

Austin, tech, and 18 hours:

There is more to the Texas capital than you think



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Gone are the days of Austin's sleepy, college town attitude anchored by the state capitol whose legislature met intermittently, inserting some vigor into the city every other year. Over the past decade, a number of factors have converged into transforming Austin into a dynamic metro with a dense urban core that now keeps the "open" sign on city streets more than 18 hours a day.

Semiconductor and electrical component manufacturing kick-started Austin's jobs scene in the technology industry. This growth has further triggered rapid and recent population gains, mainly amongst millennials whose modernizing lifestyle preferences have turned the lights on new retail while nourishing high-density multifamily residential development in the inner city. Today, office work environments are transitioning to creative, open floor plans and shared co-working space impacting traditional office design.

CBRE Research has identified six key trends that are bringing the Texas capital into the ranks of America's major metros and altering its commercial real estate sectors right along with them.



- **Now hiring, inquire within:** Due to robust employment growth, Austin's office market is firing on all cylinders, setting record highs in absorption and rents, while reaching new post-recession vacancy lows. Austin is a high demand destination for corporate relocation and expansion with major players across multiple tech sectors. Further, a growing number of them are making Austin home to their corporate headquarters.
- **Three's company:** Co-working space has emerged as a desirable office type in Austin with nearly two dozen now in operation and a half dozen coming to market this year alone. Reflecting the communicative, creative, and collaborative values of today's millennials this space category tends to attract, Austin's shared working space scene is bringing growing ranks of creative people together, an emerging trend that may indicate Austin's tech cycle 4.0.
- **Industrial signs stable:** Home to one of the largest regional concentrations of semiconductor and electronic component manufacturers in the nation, the Austin industrial market has seen falling vacancies and escalating asking rents in recent years. Given the sheer activity seen in Austin's other asset types, namely office and multifamily, it is remarkable that the Texas capital has not yet experienced an industrial development boom, partially due to different rates of industrial rent growth following the Great Recession than witnessed in other Texas markets particularly outside of R&D/flex product. But there are indications industrial development could change soon.

- **Good minds think alike:** Austin is a metropolitan leader in patent production with patents for inventions rocketing out of the recessions since 2000. This high-patenting industry has helped establish Austin as a seat of innovation and technological creativity, attracting even more publicly-traded technology companies in addition to the highly-skilled talent they employ. As a result, Austin's creative class is changing the real estate face of the city one patent at a time.
- **A room of one's own:** Austin has seen rapid multifamily development in the urban core. This trend has been stimulated by Austin's ever strengthening workforce and the influx of millennials willing to pay for access to the central city's cultural offerings. Austin has added 5,824 multifamily units to its urban core since the beginning of 2015, which further fuels its cultural identity as a city on the go.
- **The doctor is in – literally:** The life sciences industry is quickly imbedding itself in Austin's tech DNA. Anchored by a Tier I research university and the flagship of the University of Texas System (in addition to several other area colleges and universities), the northeast end of the Austin CBD will be developing even stronger life sciences ties to its economy following completion of the Dell Medical School at The University of Texas at Austin, with over 1 million sq. ft. of new developments.

INTRODUCTION

Austin's local economic landscape is a far cry from the sleepy college town of prior decades. Once nearly exclusively grounded in higher education and state government, the capital city morphed with the help of a handful of high-tech manufacturing moves (IBM, Texas Instruments, Motorola) beginning first in the 60s and then strengthened by the high-tech R&D consortiums in the 80s (MCC and SEMATECH).

Fast forward past the 1990s bust, the dot-com era gave way to entrepreneurial tech domination with venture capital sprinting to fund local startups. Austin's tech sector blossomed then boomed. The emergence of this third stage of Austin's tech evolution has further drawn regional population growth particularly among millennials shifting the dominant lifestyle preferences of higher density living, alternative work schedules, and a more walkable environment that supports a trendy retail scene. Biking to work is not common in Texas but it sure is in Austin.

Meanwhile, Austin's office market has expanded robustly with occupier demand largely driven by technology companies. The market has enjoyed continued buoyancy measured by any number of metrics. Rents have continued to hit all-time highs, quarter after quarter. Vacancy has hovered near the lowest rates in a

generation, and sublease availability is currently under 1% of the total office market. Indeed, 2015 witnessed a record year for occupier demand with the market filling over 2 million sq. ft. of space and 15 buildings coming online, representing a 6.4% gain to the size of the market, preceded by substantial pre-leasing activity.

Austin's industrial market has mirrored its office counterpart. Rents have reached all-time highs. Vacancy has tightened to the single-digits, finishing 2015 at 8.0%, indicating firm demand with industrial tenants turning the lights on last year in a little less than 1.2 million sq. ft. Tech business growth has sent ripples through the Austin economy, from changing demographics, to wage dynamics and even civic cultural shifts. There has been an influx of migration following new job creation with many tech jobs outpacing previous earnings in the city. This trend has influenced the purchasing capacity and living patterns of Austin's residents. These social dynamics have physically altered the landscape of the multifamily, office, and retail real estate markets delivering new and diverse live/work/play alternatives for Austinites, new and native, a pattern that has made the Texas capital an exemplar of the 18-hour city.

“Austinites work later and then seek entertainment after midnight in music venues and later at festivals. Extended business hours avoid rush hours and allow more flex time.”

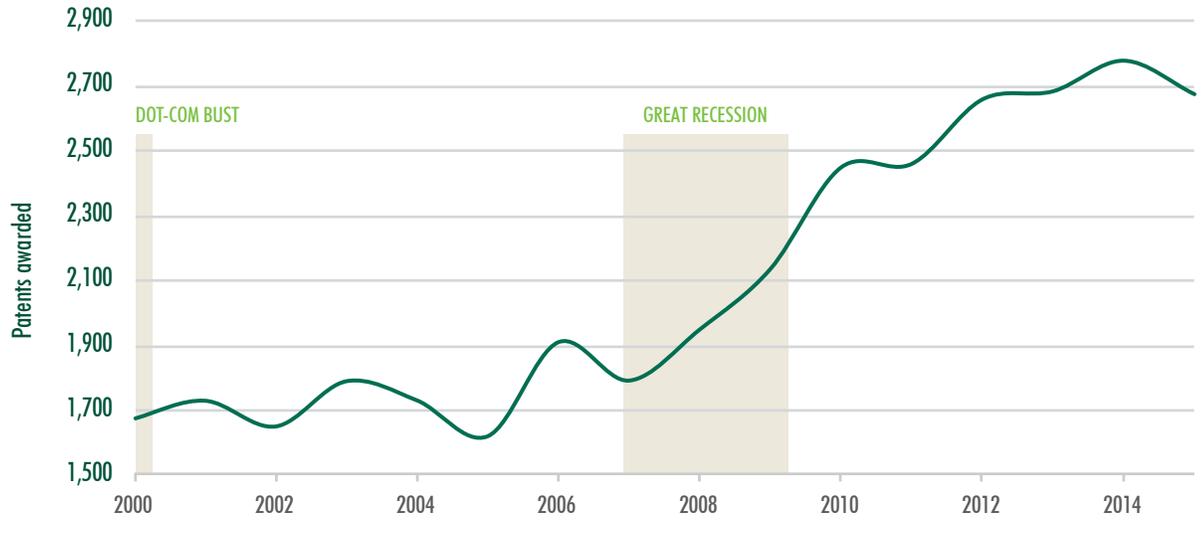
— CBRE First Vice President, Advisory & Transaction Services | Occupier

THE AUSTIN TECH FOUNDATION

Austin began its ascent to tech powerhouse through patent production with its foundation as one of the largest regional concentrations of semiconductor and electronic component manufacturers in the U.S. Since 2000, the Austin MSA has consistently laid claim as a top ten contender for total utility patents for inventions with nearly 20 times as many patents awarded compared to the national average. Austin's invention activity accelerated out of the Great Recession thanks to advanced manufacturing and electronic chip design titans in the area, and production reached

an all-time high in 2014 with Austin experiencing its greatest number of inventions awarded ever. Austin's high-patenting industries have cornerstoned a pattern of innovation and an air of technological creativity, further deepening the talent pool and attracting substantial private employers.

Figure 1: Austin MSA Patent Activity Remains Strong Despite Multiple Economic Contractions

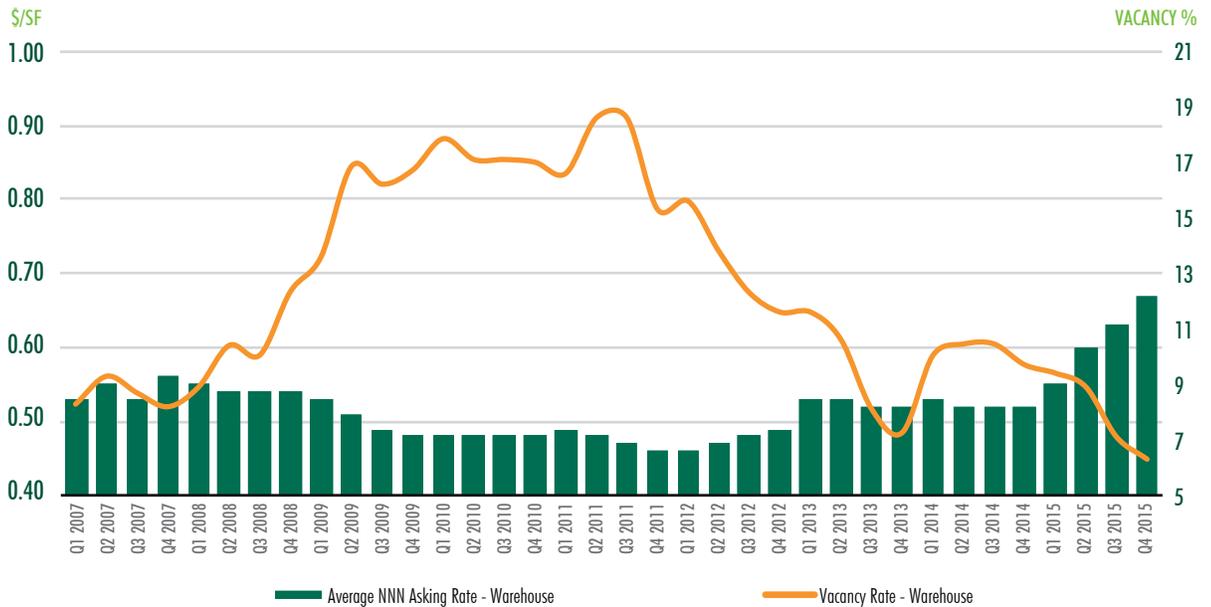


Source: U.S. Patent and Trademark Office, April 2016.

With the seeds sown for a regional innovation hub, growth has permeated the local market. The Austin office market has doubled in size, surging from 22.5 million sq. ft. in 1990 to over 45 million sq. ft. by the end of 2015. Over that same time period, full service gross Class A asking rents rose from \$13.07 per sq. ft. per year to \$35.81 per sq. ft. per year citywide. Simultaneously, tech tenants have increased their presence, representing 35.0% of all Austin office occupiers.

Austin's industrial market was influenced in a different way. Consider this: high tech manufacturing is significantly unlike traditional manufacturing with considerable capital outlays and facility requirements that have influenced Austin's industrial rents. To no surprise, then, Austin has outpaced surrounding markets in manufacturing rent appreciation for years.

Figure 2: Anchored by Advanced Manufacturing, Industrial Rents at All-Time Highs While Vacancy Dwindles



Source: CBRE Research, April 2016.

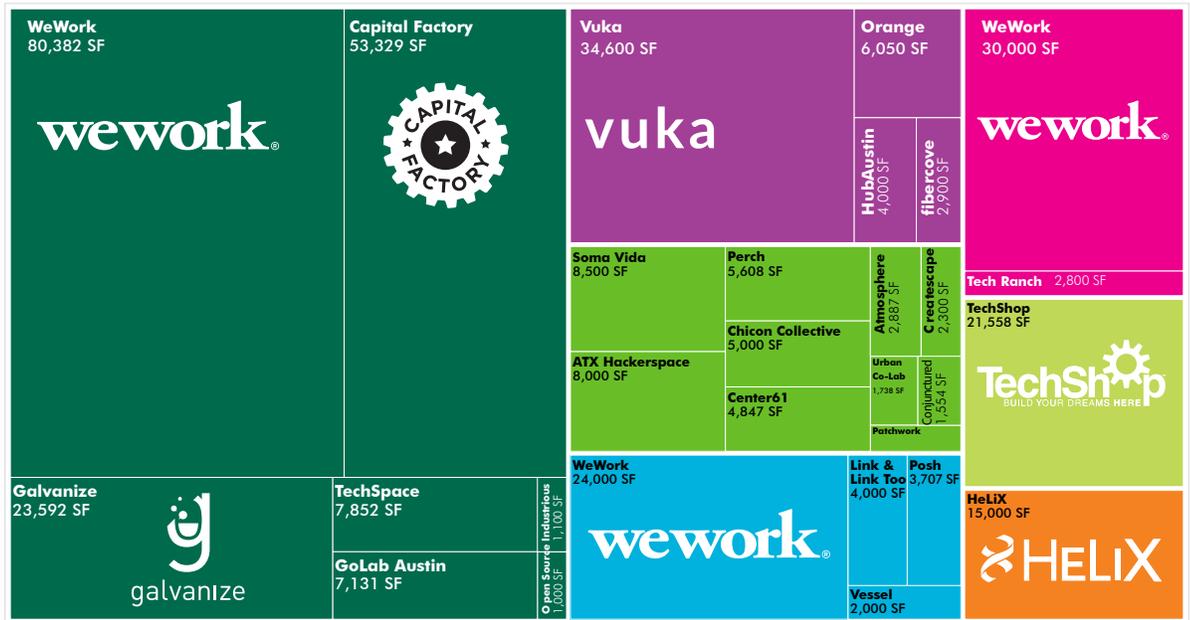
EMERGING TECH TRENDS

Today Austin’s tech scene goes beyond the advanced manufacturing of silicon widgets. Ideas have become a commodity where this dynamic has led to new trends in the local real estate market.

Most noticeable is co-working space or shared working space which emerged from the Great Recession as a choice office alternative among entrepreneurs, small businesses, and freelancers seeking to maintain a flexible work-life balance free of the financial obligations of traditional office leases. Driven by a socially-centric and tech savvy millennial generation, co-working space offers communal opportunity and a platform for new tools to be discovered and ideas to be shared in Austin’s most attractive and urban-active locations—dense, walkable, amenity-rich places.

Roughly 30 co-working spaces make up over 400,000 sq. ft. of the Austin market with a half dozen more locations coming to the market this year, including Austin’s first co-working space and bio-skills lab dedicated to medical and life sciences professionals. The most prominent co-working locations occupy large downtown footprints with their presence expanding into the Northwest, North Central, and Round Rock submarkets. These creative spaces have been the breeding grounds for

Figure 3: Austin’s Expanding Occupier Options within Creative Co-working Space



Office Submarket

- CBD
- East
- North Central
- Northwest
- Round Rock

Note: Box size (above) corresponds to the occupier's leased footprint relative to all other co-working occupiers

Source: CBRE Research, April 2016.

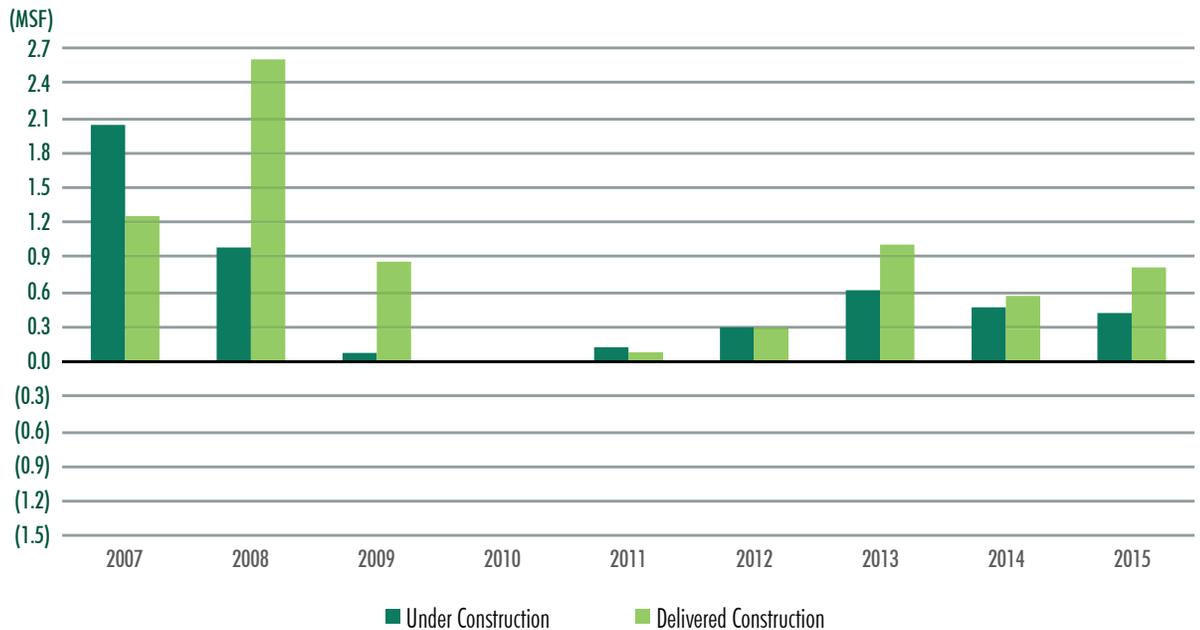
many local startups enticing venture capital investment. Still, despite co-working space growing in popularity, it is unlikely that it will significantly alter the traditional office lease model given Austin’s overall robust office market.

Adding to Austin’s deep-rooted startup network, major players in the tech sector continue to relocate and expand their presence in the market. Of the 119 relocations or expansions documented since 2015, 80% were in the tech industry (namely the software, life sciences, e-commerce, and data analytics sectors) with five companies on the Forbes Fortune 500 list. It is estimated that the top 10 companies created roughly 11,000 jobs since the beginning of 2015, nearly half of all new jobs brought to Austin in that timespan. These occupier expansions and relocations are further driving demand for highly skilled labor in an already tight jobs market where the local unemployment rate now sits at 3.1%.

Many of the expanding companies are incorporating ideas of creative workspace similar to that of co-working space. The larger companies are creating collaborative, shared environments often characterized by high density open floor plans. Challenges can arise however with these shifting preferences in space usage. As workspace requirements become denser, parking has become a predominant issue, especially for urban core occupiers. This has paved the way for increased flex space demand outside of Austin’s downtown urban core. With higher parking ratios than office, flex space provides an alternative. Traditional suburban office space, with 3.5-4 spaces per 1,000 rentable sq. ft., can see that ratio increase in flex product, and allow for the parking and worker densities companies require today.

Yet despite increasing demand for industrial space, development has not significantly followed. Currently, only four projects are under construction for a total of 418,600 sq. ft. in the Southeast and Far Northeast submarkets. Three of the four are warehouse projects, with just one flex project underway, which is located in the Southeast submarket and will add 72,000 sq. ft. of space to the market in 2016. It seems area developers have been more financially inclined to respond to office and multifamily demand—triggered by recent gains in payrolls and population—rather than industrial flex demand. In comparison, Houston and the DFW Metroplex have added 627,602 sq. ft. in flex product since 2014.

Figure 5: Unique to Texas: Austin’s Disciplined Industrial Construction Pipeline



Source: CBRE Research, April 2016.

That being said, many companies have and continue to look to the city's urban core, where office leasing activity has been the strongest, to expand or relocate. Vacancy in the CBD has dipped below 6% as recently as Q1 2016. Average full service gross Class A rates downtown have breached \$47.00 per sq. ft. per year. Developers have taken notice of demand; more than a half million sq. ft. of office space delivered in the CBD in 2015. Four more projects are under construction for a total of nearly 1 million sq. ft. in Q1 2016.



“Downtown Austin is the engine that drives this city, from an economic viewpoint as well as for its unique vibe and amenities. The influx of tech companies, coupled with traditional office occupiers, are attracting the brightest young creative class live/work/place environment.”

— CBRE First Vice President, Advisory & Transaction Services | Occupier

Be that as it may, downtown development opportunities have become increasingly limited due to a tightened supply of available lots. In response, office development has overflowed into nearby submarkets. Examples include the newly delivered 168,000 sq. ft. Lamar Central building (North Central submarket), phase one of the planned owner-occupied Oracle campus totaling 560,000 sq. ft. along Lady Bird Lake (South), and the proposed mixed-use Foundry project in the Plaza Saltillo transit-oriented development (East).

AUSTIN CULTIVATING LIFE SCIENCE INDUSTRY

Texas is a state leader in life sciences employment with the industry quickly becoming a larger piece of Austin’s tech community. Currently, life sciences occupiers are primarily clustered in north Austin along the Research Boulevard corridor and near the stretch of U.S. Highway 290/71 in south Austin. These occupiers absorb a diverse bandwidth of space from light industrial manufacturing to flex and traditional office space. Drilling down, Austin’s life sciences industry has been strong in pharmaceutical and medical device manufacturing sectors as well as R&D in the physical, life sciences, and biotechnology sectors. Anchored by The University of Texas at Austin and the Dell Medical School now underway, Austin’s local economy is slated to grow even more through the biotechnology, pharmaceuticals, diagnostics, and R&D sectors where innovation is becoming the cornerstone to healthcare advancement.

Figure 6: Top 10 Life Sciences Employers Occupy 1.1 Million Sq. Ft. of Office, Flex, and Manufacturing Space

	Company	Employees	Sub Industry	Submarket	RSF	Property Type
1	Hospira	1,500	Pharmaceutical	Northwest (Ind.)	492,853	Manufacturing
2	Pharmaceutical Product Dev.	900	CRO/IRB	Southeast (Ind.)	224,979	Flex/R&D
3	Thermo Fisher Scientific	317	Biotech	North (Ind.)	77,597	Manufacturing
4	Hanger	290	Medical Device	Northwest (Off.)	75,473	Office
5	St. Jude Medical	200	Medical Device	Southwest (Off.)	75,177	Office
6	Smith & Nephew	280	Device	Southwest (Off.)	68,086	Office
7	Advisory Board Co.	384	Diagnostics	Northwest (Off.)	38,598	Office
8	Luminex Corp	426	Biotech	Northwest (Ind.)	35,450	Flex/R&D
9	NextGen Healthcare Info Sys.	190	Biomedical & Healthcare IT	Northwest (Off.)	21,022	Office
10	e-MD’s	200	Biomedical & Healthcare IT	Far Northwest (Off.)	11,000	Office

Source: Austin Chamber of Commerce, CBRE Research, April 2016.

Growing this industry out of its infancy stage will be essential yet challenging. Austin is the largest U.S. metro area without a medical school, the very place where the training of future life science practitioners takes place. The city’s educational institutions are turning out able-bodied workers yet losing talent to more developed markets. Additionally, a struggle exists in attracting high-level talent due to the limited volume of individuals currently available in the life sciences industry compared to more established markets. Austin runs into a roadblock with local job mobility for these professionals. In this effort, city leaders have created Capital City Innovation Inc., a partnership between The University of Texas at Austin, Travis County, and Seton Healthcare Family, to integrate established businesses and startups into the Dell Medical School system.

“Austin has seen significant growth in the med tech and life science industries, following the announcement of the coming Dell Medical School and Dell Seton Medical Center.”

— CBRE Senior Vice President, Advisory & Transaction Services | Industrial & Logistics

With advancing industries come new market requirements. Austin is facing a dearth of available lab space in order to facilitate the city’s life science endeavors, and more specifically prescient wet lab space. The need for lab space in this growing field has the potential to create more demand for higher end flex/R&D space, and could potentially be a catalyst for industrial development.

TECH INDUSTRY’S INFLUENCE ON TEXAS HILL COUNTRY LIFESTYLE

Tech grows around a hearty labor market of creative talent. With an incredibly low unemployment rate of 3.1%, the Austin economy recorded the largest year-over-year increases in the computer and mathematical industry, food preparation and serving, and retail industries. Employers have been searching from a limited availability of software developers, applications specialists, and computer systems analysts creating a dynamic where jobs are chasing people. These relatively high-paying positions have helped shore up consumer spending; tech jobs pay more, allowing more disposable income and the freedom to spend. And the creative class, many enabled by flexible work arrangements, remains unconfined to traditional work standards.

Figure 7: Austin’s Tech Talent Rewarded with High Salaries

Occupation	Talent	Average Salary
Computer and Information Research Scientists	2,630	\$141,450
Computer User Support Specialists	1,790	\$120,390
Web Developers	6,160	\$98,850
Software Developers, Systems Software	9,610	\$95,090
Computer Programmers	440	\$90,600

Source: U.S. Bureau of Labor Statistics, 2014.

This in turn has helped foster a rising segment in Austin employment. High-paying tech jobs, in addition to Austin’s growing tourism reputation, have increased demand for recreation and entertainment venues in the metro. According to the U.S. Bureau of Labor Statistics, the Austin MSA employs more than 115,000 leisure and hospitality workers, a year-over-year increase of 8.4%, and an increase of more than 46,000 workers since 2006.

As an icon for retail branding and the live/work/play lifestyle, Austin has become a diverse and burgeoning shopping market. One that is literally spilling over into the streets, alive outside of the standard 9-to-5 block. The mechanism has been downtown revitalization, re-interest in the city’s urban core, and investment in new activity centers. This is reflected in the pockets of residential density seen in central Austin where 32 multifamily completions came to market over the last year with 50 currently under construction and 32 newly proposed locations on the drawing boards. Nearly 60% of all multifamily buildings since Q1 2015 (completed, planned, or under construction), are within a 20-minute drive of downtown comprising 19,000 units—the majority of Austin’s new high-density residential units.

Figure 8: Live/Work/Play Has Rejuvenated the Urban Core

Venue Type	Downtown Count
Arts Film and Culture	55
Live Music	40
Wellness and Exercise	30
Tours	19
Parks and Open Spaces	10
Festivals and Events	5
Public Art	2
Total	161

Source: Downtown Austin Alliance, 2016.

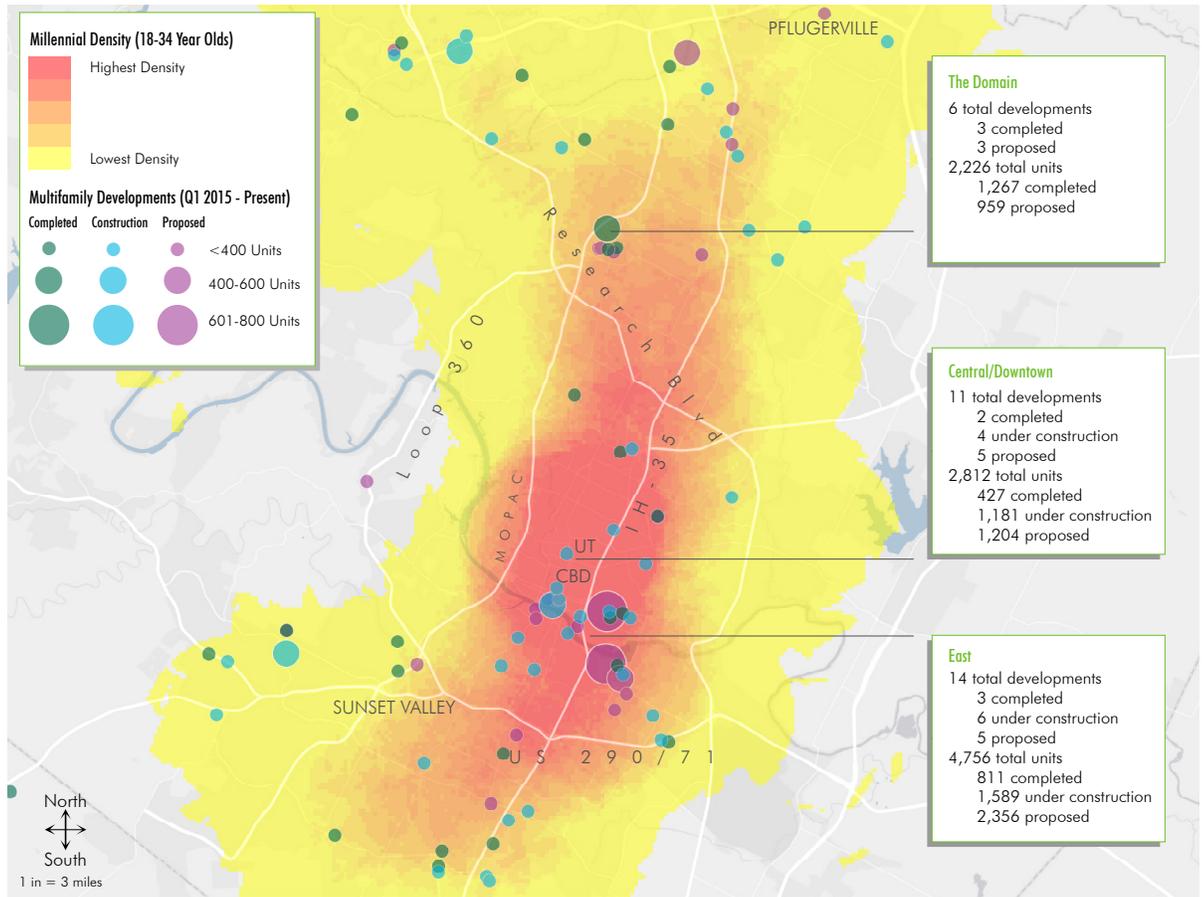
Figure 9: Culinary and Nightlife Reign Supreme in Downtown Austin

Dining Options	Downtown Count
Bars & Clubs	159
Restaurants	124
Coffee Shops & Fast Eats	99
Total	382

Source: Downtown Austin Alliance, 2016.

The revitalized urban core has spurred a lifestyle-centralized model that influences other areas of town. In one example, The Domain, with over 1,200 multifamily units completed in 2015, offers up a live/work/play ecosystem that attempts to capture the beat of Austin’s urban core. This center, located on the former IBM campus in northwest Austin, hosts significant retail and office tenants with considerable charm.

Figure 10: Millennial Density Invites Multifamily Development

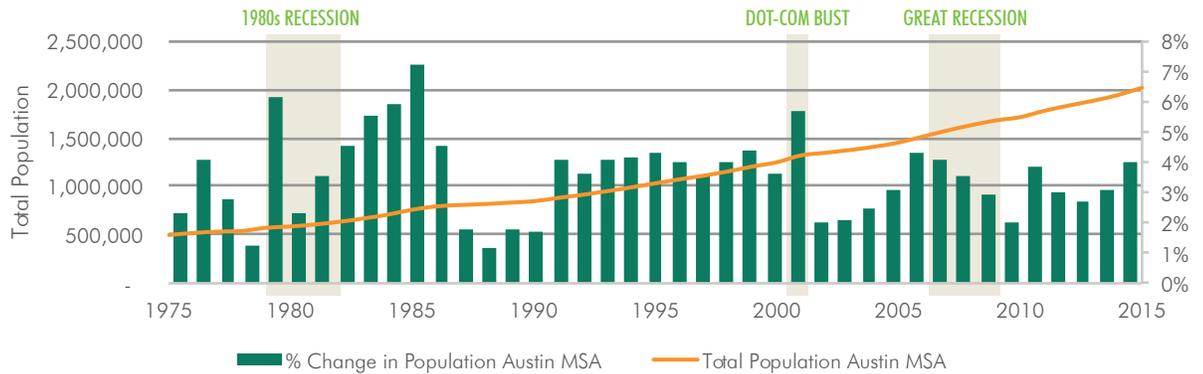


Source: CBRE Research, April 2016.

Austin’s high-density residential activity is supplied by a continued population boom and more specifically the concentration of millennials preferring centrally located shops, restaurants, and work space.

Austin has experienced exponential population growth since 1900 with the Austin MSA reaching 2 million people in 2015. This is an estimated 18% increase over the last five years making Austin the fastest-growing big city in the nation. A well-educated labor force in a region anchored by one of the nation’s largest flagship public universities has made it easy to recruit employers depending on a steady supply of young professionals entering the workforce. As such, Austin is a magnet for the young, receiving a brain gain of talented individuals. Austin’s healthy job market and advantageous business climate have favored its workers—absent a state income tax with a low cost of living compared to other parts of the country.

Figure 11: Austin Population Growth Rates Remained Positive through Three Economic Downturns



Source: U.S. Census Bureau, 2016.

With steady growth and prosperity, Austin workers’ salaries have continually risen while the regional job growth has not slowed. As a result, millennials’ rising incomes and cultural preferences have driven homemade retail success. Homegrown consumer brands like Whole Foods Market, Hopdoddy Burger Bar, Torchy’s Tacos, VERTS, Alamo Drafthouse, Kendra Scott Jewelry, YETI Coolers, and Tito’s Handmade Vodka have expanded to new markets. Likewise, the growth in Austin’s consumer wealth has paralleled a widening of its luxury brand base with large outside retailers such as Neiman Marcus, Nordstrom, Tiffany & Co., Burberry, and Louis Vuitton occupying space in The Domain.

“Austin’s food and beverage scene has exploded in the last few years, in line with the growth of entertainment and tech.”

— CBRE Associate, Advisory & Transaction Services | Retail

THE CAPITAL CITY AND THE CAPITAL MARKETS

Across all asset types, capitalization rates have seen strong compression in previous quarters and pricing has continued to hit new highs. According to Real Capital Analytics, multifamily sales surpassed \$2.7 billion for the previous four quarters through Q1 2016. And over this time period, the sale price per unit increased 11%. Office performance has been more intricate. On one hand, deal volume has been down 18% the past four quarters accompanied by declines in both properties and total sq. ft.

traded. On the other hand, prices are still rising. The average price per sq. ft. reached \$288 encompassing a 5% annual increase. When looking at funding sources, institutional players comprised 70% of office transactions in 2014 shrinking to 31% in 2015 with private capital largely making up the difference.

Austin ranked second for anticipated investment and development activity, and continues to draw national attention for retail prospects according to the Urban Land Institute's 2016 Emerging Trends in Real Estate report. The Austin market continues to favor landlords with the outlook remaining positive, though only modest decreases in cap rates are expected.

CONCLUSION

Austin has been one of the biggest beneficiaries of the tech revolution. It transformed the culture of the Texas Hill Country, bringing in a new era of urbanized business and commerce to a city once almost exclusively driven by the public sector. It brought swarms of jobs to the region boosting the local and regional economy, but also adding sector diversity. The office and industrial real estate markets saw direct benefits as these companies needed space. These new jobs brought more people to the area, and drove demand for more multifamily housing and retail options as well. The fact that these new tech jobs pay more, and attract younger workers, has influenced the retail and multifamily markets. Retail has skewed more towards the high-end, and millennials have wanted more mixed-use urban multifamily projects. The convergence of these factors has led the way for a new lifestyle that illustrates why Austin is a premiere 18-hour city.

It has been said that 18-hour cities essentially combine the best of both worlds; they fall between the larger, 24-hour gateway cities (those where you can order Chinese food at 3 a.m.) and smaller cities operating on a more traditional 9-5 business schedule.

And off the cusp of the turn of the millennial, Austin has done just that; its next phase of commercial real estate development may just make it America's next 24-hour city.

Austin – and its urban core - is more than a destination and a neighborhood – it's a globally recognized brand.”

— CBRE First Vice President, Advisory & Transaction Services | Occupier

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