.9 %	225
Telecom/IT	18	3	16.7 %	132

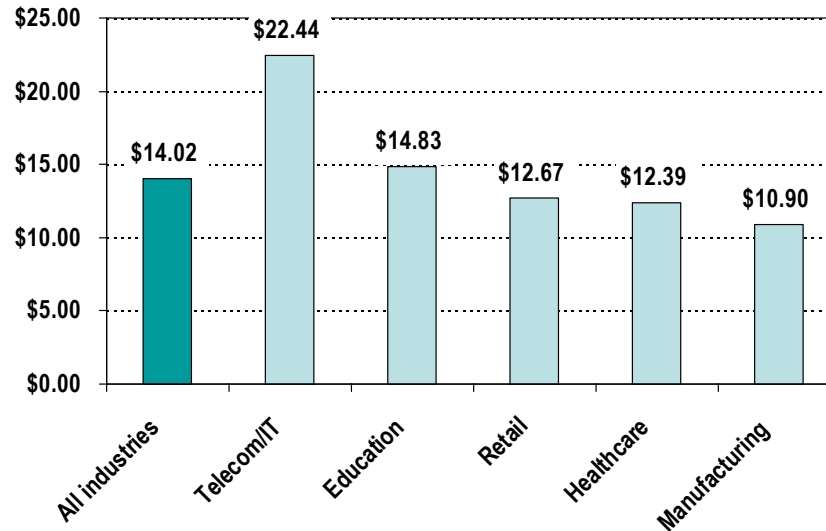


Full-Time Employees in All Industries Surveyed



- Positions classified as supervisors/management, professional, technical, and sales/marketing paid above the average hourly rate.
- Professional and unskilled occupations represented nearly 60 percent of all positions within the organizations and companies that responded to the survey.
- Occupations classified as unskilled were reported to have the lowest average hourly wage or salary, \$7.52.

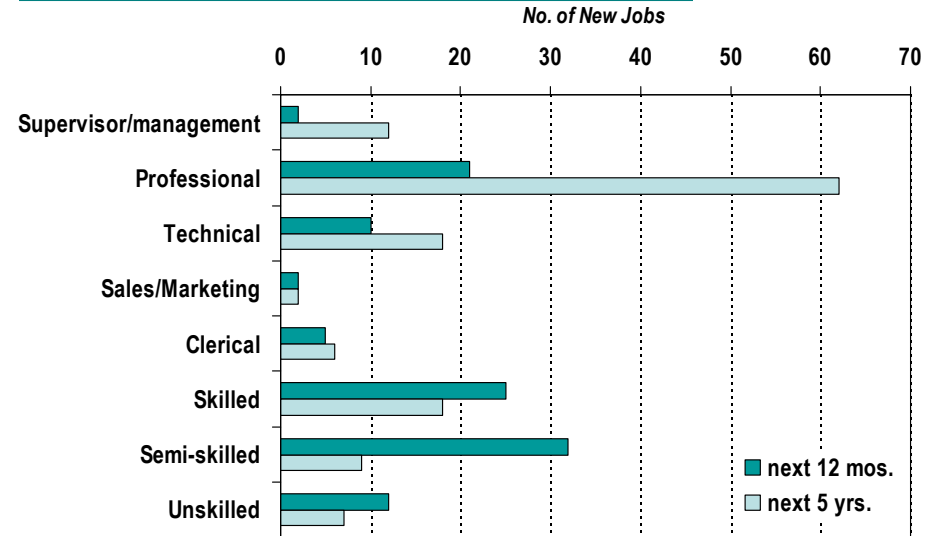
Average Hourly Wage for Full-Time Employees by Industry



- Survey respondents reported that their company or organization paid an average of \$14.02 per hour in wages and/or salary for all full-time positions.
- Full-time positions in the telecom/IT employment sector offered the highest average hourly wage, \$22.44/hr., 60 percent higher than the average for all industries surveyed.
- Full-time manufacturing positions offered the lowest hourly wage, nearly \$2 per hour less than surveyed retailers.



Hiring Intentions of Surveyed Employers



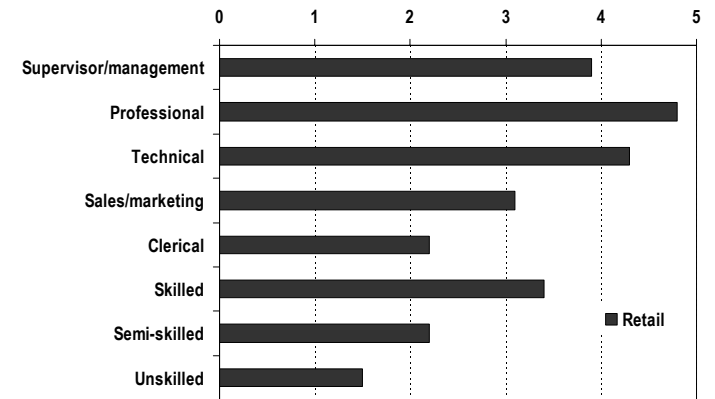
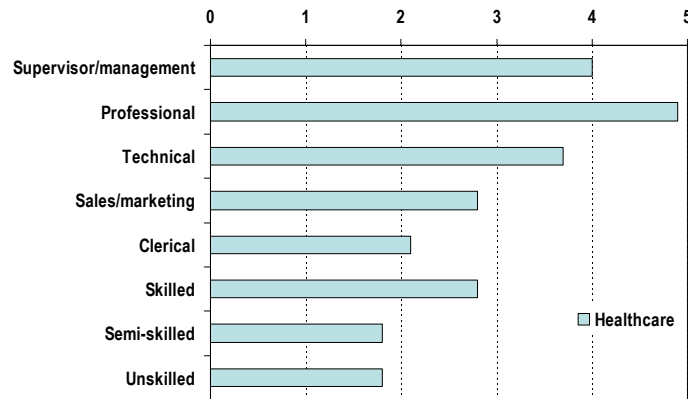
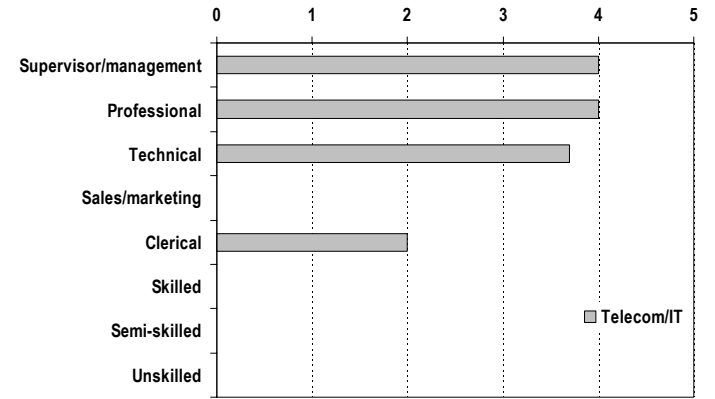
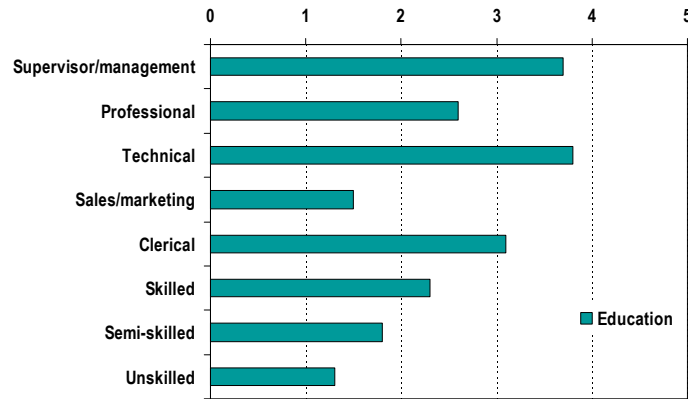
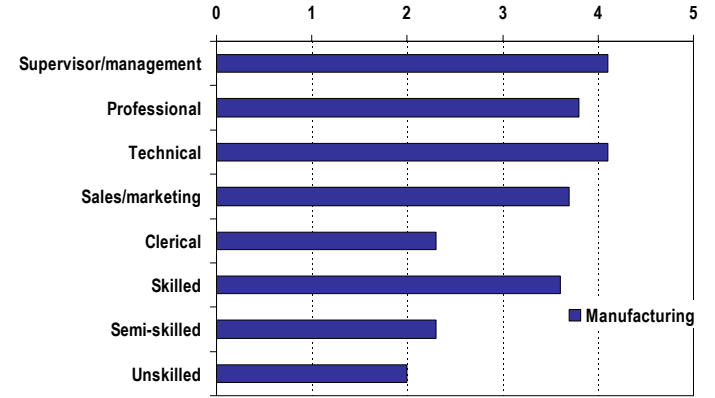
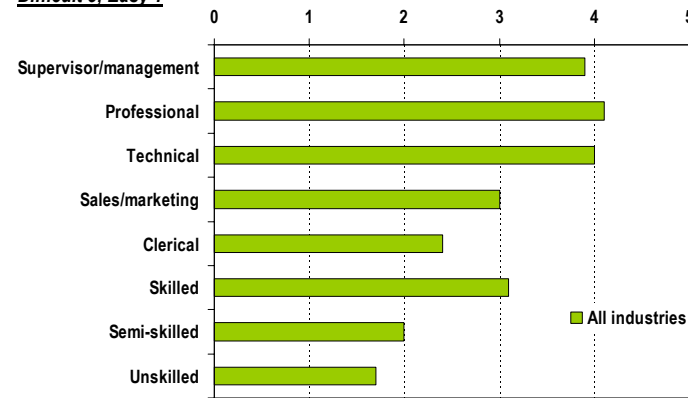
- Surveyed employers intend to increase employment by 100 positions during 2005, with skilled and semi-skilled occupations comprising roughly half of all new jobs.
- During the same period, approximately one in five new jobs was classified as professional. However, over the long-term, their share of all new jobs is expected to rise to nearly half.
- Supervisor/management and technical occupations are also expected to see their share of new jobs rise significantly during the next five years.



Ease of Filling New Positions by Occupation and Industry

Difficult 5; Easy 1

- Survey respondents stated that professional positions were the most difficult to fill, especially in the healthcare and retail employment sectors.
- Technical and supervisor/management positions were consistently rated as being difficult to fill by all employment sectors.
- Unskilled and semi-skilled positions were the easiest to fill.
- The ratings for skilled positions varied from being moderately difficult in education and healthcare to difficult in manufacturing and retail.





- The availability of labor and turnover were cited as the two highest workforce-related concerns, representing nearly half of all employers surveyed.
- The prevalence of these concerns is indicative of a tight local labor market.
- Typically, workforce shortages will often lead to higher costs for labor, which was listed as the chief concern of 15 percent of employers surveyed.
- Twenty percent of respondents listed “other” as their primary workforce challenge. Among these were obtaining security clearances for employees, as well as the cost of healthcare and other benefits *(See question 14 of the survey for full results)*.

Greatest Workforce Concern of Surveyed Employers	% of Respondents
Availability of labor	26%
Turnover	20%
Other	20%
Cost of labor	15%
Productivity	10%
Absenteeism	5%
Basic skills	2%
Language proficiency	2%



STAFFING

1. Full-Time Staff Type of Employee	All Industries		Education		Healthcare		Manufacturing		Retail		Telecom/IT	
	FT Staff	Hrly. Wage	FT Staff	Hrly. Wage	FT Staff	Hrly. Wage	FT Staff	Hrly. Wage	FT Staff	Hrly. Wage	FT Staff	Hrly. Wage
All Employees	5,360	\$14.12	1,837	\$14.83	1,900	\$12.39	1,302	\$10.90	189	\$12.67	132	\$22.44
Supervisor/Management	301	\$24.40	100	\$27.41	103	\$20.69	54	\$23.03	38	\$20.12	6	\$43.38
Professional	1,610	\$20.96	1,038	\$14.99	456	\$19.20	42	\$31.25	4	\$35.00	70	\$21.70
Technical	421	\$15.42	108	\$18.34	179	\$15.21	39	\$16.26	41	\$10.95	54	\$21.29
Sales/Marketing	34	\$16.20	-	-	8	\$17.23	5	\$17.42	21	\$14.76	-	-
Clerical	643	\$11.49	425	\$12.02	166	\$12.14	40	\$11.92	10	\$8.72	2	\$16.42
Skilled	491	\$11.30	165	\$11.17	55	\$12.29	231	\$11.29	40	\$9.72	-	-
Semi-Skilled	389	\$9.19	-	-	76	\$9.10	285	\$9.94	28	\$7.53	-	-
Unskilled	1,471	\$7.52	1	N/A	857	\$7.49	606	\$8.25	7	\$6.33	-	-

2. Part-Time Staff Type of Employee	All Industries		Education		Healthcare		Manufacturing		Retail		Telecom/IT	
	FT Staff	Hrly. Wage	FT Staff	Hrly. Wage	FT Staff	Hrly. Wage	FT Staff	Hrly. Wage	FT Staff	Hrly. Wage	FT Staff	Hrly. Wage
All Employees	307	\$26.70	117	\$37.02	149	\$32.32	6	\$21.00	35	\$16.86	-	-
Supervisor/Management	35	\$29.39	-	-	-	-	-	-	-	-	-	-
Professional	107	\$16.56	1	\$12.00	34	\$35.18	-	-	-	-	-	-
Technical	-	-	80	\$24.00	24	\$17.15	-	-	3	\$7.38	-	-
Sales/Marketing	29	\$7.59	-	-	-	-	-	-	-	-	-	-
Clerical	36	\$10.58	9	\$7.83	19	\$7.39	-	-	1	\$7.50	-	-
Skilled	38	\$7.39	8	\$7.00	16	\$14.50	2	\$9.00	10	\$9.50	-	-
Semi-Skilled	65	\$6.40	10	\$6.08	5	\$8.09	6	\$7.50	17	\$8.50	-	-
Unskilled	35	\$29.39	9	\$5.19	51	\$7.60	-	-	5	\$5.20	-	-

3a. Temp/Seasonal Workers	All Industries		Education		Healthcare		Manufacturing		Retail		Telecom/IT	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
No. of Responses	6	35	2	5	1	10	1	9	2	8	0	3
3b. Annual Number	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
No. of Employees	13	52	0	5	0	10	10	0	3	37	-	-

4a. Union	All Industries		Education		Healthcare		Manufacturing		Retail		Telecom/IT	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
No. of responses	2	37	0	7	0	9	1	9	1	8	0	2
4b. Name of Union(s)							UFCW 514T		CWA			



STAFFING (CONT'D)

5. Workforce Residence	All Industries		Education		Healthcare		Manufacturing		Retail		Telecom/IT	
Tom Green Co.	98.7%		100.0%		97.4%		98.6%		96.6%		100.0%	
Coke Co.	0.4%		0.0%		0.4%		0.9%		1.1%		0.0%	
Concho Co.	0.2%		0.0%		0.5%		0.1%		0.5%		0.0%	
Irion Co.	0.1%		0.0%		0.1%		0.1%		0.0%		0.0%	
Runnels Co.	0.4%		0.0%		0.9%		0.1%		1.8%		0.0%	
Schleicher Co.	0.1%		0.0%		0.1%		0.1%		0.0%		0.0%	
Sterling Co.	0.1%		0.0%		0.2%		0.1%		0.0%		0.0%	
Other	0.1%		0.0%		0.4%		0.0%		0.0%		0.0%	
5a. Employment Change (No. of responses)	Last 12 mos.	Last 5 yrs.	Last 12 mos.	Last 5 yrs.	Last 12 mos.	Last 5 yrs.	Last 12 mos.	Last 5 yrs.	Last 12 mos.	Last 5 yrs.	Last 12 mos.	Last 5 yrs.
Increase	14	21	2	4	4	7	3	3	3	4	2	3
Decrease	8	7	2	2	1	1	3	3	2	1	-	-
No change	19	7	3	1	6	2	4	2	5	2	1	-
New business	-	1	-	-	-	-	-	-	-	1	-	-
No response	-	5	-	-	-	1	-	2	-	2	-	-
5b. If increase, due to: (No. of responses)												
New markets	3		-		-		1		1		1	
New products/services	5		2		1		1		1		-	
Increased demand	19		3		6		4		3		3	
No response	1		1		-		-		-		-	
Other:	2		-		Expansion to more outlying areas		-		Larger facility		-	
5c. If decrease, due to: (No. of responses)												
Declining sales/demand	6		-		1		3		2		-	
Labor saving technology	2		-		-		2		-		-	
Improved Efficiency	1		-		-		-		1		-	
Other:	3		Declining school enrollment; budget cuts		-		Product being produced in other countries; One (worker) quit;		-		-	



STAFFING (CONT'D)

6. Future change in employment	All Industries		Education		Healthcare		Manufacturing		Retail		Telecom/IT	
	Increase	Decrease	Increase	Decrease	Increase	Decrease	Increase	Decrease	Increase	Decrease	Increase	Decrease
Next 12 mos.												
Supervisor/management	2	-3	0	0	1	0	1	-3	0	0	0	0
Professional	21	-5	1	-2	6	0	1	-3	0	0	13	0
Technical	10	-9	3	0	0	0	1	0	1	-2	5	-7
Sales/Marketing	2	-2	0	0	0	0	1	0	1	-2	0	0
Clerical	5	-3	0	0	1	0	4	-3	0	0	0	0
Skilled	25	-5	1	0	2	0	22	-5	0	0	0	0
Semi-skilled	32	0	1	0	2	0	29	0	0	0	0	0
Unskilled	12	-150	0	0	0	0	12	-150	0	0	0	0
Next 5 yrs.												
Supervisor/management	12	0	2	0	5	0	2	0	1	0	2	0
Professional	62	0	2	0	29	0	0	0	1	0	30	0
Technical	18	-1	13	0	5	0	0	0	0	-1	0	0
Sales/Marketing	2	0	0	0	0	0	0	0	2	0	0	0
Clerical	6	0	2	0	4	0	0	0	0	0	0	0
Skilled	18	0	1	0	15	0	2	0	0	0	0	0
Semi-skilled	9	0	1	0	1	0	1	0	6	0	0	0
Unskilled	7	0	0	0	6	0	0	0	1	0	0	0

HIRING & TRAINING

7. Recruitment methods (No. of responses)	All Industries	Education	Healthcare	Manufacturing	Retail	Telecom/IT
Workforce Solutions/ Work in Texas	18	5	8	4	1	0
Newspaper	23	5	8	6	4	0
Colleges/trade schools	13	3	6	2	2	0
Temp agencies	5	1	2	1	1	0
Referrals/work of mouth	24	3	8	6	6	1
Professional publications	6	1	4	0	1	0
Other:		Corporate resources; District website & media channel; In-house human resource office			Church bulletin; Dept. of Assisted and Rehabilitative Services consumers; Internet	Corporate recruiters; HR; Internal



HIRING & TRAINING (CONT'D)

8. Ease of Filling Position (avg. rating)	All Industries	Education	Healthcare	Manufacturing	Retail	Telecom/IT
Difficult 5; Easy 1						
Supervisor/management	3.9	3.7	4.0	4.1	3.9	4.0
Professional	4.1	2.6	4.9	3.8	4.8	4.0
Technical	4.0	3.8	3.7	4.1	4.3	3.7
Sales/Marketing	3.0	1.5	2.8	3.7	3.1	-
Clerical	2.4	3.1	2.1	2.3	2.2	2.0
Skilled	3.1	2.3	2.8	3.6	3.4	-
Semi-skilled	2.0	1.8	1.8	2.3	2.2	-
Unskilled	1.7	1.3	1.8	2.0	1.5	4.0

9. Quality of Applicant Pool (avg. rating)	All Industries		Education		Healthcare		Manufacturing		Retail		Telecom/IT	
	Prof. Staff	Other Staff	Prof. Staff	Other Staff	Prof. Staff	Other Staff	Prof. Staff	Other Staff	Prof. Staff	Other Staff	Prof. Staff	Other Staff
Excellent 3; Poor 1												
Reading skills	2.4	2.0	2.3	2.0	2.3	2.0	2.6	1.7	2.4	2.0	2.5	3.0
Math skills	2.2	1.7	2.2	1.7	2.3	1.7	2.3	1.7	2.2	1.7	2.0	3.0
Computer skills	2.3	1.7	2.2	1.8	2.3	1.7	2.3	1.4	2.3	1.6	3.0	3.0
Problem-solving skills	2.2	1.9	2.0	2.0	2.3	1.7	2.3	2.0	2.2	1.9	2.5	3.0
Communication skills	2.3	1.8	2.3	1.8	2.3	1.8	2.4	1.7	2.2	1.9	2.0	2.0
English language proficiency	2.4	2.0	2.3	2.3	2.4	1.9	2.3	1.4	2.4	2.1	2.5	3.0

10. Quality of Current Employees (avg. rating)	All Industries		Education		Healthcare		Manufacturing		Retail		Telecom/IT	
	Prof. Staff	Other Staff	Prof. Staff	Other Staff	Prof. Staff	Other Staff	Prof. Staff	Other Staff	Prof. Staff	Other Staff	Prof. Staff	Other Staff
Excellent 3; Poor 1												
Reading skills	2.7	2.2	2.7	2.5	2.5	2.0	2.8	1.9	2.7	2.3	3.0	3.0
Math skills	2.4	2.0	2.5	2.0	2.2	1.9	2.4	1.9	2.6	2.0	2.5	3.0
Computer skills	2.4	1.9	2.7	2.3	2.4	1.9	2.1	1.6	2.2	1.8	3.0	3.0
Problem-solving skills	2.5	2.0	2.3	1.8	2.4	1.9	2.5	2.1	2.4	1.9	3.0	3.0
Communication skills	2.4	2.0	2.5	1.8	2.5	2.2	2.3	1.8	2.6	2.0	2.0	2.5
English language proficiency	2.7	2.2	2.7	2.8	2.7	2.0	2.6	1.7	2.9	2.4	2.5	3.0
Attendance	2.7	2.3	2.7	2.5	2.6	2.0	2.6	2.2	2.9	2.4	3.0	2.5
Work ethic	2.6	2.3	2.8	2.2	2.4	2.1	2.4	2.1	2.8	2.6	2.5	2.5
Productivity	2.5	2.2	2.8	2.5	2.3	2.1	2.3	2.0	2.7	2.3	2.5	2.5



HIRING & TRAINING (CONT'D)

11. Importance of Language Proficiency	All Industries		Education		Healthcare		Manufacturing		Retail		Telecom/IT	
No. of responses	English	Spanish	English	Spanish	English	Spanish	English	Spanish	English	Spanish	English	Spanish
Very	34	10	7	4	9	3	7	3	8	4	3	0
Somewhat	7	21	0	0	2	7	3	5	2	5	0	0
Not at all	0	6	0	2	0	0	0	1	0	0	0	0
No response	0	4	0	1	0	1	0	1	0	1	0	3

12. Career Ladder (No. of responses)	All Industries		Education		Healthcare		Manufacturing		Retail		Telecom/IT	
Opportunities for advancement?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Supervisor/management	26	13	6	1	7	3	4	6	6	3	3	0
Professional	15	12	4	1	5	4	2	5	2	2	2	0
Technical	21	9	6	0	4	2	3	6	6	1	2	0
Sales/Marketing	14	8	0	2	5	2	2	4	7	1	0	0
Clerical	23	9	6	1	6	2	5	4	5	2	1	0
Skilled	20	6	3	1	8	2	5	2	4	1	0	0
Semi-skilled	16	9	3	2	4	3	6	2	3	2	0	0
Unskilled	13	8	2	1	4	3	5	2	2	2	0	0
Formal training or degree required?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Supervisor/management	28	9	7	0	7	2	6	4	6	2	2	1
Professional	20	6	5	0	9	0	3	4	2	1	1	1
Technical	19	13	6	0	4	4	4	5	3	3	2	1
Sales/Marketing	11	11	1	0	4	3	3	4	3	4	0	0
Clerical	9	21	3	4	0	7	3	6	3	3	1	1
Skilled	9	18	1	3	5	4	2	6	1	5	0	0
Semi-skilled	3	20	0	4	2	3	1	7	0	5	0	0
Unskilled	3	18	0	3	2	4	1	7	0	4	0	0
Training available in region?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Supervisor/management	28	7	6	1	9	0	7	3	4	2	2	1
Professional	18	5	4	1	7	1	5	2	0	1	2	0
Technical	22	7	5	2	6	1	8	1	1	3	2	1
Sales/Marketing	14	5	2	0	5	1	6	1	1	3	0	0
Clerical	27	2	7	0	7	1	8	1	4	0	1	0
Skilled	17	6	4	0	9	0	4	4	0	2	0	0
Semi-skilled	12	6	3	0	5	1	4	3	0	2	0	0
Unskilled	12	5	3	0	5	1	4	3	0	1	0	0



HIRING & TRAINING (CONT'D)

12b. If you indicated in question 12a that training programs were lacking to support particular career ladders in your organization, please describe the training needed:

Education: How to develop formal career ladders; High quality training program for HVAC & facility maintenance; Doctoral degree options

Healthcare: Hygiene school - locally; Laboratory tech school – locally; Nursing classes - clinical portion should be held at night so our assistants could further their careers

Manufacturing: OJT only; Better welder training opportunities – they exist, but fairly new options to the region; The only training for skilled woodworkers in this area is OJT

Retail: Training for auto technicians - the closest place is Sweetwater; Hands on training is best in our market; In-house training - video, lecture, OJT, training manuals, forums; Pharmacy degree not offered at local college

Telecom/IT: Employees must have a solid background in computer-based instructional development & production as well as a military intelligence background

13. What specific skills do your employees need to make your business more competitive?

Education: Military intelligence & language skills; Computer software skills that are current and a willingness to engage in additional training, learning, education; 1) customer service 2) communication skills 3) technical skills 4) computer skills; Marketing training

Healthcare: People skills, artistic skills, computer skills; Salary increase; Bi-lingual (English/Spanish), medical terminology; Sales/marketing; Computer skills, enhanced communication skills, proficiency in Spanish

Manufacturing: To be highly productive and very thorough, i.e. without mistakes; Welding skills, math skills, blue-print reading skills; Detail trim skills, cut-out & machining skills; Technical skills

Retail: Skills in mechanical & electrical and/or the ability to learn skills; Technicians with computer, electronics, and transmission repair training; Sales skills; probing skills - very "people" oriented; Knowledge of products we carry & be informed of changes to each year model body style on vehicles; How to make product look more appealing (marketing); Multitasking, fully flexible work schedule; Interest in customers/patients (i.e. name recognition)

Telecom/IT: Customer-focus communication skills, mainframe, UNIX and Windows systems administration skills; Top secret government security clearances, military



HIRING & TRAINING (CONT'D)

14. Greatest Workforce Issue	All Industries	Education	Healthcare	Manufacturing	Retail	Telecom/IT
No. of responses						
Availability of Labor	11	1	6	2	1	1
Cost of Labor	6	2	1	0	3	0
Turnover	8	1	4	1	2	0
Basic Skills	1	0	0	1	0	0
Language Proficiency	1	0	0	1	0	0
Absenteeism	2	1	0	1	0	0
Productivity	4	0	1	1	1	1
Availability of Training	0	0	0	0	0	0
Quality of Training	0	0	0	0	0	0
No response	8	0	0	2	0	0
Other	8	Security clearance; Cost of benefits & training time		Cost of healthcare for employees	Finding someone willing to work & learn; Not enough customers coming to store; Burn-out, no quality of life due to retail demand	Security clearances – gov't work; Availability of government funding

Additional Comments:

Education: When advertising for clerical we get many applications from people who are overqualified but rarely hire as they typically aren't happy with level of pay or plan to stay

Healthcare: We experience a high rate of turnover due to candidates wanting high hourly rate, but not will to produce at a high rate; The service worker category should have been included in this survey (used unskilled); Due to increases in insurance (general) and health insurance, we have had to make positions part-time. This has made turn over rate increase.

Manufacturing: We our US workers cannot compete with third world countries' labor; Cost of labor and productivity right at top also. Workman's comp and other insurance is a big problem: too expensive; There seems to be a dearth of sales and marketing professionals in this area.

Retail: The only advantage we have in this competitive business is customer service. Training and keeping long-term employees is paramount to our success.

Telecom/IT: none

**CONCHO VALLEY WORKFORCE DEVELOPMENT BOARD
INDUSTRY CLUSTER SURVEY**



Instructions: *Many of these questions can be completed by either checking a response or filling in a blank. If a question seems inappropriately worded for your situation, feel free to write an explanation in the margins or on the back of the questionnaire. If your firm has operations outside of the Tom Green County, please answer for local operations only, unless otherwise instructed. Thank you for your assistance.*

Company Background

Company: _____ Year located to the area: _____
 Contact name: _____ Phone: _____
 Address: _____
 Product or service: _____ Primary SIC or NAICS Code: _____
 Number of employees: *At this facility* _____ *Total all locations* _____

Staffing

1. Please provide the following information about *full-time* staff at this location.

Type of Employee	How Many?	Average Salary or Wage			
		Amount	Hourly	Monthly	Annually
Supervisor/Management	_____	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Professional	_____	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Technical	_____	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sales/Marketing	_____	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clerical	_____	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skilled	_____	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Semi-skilled	_____	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unskilled	_____	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Please provide the following information about *part-time* staff at this location.

Type of Employee	How Many?	Average Salary or Wage			
		Amount	Hourly	Monthly	Annually
Supervisor/Management	_____	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Professional	_____	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Technical	_____	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sales/Marketing	_____	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clerical	_____	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skilled	_____	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Semi-skilled	_____	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unskilled	_____	\$ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NOTE: Company-specific information will be kept confidential. Results will be reported in aggregate only.

- 3a. Do you hire temporary or seasonal workers? Yes No (skip to Question 4)
- 3b. If so, approximately how many annually? Full-time _____ Part-time _____
- 4a. Are any of your employees under union contract? Yes No

4b. If yes, please indicate name of union(s): _____

5. Approximately what percent of your workforce lives in each of the following areas? (Percent should equal 100.)

_____% Tom Green County ____% Irion County ____% Sterling County
 ____% Coke County ____% Runnels County ____% Other
 ____% Concho County ____% Schleicher County

5a. How has the number of permanent employees at this location changed:

	<i>Increased</i>	<i>Decreased</i>	<i>No Change</i>
In the past 12 months?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In the past 5 years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5b. If the number of employees has *increased*, is this due to: (Check all that apply)

- New markets for existing products
- New product or service
- Increased demand for current product or services
- Other (please explain) _____

5c. If the number of employees has *decreased*, is this due to: (Check all that apply)

- Declining sales
- Labor saving technology
- Improved efficiency or management technique
- Other (please explain) _____

6. Do you anticipate any change in employment at this location in the future? If so, please indicate the **total number** of positions to be affected.

Type of Employee	Next 12 months			Next 5 years		
	<i>No Change</i>	<i>Increase</i>	<i>Decrease</i>	<i>No Change</i>	<i>Increase</i>	<i>Decrease</i>
Supervisor/Management	<input type="checkbox"/>	_____	_____	<input type="checkbox"/>	_____	_____
Professional	<input type="checkbox"/>	_____	_____	<input type="checkbox"/>	_____	_____
Technical	<input type="checkbox"/>	_____	_____	<input type="checkbox"/>	_____	_____
Sales/Marketing	<input type="checkbox"/>	_____	_____	<input type="checkbox"/>	_____	_____
Clerical	<input type="checkbox"/>	_____	_____	<input type="checkbox"/>	_____	_____
Skilled	<input type="checkbox"/>	_____	_____	<input type="checkbox"/>	_____	_____
Semi-skilled	<input type="checkbox"/>	_____	_____	<input type="checkbox"/>	_____	_____
Unskilled	<input type="checkbox"/>	_____	_____	<input type="checkbox"/>	_____	_____

Hiring & Training

7. Which of the following methods do you currently use to recruit employees? (Check all that apply)

- Workforce Solutions or Work in Texas Online System Temporary agencies
 Newspaper advertising Referrals/word-of-mouth
 Colleges/trade schools Professional publications
 Other _____

8. Please rate the difficulty of finding employees in each position using the scale provided.

Type of Employee	Relative Ease of Filling Position				
	<i>Difficult</i>		<i>Moderate</i>		<i>Easy</i>
Supervisor/Management	<input type="checkbox"/> ₅	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
Professional	<input type="checkbox"/> ₅	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
Technical	<input type="checkbox"/> ₅	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
Sales/Marketing	<input type="checkbox"/> ₅	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
Clerical	<input type="checkbox"/> ₅	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
Skilled	<input type="checkbox"/> ₅	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
Semi-skilled	<input type="checkbox"/> ₅	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
Unskilled	<input type="checkbox"/> ₅	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁

9. Please evaluate the quality of the applicant pool on the following characteristics.

Type of Employee	Professional Staff			Other Staff		
	<i>Excellent</i>	<i>Satisfactory</i>	<i>Poor</i>	<i>Excellent</i>	<i>Satisfactory</i>	<i>Poor</i>
Reading skills	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
Math skills	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
Computer skills	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
Problem-solving skills	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
Communication skills	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
English language proficiency	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁

10. Please evaluate your current employees as a group on the following characteristics.

Type of Employee	Professional Staff			Other Staff		
	<i>Excellent</i>	<i>Satisfactory</i>	<i>Poor</i>	<i>Excellent</i>	<i>Satisfactory</i>	<i>Poor</i>
Reading skills	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
Math skills	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
Computer skills	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
Problem-solving skills	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
Communication skills	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
English language proficiency	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
Attendance	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
Work ethic	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
Productivity	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁

11. How important is proficiency in English and Spanish to your business?

English

- Very Somewhat Not at all

Spanish

- Very Somewhat Not at all

12a. Please rate each of the following positions within your firm regarding the existence of a career ladder or the potential for advancement.

Type of Employee	Opportunity for Advancement Exists?		Formal Training or Degree Required?		Training Currently Available in Region?	
	Yes	No	Yes	No	Yes	No
Supervisor/Management	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂
Professional	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂
Technical	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂
Sales/Marketing	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂
Clerical	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂
Skilled	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂
Semi-skilled	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂
Unskilled	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂

12b. If you indicated in question 12a that training programs were lacking to support particular career ladders in your organization, please describe the training needed.

13. What specific skills do your employees need to make your business more competitive? (Please describe)

14. What is your greatest workforce issue? (Please select only one)

- | | | |
|--|---|---|
| <input type="checkbox"/> Availability of labor | <input type="checkbox"/> Basic skills | <input type="checkbox"/> Productivity |
| <input type="checkbox"/> Cost of labor | <input type="checkbox"/> Language proficiency | <input type="checkbox"/> Availability of training |
| <input type="checkbox"/> Turnover | <input type="checkbox"/> Absenteeism | <input type="checkbox"/> Quality of training |
| <input type="checkbox"/> Other _____ | | |

Additional Comments

THANK YOU for taking the time to respond to this questionnaire. Please return your completed questionnaire to TIP Strategies, Inc. Completed surveys may be faxed to 512.343.9190. Questions regarding the survey should be directed to Alan Cox, project director, TIP Strategies at 512.343.9113.