



Tech Council

— KC —

# TECH SPECS

— V4 —



PRESENTED BY:



**RSM**

# Table of Contents

WHO WE ARE .....	3
LETTER FROM THE CEO .....	6
ANALYSIS FROM RSM .....	7
EXECUTIVE SUMMARY.....	8
CURRENT STATE .....	11
ECONOMIC IMPACT .....	12
KANSAS CITY TECH WORKFORCE AT A GLANCE.....	13
THE 2030 OUTLOOK .....	15
LOCAL VS. NATIONAL SALARY AVERAGES.....	17
ANALYSIS FROM TECH CHECKPOINT .....	19
THE STATE OF OUR STATES .....	21
REPRESENTATION IN TECH.....	23
COMPUTER SCIENCE EDUCATION POLICY.....	29
COMPUTER SCIENCE DEGREES ACROSS STATE LINES .....	30
TECH SALARIES ACROSS STATE LINES.....	31
TECH INDUSTRY COMPARISONS   KC VS SELECT MARKETS .....	32
BRAIN GAIN IN KC .....	33
THE GREAT AFTER .....	34

# Who We Are

## ABOUT THE KC TECH COUNCIL

For Kansas City to maintain a fast-growing tech industry, it needs an ever-evolving coalition to advocate and serve as a catalyst for its success. That's where we come in. As an independent nonprofit membership organization, the KC Tech Council works with 160+ member companies and industry leaders to strengthen and promote the tech hub of the midwest.

## WHAT WE DO

### **Industry Access**

The tech industry employs one in every 10 workers in Kansas City. Through events such as The CEO Retreat, Access : Granted, our Executive Roundtable Series and conversations with industry leaders on our Byte by Byte podcast, we strive to create a unique space for these 100,000+ workers to connect, collaborate and achieve.

### **Workforce Development**

Every successful tech hub has one thing in common: a strong tech talent pipeline. In 2020, more than 20,000 tech jobs were posted in the Kansas City region. We employ short-term and long-term solutions to help bridge our region's tech talent gap. In 2021, we launched Apprenti KC, part of a nationally recognized apprenticeship program focused on diversity and equity in tech.

### **Policy Advocacy**

Legislative policy has the ability to help or hinder the growth and success of the tech industry. It is vital for KC's industry to have a collective voice before our elected officials. Led by our Policy Committee of industry leaders, KCTC works to do just that. We actively monitor, champion or oppose emerging issues that impact the industry, and inform our members on the issues they should prioritize.

# INDUSTRY LEADERSHIP COUNCIL

## KC TECH COUNCIL BOARD OF DIRECTORS

**Karen Stakem Hornig, Chairperson**

Chief Executive Officer  
NIPR

**Bill Graff, Vice-Chair**

Chief Information Officer  
Cerner

**Brian Anderson, Vice-Chair**

Chief Technology Officer  
NIC

**Greg Elliott, Secretary**

VP, Business Development  
1623 Farnam, LLC

**Michael Graber, Treasurer**

Partner  
RSM US LLP

**Fred Ellermeier, Nomination Chair**

VP, Connected Communities  
Black & Veatch

**Josh Maxfield, Policy  
Committee Chair**

Associate General Counsel-Corporate  
Garmin International Inc.

**Annie Brock**

Public Sector Government Sales  
Google

**Angela Hurt**

Chief Executive Officer  
Veracity Consulting Inc

**Ed Link**

Global VP of Information Technology  
Garmin International Inc.

**Alan Lowden**

Chief Technology Officer  
H&R Block

**Jeanette Prenger**

President & Chief Executive Officer  
ECCO Select Corporation

**Andrea Schweller**

Mission Critical Business Development  
JE Dunn Construction

**James Stipek**

Shareholder  
Polsinelli PC

**Tanya Arthur**

Chief Information Officer  
Blue Cross and Blue Shield  
of Kansas City

**David Barnard**

Partner  
Stinson LLP

**Dr. Jeremy Bonnesen**

Director/Principal  
Summit Technology Academy

**Bret Borota**

Director, Global Account Leader  
Amazon Web Services

**Josh Brewster**

VP, Public Relations  
Trozzolo

**George Brooks**

Founder, Chief Executive Officer  
Crema

**John Chawana**

Vice-Chancellor | Institutional  
Effectiveness, Research & Technology  
Metropolitan Community College

**John Christopher**

Chief Technology Officer  
C2FO

**Byron Clymer**

Chief Information Officer  
Lockton Companies

**Eric Crampton**

EVP - Chief Technology Officer  
Cboe Global Markets

**Michael Dillingham**

Regional VP  
Unite Private Networks

**Kurt Hadermann**

VP, Technology  
BlueScope Buildings North America

**Michael Hannan**

Chief Security Officer  
LightEdge Solutions

**Ashlynn Horras**

Senior Project Manager (Diode Ventures)  
Black & Veatch

**Tedrick A Housh III**

Partner  
Lathrop GPM LLP

**John Kmetz**

Partner  
BKD, LLP

**Vlad Kucherovsky**

Managing Director  
Accenture

**Jennifer Lambert**

VP of Population Health  
Engineering Operations  
Cerner

**Jeff Martin**

VP, Data Centers  
Lincoln Rackhouse

**Heather McCain**

Professor of the Practice  
University of Kansas Edwards Campus

**Jill McCarthy**

SVP, Corporate Attraction  
Kansas City Area Development Council

**Trish Merz**

Regional VP  
Tanium

**David Mitchell**

Chief Technology Officer  
VMLY&R

**Scott Morris**

Chief Technology Officer  
National Association of Insurance  
Commissioners

**Shellie Myers**

Provost  
Park University

**Chris Newlin**

Director of Strategic Accounts  
Netrality Data Centers

**Neelima Parasker**

Chief Executive Officer  
SnapIT Solutions

**GC Paul**

Chief Information Officer  
GEHA

**Ravi Peru**

Chief Information Officer  
CommunityAmerica Credit Union

**Tonya Phillips**

Enterprise Sales Representative  
Zerto, Inc.

**Scott Ramon**

Chief Technology Officer  
NBKC

**Laura Sales**

Solution Specialist  
VMware Tanzu

**Nathan Tesmer**

Market Executive, Central States  
Chase

**Tucker Trotter**

Chief Executive Officer  
Dimensional Innovations

**Chris Underwood**

General Manager, 1898 & Co.  
Burns & McDonnell

**Shane Westrup**

Associate Director for Enterprise  
Information Security and IT Risk  
Intouch Group

**Terry Edwards**

Chief Information Officer  
Honeywell Federal Manufacturing  
and Technologies

**Scott Woodward**

Partner  
MarksNelson LLC

# Letter from the KC Tech Council CEO

As the regional advocate for Kansas City's tech industry, the KC Tech Council is proud to release the fourth edition of our KC Tech Specs report. This year's report analyzes our tech industry during one of the most volatile, unpredictable, and important years in recent history.

In my previous letter, I highlighted the importance of closing the tech skills gap by supporting computer science education reforms. In 2019, our team helped form and lead a statewide advocacy coalition to support computer science education reforms in Kansas.

After numerous meetings with Kansas state officials, five recommendations were presented to the Board of Education in February of 2020. I am proud to announce all five recommendations were reviewed and approved by the Board - including \$1 million of additional funding for computer science education.

Not too long after the positive news from Kansas was celebrated, a global pandemic was unfolding and the world would soon be in quarantine. Layoffs, furloughs, and closures were the headlines of daily business news, but something remarkable and surprising was also happening. KC-area tech employers were still hiring and throughout 2020, online regional tech jobs exceeded an average of 3,000 postings per month. In the middle of a global pandemic, demand for high-skilled tech workers was a shining star during a dark time. Though demand was high, supply was still low.

The KC Tech Council closely follows trends among peers to benchmark and measure results. Apprenticeship programs were emerging among peer tech councils as effective workforce training programs. Apprenticeships have been effectively training future workers since the beginning of time. However, modern tech employers have historically been absent from registered apprenticeship programs.

Our team reviewed and evaluated several emerging apprenticeship programs. In order to be considered, the program was required to demonstrate an equitable platform inclusive of race, gender, and prevent bias for non-traditional candidates.

In August, our Board of Directors approved a multi-year partnership with Apprenti, the national leading provider of tech-industry apprenticeships created by the Washington Technology Industry Association (WTIA).

By October, we identified and hired a program leader and officially launched Apprenti Kansas City, all before the end of 2020. To date, more than 300 candidates have applied and completed the required qualifications exam. Nearly 70% of those candidates are racial minorities, women or veterans. As this program grows, the positive impact on our community will be felt for many years.

In closing, I want to thank all of the KC Tech Council member companies, annual sponsors, and community partners who continue to support our work. I believe language creates your future, and we aspire for Kansas City to become the most equitable tech industry in the midwest. As you'll read in this KC Tech Specs report, a more diverse tech workforce has a measurable, positive impact on business. The future is depending on us, and together we can accomplish more than we aspire.

Thank you,



Ryan Weber  
President & CEO



# Analysis from RSM

Like many other cities across the United States, Kansas City has a growing technology ecosystem that is a critical component of the region's overall vitality. As the region emerges from the pandemic, its recovery has outpaced the overall US recovery rate. According to research by Oxford Economics, the Kansas City metro area has, as of Q1 2021, recovered 61% of its lost jobs compared to the national recovery of just 52%. The region is poised for strong growth and its growing technology industry is poised to fair well with the overall economic development of the region.

As Kansas City emerges into "The Great After" and works to expand its thriving tech ecosystem, embracing the technologies shaping the way we work, communicate, educate and entertain will be key. As an industry, technology has outpaced the growth of other sectors over the past decade. In addition, the pandemic provided an eye-opening experience to not only the reliance on technology solutions but to what is possible when forced to re-imagine the ways of the past. Kansas City is poised to establish itself as a major innovation hub in the midwest and US as tech talent and innovation spreads inward from the US coasts. In fact, research compiled by PitchBook Data, Inc shows the region has experienced a measurable uptick in venture capital and private equity investment in tech companies, with nearly \$15 billion in capital invested in regionally-based tech companies since 2017.

Business enterprises, both small and large, will likely move to increase discretionary spending and could focus a large portion of that spending on technology implementation and upgrades to meet the demands of the new hybrid work environments. A recent survey by RSM US LLP and the U.S. Chamber of Commerce found that 55% of middle-market leaders expect to increase spending on productivity-enhancing capital expenditures. The confidence of leaders to increase capital expenditures produced the highest reading since the survey that followed the passage of the 2017 Tax Cuts and Jobs Act.

On the other hand, the technology industry job market is tight, especially in metropolitan areas like Kansas City. The competition for - and cost of - highly skilled technology talent has risen accordingly. With overall unemployment rates in March of 3.7 and 4.2 percent in Kansas and Missouri, respectively, these states find themselves at employment levels very near to pre-pandemic levels of January and February 2020. The tight labor market and competition could pressure the continued growth of employment within the industry and put a heightened need for regional technology firms to retrain and upskill the local workforce.

Pent-up demand and increased savings rates of consumers during the pandemic, paired with record government stimulus and spending, will revive economic growth for years to come. The pace of technology adoption will continue as technology is finding its way into every corner of our economy. If a company suspends its technology investments, it could disrupt its own business model. Kansas City businesses are continually looking to enhance customer relationships, operational effectiveness, and their companies' culture. With labor and competitive challenges in Kansas City and across the United States on the rise, there has never been a better time to invest in technology.

RSM US LLP is proud to be a Cornerstone Sponsor of the KC Tech Council and for the opportunity to be a part of this year's KC Tech Specs report. RSM is the leading U.S. provider of audit, tax and consulting services to the middle market. We understand the importance of communicating industry-specific trends to Kansas City and are grateful for the opportunity to promote the technology ecosystem in this great city.

## **Davis Nordell**

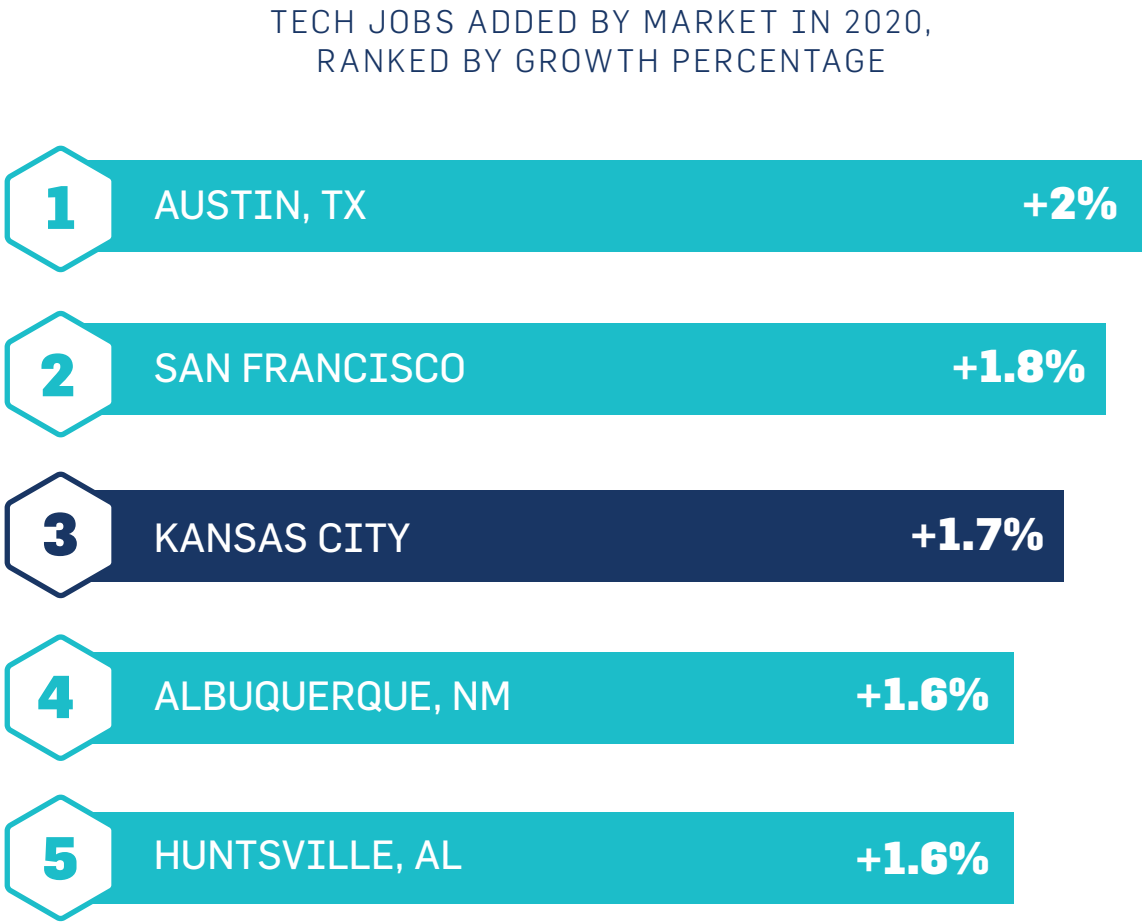
Senior Manager; Technology, Media & Telecommunications Senior Analyst

# Executive Summary

The KC Tech Council, voice of Kansas City's tech industry, relies on data to drive strategies that fulfill our mission of making Kansas City a leading tech hub in the United States. This report reflects on a most unconventional year. In 2020, as many industries and regional economies were decimated due to the fallout from the pandemic, Kansas City's tech industry experienced its own unique year, one that cemented our resiliency, revealed some shortcomings, and reset the vision of what comes next.

## Cementing Our Resiliency

Kansas City finished 2020 with 102,681 tech jobs. That's an increase of 1,723 jobs from 2019, ten times the increase of the year prior. In a year full of surprises, Kansas City saw its largest increase in tech jobs since 2017. These numbers weren't emblematic of every region's tech industry. In fact, Kansas City added the third highest percentage growth of tech jobs in the United States in 2020, trailing only San Francisco and Austin, Tex.

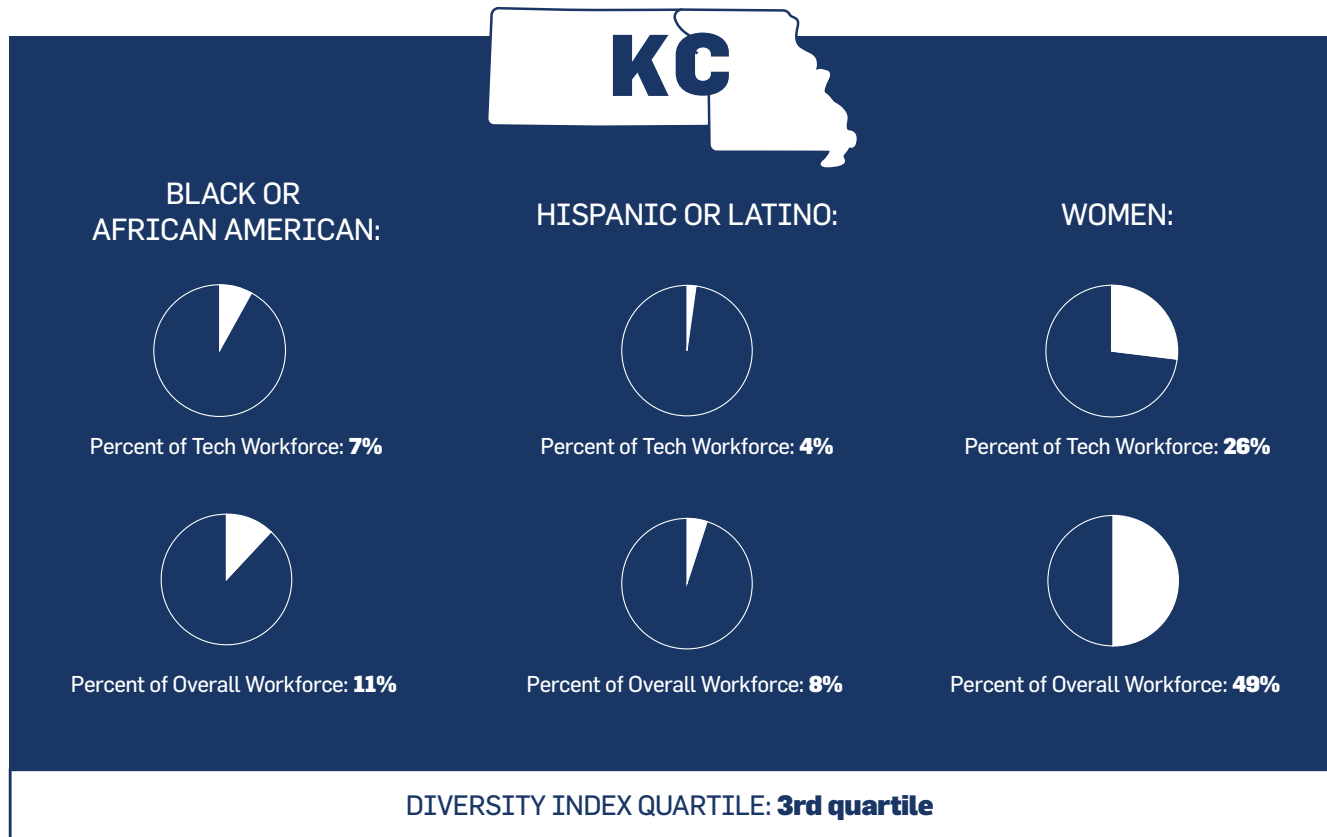




## Revealing Our Shortcomings

The year 2020 was revelatory of systemic inequalities that permeate our workplaces, education systems and daily lives. For the first time in KC Tech Specs, we are able to feature a meaningful look at diversity, equity and inclusion (DEI) numbers in our states and metro area. Our resource partners at CompTIA have created a quadrant ranking system measuring diversity and inclusion within the tech industries in US cities and states. Kansas, Missouri and Kansas City all fell into the third out of four quadrants.

### KC'S WORKFORCE DIVERSITY

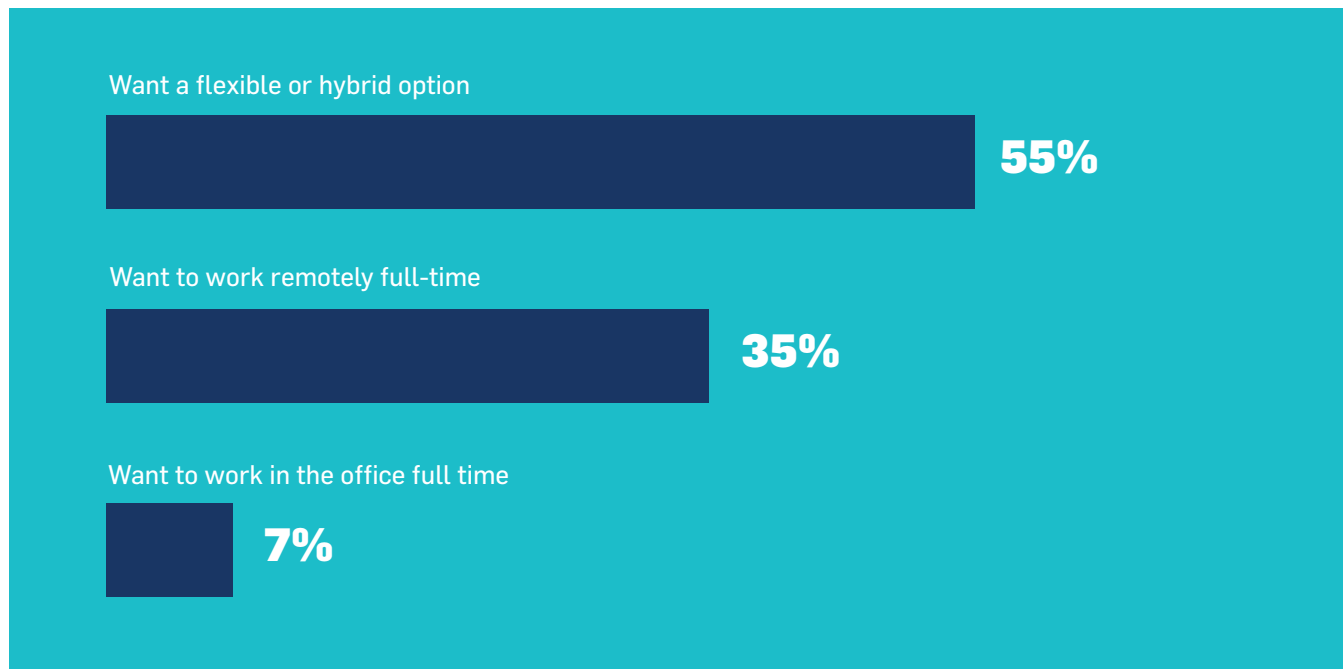


To be fair, no tech industry in the United States can claim to be demographically representative of its community. However, our region has an opportunity to correct this shortcoming through meaningful action. KC Tech Council is proud to champion efforts like the Apprenti KC tech apprenticeship program, intently focused on creating pathways into tech careers for those underrepresented in the industry.

## ***Resetting our Vision***

KC Tech Specs concludes with guidance to help employers embrace “The Great After”, the post-pandemic tech industry landscape. We can glean some insight on what might come next by looking at our past, and the tech industry’s outcomes after similar global economic events. Most pointedly, we know that tech doesn’t react the same way as other industries to these events.

### WHERE DO WORKERS PLAN TO WORK



It will also be important to study the motivations of workers, since talent is the currency of the tech industry, and the industry operates in an already tight talent market. With upwards of 60% of tech workers planning to job hunt in the next year, talent liquidity may reach levels that we haven't experienced before. And, it's clear that the “new normal” is a hybrid or work-from-home preference among those job seekers.

## CURRENT STATE

In 2020, Kansas and Missouri were collectively home to more than 15,000 tech businesses- that's 1,300 more than in 2019. That growth, in spite of unprecedented economic challenges, continued in new ways through one of the most turbulent, adversity-ridden years in our nation's history.

Kansas City's tech jobs grew faster than almost every other metro in the country, third only to San Francisco and Austin. This statistic alone reflects what we have always known to be true: a midwestern work ethic combined with a history of innovation makes Kansas City a unique incubator for technology and a crucial component of the industry's national success.

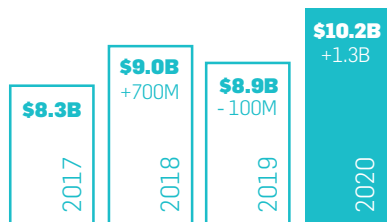
As we dissect various components of our region's industry, its strengths and shortcomings, we as a community are presented with the opportunity to advance Kansas City's national position and maintain our status as a flourishing metro.

## CURRENT STATE

# Economic Impact

After a plateau in 2019, the tech industry's impact on the region's economy increased significantly in 2020. Kansas was home to the largest percent increase, expanding its presence by 1.2%. Unsurprisingly, tech possesses a larger percentage of Kansas City's economy than either Kansas or Missouri, responsible for 10.5% of overall economic contributions. After a dramatic increase in financial impact in 2018, Missouri's contributions had the smallest amount of change between 2019 and 2020.

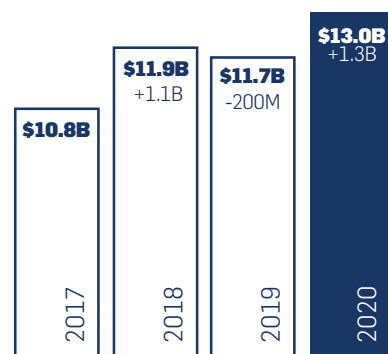
### KANSAS



### MISSOURI



### KANSAS CITY



#### PERCENT OF ECONOMY:

2019 **5.7%**  
2020 **6.9%**

#### PERCENT OF ECONOMY:

2019 **7.4%**  
2020 **7.6%**

#### PERCENT OF ECONOMY:

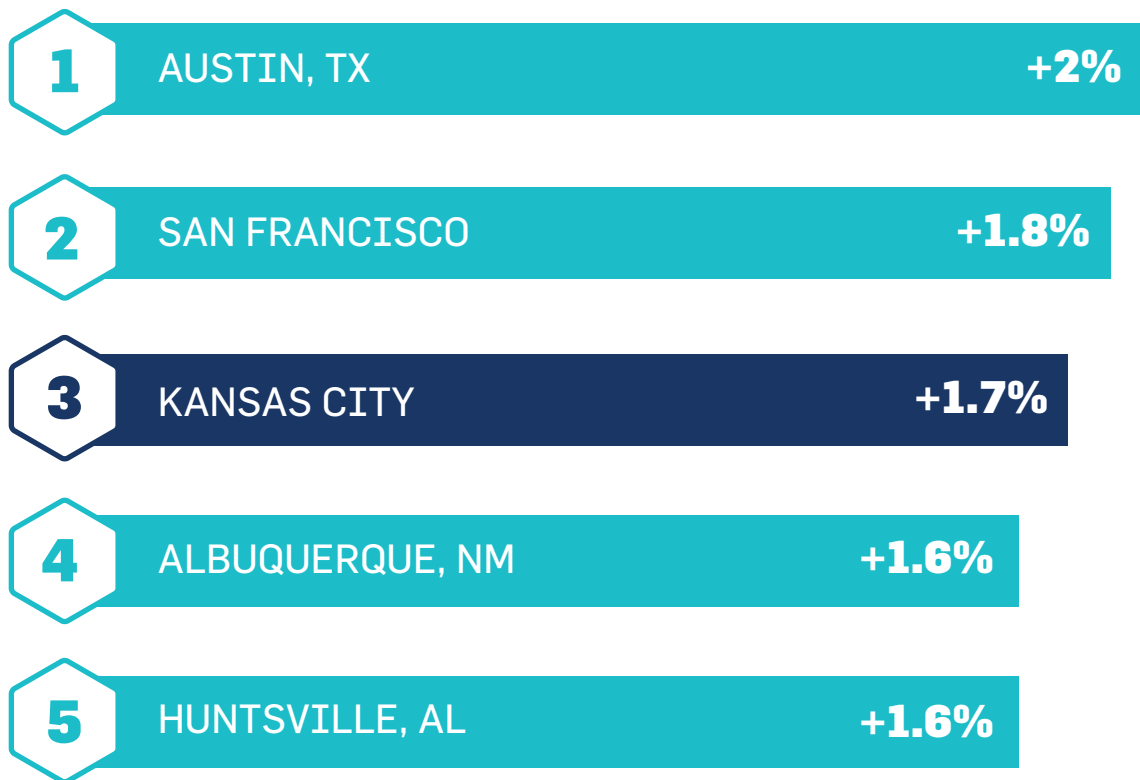
2019 **9.6%**  
2020 **10.5%**

## CURRENT STATE

# Kansas City Tech Workforce at a Glance

In 2020, Kansas City added the 11th most new tech jobs of all the metros in the United States, with an increase of 1,723 employees. Kansas City had the third-highest tech increase by percentage (+1.7%), behind only Austin and San Francisco.

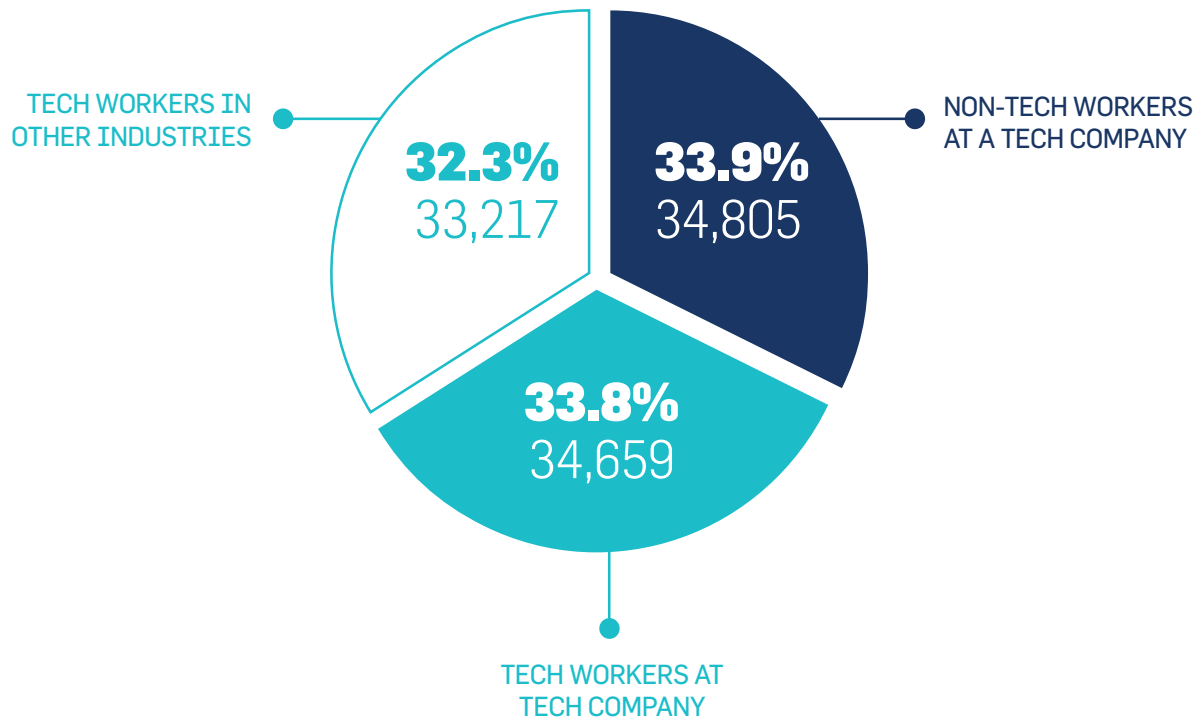
### TECH JOBS ADDED BY MARKET IN 2020, RANKED BY GROWTH PERCENTAGE



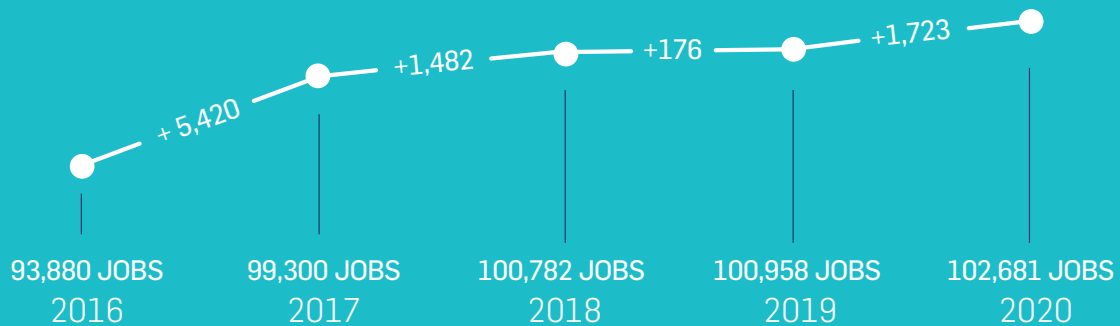
## THREE CATEGORIES OF TECH WORKERS

- **Tech workers in other industries:** a skilled tech worker who works in an industry outside of technology.  
(Ex. a software developer working at a small retail business.)
- **Non-tech workers at a tech company:** A worker who does not have technical skills working in the tech industry.  
(Ex. a marketing director at a tech startup.)
- **Tech workers at a tech company:** a skilled tech worker who works in the tech industry.  
(Ex. a computer engineer working at a tech company.)

## WHERE ARE THE TECH WORKERS?



## NET TECH EMPLOYMENT GROWTH IN KANSAS CITY



# THE 2030 OUTLOOK FOR TECH OCCUPATIONS

There are two main factors that contribute to the ebb and flow of the demand for tech workers: growth and replacement. Growth is characterized by an addition of tech jobs to support emerging technologies at new and existing companies. Replacement occurs when a tech worker leaves their position to accommodate lifestyle changes, retirement, etc.

In this report, we compare Kansas City's tech workforce demand to similar markets. We will take a deeper look at how we compare across various data points.

## PROJECTED GROWTH FOR TECH OCCUPATIONS:

	2020	2030 PROJECTION	NUMERIC CHANGE 2020-2030	PROJECTED % CHANGE 2020-2030:
<b>KANSAS CITY</b>	48,401	54,519	6,118	13%
<b>MISSOURI</b>	96,053	109,199	13,146	14%
<b>KANSAS</b>	40,649	44,195	3,545	9%

## PROJECTED REPLACEMENT RATE FOR TECH OCCUPATIONS:

	ANNUAL REPLACEMENT COUNT (2020-2030):	ANNUAL REPLACEMENT PERCENT (2020-2030):
<b>KANSAS CITY</b>	3,289	6.8%
<b>MISSOURI</b>	6,576	6.8%
<b>KANSAS</b>	2,734	6.7%

HIGHEST AND LOWEST COMBINED GROWTH &  
REPLACEMENT RATES ACROSS THE UNITED STATES

LOWEST PROJECTED PERCENT  
CHANGE BY STATE (2020-2030)



HIGHEST PROJECTED PERCENT  
CHANGE BY STATE (2020-2030)



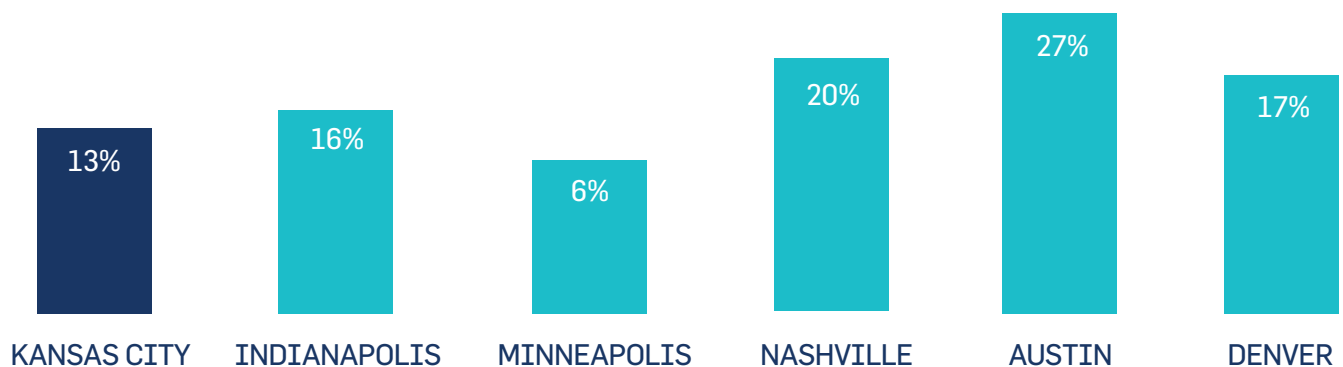
LOWEST PROJECTED PERCENT  
CHANGE BY CITY (2020-2030):



HIGHEST PROJECTED PERCENT  
CHANGE BY CITY (2020-2030):



PEER GROUP PROJECTED COMBINED GROWTH  
& REPLACEMENT PERCENT CHANGE





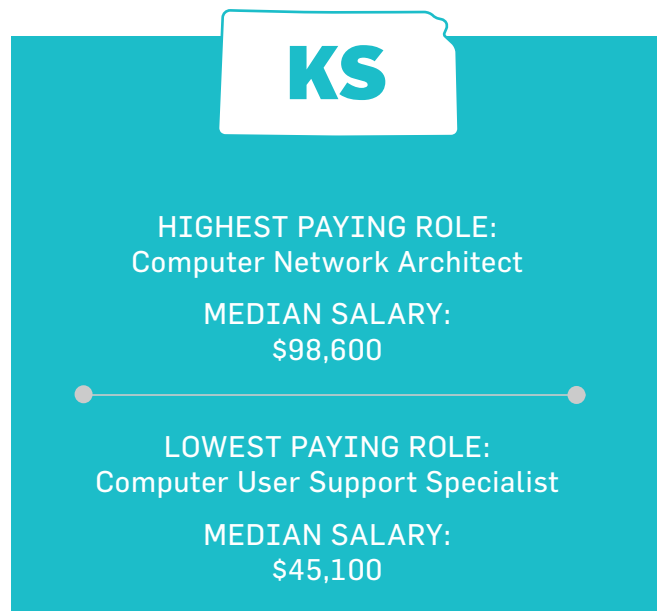
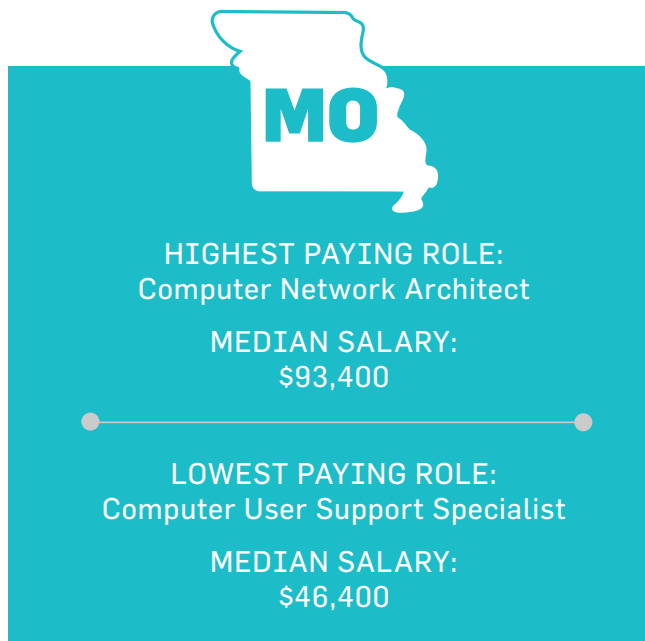
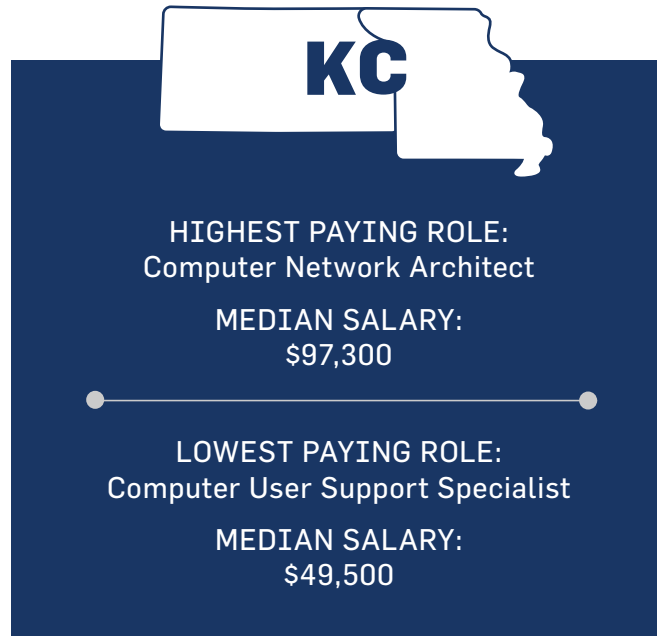
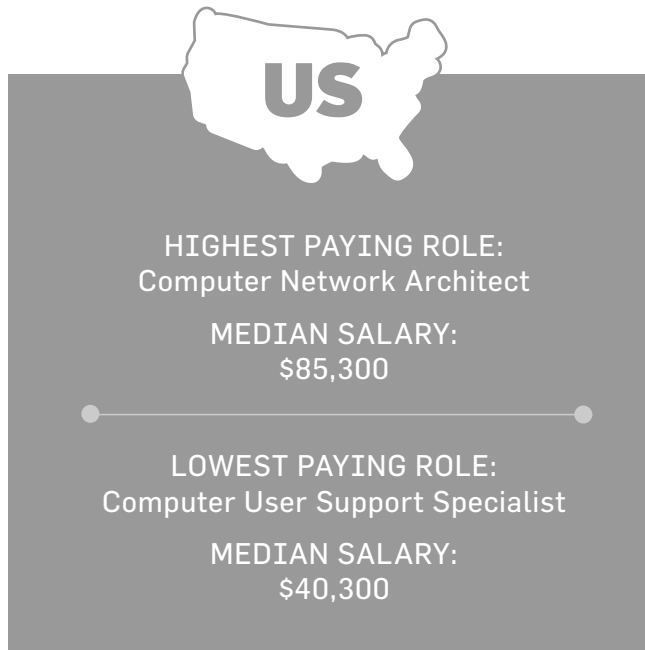
# LOCAL VS. NATIONAL SALARY AVERAGES

At first glance, the \$7,000+ deficit between Kansas City's median tech wage and the US median tech wage is concerning. That concern fails to take into consideration the low cost of living, quality of life and other valuable components of our region that attract tech workers. However, in a world where remote work is the new normal, salary plays an increasingly important role in recruitability. While the Kansas City region outpaces its home states, the median salary lags behind the US as a whole.

## TECH OCCUPATION SALARIES

	10 <sup>TH</sup> PERCENTILE	25 <sup>th</sup>	MEDIAN SALARY	75 <sup>th</sup>	90 <sup>TH</sup> PERCENTILE	% HIGHER THAN MEDIAN AREA WAGE
<b>US</b>	\$51,635	\$66,321	\$86,852	\$111,379	\$142,692	89%
<b>KC</b>	\$49,322	\$62,137	\$79,369	\$99,344	\$119,734	76%
<b>MO</b>	\$45,922	\$58,459	\$75,639	\$95,099	\$115,433	83%
<b>KS</b>	\$46,247	\$57,739	\$73,015	\$91,112	\$109,949	80%

## HIGHEST AND LOWEST MEDIAN SALARY BY TECH OCCUPATION

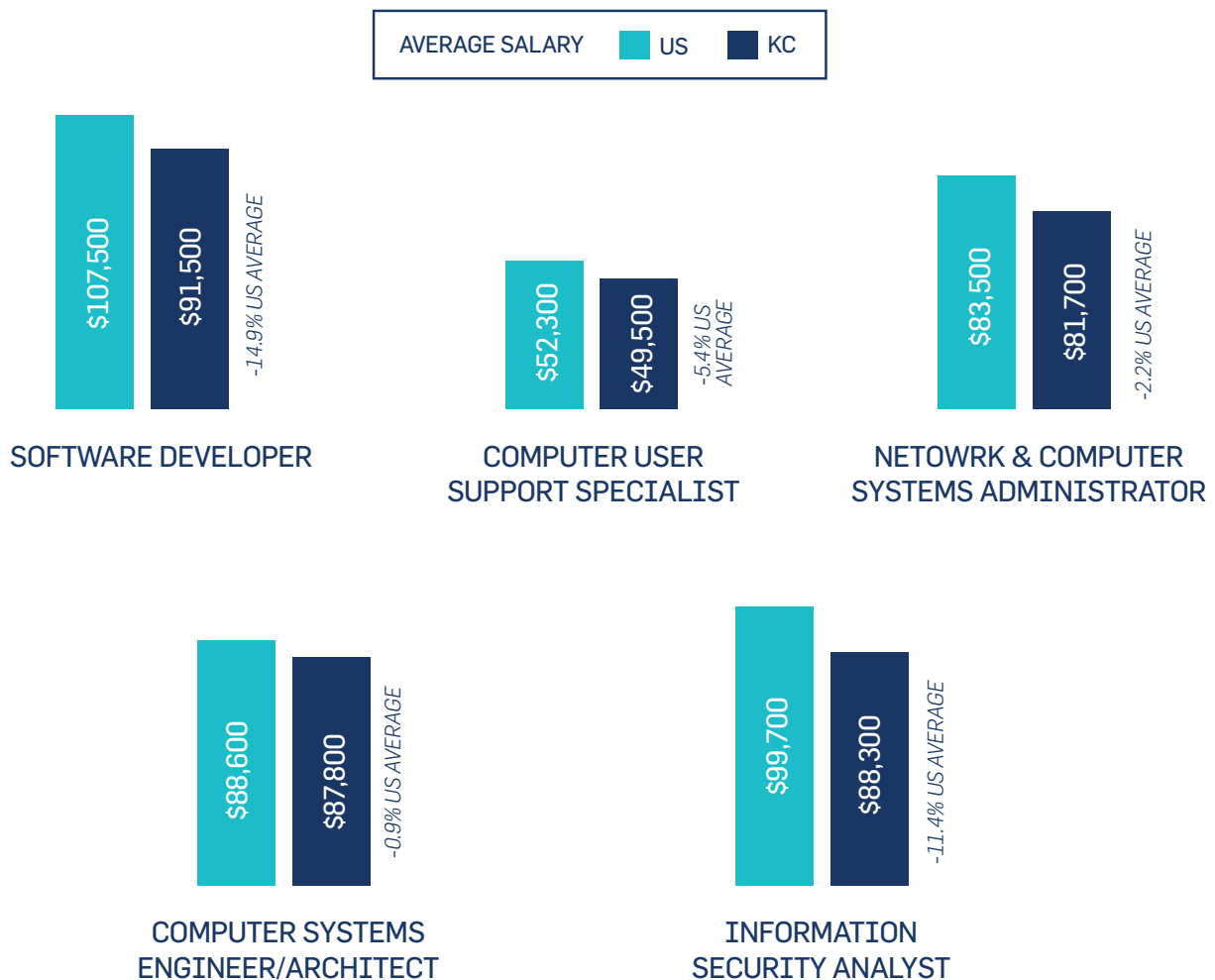


# ANALYSIS FROM TECH CHECKPOINT



The Tech Checkpoint is a monthly workforce report produced by the KC Tech Council. Each month, we collect data from our partners at JobsEQ and compile it into one report delivered straight to the inboxes of KCTC subscribers. In addition to current statistics, Tech Checkpoint offers thought leadership from local talent acquisition company, ECCO Select.

The occupations listed below **were consistently ranked in the top five occupations demanded in our region.** The median wage comparison between KC and the US reflects the same trend seen in the greater comparison of wages listed in the “Local vs. National Salary Averages” section.



ACCORDING TO THE 2020 MONTHLY TECH CHECKPOINT, THE  
FOLLOWING ARE OCCUPATIONS, CERTIFICATIONS AND  
SKILLS IN HIGHEST DEMAND IN KC.

## TOP 10 OCCUPATIONS

---

1. Software Developer
2. Computer User Support Specialist
3. Network and Computer Systems Administrator
4. Computer Systems Engineer/Architect
5. Information Security Analyst
6. Information Technology Project Manager
7. Software Quality Assurance Analyst and Tester
8. Computer Systems Analyst
9. Web Developer
10. Database Administrator

## TOP 5 CERTIFICATIONS

---

1. Secret Clearance
2. CISSP
3. CCNA
4. PMP
5. CCNP

## TOP 5 SKILLS

---

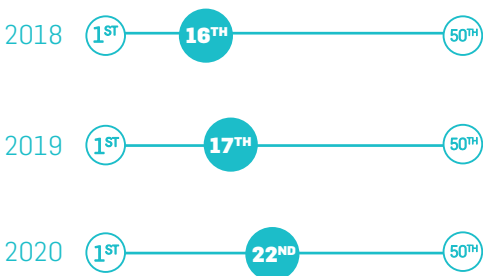
1. Computer Programming/Coding
2. SQL
3. Agile
4. Java
5. Linux

# THE STATE OF OUR STATES

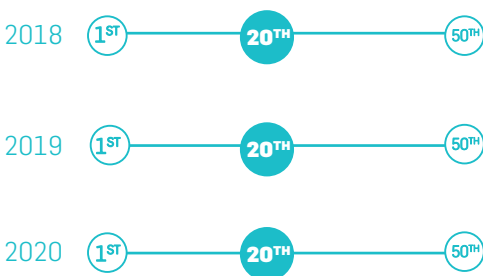
In order for us to understand our opportunities as a region, we must examine the current status of various components of the tech industry in Kansas and Missouri independently. This section provides a year-over-year look at measuring points from each state's tech industry, beginning in 2017 & 2018.



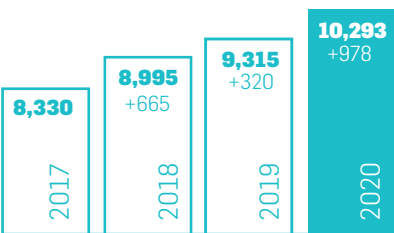
## NET TECH EMPLOYMENT JOBS ADDED STATE RANK



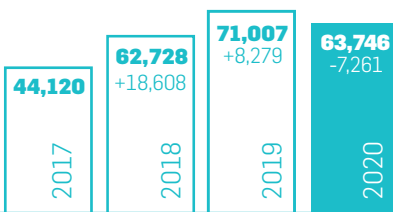
## NET TECH EMPLOYMENT STATE RANK



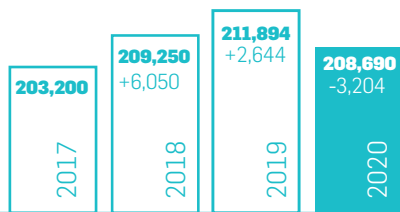
## TECH BUSINESSES



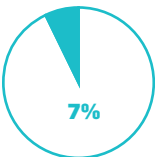
## TECH JOB POSTINGS



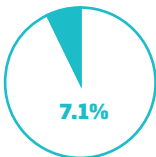
## NET TECH EMPLOYMENT



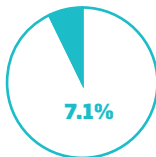
## NET EMPLOYMENT AS A % OF OVERALL WORKFORCE



2018



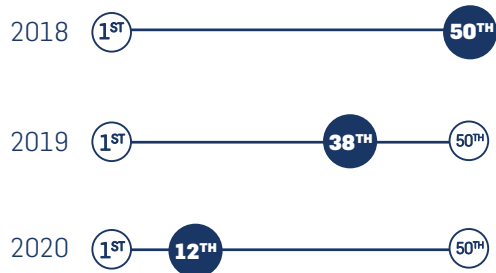
2019



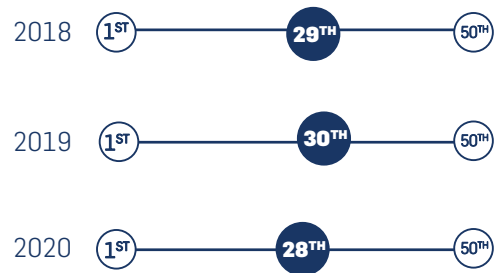
2020



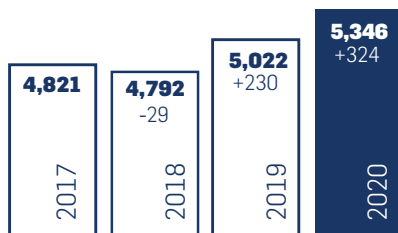
### NET TECH EMPLOYMENT JOBS ADDED STATE RANK



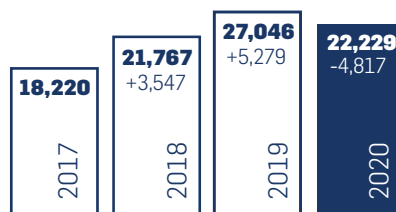
### NET TECH EMPLOYMENT STATE RANK



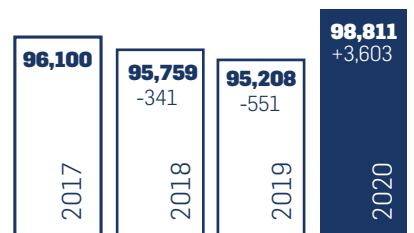
### TECH BUSINESSES



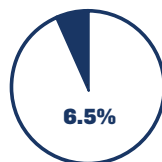
### TECH JOB POSTINGS



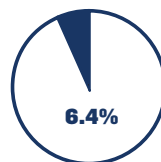
### NET TECH EMPLOYMENT



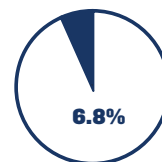
### NET EMPLOYMENT AS A % OF OVERALL WORKFORCE



2018



2019



2020



## REPRESENTATION IN TECH

A reflection on 2020 would not be complete without addressing the conversation on racial inequality in the US. Opportunities arose to examine our history, its impact on the present and ways to create positive change in the future. In business, it became crucial for companies to speak out and prioritize diversity, equity and inclusion more than ever before.

The underrepresentation of marginalized communities is prevalent in tech. This directly hinders areas of the ecosystem that make a successful industry. In this section, we explore the impact diversity, equity and inclusion has on business. There is also evidence of Kansas City's shortcomings in DEI and where improvements can and should be prioritized.

# REPRESENTATION IN TECH ACROSS RACE AND GENDER

## WHAT IS DEI (DIVERSITY, EQUITY, INCLUSION)?

**Diversity:** The practice or quality of including or involving people from a range of different social and ethnic backgrounds and of different genders, sexual orientations, etc.

**Equity:** The quality of being fair and impartial

**Inclusion:** The practice or policy of providing equal access to opportunities and resources for people who might otherwise be excluded or marginalized, such as those who have physical or mental disabilities and members of other minority groups.

DEI is a crucial and often overlooked component of building a successful workforce. According to a 2021 article from Catalyst, incorporating these values can aid companies in several areas.

**Recruit and retain talent** - marginalized groups are more likely to join and stay at an organization where they can find coworkers similar to themselves. If they're not there already, they need support to encourage them to stay in a group where they may be isolated due to their race, gender, ethnicity, etc. DEI is a crucial and often overlooked component of building a successful workforce. 35% percent of an employee's emotional investment to their work and 20% of their desire to stay at their organization is linked to feelings of inclusion.<sup>1</sup>



35% of an employee's emotional investment to their work and 20% of their desire to stay at their organization is linked to feelings of inclusion.



<sup>1</sup>CompTIA Cyberstates 2021, Catalyst



**Foster productivity & innovation** - A culture that prioritizes DEI allows employees to dedicate more time to their work. New levels of productivity, creativity, engagement and efficiency can be reached when an employee feels safe and supported through DEI initiatives in the workplace. "A 10% increase in perceptions of inclusion improves absenteeism, adding nearly one day a year in work attendance per employee."<sup>1</sup>



Companies with strong inclusive cultures and policies are more likely to report a 59.1% increase in creativity, innovation and openness and a 37.9% better assessment of consumer interest and demand.<sup>1</sup>



**Boost employer reputation** - While there is progress to be made on all fronts in DEI, it is clear that consumers lean toward patronizing companies that are perceived to prioritize these values. When these priorities are also reflected in corporate boards, companies are more likely to have a better understanding of more stakeholder groups.

**Deliver strong financial performance.** - There is no substantiated proof that DEI efforts are directly linked to stronger financial performance of a company. It's easy to assume the clear links between the positive impact on recruitment and culture would lead to increased revenue. However, studies are limited to uncovering correlation between the two rather than causation. From a statistical perspective, DEI efforts clearly increase the quality of talent pools and can easily be proven to be a vital ingredient to a thriving workforce rather than a more efficient route to a bottom line.

After proving its resilience and durability through the pandemic, our region has an opportunity to overcome the next obstacle: an insufficient pipeline of diverse candidates. **Marginalized groups make up less than 37% of the tech workforce in Kansas City, the only group to reach double-digits being women.**

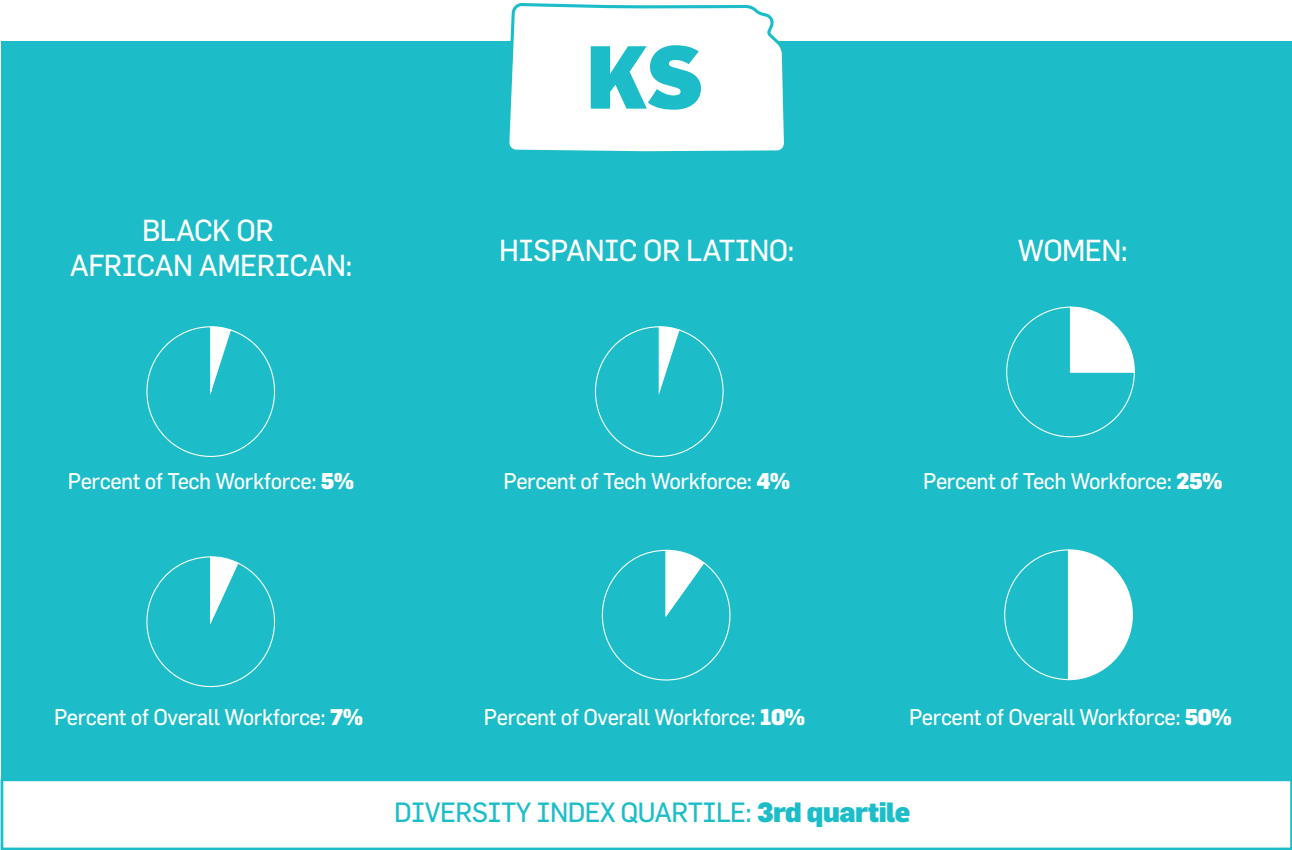
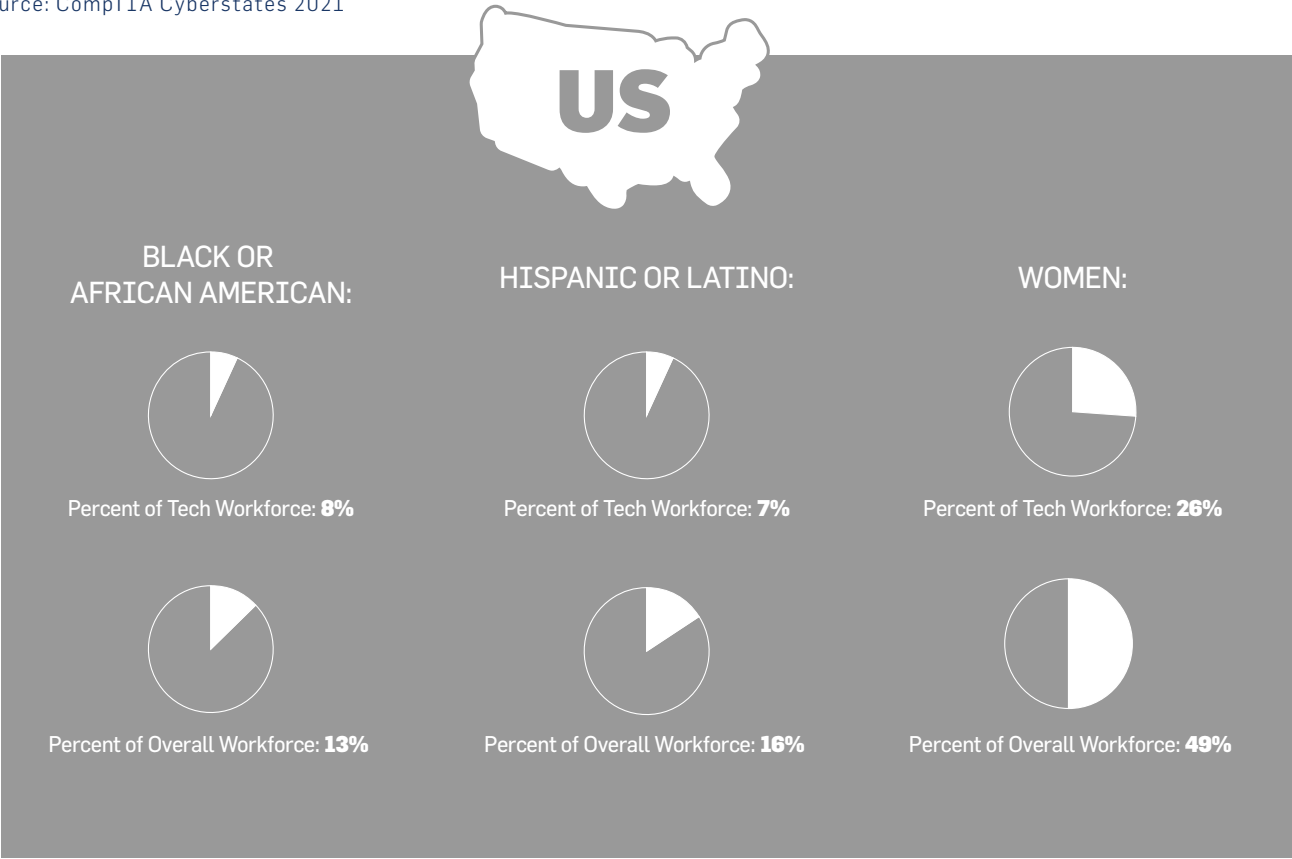
For all the reasons listed above, it is crucial to shift focus to dissolving barriers that exist between the tech industry and marginalized groups.

<sup>1</sup>CompTIA Cyberstates 2021, Catalyst

# DEMOGRAPHIC BREAKDOWN IN TECH INDUSTRY

The Diversity Index weighs two key facets of race and ethnicity within the workforce: quantity and distribution, and reflects it in a single metric.

Source: CompTIA Cyberstates 2021





BLACK OR  
AFRICAN AMERICAN:



Percent of Tech Workforce: **8%**



Percent of Overall Workforce: **12%**

HISPANIC OR LATINO:



Percent of Tech Workforce: **2%**



Percent of Overall Workforce: **4%**

WOMEN:



Percent of Tech Workforce: **27%**



Percent of Overall Workforce: **49%**

DIVERSITY INDEX QUARTILE: **3rd quartile**



BLACK OR  
AFRICAN AMERICAN:



Percent of Tech Workforce: **7%**



Percent of Overall Workforce: **11%**

HISPANIC OR LATINO:



Percent of Tech Workforce: **4%**



Percent of Overall Workforce: **8%**

WOMEN:



Percent of Tech Workforce: **26%**



Percent of Overall Workforce: **49%**

DIVERSITY INDEX QUARTILE: **3rd quartile**

The Diversity Index weighs two key facets of race and ethnicity within the workforce: quantity and distribution, and reflects it in a single metric.



## CITY AND STATE TALENT PIPELINE MARKET COMPARISONS

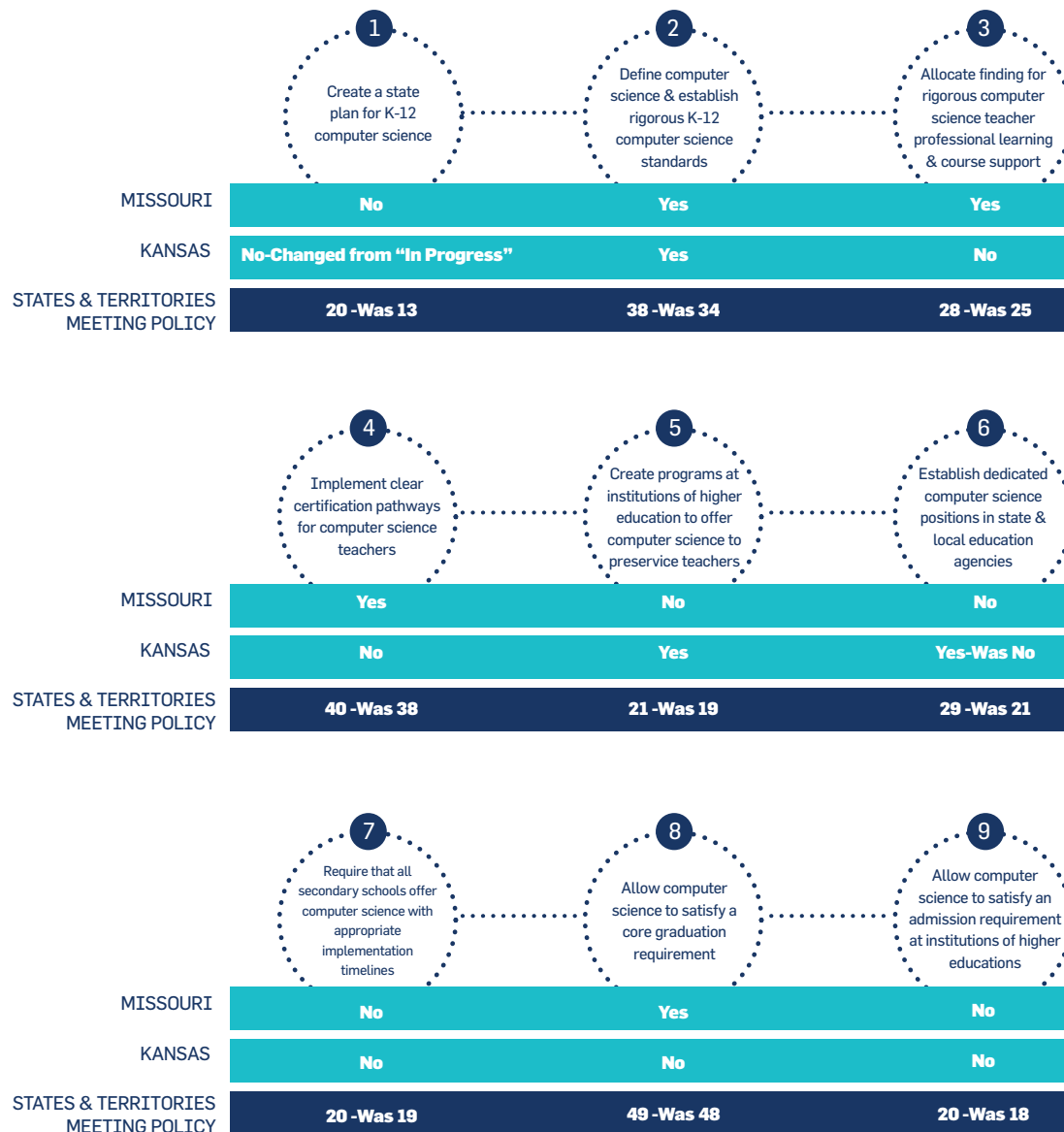
In this section, we explore Kansas City's tech talent supply in addition to those of its two home states and similar markets. With a continuously increasing demand for tech workers, it is important to examine our tech talent pipeline and how it stacks up against others.

# COMPUTER SCIENCE EDUCATION POLICY FOR K-12

To begin assessing the performance of our region's tech talent pipeline, it's important to start at the very beginning. In this case, kindergarten. Meaningful computer science (CS) education experience can play a predictive and significant role in determining a student's likelihood of electing to pursue a career in tech.

These nine policies were created by our advocacy partners at Code.org, a leading non-profit advocating for CS education expansion in the United States, as tactics that could help states bolster computer science education in their K-12 public schools.

Below, we've tracked each of the nine proposals, indicated how many states have already passed similar statewide legislation, and noted whether Missouri and Kansas have passed legislation as well. Additionally, we've indicated how many states had passed legislation the last time these metrics were tracked by KCTC, which was in 2019.



# COMPUTER SCIENCE DEGREES ACROSS STATE LINES

With a finite amount of tech workers, tech talent recruitment is highly competitive. With a dramatic increase in remote work, attracting top talent has become even more competitive between metros.

In order to match the increasing demand for talent, companies and education institutions have created numerous programs to more quickly produce skilled candidates. However, it is still common for companies to require or opt for candidates who have completed a four-year degree. We surveyed a small group of tech execs to help identify the top five states from which they typically recruit post-grad candidates. Tech degrees make up less than 5% of the total degrees produced by each state. Kansas and Missouri produce 1.5% and .37%, respectively, fewer than Indiana, the leader.

## WHO'S GRADUATING WITH COMPUTER SCIENCE DEGREES ACROSS THE REGION?

	KANSAS	MISSOURI	IOWA	NEBRASKA	ARKANSAS	INDIANA
BACHELORS	662	1,737	870	615	480	2,654
MASTER'S	144	808	603	314	263	571
ASSOCIATE'S	258	462	312	223	242	663
DOCTORATE	6	17	17	11	7	71
TOTAL TECH DEGREES	1,281	3,430	2,192	1,471	4,484	4,958
	2.32% OF TOTAL DEGREES	3.48% OF TOTAL DEGREES	3.85% OF TOTAL DEGREES	4.58% OF TOTAL DEGREES	2.95% OF TOTAL DEGREES	4.07% OF TOTAL DEGREES
TOTAL DEGREES	55,317	98,523	57,004	32,113	50,290	121,847

*Awards data are based upon degrees conferred for the academic year 2018-2019 and are provided by the National Center for Education Statistics. Statistics were pulled using Computer and Information Sciences and Support Services (11).*

# TECH SALARIES ACROSS STATE LINES

In addition to Kansas and Missouri producing fewer CS graduates than competing states, the competition to keep graduates in our workforce pipeline has stiffened with the normalization of remote work. As remote work continues to be an attractive perk for candidates, salary has become a crucial component of bringing talent to our region. Missouri holds the second highest tech salary after Iowa. Kansas trails behind with the fifth-highest salary out of the six states, only preceding Arkansas.



**MEAN TECH SALARY:** \$79,900  
**MEAN STATE SALARY OF ALL OCCUPATIONS:** \$49,000



**MEAN TECH SALARY:** \$76,000  
**MEAN STATE SALARY OF ALL OCCUPATIONS:** \$47,700



**MEAN SALARY:** \$80,100  
**MEAN STATE SALARY OF ALL OCCUPATIONS:** \$48,600



**MEAN TECH SALARY:** \$79,000  
**MEAN STATE SALARY OF ALL OCCUPATIONS:** \$48,800



**MEAN TECH SALARY:** \$69,600  
**MEAN STATE SALARY OF ALL OCCUPATIONS:** \$43,400



**MEAN TECH SALARY:** \$77,200  
**MEAN STATE SALARY OF ALL OCCUPATIONS:** \$47,500

# TECH INDUSTRY COMPARISONS

## KC VS SELECT MARKETS

In this section, we explore the current state of Kansas City's tech talent supply in addition to those of its two home states and similar markets. With a continuously increasing demand for tech workers, it is important to examine the efficacy of our tech talent pipeline and how it stacks up against others.

The matrix below outlines various metrics to measure how large the tech industry's employment base is in peer cities, how significantly tech has grown, and its share of economic impact within the market.

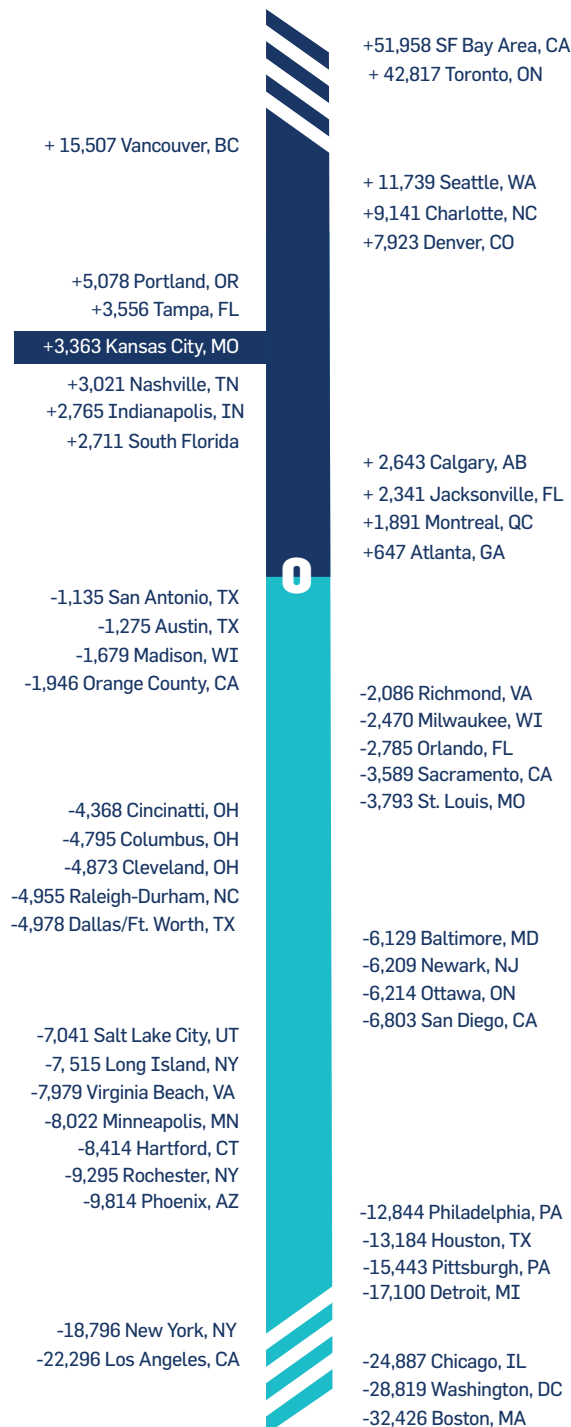
	NET TECH EMPLOYMENT JOBS ADDED RANK	ECONOMIC IMPACT RANK	NET EMPLOYMENT AS A % OF OVERALL WORKFORCE	NET TECH EMPLOYMENT
<b>KANSAS CITY</b>	11TH	27TH	9.4%	102,681
<b>INDIANAPOLIS</b>	27TH	30TH	7%	74,273
<b>NASHVILLE</b>	30TH	34TH	6.2%	65,283
<b>MINNEAPOLIS</b>	47TH	16TH	9.9%	195,727
<b>AUSTIN</b>	5TH	13TH	15.3%	172,961
<b>DENVER</b>	8TH	14TH	12%	191,793



# BRAIN GAIN IN KC

"Brain gain" represents the number of tech degree graduates in the region vs. tech talent job creation in the market.

These rankings can be defined as a success and an opportunity for the region. KC consistently performs strongly when it comes to obtaining talent, we struggle when it comes to generating our own said talent. When comparing our region to other midwestern markets such as St. Louis and Chicago, Kansas City rises above. However there is room to prioritize talent in a way that elevates our ranking to be closer in comparison to tech talent hotbeds such as Austin and Denver, while placing an emphasis on talent attraction alongside talent generation.





## THE GREAT AFTER

How well can our past predict our future? Economic fallout isn't a new challenge for the tech industry, but will this pivot look the same as others? How can employers position themselves to succeed in this post-pandemic landscape, The Great After?

In short, examining data can help reveal the trends and motivations that lie within the most critical asset of the tech industry: its workers.

# THE GREAT AFTER

## PHASES OF THE PANDEMIC FROM A C-LEVEL POINT OF VIEW:

In March 2020, businesses across the nation left the office for what many presumed would be a one to two-week period to slow the spread of COVID-19. A year later, a handful of employees slowly began returning to the office after fully adapting a work from home regimen.

### ***Tech Impact Index***

The KC Tech Council reached out to a small group of tech executives in the region at the beginning, middle and end of this journey to gather data for our Tech Impact Index- a report that visualized data measuring the impact of the pandemic on the tech industry. Along with the evolution of the pandemic and the ever-changing requirements to prevent its spread, executives continuously evolved strategies across the board for the benefit of their businesses. Participants were asked about their company's remote work approach, predictions of when in-person work and events would resume and various other components of how businesses were fairing and adapting. The change in perspectives on these touchpoints indicates a clear willingness of tech executives to "meet the moment" when faced with unprecedented challenges.

### ***Remote Work***

When the first Index was created in April 2020, less than half of the employers represented had a 100% remote workforce. In July, when we reached out again, most participants had a 100% remote workforce. The most recent index, created in February 2021, also indicated a majority remote workforce. This is consistent with the major shift in perspective of when in-person events would resume. While most participants did not initially indicate a month deemed critical to resume in-person work, many felt comfortable identifying a specific month in which it would be possible, if not crucial, to get back to the office. Whereas in the July index, nearly all participants stated the timeline for resuming in-person work is unknown, not applicable or not critical, with only two participants stating specific months. In this year's February installment, three participants had resumed in-person practices, and the rest indicated in-person would resume in the summer of 2021, the earliest being July. Across the board, throughout the pandemic, executives indicated a clear assumption that remote work would be much more common post-pandemic.

### ***Workforce Freeze & Reduction***

Of course, another significant concern caused by the pandemic was its impact on the economic component of the industry. The vast majority of participants in each index agreed the demand for technology, both new and existing, would increase because of the pandemic. Despite this, the jarring economic impact of the pandemic was not completely avoided. In the beginning, more than half of the participants indicated a freeze in hiring. The rest either indicated no impact or an increase in hiring, with less than 12% indicating layoffs, furloughs or pay reductions. It can be deduced from these numbers that the tech industry, while not invincible, managed to weather the storm mostly unscathed. According to an April 2020 report from the Conference Board [1], 40% of participating organizations reported implementing some level of cost-reduction action, including cutting bonuses, layoffs and a decrease in pay and bonuses. Throughout the course of the pandemic, the main concern of participants was the uncertainty of the future, followed closely by maintaining culture, then changing strategy, and maintaining payroll.

The evolution of the impact of the pandemic showed an initial naivety to the duration of this culture shift, an acceptance of the new norm caused by the pandemic then increased confidence in the tech industry's ability to evolve and the resilience of tech workers. In addition to these metrics, we gathered perspectives and advice from tech leaders that fueled this evolution. To view all the data collected, visit [kctechcouncil.com/covid-19-impact-index](https://kctechcouncil.com/covid-19-impact-index).<sup>1</sup>

## PREDICTIVE HISTORY

What do we know about past global economic events, and the influence they have had on the tech industry? Studying our past may help us understand the present, and project future outcomes.

Let's start with the past. The tech industry isn't recession-proof, though economic downturns tend to affect the tech industry differently than other sectors.

For example, in 2008, the Great Recession decimated many core industries, but almost served as a catalyst for the modern tech boom we're still experiencing:



The Great Recession everywhere else was more of a speed bump in Silicon Valley. In fact, it was arguably the birth of the modern startup boom. The number of startups tracked by Crunchbase rose rapidly from 1,200 in 2007, by at least 25% every year, to 5,700 five years later.<sup>2</sup>



Looking back further, to the dot-com crash in 2001, the tech industry was far more shaken than its counterparts. In some ways, it served as a "cleaning of house".

<sup>1</sup>The Conference Board, "Adapting to the Reimagined Workplace: Human Capital Responses to the COVID-19 Pandemic" <https://conference-board.org/topics/natural-disasters-pandemics/adapting-to-the-reimagined-workplace>

<sup>2</sup>Techcrunch.com, July 28, 2019, "What will happen when the bad times come?"

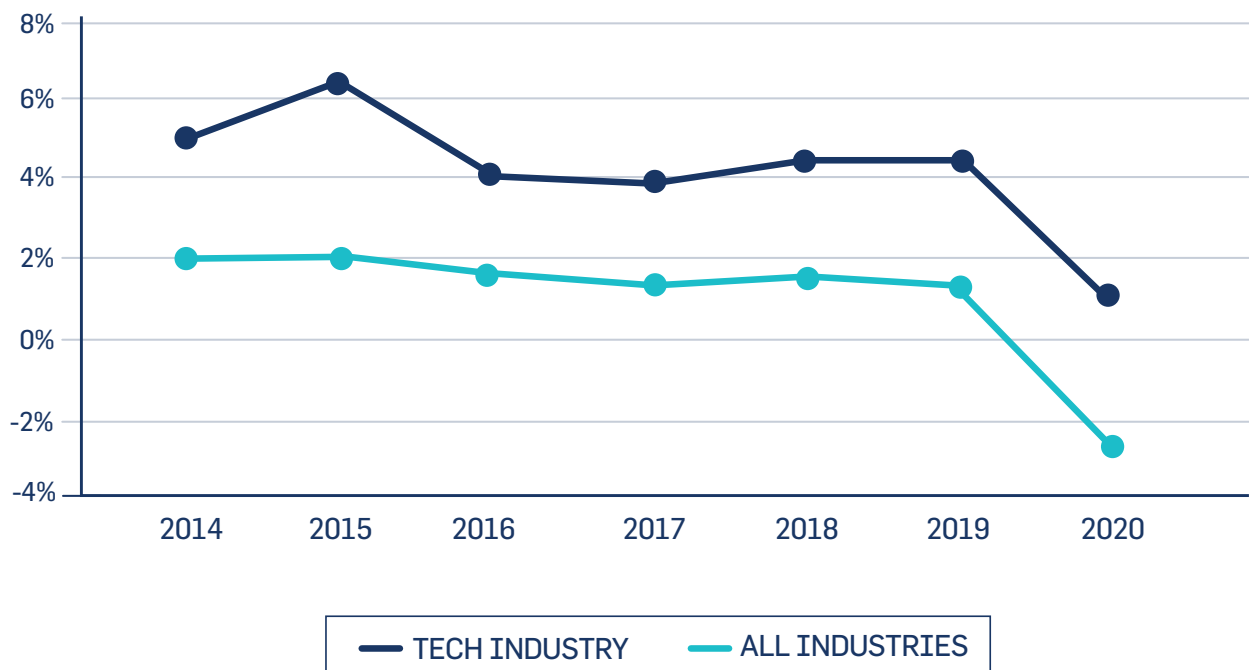


Tech was — of course, and rightly — hit hard. This was not entirely a bad thing. Even at the time it was clear that to some extent the chaff was being sifted from the industry, albeit at widespread painful personal cost. However, that unpleasant correction set the stage for the nonstop growth since.<sup>2</sup>



The current post-pandemic recovery may appear to look a bit more like the 2008 scenario. While other industries lost a large share of employment due to the pandemic, tech added new employees at a rate of about 1.5% in 2020, slower than earlier years, but still markedly higher than the rate in 2020 across all industries, which lost jobs at -2.7%.

#### ANNUAL CHANGE IN TOTAL EMPLOYMENT: TECH VS. ALL INDUSTRIES<sup>3</sup>



<sup>2</sup> Techcrunch.com, July 28, 2019, "What will happen when the bad times come?"

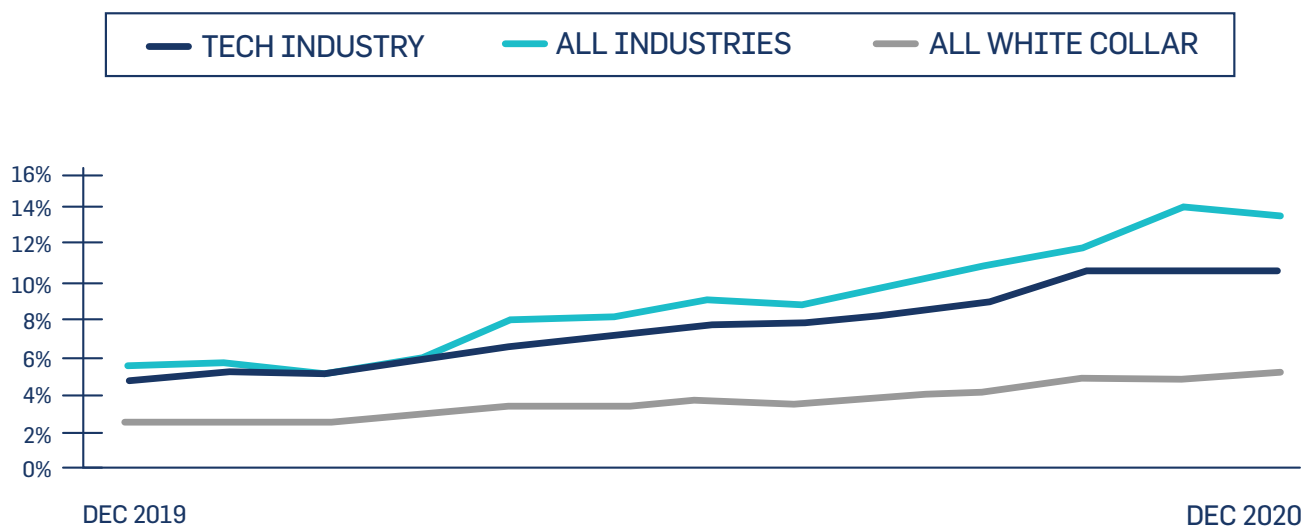
<sup>3</sup> CBRE, 2021, COVID-19 Impact on Resident Migration Patterns

## A UNIQUE PRESENT

The present is also markedly different than either past scenario, as it carries a lot of change in the nature of our workforce, specifically around remote work and remote hiring. More than 1 out of every 10 current tech job postings are for remote work.

“Tech ramped up its remote hiring at a much faster pace than the economy overall. Since March 2020 when shelter in place orders were enacted across the U.S., tech company remote job postings increased from 6% to 13%, while the increase for all industries was much less dramatic (from 3% in March to 5% in December).<sup>3</sup>”

ACTIVE JOB POSTINGS - REMOTE AS A % OF TOTAL

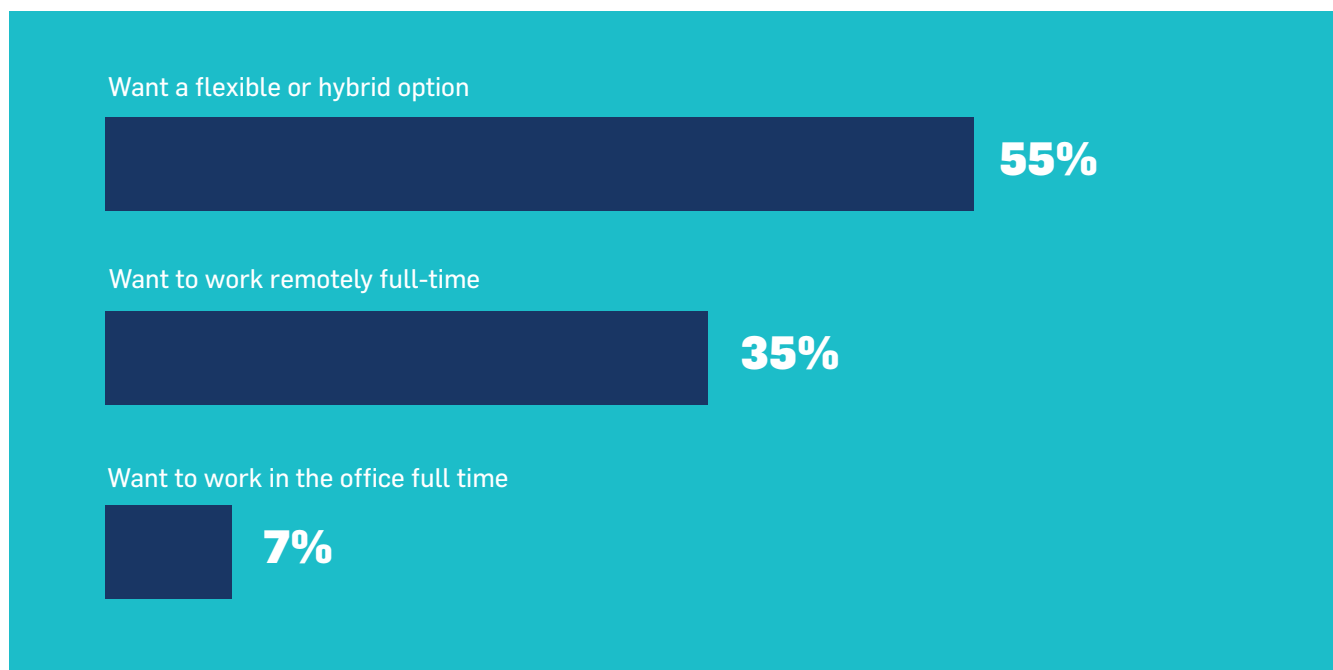


<sup>3</sup>CBRE, 2021, COVID-19 Impact on Resident Migration Patterns

Additionally, this shift to embrace remote work from home positions is largely following the desires of the candidates tech companies will be fighting to recruit over the coming months. **According to Indeed.com, 90% of tech workers who plan to change jobs in the next year prefer to work in a hybrid or flexible location, or prefer to work remotely full-time.**

## WHERE DO WORKERS PLAN TO WORK?<sup>4</sup>

*Tech Workers planning to change jobs sharing location preferences*



And, just how many of those workers plan to change jobs? **Upwards of 60% of tech workers are planning to begin a job search in the next 12 months**, in an Indeed.com survey taken in late 2020. This is leading to concern among some HR professionals of a “Turnover Tsunami”, as pent-up demand for job change creates unprecedented talent liquidity in industries that have tight talent margins, like tech.<sup>5</sup>

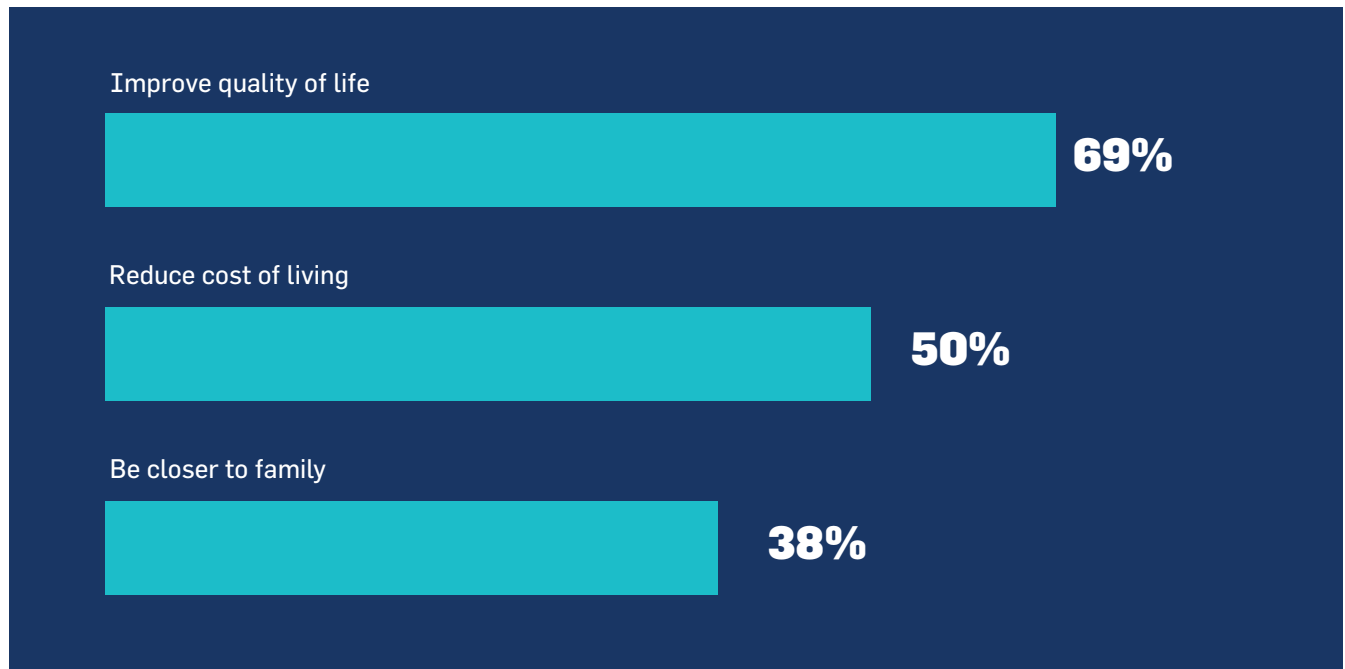
Another area primed to experience liquidity? Geographic location. In fact, **52% of tech workers are planning a geographic relocation in the next 12 months**. Reasons cited align with many of the very same benefits metro areas like Kansas City utilize to draw new talent to the region:

<sup>4</sup> Indeed.com, November 19, 2020, “Report: How Tech Workers see the Future of Remote Work”

<sup>5</sup> SHRM.org, 2021

## WHY ARE WORKERS MOVING?<sup>4</sup>

*Tech workers' top reasons for moving to a new location*



These sentiments are encouraging news for metro areas hoping to draw coastal talent post-pandemic, but it's important to note that **only 19% of these workers plan to move to a new state.** Those relocating may be in search of communities where a tech industry is already alive and well. Upwards of **76% of tech workers planning to move believe it's important to stay near a tech hub for networking opportunities.**

<sup>4</sup> Indeed.com, November 19, 2020, "Report: How Tech Workers see the Future of Remote Work"



## THE BOTTOM LINE ON “THE GREAT AFTER”

Our past can help us learn about our future. It's clear that past economic crises have impacted the tech industry, but that impact isn't always duplicative of the effect on other industries. Most recently, tech proved itself to be resilient in the face of the Great Recession, and early 2020 numbers seem to paint a similar picture of resiliency as we come out of the current crisis.

As meaningful as the past can be, it hasn't adequately provided guidance on the impending sea change in the workforce. The lines between geographic location and workplace have blurred. Talent pools have expanded, shallowing out in some areas, deepening in others. Data will help instruct employers on the decisions that will put them at an advantage to attract top talent, and that data is just emerging.

### FIVE THINGS TO WATCH:

- **Keep an eye on Big Tech.** The five leading employers (Alphabet, Amazon, Microsoft, Apple and Facebook) often set the stage culturally for other companies. Facebook staying fully-remote? That puts pressure on everyone else.
- **Look for new satellite headquarters.** This trend began pre-pandemic, but the decentralization of tech might be more attractive now as companies seek to imbed smaller, more nimble office space with their various talent pools across the country.
- **Pay attention to retention.** As companies become more hybrid, those who prioritize retention through total compensation packages, a focus on employee development and emerging trends will claim an added advantage in this new talent landscape.
- **Embrace this moment.** More than two-thirds of respondents in the Indeed.com survey believe the post-pandemic landscape will increase workplace diversity in terms of gender, race/ethnicity and disability. Which employers will embrace this moment?
- **Watch the double-edged sword.** Casting a wider geographic net to claim top talent from other markets? Expect the same net to extend from those markets to your top employees.



WANT MORE?

*Connect with us:*  
[kctechcouncil.com](http://kctechcouncil.com)

*Request a presentation:*  
[kctechspecs.com](http://kctechspecs.com)