















ECONOMIC DEVELOPMENT STRATEGIC PLAN

PREPARE FOR THE DEVELOPMENT CORPORATION OF ABILENE, TEXAS





ACKNOWLEDGEMENTS

TIP Strategies would like to thank the many individuals who participated in the creation of this economic development strategic plan. We are especially grateful to project steering committee, the leadership and staff of the Development Corporation of Abilene (DCOA), and the City of Abilene for their guidance and feedback throughout the development of this plan.

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EXECUTIVE SUMMARY

INTRODUCTION

DCOA engaged TIP Strategies to assist in crafting an economic development strategic plan that will serve as the basis for a comprehensive approach to economic development for the DCOA and its community partners for the next five to 10 years. The analysis and recommendations are the result of an eight-month process incorporating input and ideas from key stakeholders and organizations throughout the community. The strategic plan that follows is designed with the overall goal of positioning Abilene for long-term growth and prosperity for residents and businesses.

To that end, we are proposing strategies that stretch Abilene's leadership to embrace an approach that moves the community beyond economic development as it is traditionally practiced. It is our view that Abilene's long-term future prosperity will not be secured through industry attraction. The area already enjoys low unemployment. In actuality, the biggest economic development challenge facing the community is not generating new jobs; it is developing, retaining, and attracting the talent that can fill existing and future need. That is what many of Abilene's current employers disclosed is their greatest challenge during stakeholder meetings and through an online questionnaire.

In addition to talent, the community must place greater emphasis on a bottom-up approach that equips and supports existing and future businesses, students, and entrepreneurs. This includes creating a culture of entrepreneurship and innovation that will ensure a vibrant business base and will enhance education and income levels of residents. It also requires devoting additional resources and time to reaching out and supporting existing businesses through an expanded business retention and expansion program.

This does not mean that the DCOA and its partners should eschew its core mission of leveraging talent, land, and incentives to attract quality manufacturing and services employers to the community. Abilene will more aggressively compete for these investments as they provide important middle-skill employment opportunities for residents and are critical to expanding the city's tax base.

Abilene should also build on its growing base of higher education and healthcare institutions to stimulate the attraction of new residents and investments. Additionally, the plan calls for a quality of place that offers the features, amenities, and attractions necessary to retaining and attracting the talent needed to meet current and future employer needs.

A NEW VISION FOR ECONOMIC DEVELOPMENT IN ABILENE

PAST & PRESENT	FUTURE
 Early adoption of local sales tax funding for economic development Traditional economic development approach Business attraction competitiveness based on lower costs Loss of talent to larger metro areas in Texas 	 Embrace and promote an entrepreneurial economy fueled by talent and innovation. Leverage and expand a vibrant higher education and healthcare center Enhance Abilene's amenities and community assets to create a quality of place attractive to top-notch employers and talent.

APPROACH

Over the course of eight months, the TIP Strategies consulting team worked closely with Abilene's business and community leaders to identify the city's most promising opportunities for economic growth. The first step was to establish a common understanding of assets and challenges. This "Discovery Phase" included valuable **roundtable discussions and interviews** with over numerous stakeholders representing a broad cross section of Abilene's business, government, and academic leadership.

During this phase, the consulting team also compiled a wide range of **demographic and economic data** for Abilene in relation to Texas and the US (Appendix A). The economic research also compared Abilene to eight primary competitor cities to gain a better understanding of how the city fares vis-à-vis its competition. The **peer cities** include: Lubbock, San Angelo, Tyler, Amarillo, Waco, Ardmore (OK), Lawton (OK), and Wichita Falls.

Appendix B contains the **target industry analysis, recommendation, and profiles**. It includes industry definitions and trends, occupational characteristics, strategic considerations, and industry intelligence for each industry sector. Based on these criteria and this process, four target sectors were chosen: advanced manufacturing, food processing, healthcare, and back office. Within each sector, promising niches were noted.

In addition to personal interviews and roundtable discussions, the consulting team sought input from the business community through an **online questionnaire**. A link to the questionnaire was emailed to Abilene Chamber of Commerce members in September 2015. A total of 100 firms completed at least some portion of the survey, representing just over 14,000 employees. A summary of the results is presented in Appendix C.

Finally, a presentation of national best practices for using, administering, and measuring **incentives** in provided in Appendix D.

FIGURE 1. SUMMARY OF KEY ECONOMIC DEVELOPMENT ASSETS



MARKET ACCESS

- Central location within Texas and the U.S.
- Access to both east and west coasts, the industrial Midwest, northeast and the markets in Mexico
- Proximity to the Dallas-Ft Worth CSA (6.9 million residents)



SITES & BUILDINGS

- Industrial and commercial land capacity
- Redevelopment & reuse potential of commercial offices



TRANSPORTATION

- Location on Interstate 20
- Hub for U.S. Highways 83, 84, 277
- Railroads: Union Pacific and Southern Switching Company
- Abilene Regional Airport (ABA)
 16 daily commercial flights to DFW



EMPLOYERS

- 2 significant medical centers
- 6 higher education institutions
- Dyess Air Force Base
- Significant manufacturing and telecommunications companies



WORKFORCE

- 12-county labor shed (based on Jan. 2015 Workforce Assessment))
- Regarded as highly productive
- Wages in-line or lower than national medians



HIGHER EDUCATION

- 3 private universities
- Texas Tech Health Science
 Center Schools of Nursing,
 Public Health, & Pharmacy
- 2 public community & technical colleges
- Served by 2 public school systems

SWOT

An assessment of the city's strengths and weakness as well as its opportunities and threats, are important touchstones to future strategies. The SWOT is based on community input and data findings. It is a snapshot in time, but it typically highlights longstanding issues of economic competitiveness.

STRENGTHS





- Higher education institutions
- Healthcare facilities
- Dyess AFB and Military Affairs Committee
- Community foundations
- Type A ED sales tax
- AIF large private sector interest in ED
- Recent recruitment/expansion successes
- Downtown infrastructure
- Transportation linkages (highway, air, rail)
- Recent school and infrastructure bond elections
- Historically stable economic growth

WEAKNESSES

- Employers report difficulty in recruiting/retaining
- skilled professionals Low unemployment rate & low wages =
- underemployment
- Inventory of older commercial buildings
- Underdeveloped entrepreneurial culture
- Lack of amenities appealing to college students and young adults
- Relatively small industrial/manufacturing base
- Isolated geographic location

OPPORTUNITIES



THREATS



- Leveraging higher education institutions
- Pine Street Corridor (medical-education district)
- Downtown as an employment center
- Talent development, retention, & attraction
- Building an entrepreneurship ecosystem
- Growing economic/talent impact of Dyess AFB
- Aggressive target industry marketing
- Comprehensive business retention & expansion program
- Exploiting connections & proximity to DFW
- Engaging young professionals
- Leveraging international refugee population
- Communicating success stories internal marketing

- Not moving beyond being a low-cost business location
- Future support for public funding of economic development
- BRAC, sequestration, and defense spending uncertainty
- Long-term water resources (regional)
- Sustained low oil prices

ACTION PLAN

VISION

An economic development strategy must be driven by a clear vision. Meaningful vision statements are bold, provide a clear direction, and differentiate the community from the standard declaration of being "a great place to live, work, and play."

Abilene has a growing, dynamic economy that elevates the creativity, skills, and ambitions of its businesses and residents.

STRATEGIES

Rather than basing the plan around broad goals, the economic development plan is built around 10 priority strategies. Each strategy is focused on a specific initiative, issue, or program recommended for action on the part of the DCOA and its economic development partners. Under each strategy are a number of actions needed for implementation. Below are the strategies TIP recommends DCOA and its partners pursue as part of a comprehensive economic development program.

- 1. Aggressively market and promote Abilene as a destination for new investment and employment.
- 2. Build a deep and highly skilled talent base through development, retention, and attraction.
- 3. Develop an innovation ecosystem that spawns and supports innovative people and businesses.
- 4. Position Abilene as top of mind for businesses and talent in DFW.
- 5. Support the growth and prosperity of existing businesses.
- 6. Make downtown Abilene a center of employment and investment.
- 7. Continue redeveloping the Pine Street Corridor as a central mixed-use artery connecting downtown to the city's emerging education and healthcare district.
- 8. Engage emerging leaders in economic development and civic affairs.
- 9. Leverage Dyess AFB as a source of talent and as an economic driver.
- 10. Launch a community-wide public awareness campaign designed to encourage residents to become ambassadors for Abilene's success.

STRATEGY 1. AGGRESSIVELY MARKET AND PROMOTE ABILENE AS A DESTINATION FOR NEW INVESTMENT AND EMPLOYMENT.

- **1.1.** Ensure that the appropriate sites and infrastructure are in place to support the growth of existing employers and the attraction of new businesses.
 - **1.1.1.** Continue to market the Five Points Business Park, the 18-36 Industrial Park, the Maple Street Property, and the WindStar Industrial Property as locations for new and expanding companies in the advanced manufacturing, food processing, and back office operations industries.
 - **1.1.2.** Promote and support downtown Abilene as a destination for new company headquarters, professional services, and back office facilities. (Strategy 6)
 - **1.1.3.** Support the expansion of healthcare and higher education facilities and employment in the Pine Street Corridor. (Strategy 7)
 - 1.1.4. Continue supporting critical local and regional transportation infrastructure investments.
- **1.2.** Strengthen Abilene's industry attraction program through focused external marketing and by cultivating relationships with key business decision makers.

Four target sectors were identified as having the highest prospects for new investment and employment in Abilene. Within each sector, promising niches were noted.

- Advanced Manufacturing
 - Engine, Turbine, & Power Equip
 - Architectural & Structural Metals
 - Boiler, Tank, and Shipping Container Manufacturing
- Food Processing
 - Beverage Manufacturing
 - Bakeries and Tortilla Manufacturing
 - Animal Food Manufacturing
- Healthcare
 - Specialty Hospitals
 - Offices of Physicians
 - Medical and Diagnostic Labs
- Back Office and Processional Services
 - Business Support Services
 - Architectural, Engineering, & Related Services
 - Computer Systems Design and Related Services

Industry definitions and trends, occupational characteristics, strategic considerations, and industry intelligence are provided in Appendix B for each industry sector.

- **1.3.** Cultivate relationships and networks with business executives for the recruitment of new businesses to Abilene, especially in target industries (advanced manufacturing, back office operations and professional services, healthcare, and food processing).
 - 1.3.1. Compile and maintain resource information for each target industry and key subsectors. This includes identifying trade and industry associations for each sector as well as following industry trends by monitoring trade publications or purchasing industry data and reports from private sources. (TIP has provided industry intelligence for each of the target industries.)
 - **1.3.2.** Develop and maintain a database of companies in each target industry.
 - **1.3.3.** Join and participate in trade or industry associations for the priority target sectors. AIF staff should research appropriate organizations and attend events and trade shows.
 - **1.3.4.** Conduct at least six call trips/marketing missions per year (once every two months) to meet with company executives in regions where each target industry concentration is the highest.
- 1.4. Build awareness among decision-makers in target sectors in the DFW Metroplex. (Strategy 4.1)
- **1.5.** Create a database of developers, brokers, and site consultants.
- 1.6. Call on site consultants in targeted metropolitan areas, particularly the DFW Metroplex. Utilize a site selection database to identify targets and periodically set appointments to discuss the Abilene market and development opportunities.
- 1.7. Host a "fam tour" for DFW site consultants as a way to generate awareness of Abilene as a destination for business expansions among executives.
- 1.8. Explore the possibility of exhibiting at the North Texas Commercial Association of Realtors and Real Estate Professionals (NTCAR) Commercial Real Estate Expo. Attendees at the half-day convention include brokers, developers, investors, and corporate real estate professionals. According to NTCAR, this event is the largest commercial real estate trade show in the southwest. Economic development organizations in the DFW Metroplex and other areas of the state regularly exhibit at the event.
- **1.9.** Continue maintaining and updating information typically of interest to commercial and industrial site selectors on the DevelopAbilene website.
- **1.10.** Work to adjust incentive policies to support the strategies in this plan. Appendix D provides a description of best practices for utilizing, administering, and measuring incentives.
 - **1.10.1.** Maintain the Type A economic development sales tax tool for attracting and supporting new business investment in Abilene.

- **1.10.2.** Ensure that incentives encourage high levels of capital investment, especially from advanced manufacturing firms.
- **1.10.3.** Ensure that incentives encourage high-wage job growth.
- **1.10.4.** Maintain flexibility in local incentive policies to allow for the promotion of other desirable outcomes beyond job growth and capital investment, such as site improvements, expanded connections with local educational institutions, and new R&D facilities.

STRATEGY 2. BUILD A DEEP AND HIGHLY SKILLED TALENT BASE THROUGH DEVELOPMENT, RETENTION, AND ATTRACTION.

- **2.1.** Launch a campaign to create awareness of the opportunities in Abilene.
 - **2.1.1.** Design a friends and family campaign to inform former residents and alumni who live in other cities of the opportunities and great quality of life in Abilene.
 - Assemble a network of local alumni associations—both college and high school—that are willing
 to push information and content out to their alumni networks.
 - Organize a committee that includes influential alumni as well as young professionals to be champions for the network, act as a sounding board, provide content for the online network hubs, and assist in planning events. Make a goal of creating a committee of 20 members who would each recruit 20 individuals to the network.
 - 2.1.2. Use this network to communicate regularly with former residents and alumni. Share information such as job opportunities, arts and cultural events, notable economic development activities, and other types of information that will build awareness of the positive things going on in Abilene and draw the alumni back. This same communication tool can be used to communicate with current residents of the community.
 - **2.1.3.** Plan and organize joint alumni events and receptions in primary external markets (e.g., Dallas and Houston).
 - Request zip codes of alumni's addresses from the alumni network partners and create a map that identifies concentrations of Abilene alumni.
 - Create a video that features residents who have moved back to the community who can talk about why they moved back, what they love about Abilene, and how it has changed.
 - **2.1.4.** Hold an annual former resident/alumni event in Abilene, possibly in conjunction with a local event/festival.

- **2.1.5.** Create online forums through social media (e.g., Facebook group page) where former residents and alumni can interact with one another.
- **2.2.** Strengthen existing partnerships and create new connections between Abilene's employers and educational institutions.
 - **2.2.1.** Work with local employers and K-16 education providers to expand school-to-work programs (e.g., internships, apprenticeships, work-based learning, plant tours, career days, etc.).
 - Workforce Solutions has served as a connector/convener for business and education on several projects—Fast Track Welding (a short-term, intensive training program designed to meet the needs of local employers); the Workforce Investment Fund (a local grant program for small and medium businesses to train new and incumbent workers); creation and promotion of dual credit CTE programs; and customized training for businesses.
 - **2.2.2.** Assist employers in articulating their worker education, training, and skills needs through an online employer survey. (Strategy 5.3)
 - **2.2.3.** Publicize local high-demand jobs and career opportunities to help drive students toward the fields of study that support those careers.
 - Workforce Solutions hosts a regional career fair for youth in grades 8 12 known as the World of Work. In addition to connecting youth with employers, there are also representatives from two-and four-year colleges and universities. Prior to regional events, Workforce Solutions held smaller events at local ISDs on high school campuses for four years. It also created a "Career Corner" on its website that includes "Career Guides" that assist students in making the connection between high school courses and jobs.
- 2.3. Launch industry-specific initiatives to address specific workforce issues in key sectors, especially in advanced manufacturing, information technology, and healthcare. For several years, Workforce Solutions managed a regional healthcare industry task and a manufacturing task force in the Abilene area tied to MSSC. However, both have been non-operational for several years.
 - **2.3.1.** Bring the primary stakeholders (employers, workforce training, education) of industry sectors together to identify common needs and challenges. Discuss ideas to collectively address needs and challenges.
- **2.4.** Conduct outreach to the international refugee population to identify individuals who possess the skills and education to fill high-demand positions. This outreach should also be extended to low-skill workers who could be trained to fill middle-skill jobs.
- **2.5.** Organize an Abilene Workforce and Education Summit to discuss progress in addressing regional workforce development issues and education barriers.

Worforce Solutions is currently planning a workforce and education summit for August 11, 2016, at the Abilene Civic Center. The summit is embedded in a regional STEM conference targeted to educators that will feature interactive exhibits, virtual field trips, and multiple workshops.

STRATEGY 3. DEVELOP AN INNOVATION ECOSYSTEM THAT SPAWNS AND SUPPORTS INNOVATIVE PEOPLE AND BUSINESSES.

- **3.1.** Build a start-up ecosystem in Abilene.
 - **3.1.1.** Conduct a local entrepreneurial assessment.
 - Work with ACU's Griggs Center for Entrepreneurship & Philanthropy and the Texas Tech SBDC to identify key existing players, organizations, and networks involved in entrepreneurship in the community. These could include existing entrepreneurs, feeder companies, angel and venture capital investors, educators, mentors, business support organizations, and social networks.
 - **3.1.2.** Create events to bring the local players together to mix and collide. National examples of such events include:
 - 1 Million Cups started by the Kauffman Foundation This event brings the community together over free cups of coffee. It's a platform where local entrepreneurs share what they are doing and how the community can help. (www.lmillioncups.com)
 - StartupWeekend This a weekend long competition where attendees pitch ideas and build the early stages of a startup with their team. (<u>startupweekend.org</u>)
 - Startup Drinks This is an evening social event for entrepreneurs hosted by Emerging Prairie in Fargo, ND. (www.emergingprairie.com/startup-drinks)
 - **3.1.3.** Set up a blog/social network page to keep the entrepreneurial community informed of such events.
 - **3.1.4.** Promote and support the development of co-working space in downtown Abilene tailored for entrepreneurs and young start-ups.
 - **3.1.5.** Highlight successes through events and social media.
- **3.2.** Actively support student entrepreneurship programs and efforts at the Griggs Center for Entrepreneurship & Philanthropy at Abilene Christian University.
 - **3.2.1.** Play an active role (including financial support) in the Springboard Ideas Challenge competition.
- **3.3.** Encourage "grass-roots" innovation among K-12 students and young adults throughout the community by facilitating the creation of programs at local educational institutions that emphasize innovation, technology commercialization, and business development.

- **3.4.** Expand the availability of start-up capital by formalizing access to existing capital in Abilene and by developing stronger ties to angel and venture capital investors outside of Abilene.
 - **3.4.1.** Work with area banks and local investors to form an angel network. The network could serve as a seed capital source that connects local investors with deals across Texas, focusing on Abilene and West Central Texas to the extent possible.
 - **3.4.2.** Encourage local entrepreneurs to tap into federal funding in the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (SBTTR) grants.
 - **3.4.3.** Market qualified Abilene-based start-ups to outside angel investors and venture capital firms. Focus on investors from Austin, DFW, and Houston.

STRATEGY 4. POSITION ABILENE AS TOP OF MIND FOR BUSINESSES AND TALENT IN THE DFW METROPLEX.

- **4.1.** Build awareness among decision-makers in target sectors in the DFW Metroplex. (Strategy 1.4)
 - **4.1.1.** Develop and maintain a database of DFW area companies in each target industry.
 - **4.1.2.** Call on owners and managers of DFW companies to present the benefits of Abilene as a location for future expansion or for consolidation of facilities and operations.
 - **4.1.3.** Implement a public relations campaign targeted at regional publications. Identify key regional publications such as the Dallas Business Journal and send press releases on recent Abilene business successes.
- **4.2.** Promote Abilene to the DFW commercial real estate community.
 - **4.2.1.** Call on site consultants in the DFW Metroplex. Utilize a site selection database to identify targets and periodically set appointments to discuss the Abilene market and development opportunities. (Strategy 1.6
 - **4.2.2.** Host a "fam tour" for DFW site consultants as a way to generate awareness of Abilene as a destination for business expansions among executives. (Strategy 1.7)
 - 4.2.3. Explore the possibility of exhibiting at the North Texas Commercial Association of Realtors and Real Estate Professionals (NTCAR) Commercial Real Estate Expo. Attendees at the half-day convention include brokers, developers, investors, and corporate real estate professionals. According to NTCAR, this event is the largest commercial real estate trade show in the southwest. Economic development organizations in the DFW Metroplex and other areas of the state regularly exhibit at the event. (Strategy 1.8)

- **4.3.** Engage with key economic development resources, industry groups, and professional networks in the DFW Metroplex.
 - **4.3.1.** Join key regional industry associations and professional networks to remain current on critical issues, build stronger networks, and leverage resources.
 - **4.3.2.** Attend conferences and trade shows held in DFW by national industry organizations.

STRATEGY 5. SUPPORT THE GROWTH AND PROSPERITY OF EXISTING BUSINESSES.

- **5.1.** Enlarge and maintain a database of existing employers. Working with local partners, the database should continually be expanded to include companies in the area that serve external markets or are suppliers to existing primary employers.
- 5.2. Strengthen AIF's on-site business visitation program. AIF and DCOA should set a goal of meeting with at least 50 employers each year. Business visitations should be prioritized using criteria such as employer size, employer growth rates (if known), and target industries. The visits should be structured to gauge the abilities and needs of local businesses in order to operate successfully and possibly expand in Abilene.
- **5.3.** Develop a questionnaire to capture critical information from business executives and owners during visits. The information captured during the visit should be routinely entered into the employer database for future reporting.
- **5.4.** Utilize a customer relationship management (CRM) software system, such as Salesforce.com, for maintaining the existing business database and prospect management system.
- **5.5.** In conjunction with the Abilene Chamber of Commerce, develop an annual online business survey as a means for keeping in touch with local businesses and documenting specific needs or expansion plans. Include questions on the survey for employers regarding their attitude toward the business climate, talent availability, and workforce quality in Abilene. Utilize the online employer questionnaire developed as part of this project as a starting point.
- **5.6.** Utilize local experts to assist businesses in areas such as access to funding, international trade, lean manufacturing, succession planning, and sales and marketing.
- 5.7. Host quarterly roundtable discussions including "CEO Breakfast" events to allow business leaders the ability to interact in person with local partners in the areas of economic development, small business assistance, talent management, and education. Informal roundtables often stimulate topics of discussion that a survey or questionnaire cannot.
- **5.8.** Develop a "rapid response" strategy for dealing with potential layoffs or plant closures. Under the Federal Worker Adjustment and Retraining Notification Act (WARN) of 1989, companies with 100 or more employees must notify local governments and state workforce organizations about facility closings or mass layoffs at least

60 days in advance of the event. However, at this point, it is frequently too late to do anything. Identify "atrisk" companies early-on and develop an aggressive intervention strategy.

Workforce Solutions has developed community-wide plans for several rural communities that were experiencing business closings with significant impact and has experience in working with businesses, economic development, chambers, elected officials, community partners, and training providers to form teams and plans to address events. Workforce Solutions can also connect employers who are experiencing slow-downs to resources to minimize the impact on their business and workers. In addition, Workforce Solutions has a designated "Rapid Response Coordinator" who also works closely with economic development partners on business recruitment. It has also served as a connector between employers who are downsizing and employers with job openings to quickly transition workers—this has been through job fairs, hiring events and individual referrals.

STRATEGY 6. MAKE DOWNTOWN ABILENE A CENTER OF EMPLOYMENT AND INVESTMENT.

- **6.1.** Revisit the 2010 Master Plan for South Downtown Abilene.
 - **6.1.1.** Assess progress made in adopting and implementing the recommendations.
 - **6.1.2.** Consider updating the plan based on current market trends and conditions.
- **6.2.** Promote downtown as a destination for investment and employment, and support ongoing downtown revitalization efforts as a way to attract and retain talent.
 - **6.2.1.** Create a "Downtown Investment Package" of materials (online and in print) to highlight and market downtown as a target investment location. Market this package to site consultants and business executives searching for locations to accommodate such uses as company headquarters, professional services, and office support operations.
 - **6.2.2.** Expand the Abilene Downtown Association's website (abilenedowntown.com) to serve as a one-stop-shop for all of the public and private efforts to revitalize downtown Abilene.
 - **6.2.3.** Promote and support the development of co-working space in downtown Abilene tailored for entrepreneurs and young start-ups. (Strategy 3.1.4.)
- **6.3.** Work with the Texas Tech SBDC and the Griggs Center for Entrepreneurship and Philanthropy at ACU to expand business retention and attraction efforts focused on the downtown area. Fostering higher levels of private employment to the area, especially in professional services and information technology can support revitalization efforts and lead to the development of new housing, dining, entertainment, and retail establishments.
- **6.4.** Explore the adoption of new public funding mechanisms such as Tax Increment Financing (TIF) and Public Improvement District (PID) to help fund downtown improvements.

- 6.5. Explore the creation of an incentive policy that targets infill development on vacant or underserved properties in downtown. A potential model for such an incentive program is the City of San Antonio's Inner City Reinvestment/Infill Policy. San Antonio's policy involves four coordinated incentives with the target area: (1) no City fees, (2) targeted city incentives (tax abatements, weatherization, CDBG), (3) interdepartmental oversight and single point of contact, and (4) and the establishment of a land bank.
- 6.6. Consider establishing a Revolving Loan Fund (RLF) that is structured to attract and expand professional services and technology-based businesses in the downtown area. An RLF provides operating capital for small developing companies. To assist in capitalizing on an RLF, the City of Abilene could apply for grants from the Economic Development Administration (EDA), the Department of Housing and Urban Development (HUD), and Community Development Block Grant (CDBG) program funds.

STRATEGY 7. CONTINUE REDEVELOPING THE PINE STREET CORRIDOR AS A CENTRAL MIXED-USE ARTERY CONNECTING DOWNTOWN TO THE CITY'S EMERGING EDUCATION AND HEALTHCARE DISTRICT.

- **7.1.** Conduct a Pine Street Corridor study to evaluate its redevelopment potential and any needed changes to the overlay zone to promote high quality development.
- **7.2.** Evaluate improvements to make the corridor more pedestrian and bicycling friendly to make it easier for residents, students, and visitors travel between education and medical facilities and the downtown.
- **7.3.** Explore creating a formal "Health and Education District" within the corridor to help brand and promote the area to new businesses, developers, and residents.
 - **7.3.1.** Such a designation may help in attracting new owners/tenants for the AbLab facility.

STRATEGY 8. ENGAGE EMERGING LEADERS IN ECONOMIC DEVELOPMENT AND CIVIC AFFAIRS.

- 8.1. Continue growing Abilene Chamber's Young Professionals (AbileneYP) program.
 - **8.1.1.** Encourage AbileneYP to take an active role in civic, community development, and economic development affairs in the community.
- **8.2.** Establish a Next Generation Task Force comprised of professionals and volunteers in their 20s and 30s to understand the primary barriers to the retention and attraction of young talent in Abilene.
- **8.3.** Encourage emerging leaders to apply for seats on county, local, and non-profit boards and commissions by hosting workshops on the importance and relevance of various boards and commissions and providing information on available positions.

STRATEGY 9. LEVERAGE DYESS AIR FORCE BASE AS A SOURCE OF TALENT AND AS AN ECONOMIC DRIVER.

- **9.1.** Work closely with the Airman and Family Readiness Center (A&FRC) to help connect Airmen separating from and retiring from service with area employers.
 - Program (TAP) to fill out a brief (one-page), volunatary, and anonymous survey seeking information on their post-service intent. The purpose of the survey is to document the characteristics of active duty military personnel separating from service through Dyess AFB. The survey would seek basic information on length of service, educational attainment, intent to remain in the area permanently, professional and technical skills, desired career fields for the service member and spouse, and views on other quality of place issues that would affect their decision to remain in Abilene. While the A&FRC would administer the survey, local economic develoment and workforce development partners would collect and tabulate the responses, as well as analyze and publish the results. (TIP has helped to design similar survey programs at Fort Hood, TX and Fort Campbell, KY.)
 - **9.1.2.** Data from the survey could be used to identify potential local employment opportunities for Airmen, tailor workforce training and education programs, and market the potential talent pool Dyess represents to investment prospects and existing businesses.
- **9.2.** Communicate with spouses of Airmen and separating Airmen about jobs or industry developments that may be of interest through social media, networking events, and word-of-mouth marketing.
- 9.3. Work with the Air Force to identify opportunities for partnering with Dyess on new private investment opportunities associated with the base through enhanced use lease options. One potential opportunity that has been mentioned is taking advantage of the base's power and security infrastructure to develop data center facilities.
- **9.4.** Publicize new vendor and contracting opportunities for local businesses at the base.

STRATEGY 10. LAUNCH A COMMUNITY-WIDE PUBLIC AWARENESS CAMPAIGN DESIGNED TO ENCOURAGE RESIDENTS TO BECOME AMBASSADORS FOR ABILENE'S SUCCESS.

- 10.1. Establish a Digital Ambassadors Program that utilizes a network of "connectors" who share positive stories about Abilene online. Social Toaster (www.socialtoaster.com) provides a platform for structuring and managing such a program.
 - **10.1.1.** Identify the connectors and thought leaders in Abilene and encourage them to be digital ambassadors for the community.

- **10.1.2.** Develop content that portrays a positive image of Abilene's business climate and highlights opportunities for business and talent to be successful in Abilene.
- **10.1.3.** Promote the program across the communications channels of local chambers and business organizations, including traditional and social media.
- **10.2.** Train and equip residents to become community advocates in order to spread positive messages about Abilene and strengthen community pride.
 - **10.2.1.** Organize and hold regular community events that celebrate Abilene's successes and recognize individuals who are actively working to improve the community.
 - **10.2.2.** Use the digital ambassador network to push positive stories out to Abilene residents to help establish a more positive perception of their community.
 - **10.2.3.** Create a brief set of bullet points highlighting Abilene's positive business environment to be used by local community and business leaders.
- **10.3.** Engage local political, community, nonprofit, and business leaders more closely in economic development activities and initiatives to inform them about the activities and impacts of the DevelopAbilene partners.

METRICS

An important and often overlooked component of a successful strategic plan is the development of metrics by which progress toward the plan's implementation will be measured and tracked. The types of performance measures normally established and used by organizations include:

- Input measures, which identify the amount of resources needed to provide a particular product or service, including labor, materials, equipment, and supplies;
- Output measures, which represent the number of products or services provided and focus on the level
 of activity involved in providing a service or making a product (workload measures are one of the most
 common type of output measures);
- Efficiency measures, also known as productivity measures, which reflect the cost of providing products
 or services, in either terms of dollars or time;
- Quality measures, which reflect the effectiveness in meeting the expectations of customers and stakeholders in providing a service or product (these can include reliability, accuracy, courtesy, competence, responsiveness, and completeness associated with the product or service provided); and
- Outcome measures, which reflect the actual results achieved with a service or a product.

While it is difficult to directly connect the success of any economic development strategic plan to local-level macro-economic statistics (e.g., median household income), tracking some economic indicators provides a general understanding of the relative economic health of Abilene. TIP recommends DCOA and AIF use the following indicators to measure program effectiveness and economic growth in the city.

SUGGESTED METRIC	DATA SOURCE
Number of business site visits	AIF/DCOA records
Number of jobs created/retained	Texas Workforce Commission; business interviews, surveys, and media reports
Average wages of new jobs created/retained	Texas Workforce Commission; business interviews, surveys, and media reports
Annual unemployment rate	Texas Labor Market and Career Information
Private non-farm employment	Texas Labor Market and Career Information
Amount of private sector investment (by geographic area)	Business interviews, surveys, media reports
Number of new businesses formed by geographic location within the region (by geographic area)	Business interviews, surveys, media reports

SUGGESTED METRIC	DATA SOURCE
Office square footage added to the local market (by geographic area)	Regional commercial office brokerage (e.g., CB Richard Ellis)
Industrial square footage added to the local market (by geographic area)	Regional commercial office brokerage (e.g., CB Richard Ellis)
Growth of commercial tax base	Taylor County Tax Appraisal District
Tax base diversification (increased non-residential share of property tax revenues)	Taylor County Tax Appraisal District
Retail sales growth	Texas Comptroller
Annual population estimates	U.S. Census – American Community Survey (1-year estimates)
Population projections	Texas State Data Center
Population over age 25 with a bachelor's degree or higher	U.S. Census – American Community Survey (1-year estimates)
Percent of the population age 20-34	U.S. Census – American Community Survey (1-year estimates)
Number of enrolled college and university students	Abilene Christian University, McMurry University, Hardin Simmons University, Texas Tech Health Science Center, Cisco College, Texas State Technical College
Net migration to Taylor County	Internal Revenue Service
Median household income	U.S. Census – American Community Survey (1-year estimates)

IMPLEMENTATION MATRIX

The following matrix combines all the strategies and actions in a single table. The implementation matrix provides a graphic representation of when the actions should realistically be implemented and the most appropriate organizations to carry them out. The implementation matrix should not be viewed as a static document that cannot be modified or adjusted. Quite the contrary, events or conditions can rapidly change in a community after the plan is completed. These changing circumstances may require a re-prioritization of strategies and actions. In fact, TIP recommends that every plan be viewed as an evergreen document that requires routine pruning and reshaping. TIP will provide this matrix in an Excel spreadsheet format that will allow for easier manipulation of ordering and timelines.

Implementation of the plan will require the participation and collaboration of a number of organizations in the community. It should not rest entirely on the DCOA. As the economic development corporation for Abilene, DOCA will bear the primary responsibility for coordinating the implementation of strategies and actions laid out in the plan. However, the member organizations of the DevelopAbilene alliance will all play key roles. Suggested partner implementation organizations include (but are not necessarily limited to):

- DCOA Development Corporation of Abilene
- AIF Abilene Industrial Foundation
- ACC Abilene Chamber of Commerce
- City City of Abilene
- SBDC Texas Tech Small Business Development Center
- WS Workforce Solutions
- PSEIs Post-Secondary Education Institutions
 - ACU Abilene Christian University; TTUHSC Texas Tech University Health Sciences Center; HSU Hardin Simmons University; McM McMurry University; CC Cisco College; TSTC Texas State Technical College
- ISDs Independent School Districts
 - AISD Abilene Independent School District; WISD Wiley Independent School District

	Potential	2016	2017	2018	2019	2020
Strategies & Actions	Partners	Q1 Q2 Q3 Q4 G	1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4
STRATEGY 1: AGGRESSIVELY MARKET AND PROMOTE ABILENE	AS A DESTINAT	ION FOR NEW II	NVESTMENT	AND EMPLOY	MENT.	
Action 1.1: Ensure that the appropriate sites and infrastructure are in place to support the growth of existing employers and the attraction of new businesses.	DCOA, AIF, City					
Action 1.2: Strengthen Abilene's industry attraction program through focused external marketing and by cultivating relationships with key business decision makers.	AIF, DCOA					
Action 1.3: Cultivate relationships and networks with business executives for the recruitment of new businesses to Abilene, especially in target industries (advanced manufacturing, back office operations and professional services, healthcare, and food processing.	AIF, DCOA					
Action 1.4: Build awareness among decision-makers in target sectors in the DFW Metroplex. (Strategy 4.1)	AIF					
Action 1.5: Create a database of developers, brokers, and site consultants.	AIF					
Action 1.6: Call on site consultants in targeted metropolitan areas, particularly the DFW Metroplex. Utilize a site selection database to identify targets and periodically set appointments to discuss the Abilene market and development opportunities.	AIF					
Action 1.7: Host a "fam tour" for DFW site consultants as a way to generate awareness of Abilene as a destination for business expansions among executives.	AIF, DCOA					
Action 1.8: Explore the possibility of exhibiting at the North Texas Commercial Association of Realtors and Real Estate Professionals (NTCAR) Commercial Real Estate Expo.	AIF					
Action 1.9: Continue maintaining and updating information typically of interest to commercial and industrial site selectors on the DevelopAbilene website.	AIF					

	Potential		20	016			201	7		20)18		20	019			20	20	
Strategies & Actions	Partners	QI	Q2	2 Q3	Q4	Q1	Q2 G	3 Q4	i Q	1 Q2	Q3 Q4	4 Q	1 Q2	2 Q3	Q4	Q1	Q2	Q3	Q4
Action 1.10: Work to adjust incentive policies to support the strategies in this plan.	DCOA, City																		
STRATEGY 2: BUILD A DEEP AND HIGHLY SKILLED TALENT BASE	THROUGH DEV	ELO	PM	ENT	, RE	TEN	ITION	, AN	ID A	ATTE	RACTIC	N.							
Action 2.1: Launch a campaign to create awareness of the opportunities in Abilene.	WS, ACC, PSEIs, ISDs																		
Action 2.2: Strengthen existing partnerships and create new connections between Abilene's employers and educational institutions.	WS, ACC, DCOA, PSEIs, ISDs																		>
Action 2.3: Launch industry-specific initiatives to address specific workforce issues in key sectors, especially in advanced manufacturing, information technology, and healthcare.	DCOA, WS, PSEIs, ISDs																		>
Action 2.4: Conduct outreach to the international refugee population to identify individuals who possess the skills and education to fill high-demand positions.	WS, ACC, PSEIs																		>
Action 2.5: Organize an Abilene Workforce and Education Summit to discuss progress in addressing regional workforce development issues and education barriers.	WS, DCOA, ACC, PSEIs, ISDs																		>
STRATEGY 3: DEVELOP AN INNOVATION ECOSYSTEM THAT SPA	WNS AND SUP	PO	RTS	INN	10V	ΆΤ	VE P	OPI	E A	ND	BUSIN	ESS	ES.			l			
Action 3.1: Build a start-up ecosystem in Abilene.	AIF, ACC, ACU, SBDC, DCOA, WS																		>
Action 3.2: Actively support student entrepreneurship programs and efforts at the Griggs Center for Entrepreneurship & Philanthropy at Abilene Christian University.	ACU, DCOA, WS																		>
Action 3.3: Encourage "grass-roots" innovation among K-12 students and young adults throughout the community by facilitating the creation of programs at local educational institutions that emphasize innovation, technology commercialization, and business development.	ISDs, ACU, WS																		>

	Potential	2	016		2017	′		20	18		20	19		20	20	
Strategies & Actions	Partners	Q1 Q	2 Q3 Q4	Q1	Q2 Q	3 Q4	Q1	Q2	Q3 Q4	Q1	Q2	Q3 Q	4 Q	1 Q2	Q3	Q4
Action 3.4: Expand the availability of start-up capital by formalizing access to existing capital in Abilene and by developing stronger ties to angel and venture capital investors outside of Abilene.	ACU, DCOA, ACC															
STRATEGY 4: POSITION ABILENE AS TOP OF MIND FOR BUSINES	SSES AND TALE	NI TN	THE DFV	V M	ETROF	LEX	•									
Action 4.1: Build awareness among decision-makers in target sectors in the DFW Metroplex. (Strategy 1.4)	AIF															
Action 4.2: Promote Abilene to the DFW commercial real estate community. (Strategies 1.5-1.7)	AIF															
Action 4.3: Engage with key economic development resources, industry groups, and professional networks in the DFW Metroplex.	AIF, DCOA															
STRATEGY 5: SUPPORT THE GROWTH AND PROSPERITY OF EXISTING BUSINESSES.																
Action 5.1: Enlarge and maintain a database of existing employers. Working with local partners, the database should continually be expanded to include companies in the area that serve external markets or are suppliers to existing primary employers.	AIF															
Action 5.2: Strengthen AlF's on-site business visitation program. AlF and DCOA should set a goal of meeting with at least 50 employers each year.	AIF, DCOA															
Action 5.3: Develop a questionnaire to capture critical information from business executives and owners during visits.	AIF, ACC, DCOA, WS															
Action 5.4: Utilize a customer relationship management (CRM) software system, such as Salesforce.com, for maintaining the existing business database and prospect management system.	AIF, DCOA															
Action 5.5: In conjunction with the Abilene Chamber of Commerce, develop an annual online business survey as a means for keeping in touch with local businesses and documenting specific needs or expansion plans.	ACC, AIF, DCOA, WS															•
Action 5.6: Utilize local experts to assist businesses in areas such as access to funding, international trade, lean manufacturing, succession planning, and sales and marketing.	AIF, SBDC, ACU, DCOA, ACU															

	Potential	2	2016		201	7		20	18		201	9		20	20
Strategies & Actions	Partners	Q1 Q	2 Q3 Q4	4 Q1	Q2 G	23 Q4	Į Q1	Q2	Q3 Q4	Q1	Q2 (Q3 Q4	Q1	Q2	Q3 Q4
Action 5.7: Host quarterly roundtable discussions including "CEO Breakfast" events to allow business leaders the ability to interact in person with local partners in the areas of economic development, small business assistance, talent management, and education. I	DCOA, AIF, ACC, WS														
Action 5.8: Develop a "rapid response" strategy for dealing with potential layoffs or plant closures.	WS, AIF, DCOA, City, SBDC														
STRATEGY 6: MAKE DOWNTOWN ABILENE A CENTER OF EMPLO	YMENT AND II	VEST	MENT.								±				
Action 6.1: Revisit the 2010 Master Plan for South Downtown Abilene.	City	1 1 2 3 3 4 4 5 6 7 7													
Action 6.2: Promote downtown as a destination for investment and employment, and support ongoing downtown revitalization efforts as a way to attract and retain talent.	AIF, City, DCOA														
Action 6.3: Work with the Texas Tech SBDC and the Griggs Center for Entrepreneurship and Philanthropy at ACU to expand business retention and attraction efforts focused on the downtown area.	SBDC, ACU														
Action 6.4: Explore the adoption of new public funding mechanisms such as Tax Increment Financing (TIF) and Public Improvement District (PID) to help fund downtown improvements.	City, DCOA														
Action 6.5: Explore the creation of an incentive policy that targets infill development on vacant or underserved properties in downtown.	City, DCOA														
Action 6.6: Consider establishing a Revolving Loan Fund (RLF) that is structured to attract and expand professional services and technology-based businesses in the downtown area.	City, DCOA														
STRATEGY 7: CONTINUE REDEVELOPING THE PINE STREET CORR CITY'S EMERGING EDUCATION AND HEALTHCARE DISTRICT.	IDOR AS A CEN	ITRAL	MIXED-	USE	ARTE	RY C	ONI	NEC	TING I	OOV	VNTC)WN	TO 1	THE	
Action 7.1: Conduct a Pine Street Corridor study to evaluate its redevelopment potential and any needed changes to the overlay zone to promote high quality development.	City														

	Potential	2	016		2	2017	7		20	18		201	9		20	20
Strategies & Actions	Partners	Q1 Q	2 Q3	Q4 Q	1 G	2 Q	3 Q 4	Q1	Q2	Q3 Q4	Q1	Q2 (Q3 Q	4 Q1	Q2	Q3 Q4
Action 7.2: Evaluate improvements to make the corridor more pedestrian and bicycling friendly to make it easier for residents, students, and visitors travel between education and medical facilities and the downtown.	City, PSEIs															
Action 7.3: Explore creating a formal "Health and Education District" within the corridor to help brand and promote the area to new businesses, developers, and residents.	City, PSEIs															
STRATEGY 8: ENGAGE EMERGING LEADERS IN ECONOMIC DEVE	LOPMENT AND	CIVIC	AFFA	IRS.		'										<u> </u>
Action 8.1: Continue growing Abilene Chamber's Young Professionals (AbileneYP) program.	ACC															
Action 8.2: Establish a Next Generation Task Force comprised of professionals and volunteers in their 20s and 30s to understand the primary barriers to the retention and attraction of young talent in Abilene.	ACC															
Action 8.3: Encourage emerging leaders to apply for seats on county, local, and non-profit boards and commissions by hosting workshops on the importance and relevance of various boards and commissions and providing information on available positions.	ACC															
STRATEGY 9: LEVERAGE DYESS AIR FORCE BASE AS A SOURCE C	F TALENT AND	AS AI	N ECO	NON	ΛIC	DRI	VER.	,								
Action 9.1: Work closely with the Airman and Family Readiness Center (A&FRC) to help connect Airmen separating from and retiring from service with area employers.	ACC, WS															
Action 9.2: Communicate with spouses of Airmen and separating Airmen about jobs or industry developments that may be of interest through social media, networking events, and word-of-mouth marketing.	ACC, WS															
Action 9.3: Work with the Air Force to identify opportunities for partnering with Dyess on new private investment opportunities associated with the base through enhanced use lease options.	ACC, City, DCOA															

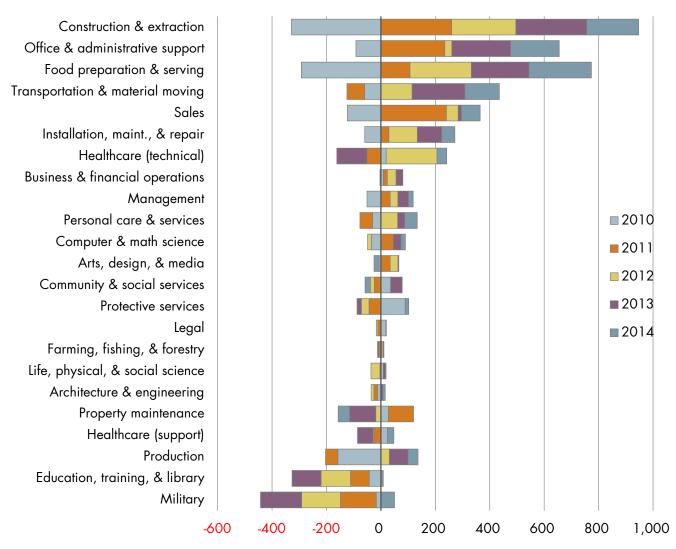
	Potential	20)16		2017	7		20	18		20)19			2020	0
Strategies & Actions	Partners	Q1 Q2 Q3 Q4 Q1 Q2 Q		Q2 Q	3 Q4	4 Q1 Q2 Q3 Q		Q3 Q4	I Q	I Q2	Q3	Q 4	Q1 (2 2 Q	3 Q4	
Action 9.4: Publicize new vendor and contracting opportunities for local businesses at the base.	ACC															
STRATEGY 10: LAUNCH A COMMUNITY-WIDE PUBLIC AWARENI FOR ABILENE'S SUCCESS.	SS CAMPAIGN	DESIGI	NED TO	EN	COUR	AGE	RES	IDE	NTS T	ОВ	ECO	ME	AM	BAS:	SADO	ORS
Action 10.1: Establish a Digital Ambassadors Program that utilizes a network of "connectors" who share positive stories about Abilene online.	ACC															
Action 10.2: Train and equip residents to become community advocates in order to spread positive messages about Abilene and strengthen community pride.	ACC															
Action 10.3: Engage local political, community, nonprofit, and business leaders more closely in economic development activities and initiatives to inform them about the activities and impacts of the	DCOA, AIF, City, ACC,															
DevelopAbilene partners.																

APPENDIX A: ECONOMIC ASSESSMENT

ECONOMIC TRENDS

FIGURE 2. JOB CHANGE BY MAJOR OCCUPATIONAL GROUP, 2010-2014

Figure 2 compares net job change in the Abilene metropolitan statistical area (MSA) since 2010, the first full year following the recession's official end in June 2009. Isolating employment trends by year helps illustrate how specific occupational groups have fared during the recovery. Two groups—Construction & extraction and Office & administrative support—added a combined total of more than 1,000 jobs during the four-year period, accounting for just over 60 percent of the Abilene's net job growth. In each case, gains in subsequent years offset significant losses during 2010, particularly Construction and extraction which shed more than 300 jobs during that year. The largest net losses over the period were seen in Military; Education, training, & library; and Production.



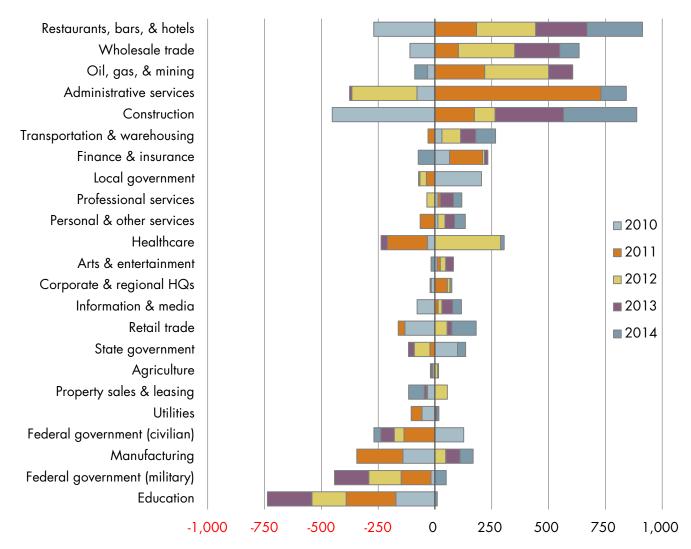
Source: EMSI, 2015.2 - QCEW Employees, Non-QCEW Employees, and Self-Employed.

Note: Figures exclude unclassified employment. The Abilene MSA is comprised of three counties: Taylor, Jones, and Callahan

FIGURE 3. JOB CHANGE BY INDUSTRY SECTOR, 2010-2014

While the prior figure analyzed job change by occupational group, Figure 3 shows annual change in employment in the Abilene MSA by major industry sector. From 2010 to 2014, the largest net gains were in Restaurants, bars, & hotels, which added nearly 650 jobs over the period, despite shedding 270 positions in 2010. Wholesale trade and Oil, gas, & mining were the next largest gainers, with each sector experiencing a net gain of roughly 500 jobs over the four years analyzed. The largest single-year increase was seen in Administrative services, a category that includes a wide range of business support services, which added more than 700 jobs in 2011.

Losses were steepest in industries that parallel the occupations shown previously: Education, Federal government (military), and Manufacturing. Of these, only Manufacturing experienced significant gains during the period analyzed, although, the roughly 170 jobs gained since 2012 were not sufficient to offset nearly 350 jobs lost in 2010 and 2011 combined. The Education sector lost more than 700 jobs over the four-year period, with substantial cuts coming in all but the most recent year. Construction experienced the largest single-year decrease, shedding 450 jobs in 2010.



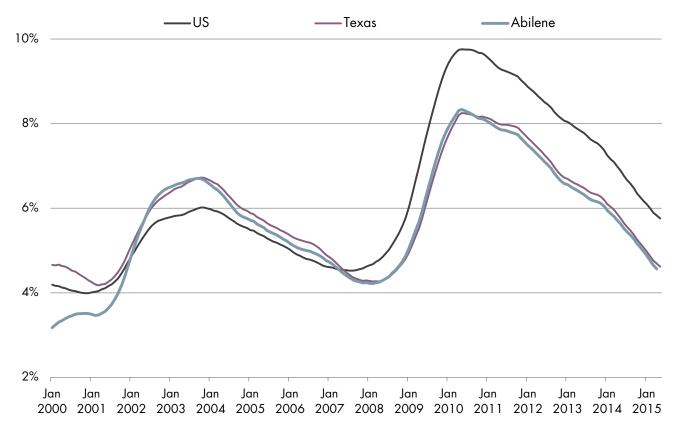
Source: 2015.2 - QCEW Employees, Non-QCEW Employees, and Self-Employed.

FIGURE 4. UNEMPLOYMENT RATES

UNEMPLOYMENT RATE (12-MONTH MOVING AVERAGE), 2000-2015

With the exception of the early 2000s, unemployment rates in the Abilene MSA have closely tracked the state average for much of the last 15 years. Abilene started the previous decade with rates a full percentage point or more below the state and national average. The MSA's unemployment rate began ticking up steadily in late 2001, however, as the country approached the depth of the economic downturn that followed the dot-com crash. By the fall of 2003, unemployment in the metro area was approaching 7 percent, a figure that mirrored the state's performance, but exceeded the national average.

By contrast, during the most recent recession, both Abilene and Texas outperformed the US. While unemployment climbed dramatically throughout 2009, the picture in Texas was better than elsewhere in the country. Nationally, average unemployment peaked at nearly 10 percent in May 2010, compared with a rate of just over 8 percent in the Abilene MSA and the state as a whole. The gap has narrowed slightly as rates have edged down across the board since that time. In May 2015, the most recent period available at the time of analysis, average annual unemployment in the Abilene MSA was 4.5 percent, just below the state average of 4.6 percent, and significantly lower than the US rate of 5.8 percent.



Source: US Bureau of Labor Statistics, Local Area Unemployment Statistics (state and local), Current Population Survey (national).

FIGURE 5. COUNTY-TO-COUNTY MIGRATION, THREE-YEAR AVERAGE

GROSS POPULATION FLOWS BETWEEN TAYLOR AND OTHER COUNTIES

Migration data, compiled by the US Internal Revenue Service, based on year-over-year address changes by tax filers, provides an excellent basis for illustrating domestic population movements. Although not an exact match, tax returns are used to represent households; the number of exemptions filed is typically used as a proxy for population. An analysis of IRS migration data for Taylor County provides clues to sources of population gain and loss in Abilene. To help smooth out variations within individual tax years, a three-year average was used.

Slightly more than 3,800 households moved out of Taylor County each year on average during the time period analyzed, with a nearly equal number moving in. Like many Texas counties, Taylor's migration flows are primarily with other counties in the state. Those in the top 10 either shared a border with Taylor County— Jones, Nolan, and Callahan—or were part of another metropolitan area. The state's major metropolitan areas gained the largest net number of households from Taylor County. Core counties within the Dallas-Ft Worth area (Tarrant and Dallas Counties) averaged a net gain of nearly 100 households annually during the three years analyzed. Other MSA core counties that experienced a net gain of households from Taylor County include Travis County (Austin), Lubbock County (Lubbock), Bexar County (San Antonio), and Harris County (Houston).

TAYLOR COUNTY, TX TOP MIGRATION FLOWS

County	State	Inbound from	Outbound to	Net Loss/	Gain
Jones County	TX	230	190	+40	
Nolan County	TX	73	51	+22	
Callahan County	TX	1 <i>77</i>	161	+16	
Tom Green County	TX	84	81	+3	
Harris County	TX	68	74		-6
Bexar County	TX	94	101		-8
Lubbock County	TX	94	115		-21
Dallas County	TX	108	144		-36
Travis County	TX	46	86		-41
Tarrant County	TX	171	229		-58

Source: Internal Revenue Service.

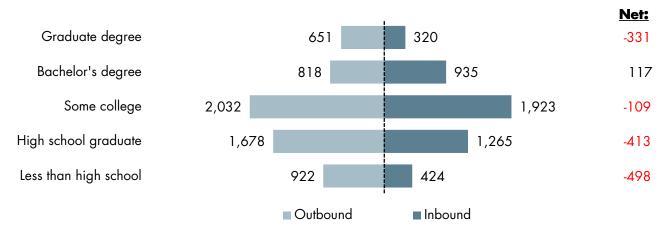
Note: Figures reflect the net flow of returns (households), not exemptions (population). The analysis includes only counties that had flows in both directions relative to Taylor County (i.e., those having both an outflow of households to and an inflow of households from Taylor County). Top 10 counties are based on the size of flows into and out of Taylor County, sorted by net loss/gain.

FIGURE 6. GEOGRAPHIC MOBILITY, BY EDUCATIONAL ATTAINMENT

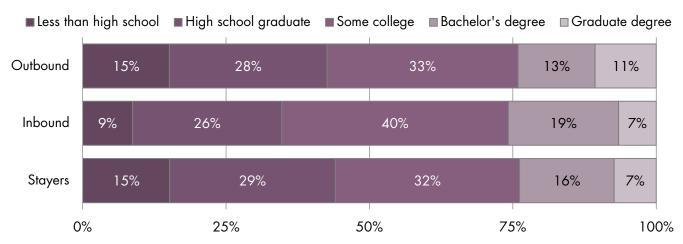
FOR THE POPULATION AGE 25 YEARS AND OVER

Though not directly comparable to the IRS migration data in the prior figure, data from the American Community Survey (ACS) can provide a sense of how movers and non-movers differ on key demographic characteristics. Figure 6 shows migration flows by the highest level of educational attainment achieved for Taylor County residents age 25 years and over. Residents with some college, but less than a four-year degree were the most mobile, with roughly 2,000 people in this group moving into and out of the county. In terms of net losses and gains, residents holding a high school diploma or less were more likely to move outside the county, with a net loss of nearly 500 residents in this group. While the county fared better among bachelor degree holders, gaining slightly more than 100 residents in this category, it experienced a net loss of more than 300 advanced degree holders. Comparing the educational distributions for the types of migrants—those who stayed, left, or migrated to Taylor County—confirms its loss of highly educated residents. Eleven percent of migrants leaving the county had a graduate degree, while only 7 percent of both stayers and inbound migrants held this credential.

MIGRANTS INTO AND OUT FROM TAYLOR COUNTY, BY EDUCATIONAL ATTAINMENT



DISTRIBUTION OF EDUCATION WITHIN TAYLOR COUNTY'S THREE MIGRANT GROUPS

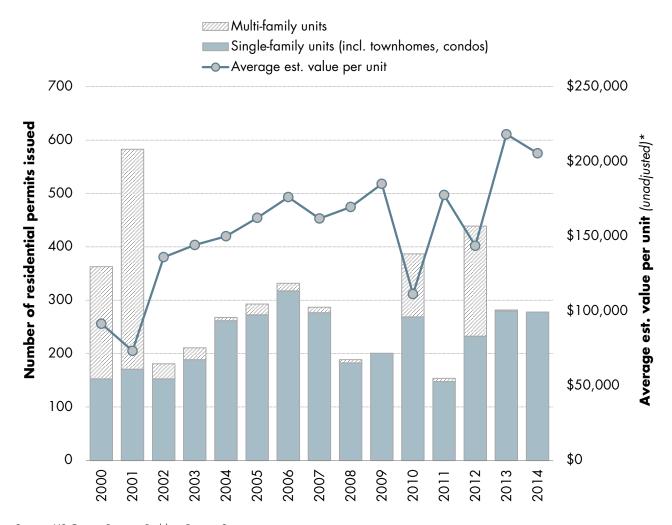


Source: ACS 5-year estimates 2007-2011. Note: Stayers include non-movers and those who moved within Taylor County.

FIGURE 7. RESIDENTIAL BUILDING PERMITS REPORTED

ABILENE (TAYLOR COUNTY), 2001-2014

Since 2000, jurisdictions in Taylor County have issued an average of roughly 225 permits for single-family homes each year. The number of single-family units—which includes townhomes and condominiums, as well as traditional homes—topped 300 in 2006, the peak of the economic expansion. In contrast, multi-unit residential construction fluctuated widely during the same period. The early part of the decade saw the largest number of multi-family units permitted, with more than 600 units permitted in 2000 and 2001 combined. Multi-family construction is highly susceptible to economic cycles as well as local factors, such as changes in the number of active duty personnel stationed at Dyess Air Force Base.



Source: US Census Bureau, Building Permits Survey.

^{*}Notes: Figures are for new privately-owned residential buildings and include both single- and multi-family units. The dollar value of residential construction should be used with caution. Because of the nature of the building permit application process, valuations may frequently differ from the true cost of construction.

COMMUTING PATTERNS

FIGURE 8. ABILENE MSA COMMUTING FLOWS, 2013

INCLUDING TOP 10 COUNTIES FOR PLACE OF RESIDENCE / PLACE OF WORK

In 2013, more than two-thirds (69 percent) of the roughly 59,000 jobs in the three-county Abilene MSA were filled by residents. Taylor County was by far the largest source of workers, accounting for 61 percent of the MSA's total jobholders, with an additional 8.6 percent coming from Jones and Callahan Counties. The remainder, nearly 18,200 workers, commuted into the three-county region from outside.

The MSA exported slightly more workers than it imported, with roughly 20,300 workers—one in three employed residents—leaving the three-county region for work. Dallas and Tarrant Counties were the top destination for outbound commuters, with each county capturing roughly 4 percent of the MSA's employed residents. The remaining top 10 places of employment for Abilene MSA residents were other metropolitan areas: Harris (Houston), Tom Green (San Angelo), Travis (Austin), Midland, and Lubbock, each of which accounted for around 1.5 percent of outbound commuters in 2013.



Notes: Overlay arrows are for illustrative purposes and do not indicate directionality of worker flow between home and employment locations.

WHERE ABILENE MSA WORKERS LIVE

County	Count	Share
1 Taylor County, TX	35,378	61.1%
2 Jones County, TX	3,730	6.4%
3 Tom Green County, TX	1,260	2.2%
4 Callahan County, TX	1,246	2.2%
5 Tarrant County, TX	934	1.6%
6 Hood County, TX	705	1.2%
7 Nolan County, TX	636	1.1%
8 Lubbock County, TX	631	1.1%
9 Dallas County, TX	576	1.0%
10 Erath County, TX	503	0.9%
All Other Locations	13,232	22.5%
Total	58,831	100.0%

WHERE EMPLOYED ABILENE MSA RESIDENTS WORK

	County	Count	Snare
1	Taylor County, TX	36,913	60.6%
2	Jones County, TX	2,387	3.9%
3	Dallas County, TX	2,353	3.9%
4	Tarrant County, TX	2,317	3.8%
5	Callahan County, TX	1,341	2.2%
6	Harris County, TX	1,034	1.7%
7	Tom Green County, TX	1,024	1.7%
8	Travis County, TX	872	1.4%
9	Midland County, TX	790	1.3%
10	Lubbock County, TX	787	1.3%
	All Other Locations	11,121	18.2%
	Total	60,939	100.0%

Source: (both figures) US Census Bureau, Local Employment Dynamics.

FIGURE 9. DISTANCE TRAVELED, 2002 VS. 2013

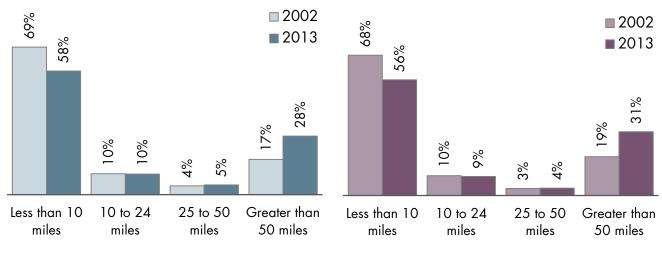
SHARE OF JOB HOLDERS

The majority of job holders in the Abilene MSA travel less than 10 miles to work, a reflection of the large share of residents that both live and work in the three-county region. Commuting distances have increased since 2002—the initial year for which data are available—with the most significant increases occurring in the share of workers traveling more than 50 miles.

In 2002, just 17 percent of people who worked in the Abilene MSA commuted this distance. By 2013, the most recent year for which data are available, this figure had risen sharply to 28 percent. This finding suggests that Abilene is able to draw in workers from a larger area, which can be an advantage in business recruitment. However, residents of the Abilene MSA also traveled longer distances to their jobs. In 2002, roughly one in five employed residents in the three counties (19 percent) traveled more than 50 miles to work. In 2013 this figure had risen to nearly one in three (31 percent).

PEOPLE WHO WORK IN ABILENE MSA

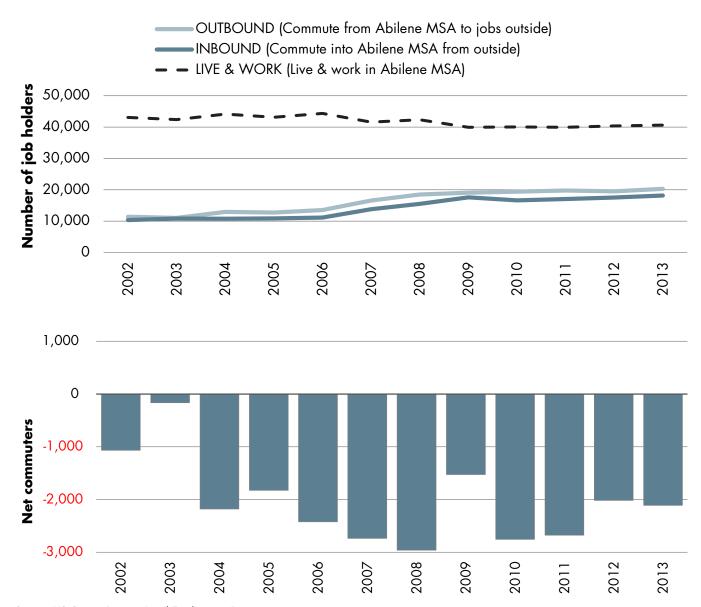
EMPLOYED PEOPLE WHO LIVE IN ABILENE MSA



Source: US Census Bureau, Local Employment Dynamics.

FIGURE 10. COMMUTING FLOWS, 2002 TO 2013: ABILENE MSA

The top graph shows long-term commuting trends for the Abilene MSA by type of flow. The number of residents that both live and work in the Abilene MSA has remained fairly constant over the period, declining only slightly in recent years. By contrast, the numbers of both inbound and outbound commuters began increasing steadily in 2006, leveling out in 2010. However, the number of outbound commuters has consistently exceeded those coming into the MSA for work by a slight margin throughout the period. The net difference between inbound and outbound commuters in each year is shown in the bottom graph. The sudden reduction in the net outflow of workers in 2009 is likely a reflection of the dramatic rise in unemployment rates seen in Abilene and throughout the country (Figure 4, page 28). The number drawn into the region for work continued to tick upward in 2009, while the number of jobholders traveling outside the MSA increased more gradually. Likewise, 2009 marks a contraction in the number of local residents working in Abilene (those that "live & work" in the MSA) which continued throughout the period.



Source: US Census Bureau, Local Employment Dynamics.

FIGURE 11. COMMUTING FLOWS, 2002 TO 2013: ABILENE AND DALLAS

As seen in Figure 8 (page 32), Abilene's labor market is interconnected with a number of major metropolitan areas, including the Metroplex. The top graph shows the flow of commuters between the Abilene MSA and the Dallas-Fort Worth MSA. Like the overall commuting flows shown previously, the number of residents leaving the Abilene MSA to work in the Metroplex exceeds the number commuting in throughout the period. After remaining steady through the start of the decade at roughly 2,000 workers, the gap began to widen in 2007. This trend was exacerbated by a sharp drop in the number of Dallas-Fort Worth area residents commuting to work in the Abilene MSA after 2009. While the number of inbound commuters began increasing in 2013, it has not returned to its 2009 peak. A leveling off in the number of outbound commuters (Abilene MSA residents commuting to the Metroplex) has kept the net difference in check since 2009.

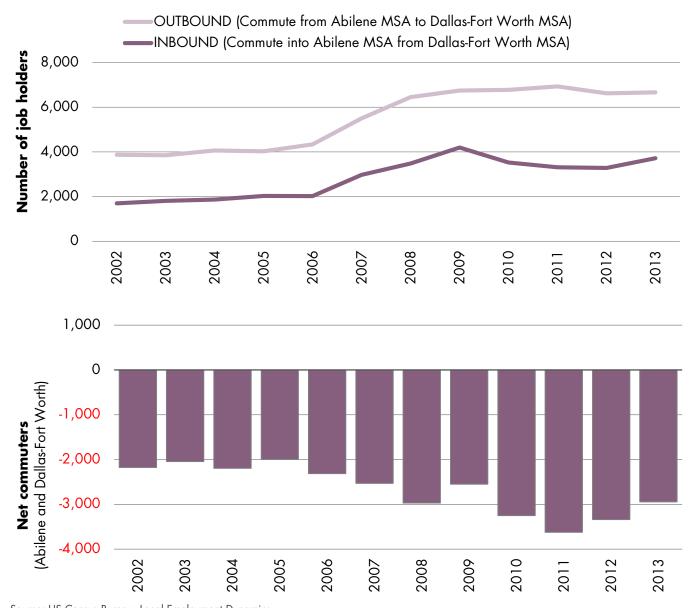
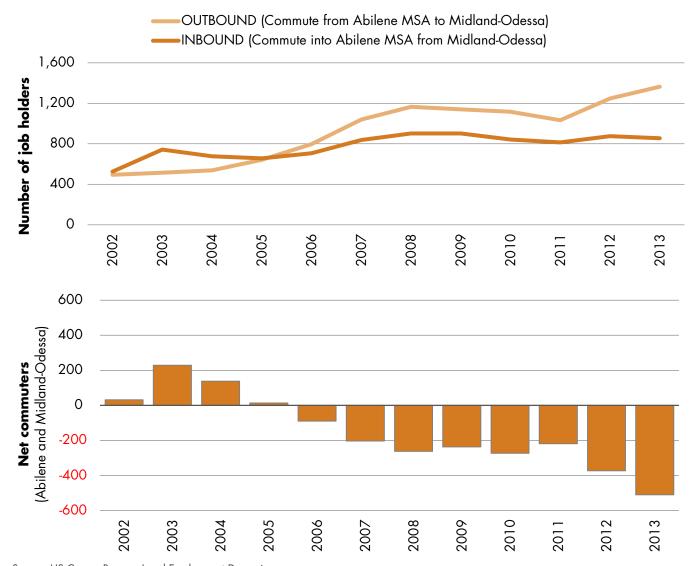


FIGURE 12. COMMUTING FLOWS, 2002 TO 2013: ABILENE AND MIDLAND-ODESSA

The Midland-Odessa MSA was also interconnected with the Abilene MSA, although to a lesser extent than Dallas-Fort Worth. Midland County was among the top 10 locations for Abilene commuters in 2013, with nearly 800 residents traveling to work there. Unlike its relationship with the Metroplex, flows between the two MSAs were relatively balanced for most of the last decade. In the early 2000s, Abilene netted slightly more workers from this exchange, however, steady increases in the number of Abilene-area residents commuting to Midland-Odessa shifted this balance. Since 2011, the gap has widened at a faster pace, likely a reflection of continued growth in the volatile oil and gas industry



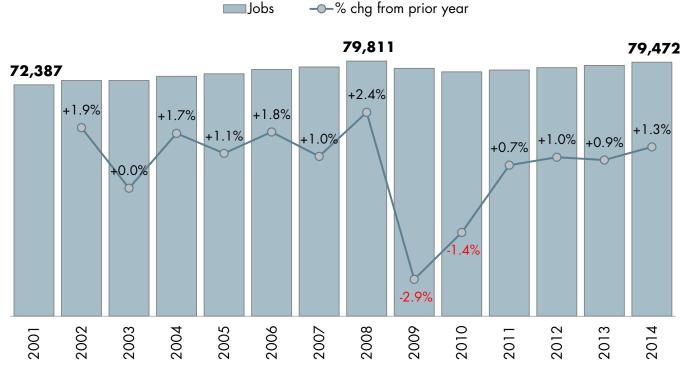
Source: US Census Bureau, Local Employment Dynamics.

INDUSTRY AND EMPLOYMENT

FIGURE 13. TOTAL EMPLOYMENT, 2001-2014

TOTAL NONFARM JOBS IN THE ABILENE MSA

The Abilene MSA saw consistent employment growth throughout most of the 2000s, leading up to a peak of nearly 80,000 jobs in 2008. Following losses in both 2009 and 2010, employment began ticking upward in 2011. By 2014, the MSA had recovered most of the roughly 3,300 jobs lost during this period. At nearly 79,500, employment in the three-county region in 2014 was only a few hundred jobs off its 2008 peak.



Source: 2015.2 - QCEW Employees, Non-QCEW Employees, and Self-Employed.

ABOUT THE DATA

Unless otherwise indicated, employment data in this report were prepared by Economic Modeling Specialists Inc. (EMSI). EMSI's proprietary database integrates economic, labor market, demographic, and education data from nearly 90 government and private-sector sources. The figures presented in this report are "complete" employment, rather than the "covered" employment typically produced by state and federal workforce agencies. Unlike covered employment, which includes only those industries covered by unemployment insurance, complete employment includes estimates of all industries, as well as an estimate of the number of self-employed.

FIGURE 14. DISTRIBUTION OF EMPLOYMENT BY INDUSTRY SECTOR, 2014

The distribution of employment by major industry sector in the Abilene MSA mirrored both Texas and the US, with Healthcare & Social Assistance representing the largest share of jobs across all three geographies. The sector comprises a slightly larger share of total employment in Abilene than the national average (13.2 percent versus 12.4 percent). This is likely a reflection of the role Abilene plays in serving the wider region. Like many metropolitan areas, Retail Trade and Local Government (which includes public education and hospitals) round out the top three. Together, these sectors account for roughly one-third of total employment in the three counties.

Areas where Abilene's employment distribution differed from the state or the US include an above-average share of military employment (reflecting the presence of Dyess AFB). The presence of a military installation may also help explain the slightly above-average share of employment found in Lodging, Restaurants, and Bars and Personal & Other Services. The MSA also has a much higher share of its total employment in jobs related to privately operated educational facilities, due to the presence of institutions such as Abilene Christian University and Hardin-Simmons University. Sectors with below-average levels of employment include Manufacturing, Professional Services, and Administrative & Support Services.

NAICS C	ode & Description	Abilene MSA	Texas	US
62	Healthcare & Social Assistance	13.2%	10.8%	12.4%
44-45	Retail Trade	10.8%	10.3%	10.4%
903	Local Govt. (Incl. Pub. Ed. & Hospitals)	9.9%	10.0%	9.2%
72	Lodging, Restaurants, & Bars	9.1%	8.5%	8.3%
23	Construction	6.5%	6.7%	5.3%
9012	Federal Govt., Military	6.0%	1.4%	1.3%
81	Personal & Other Services	5.4%	4.9%	4.8%
61	Educational Services (Private)	4.5%	1.6%	2.5%
56	Administrative & Support Services	4.4%	6.6%	6.2%
902	State Govt. (Incl. Higher Ed./Hospitals)	4.3%	2.9%	3.4%
52	Finance & Insurance	4.1%	4.2%	4.0%
42	Wholesale Trade	3.7%	4.6%	3.9%
31-33	Manufacturing	3.6%	7.1%	8.1%
54	Professional Services	3.1%	6.0%	6.3%
21	Mining (Incl. Oil & Gas)	2.7%	2.4%	0.6%
48-49	Transportation & Warehousing	2.2%	3.6%	3.3%
51	Information	1.6%	1.7%	1.9%
9011	Federal Govt., Civilian	1.5%	1.6%	1.9%
53	Property Sales & Leasing	1.3%	1.9%	1.7%
71	Arts, Entertainment, & Recreation	1.0%	1.2%	1.7%
11	Agriculture & Forestry	0.6%	0.8%	1.2%
22	Utilities	0.4%	0.4%	0.4%
55	Corporate & Regional Offices	0.3%	0.8%	1.4%

Source: 2015.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed. Note: Figures exclude unclassified employment

FIGURE 15. CONCENTRATION OF EMPLOYMENT BY INDUSTRY, 2014

LOCATION QUOTIENT (LQ) ANALYSIS BY MAJOR INDUSTRY SECTOR, US=1.00

A look at location quotients (LQs) suggests strengths in a number of sectors relative to the state and US. Not surprisingly, employment in Mining, which includes activities related to oil and gas exploration and extraction, comprises a larger-than-expected share of the region's job base, as does military-related employment. As indicated previously, the presence of Abilene Christian University helps explain the region's concentration of employment in Educational Services (Private). Though it falls just under the 1.25 threshold typically used to indicate relative advantage, Abilene's relatively strong LQ in State Government is due, at least in part, to the correctional facilities located in the region.

NAICS	Code & Description	Abilene MSA	Texas	US
21	Mining (Incl. Oil & Gas)	4.80	4.35	1.00
9012	Federal Govt., Military	4.46	1.05	1.00
61	Educational Services (Private)	1.79	0.65	1.00
23	Construction	1.24	1.28	1.00
902	State Govt. (Incl. Higher Ed./Hospitals)	1.24	0.83	1.00
22	Utilities	1.21	1.07	1.00
81	Personal & Other Services	1.12	1.02	1.00
72	Lodging, Restaurants, & Bars	1.09	1.02	1.00
903	Local Govt. (Incl. Pub. Ed. & Hospitals)	1.08	1.09	1.00
62	Healthcare & Social Assistance	1.07	0.87	1.00
44-45	Retail Trade	1.03	0.99	1.00
52	Finance & Insurance	1.01	1.06	1.00
42	Wholesale Trade	0.94	1.18	1.00
51	Information	0.83	0.88	1.00
9011	Federal Govt., Civilian	0.79	0.84	1.00
53	Property Sales & Leasing	0.76	1.12	1.00
56	Administrative & Support Services	0.71	1.07	1.00
48-49	Transportation & Warehousing	0.67	1.11	1.00
<i>7</i> 1	Arts, Entertainment, & Recreation	0.63	0.71	1.00
11	Agriculture & Forestry	0.50	0.67	1.00
54	Professional Services	0.49	0.96	1.00
31-33	Manufacturing	0.45	0.87	1.00
55	Corporate & Regional Offices	0.23	0.59	1.00

Source: 2015.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed. Note: Figures exclude unclassified employment

LOCATION QUOTIENT (LQ) ANALYSIS is a statistical technique used to suggest areas of relative advantage. LQs are calculated as an industry's share of total local employment divided by the same industry's share of employment at the national level. If the local industry and national industry are perfectly proportional, the LQ will be 1.00. LQs greater than 1.25 are presumed to indicate a comparative advantage; those below 0.75 suggest an under-developed sector but may also point to opportunities for expansion/attraction.

FIGURE 16. TOP 25 INDUSTRIES RANKED BY LOCATION QUOTIENT (LQ), 2014

While the prior figures focused on major industry sectors, Figure 16 and Figure 17 provide employment data at the detailed industry level. Support Activities for Mining had the highest concentration in the Abilene MSA relative to national averages in 2014, as evidenced by its LQ of 7.52. The industry also performed well according to other indicators, with average earnings per job in excess of \$70,000, and strong employment growth. The LQ analysis also highlights the MSA's strengths in Manufacturing. Six of the top 25 most concentrated industries in the Abilene MSA were in this sector, including Engine, Turbine, & Power Transmission Equipment Manufacturing (with an LQ of 5.68) and Boiler, Tank, & Shipping Container Manufacturing (4.68 LQ). Industries within the Wholesale Trade sector were also highly concentrated, with two industries among the top 10: Petroleum Wholesalers (4.87 LQ) and Machinery & Equipment Wholesalers (2.81 LQ). However, these industries were smaller than many other top 25 industries. Abilene's largest concentrated industry was the Military (4,753 jobs), which had the fifth-highest LQ.

NAICS Code & Description	Jobs 2010	Jobs 2014	Net Chg., 2010-14	Projected Chg.*	Ave. Earnings per Job**	LQ 2014
2131 Support Activities for Mining	1,195	1,729	+534	<u> </u>	\$71,950	7.52
3336 Engine, Turbine, & Power Transmission Equipment Mfg.	1 <i>75</i>	293	+118	A	\$57,808	5.68
4247 Petroleum & Petroleum Products Merchant Wholesalers	1 <i>77</i>	254	+76	A	\$72,770	4.87
3324 Boiler, Tank, & Shipping Container Manufacturing	301	238	-63	A	\$59,045	4.68
9012 Federal Government, Military	5,128	4,753	-375	▼	\$56,394	4.46
5152 Cable & Other Subscription Programming	221	145	-76	▼	\$51,684	4.28
3111 Animal Food Manufacturing	150	116	-34	A	\$34,246	4.08
6113 Colleges, Universities, & Professional Schools	3,131	3,010	-121	A	\$35,424	3.09
4238 Machinery, Equipment, & Supplies Merchant Wholesalers	654	999	+345	A	\$69,969	2.81
2111 Oil & Gas Extraction	278	285	+7	A	\$78,322	2.75
5614 Business Support Services	820	1,285	+465	A	\$22,844	2.60
7212 RV (Recreational Vehicle) Parks & Recreational Camps	18	77	+59	A	\$32,884	2.45
4442 Lawn & Garden Equipment & Supplies Stores	190	200	+11	A	\$34,004	2.45
9029 State Government, Excluding Education & Hospitals	2,874	2,792	-82	A	\$52,163	2.36
2123 Nonmetallic Mineral Mining & Quarrying	102	111	+9	▼	\$58,914	2.35
4231 Motor Vehicle/Motor Vehicle Parts & Supplies Wholesalers	248	376	+128	A	\$55,847	2.11
6223 Specialty (except Psychiatric & Substance Abuse) Hospitals	89	232	+143	A	\$53,926	2.10
4512 Book Stores & News Dealers	111	108	-3	A	\$15,612	2.08
2362 Nonresidential Building Construction	189	825	+636	A	\$85,355	2.02
3121 Beverage Manufacturing	400	202	-198	▼	\$48,583	1.98
4881 Support Activities for Air Transportation	126	171	+44	A	\$83,030	1.84
5241 Insurance Carriers	1,352	1,199	-153	A	\$52,240	1.83
3262 Rubber Product Manufacturing	148	125	-22	•	\$82,453	1.83
8123 Drycleaning & Laundry Services	246	290	+44	A	\$28,417	1.76
3118 Bakeries & Tortilla Manufacturing	279	277	-2	<u> </u>	\$23,684	1.73

Source: 2015.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed. Notes: Figures exclude industries with <50 employees in any year, unless one year has >75 employees. *Shows direction of EMSI's projections through 2019 **Average earnings per job includes wages, salaries, supplements (additional employee benefits), and proprietor income and is not equivalent to the wages paid to workers in the industry.

FIGURE 17. TOP 25 INDUSTRIES RANKED BY NET JOB CHANGE, 2010-2014

When viewed in terms of employment growth rather than relative concentration, the list of top industries looks quite different. Unlike Figure 16, which was dominated by heavy industries in Manufacturing, Mining, and Wholesale Trade, the region's fastest growing industries between 2010 and 2014 were much likely to be service related. Restaurants & Other Eating Places topped the list, adding more than 650 jobs during the period. This industry was also by far the largest among the top 25, accounting for nearly 5,900 jobs in 2014. The Healthcare and Social Assistance sector had the most industries among the region's fastest-growing, with 6 of the top 25 industries. One industry in the sector, Offices of Physicians, had the highest average earnings per job among the high-growth industries, at slightly more than \$98,000. Other industries with strong average earnings include those in Construction (Nonresidential Building Construction, \$85,355; and Utility System Construction, \$75,151); Manufacturing (Aerospace Product & Parts Mfg., \$72,854); and Mining (Support Activities for Mining, \$71,950).

NAICS Code & Description	Jobs 2010	Jobs 2014	Net Chg., 2010-14	Projected Chg.*	Ave. Earnings per Job**	LQ 2014
7225 Restaurants & Other Eating Places	5,199	5,862	+663	A	\$16,603	1.17
2362 Nonresidential Building Construction	189	825	+636	A	\$85,355	2.02
2131 Support Activities for Mining	1,195	1 <i>,7</i> 29	+534	A	\$71,950	7.52
5614 Business Support Services	820	1,285	+465	A	\$22,844	2.60
4238 Machinery, Equipment, & Supplies Merchant Wholesalers	654	999	+345	A	\$69,969	2.81
4921 Couriers & Express Delivery Services	209	430	+221	A	\$60,581	1.59
7223 Special Food Services	299	489	+190	A	\$21,605	1.27
2382 Building Equipment Contractors	1,163	1,342	+179	A	\$49,735	1.23
6213 Offices of Other Health Practitioners	200	372	+172	A	\$48,742	0.81
6241 Individual & Family Services	437	608	+171	A	\$26,359	0.54
6223 Specialty (except Psychiatric & Substance Abuse) Hospitals	89	232	+143	A	\$53,926	2.10
4411 Automobile Dealers	798	933	+136	A	\$65,894	1.48
4231 Motor Vehicle/Motor Vehicle Parts & Supplies Wholesalers	248	376	+128	A	\$55,847	2.11
2371 Utility System Construction	209	337	+127	A	\$75,151	1.33
6211 Offices of Physicians	1,450	1,568	+118	A	\$98,279	1.19
3336 Engine, Turbine, & Power Transmission Equipment Mfg.	1 <i>75</i>	293	+118	A	\$ <i>57</i> ,808	5.68
6219 Other Ambulatory Health Care Services	149	263	+114	A	\$40,404	1.60
5221 Depository Credit Intermediation	814	925	+111	A	\$54,525	1.04
4461 Health & Personal Care Stores	428	525	+97	A	\$34,805	0.97
5182 Data Processing, Hosting, & Related Services	130	226	+96	A	\$42, <i>7</i> 33	1.57
3323 Architectural & Structural Metals Manufacturing	153	243	+91	A	\$54,751	1.31
6212 Offices of Dentists	332	416	+83	A	\$53,018	0.86
3364 Aerospace Product & Parts Manufacturing	108	190	+83	A	\$72,854	0.75
5151 Radio & Television Broadcasting	95	1 <i>7</i> 6	+81	A	\$3 <i>5,7</i> 68	1.48
2389 Other Specialty Trade Contractors	516	595	+80	A	\$35,926	1.18

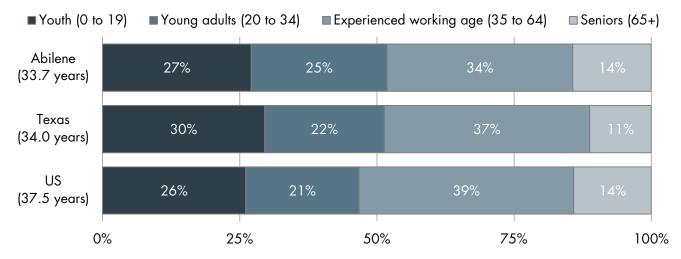
Source: 2015.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed. Notes: *Shows direction of EMSI's projections through 2019 **Average earnings per job includes wages, salaries, supplements (additional employee benefits), and proprietor income and is not equivalent to the wages paid to workers in the industry.

WORKFORCE & OCCUPATIONS

FIGURE 18. AGE STRUCTURE AND MEDIAN AGE (IN YEARS)

Like the state as a whole, Abilene's population is young relative to the US. The MSA's median age of 33.7 is nearly 4 years younger than the national average. A look at the MSA's age structure relative to the state reveals that both Abilene and Texas have a similar share of their population—more than one-half (52 percent)—on the younger end of the scale. The distribution of these age groups, however, is slightly different. Texas has a much higher share of its population under the age of 20, while Abilene has a higher share of young adults (those 20 to 34 years old), again reflecting the influence of the region's higher education assets.

Experienced workers, defined here as those age 35 to 64 years old, comprise a smaller share of Abilene's workforce (34 percent) than either the state or the US (37 percent and 39 percent, respectively). This group is typically in its highest earning years, making it a desirable population from a revenue standpoint, and often possesses a range of employment and life experience that are attractive to employers. Abilene also has a higher proportion of seniors (65+) than Texas, though its share of this age group is in line with national averages. The presence of a large number of seniors can have implications for service delivery and public resources.



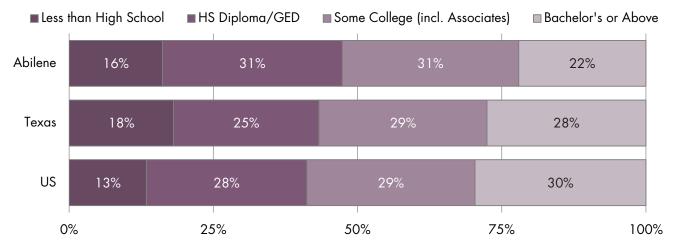
Source: 2013 American Community Survey 1-Year Estimates (DP-05).

FIGURE 19. EDUCATIONAL ATTAINMENT

HIGHEST LEVEL OF EDUCATION, 2013

Educational attainment in Abilene lags the nation in a number of important categories. First, residents of the MSA are more likely to lack a high school diploma or GED than the average nationwide, with 16 percent of the adults 25 years and over in the three counties lacking this credential. Texas, as a whole, fares slightly worse on this indicator at 18 percent—nearly one in five adults. Nearly half of adults in the Abilene MSA (47 percent) do not have any college experience.

The Abilene MSA has a lower proportion of residents with a bachelor's degree than the US and Texas. Twenty-two percent of residents had a bachelor's degree or higher, six percentage points less than Texas (28 percent) and eight percentage points less than the US (30 percent). While the MSA lags in the share of adults with a four-year degree, it has a slightly higher share of residents with some college. This group includes people who have attained Associates degrees, as well as those who have completed certificate programs required in a number of trade and technical occupations currently in demand across the country.



Source: 2013 American Community Survey 1-Year Estimates (DP-02). Note: Population is age 25 years and older.

FIGURE 20. DISTRIBUTION OF EMPLOYMENT BY OCCUPATIONAL GROUP, 2014

Not surprisingly, the Abilene MSA's largest occupational groups align closely with its industry composition (Figure 14), with office workers, sales clerks, food service workers, and healthcare professionals topping the list. Likewise, the region's top occupational groups mirror those at the state and national level. Abilene's strengths in healthcare are also evident in its occupational distribution. One in ten jobs in the three-county MSA is in a healthcare-related field (including practitioners/technicians and support occupations). By contrast, just 7.2 percent of Texas jobs and 8.2 percent of jobs nationwide are in these two occupational groups. Occupations that are underrepresented relative to national norms include those related to the professional services industry, including Business & Financial, Computer & Mathematical, Architecture & Engineering, and Legal.

SOC Code & Description		Abilene MSA	Texas	US
43-0000	Office & Administrative Support	15.2%	15.9%	15.2%
41-0000	Sales & Related	10.4%	10.6%	10.3%
35-0000	Food Prep. & Serving Related	9.7%	8.2%	8.1%
29-0000	Healthcare Practitioners & Technical	6.7%	4.8%	5.4%
47-0000	Construction & Extraction	6.6%	5.9%	4.5%
25-0000	Education, Training, & Library	6.1%	5.7%	5.7%
55-0000	Military	6.0%	1.4%	1.3%
53-0000	Transportation & Material Moving	5.3%	6.5%	6.4%
39-0000	Personal Care & Service	4.2%	4.2%	3.9%
49-0000	Installation, Maintenance, & Repair	4.0%	4.2%	3.8%
11-0000	Management	3.7%	4.7%	5.3%
37-0000	Building/Grounds Cleaning & Maint.	3.7%	3.7%	3.8%
31-0000	Healthcare Support	3.3%	2.4%	2.8%
51-0000	Production	3.1%	5.6%	6.0%
13-0000	Business & Financial Operations	3.1%	4.6%	4.9%
33-0000	Protective Service	2.8%	2.4%	2.3%
21-0000	Community & Social Service	1.7%	1.2%	1.6%
27-0000	Arts, Entertainment, & Media	1.5%	1.3%	1.7%
15-0000	Computer & Mathematical	1.1%	2.7%	2.7%
17-0000	Architecture & Engineering	0.7%	1.9%	1.7%
19-0000	Life, Physical, & Social Science	0.6%	0.7%	0.8%
23-0000	Legal	0.4%	0.8%	0.8%
45-0000	Farming, Fishing, & Forestry	0.4%	0.5%	0.8%

Source: EMSI, 2015.2 - QCEW Employees, Non-QCEW Employees, and Self-Employed.

Note: Figures exclude unclassified employment.

FIGURE 21. CONCENTRATION OF EMPLOYMENT BY OCCUPATIONAL GROUP, 2014

LOCATION QUOTIENT (LQ) ANALYSIS BY MAJOR OCCUPATIONAL GROUP, US=1.00

Because occupations are common across a range of industries, concentrations of employment are less likely to occur at the group level. This is particularly true when analyzing larger economies, such as states and metropolitan areas, which typically include a cross-section of industries. Most metropolitan areas, for example, have hospitals, restaurants, government offices, and so on, and, therefore, tend to have LQs approaching 1.0 in related occupational groups. Yet, despite these issues, the relative concentration of employment connected to oil and gas activities and population and business growth can be seen in Figure 21. Both Abilene and Texas show higher-than-expected concentrations of employment in Construction & Extraction occupations, with LQs of 1.47 and 1.32, respectively. Abilene's strengths in healthcare are also again apparent, with strong LQs for both Healthcare Practitioners & Technical (1.24 LQ) and Healthcare Support (1.18 LQ).

SOC Code & Description		Abilene MSA	Texas	US
55-0000	Military	4.46	1.06	1.00
47-0000	Construction & Extraction	1.47	1.32	1.00
29-0000	Healthcare Practitioners & Technical	1.24	0.90	1.00
33-0000	Protective Service	1.21	1.04	1.00
35-0000	Food Prep. & Serving Related	1.19	1.02	1.00
31-0000	Healthcare Support	1.18	0.86	1.00
39-0000	Personal Care & Service	1.07	1.08	1.00
25-0000	Education, Training, & Library	1.06	0.99	1.00
49-0000	Installation, Maintenance, & Repair	1.04	1.10	1.00
21-0000	Community & Social Service	1.03	0.72	1.00
41-0000	Sales & Related	1.00	1.03	1.00
43-0000	Office & Administrative Support	1.00	1.05	1.00
3 <i>7</i> -0000	Building/Grounds Cleaning & Maint.	0.96	0.95	1.00
27-0000	Arts, Entertainment, & Media	0.84	0.77	1.00
53-0000	Transportation & Material Moving	0.83	1.02	1.00
19-0000	Life, Physical, & Social Science	0.76	0.88	1.00
11-0000	Management	0.69	0.88	1.00
13-0000	Business & Financial Operations	0.63	0.93	1.00
51-0000	Production	0.51	0.92	1.00
45-0000	Farming, Fishing, & Forestry	0.49	0.63	1.00
23-0000	Legal	0.47	0.90	1.00
15-0000	Computer & Mathematical	0.43	1.03	1.00
1 <i>7</i> -0000	Architecture & Engineering	0.41	1.17	1.00

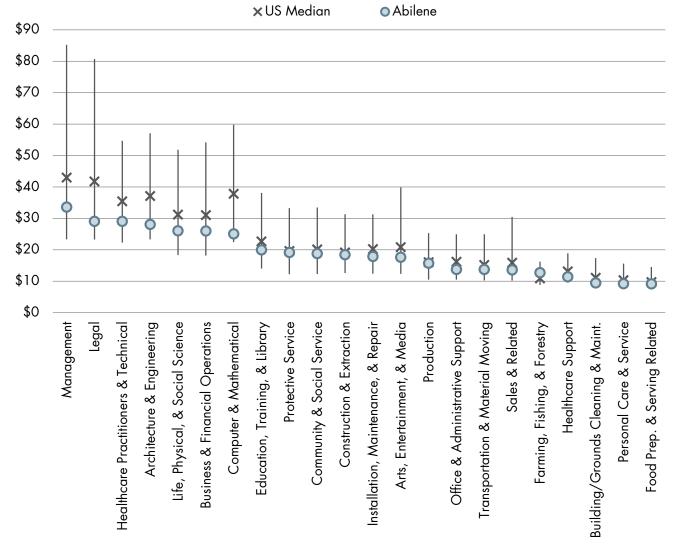
Source: EMSI, 2015.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed.

Note: Figures exclude unclassified employment. LQs of 1.25 or greater are highlighted and are suggestive of a competitive advantage relative to the US.

FIGURE 22. ABILENE WAGES IN THE CONTEXT OF THE NATIONAL WAGE RATES BY MAJOR OCCUPATIONAL GROUP, 2014

Line = US wage range from 10th to 90th percentile; Markers = median hourly wage rates for US (x) and Abilene (dot)

Median wage rates in Abilene were below the US in all major occupational groups except one–Farming, Fishing, & Forestry. However, jobs in this occupational group are among the lowest paying in the region, with only four occupational groups in the MSA having lower median wage rates in 2014. For many professional services positions, Abilene's median wage falls significantly below the national median. Median wages for Computer & Mathematical occupations in the Abilene MSA fall near the 10th percentile of the national range. Jobs in Legal and Architecture & Engineering fields also fall very near the lower end of the spectrum relative to the nation. While this can be an advantage in the recruitment of businesses, it can hamper talent recruitment and retention. Underscoring Abilene's relatively low cost of living (see, for example, Figure 27) should be the focus in such efforts.



Source: EMSI, 2015.2 - QCEW Employees, Non-QCEW Employees, and Self-Employed

FIGURE 23. TOP 10 OCCUPATIONS IN ABILENE MSA

BASED ON SIZE, GROWTH (NUMERIC & PERCENTAGE), AND WAGES PAID, 2014

Figure 23 (shown on the following page) provides an overview of the top 10 occupations in the Abilene MSA based on three factors: size (number of jobs in 2014), growth (in both numeric and percentage terms), and wages paid. An overview of each is provided below.

Largest. The largest occupation in Abilene was Combined Food Preparation and Serving Workers, Including Fast Food, which also added the most jobs over the last decade. In 2014, nearly 2,500 residents in Abilene worked in this occupation.

Three of Abilene's other largest occupations were in the Office and Administrative Support major occupation group. These occupations were Office Clerks, General; Secretaries and Administrative Assistants, Except Legal, Medical, and Executive; and Bookkeeping, Accounting, and Auditing Clerks. Workers in these occupations earned over \$10 per hour. The highest-paid large occupation was Registered Nurses, with a median wage of \$28.71 per hour. This wage was almost twice the salaries of Bookkeeping, Accounting, and Auditing Clerks employees, the second-highest paid large occupations (\$14.54 per hour).

• **Fastest growing.** The two occupations that grew the fastest in Abilene were Emergency Medical Technicians and Paramedics, and Telemarketers. Both industries more than doubled in size since 2004. The occupation that grew the most in numeric terms was Combined Food Preparation and Serving Workers, which added 455 jobs over the decade.

Broadly speaking, fast-growing occupations paid more than the largest occupations. However, wages in these occupations were much lower than highest paid occupations in Abilene. Eight of the ten occupations with the largest percent change in employment had median wages below \$20 per hour; seven of the ten occupations that added the most jobs had median wages under \$15 per hour. However, a few fast-growing occupations had higher earnings; Median wages for General and Operations Managers in the region approached \$40 per hour in 2014.

Highest earning. The occupation with the highest earnings in 2014 was Physicians and Surgeons, All Other, which had median wages of nearly \$100 per hour. Including Physicians, all high-paying occupations but one were in the Healthcare Practitioners and Technical Occupations major occupational group. The only exception was Architectural and Engineering Managers. With a median wage of \$57.41 per hour, this occupation came in near the bottom of the list, with Nurse Anesthetists in the number 10 spot.

Like many other metro areas, the highest-paying occupations employ a relatively small number of workers. Pharmacists were the only high-earning occupation among the top 10 with more than 100 jobs. The gap between the highest and 10th best-paying occupation was significant. Nurse Anesthetists had median wages of slightly less than \$57 per hour, \$42 per hour less than the top spot.

Jobs, 2014	∢LARGEST	Median hourly earnings
2,462	Combined Food Preparation and Serving Workers, Including Fast Food	\$8.49
2,461	Retail Salespersons	\$9.67
2,290	Office Clerks, General	\$12.51
1,840	Cashiers	\$8.86
1,815	Registered Nurses	\$28.71
1,797	Secretaries and Admin. Assistants, Except Legal, Medical, and Executive	
1,359	Personal Care Aides	\$8.13
1,321	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$9.42
1,301	Waiters and Waitresses	\$8.64
1,031	Bookkeeping, Accounting, and Auditing Clerks	\$14.54
· · · · · · · · · · · · · · · · · · ·	1 0.	
Net change	◆FASTEST-GROWING , 2004-2014 (#)	Median hourly earnings
+455	Combined Food Preparation and Serving Workers, Including Fast Food	\$8.49
+318	Correctional Officers and Jailers	\$17.24
+253	Psychiatric Aides	\$10.98
+253	Personal Care Aides	\$8.13
+204	Customer Service Representatives	\$11.52
+198	Office Clerks, General	\$12.51
+197	Insurance Sales Agents	\$24.86
+159	Secretaries and Admin. Assistants, Except Legal, Medical, and Executive	
+148	Telemarketers	\$10.70
+144	General and Operations Managers	\$39.73
	· · · · · · · · · · · · · · · · · · ·	
% change	◆FASTEST-GROWING , 2004-2014 (%)	Median hourly earnings
	(11)	
+185%	Emergency Medical Technicians and Paramedics	
+185%	Emergency Medical Technicians and Paramedics Telemarketers	\$14.49
+131%	Telemarketers	
+131% +70%	Telemarketers Hotel, Motel, and Resort Desk Clerks	\$14.49 \$10.70 \$8.77
+131% +70% +66%	Telemarketers Hotel, Motel, and Resort Desk Clerks Psychiatric Aides	\$14.49 \$10.70 \$8.77 \$10.98
+131% +70%	Telemarketers Hotel, Motel, and Resort Desk Clerks Psychiatric Aides Insurance Sales Agents	\$14.49 \$10.70 \$8.77
+131% +70% +66% +56%	Telemarketers Hotel, Motel, and Resort Desk Clerks Psychiatric Aides	\$14.49 \$10.70 \$8.77 \$10.98 \$24.86
+131% +70% +66% +56% +51% +49%	Telemarketers Hotel, Motel, and Resort Desk Clerks Psychiatric Aides Insurance Sales Agents First-Line Supervisors of Correctional Officers	\$14.49 \$10.70 \$8.77 \$10.98 \$24.86 \$19.78 \$15.25
+131% +70% +66% +56% +51% +49% +49%	Telemarketers Hotel, Motel, and Resort Desk Clerks Psychiatric Aides Insurance Sales Agents First-Line Supervisors of Correctional Officers Interpreters and Translators	\$14.49 \$10.70 \$8.77 \$10.98 \$24.86 \$19.78
+131% +70% +66% +56% +51% +49%	Telemarketers Hotel, Motel, and Resort Desk Clerks Psychiatric Aides Insurance Sales Agents First-Line Supervisors of Correctional Officers Interpreters and Translators Correctional Officers and Jailers Civil Engineering Technicians	\$14.49 \$10.70 \$8.77 \$10.98 \$24.86 \$19.78 \$15.25 \$17.24
+131% +70% +66% +56% +51% +49% +49% +47%	Telemarketers Hotel, Motel, and Resort Desk Clerks Psychiatric Aides Insurance Sales Agents First-Line Supervisors of Correctional Officers Interpreters and Translators Correctional Officers and Jailers	\$14.49 \$10.70 \$8.77 \$10.98 \$24.86 \$19.78 \$15.25 \$17.24 \$21.55
+131% +70% +66% +56% +51% +49% +49% +47% +42%	Telemarketers Hotel, Motel, and Resort Desk Clerks Psychiatric Aides Insurance Sales Agents First-Line Supervisors of Correctional Officers Interpreters and Translators Correctional Officers and Jailers Civil Engineering Technicians Veterinary Technologists and Technicians	\$14.49 \$10.70 \$8.77 \$10.98 \$24.86 \$19.78 \$15.25 \$17.24 \$21.55 \$10.16
+131% +70% +66% +56% +51% +49% +49% +47% +42% Jobs, 2014	Telemarketers Hotel, Motel, and Resort Desk Clerks Psychiatric Aides Insurance Sales Agents First-Line Supervisors of Correctional Officers Interpreters and Translators Correctional Officers and Jailers Civil Engineering Technicians Veterinary Technologists and Technicians HIGHEST-PAYING	\$14.49 \$10.70 \$8.77 \$10.98 \$24.86 \$19.78 \$15.25 \$17.24 \$21.55 \$10.16 Median hourly earnings
+131% +70% +66% +56% +51% +49% +49% +47% +42% Jobs, 2014	Telemarketers Hotel, Motel, and Resort Desk Clerks Psychiatric Aides Insurance Sales Agents First-Line Supervisors of Correctional Officers Interpreters and Translators Correctional Officers and Jailers Civil Engineering Technicians Veterinary Technologists and Technicians HIGHEST-PAYING > Physicians and Surgeons, All Other	\$14.49 \$10.70 \$8.77 \$10.98 \$24.86 \$19.78 \$15.25 \$17.24 \$21.55 \$10.16 Median hourly earnings \$98.49
+131% +70% +66% +56% +51% +49% +47% +42% Jobs, 2014 82 27	Telemarketers Hotel, Motel, and Resort Desk Clerks Psychiatric Aides Insurance Sales Agents First-Line Supervisors of Correctional Officers Interpreters and Translators Correctional Officers and Jailers Civil Engineering Technicians Veterinary Technologists and Technicians HIGHEST-PAYING > Physicians and Surgeons, All Other Surgeons	\$14.49 \$10.70 \$8.77 \$10.98 \$24.86 \$19.78 \$15.25 \$17.24 \$21.55 \$10.16 Median hourly earnings \$98.49 \$82.41
+131% +70% +66% +56% +51% +49% +42% Jobs, 2014 82 27 65	Telemarketers Hotel, Motel, and Resort Desk Clerks Psychiatric Aides Insurance Sales Agents First-Line Supervisors of Correctional Officers Interpreters and Translators Correctional Officers and Jailers Civil Engineering Technicians Veterinary Technologists and Technicians HIGHEST-PAYING > Physicians and Surgeons, All Other Surgeons Family and General Practitioners	\$14.49 \$10.70 \$8.77 \$10.98 \$24.86 \$19.78 \$15.25 \$17.24 \$21.55 \$10.16 Median hourly earnings \$98.49 \$82.41 \$81.64
+131% +70% +66% +56% +51% +49% +42% Jobs, 2014 82 27 65	Telemarketers Hotel, Motel, and Resort Desk Clerks Psychiatric Aides Insurance Sales Agents First-Line Supervisors of Correctional Officers Interpreters and Translators Correctional Officers and Jailers Civil Engineering Technicians Veterinary Technologists and Technicians HIGHEST-PAYING > Physicians and Surgeons, All Other Surgeons Family and General Practitioners Internists, General	\$14.49 \$10.70 \$8.77 \$10.98 \$24.86 \$19.78 \$15.25 \$17.24 \$21.55 \$10.16 Median hourly earnings \$98.49 \$82.41 \$81.64 \$78.62
+131% +70% +66% +56% +51% +49% +47% +42% Jobs, 2014 82 27 65 39	Telemarketers Hotel, Motel, and Resort Desk Clerks Psychiatric Aides Insurance Sales Agents First-Line Supervisors of Correctional Officers Interpreters and Translators Correctional Officers and Jailers Civil Engineering Technicians Veterinary Technologists and Technicians HIGHEST-PAYING > Physicians and Surgeons, All Other Surgeons Family and General Practitioners Internists, General Pediatricians, General	\$14.49 \$10.70 \$8.77 \$10.98 \$24.86 \$19.78 \$15.25 \$17.24 \$21.55 \$10.16 Median hourly earnings \$98.49 \$82.41 \$81.64 \$78.62 \$72.86
+131% +70% +66% +56% +56% +51% +49% +42% Jobs, 2014 82 27 65 39 15	Telemarketers Hotel, Motel, and Resort Desk Clerks Psychiatric Aides Insurance Sales Agents First-Line Supervisors of Correctional Officers Interpreters and Translators Correctional Officers and Jailers Civil Engineering Technicians Veterinary Technologists and Technicians HIGHEST-PAYING > Physicians and Surgeons, All Other Surgeons Family and General Practitioners Internists, General Pediatricians, General Obstetricians and Gynecologists	\$14.49 \$10.70 \$8.77 \$10.98 \$24.86 \$19.78 \$15.25 \$17.24 \$21.55 \$10.16 Median hourly earnings \$98.49 \$82.41 \$81.64 \$78.62 \$72.86 \$70.46
+131% +70% +66% +56% +51% +49% +47% +42% Jobs, 2014 82 27 65 39	Telemarketers Hotel, Motel, and Resort Desk Clerks Psychiatric Aides Insurance Sales Agents First-Line Supervisors of Correctional Officers Interpreters and Translators Correctional Officers and Jailers Civil Engineering Technicians Veterinary Technologists and Technicians HIGHEST-PAYING > Physicians and Surgeons, All Other Surgeons Family and General Practitioners Internists, General Pediatricians, General Obstetricians and Gynecologists Dentists, General	\$14.49 \$10.70 \$8.77 \$10.98 \$24.86 \$19.78 \$15.25 \$17.24 \$21.55 \$10.16 Median hourly earnings \$98.49 \$82.41 \$81.64 \$78.62 \$72.86 \$70.46 \$69.32
+131% +70% +66% +56% +51% +49% +449% +447% +42% Jobs, 2014 82 27 65 39 15 13	Telemarketers Hotel, Motel, and Resort Desk Clerks Psychiatric Aides Insurance Sales Agents First-Line Supervisors of Correctional Officers Interpreters and Translators Correctional Officers and Jailers Civil Engineering Technicians Veterinary Technologists and Technicians HIGHEST-PAYING > Physicians and Surgeons, All Other Surgeons Family and General Practitioners Internists, General Pediatricians, General Obstetricians and Gynecologists Dentists, General Pharmacists	\$14.49 \$10.70 \$8.77 \$10.98 \$24.86 \$19.78 \$15.25 \$17.24 \$21.55 \$10.16 Median hourly earnings \$98.49 \$82.41 \$81.64 \$78.62 \$72.86 \$70.46 \$69.32 \$62.00
+131% +70% +66% +56% +51% +49% +42% Jobs, 2014 82 27 65 39 15 13 60 120	Telemarketers Hotel, Motel, and Resort Desk Clerks Psychiatric Aides Insurance Sales Agents First-Line Supervisors of Correctional Officers Interpreters and Translators Correctional Officers and Jailers Civil Engineering Technicians Veterinary Technologists and Technicians HIGHEST-PAYING > Physicians and Surgeons, All Other Surgeons Family and General Practitioners Internists, General Pediatricians, General Obstetricians and Gynecologists Dentists, General	\$14.49 \$10.70 \$8.77 \$10.98 \$24.86 \$19.78 \$15.25 \$17.24 \$21.55 \$10.16 Median hourly earnings \$98.49 \$82.41 \$81.64 \$78.62 \$72.86 \$70.46 \$69.32

Source: (all figures) EMSI, 2015.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed

PEER ASSESSMENT

To provide a baseline understanding of Abilene's relative economic position, TIP compiled demographic and economic data for Abilene and 8 other peer metro areas in Texas and Oklahoma. Abilene economic development officials identified these communities as being common direct competitors for new investment prospects. The purpose is to document the city's competitive advantages and disadvantages vis-à-vis its peer communities and compared to the U.S. average.

In each case, we compared the entire Abilene metro area with the metro area of the peer region, with the exception of Ardmore, OK, which is micropolitan statistical areas. The tables in this section are organized with the U.S. average as the point of reference. The 9 metro areas—8 peer regions and Abilene—are ranked by performance rather than numeric value to facilitate comparisons. Metro areas that outperform the nation are stacked above the U.S. figure; those that do not fare as well on the U.S. are shown below. The resulting tables enable a quick comparison of Abilene's performance on each data point relative to the national average and the benchmark regions.

FIGURE 24. TOTAL POPULATION, 2010 AND 2014

Compared to its benchmarks, Abilene had one of the slowest-gowing populations from 2010 to 2014. Only two benchmarks had slower growth: Lawton and Wichita Falls. The fastest growth was seen in San Angelo, which expanded at a rate of 5.7 percent, 3.7 percentage points higher than Abilene's growth of 2.0 percent.

Abilene's median age of 34.1 falls in the middle of the benchmark cities. However, the MSA's population is younger than the US median by 3.3 years.

			2010 to	2010 to 2014		
MSA	2010	2014	Net Chg.	% Chg.	Median Age (in years)	
San Angelo, TX	111,823	118,182	+6,359	+5.7%	34.0	
Lubbock, TX	290,805	305,644	+14,839	+5.1%	31.0	
Tyler, TX	209,714	218,842	+9,128	+4.4%	35.9	
US	308.7 M	318.9 M	+10.2 M	+3.3%	37.4	
Amarillo, TX	251,933	259,885	+7,952	+3.2%	34.3	
Waco, TX	252,772	260,430	+7,658	+3.0%	33.4	
Ardmore, OK	47,557	48,821	+1,264	+2.7%	38.3	
Abilene, TX	165,252	168,592	+3,340	+2.0%	34.1	
Lawton, OK	130,291	131,183	+892	+0.7%	31.7	
Wichita Falls, TX	151,306	151,536	+230	+0.2%	35.4	

Source: US Census Bureau, 2014 Current Population Estimates (population); 2011-2013 American Community Survey 3-Year Estimates (DP05) (median age).

Note: Figures shown are for the metropolitan statistical area (MSA), with the exception of Ardmore, OK, which is a micropolitan statistical area

FIGURE 25. TOTAL EMPLOYMENT

TOTAL NONFARM JOBS, 2010-2014

The employment growth that returned to the US after the Great Recession was also experienced in Abilene and the majority of the benchmark communities. Ardmore was the fastest growing, rising by 7.4 percent from 2010-2014. Total employment in Abilene increased by 3.9 percent, 0.2 points slower than the US (4.1 percent), but still better than four of the benchmark communities. Two of the MSA's poorer performing peers saw declines in employment: Wichita Falls (-3.4 percent) and Lawton (-4.2 percent).

The median wages of Abilene and the benchmark communities all fall below the US rate of \$20.06. Abilene's benchmark city with the highest median wage was Amarillo at \$17.63, a rate \$2.43 lower than the US. Abilene's median wage of \$16.76 put it lower than the highest benchmark by \$0.87, and lower than the US by \$3.30.

			2010	to 2014	Median Hourly
MSA	2010	2014	Net Chg.	% Chg.	Wage
Ardmore, OK	24,083	25,866	+1 <i>,7</i> 83	+7.4	\$17.10
Lubbock, TX	141,406	149,124	+7,718	+5.5	% \$16.90
San Angelo. TX	53,438	55,900	+2,462	+4.6	% \$16.32
Tyler, TX	103,315	107,859	+4,544	+4.4	% \$1 <i>7</i> .59
US	144.4 M	153.2 M	+6.0 M	+4.19	\$20.06
Abilene, TX	76,464	79,472	+3,008	+3.9°	% \$16.67
Amarillo, TX	121,870	125,962	+4,092	+3.4	% \$1 <i>7</i> .63
Waco, TX	118,661	122,606	+3,945	+3.39	% \$1 <i>7</i> .51
Wichita Falls, TX	69,828	67,462	-2,366	-3.4	\$16.35
Lawton, OK	62,234	59,602	-2,632	-4.2	\$16.45
				•	

Source: EMSI, 2015.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed.

Note: Figures shown are for the metropolitan statistical area (MSA), with the exception of Ardmore, OK, which is a micropolitan statistical area.

FIGURE 26. EDUCATIONAL ATTAINMENT LEVELS

HIGHEST LEVEL OF EDUCATION AMONG THE POPULATION AGE 25 YEARS AND OVER

By one measure, Abilene MSA looks well educated compared to its peers. Roughly 15 percent of Abilene's adult residents have bachelor's degree, while only three benchmarks have a higher proportion of residents at that education level. However, the percentage of Abilene's population with a graduate or professional degree is only 6.7 percent. That puts Abilene even with Wichita Falls, but lower than only two benchmarks, Lawton and Ardmore. Although the majority of the comparison communities have a greater percentage of residents possessing an advanced degree, they all fall below the US (10.9%).

Relative to the US, Abilene and most of benchmark communities have higher than average percentages of their populations who have achieved a high school diploma or less. The few exceptions include Lubbock, whose rate of 41.7 percent is comparable to the US (41.8 percent), and Tyler and Amarillo who fare slightly better at 40.5 and 41.2 percent respectively. Abilene and the rest of its peers have populations in which nearly half of the residents have no college experience.

MSA	High School/ GED or Less Than HS	Some College (incl. Associates)	Bachelor's Degree	Graduate or Professional Degree
US	41.8%	29.1%	18.2%	10.9%
Lubbock, TX	41.7%	31.3%	17.3%	9.7%
Tyler, TX	40.5%	34.8%	17.0%	7.8%
Amarillo, TX	41.2%	35.9%	15.8%	7.1%
Abilene, TX	47.6%	31.0%	14.7%	6.7%
San Angelo, TX	48.0%	30.3%	14.1%	7.5%
Waco, TX	45.9%	32.8%	14.1%	7.2%
Lawton, OK	44.9%	34.5%	14.0%	6.5%
Wichita Falls, TX	46.7%	33.0%	13.6%	6.7%
Ardmore, OK	55.1%	26.5%	12.4%	6.0%

Source: 2011-2013 American Community Survey 3 year Estimates (DP-02).

Note: Figures shown are for the metropolitan statistical area (MSA), with the exception of Ardmore, OK, which is a micropolitan statistical area.

FIGURE 27. HOUSING AFFORDABILITY

HOME VALUE TO INCOME RATIO

Abilene is an affordable place to live. The MSA's housing costs are not only well below the US, they are lower than nearly all of the benchmark communities. Abilene's median home value is \$88,500, almost 50 percent of the US value of \$173,200. Based on the affordability ratio (home value vs. income), Abilene (2.05) has a more affordable housing stock than all but one of its benchmarks, Wichita Falls (1.95).

MSA	Median Home Values*	Median Household Income	Housing Affordability**
Wichita Falls, TX	\$89,300	\$45,840	1.95
Abilene, TX	\$88,500	\$43,182	2.05
Ardmore, OK	\$94,600	\$44,124	2.14
San Angelo, TX	\$104,000	\$45,487	2.29
Lubbock, TX	\$106,900	\$44,523	2.40
Lawton, OK	\$112,200	\$45,019	2.49
Amarillo, TX	\$119,700	\$47,779	2.51
Waco, TX	\$107,400	\$40,760	2.63
Tyler, TX	\$122,900	\$46,436	2.65
US	\$173,200	\$52,176	3.32

^{*} Owner-occupied units ** Housing affordability: Home value/income ratio (Lower = more affordable)
Source: 2011-2013 American Community Survey 3 year Estimates (DP-03 and DP-04).
Note: Figures shown are for the metropolitan statistical area (MSA), with the exception of Ardmore, OK, which is a micropolitan statistical

FIGURE 28. LABOR FORCE AND UNEMPLOYMENT RATES, 2010 TO 2015

From 2010 to 2014, the labor force in most of the benchmark communities grew faster than in Abilene. San Angelo had the fastest growth (4.0 percent), 3.3 percentage points higher than Abilene (0.7 percent). Abilene also grew slower than the US (1.3 percent). There were only three benchmark communities with a slower growth rate than Abilene; all three lost jobs over the same period.

In contrast, Abilene's unemployment rate was 3.8 percent in August 2015, the third lowest among its peers and significantly lower than the US rate of 5.2 percent. However, because Abilene's labor force grew relatively slowly, the MSA's low unemployment rate might be caused by workers leaving the labor force, rather than Abilene's workers finding or maintaining a job.

	Labor Force			2010	to 2014	Unemployment
MSA	(Aug 2015)*	2010	2014	Net Chg.	% Chg.	Rate (Aug 2015)*
San Angelo, TX	55,182	53,468	55,619	+2,151	+4.0%	4
Lubbock, TX	151,853	149,358	154,374	+5,016	+3.4%	3.4
Ardmore, OK	22,540	21,187	21,761	+574	+2.7%	4.7
Tyler, TX	101,442	101,151	102,952	+1,801	+1.8%	4.5
Amarillo, TX	127,901	129,609	131,846	+2,237	+1.7%	3.1
US	157.7 M	153.9 M	155.9 M	+2 M	+1.3%	5.2
Abilene, TX	74,721	76,448	<i>7</i> 7,014	+566	+0.7%	3.8
Waco, TX	11 <i>7</i> ,056	120,142	119,389	-753	-0.6%	4.1
Wichita Falls, TX	63,288	69,420	66,417	-3,003	-4.3%	4.2
Lawton, OK	50,773	54,506	51,567	-2,939	-5.4%	4.5

^{*}Data for August 2015 is preliminary.

Source: US Bureau of Labor Statistics.

Note: Figures shown are for the metropolitan statistical area (MSA), with the exception of Ardmore, OK, which is a micropolitan statistical area.

FIGURE 29. REGIONAL PURCHASING PARITIES

Regional Price Parities (RPPs), produced by the US Bureau of Economic Analysis, provide a quick measure of the differences in prices of goods and services (including rent) across states and metropolitan areas for a given year. RPPs are expressed as a percentage of the overall national price level, which is equal to 100.0. The costs of all goods and services in Abilene (91.3) compared favorably to its benchmarks. Only two of its peers, Waco (91.2) and Wichita Falls (91.0) had lower overall RPPs. Abilene tied for the lowest prices in two out of three RPP components: Goods (97.0) and Services Other than Rent (94.1).

MSA	All Items	Goods	Services: Rents	Services: Other
US	100.0	100.0	100.0	100.0
Tyler, TX	94.7	97.6	89.2	94.3
Lubbock, TX	93.4	97.3	84.7	94.2
Amarillo, TX	93.1	97.4	82.5	94.3
San Angelo, TX	92.5	97.5	79.7	94.3
Lawton, OK	91.5	97.0	76.2	94.1
Abilene, TX	91.3	97.0	76.5	94.1
Waco, TX	91.2	97.0	75.1	94.1
Wichita Falls, TX	91.0	97.3	75.0	94.2

Source: US Bureau of Economic Analysis.

Notes: Figures shown are for the metropolitan statistical area (MSA). BEA does not measure RPPs for Ardmore.

FIGURE 30. INNOVATION INDEX

INNOVATION PERFORMANCE AND POTENTIAL

The Innovation Index was designed by a partnership between US Commerce Department's Economic Development Administration, the Purdue Center for Regional Development, and the Indiana Business Research Center at Indiana University's Kelley School of Business to assess a region's capacity for innovation relative to other MSAs. Like the RPPs, an MSA's index value is reported as a percentage of overall US performance (US=100.0). Innovation is measured using four indicators: human capital, economic dynamics, productivity and employment, and economic well-being. Abilene's Innovation index score, 82.1, was lower than nearly all of its peers, suggesting it is less competitive in the knowledge economy. The only benchmark that scored lower was Lawton (81.0). Yet, as revealed in the Economic Dynamics component of the index, Abilene has the potential to become more innovative in the future. Only Tyler (87.7) performed better on the Economic Dynamics sub-index, scoring 1.5 percentage points higher than Abilene (86.2).

		Index Components								
	Innovation	Inputs a	nd Capacity	Outputs						
MSA	Index	Human Economi Capital Dynamic		Productivity and Employment	Economic Well-Being					
US	100.0	100.0	100.0	100.0	100.0					
Tyler, TX	88.8	90.0	87.7	83.3	104.8					
Waco, TX	87.6	86.3	83.0	89.4	100.3					
Lubbock, TX	87.4	93.6	82.5	81.9	100.3					
Amarillo, TX	84.5	85.8	83.3	78.5	102.3					
San Angelo, TX	84.3	89.7	85.5	70.9	105.1					
Ardmore, OK	83.6	<i>77</i> .1	85.2	80.8	107.0					
Wichita Falls, TX	83.2	78.0	82.2	82.8	103.3					
Abilene, TX	82.1	79.7	85.3	74.6	101.9					
Lawton, OK	81.0	85.1	81.2	68.8	105.0					

Source: Innovation Project, a collaboration of academic and private-sector researchers funded in part by the Economic Development Administration. For additional information see www.statsamerica.org.

Note: At the time of this analysis, the Innovation Index incorporated outdated metropolitan area definitions. All figures shown are based on custom regions that align with the 2013 definition of the indicated metropolitan statistical area (MSA), or, in the case of Ardmore, the micropolitan statistical area.

APPENDIX B: TARGET INDUSTRY PROFILES

The selection of target industries will help guide marketing and outreach efforts to support business attraction in Abilene. The profiles that follow are meant to be a tool to support prospecting activities. Each profile provides information on industry trends, why the industry is a fit for Abilene, typical staffing patterns, resources for industry intelligence and networking, and strategic considerations.

In the selection of target sectors, TIP started with the existing industry strengths as well as sectors where the community has experienced some success in attracting and expanding. We then considered a number of quantitative factors to identify niches within the most promising sectors for Abilene. These factors included:

- COMPETITIVE ADVANTAGE: does Abilene have a higher concentration of employment in this sector than the nation overall?
- GROWTH PROSPECTS: is the industry projected to grow over the next five years nationally and/or within the region?
- CRITICAL MASS: are there a significant number of firms in the sector?
- IMPACT: does the growth in the industry spillover to other sectors?
- **EXPORT ORIENTATION:** is the sector traded outside of the regional service area?
- PROPENSITY TO LOCATE IN ABILENE: do trends in firm location in this industry show a preference for Abilene?

Next, we filtered potential target sectors using the following criteria:

LOCATION	the area's advantages should correspond to critical facility location factors
IMAGE	should be desirable in terms of land use, job quality, economic cycles, and long-term development linkages
INFRASTRUCTURE	infrastructure requirements should be compatible with the area's capacity and general cost
	structure

In addition, we examined the industries in the context of the assets and characteristics of the community. Finally, consideration was given to how targets fit within the goals of the project and within the potential opportunities and challenges identified during the planning process.

FIGURE 31. SUMMARY OF KEY ASSETS



MARKET ACCESS

- Central location within Texas and the U.S.
- Access to both east and west coasts, the industrial Midwest, northeast and the markets in Mexico
- Proximity to the Dallas-Ft Worth CSA (6.9 million residents)



SITES & BUILDINGS

- Industrial and commercial land capacity
- Redevelopment & reuse potential of commercial offices



TRANSPORTATION

- Location on Interstate 20
- Hub for U.S. Highways 83, 84, 277
- Railroads: Union Pacific and Southern Switching Company
- Abilene Regional Airport (ABA)
 16 daily commercial flights to DFW



EMPLOYERS

- 2 significant medical centers
- 6 higher education institutions
- Dyess Air Force Base
- Significant manufacturing and telecommunications companies



WORKFORCE

- 12-county labor shed (based on Jan. 2015 Workforce Assessment))
- Regarded as highly productive
- Wages in-line or lower than national medians



HIGHER EDUCATION

- 3 private universities
- Texas Tech Health Science
 Center Schools of Nursing,
 Public Health, & Pharmacy
- 2 public community & technical colleges
- Served by 2 public school systems

TARGET INDUSTRY RECOMMENDATIONS

Based on these criteria and this process, four target sectors were chosen. Within each sector, promising niches were noted.

- ADVANCED MANUFACTURING
- FOOD PROCESSING
- HEALTHCARE
- BACK OFFICE & PROFESSIONAL SERVICES

Industry definitions and trends, occupational characteristics, strategic considerations, and industry intelligence are provided on the following pages for each industry sector.



INDUSTRY DEFINITION AND TRENDS

The term "advanced manufacturing" is used to describe industries and companies that incorporate innovative technologies as part of their production process. Advanced manufacturers tend to have relatively high levels of capital expenditures, to pay above-average wages, and to invest heavily in R&D. This is generally not a jobs-producing sector due to the high levels of automation typically involved in production. Within the Abilene MSA, this sector accounted for just under 1,600 jobs in 2015. While growth is projected to remain fairly low (4%), relative to the nation (-3%) the sector is actually healthy locally.

FIGURE 32. INDUSTRY NICHES

NAICS	DESCRIPTION
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing
3323	Architectural and Structural Metals Manufacturing
3324	Boiler, Tank, and Shipping Container Manufacturing
3261	Plastics Product Manufacturing
3262	Rubber Product Manufacturing
3222	Converted Paper Product Manufacturing
3231	Printing and Related Support Activities
3329	Other Fabricated Metal Product Manufacturing
3327	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing
3344	Semiconductor and Other Electronic Component Manufacturing
3359	Other Electrical Equipment and Component Manufacturing
3251	Basic Chemical Manufacturing
3254	Pharmaceutical and Medicine Manufacturing
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing
3339	Other General Purpose Machinery Manufacturing
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing
3335	Metalworking Machinery Manufacturing
3353	Electrical Equipment Manufacturing
3252	Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing
3255	Paint, Coating, and Adhesive Manufacturing
3332	Industrial Machinery Manufacturing

Source: TIP Strategies research.

FIGURE 33. INDUSTRY SNAPSHOT

	ABILENE MSA	LABOR SHED*	US TOTAL					
Number of Establishments (2014)	112	5,850	145,004					
Number of Jobs (2015)	1,591	227,981	4,975,300					
EMPLOYMENT GROWTH OUTLOOK 2015-20								
Number of jobs added	67	-4,291	-128,525					
Percent growth	4%	-2%	-3%					

FIGURE 34. INDUSTRY EMPLOYMENT TRENDS

EMPLOYMENT 2006-15, ABILENE MSA

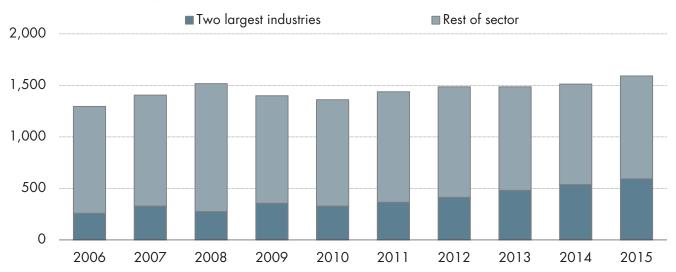
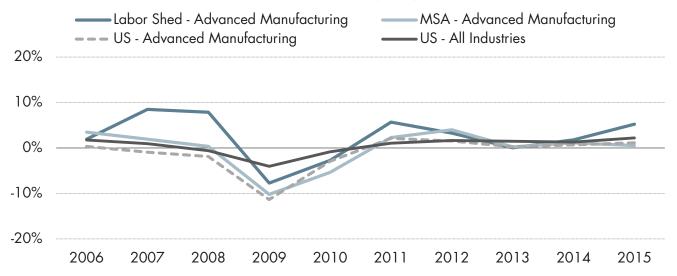


FIGURE 35. INDUSTRY GROWTH TRENDS

2006-15 ANNUAL CHANGE IN EMPLOYMENT, LABORSHED, MSA, AND US



Source: EMSI 2015.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed

^{*}Labor shed comprises 12 counties: Callahan, Coke, Coleman, Eastland, Fisher, Haskell, Jones, Nolan, Runnels, Shackelford, Stonewall, Taylor

OCCUPATIONAL CHARACTERISTICS

SUBSECTOR DETAIL

The following two tables contain data on occupations typically required by two subsectors within Advanced Manufacturing: (1) Engine, Turbine, and Power Equipment Manufacturing and (2) Architectural and Structural Metals Manufacturing.

ORANGE = Median wages higher in Abilene compared to the US

PURPLE = LQs of 1.25 or greater, suggestive of a competitive advantage relative to the US.

GRAY = LQs of .75 or lower, suggestive of a competitive disadvantage relative to the US.

TARGET GROUP: Advanced Manufacturing

TYPE OF EMPLOYER: Engine, Turbine, and Power Transmission Equipment Manufacturing

	% of industry jobs in	Existing	occupations	Median hourly wage	Local median wage as	Locatio	n Quotient
SOC Primary occupations required	MSA	MSA	Laborshed	(MSA)	% of US	MSA	Laborshed
HIGH SKILL (Bachelors degree or higher)							
11-1021 General & Operations Managers	2%	1,03 <i>7</i>	116,058	\$39. <i>7</i> 3	85%	0.92	1.09
MIDDLE SKILL (Some training beyond high school)							
51-1011 First-Line Supvsr., Production & Oper. Workers	3%	180	26,590	\$25.73	97%	0.56	0.88
LOW SKILL (High school or less)							
51-4041 Machinists	10%	106	20,51 <i>7</i>	\$20.99	109%	0.49	1.02
51-4121 Welders, Cutters, Solderers, & Brazers	7%	58 <i>7</i>	27,002	\$17.89	100%	2.75	1.34
51-2031 Engine & Other Machine Assemblers	6%	20	3,289	\$15.83	86%	0.96	1.67
51-9061 Inspect., Testers, Sorters, Samplers, & Weigher	4%	128	28,335	\$15.58	91%	0.48	1.12
49-9071 Maintenance & Repair Workers, General	3%	<i>7</i> 50	<i>7</i> 1,199	\$14.55	84%	1.00	1.00
51-4034 Lathe & Turning Machine, Metal/Plastic	3%	16	3,393	\$18.60	106%	0.70	1.59
51-2092 Team Assemblers	2%	70	42,1 <i>7</i> 5	\$11.67	85%	0.11	0.73
13-1199 Business Operations Specialists, All Other	2%	566	49,894	\$27.41	85%	1.10	1.03

Source: EMSI 2015.2 - QCEW Employees, Non-QCEW Employees, and Self-Employed

Notes: Abilene's Laborshed includes Callahan, Coke, Coleman, Eastland, Fisher, Haskell, Jones, Nolan, Runnels, Shackelford, Stonewall, and Taylor County in Texas. This definition of Abilene's laborshed was established by the Site Selection Group in their January 5, 2015 report: Abilene Workforce Assessment: Executive Summary.

ORANGE = Median wages higher in Abilene compared to the US

PURPLE = LQs of 1.25 or greater, suggestive of a competitive advantage relative to the US.

GRAY = LQs of .75 or lower, suggestive of a competitive disadvantage relative to the US.

TARGET GROUP: Advanced Manufacturing

TYPE OF EMPLOYER: Architectural and Structural Metals Manufacturing

	% of industry jobs in	Existing	occupations	Median hourly wage			Location Quotient	
SOC Primary occupations required	MSA	MSA	Laborshed	(MSA)	% of US	MSA	Laborshed	
HIGH SKILL (Bachelors degree or higher)								
11-1021 General & Operations Managers	3%	1,03 <i>7</i>	116,058	\$39 <i>.7</i> 3	85%	0.92	1.09	
MIDDLE SKILL (Some training beyond high school)								
51-1011 First-Line Supvsr., Prod. & Operating Workers	3%	180	26,590	\$25 <i>.</i> 73	97%	0.56	0.88	
LOW SKILL (High school or less)								
51-4121 Welders, Cutters, Solderers, & Brazers	37%	58 <i>7</i>	27,002	\$17.89	100%	2.75	1.34	
51-4031 Cutting, Punching, & Press Mach., Metal/Plastic	5%	52	9,034	\$15.63	106%	0.51	0.94	
47-2211 Sheet Metal Workers	4%	<i>7</i> 1	7,806	\$1 <i>7</i> .25	80%	0.92	1.08	
51-2041 Structural Metal Fabricators & Fitters	4%	24	4,357	\$15.33	87%	0.58	1.10	
51-9198 Helpers-Production Workers	3%	135	20,765	\$9.04	80%	0.60	0.98	
43-9061 Office Clerks, General	3%	2,310	208,265	\$12.51	91%	1.33	1.28	
41-4012 Sales Reps., Whls. & Mfg., Ex. Tech. & Scientific	2%	573	86,260	\$18.51	70%	0.73	1.17	
51-9121 Coating, Painting, & Spraying Mach. Workers	2%	43	5,254	\$14.39	95%	0.88	1.13	

Source: EMSI 2015.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Notes: Abilene's Laborshed includes Callahan, Coke, Coleman, Eastland, Fisher, Haskell, Jones, Nolan, Runnels, Shackelford, Stonewall, and Taylor County in Texas. This definition of Abilene's laborshed was established by the Site Selection Group in their January 5, 2015 report: Abilene Workforce Assessment: Executive Summary.

STRATEGIC CONSIDERATIONS

- Nationally and locally, manufacturers often cite difficulty in finding and recruiting workers with engineering
 and technical skills. This can present substantial challenges for attracting employers; therefore, Abilene's
 ability to be attractive to workers with these skills will be crucial to its success in this sector.
- Abilene is located near some of the state's largest energy producing areas for both petroleum and wind and should be able to compete for energy equipment manufacturing.
- Abilene can demonstrate examples of successful advanced manufacturers producing locally, including Tigé Boats, Pactiv, Rentech Boiler Systems, and Broadwind Towers.

INDUSTRY INTELLIGENCE AND NETWORKING

TRADE ASSOCIATIONS			
National Association of Ma	nufacturers		www.nam.org
Texas Association of Manuf	acturers		www.manufacturetexas.org
Association for Manufacturi	ng Technology		www.amtonline.org
National Association of Arc	chitectural Metal Mc	inufacturers	www.naamm.org
US Renewable Energy Asso	ciation		www.usrea.org
American Wind Energy Ass	sociation		www.awea.org
Gas Turbine Association			www.gasturbine.org
Texas Renewable Energy In	dustry Alliance		www.treia.org
US Oil & Gas Association			www.usoga.org
Texas Oil & Gas Associatio	n		www.txoga.org
Texas Alliance of Energy Pr	oducers		www.texasalliance.org
RELEVANT CONFERENC	ES/EVENTS		
2016 Alliance Expo an	d Annual Meetin	9	
19-20 April, 2016	Wichita Falls, TX	www.texasalliance.org/ev	vent/alliance-expo-annual-meeting
AWEA Windpower Exp	•		
23-26 May, 2016	New Orleans, LA	www.windpowerexpo.org	
Clean Air Through Ener	gy Efficiency Co	nference	
1-3 December, 2015	Galveston, TX	catee.tamu.edu/	
Ports-to-Plains Alliance	Energy & Agric	ulture Summit	
30-31 March, 2016	Lubbock, TX	portstoplains.com/index.php/home	e/event-calendar/day.listevents/2016/03/30-
Texas Design-2-Part Sh	now		
24-25 February, 2016	Grapevine, TX	www.d2p.com	
44th SME North Americ	can Manufacturi	ng Research Conference (NAMI	RC)
27 June-1 July, 2016	Blacksburg, VA	www.cpe.vt.edu/2016na	mrc-msec
HOUSTEX 2017			
28 February-2 March, 2017	Houston, TX	www.houstexonline.com	
TRADE PUBLICATIONS			
Industry Week		www.indus	stryweek.com
Manufacturing Today		www.manu	ufacturing-today.com
Today's Energy Solutions		www.online	etes.com
Eyes on Texas and Washin	gton	<u>texasallian</u>	ce.org/news/eyes-on-texas-and-washington

Source: TIP Strategies research.



INDUSTRY DEFINITION AND TRENDS

Food and beverage manufacturers process essentially two things: plants and animals, or in more industry-specific terms, crops and livestock. There are big names in the industry like Unilever, Kraft, and ADM. The industry is generally served by firms specializing in food distribution. Less known are the specialty foods that process, manufacture, distribute, market, and sell niche market foodstuffs for consumption. Their products include snack foods, sauces and condiments, meat products, fish and seafoods, canned and frozen foods, and beverages.

While much of the U.S. manufacturing sector has shed jobs in recent decades, only a few niches, including food and beverage manufacturing, have managed to eke out job growth. This trend should continue in the years ahead as food processing firms in the U.S. are expected to increase payrolls, although very modestly (2% between 2015 and 2020).

The major change in the industry involves consumer tastes. The homogenous marketplace of monolithic labels of previous decades has yielded shelf space to specialty brands and ethnic foods. Increasing consumer concerns with the quality of pet diets has also diversified the industry away from a few large name brands to more specialized, high quality manufacturers.

FIGURE 36. INDUSTRY NICHES

NAICS	DESCRIPTION
3111	Animal Food Manufacturing
3118	Bakeries and Tortilla Manufacturing
3121	Beverage Manufacturing
3111	Animal Food Manufacturing
3113	Sugar and Confectionery Product Manufacturing
3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing
3116	Animal Slaughtering and Processing
3119	Other Food Manufacturing
3112	Grain and Oilseed Milling
3115	Dairy Product Manufacturing
3117	Seafood Product Preparation and Packaging

Source: TIP Strategies research.

FIGURE 37. INDUSTRY SNAPSHOT

	ABILENE MSA	LABOR SHED*	US TOTAL					
Number of Establishments (2014)	56	1,132	37,964					
Number of Jobs (2015)	652	45,017	1,713,965					
EMPLOYMENT GROWTH OUTLOOK 2015-20								
Number of jobs added	-42	-524	27,256					
Percent growth	-6%	-1%	2%					

FIGURE 38. INDUSTRY EMPLOYMENT TRENDS

EMPLOYMENT 2006-15, ABILENE MSA



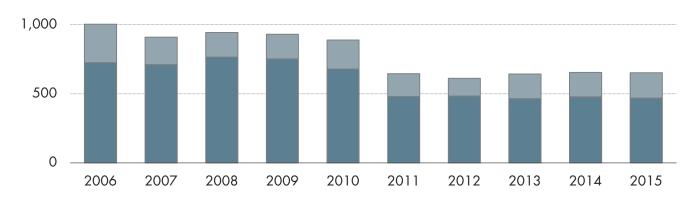
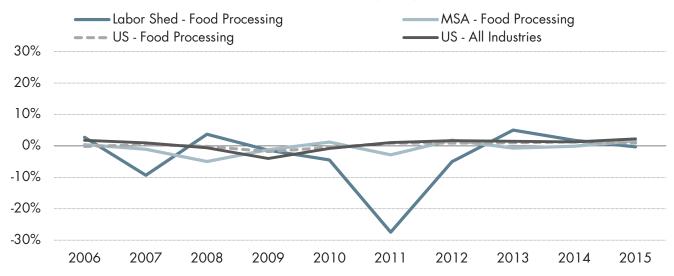


FIGURE 39. INDUSTRY GROWTH TRENDS

2006-15 ANNUAL CHANGE IN EMPLOYMENT, LABORSHED, MSA, AND US



Source: EMSI 2015.2 - QCEW Employees, Non-QCEW Employees, and Self-Employed

^{*}Labor shed comprises 12 counties: Callahan, Coke, Coleman, Eastland, Fisher, Haskell, Jones, Nolan, Runnels, Shackelford, Stonewall, Taylor

OCCUPATIONAL CHARACTERISTICS

SUBSECTOR DETAIL

The following two tables contain data on occupations typically required by two subsectors within Food Processing: (1) Bakeries and Tortilla Manufacturing and (2) Beverage Manufacturing.

ORANGE = Median wages higher in Abilene compared to the US

PURPLE = LQs of 1.25 or greater, suggestive of a competitive advantage relative to the US.

GRAY = LQs of .75 or lower, suggestive of a competitive disadvantage relative to the US.

TARGET GROUP: Food Processing

TYPE OF EMPLOYER: Bakeries and Tortilla Manufacturing

	% of industry jobs in Exist		Existing occupations		Local median wage as _	Location Quotient	
SOC Primary occupations required	MSA	MSA	Laborshed	wage (MSA)	% of US	MSA	Laborshed
HIGH SKILL (Bachelors degree or higher)							
None							
MIDDLE SKILL (Some training beyond high school)							
None							
LOW SKILL (High school or less)							
51-3092 Food Batchmakers	11%	59	4,762	\$10.19	79%	0.92	0.79
51-3011 Bakers	10%	52	<i>7</i> ,271	\$9.71	86%	0.53	0.78
35-3022 Counter Attendants, Cafeteria, & Concession	10%	592	25,684	\$8.53	95%	2.29	1.06
53-7064 Packers & Packagers, Hand	5%	181	26,139	\$8.66	88%	0.48	0.73
41-2011 Cashiers	5%	1,816	136,726	\$8.86	97%	1.00	0.80
41-2031 Retail Salespersons	5%	2,418	222,987	\$9.67	93%	0.98	0.96
51-9198 Helpers-Production Workers	5%	135	20,765	\$9.04	80%	0.60	0.98
53-3031 Driver/Sales Workers	4%	356	29,641	\$13.56	127%	1.57	1.38
35-3021 Combined Food Prep. & Servers, Incl. Fast Food	3%	2,641	168,53 <i>7</i>	\$8.49	96%	1.55	1.05
37-2011 Janitors & Cleaners, Exc. Maids & Housekeepers	3%	1,31 <i>7</i>	121,306	\$9.42	85%	0.99	0.97

Source: EMSI 2015.2 - QCEW Employees, Non-QCEW Employees, and Self-Employed

Notes: Abilene's Laborshed includes Callahan, Coke, Coleman, Eastland, Fisher, Haskell, Jones, Nolan, Runnels, Shackelford, Stonewall, and Taylor County in Texas. This definition of Abilene's laborshed was established by the Site Selection Group in their January 5, 2015 report: Abilene Workforce Assessment: Executive Summary.

ORANGE = Median wages higher in Abilene compared to the US

PURPLE = LQs of 1.25 or greater, suggestive of a competitive advantage relative to the US.

GRAY = LQs of .75 or lower, suggestive of a competitive disadvantage relative to the US.

TARGET GROUP: Food Processing

TYPE OF EMPLOYER: Beverage Manufacturing

		Existing occupations		Median hourly wage	Local median wage as _	Location Quotient	
SOC Primary occupations required	jobs in MSA	MSA	Laborshed	(MSA)	% of US	MSA	Laborshed
HIGH SKILL (Bachelors degree or higher)							
None							
MIDDLE SKILL (Some training beyond high school)							
53-3032 Heavy & Tractor-Trailer Truck Drivers	5%	1,21 <i>7</i>	97,630	\$17.90	96%	1.23	1.05
LOW SKILL (High school or less)							
53-3031 Driver/Sales Workers	7%	356	29,641	\$13.56	127%	1.57	1.38
51-9111 Packaging & Filling Machine Workers	6%	53	14,019	\$12.69	100%	0.26	0.73
53-7051 Industrial Truck & Tractor Operators	5%	222	25,841	\$14.06	93%	0.79	0.97
51-9012 Separating, Filtering, & Precipitating Machine	5%	12	1,818	\$20.34	110%	0.51	0.82
41-2031 Retail Salespersons	5%	2,418	222,987	\$9.67	93%	0.98	0.96
41-4012 Sales Reps., Whls. & Mfg., Exc. Tech. & Scientific	4%	<i>57</i> 3	86,260	\$18.51	70%	0.73	1.17
53-7062 Laborers/Freight, Stock, & Material Movers, Hand	4%	844	127,673	\$9.34	79%	0.64	1.02
43-5081 Stock Clerks & Order Fillers	3%	1,003	89,092	\$9.90	90%	1.01	0.95
41-9011 Demonstrators & Product Promoters	3%	34	6,268	\$12.14	99%	0.64	1.26

Source: EMSI 2015.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Notes: Abilene's Laborshed includes Callahan, Coke, Coleman, Eastland, Fisher, Haskell, Jones, Nolan, Runnels, Shackelford, Stonewall, and Taylor County in Texas. This definition of Abilene's laborshed was established by the Site Selection Group in their January 5, 2015 report: Abilene Workforce Assessment: Executive Summary.

STRATEGIC CONSIDERATIONS

- Food and beverage processing leverages existing, regional agricultural strengths for more value-added products and processes.
- Abilene has been able to sustain and grow a local cluster of food processing firms, including Coca-Cola,
 Pepsi, AbiMar Foods, and most recently the announcement of Prairie Dog Pet Products investing in the community.
- Pet food is a growing segment of the U.S. market and is often overlooked as a sub-target within the food processing sector.
- Abilene's access to I-20 opens important highway routes to the east and west coasts, as well as to DFW's large consumer market.

INDUSTRY INTELLIGENCE AND NETWORKING

TRADE ASSOCIATIONS	S	
Institute of Food Technolog	gists	www.ift.org
Texas Food Processors Association		www.tfpa.org
International Dairy-Deli-Bakery Association		www.iddba.org
American Bakers Association		www.americanbakers.org
Tortilla Industry Association		www.tortilla-info.com
American Society of Baking		www.asbe.org
Allied Trades of the Baking Industry		www.atbi.org
Retail Bakers of America		www.retailbakersofamerica.org
American Beverage Association		www.ameribev.org
RELEVANT CONFEREN	ICES/EVENTS	
International Product	ion & Processing Exhil	bition
26-28 January, 2016	Atlanta, GA	www.ippexpo.com
Northwest Food & Be	verage Manufacturers	<u> </u>
11-13 January, 2016	Portland, OR	www.cvent.com/events/2016-northwest-food-beverage-manufacturers-expo- conference/event-summary-82263f6f584747498e52a694a34b189f.aspx
Food Safety Summit		
10-12 May, 2016	Rosemont, IL	www.foodsafetysummit.com/index.php
Tortilla Industry Asso	ciation's 2016 Conver	ntion & Exposition
18-19 May, 2016	Valley Center, CA	www.tortilla-info.com/default.asp?contentID=106
International Dairy-D	eli-Bakery Association	a 2016 Trade Show
5-7 June, 2016	Houston, TX	www.iddba.org/conference.aspx
FMI Connect		
20-23 June, 2016	Chicago, IL	www.fmiconnect.net
IFT Food Expo 2016		
16-19 July, 2016	Chicago, IL	www.am-fe.ift.org/cms
Food Processing Expo	2016	
17-18 February, 2016	Sacramento, CA	www.foodprocessingexpo.net
Retail Bakers of Ame	rica Roadshow 2016	
31 January, 2016	Cincinnati, OH	www.retailbakersofamerica.org/rba-roadshow.html
BakingTech 2016		
28 February-1 March, 20	16 Chicago, IL	www.asbe.org/bakingtech2016
The Beverage Forum		
26-27 April, 2016	Chicago, IL	www.beverageforum.com
BevOpsFleet Summit		
10-13 May, 2016	Las Vegas, NV	<u>bevopsfleetsummit.com</u>

TRADE PUBLICATIONS		
Food Processing	www.foodprocessing.com	
Food Engineering Magazine	www.foodengineeringmag.com	
Food Safety Magazine	www.foodsafetymagazine.com	
Dairy-Deli-Bake Digest	www.iddba.org/digest.aspx	
Bake Magazine	www.bakemag.com	
Baking&Snack, Milling&BakingNews	www.bakingbusiness.com	
Bevnet Magazine	www.bevnet.com/magazine	
Beverage Industry Magazine	www.bevindustry.com	
Beverage World Magazine	www.beverageworld.com	

Source: TIP Strategies research.



INDUSTRY DEFINITION AND TRENDS

The Healthcare sector is composed of all local and regional health services including hospitals, doctors' offices, outpatient care centers, residential care facilities, medical laboratories, and home healthcare services. The largest sectors in the Abilene area are General Medical and Surgical Hospitals, Home Health Care Services, and Offices of Physicians. Some of the area's largest employers are in the healthcare sector, including Hendrick Health System, Abilene State Supported Living Center, Abilene Regional Medical Center, and Abilene Diagnostic Clinic.

In 2014, the MSA was home to 1,386 healthcare establishments. Healthcare & social assistance (NAICS 62) accounted for 13.2% of the area's industry employment, which is the largest percentage among all industry sectors and higher than the U.S. percentage (12.4%). Healthcare employment is projected to expand over the next five years by 10% in the MSA and 17% in the labor shed.

FIGURE 40. INDUSTRY NICHES

NAICS	DESCRIPTION
6221	General Medical and Surgical Hospitals
6211	Offices of Physicians
6216	Home Health Care Services
6231	Nursing Care Facilities (Skilled Nursing Facilities)
6233	Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly
6212	Offices of Dentists
6232	Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities
6213	Offices of Other Health Practitioners
6219	Other Ambulatory Health Care Services
6223	Specialty (except Psychiatric and Substance Abuse) Hospitals
6214	Outpatient Care Centers
6239	Other Residential Care Facilities
6215	Medical and Diagnostic Laboratories
6222	Psychiatric and Substance Abuse Hospitals

Source: TIP Strategies research.

FIGURE 41. INDUSTRY SNAPSHOT

	ABILENE MSA	LABOR SHED*	US TOTAL		
Number of Establishments (2014)	1,386	29,585	652,763		
Number of Jobs (2015)	18,990	679,379	15,357,487		
EMPLOYMENT GROWTH OUTLOOK 2015-20					
Number of jobs added	1,811	117,855	1,808,762		
Percent growth	10%	17%	12%		

FIGURE 42. INDUSTRY EMPLOYMENT TRENDS

EMPLOYMENT 2006-15, ABILENE MSA

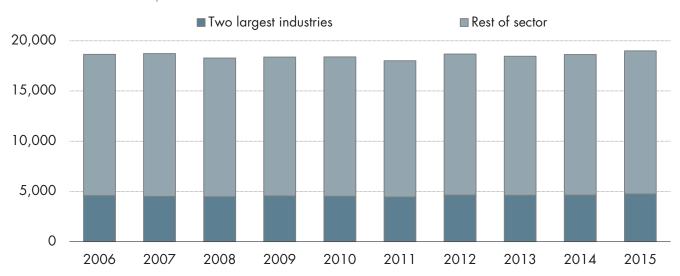
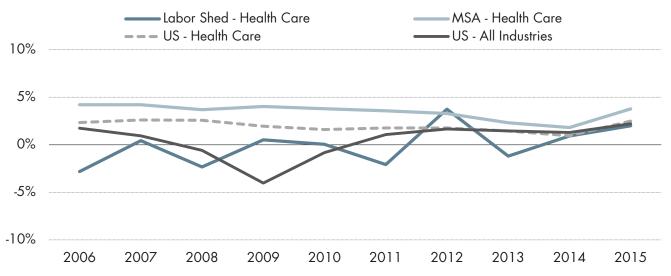


FIGURE 43. INDUSTRY GROWTH TRENDS

2006-15 ANNUAL CHANGE IN EMPLOYMENT, LABORSHED, MSA, AND US



Source: EMSI 2015.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed

^{*}Labor shed comprises 12 counties: Callahan, Coke, Coleman, Eastland, Fisher, Haskell, Jones, Nolan, Runnels, Shackelford, Stonewall, Taylor

OCCUPATIONAL CHARACTERISTICS

SUBSECTOR DETAIL

The following two tables contain data on occupations typically required by two subsectors within Health Care: (1) General Medical and Surgical Hospitals and (2) Offices of Physicians.

ORANGE = Median wages higher in Abilene compared to the US

PURPLE = LQs of 1.25 or greater, suggestive of a competitive advantage relative to the US.

GRAY = LQs of .75 or lower, suggestive of a competitive disadvantage relative to the US.

TARGET GROUP: Health Care

TYPE OF EMPLOYER: General Medical and Surgical Hospitals

	% of industry jobs in	Existing (occupations	Median hourly wage	Local median wage as _	Location	n Quotient
SOC Primary occupations required	MSA	MSA	Laborshed	(MSA)	% of US	MSA	Laborshed
HIGH SKILL (Bachelors degree or higher)							
29-1141 Registered Nurses	32%	1,843	123,205	\$28.71	90%	1.2 <i>7</i>	0.90
29-2011 Medical & Clinical Laboratory Technologists	2%	92	8,365	\$20.74	73%	1.07	1.04
11-9111 Medical & Health Services Managers	2%	153	13,118	\$39.35	89%	0.89	0.81
MIDDLE SKILL (Some training beyond high school)							***************************************
31-1014 Nursing Assistants	8%	935	45,949	\$10.87	90%	1.20	0.63
43-6013 Medical Secretaries	6%	684	51,089	\$11.82	76%	2.39	1.90
29-2061 Licensed Practical/Vocational Nurses	5%	1,008	37,979	\$18.83	92%	2.63	1.05
29-2055 Surgical Technologists	2%	84	6,208	\$19.11	92%	1.58	1.23
29-1126 Respiratory Therapists	2%	74	6,497	\$24.53	90%	1.16	1.09
29-2012 Medical & Clinical Laboratory Technicians	1%	93	<i>7</i> ,208	\$16.47	89%	1.09	0.89
LOW SKILL (High school or less)							
37-2012 Maids & Housekeepers	2%	<i>7</i> 68	<i>77</i> ,200	\$8.43	90%	0.97	1.03

Source: EMSI 2015.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Notes: Abilene's Laborshed includes Callahan, Coke, Coleman, Eastland, Fisher, Haskell, Jones, Nolan, Runnels, Shackelford, Stonewall, and Taylor County in Texas. This definition of Abilene's laborshed was established by the Site Selection Group in their January 5, 2015 report: Abilene Workforce Assessment: Executive Summary.

ORANGE = Median wages higher in Abilene compared to the US

PURPLE = LQs of 1.25 or greater, suggestive of a competitive advantage relative to the US.

GRAY = LQs of .75 or lower, suggestive of a competitive disadvantage relative to the US.

TARGET GROUP: Health Care

TYPE OF EMPLOYER: Offices of Physicians

	% of industry jobs in	Existing	occupations	Median hourly wage	Local median wage as _	Locatio	n Quotient
SOC Primary occupations required	MSA	MSA	Laborshed	(MSA)	% of US	MSA	Laborshed
HIGH SKILL (Bachelors degree or higher)							
29-1062 Family & General Practitioners	3%	66	4,321	\$81.64	97%	0.89	0.62
29-1069 Physicians & Surgeons, All Other	3%	85	13,815	\$98.49	112%	0.46	0.79
29-1171 Nurse Practitioners	3%	85	4,760	\$53.04	116%	1.2 <i>7</i>	0.76
MIDDLE SKILL (Some training beyond high school)							
31-9092 Medical Assistants	12%	308	35,904	\$11. <i>7</i> 6	81%	0.96	1.19
29-2061 Licensed Practical/Vocational Nurses	9%	1,008	37,979	\$18.83	92%	2.63	1.05
29-1141 Registered Nurses	8%	1,843	123,205	\$28. <i>7</i> 1	90%	1.27	0.90
LOW SKILL (High school or less)							
43-6013 Medical Secretaries	17%	684	51,089	\$11.82	76%	2.39	1.90
43-4171 Receptionists & Information Clerks	5%	413	38,549	\$10.97	85%	0.74	0.74
43-9061 Office Clerks, General	3%	2,310	208,265	\$12.51	91%	1.33	1.28
43-3021 Billing & Posting Clerks	2%	202	29,669	\$13.34	80%	0.73	1.15

Source: EMSI 2015.2 - QCEW Employees, Non-QCEW Employees, and Self-Employed

Notes: Abilene's Laborshed includes Callahan, Coke, Coleman, Eastland, Fisher, Haskell, Jones, Nolan, Runnels, Shackelford, Stonewall, and Taylor County in Texas. This definition of Abilene's laborshed was established by the Site Selection Group in their January 5, 2015 report: Abilene Workforce Assessment: Executive Summary.

STRATEGIC CONSIDERATIONS

- The growing cluster of healthcare employers and education institutions, including the investments of Texas
 Tech Health Sciences Center, in the Pine Street Corridor presents an opportunity to brand and promote a
 health and education district in the city.
- Continue to stay current on trends. Sources of industry intelligence are provided page 20.

INDUSTRY INTELLIGENCE AND NETWORKING

TRADE ASSOCIATIONS		
American Health Care Association		www.ahcancal.org
American Hospital Association		www.aha.org
Southern Medical Association		www.sma.org
Health Industry Distributors Association		www.hida.org
National Association for Healthcare Quality		www.nahq.org
Texas Health Care Association		www.txhca.org
Texas Hospital Association		www.tha.org
Texas Association of Healthcare Facilities Mo	ınagement	www.tahfm.org
Texas Association for Healthcare Quality		www.txquality.org
Texas Academy of Family Physicians		www.tafp.org
RELEVANT CONFERENCES/EVENTS		
ACHA/NCAL Quality Summit 2016		
9-11 February, 2016 San Antonio, TX	www.ahcancal.org/eve	nts/qualitysummit/Pages/default.aspx
24th Annual Health Forum and the An	nerican Hospital Asso	ciation Leadership Summit
17-19 July, 2016 San Diego, CA	www.healthforum-edu.co	om/summit/
67 th Annual American Health Care As	sociation Convention	& Expo
16-19 October, 2016 Nashville, TN	www.eventscribe.com/2	2016/ahcancal/
VITAL2016		
15-17 June, 2016 Boston, MA	www.vital.essentialhosp	itals.org
SMA's Annual Scientific Assembly		
3-5 November, 2016 Chattanooga, TN	www.sma.org/assembly	1/
2016 Texas Hospital Association Ann	ual Conference and E	хро
21-22 January, 2016 Dallas, TX	www.tha.org/HealthCa	reProviders/Education/COBGTHAAnnualConfer088A/index.asp
Interlink 2016		
3-6 April, 2016 Dallas, TX	www.tahfm.org/?page=	=2016SaveDate
TRADE PUBLICATIONS		
Healthcare	www.mdpi.com/journal	<u>/healthcare</u>
Hospitals & Health Networks Magazine	www.hhnmag.com	
Journal for Healthcare Quality	www.nahq.org/Quality-	Community/journal/jhq.html
Southern Medical Journal	www.sma.org/smj-home	2
Health Care Advocate	www.tha.org/advocate	
Texas Hospitals	www.tha.org/HealthCa	reProviders/AboutTHA/Publications/TexasHospitals/index.asp
Texas Family Physician	www.tafp.org/news/tfp	

Source: TIP Strategies research.



BACK OFFICE & PROFESSIONAL SERVICES

INDUSTRY DEFINITION AND TRENDS

This target sector includes shared service centers, corporate and technical services, data storage and processing, as well as more basic business support services, such as contract telephone call center operations. This sector also includes firms that provide data management and support services to companies, hospitals, governments, and individuals. In addition, for this profile we have included professional services activities in the architectural, engineering, and related services, primarily due to the presence of Lauren Engineers & Constructors in Abilene.

This sector has shown healthy employment growth locally, regionally, and nationally. The Abilene MSA is home to about 400 establishments and 2,800 jobs. Employment is projected to grow by 14 percent, which outpaces rates for the labor shed (10%) and the nation (12%).

FIGURE 44. INDUSTRY NICHES

NAICS	DESCRIPTION
5614	Business Support Services
5413	Architectural, Engineering, and Related Services
5415	Computer Systems Design and Related Services
5611	Office Administrative Services
5182	Data Processing, Hosting, and Related Services
5614	Business Support Services

Source: TIP Strategies research.

FIGURE 45. INDUSTRY SNAPSHOT

	ABILENE MSA	LABOR SHED*	US TOTAL		
Number of Establishments (2014)	398	22,480	469,850		
Number of Jobs (2015)	2,855	395,314	5,281,300		
EMPLOYMENT GROWTH OUTLOOK 2015-20					
Number of jobs added	394	41,415	620,960		
Percent growth	14%	10%	12%		

FIGURE 46. INDUSTRY EMPLOYMENT TRENDS

EMPLOYMENT 2006-15, ABILENE MSA

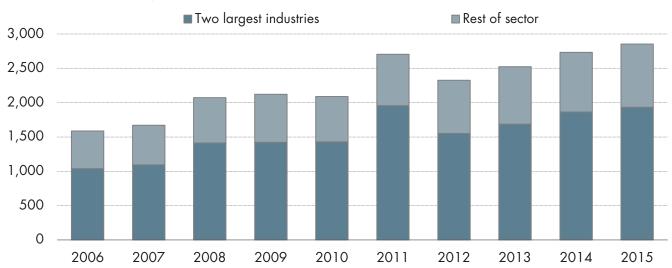
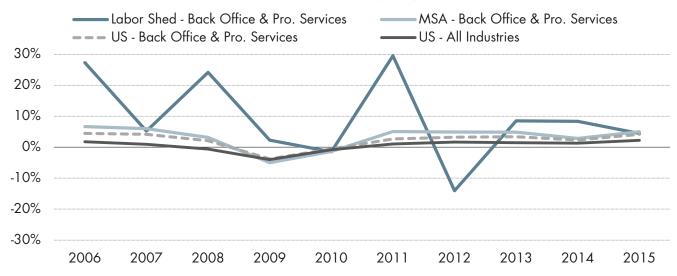


FIGURE 47. INDUSTRY GROWTH TRENDS

2006-15 ANNUAL CHANGE IN EMPLOYMENT, LABORSHED, MSA, AND US



Source: EMSI 2015.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed

^{*}Labor shed comprises 12 counties: Callahan, Coke, Coleman, Eastland, Fisher, Haskell, Jones, Nolan, Runnels, Shackelford, Stonewall, Taylor

OCCUPATIONAL CHARACTERISTICS

SUBSECTOR DETAIL

The following two tables contain data on occupations typically required by two subsectors within Advanced Manufacturing: (1) Engine, Turbine, and Power Equipment Manufacturing and (2) Architectural and Structural Metals Manufacturing.

Local median wages are highlighted if the occupation has a higher median wage in Abilene compared to the US: PURPLE = LQs of 1.25 or greater, suggestive of a competitive advantage relative to the US.

GRAY = LQs of .75 or lower, suggestive of a competitive disadvantage relative to the US.

TARGET GROUP: Back Office & Professional Services

TYPE OF EMPLOYER: Business Support Services

	% of industry jobs in	Existing	occupations	Median hourly wage	Local median wage as	Locatio	n Quotient
SOC Primary occupations required	MSA	MSA	Laborshed	(MSA)	% of US	MSA	Laborshed
HIGH SKILL (Bachelors degree or higher)							
11-1021 General & Operations Managers	2%	1,03 <i>7</i>	116,058	\$39.73	85%	0.92	1.09
MIDDLE SKILL (Some training beyond high school)							
15-1151 Computer User Support Specialists	4%	339	45,088	\$18.25	80%	1.00	1.41
LOW SKILL (High school or less)							
43-4051 Customer Service Representatives	28%	842	170,354	\$11.52	77%	0.61	1.32
41-9041 Telemarketers	18%	272	1 <i>7</i> ,307	\$10.70	96%	2.05	1.39
43-1011 First-Line Supvsr., Office & Admin. Support	5%	646	<i>7</i> 9,585	\$24.13	99%	0.84	1.09
41-3099 Sales Reps., Services, All Other	5%	447	68,678	\$16.86	68%	0.91	1.48
43-3011 Bill & Account Collectors	3%	106	27,992	\$13.56	84%	0.56	1.58
43-9061 Office Clerks, General	3%	2,310	208,265	\$12.51	91%	1.33	1.28
41-1012 First-Line Supvsr., Non-Retail Sales Workers	2%	194	23,752	\$21.62	75%	1.03	1.35
43-2011 Switchboard Ops., Incl. Answering Service	2%	48	6,111	\$10.16	80%	0.81	1.10

Source: EMSI 2015.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Notes: Abilene's Laborshed includes Callahan, Coke, Coleman, Eastland, Fisher, Haskell, Jones, Nolan, Runnels, Shackelford, Stonewall, and Taylor County in Texas. This definition of Abilene's laborshed was established by the Site Selection Group in their January 5, 2015 report: Abilene Workforce Assessment: Executive Summary.

ORANGE = Median wages higher in Abilene compared to the US

PURPLE = LQs of 1.25 or greater, suggestive of a competitive advantage relative to the US.

GRAY = LQs of .75 or lower, suggestive of a competitive disadvantage relative to the US.

TARGET GROUP: Back Office & Professional Services

TYPE OF EMPLOYER: Architectural, Engineering, and Related Services

	% of industry jobs in	Existing	occupations	Median hourly wage	Local median wage as .	Locatio	n Quotient
SOC Primary occupations required	MSA	MSA	Laborshed	(MSA)	% of US	MSA	Laborshed
HIGH SKILL (Bachelors degree or higher)							
17-2051 Civil Engineers	6%	74	19,232	\$38.09	98%	0.49	1.36
11-1021 General & Operations Managers	4%	1,037	116,058	\$39.73	85%	0.92	1.09
19-2042 Geoscientists, Excl. Hydrologists & Geographers	3%	103	7,478	\$40.54	93%	5.33	4.10
MIDDLE SKILL (Some training beyond high school)							
17-3022 Civil Engineering Technicians	9%	125	6,000	\$21.55	93%	3.24	1.66
17-3011 Architectural & Civil Drafters	6%	43	9,065	\$17.60	73%	0.83	1.85
LOW SKILL (High school or less)							
43-9061 Office Clerks, General	6%	2,310	208,265	\$12.51	91%	1.33	1.28
43-6014 Secretaries/Admin. Asst., Exc. Legal, Med., & Exec	. 5%	1,820	117,604	\$13.06	82%	1.30	0.89
51-9061 Inspect., Testers, Sorters, Samplers, & Weighers	3%	128	28,335	\$15.58	91%	0.48	1.12
47-4011 Construction & Building Inspectors	3%	46	5,274	\$23.74	91%	0.87	1.06
43-3031 Bookkeeping, Accounting, & Auditing Clerks	2%	1,053	86,556	\$14.54	83%	1.12	0.98

Source: EMSI 2015.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Notes: Abilene's Laborshed includes Callahan, Coke, Coleman, Eastland, Fisher, Haskell, Jones, Nolan, Runnels, Shackelford, Stonewall, and Taylor County in Texas. This definition of Abilene's laborshed was established by the Site Selection Group in their January 5, 2015 report: Abilene Workforce Assessment: Executive Summary.

STRATEGIC CONSIDERATIONS

- Abilene's location along the I-20 corridor is an advantage, especially for companies with large operations in Dallas-Fort Worth. Abilene also offers a lower-cost alternative in relative proximity to operations in DFW. In addition, the presence of Dyess AFB allows centers to take advantage of the high quality workforce associated with military installation – both military spouses and Airmen separating from service.
- The presence of Lauren Engineers demonstrates that a higher-wage professional services firm can succeed in Abilene.
- Continue to stay current on trends. Sources of industry intelligence are provided on page 25.

INDUSTRY INTELLIGENCE AND NETWORKING

TRADE ASSOCIATIONS			
Data Management Professionals	www.dmprofessionals.org		
Professional Association for Customer Engagement	www.paceassociation.com		
Association of Support Professionals	www.asponline.com		
Advancing Data Center Professionals	www.afcom.com		
The Outsourcing Institute	www.outsourcing.com		
International Customer Management Institute (ICMI)	www.icmi.com		
International Association of Outsourcing Professionals	s (IAOP) www.iaop.org		
IAOP Texas Chapter	www.iaop.org/content/23/162/1262		
RELEVANT CONFERENCES/EVENTS			
Contact Center Executive Exchange			
13-15 March, 2016 Rockwall, TX	www.contactcenterexecutiveexchange.com		
Outsourcing World Summit			
15-17 February, 2016 Lake Buena Vista, FL	www.iaop.org/Content/23/154/1099/Default.aspx		
Data Center World Global Conference 2016	•		
14-18 March, 2016 Las Vegas, NV	www.datacenterworld.com/spring		
2016 PACE Convention & Expo			
3-6 April, 2016 Orlando, FL	www.paceassociation.com/p/cm/ld/fid=771		
Association of TeleServices International Ann	nual Conference 2016		
21-23 June, 2016 Tampa, FL	www.atsi.org/events/2016conference.cfm		
Contact Center Expo & Conference			
10-13 May, 2016 Long Beach, CA	www.icmi.com/Contact-Center-Expo-Conference		
Contact Center Demo & Conference			
25-27 October, 2016 Dallas, TX	www.icmi.com/Contact-Center-Demo-Conference		
CRM Evolution 2016 Conference & Exhibition	1		
23-25 May, 2016 Washington, DC	www.destinationcrm.com/Conferences/2016		
TRADE PUBLICATIONS			
Professional Services Journal	www.professionalservicesjournal.com		
Accelerate Magazine	www.asset-control.com/accelerate		
CRM Magazine	www.destinationcrm.com/CRM_Magazine		
Connections Magazine	www.connectionsmagazine.com		
PULSE Magazine	www.iaop.org/Content/23/152/3004/Default.aspx		
Target Marketing	www.targetmarketingmag.com		
Contact Center Pipeline	www.contactcenterpipeline.com		

Source: TIP Strategies research.

APPENDIX C: EMPLOYER SURVEY

TIP facilitated a survey of Abilene employers to help gauge their hiring needs and perceptions of the community. A link to the survey was emailed to Abilene Chamber of Commerce members in September 2015. A total of 100 firms completed at least some portion of the survey, representing just over 14,000 employees. The results are presented below.

RESPONDENT PROFILE

FIGURE 48. WHICH OF THE FOLLOWING BEST DESCRIBES YOUR INDUSTRY?

NUMBER OF RESPONDING FIRMS BY BROAD CATEGORY

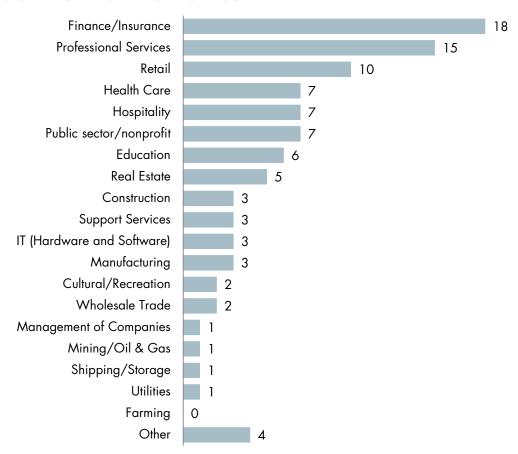


FIGURE 49 APPROXIMATELY HOW MANY PEOPLE ARE CURRENTLY EMPLOYED BY YOUR BUSINESS IN THE ABILENE AREA?

	Number reported	Share of total	Maximum value	Average value
Full-time	11,689	83%	2,575	122
Part-time	1,536	11%	485	21
Contract/temporary	781	6%	300	16
Total, all responses	14,006	100%	3,039	143

FIGURE 50. APPROXIMATELY WHAT PERCENTAGE OF YOUR WORKFORCE IS EMPLOYED IN THE FOLLOWING CATEGORIES?

Share category	comprises	of firm's	total	employment
----------------	-----------	-----------	-------	------------

			(with most common response highlighted)					
	Number of responding fi	irms	None	Less than 10%	10 to 24%	24% to 49%	50 to 74%	75% or more
Management		85	7%	42 %	34%	7%	6%	4%
Clerical/Administrative		75	8%	45 %	24%	5%	13%	4%
Sales/Marketing		<i>7</i> 3	18%	37%	12%	7%	12%	14%
Professional/Technical		72	10%	15%	14%	13%	29%	19%
Skilled Labor		60	43%	10%	15%	13%	10%	8%
Unskilled/Laborers		57	39%	23%	14%	11%	5%	9%
Other		24	71%	13%	8%	4%	0%	4%

HIRING NEEDS

FIGURE 51. DO YOU PLAN TO HIRE ADDITIONAL EMPLOYEES AT YOUR ABILENE LOCATION(S) IN THE NEXT 2 YEARS?

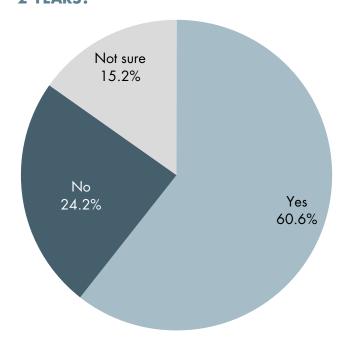


FIGURE 52. IF YES, APPROXIMATELY HOW MANY WORKERS DO YOU PLAN TO ADD IN EACH OF THE FOLLOWING CATEGORIES?:

Number of anticipated hires by category

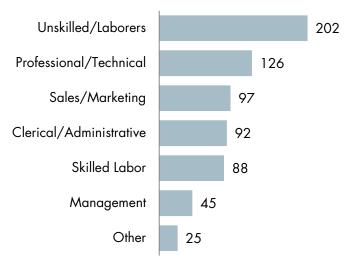


FIGURE 53. APPROXIMATELY HOW LONG DOES IT TYPICALLY TAKE TO FILL A VACANCY FOR EACH OF THE FOLLOWING CLASSIFICATIONS OF WORKERS?

SHARE OF FIRMS THAT INDICATED TIME PERIOD

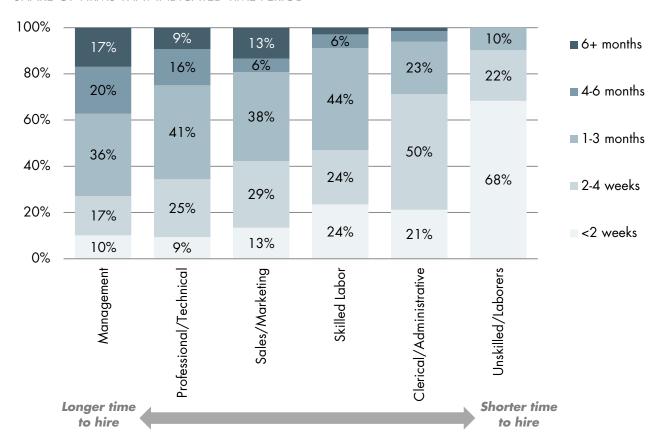


FIGURE 54. WHEN HIRING, PLEASE INDICATE WHICH GEOGRAPHIC AREA IS TYPICALLY USED TO RECRUIT WORKERS IN EACH BROAD CATEGORY

Share that recruit workers from the specified area

(with most common response highlighted)

	Number of fi		Local workforce	Outside the Abilene area	Outside Texas
Management		67	82%	36%	6%
Professional/Technical		69	75%	36%	3%
Sales/Marketing		57	89%	14%	4%
Skilled Labor		41	93%	22%	0%
Unskilled/Laborers		42	98%	5%	0%
Clerical/Administrative		67	96%	9%	1%

Note: Percentages do not sum to 100 because respondents could select multiple areas.

FIGURE 55. WHICH OCCUPATIONS ARE DIFFICULT TO RECRUIT IN YOUR INDUSTRY?

OPEN-ENDED RESPONSES GROUPED BY TIP STRATEGIES

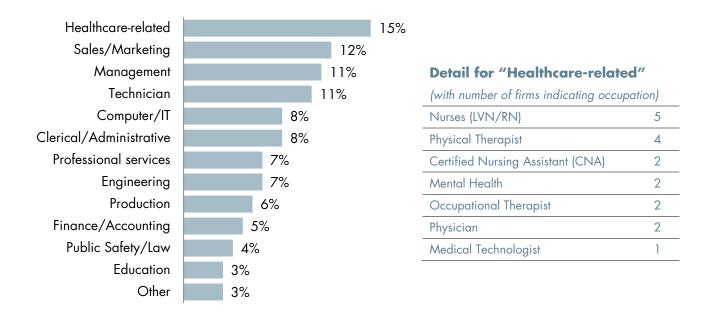
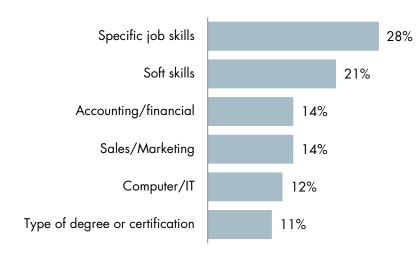


FIGURE 56. WHICH SKILLS ARE DIFFICULT TO FIND IN YOUR INDUSTRY?

OPEN-ENDED RESPONSES GROUPED BY TIP STRATEGIES



Detail for "Specific job skills"

(with number of firms indicating skill)

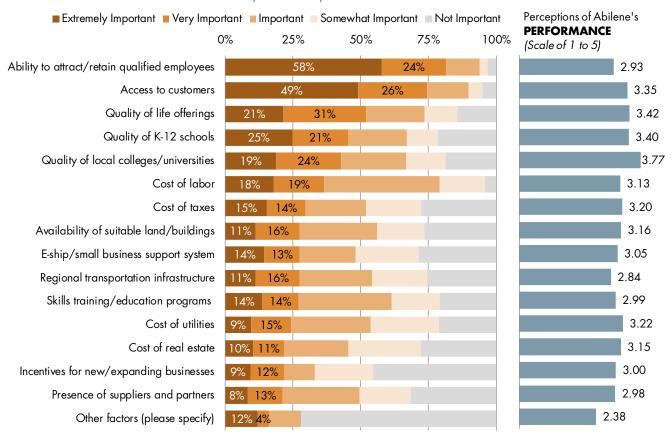
Equipment Service/Maintenance	3
Technician (Unspecified)	3
CNC Operator	2
Auto Service Technician	1
CADD Technician	1
Clerical/Administrative	1
Forklift Operator	1
Laborer	1
Oil Field Related	1
Production	1
Skilled Trades	1

[&]quot;Soft skills" was the heading given to a range of basic and employability skills, including "work ethic," communications skills, leadership, teamwork, and problem-solving.

PERCEPTIONS OF COMMUNITY

FIGURE 57. BASED ON YOUR EXPERIENCE, PLEASE RATE THE IMPORTANCE OF THE FOLLOWING FACTORS TO THE SUCCESS OF YOUR BUSINESS

FACTORS RATED ON A SCALE OF 1 TO 5, WHERE 1 = NOT IMPORTANT AND 5 = EXTREMELY IMPORTANT AVERAGE RATINGS OF PERFORMANCE (FIGURE 58) INCLUDED FOR COMPARISON

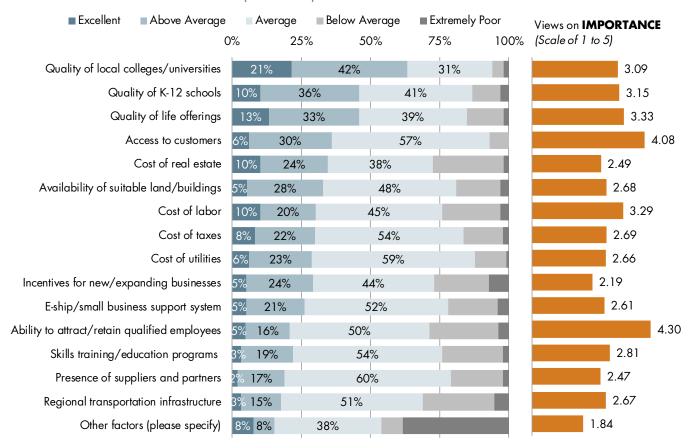


Detail for "other" responses:

- Availability of quality child care providers
- Competitive salaries extremely important
- Keeping the Abilene Bulk Mail Processing Center open in Abilene SCF Facility
- Since they would not be "my" employees it's a little different, but we still need desperately to increase our sales force.
- Quality employment opportunity to retain young professionals and the creation of "wealth" in our city.
- DCOA of Abilene great people there

FIGURE 58. PLEASE RATE ABILENE'S PERFORMANCE ON EACH FACTOR.

FACTORS RATED ON A SCALE OF 1 TO 5, WHERE 1 = EXTREMELY POOR AND 5 = EXCELLENT AVERAGE RATINGS OF IMPORTANCE (FIGURE 57) INCLUDED FOR COMPARISON



Detail for "other" responses:

- Availability of quality child care providers
- Visionary city government willing to partner with higher education to customize career opportunities here.
- business friendly community

COMMENTS

PLEASE PROVIDE ANY ADDITIONAL THOUGHTS THAT WOULD BE HELPFUL IN DCOA/CHAMBER EFFORTS TO STRENGTHEN AND GROW THE LOCAL ECONOMY.

It is crucial to enhance and improve public education (K-12) in Abilene ISD; continue to promote efforts at state and local level for additional water sources; continue to foster cooperation and collaboration between Chamber, DCOA and City Council / Administration.

We are forced to promote from within and train our own people. We must compete with Herod industries for our technical employee, predominantly the oil field. We are indirectly affected by other industry's ability to receipt funding, land availability, and tax incentives etc. in an effort to grow their workforce/business and thus increase our opportunities.

Here are my notes for a Chambers meeting on your task.

Ranking of interest

- 1. Education/Workforce (we have to build a strong infrastructure of workers both for economic development, entrepreneurship and Services).
- 2. Small Business/Entrepreneurship (we need to make Abilene a place for incubation of starter businesses, we want people to come and stay in Abilene because it is easy to start and grow their American Dream. We can keep university students if we promote and show opportunity).
- 3. Tourism/Quality of life (millennium don't see themselves retiring. They live for today and time off. We must provide them with the environment they want or they will not come or stay).
- 4. Commercial Development (it is hard to do business in Abilene with the current city philosophy. The city doesn't look for ways to get things done. Structure is important but FLEXIBILITY is the key. The city focuses on structure not flexibility).

Ranking for discussion

- 1. Economic Development (we need a frank and open discussion of 4B. The world is changing and we must change with it. Millenniums will demand it, and so will others).
- 2. Small Business/Entrepreneurship (this is the backbone of America and what we should strive to be known for this spirit).
- 3. Tourism/Quality of life (how, what, when, and where).
- 4. Commercial Development (How, what, and who)

There appears to be limited support for small businesses/entrepreneurs. The SBDC does a good job, but it is only one agency-there is no ecosystem of support for entrepreneurs and appears to be little interest in supporting creation/expansion of services beyond the SBDC and a few other very limited efforts.

The transportation system within Abilene is pretty good, but it really hurts Abilene in terms of labor recruitment and tourism to not have an affordable and well-coordinated system of transit services. A regional transportation hub as one of the options for the recent bond issue that could have benefited Abilene employers and the economy through increased access to retail), however, it received no support from the committee or council. There appears to be a belief that everyone has or should have their own vehicle or that they will need to rent a vehicle if they fly into Abilene. Perhaps if the city, ISD and rural transit providers worked together, they could identify strategies to increase ridership, reduce costs and create a high quality intermodal transit center.

Another issue for some workers is the availability of affordable housing for low to moderate income workers. The wages for low and even some mid-skill level positions are relatively low compared to similar sized cities, which makes it difficult for families to purchase property. Not sure if the percentage of rentals has increased, but it feels like more families are opting for renting (despite low interest rates) because they can't afford to save enough to make the required down payment for a home purchase. The abundance of college students living off campus also creates a challenging rental market for families because students are willing to pay much higher rents than a family can afford.

The COC needs to focus its membership from the bottom up. The small business is still the economic driver in our community. There are a majority of small businesses that are not members of the chamber but should be. That is where your membership growth will come from.

Finding new way to communicate to ALL of those who live in Abilene what is available.

Educate business of other businesses resources so can do business locally to operate.

Abilene appears to have plenty of blue collared jobs available, but few white collar jobs are available.

Consequently, the white collar job pool is shallow and most hiring has to occur outside of the Abilene community.

My business occasionally requires travel to other areas. Any additions to air travel opportunities would be a great help. We also need more hotel conference space with full service dining to host seminars/dinner/luncheon meetings.

We are a service organization and virtually all of our clients are at least 150 miles from us. Houston is a big hub for us yet it is cheaper to drive than fly - not to mention the convenience. No Engineering support YET-ACU is beginning a program and we are fully engaged in that effort.

DCOA does not help enough small business. There should monthly meetings with plans from small businesses that are looked at and then chosen upon their potential for growth. \$9,000,000 would start 100 small businesses. Not griping at all...but 50% of those would probably grow and survive and employ 100's of Abilene local workers just like the new dog food company might. Seen DCOA fail too many times on bringing in out of town companies when we need help right here at home.

Any type of conference on dealing with Millennials would be helpful. I know they are a different breed and we have to change our treatment of them. Maybe a conference to TEACH Millennials how to deal with the real world would be good! :)

Better development on building sites, clean up old building around Downtown, better streets in Abilene. Too expensive to travel out of Abilene

Would like more quality of life things in town to attract and retain graduating college students. Also makes it easier to attract young families to town. We need MORE athletic facilities, and better places for things like biking, jogging, etc. Indoor facilities and lighted facilities. - I would like our local chamber to be MORE involved in politics instead of the model we have followed for years.

Air transportation that meets needs other than just to DFW! Huge issue

Abilene doesn't need more jobs. Abilene needs QUALITY jobs within which employed individuals can pursue excellent incomes and elevate their standard of living. That means, simply, the ability to acquire WEALTH. Without the expansion of wealth in Abilene, we cannot achieve quality growth that will elevate ALL our citizens quality of life, our schools, businesses, and new, progressive industry to stabilize capital-generating activities. We've got to figure out how to keep our university graduates in Abilene, Texas!

We can use help finding a Director of Cosmetic Manufacturing. We need somebody that knows what GMP is. (Good Manufacturing Practices)

Diversify away from oil and gas and wind; technology is the future

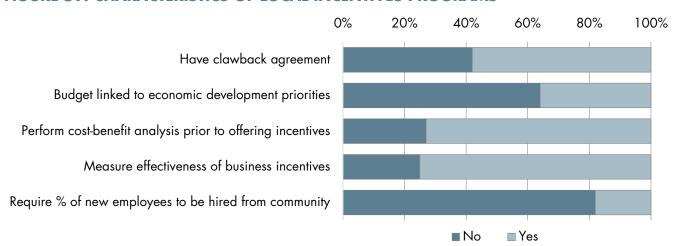
We need to make sure that we have clearly defined target industries that complement our available work force, real estate and basic considerations for business location here in Abilene. We need to enhance our abilities to attract young professionals, enhance quality of life and create job opportunities and career paths that are desirable. Most importantly, we need to create more opportunities for tourism dollars, business and economic development which will create great tax based contribution and more opportunities for growth of the community and the region.

APPENDIX D: INCENTIVES BEST PRACTICES

The responsible use of incentives is an important consideration for Abilene's economic development program. To be effective, Abilene's incentives must align with the strategies and actions adopted as part of this strategic plan. In spite of growing criticism and evidence that the return on investment could be higher for education and infrastructure spending, the use of incentives is not likely to disappear in the short-term. The inter- and intra-state competition for investment is too great. As Dale Ketcham, Chief of Strategic Alliance at Space Florida, says, "Unilateral disarmament in the face of economic competition is not a strategy for success."

Though economic development incentives have long been the subject of external scrutiny, many of the government agencies that administer the incentives programs have not had strong systems of accountability in place to evaluate the effectiveness of incentives. This is changing as more jurisdictions are adopting best practices for the responsible use of incentives. A recent survey by the International City/County Management Association (ICMA) provides insights on how local governments use business incentives and employ accountability measures. The survey of about 1,200 local governments reveals that more and more respondents are measuring the effectiveness of business incentives and conducting cost-benefit analyses to improve their return on investment. The use of other practices is summarized below:

FIGURE 59. CHARACTERISTICS OF LOCAL INCENTIVES PROGRAMS



Source: ICMA.

The International Economic Development Council's Economic Development Research Partners (EDRP) has recently published a series of reports on the use of local incentives. These reports provide guidelines and define best practices in an effort to support economic developers in strengthening their own incentives policies. In the report Seeding Growth: Maximizing the Return on Incentives, the EDRP presents best practices for incentives portfolio management. These best practices include:

Setting the context. Economic development organization (EDOs) should create an operating environment in which they can effectively use incentives. To do this, they must identify the community's long-term economic development objectives and goals, create strong cooperative regional partnerships to minimize interregional competition, deploy non-financial incentives where possible, and put in place the tools and resources needed to manage incentives programs.

- Designing effective programs. EDOs should articulate a statement of the incentives' purpose, identify target industries, locations, and/or project types whose attraction will help meet those objectives, state clear criteria for projects that qualify for incentives, structure tools that will induce the desired action cost effectively, create mechanisms for rewarding companies that achieve public objectives, specify the maximum amount that can be paid out under the program, and engage the incentives recipients in data collection over the life of the incentive.
- Creating incentives agreements. For every project, the EDO should create an incentives agreement, which is a legal document that specifies the characteristics of the project incentives, the conditions upon which it is offered, the monitoring mechanisms, and the consequences of non-adherence.
- Analyzing and monitoring portfolio performance. The EDO should collect and analyze data to
 measure both project and program performance against the conditions identified in the incentives
 agreements and against the program goals and objectives.
- Actively managing the portfolio. Once the analysis has been performed, the EDO will need to take
 the necessary actions related to rewarding performance or recovering funding for projects in non-compliance.
- Communicating with shareholders. EDOs should regularly communicate the success of their
 incentives investments to stakeholders through annual portfolio reports, comparisons with other economic
 development incentive programs, and periodic comprehensive reviews of the incentives program.

The Government Finance Officers Association (GFOA) has similarly published various best practices to guide the use of economic development incentives. These best practices are summarized below:

- Developing a policy. The GFOA recommends creating a policy that defines appropriate parameters for incentives use. At minimum, the policy should state the goals and objectives for using economic development incentives, define the types of incentives and the extent to which the jurisdiction will use them, outline an evaluation process for the purposes of consistency and transparency, require performance standards, and establish a process for monitoring performance and compliance.
- Evaluating and managing economic development incentives. The GFOA recommends that jurisdictions examine the potential costs and benefits associated with projects. This analysis should include both financial and non-financial costs, a wide range of benefits (tangible and intangible), the timing of the costs and benefits, and an estimate of the net present value of the net benefits.
- Monitoring economic development performance. The GFOA recommends the inclusion of a clearly defined monitoring process in the economic development policy. The process should entail periodic evaluations of how the project has performed in comparison to the targets provided in the economic development agreement. In addition, jurisdictions should measure the performance of the projects collectively against the overall goals and objectives set forth in the incentives policy.

LOCAL INCENTIVE TOOLS AVAILABLE IN TEXAS

INCENTIVE TOOLS	DESCRIPTIONS			
Type A Sales Tax	The Type A sales tax is chiefly intended for the growth and attraction of manufacturing and industrial development. Economic Development Corporations (EDCs) may use Type A revenue to fund land, buildings, equipment, facilities expenditures, targeted infrastructure, and improvements for eligible projects (e.g., manufacturing facilities, distribution centers, R&D facilities, primary job training facilities operated by higher education institutions, telephone call centers, aviation facilities, and rail ports.			
	With voter approval, Type A EDCs may fund projects eligible under Type B without voting to abolish the Type A tax and impose the Type B tax. Type A EDCs also may seek voter approval to spend Type A sales tax funds to clean up contaminated property.			
Type B Sales Tax	The Type B sales tax may be used for any project eligible under Type A rules and several other project types, including quality of life improvements (e.g., professional and amateur sports and athletic facilities, tourism and entertainment facilities, convention facilities and public parks, parking and transportation facilities, related street and water facilities, and affordable housing.)			
Property Tax Abatement	A tax abatement is a local agreement between a taxpayer and a taxing unit that exempts all or part of the increase in the value of the real property and/or tangible personal property from taxation for a period not to exceed 10 years. Tax abatements are an economic development tool available to cities, counties, and special districts to attract new industries and to encourage the retention and development of existing businesses through property tax exemptions or reductions. School districts may not enter into abatement agreements.			
Tax Increment Financing/Tax Increment Reinvestment Zone	Tax increment financing is a tool that local governments can use to publicly finance needed improvements to infrastructure and buildings within a designated area known as a reinvestment zone. The cost of improvements to the reinvestment zone is repaid by the future tax revenues of each taxing unit that levies taxes against the property. Each taxing unit can choose to dedicate all, a portion of, or none of the tax revenue gained as a result of improvements within the reinvestment zone. Once a city has begun the process of establishing a tax increment financing reinvestment zone, other taxing units are			
	allowed to consider participating in the tax increment financing agreement. These zones are commonly referred to as either a tax increment financing (TIF) zone or a tax increment reinvestment zone (TIRZ).			

INCENTIVE TOOLS	DESCRIPTIONS				
Freeport Exemptions	Freeport exemptions can be offered by a school district, county, and municipality to exempt tangible personal property from ad valorem taxation. Freeport property is exempt if it is property that is detained in Texas for 175 days or less. Freeport property includes goods, wares, merchandise, ores, and certain aircraft and aircraft parts. Freeport property qualifies for an exemption from ad valorem taxation only if it has been detained in the state for 175 days or less for the purpose of assembly, storage, manufacturing, processing, or fabricating. For certain aircraft parts, a community, by official action, may extend the deadline to 730 days.				
Goods-in-Transit Exemptions	Goods-in-Transit exemptions can be offered by a school district, county, and municipality to exempt inventory from ad valorem taxation. The Goods-in-Transit exemption is applied to goods traveling inside the state. It is only available for goods stored at locations owned by someone other than the owner of the goods themselves. If you are a small business and are currently paying property tax on inventory that you store for less than 175 days prior to shipping it within Texas, contact your local chamber of commerce to find out about how your community can choose to exempt inventory from taxation.				
Chapter 380/381 Agreements	The Local Government Code authorizes both municipalities (Chapter 380) and counties (Chapter 381) to offer incentives that will promote economic development on commercial and retail projects.				
Chapter 313 Agreement	Chapter 313 incentives give school districts the authority to enter into an agreement with a corporation or limited liability company that limits the appraised value of property for the maintenance and operations portion of school district property tax.				
Local Hotel Occupancy Tax	The local hotel occupancy tax can be used to fund programs that support and encourage tourism. A city may impose a hotel occupancy tax (HOT tax) by passage of an ordinance. A county may impose a HOT tax by adopting an order or a resolution. The tax is imposed on an individual renting a hotel room, not on a hotel.				
Municipal Development Districts	Chapter 377 of the Local Government Code authorizes cities to hold an election in all or part of a city, including its extra territorial jurisdiction, to create a municipal development district and to adopt a sales tax to fund it.				
County Assistance Districts	Any county may adopt this sales tax, in all or part of the county, if the new combined local sales tax rate would not exceed 2 percent at any location within the district. The commissioners court serves as the board of directors. County assistance district funds can be used for construction, maintenance or improvement of roads or highways; provision of law enforcement and detention services; maintenance or improvement of libraries, museums, parks or other recreational facilities; promotion of economic development and tourism; firefighting and fire prevention services and provision of services that benefit the public welfare.				

INCENTIVE TOOLS	DESCRIPTIONS
Enterprise Zone Program	The Texas Enterprise Zone Program is an economic development tool for local communities to partner with the State of Texas to promote job creation and capital investment in economically distressed areas of the state. Local communities must nominate a company as an Enterprise Project to be eligible to participate in the Enterprise Zone Program. Legislation limits allocations to the state and local communities per biennium. Designated projects are eligible to apply for state sales and use tax refunds on qualified expenditures. The level and amount of refund is related to the capital investment and jobs created or retained at the qualified business site.
Manufacturing Exemptions	State sales and use tax exemptions are available to taxpayers who manufacture, fabricate, or process tangible property for sale. The exemption also applies to tangible personal property that makes a chemical or physical change in the product being manufactured and is necessary and essential in the manufacturing process.

Source: Texas Comptroller of Public Accounts (www.texasahead.org)

RECENT EXAMPLES OF INCENTIVE AGREEMENTS IN TEXAS

COMMUNITY/ ORGANIZATION	DATE	TYPE	BENEFIT TO RECIPIENT(S)	BENEFIT TO THE COMMUNITY
City of Amarillo, Amarillo TIRZ No. 1	2/22/16	TIF/TIRZ	The TIRZ will annually reimburse to the developer (90%) of the annual ad valorem tax increment from participating taxing entities that is generated by the property's ad valorem tax revenue for a term not to exceed 20 years. The proposed assistance is consistent with the goals of the zone and public purpose to "diversify the economy, eliminate un-and under-employment in the Zone, develop or expand business, and commercial activity in the TIRZ."	The developer will renovate a 37,152 sq. ft. warehouse located in a tax increment financing reinvestment zone into 25 residential units and associated parking. The developer is required to secure not less than \$2,912,500 in private investment for the Project on the Property.
City of Beaumont	2/3/2016	Other	The City of Beaumont has established an industrial district comprising a certain part of the extra-territorial jurisdiction of the City. The recipients, ExxonMobil Oil Corporation and GE Capital, own property and facilities in the industrial district. The City of Beaumont agrees that it will not annex, attempt to annex or in any way cause or permit to be annexed any portion of lands or facilities or properties of the company covered by the agreement for the period of the agreement	ExxonMobil recognizes its obligation to contribute to the revenue needs of Beaumont in an amount commensurate with the burdens placed upon the city and benefits derived by the company by reason of being located immediately adjacent to the city. Therefore, the company will pay the City a certain sum which will be computed on the assessed value of the company's facilities and property, real, personal, and mixed located on company's land.
Schertz Economic Development Corporation	1/29/2016	EDC grant/loan	\$100,000 grant	The company (Major Wire Texas) must create and maintain a minimum of \$4.9 million in tangible personal property and 58 full-time employees with a minimum payroll of \$1.892 million.

COMMUNITY/ ORGANIZATION	DATE	TYPE	BENEFIT TO RECIPIENT(S)	BENEFIT TO THE COMMUNITY
City of Arlington	12/15/2015	Chapter 380/381	Kroger entered into a contract to purchase vacant land to develop a retail development, which will include a 123,000 sq. ft. grocery store. Kroger is requesting assistance from the City to offset costs of developing a four-lane roadway adjacent to the site.	The City of Arlington will pay Kroger one or more grant payments (not to exceed in total \$2,220,419) for costs associated with the construction of the roadway improvements. The completion of the project must result in added taxable value of at least \$8 million.
City of Coppell	12/18/2015	Tax Abatement	The property owner (A Decent Establishment) plans to purchase land in a Tax Abatement Reinvestment Zone, construct a 6,000 sq. ft. building, and lease it to Roots Coffeehouse. The City of Coppell will grant the owner an abatement of 75% of the taxable value of the improvements for a period of 5 consecutive years, provided the taxable value for the improvements is at least \$400,000.	The City finds that the proposed improvements will enhance the economic vitality of the community through a combination of new capital investment, increased sales tax revenues, and the creation of additional job opportunities.
City of Lubbock	12/3/2015	Tax Abatement	The City of Lubbock is offering United Supermarkets and Safeway Inc. a tax abatement for improvements to real property owned by Safeway and for tangible personal property (equipment) improvements owned by United located in a tax abatement reinvestment zone. The City will abate taxes on eligible property on a sliding scale (100% for year one, 90% for year two, 80% for year three, etc.) for a 10-year period.	United Supermarkets plans to expand an existing property owned by Safeway. United will expend \$26 million dollars for the expansion of an existing facility owned by Safeway and \$1.2 million dollars on eligible new equipment and machinery to be located within the reinvestment zone. United also agreed to create 135 new jobs by December 313, 2016 and retain those jobs for the term of the agreement.

COMMUNITY/ ORGANIZATION	DATE	TYPE	BENEFIT TO RECIPIENT(S)	BENEFIT TO THE COMMUNITY
Seguin Economic Development Corporation (SEDC)	10/27/2015	EDC grant/loan	Cerealto plans to relocate and expand its bakery facility in Seguin on industrial property owned by SEDC on Interstate 10. In exchange for the relocation/expansion, SEDC will convey approximately 50 acres to Cerealto at no cost, which constitutes a \$1.3 million incentive.	Cerealto agrees to create 212 full-time jobs with a total annual payroll of at least \$8,460,060 over a 5-year period.
City of Amarillo	10/29/2015	Chapter 380/381	Cinergy Entertainment Amarillo requested the City of Amarillo provide financial assistance to support its project to construct and develop a 90,000 sq. ft. multi-use entertainment center in the city. For its part, the City agreed to pay the company a program grant payment equal to 50% of the net amount (gross amount less 2% for Comptroller's Service fee) of the 1% of municipal sales tax that is paid to the City by the Comptroller from the center. The grant program grant payment shall continue for a period of 10 years.	In addition to making a minimum capital investment the project of \$25 million, the company agrees to create a minimum of 100 full-time jobs and maintain that number for the entire term of the agreement.
Lubbock Economic Development Alliance	5/1/2015	EDC grant/loan	LEDA will pay the recipient \$52,500, payable over 5 years. The incentive award is intended to help cover project costs.	Chromatin is a foreign for-profit corporation that plans increase its activities at its existing facility located in Lubbock County. The project will result in 21 new primary jobs for Lubbock County, with a target annual compensation of \$1,116,000 in the aggregate, or a total of \$5,580,000 over 5 years. Total capital investment is estimated to be \$4,550,000.

Source: Texasbusinessincentives.com