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Report Goals

Redwood Advisors set out in late 2017 to conduct a survey, interview local leaders and create a report on Austin’s innovation ecosystem. This report has three goals:

1. Provide insight into local leaders’ perspective on Austin’s innovation ecosystem, both quantitatively and qualitatively
2. Provide a sound, public fact base and resource for leaders, innovators and professionals interested in growing and strengthening Austin’s innovation potential
3. Help spark and strengthen conversations and discussions about Austin’s innovation ecosystems, particularly its strengths and areas for improvement and growth

Methodology

Redwood Advisors developed a survey that asked participants about four critical areas regarding Austin’s innovation ecosystem including an assessment of Austin’s ecosystem today and its key favorable and unfavorable factors. The survey questions and answers were developed by Redwood Advisors building on similar surveys of innovation and innovation ecosystems.

This survey was distributed to 25 business and civic leaders in the greater Austin community in late fall and winter 2017-2018. The participants come from a broad array of business and social sector backgrounds with a focus on innovation leaders (e.g., CEOs, start-up founders, design thinkers) selected to represent a diverse set of stakeholders in Austin’s innovation ecosystem, from local CEOs to Austin city council members.

In addition, the firm conducted an interview series with a select group of participants; this series will be released in podcast form on Redwood Advisors’ website in March 2018.

About the Authors

Redwood Advisors helps mid-size, consumer-facing clients maximize profitable growth through growth strategy, organizational excellence, and digital strategy projects. Founded by a former McKinsey & Company consultant, Redwood Advisors delivers top consulting firm quality with wide-ranging expertise, hard work and a client first approach. We have delivered over 40 projects and served numerous marquee institutions in the public, private and social sectors including Johnson & Johnson, Lyft, National Geographic, NASA, Ares Private Equity Group and the Markle Foundation’s Skillful initiative.

To learn more, visit us at RWAdvisors.com.
Executive Summary

- Austin is a “Local Innovation Hub”; Austin consistently innovates and Austin innovators sometimes – but not often – achieve national or global scale
- Survey participants report that Austin’s most innovative industry is Restaurants and Food while its least innovative industry is Finance and Financial Services
- The most favorable characteristic for fostering innovation is Austin’s “overall quality of life”, while “transportation infrastructure and logistics” was ranked the most unfavorable characteristic for fostering innovation of 12 key factors
- Austin’s business culture can be characterized as high-morale with top words used to describe Austin’s business culture including “creative” and “joyful”; however, participants gave Austin low scores for a variety of more analytical, classic business skills with “strategic” and “decision making” getting particularly low scores
- There is general agreement that Austin’s innovation ecosystem is strong but in the 2nd tier of innovative U.S. cities, with capital availability, cultural factors and other challenges preventing Austin from being a global innovation leader (e.g., Bay Area)

1. City Brand, Reputation and Lifestyle: Austin is seen and experienced as a great place to live and work; this helps attract and retain high-skilled talent critical for innovation
2. The University of Texas at Austin: UT offers a deep, wide pipeline of talent, a strong research base and strong programs in business, entrepreneurship and design
3. State Tax/Regulatory Environment: Texas has no state income tax and a low regulatory burden on businesses and individuals, although the city of Austin is seen as having a relatively high tax and regulatory burden
4. City Amenities: Key events (e.g., SXSW) help Austin’s brand and quality of life and help recruit and retain talent
5. Consumer Branding Success: Austin companies (e.g., Yeti) often win with consumers

1. City Infrastructure: Traffic and logistics in the city are viewed as a significant weakness
2. Work Culture: Workers are happy but many put work second and invest fewer hours relative to other innovation leaders (e.g., San Francisco, New York)
3. Few Major Homegrown Success Stories: Beyond Dell, Austin has few global brands
4. Key Talent Gaps: Austin needs to retain top talent and executive management
5. Shallow Funding Base: Austin firms often look elsewhere for capital to scale

- Although Government is Austin’s largest industry now (by total employment), Professional Services will be the largest by 2024
- Most of Austin’s fastest-growing jobs fall into three broadly-defined categories: computer science professionals, tradespeople, and educators; with Web Developers leading the charge as Austin’s fastest growing profession
Selected History of Austin Innovation

Many observers see Austin’s start as a business hub originating with the arrival of two key players in the mid-20th century: IBM’s arrival in 1967 and the creation of the Innovation, Creativity and Capital (IC2) Institute at The University of Texas (UT) in 1977. Around this time, Austin began to develop a reputation for technological innovation, especially in the enterprise space. This continued into the mid-1980s with the arrival of Microelectronics and Dell. Microelectronics was one of the largest computer research consortia of its time. Dell started as a producer of PCs and has since become a global leader in technology and business.

Dell grew its market cap from $85M in 1988 to $24B in 2013

Dell, founded as “PC’s Limited” by Michael Dell in 1984, emerged as a leader with a focus on supply chain excellence, innovative technology and hard work. During its early years, Dell’s culture was taxing – staff often stayed at their desks until 3 or 4 in the morning – but the company grew quickly and went public in 1988 with a market capitalization of ~$85 million. By the time it went private in 2013, Dell had a market capitalization of $24B, a CAGR of over 25% over the 35-year period.

However, Austin’s tech scene did not benefit as much as many other major US cities from having a globally successful, marquee tech employer. Unlike Seattle’s Microsoft or the Bay Area’s Google and PayPal “mafias”, Dell’s early employees – “Dellionaires” – did not start as many or invest as much into other technology start-ups (though notable exceptions exist).

Trilogy’s move to Austin in the late 1990s brought in a large influx of new talent. In time, former Trilogy employees helped start and lead a number of Austin success stories including BazaarVoice, HomeAway, and WhaleShark. Austin now has a number of notable innovative companies in consumer retail, food and beverage, and enterprise software with many observers seeing a strong growth in Austin’s innovation scene. However, the traditional tech space has had few big public market winners recently – before SailPoint’s IPO in October 2017, Austin had not seen a tech IPO since 2014.

Despite possible challenges in the tech space, Austin has a thriving consumer brand ecosystem including companies such as Yeti, Whole Foods, Tito’s and Outdoor Voices. Yeti makes for an interesting Austin case study. With a combination of materials science development and fantastic branding, Yeti has turned outdoor cooler products into a multi-billion dollar space. Similarly, Whole Foods helped create American demand for high-quality, organic foods and was recently acquired by Amazon for nearly $14B in a landmark deal for the city.

Austin’s overall economy is robust and growing, with real GDP growth consistently beating the national average and a 2.9% annual population growth in recent years. The city has a growing population of increasingly high-skilled workers and a large base of successful companies to seed the next round of successful Austin innovation.
Select Timeline of Austin Innovation

- IBM builds its first manufacturing plant in Austin (1967)
- Microelectronics and Computer Technology Company arrives in Austin (1983)
- SXSW is created primarily as a music festival (1987)
- Dell is founded by Michael Dell (1984)
- Herb Kelleher Center for Entrepreneurship, Growth, and Renewal is founded at UT (2001)
- SXSW is created primarily as a music festival (1987)
- Proliferation of startup activity and both economic and population growth (2000s-2010s)
- Trilogy is founded (1989)
- The Dell Seton Medical Center is built (2016)
- Whole Foods is founded (1965)
- George Kozmetsky founds the Innovation, Creativity, and Capital (IC2) Institute at UT Austin (1977)
- Joshua Baer launches Capital Factory (2009)
Key Findings
Top Findings:

“Austin is the king of all the second tier cities”

- Joshua Baer, Capital Factory

60% of Austin leaders scored Austin a 3 out of 5 on an innovation scale viewing Austin as a “Local Innovation Leader”

Restaurants and Food was rated the most innovative industry in Austin

Transportation infrastructure was rated the most unfavorable quality of Austin for fostering and cultivating innovation

“There is a gravity to Austin that attracts people and makes them want to be here because there’s a lifestyle, a culture here”

- Brian Tochman, Kasita
Please provide your assessment of Austin’s innovation ecosystem on the following scale:

1 = Innovation Backwater: Little to no innovation occurs in Austin
2 = Innovation Outpost: A limited amount of innovation occurs in Austin
3 = Local Innovation Hub: Some innovation occurs in Austin and in a few instances achieves national or even global scale
4 = Innovation Leader: Innovation consistently occurs in Austin and sometimes achieves national or even global scale
5 = Global Innovation Leader: Large-scale innovation consistently occurs in Austin and frequently achieves national and global scale

Austin scored an average 3.2 out of 5 on an innovation scale, with 60% of respondents rating Austin a Local Innovation Hub. While some innovation does occur in Austin, including some notable success stories (e.g., HomeAway, BazaarVoice, RetailMeNot), Austin is not seen as an innovation leader. As one respondent put it, “the hype outpaces the reality.”

Only 12% of respondents rated Austin lower than a 3 out of 5. Respondents consistently remarked on Austin’s entrepreneurial focus as “a vibrant, young startup hub” with “some obvious success stories” although one local founder noted that “Silicon Valley created 50x more equity value than Austin in 2016.” However, few respondents viewed Austin as a peer to leading innovation areas such as Silicon Valley and New York City.
**Survey Results**

**Austin’s Most Innovative Industries**

“Please provide your assessment of each of the following industries in Austin on the following scale in your view:”

<table>
<thead>
<tr>
<th>Industry</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restaurants and Food</td>
<td>3.7</td>
</tr>
<tr>
<td>Advanced Manufacturing</td>
<td>3.5</td>
</tr>
<tr>
<td>Creative and Digital Media</td>
<td>3.4</td>
</tr>
<tr>
<td>IT and Data Management</td>
<td>3.2</td>
</tr>
<tr>
<td>Consumer Goods</td>
<td>3.0</td>
</tr>
<tr>
<td>Consumer Technology</td>
<td>3.0</td>
</tr>
<tr>
<td>Health Care</td>
<td>3.0</td>
</tr>
<tr>
<td>Retail</td>
<td>3.0</td>
</tr>
<tr>
<td>Professional Services</td>
<td>2.9</td>
</tr>
<tr>
<td>Pharmaceuticals and Medical Products</td>
<td>2.5</td>
</tr>
<tr>
<td>Energy</td>
<td>2.4</td>
</tr>
<tr>
<td>Finance &amp; Financial Services</td>
<td>2.3</td>
</tr>
</tbody>
</table>

3.7 was the highest score of any industry, given to Restaurants and Food.

8 of 12 industries scored a 3 or higher out of 5 for innovation.

Austin’s most innovative industry is Restaurants & Food, ranking close to an Innovation Leader with an average score of 3.7 out of 5. The city clearly has an innovative food scene with both critically acclaimed gourmet options (e.g., Uchi, Launderette) and strong consumer chains (e.g., Amy’s, Torchy’s, Snap Kitchen).

Other top-ranked industries included Creative and Digital Media, IT & Data Management, and Consumer Goods. Respondents noted that Austin has a strong reputation for creativity and a focus on tech, with high-profile consumer brands (e.g., Whole Foods, Yeti). Financial Services, Energy, and Pharmaceuticals came in at the bottom of the list with respondents reporting limited innovation in those industries.

The average industry score was 3.0 out of 5 although 8 of 12 industries scored a 3 or higher on average. This provides additional support for the respondents’ earlier consensus view that Austin qualifies as a Local Innovation Hub.
“Please provide your assessment of each of the following qualities of the Austin innovation ecosystem according to how favorable they are for fostering and cultivating innovation:”

<table>
<thead>
<tr>
<th>Quality</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall quality of life</td>
<td>6.4</td>
</tr>
<tr>
<td>Education ecosystem</td>
<td>5.6</td>
</tr>
<tr>
<td>Tax environment</td>
<td>5.5</td>
</tr>
<tr>
<td>Talent pool</td>
<td>5.3</td>
</tr>
<tr>
<td>Presence of other companies &amp; orgs</td>
<td>4.7</td>
</tr>
<tr>
<td>Cost of doing business</td>
<td>4.6</td>
</tr>
<tr>
<td>Existing work culture</td>
<td>4.6</td>
</tr>
<tr>
<td>Other political and regulatory factors</td>
<td>4.3</td>
</tr>
<tr>
<td>Cost of living</td>
<td>4.2</td>
</tr>
<tr>
<td>Availability of financial capital</td>
<td>4.1</td>
</tr>
<tr>
<td>Transportation infrastructure &amp; logistics</td>
<td>2.8</td>
</tr>
</tbody>
</table>

**Quality of life** scored as the most favorable characteristic for innovation.

By far the most favorable characteristic for Austin innovation is the “overall quality of life”, followed by the “education ecosystem”, “tax environment” and “talent pool”; each scored a 5 or higher out of 7 on our favorability scale. The high rating on “overall quality of life” reflects Austin’s national reputation for being a fun city to live in. Follow-up interviews and comments found that the high marks for “tax environment” reflected the Texas state tax environment. Texas has no state income tax. Austin has the highest per-capita taxes of any major Texan metropolitan area.

**Transportation infrastructure** was the only characteristic to receive a negative favorability score.

Toward the bottom of the list (~4 out of 7) were “political and regulatory factors”, “cost of living” and “availability of financial capital”.

The sole characteristic to receive a negative net favorability score (lower than 4 out of 7) was Austin’s “transportation infrastructure and logistics” with many respondents complaining about Austin’s growing traffic problems and public transportation.
Survey Results
Austin’s Business Culture

“Please provide your assessment of the following words or phrases according to how well they describe the business culture in Austin:”

<table>
<thead>
<tr>
<th>Word</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative</td>
<td>5.6</td>
</tr>
<tr>
<td>Joyful</td>
<td>5.5</td>
</tr>
<tr>
<td>Teamwork</td>
<td>5.2</td>
</tr>
<tr>
<td>Employee Engagement</td>
<td>5.2</td>
</tr>
<tr>
<td>Learning Opportunities</td>
<td>5.2</td>
</tr>
<tr>
<td>Trusting</td>
<td>5.0</td>
</tr>
<tr>
<td>Adaptable</td>
<td>4.9</td>
</tr>
<tr>
<td>Communicative</td>
<td>4.8</td>
</tr>
<tr>
<td>Purposeful</td>
<td>4.8</td>
</tr>
<tr>
<td>Respectful</td>
<td>4.8</td>
</tr>
<tr>
<td>Results-Oriented</td>
<td>4.4</td>
</tr>
<tr>
<td>Unpredictable</td>
<td>4.3</td>
</tr>
<tr>
<td>Accountable</td>
<td>4.3</td>
</tr>
<tr>
<td>Decision Making</td>
<td>4.2</td>
</tr>
<tr>
<td>Risk-Averse</td>
<td>4.2</td>
</tr>
<tr>
<td>Strategic</td>
<td>3.8</td>
</tr>
</tbody>
</table>

1 = Very Poorly
2 = Poorly
3 = Somewhat Poorly
4 = Neutral
5 = Somewhat Well
6 = Well
7 = Very Well

Creative and Joyful scored high scores

Austin’s business culture could be characterized as generally positive and employee-friendly – morale-focused words like Creative, Joyful, Teamwork, Employee Engagement and Learning Opportunities all scored a 5 or higher out of 7, indicating that they describe Austin at least “somewhat well”.

Strategic received the lowest score

However, respondents consistently gave the city low scores for more analytically-oriented, classical business skills critical for successful innovation such as Strategic, Results-Oriented, Accountable, and Decision Making. All of those words fell into the neutral range (“neutral” being equal to 4 out of 7) with Strategic being ranked lowest at 3.8 out of 7.
In conjunction with the survey, Redwood Advisors conducted a series of interviews, which will be published on our website as podcasts. Please visit RWAdvisors.com/publications for more information and to listen to these interviews. Interviewees included:

**Joshua Baer, Founder, Capital Factory**
Joshua is the founder of Capital Factory, a coworking community and mentorship-based accelerator based in Austin, TX designed to help startups find their first investors, customers and employees.

**Evan Baehr, Founder, Able Lending**
Evan is a serial founder of technology companies, venture investor and advisor, best-selling author, and university lecturer. Most recently he cofounded Able, a financial technology company backed by Mike Maples and Peter Thiel, which sold in 2017.

**Ellen Troxclair, District 8 Council Member, Austin City Council**
Ellen is an accomplished businesswoman and Austin City Council Member. Ellen also manages a successful residential real estate business and is dedicated to making Austin affordable.

**Jason Chicola, Founder and CEO, Rev**
Jason is the Founder and CEO of Rev, a company with the mission of giving more people the freedom to work from home. Jason is an active angel investor, previously worked at Upwork and has experience in consulting, VC, and PE.

**Matt Beecher, CEO, Student Loan Genius**
Matt is the CEO of Student Loan Genius, which helps companies and employees pursue life, liberty, and freedom from student loans. Matt has deep experience in the financial and tech sectors on both the East and West coasts.

**Brian Tochman, President and COO, Kasita**
Brian is the COO of Kasita, a manufacturer of modern micro homes designed to fit in the heart of the city or in your backyard. Brian also has experience in consulting, private equity, and supply chain management.

**Jennifer Houlihan, Managing Dir., Austin Forum on Tech. & Society**
Jennifer, who goes by “Houli”, has decades of experience in management and strategy as both a staff member of and consultant to colleges and universities, hospitals, and nonprofit organizations.
During our interviews, Austin leaders consistently brought up a number of key learnings and takeaways including the following three:

1. **Austin is “the king of all the second tier cities”**

   Austin’s leaders echoed verbally what we saw in the survey results – Austin is a fantastic city with a high quality of life and a lot of interesting things happening in regard to innovation (e.g., startups, accelerators), but Austin falls into the second tier of U.S. cities when it comes to innovation.

   What could push Austin up into that top tier? Multiple interviewees pointed to the fact that Austin does not have a true “PayPal Mafia” to spur second- and third-generation innovation like Silicon Valley. For those unfamiliar with the term: several former employees of PayPal in the late 1990s and early 2000s went on to create massive, billion-dollar enterprises and/or invested their capital into successful start-ups. Tesla, SpaceX, LinkedIn, YouTube, and Yelp were all founded by former PayPal employees. Trilogy, which came to Austin in the late 1990s, is seen as Austin’s closest thing to a PayPal Mafia but operates at a much smaller scale.

2. **UT provides “massive intellectual, social, and financial capital” but many of its top grads choose to leave Texas**

   Austin’s “education ecosystem” scored as the second most favorable characteristic for innovation in our survey. Many interviewees praised the institution, noting that its scale and quality generates a ton of high-quality talent for the city. The presence of the Dell Medical Center, and key staff throughout the institution (e.g., Bob Metcalf), were also highlighted.

   However, we also heard that many top grads – particularly those with in-demand degrees like Computer Science – leave Austin, and often Texas, for jobs in other cities such as San Francisco and New York.

3. **Austin’s unique culture is a “great advantage” for attracting talent**

   Respondents strongly felt that Austin provides a very high quality of life with that characteristic viewed as Austin’s most favorable characteristic. The city has great events, live music, beautiful public places, warm weather, and a welcoming, accepting culture that makes people want to move and stay here.

   In our interviews, we heard that this quality of life is playing well to Austin's advantage. Increasingly, major companies (e.g., Facebook, Google) are moving divisions here, to both access a new talent pool and to offer another destination for talent seeking a higher quality of life and lower costs.
### Top Assets and Growth Areas

#### Assets

<table>
<thead>
<tr>
<th>Asset</th>
<th>Description</th>
<th>Growth Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Brand, Reputation</td>
<td>City Infrastructure</td>
<td></td>
</tr>
<tr>
<td>and Lifestyle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Texas</td>
<td>Work Culture</td>
<td></td>
</tr>
<tr>
<td>State Tax / Regulatory</td>
<td>Few Major Homegrown Success Stories</td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>City Amenities</td>
<td>Key Talent Gaps</td>
<td></td>
</tr>
<tr>
<td>Consumer Branding Success</td>
<td>Shallow Funding Base</td>
<td></td>
</tr>
</tbody>
</table>

#### Quotes

- "There’s a long history of people coming to Austin and wanting to stay in Austin”
  
  - Jason Chicola, Rev

- "There are lots of startups trying new things, but very few Austin-based success stories”
  
  - Austin Executive
In our survey, overall quality of life ranked as Austin’s #1 most favorable characteristic for fostering innovation – an outcome that echoes Forbes’ assessment. Respondents noted “We’re above a 3, but…the brand alone counts for something” and “I see a vibrant, young start-up hub.” Interviewees suggested Austin’s strong reputation for high quality of life offers a key talent magnet that could help seed and scale the next generation of Austin success stories.

### 1. City Brand, Reputation and Lifestyle

Austin was listed as the “#1 Best Place to Live in America” in 2017 by US News & World Report

Austin has a reputation for being a great place to live – US News & World Report listed Austin as the #1 Best Place to Live in America in 2017. This reflects a strong city-wide reputation, which is built on great cultural amenities, high quality of life, a strong job market, and a young, dynamic culture. Austin thrives on its reputation as the live music capital of the world with fantastic public spaces and greenbelts, and incredible festivals including SXSW and ACL.

### 2. University of Texas

As a top-ranked public university, the University of Texas at Austin boasts an enrollment of 51,000 students and 3,000 faculty members. UT’s business and STEM programs consistently rank in the top ten of U.S. News and World Report lists, and the school is ranked #32 among global universities.

Some notable facts about the university:

- With a total of $150 million pledged, Dell Medical School opened its doors in summer 2016 to a group of 50 students with a 1% acceptance rate.
- The Dell Seton Medical Center is a 517,000-sq-ft teaching hospital (finished in May 2017) expected to create 15K new jobs and contribute $2 billion annually to the Austin economy; it is the only Level 1 trauma center in Central Texas.
- The IC2 Institute, founded by a former Dean of the McCombs School of Business, has put out 500+ publications promoting entrepreneurial wealth creation.
- The Bill & Melinda Gates Computer Science Complex and Dell Computer Science Hall is prepared for a 40% increase in faculty and a 50% increase in students in 2018; 20% of all computer science graduates in Texas come from UT
Texas has no income tax for both individuals and corporations, making it an attractive place to start and scale a business. The lack of an income tax combined with a large and growing state population, large state economy, and steady job growth. Forbes ranked Texas as the #4 state for doing business recently.

Interviews and open-ended survey responses suggested that Austin’s favorable tax and regulatory factor largely reflects state, not local city, policy. Austin actually has the highest per capita tax burden in Texas. Many respondents also noted that Austin has an increasingly burdensome regulatory environment with multiple people pointing to Lyft and Uber’s departure and later return due to a Texas state law.

Austin has a number of cultural and city amenities, led by SXSW. In 1987, a group of Austinites banded together to create a music conference that has since grown to over 95K attendees with a contribution of $325 million to the Austin economy in 2017. The festival has featured a variety of speakers and performers including former President Barack Obama and Elon Musk and is listed as a top conference for entrepreneurs by Inc. Magazine. Austin’s live music shows, museums, Capitol campus, parks and public spaces, and new state-of-the-art Central Library give the city character and draw talent.

Austin’s distinct culture and keen consumer sense has produced a slew of popular consumer-facing companies that use savvy consumer branding including Yeti, Tito’s Vodka, Outdoor Voices, Kendra Scott and Turnkey Vacation Rentals.

Yeti sells coolers, drinkware and apparel using its adventurous, outdoor-oriented culture to consumers; the company considered a rumored $3-5B IPO in 2016. Tito’s began as a side project for noted entrepreneur Bert Beveridge making flavored vodkas as gifts, but it has since grown into a $2B business. Kendra Scott is another success with a $1B estimated valuation after Berkshire Partners’ investment. Outside of consumer products, Turnkey Vacation Rentals recently raised $21 million on the value of its comprehensive customer service for vacation rentals like “a fine hotel”. All these businesses exhibit a strong consumer sensibility that many see as a core Austin strength.
According to an updated ranking by Inrix, a company that analyzes real-time traffic conditions, Austin is the 13th most congested city in the U.S., and I-35 southbound is the 6th most congested road in the U.S. A drive on Interstate 35 – a major interstate used by tens of thousands of Austinites for their commute every day – can often take 30 minutes or more for a journey that would otherwise take 10 minutes without traffic.

The lack of extensive public transportation options means that people still prefer their cars; however, the city has consistently focused on anti-car measures such as protected bike lanes and increased parking costs, disincentivizing driving rather than making it easier for citizens to make their daily commute. An Austin Business Journal survey reported that 47% of participants ranked transportation as the number one issue facing Austin – and our survey showed similar results. Though Capital Metro has plans to expand the bus system, there are no major plans to reach suburbs, and the Lone Star Railroad project ended in 2016. Surveys and interviews suggested many saw this as a key pain point for Austin that only seemed to be getting worse.

According to a WalletHub report on the “Most Stressed Cities,” Austin ranks close to the bottom of the spectrum, ranking 138th among 150 cities. This suggests a relatively happy and carefree workforce compared to workers in many other major American cities. One interviewee described Austin as somewhere in-between of Portland – the ultimate laid-back city – and San Francisco – a center of “cut-throat” intensity.

But long hours (at least sometimes) and a dedication to work are viewed as critical to start-up success. Austin's biggest success story – Dell – exhibits this point with one interviewee noting that “Dell people worked really long hours at the beginning - until 3 or 4AM on any given night.” Surveys and interviews suggest Austinites typically leave work by 5pm, while the prospect of staying late is largely a foreign idea and cultural practice. However, anecdotal and empirical research suggest this type of dedication is critical to startup success. New York City ranks #3 on the same WalletHub ranking and California cities dominate the top 25. In 2016, one report found that Silicon Valley created more than 50x more equity value than Austin, meaning the Bay Area created more equity value on average by January 7th than Austin did during the full year.

By January 7th
Silicon Valley would have generated as much equity value as Austin will for the whole year in 2016
3. Few Major Homegrown Success Stories

Survey results and interviewees noted that Austin lacks a strong portfolio of national and global success stories. Dell is a marquee brand but stands largely alone in terms of its size and success.

There have been a handful of other local successes such as Indeed, Whole Foods, SolarWinds ($950M IPO) and BazaarVoice ($800M IPO) – but these successes are the exception rather than the rule. As one survey respondent put it, “What are the great success stories? Whole Foods and Dell, to be sure. Maybe HomeAway and BazaarVoice. But beyond that, Austin seems to create a lot of mid-sized SaaS companies that don’t hit major scale.”

4. Key Talent Gaps

While Austin boasts UT Austin as a nationally renowned institution for STEM, the city has trouble retaining top talent. Over one-third of all UT computer science graduates leave Texas, many of which are the top achievers in their class. Interviews also suggested leaders see key gaps at the executive level in Austin.

The city is full of entrepreneurs and sales workers, but there are not a lot of C-suite level managers from high-profile companies, largely because there is a lack of those companies in Austin (see above). In contrast, former management of the Brigham Exploration Corporation, an Austin energy company purchased by Statoil in 2011, have created two new energy companies since then, both raising in excess of $500 million in the past two years. The question still remains – how do we create this same environment in IT?

5. Shallow Funding Base

Since the decline of Austin Ventures in 2012, Austin has had relatively thin funding with most investments going to later-stage startups. Silicon Valley venture capital firms account for 6 of the top 10 VC firms in the world, with a combined $37B in capital raised over the past 10 years; in contrast, the top Austin VC firms have a combined fund value of less than $90 million. One recent report suggests that private equity-backed funding makes up ~40% of Austin business funding, indicating proportionally less seed funding, which drives startup creation and growth. Interviews and survey results suggested Austin startups often visit investors in other cities to find funds to scale.
Included in this section:

1. **Industry growth projections** for the top 10 industries in Austin, plus a comparison to two other major U.S. cities

2. **Austin’s fastest-growing jobs** and commentary on how they will play into the innovation ecosystem going forward
Austin is expecting to see strong job growth across the board through 2024, with most industries expecting 20-30% growth over the 10-year period (per Texas Workforce Commission projection). Although Government was Austin’s biggest industry in 2014 – not surprising given the presence of the state capital – it is projected to fall to 4th by 2024. By then, Professional Services will reign as the largest industry in Austin at 92K jobs, adding 23K new jobs (34% growth) over the period, with Health Care in close pursuit at 91K jobs with 22K new jobs (33% growth).

Compare Austin to its peers in Texas or nationwide and one can observe substantial differences. Austin is often compared to San Francisco and certainly seems to be headed that way; Professional Services is by far the biggest industry in the Bay and the cities have very similar distributions of industries.

Dallas, on the other hand, has a very different distribution, with a far greater preponderance of health care, retail, and admin & waste services compared to either Austin or San Francisco.

Source: Data from state workforce commission websites
### Travis County’s top 15 fastest-growing jobs by projected 2014-2024 growth (%) (min. 750 new jobs)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Web Developers</td>
<td>3K</td>
<td>49%</td>
<td>3K</td>
</tr>
<tr>
<td>2</td>
<td>Electricians</td>
<td>4K</td>
<td>45%</td>
<td>4K</td>
</tr>
<tr>
<td>3</td>
<td>Plumbers</td>
<td>3K</td>
<td>41%</td>
<td>3K</td>
</tr>
<tr>
<td>4</td>
<td>Computer Systems Analysts</td>
<td>12K</td>
<td>40%</td>
<td>12K</td>
</tr>
<tr>
<td>5</td>
<td>Market Analysts</td>
<td>5K</td>
<td>39%</td>
<td>5K</td>
</tr>
<tr>
<td>6</td>
<td>Middle School Teachers</td>
<td>3K</td>
<td>39%</td>
<td>3K</td>
</tr>
<tr>
<td>7</td>
<td>Elementary School Teachers</td>
<td>7K</td>
<td>39%</td>
<td>7K</td>
</tr>
<tr>
<td>8</td>
<td>Cooks</td>
<td>9K</td>
<td>38%</td>
<td>9K</td>
</tr>
<tr>
<td>9</td>
<td>Construction Laborers</td>
<td>9K</td>
<td>38%</td>
<td>9K</td>
</tr>
<tr>
<td>10</td>
<td>Secondary School Teachers</td>
<td>5K</td>
<td>38%</td>
<td>5K</td>
</tr>
<tr>
<td>11</td>
<td>Application Software Developers</td>
<td>12K</td>
<td>38%</td>
<td>12K</td>
</tr>
<tr>
<td>12</td>
<td>Computer &amp; Info Systems Managers</td>
<td>3K</td>
<td>38%</td>
<td>3K</td>
</tr>
<tr>
<td>13</td>
<td>Substitute Teachers</td>
<td>4K</td>
<td>38%</td>
<td>4K</td>
</tr>
<tr>
<td>14</td>
<td>Construction Supervisors</td>
<td>4K</td>
<td>37%</td>
<td>4K</td>
</tr>
<tr>
<td>15</td>
<td>Registered Nurses</td>
<td>15K</td>
<td>35%</td>
<td>15K</td>
</tr>
</tbody>
</table>

Most of Austin’s fastest-growing jobs fall into three broadly-defined categories: computer science professionals (e.g., web and app developers), tradespeople (e.g., electricians), and educators. **Web Developers** expect to see the fastest growth over the 10-year period, at 49% growth, while **Computer Systems Analysts** and **Application Software Developers** each expect to add over 3,300 new jobs. Clearly, the tech boom that Austinites perceive is being expected by the labor markets as well; Computer Science grads will continue to do well in Austin.

However, there is much to be excited about for Austinites who do not have a Computer Science degree, and particularly those who wish to forego the traditional 4-year college path. **Electricians, Plumbers, Construction Supervisors**, and **Registered Nurses** – all jobs that can be obtained easily without a 4-year degree – all pay well and expect to add a substantial number of jobs. These present interesting opportunities across the board for Austin’s labor market.

Source: Data from state workforce commission websites
About Redwood Advisors

Contact Us
Thank you for reading the Austin Innovation Ecosystem Report 2018. We are happy to respond to questions on this report or to present its content. If you have any questions, comments, inquiries, or requests to present this material, please contact us here:

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What We Do
We help clients maximize profitable growth, deliver organizational excellence, and unlock digital potential.

Maximizing Growth: We help companies grow faster and more profitably with customized, end-to-end Growth Strategy projects. We also provide Board Services to ensure alignment and high-value board engagement and stand-up and run Strategic PMOs to deliver key strategic initiatives.

Transforming Organizations: We help companies achieve organizational excellence across six key dimensions including structure, roles and responsibilities and governance. Organizational Diagnostics projects baseline a company’s current state and projects in Organizational Design, Organizational Effectiveness and Human Capital help companies build best-in-class structures, systems (e.g., processes, metrics) and talent strategies.

Unlocking Digital: We help organizations unlock digital potential at the strategic, ecosystem and product level. We deliver Digital Strategy and Ecosystem Blueprint projects that help clients articulate a digital vision, strategy and plan and provide specific product guidance (e.g., target customers, features, business model) with Product Strategy projects.

Our Clients
Redwood Advisors has served numerous marquee institutions in the private, public, and social sectors including: