

A detailed topographic map of Georgetown, Guyana, showing the city's layout, surrounding terrain, and the Essequibo River. The map is rendered in a light gray, line-art style. The city grid is prominent in the lower right, while the river flows through the center. The background of the entire slide features a faint, larger-scale version of this map.

CITY OF GEORGETOWN TARGET INDUSTRY ANALYSIS

AUGUST 18, 2017



About the City of Georgetown Economic Development Target Industry & Workforce Analysis

In April 2017, the City of Georgetown initiated the development of an Economic Development Target Industry & Workforce Analysis aimed at diversifying the local economy, increasing business investment throughout the city, and fully leveraging hometown talent. Through a competitive bidding process, the City of Georgetown retained Avalanche Consulting, a national economic development consultancy based in Austin, TX, to facilitate the preparation of the Economic Development Target Industry & Workforce Analysis. Georgetown residents and businesses were invited to share their perspectives and vision for the community through an online survey and a series of individual interviews and focus groups.

Once complete, the Economic Development Target Industry & Workforce Analysis will have two primary phases:

Phase 1: Workforce Analysis

The Economic Development Target Industry & Workforce Analysis begins with an exploration of Georgetown's competitive position. The study team examined a range of local assets and quantitative metrics to better understand the city's evolving economy and population. In addition to data analysis, the study team conducted multiple focus groups and interviews. All input is then distilled into a concise SWOT summary outlining the community's strengths, weaknesses, opportunities, and threats.

Phase 2: Target Industry Analysis

This second phase of the Economic Development Target Industry & Workforce Analysis includes the target industries and niche sector recommendations of the consulting team's. By targeting specific industry clusters, the City of Georgetown can more strategically invest in those factors such as infrastructure or workforce training programs necessary to spur job creation within the community. Target industry identification blends industry location quotient analysis with a review of data trends, SWOT evaluation, and city priorities.

Why Target?

Identifying target industries is an important part of effective economic development. **No community can be all things to all businesses.** Instead the most successful communities identify their key competitive strengths and focus their economic development activities on those industry industries that best match those strengths.

Targeting specific industries is not only about attracting new businesses to a community. It is about **understanding and addressing the needs of existing businesses**; it is about fostering an **environment that encourages new businesses** to form locally; and it is about **aligning activities in pursuit of a shared vision** for the entire community.

Focusing on target industries also does not mean that other businesses are ignored. Economic development activities are aimed at improving the overall economy in Georgetown for all businesses. Investments and programs designed for target industries should benefit all sectors of the local economy.

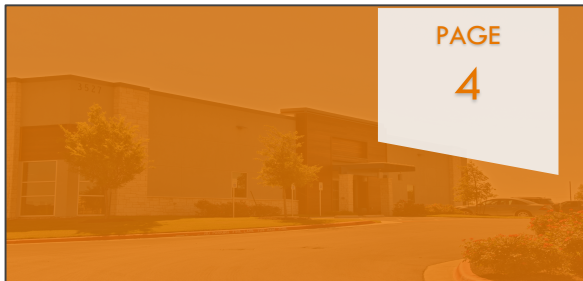
The following *Target Industry Analysis* provides a list of recommended target industries for the City of Georgetown and an explanation of how each of these industries and their niche sectors were identified.

This analysis also includes profiles of each target industry. These profiles include a general description of each industry, their economic trends, and related locational requirements – such as workforce, infrastructure, and regulatory needs. Each industry profile also includes descriptions of specialized niched sectors that present strong opportunities for growth in Georgetown. The profiles conclude with a sample of sales messages that describe a business case for growing each industry in Georgetown.

This report is a resource for leadership, economic development partners, and citizens. It should help everyone better understand the business opportunities that exist in Georgetown and provide a platform on which to develop strategies to grow these industries.

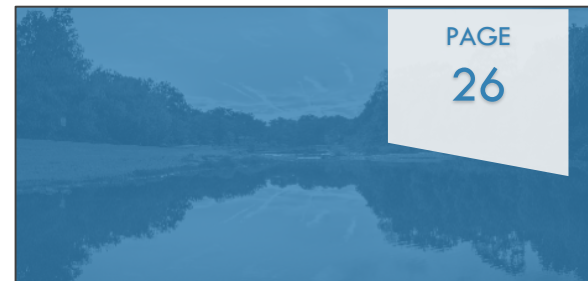
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TARGET INDUSTRY RECOMMENDATIONS



The Target Industry Analysis begins with a discussion on how industries were evaluated. The section then includes a series of recommendations on specific target industries and niche sectors for the City of Georgetown.

TARGET INDUSTRY PROFILES



The Target Industry Profiles provide greater detail about each industry, their location needs, and the opportunity they present for Georgetown.

01

Target Industry Recommendations

This section of the report describes the criteria used to evaluate potential industries and recommends specific target industries and niche sectors for the City of Georgetown.

Target Industry Identification

Selecting targets is an iterative process – using quantitative and qualitative information to identify targets that offer the greatest opportunities for a community based on local assets, needs, and desires.

The consulting team asked four primary questions to filter potential industries:

1. Is the industry growing and projected to grow within Georgetown, the Austin Metro, Texas, and the US?

Communities should focus their economic development efforts on industries that offer the highest return on investment. Investing in industries that are declining or likely to decline in the future is typically a poor use of resources.

2. Does the industry already have a presence in Georgetown?

Industries with an existing presence in Georgetown may reflect local competitive advantages. Concentrated industries may also offer strong opportunities for expansion, recruitment, and startup growth with continued support.

3. Does the industry match Georgetown's assets?

The Workforce Analysis and this Target Industry Analysis report identify numerous competitive assets and opportunities in Georgetown. Potential target industries were evaluated based on their compatibility with these assets.

4. Does the industry align with Georgetown's goals and vision?

Industries were evaluated based on their ability to support the goals and values identified in conversations, focus groups, and interviews with Georgetown leadership, stakeholders, and City staff.

Competitive Strengths & Opportunities

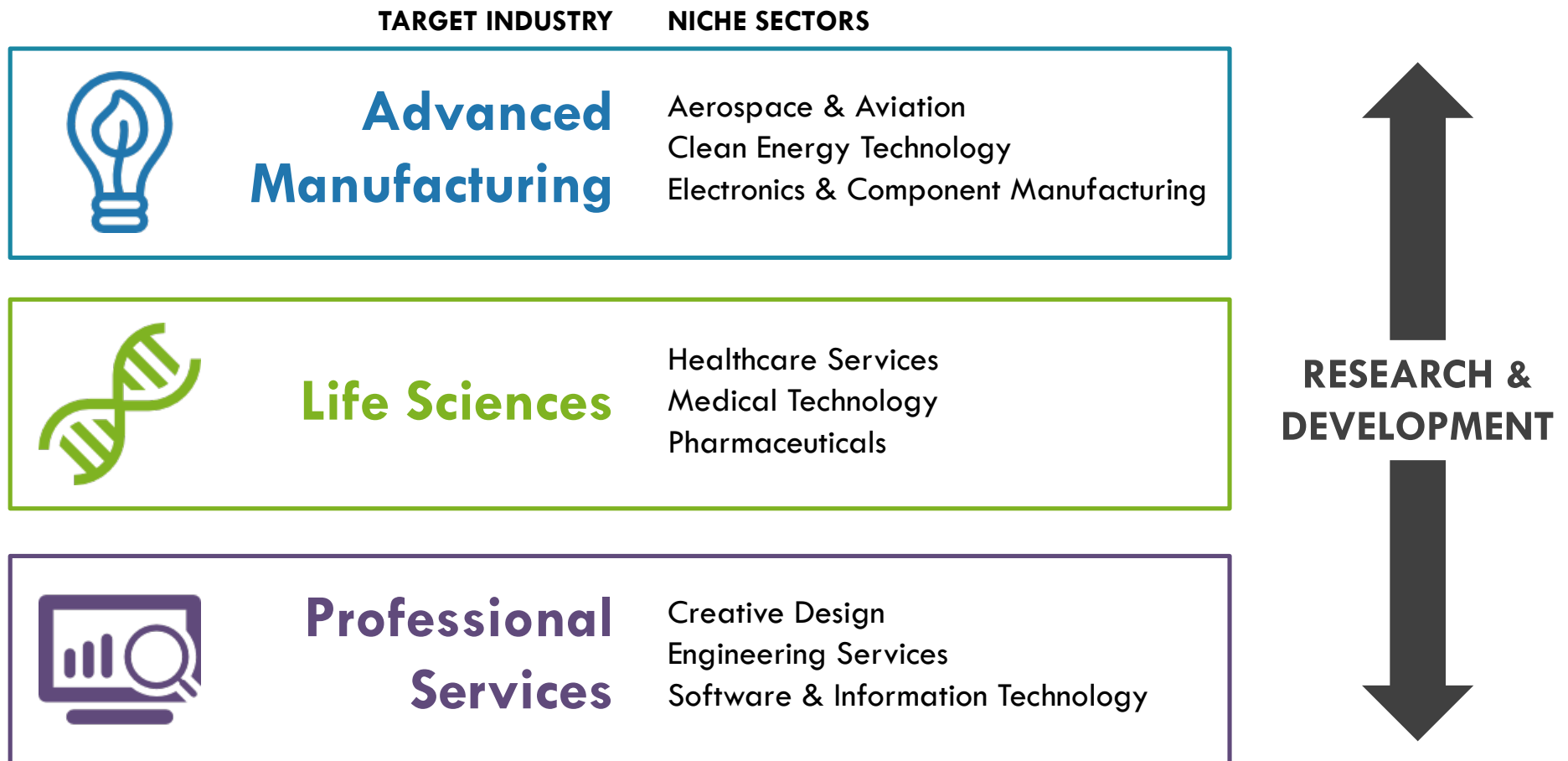
Georgetown has numerous strengths and opportunities that make it a competitive location to grow and attract businesses. Some of the primary assets and strengths considered when selecting target industries include:

- Historically, Georgetown was often viewed as a bedroom and retirement community, but in recent years, the city has seen rapid job growth in conjunction with population growth. As central Austin and the inner ring of metropolitan area communities become highly developed, **Georgetown is increasingly viewed as an attractive and affordable location** for a range of industries.
- **Retired residents** of Georgetown are highly active in the community and regularly volunteer their time and skills. This large population is highly educated and many have retired from successful business careers. They can offer tremendous benefit to local companies and entrepreneurs as part-time **employees, advisors, and mentors**.
- Local elected leaders and City staff are **proactively supportive of growing new businesses** in the city.
- Georgetown has a relatively **large manufacturing sector** for a community of its size. Alongside this employment base, the city also has a **surprisingly strong Maker culture** that encourages experimentation and development in skilled manufacturing.
- Georgetown is home to a **wealth of talent**. Residents are highly educated – with 44% holding a bachelor's degree or higher – but a majority (75%) of working residents commute out of the city to their jobs each day. Many of these residents would prefer not to commute and present a large pool of potential workers for businesses located in the city.
- In addition to out-commuting residents, employers in Georgetown are able to draw from **a labor force of 700,000 workers** spread across the city's North and South labor sheds. Each labor shed has unique characteristics – including high concentrations of Medical and Construction occupations in the North and a high concentration of Computer occupations in the South.
- Georgetown is home to a **large veteran population**, and the North labor shed encompasses Fort Hood.
- Georgetown offers a **high quality of life**, and employers report high success recruiting workers from outside the region to live in the city. Employers generally reported that finding skilled trade workers was relatively easy, but some worry that rising cost of living and traffic congestion are making it harder to find low-skill workers.
- Education is a major strength in Georgetown. **Southwestern University** is located in the city, and an **Austin Community College** campus is located in Round Rock. The **East Williamson County Higher Education Center** has campuses in Hutto and Taylor. The **Georgetown Independent School District** has also made significant gains in STEM education and Career & Technical Education (CTE) programs in recent years.
- Georgetown's **commitment to renewable energy resources** is attractive to many businesses – especially in clean energy.

Georgetown Target Industry Recommendations

Based on the analysis conducted through this selection process, Avalanche recommends three target industries and nine niche sectors for the City of Georgetown. Research & Development is an additional target that underlies all three industries.

The profiles in the following section provide additional detail about each target and why they make sense for Georgetown.



Target Industry Alignment

Economic development activities are supported by more than the City of Georgetown. It is important to consider how each target industry fits into regional and statewide programs.

Georgetown is part of Opportunity Austin, an economic development initiative representing the multi-county and multi-city Austin metropolitan region. Georgetown is also supported by Team Texas and the Texas Governor's Office of Economic Development and Tourism. These groups have identified statewide target industries and created programs to support their growth.

Not every statewide or regional target aligns with those of Georgetown, but each local target should fit into the broader framework. By aligning targets, the City of Georgetown will be able to leverage marketing, education, financial, and other supportive resources provided by the state and region.

Local economic development efforts must also highlight the opportunities that make Georgetown unique within the Austin region and within Texas. When a target industry business is considering expanding or relocating in Texas or Austin, Georgetown should be top of mind as a potential location.

GEORGETOWN TARGET	OPPORTUNITY AUSTIN TARGET	TEXAS TARGET
Advanced Manufacturing	Advanced Manufacturing	Advanced Technology & Manufacturing
	Clean Energy & Power Technology	Energy
	Space Technology	Aerospace, Aviation, & Defense
Life Sciences	Life Sciences	Biotechnology & Life Sciences
Professional Services	Creative & Digital Media Technology	Information & Computer Technology

02

Target Industry Profiles

The profiles on the following pages provide greater detail about each of Georgetown's target industries and their niche sectors. Each profile includes an overview of the industry – describing its activities, business location factors, and recent employment trends. The profiles then highlight global forces that may impact each industry's future. The consulting team also shares local sales messages that demonstrate Georgetown's appeal to each target industry. Each profile concludes with a discussion of the availability of workforce supporting each industry in Georgetown's North and South Labor Sheds.

These profiles are meant to serve as a reference to the City of Georgetown, its partner organizations, city residents, and local businesses. The profiles should arm the community with information to help make more informed decisions about strategic programs and investments.

Advanced Manufacturing



Advanced Manufacturing

Aerospace & Aviation
Clean Energy Technology
Electronics & Component Manufacturing



Advanced Manufacturing

INDUSTRY OVERVIEW

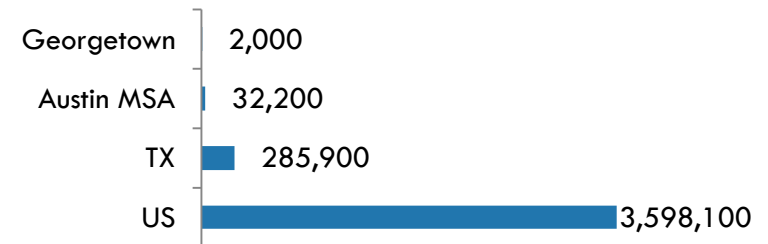
Advanced Manufacturing involves the transformation of raw materials into component pieces and finished products using complex machinery and sophisticated production processes. Despite the national media's focus on the decline of US manufacturing, its employment has increased every year since 2010 and currently employs more than 3.6 million Americans.

Modern Advanced Manufacturing is distinguished by its reliance on advanced technology and a skilled labor force. Many Advanced Manufacturing occupations require specialized training to operate complex machinery. As a result, Advanced Manufacturing operations often seek locations with a strong technical college or other training systems. High demand for these skilled workers often supports relatively high wages in this industry.

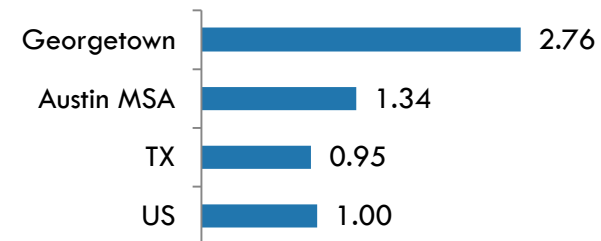
Advanced Manufacturing operations typically require plentiful, affordable energy supplies. Advanced Manufacturing subsectors may also require sizable natural gas, water, and wastewater capacity. Proximity to an interstate is preferable to help facilitate delivery of both raw materials and finished products. Available rail access may also be a consideration.

Advanced Manufacturing jobs are already highly concentrated in Georgetown – with 2,000 jobs and an LQ of 2.76 – more than double the concentration in Austin. Advanced Manufacturing jobs are also growing more rapidly in Georgetown and forecast to continue rapid growth into the near future.

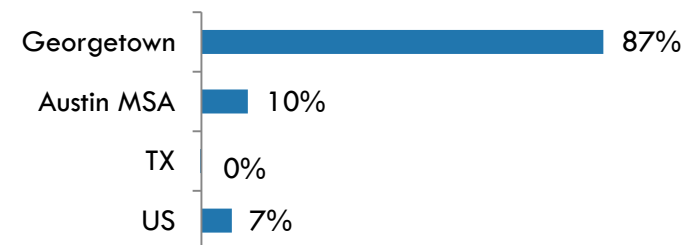
ADVANCED MANUFACTURING EMPLOYMENT, 2016



ADVANCED MANUFACTURING LOCATION QUOTIENT, 2016



ADVANCED MANUFACTURING EMPLOYMENT GROWTH, 2011 – 2016



Advanced Manufacturing

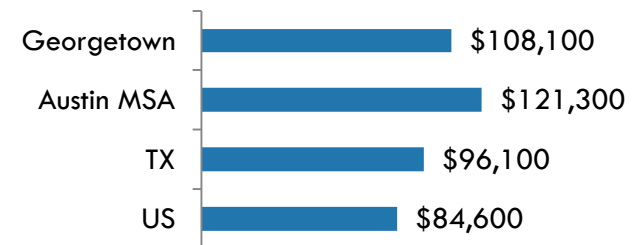
GLOBAL FORCES

Manufacturing employment in the US declined for three decades as companies moved operations abroad to secure cheaper labor. In recent years, however, **US Manufacturing has enjoyed a resurgence** as domestic production becomes more globally competitive. **Increased automation** and the continued **adoption of robotics** have helped make US manufacturers more productive. **Rising foreign labor costs** have increased the cost competitiveness of US workers, and **declining commodity prices**, including domestic energy prices, have lowered the cost of US production and transportation.

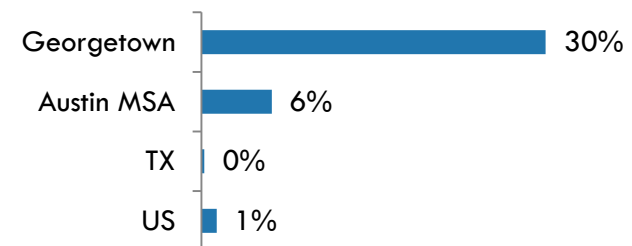
While automation makes US manufacturers more competitive, it is also changing the nature of manufacturing work – eliminating the need for some positions, creating others, and requiring overall greater training of workers.

While increased productivity has helped the US maintain its position as the world's second-largest producer of manufactured goods, a rise in the sense of nationalism in the US and other countries has raised the specter of a **trade war** that would threaten domestic manufacturing. Additionally, possible renegotiations of trade agreements such as NAFTA would could have significant impacts on US manufacturing.

ADVANCED MANUFACTURING AVERAGE SALARY, 2016



ADVANCED MANUFACTURING FORECAST EMPLOYMENT GROWTH, 2016 – 2021



Source: EMSI / Avalanche Consulting

Advanced Manufacturing

NICHE SECTORS

Aerospace & Aviation

Aerospace and Aviation includes companies involved in the design, manufacture, and operation of various forms of aircraft and their components. Whereas Aviation-related aircraft operate within the Earth's atmosphere, Aerospace-related aircraft typically extend beyond the Earth's atmosphere and into space. Both industries have experienced growth in recent years with private space exploration driving an expansion of the the Aerospace sector and increased demand for international air travel fueling new aircraft production. The emerging Unmanned Aerial Vehicles (UAV) market, expected to double during the next 10 years, represents another major growth area.

Maintenance, Repair, and Overhaul (MRO) operations are another important segment of this sector. These services are performed by the airlines themselves or independent contractors in centralized, regional facilities. With numerous airlines competing for space at busy major airports, many are looking for MRO locations outside larger metropolitan areas where they can conduct these activities at lower costs.

Clean Energy Technology

Clean Energy Technology covers operations focused on the development and manufacturing of products and processes to reduce carbon output. These technologies are most often utilized in transportation, energy production and transmission, and energy efficiency. The rise of Clean Energy Technology has been primarily driven by emission standards and other regulations, fluctuating energy costs, changes in consumer attitudes, and an influx of R&D. The International Renewable Energy Agency (IRENA) projects that employment in clean energy will triple worldwide to 24 million by 2030.

Companies involved in Clean Energy Technology seek locations with an established technology industry, a strong research university, and existing energy expertise.

Advanced Manufacturing

Electronics & Component Manufacturing

Electronics & Component Manufacturing includes the manufacture, design, development, assembly, and servicing of electronics and components featuring integrated circuits. According to a 2016 analysis by IBISWorld, the global consumer electronics manufacturing industry was valued at \$286 billion. The industry is divided into four key segments: government products, industrial products, consumer products and electronics components. Companies in this industry must invest substantial resources into research and development to constantly improve parts, products, and the processes to improve them, specifically to keep up with the demand for new technologies and green/energy efficient products. Key areas of future growth include: automotive, mobile devices, healthcare, communications, and data processing.

Important site location considerations for companies in the Electronics & Component Manufacturing sector include a highly-skilled workforce, energy availability and affordability, and proximity to interstate.

Advanced Manufacturing

LOCAL SALES MESSAGES

- Georgetown is already home to a highly-concentrated and rapidly growing Advanced Manufacturing industry. The success of existing businesses highlights Georgetown's competitive position.
- Alongside manufacturing employers, Georgetown is a "Get Things Done" community. Many adults and youth in Georgetown embrace a "Maker" culture focused on innovative manufacturing and design.
- Georgetown benefits from a logistically strong geographic location – with easy access to Interstate 35, State Highway 130, and rail service from both Burlington Northern Santa Fe and Union Pacific railroads.
- There is plentiful commercial and industrial land available for development in Georgetown, and the City continues to plan for the future and make infrastructure investments necessary to accommodate growth.
- Georgetown Municipal Airport is an important asset for the city – supporting flights for executives, corporations, and general aviation activity. The airport has surrounding land available for development and already supports a flight training school
- In partnership with the airport and others, the Georgetown ISD recently completed a program where students designed and built an actual airplane, which was flown before graduation.
- The City of Georgetown's commitment to renewable energy is attractive to many businesses for a variety of reasons – including cultural fits, co-branding opportunities, and cost assurances. The renewable energy commitment will ensure a sustainable source of electricity into the future.
- Advanced Manufacturers in Georgetown can draw from an available labor force of over 30,000 workers in supportive occupations across both labor sheds.
- Georgetown is home to a large veteran population, and employers draw workers from as far north as Fort Hood – helping capture existing military and other skilled trade workers.
- Existing employers generally have good success finding skilled trade workers locally and recruiting workers from outside the region. Additionally, Austin Community College, East Williamson County Higher Education Center, the University of Texas, Texas State University, Texas State Technical College, and other regional institutions offer training programs in a wide range of skills required in this industry.
- Georgetown is part of the Austin Metro – one of the most innovative regions in the world, with a host of companies and institutions conducting cutting edge research and development in clean energy technology and other manufacturing sectors.

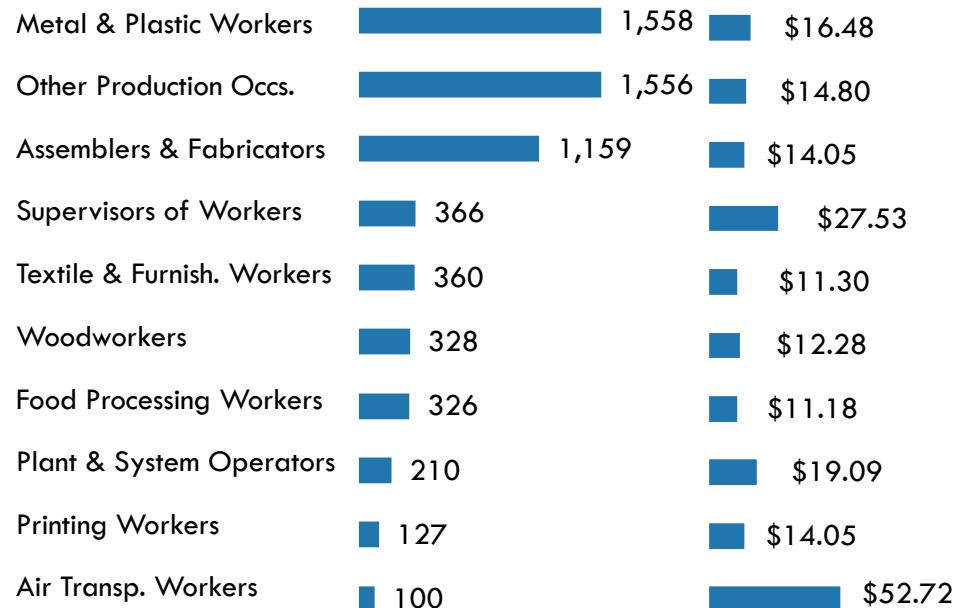
Advanced Manufacturing

GEORGETOWN WORKFORCE

Georgetown has access to a large Advanced Manufacturing workforce, with 6,000 individuals in supportive occupations in the North Labor Shed and nearly 28,000 workers in the South Labor Shed. The largest occupational categories of workers available are Other Production Occupations (which include a mix of operators, inspectors, and other miscellaneous positions), Assemblers & Fabricators, and Metal Workers & Plastic Workers.

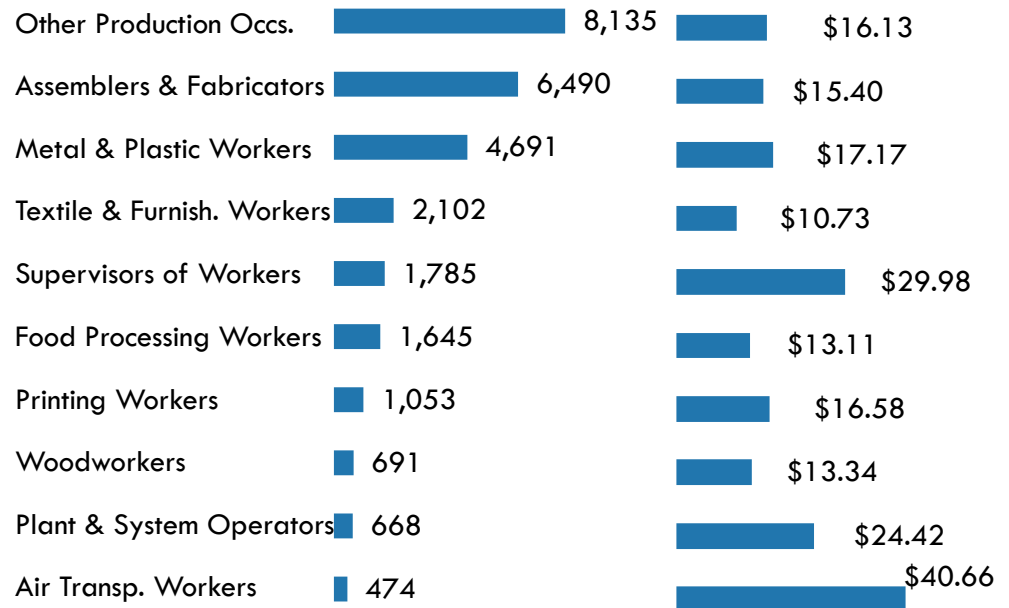
GEORGETOWN **NORTH** LABOR SHED – 2016

INDUSTRY SUPPORTIVE WORKERS AVERAGE HOURLY \$



GEORGETOWN **SOUTH** LABOR SHED – 2016

INDUSTRY SUPPORTIVE WORKERS AVERAGE HOURLY \$



Life Sciences



Life Sciences

Healthcare Services
Medical Technology
Pharmaceuticals



Life Sciences

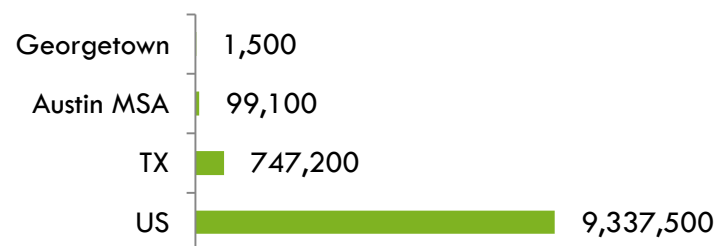
INDUSTRY OVERVIEW

The Life Sciences industry covers a range of technology, products, and services meant to enhance the biological functions of animals, crops, and humans. This includes production, processing, and sales of crops and livestock agricultural products. It also covers the provision of medical care in hospitals, outpatient care, dental work, urgent care, elderly care, and veterinary offices—as well as the development and manufacture of products that promote human and animal health. Population growth, demographic change, technological innovation, global markets, and consumer preferences are all driving gains in this industry.

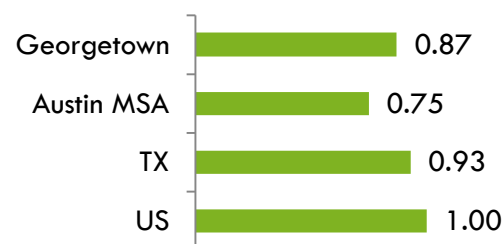
The location of Life Sciences operations is usually driven by the size and dynamics of local populations and the presence of research facilities in specialty fields. Hospitals and outpatient operations provide healthcare services to the residents of a community and often cluster in hubs to serve a broader region. Serving a larger, regional population allows industries to develop specialized care facilities. Pharmaceuticals, medical technology, and other related operations tend to cluster in centers that also feature a university research facility. The Life Sciences require significant education and training for their workers, including medical doctors, nurses, therapists, and technicians.

Life Sciences are currently less concentrated in Georgetown than the national average – with an LQ of 0.87 – but more than the Austin Metro. In recent years, Life Sciences jobs have grown more rapidly in Georgetown and are expected to continue that trend.

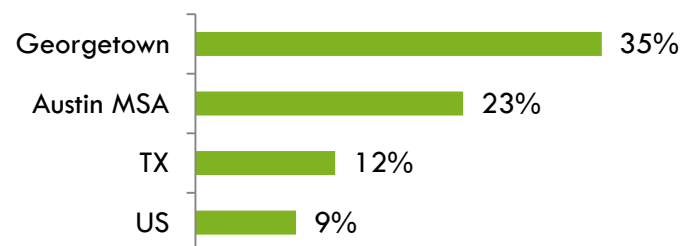
LIFE SCIENCES EMPLOYMENT, 2016



LIFE SCIENCES LOCATION QUOTIENT, 2016



LIFE SCIENCES EMPLOYMENT GROWTH, 2011 – 2016



Life Sciences

GLOBAL FORCES

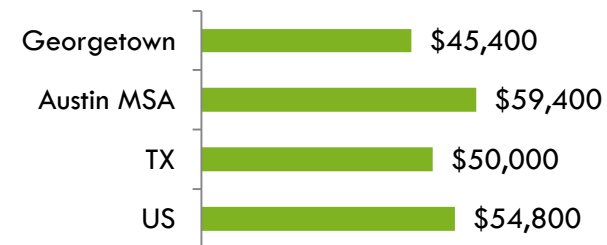
A variety of factors are contributing to the growth of the Life Sciences industry. The aging US population continues to create new demands for healthcare services. New medical devices, therapies, and pharmaceuticals increase both the demand and costs of healthcare. Ongoing changes to insurance and regulation add further complexity to an exceedingly intricate marketplace.

Rising costs are directly changing the Healthcare Services sectors – increasing the number of hospital system mergers, as they seek to reduce costs through consolidation. The drive for cost reduction is also leading to new emphases in the delivery of healthcare service. More doctors are prioritizing patient outcomes and focusing on behavioral, lifestyle, and wellness strategies. These in turn push growth in wellness products.

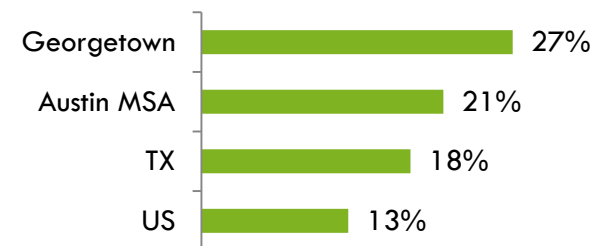
Technology is also a primary global driver in this cluster. Mobile devices and software are allowing doctors to reduce costs by providing distance treatment. The capture, consolidation, and analysis of patient data and human genetic and biological information is leading to more personalized and effective treatments and medicines.

Growth in the Life Sciences industry is unlikely to slow in the years ahead. Strong demand in this industry far exceeds any concerns related to cost structure and pricing or changes in regulatory compliance.

LIFE SCIENCES AVERAGE SALARY, 2016



LIFE SCIENCES FORECAST EMPLOYMENT GROWTH, 2016 – 2021



Source: EMSI / Avalanche Consulting

Life Sciences

NICHE SECTORS

Healthcare Services

Healthcare Services covers the hospital systems, home healthcare, diagnostics laboratories, independent physician offices, and other ambulatory healthcare services that serve a community or region. Regional healthcare service providers can offer specialty treatment centers unavailable in smaller communities. The sector is largely driven by population dynamics and benefits from strong educational support.

Medical Technology

Medical Technology includes the development and design of products used to monitor, diagnose, and treat a wide array of medical conditions and diseases. Advancements in the sector provide improved health outcomes and cost savings through earlier and more accurate diagnosis, less invasive treatment options, and reduced hospital stays and rehabilitation times. Products include everything from smartwatches to home diagnostics to 3D printed biological material.

Pharmaceuticals

Pharmaceuticals are medicines designed and manufactured to treat human diseases and other ailments. The development of pharmaceuticals relies heavily on specialized research – often performed through partnerships between universities and private businesses. Production of pharmaceuticals relies heavily on chemical manufacturing skills and processes. Pharmaceuticals and new medicines receive the highest amount of R&D expenditures of any sector in the US.

Life Sciences

LOCAL SALES MESSAGES

- Georgetown is already home to a small but rapidly growing Life Sciences industry – including private companies in pharmaceuticals and other biotechnology areas.
- Georgetown features two world class hospital systems with an additional facility just outside the city limits – St. David's Georgetown Hospital and the Georgetown Scott & White Clinic. The Seton Medical Center Williamson County and Scott & White Hospital are also located in close proximity to Georgetown.
- The hospital systems offer an extensive suite of general and specialized services.
- Scott & White recently opened a cancer research facility in nearby Round Rock.
- The Georgetown Health Foundation is dedicated to supporting the healthcare system in Georgetown and owns extensive land that could be developed into an expanded medical district.
- Georgetown is well-located geographically – nearby to the University of Texas, Texas A&M, and other cutting-edge Life Sciences research and education institutions. There are numerous institutions across the Austin Metro focused on innovation and technological development in this industry.
- As the geographic core of Austin becomes more expensive, many entrepreneurs are seeking more affordable, high-quality locations with access to talented workers in the area. Georgetown is a perfect fit for these growing ventures.
- Georgetown's rapidly growing overall population and large retired community create high demand for healthcare services in the area. The local population also provides opportunities for development and testing of new products and services in this industry.
- Austin Community College, East Williamson County Higher Education Center, and other regional educational institutions provide extensive training in Life Sciences fields. The new University of Texas Medical School in Austin will also be a tremendous resource for the regional Life Sciences industry.

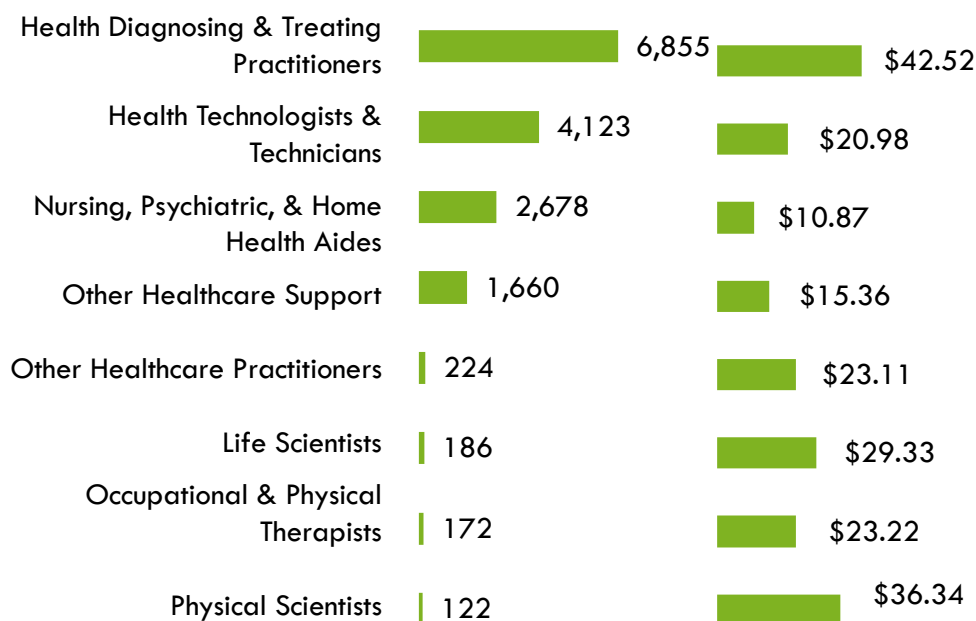
Life Sciences

GEORGETOWN WORKFORCE

Life Sciences employers in Georgetown can draw from an abundant pool of workers in both labor sheds. The North Labor Shed includes over 16,000 Life Sciences workers, and the South Labor Shed covers nearly 58,000 similar workers. The largest category of workers is Health Diagnosing & Treating Practitioners – which include doctors, nurses, surgeons, pharmacists, therapists, and many more. The North Labor Shed in particular has a high concentration of all these occupations.

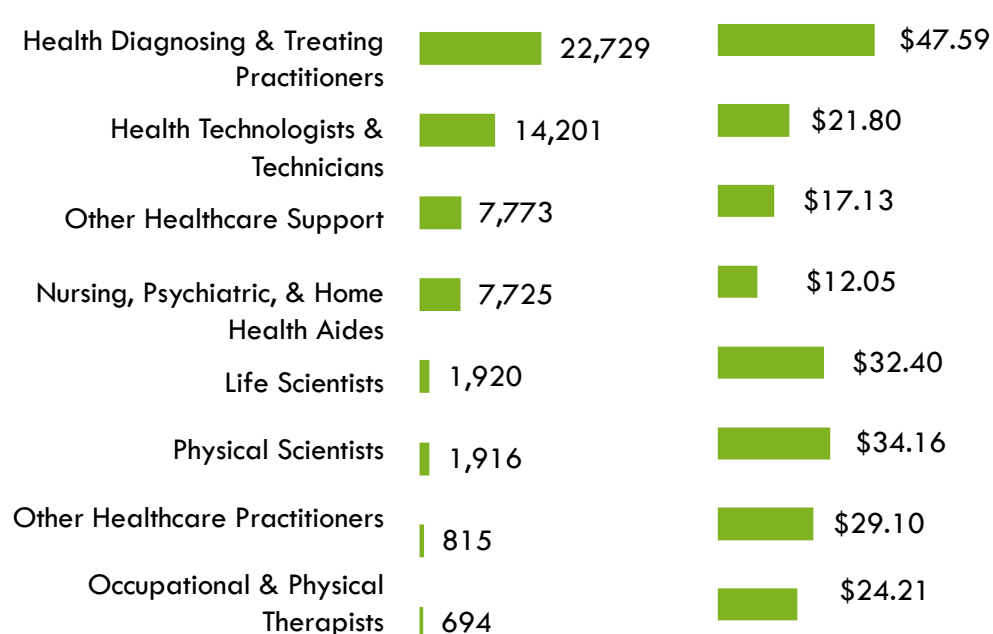
GEORGETOWN **NORTH** LABOR SHED – 2016

INDUSTRY SUPPORTIVE WORKERS AVERAGE HOURLY \$



GEORGETOWN **SOUTH** LABOR SHED – 2016

INDUSTRY SUPPORTIVE WORKERS AVERAGE HOURLY \$



Professional Services



Professional Services

Creative Design
Engineering Services
Software & Information Technology



Professional Services

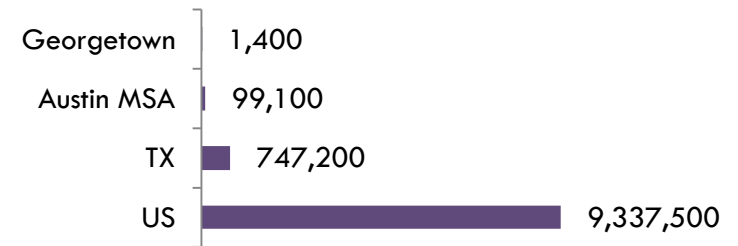
INDUSTRY OVERVIEW

Professional Services includes a wide range of skilled services that often support other industries – from accounting and engineering to creative design and software development. With a heavy focus on the research and development of new products, systems, and software, Professional Services are often a source of innovation. Professional Services is also one of the largest industries in the US, with 9.3 million workers.

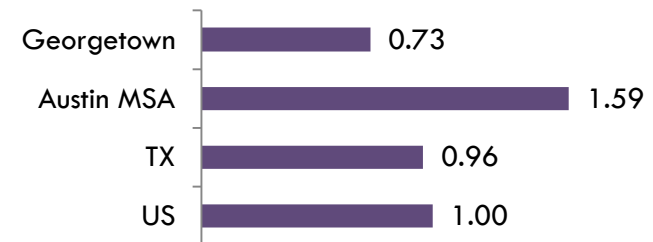
Professional Services operations have minimal infrastructure requirements. Office space and high-speed internet are usually the basic requirements for a firm to operate. Instead, talent availability is more important. If they are to thrive, Professional Services firms must be able to attract and retain talent. Quality of life is another critical location factor, as it facilitates the ability of Professional Services firms to recruit and retain the best talent. As a result, Professional Services firms often cluster in larger, centralized locations with plenty of amenities and in cities with universities that can provide a continuous supply of new workers with the latest skills.

With 1,400 employees, Professional Services is less concentrated in Georgetown than the overall Austin Metro – with a local LQ of 0.73 compared to 1.59 regionally. The industry is rapidly becoming more concentrated in Georgetown – growing 66% over the past five years and projected to grow another 28% over the next five.

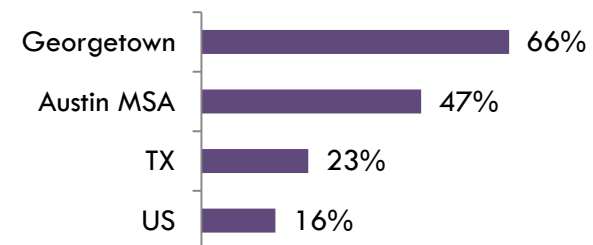
PROFESSIONAL SERVICES EMPLOYMENT, 2016



PROFESSIONAL SERVICES LOCATION QUOTIENT, 2016



PROFESSIONAL SERVICES, EMPLOYMENT GROWTH, 2011 – 2016



Professional Services

GLOBAL FORCES

Professional Services is currently one of the most dynamic industries worldwide. This industry thrives in areas where there is a strong private sector supported by government with stable regulatory environments, strong intellectual property protections, and a reliable judicial system. For such reasons, the US continues to be the most desirable location for Professional Services firms.

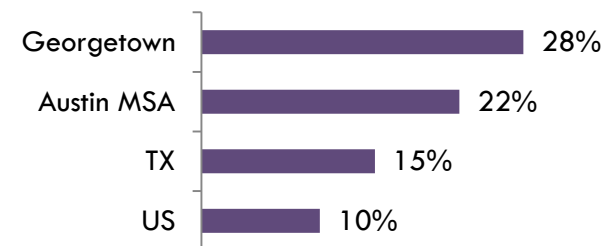
The **rise of cloud computing**, combined with a continued increase in the number of devices capable of producing data, has propelled an explosion in information worldwide; according to an estimate from IBM, 90% of all information ever created has been produced in just the past two years. Numerous subsectors have risen up in the Software & Information Technology field to find new ways of using this data to improve efficiencies in markets and better deliver a wide range of services to customers.

Continued development of **artificial intelligence** (AI) could potentially impact the Professional Services industry as once complex tasks become simplified and automated. Already we have seen the introduction of IBM's Watson in cancer research, tax preparation and aircraft maintenance. The impacts of AI on this and other industries remain unknown, but even if it eliminates some jobs, it has the potential to create new opportunities in programming and applications.

PROFESSIONAL SERVICES AVERAGE SALARY, 2016



PROFESSIONAL SERVICES FORECAST EMPLOYMENT GROWTH, 2016 – 2021



Source: EMSI / Avalanche Consulting

Professional Services

NICHE SECTORS

Creative Design

Creative Design covers individuals and businesses that offer contracted design services in a number of specialty areas, including graphic design, interior design, and industrial design. Design services are used in everything from film and technology to manufacturing and architecture. The most basic form of design includes the preparation of graphics and images for websites, marketing materials, logos, and signage, along with numerous other business needs. The more technical side focuses more on design for physical space, objects and processes including building interiors, user interfaces, industrial systems, and consumer product design. The Creative Design sector, like all Professional Services, is driven by availability of skilled talent.

Engineering Services

Engineering Services encompass professional businesses that provide contracted applied engineering services in a range of fields, including structural, mechanical, industrial, electrical, and other engineering fields. These engineering experts are critical to constructing, upgrading, and maintaining complex modern manufacturing facilities and machinery, designing buildings, and supporting a range of physical activities. Engineering businesses tend to cluster in proximity to their primary clients – manufacturers, builders, and utilities. This sector hires employees with advanced degrees – at a minimum bachelor's degree holders and often master's. As a result, engineering firms frequently choose locations with a high quality of life to aid employee retention and attraction.

Software & Information Technology

Software & IT includes organizations and individuals in software design and publishing, custom computer programming, computer systems design, and data processing facilities management. Data storage and utilization and cyber security are some of the major growth areas for this sector as the amount and sensitivity of data online increases exponentially. Software and IT is a very enterprising sector with small and medium-sized firms representing almost 99% of the industry.

Professional Services

LOCAL SALES MESSAGES

- Georgetown is part of the Austin Metro – one of the most dynamic centers of Professional Services in the country. Although Professional Services jobs are currently less concentrated in Georgetown, the industry is growing more rapidly locally than the entire region, state, or nation.
- Georgetown is a highly attractive place to live, and employers widely report that recruiting outside talent to Georgetown is an easy task. Given the industry's emphasis on talent availability and quality of place, Georgetown provides a competitive location to recruiting and retain skilled workers.
- Georgetown is already home to many individuals employed in Professional Services who currently work for employers located outside of the city. Employers opening, expanding, or relocating to Georgetown can potentially draw from this wealth of existing local talent – in addition to a pool of more than 75,000 workers to the South.
- Georgetown is already home to a large share of professionals who work from home or small startups.
- The City continues to make strategic investments in infrastructure and quality of life assets that make Georgetown an attractive place to live. The city benefits from a large, vibrant arts community; a unique downtown; extensive, high-quality parks and trails; and an overall attractive built and natural environment.
- In addition to the Georgetown Municipal Airport, the city has relatively easy access to Austin Bergstrom International Airport – both of which are positive assets for business travelers and executives in Professional Services.
- Current residents of Georgetown hold very positive views of their community. As one resident observed, Georgetown has the perfect mix of history, industry, and livability. The city is also multi-generational and engaged – with an active volunteer population across ages – an attractive feature to many professionals.

Professional Services

GEORGETOWN WORKFORCE

Professional Services supportive workers are much more concentrated in the Georgetown South Labor Shed than the North. The South Labor Shed has over 75,000 workers in occupations that support Professional Services, while the North Labor Shed has slightly under 5,000. Across both labor sheds, the largest category of Professional Services workers available to employers in Georgetown are Software Developers & Programmers and Engineers.

GEORGETOWN **NORTH** LABOR SHED – 2016

INDUSTRY SUPPORTIVE WORKERS AVERAGE HOURLY \$

Engineers	1,022	\$46.02
Software Developers	769	\$48.12
Computer Specialists	733	\$25.15
Drafters / Eng. Techs.	610	\$27.90
Database & System Admin.	405	\$40.53
Art & Design Workers	387	\$17.64
Computer & Info. Analysts	366	\$41.14
Misc. Computer Occs.	277	\$37.26
Architects, Surveyors, Carts.	109	\$30.14
Computer & Info Research Sci.	32	\$41.94

GEORGETOWN **SOUTH** LABOR SHED

INDUSTRY SUPPORTIVE WORKERS AVERAGE HOURLY \$

Software Developers	21,533	\$45.79
Engineers	11,958	\$49.54
Computer & Info. Analysts	10,188	\$41.23
Computer Specialists	9,421	\$25.76
Drafters / Eng. Techs.	7,531	\$29.67
Database & System Admin.	7,375	\$45.82
Art & Design Workers	3,744	\$25.25
Architects, Surveyors, Carts.	1,830	\$33.66
Misc. Computer Occs.	1,433	\$40.93
Computer & Info Research Sci.	494	\$47.25

Research & Development

Research & Development (R&D) involves targeted efforts to innovate, introduce, and improve a product or process. Companies invest in R&D to maintain their competitiveness, to develop new products, or to identify new markets or uses for existing products. As the US economy has become increasingly knowledge based, the number of R&D jobs has continued to increase. During the past 15 years, private R&D employment has increased three times faster than the US average for all industries.

R&D expenditures by US businesses currently exceed \$340 billion annually. Such spending is disproportionately concentrated in a handful of industries and locations. Just two industries – Manufacturing and Software/IT – account for more than 80% of domestic R&D expenditures. Additionally, half of all R&D spending in the US is absorbed by five states, including Texas.

Manufacturing R&D is focused primarily on the improvement or development of systems, machines, processes, and/or products. Manufacturing accounts for more than two-thirds of R&D expenditures in the US, dominated by the Chemical and Computer/ Electronic Products sectors.

Research and Development is a sustaining factor in the **Life Science** industry with activities spanning from drug development and delivery to the application of bio-tech research. Pharmaceuticals alone represent 16% of all US R&D expenditures.

Software and IT dominate the **Professional Services** industry with more than \$63 billion in annual R&D expenditures. Primary activities include product development and application.

