



WE CREA+E JOBS





THE ECONOMIC IMPACT OF STARTUPS





FALL 2022 REPORT



JOB CREATION IN KANSAS CITY: THE ROLE OF FIRST-TIME EMPLOYERS

New jobs are critical to the success of great communities and strong economies. And creating these high-paying, full-time jobs has a ripple effect.

New jobs can attract people to a community. New jobs can mean previously unemployed or underemployed workers can support their families. New jobs can mean increased demand for products and services, which in turn drives the need for more businesses and more jobs.

New and young firms are the primary source of job creation in the U.S. economy in urban and rural communities, according to the Ewing Marion Kauffman Foundation.¹ The COVID-19 crisis and the emergency measures taken to stop its spread in 2020 and 2021 wreaked havoc on entrepreneurs

and small business owners. Shops closed, capital investments for new startups slowed, supply chains were tested, markets shifted and job seekers looked for better employment opportunities.²

Now, more than ever, it is critical to recognize the importance of startup firms to the creation of jobs and support those firms so they can lead the community back to recovery as jobproducing engines.

Kansas City's new and young small firms make a substantial contribution to new job creation in the metro area. In 2021, these new firms actually increased their share of job creation, creating **63%** of all new jobs in 2021, compared with 60% in 2020 and 57% in 2019.

DURING A FIVE-YEAR PERIOD, KC CREATED MORE THAN 86,000 JOBS.

HIGHLIGHTS:

- First-time employers in the Kansas City area³ who employed fewer than 20 employees created 19,849 new jobs in 2021, up 22% from 2020.
- These firms created an average of 16,413 jobs each year from 2017-21.
- Accounting for the employees these same firms hire in each succeeding year and accounting for job losses as well, first-time employers from 2017-21 accounted for 86,761 jobs in 2021. This accounted for 63% of all new jobs and about 8% of the total employment.
- The average wage for new jobs in the tech sector start 42% higher than the average

- wage of all new jobs, making that sector a key focus for job growth. In Kansas City, new tech sector startups created **1,879 jobs in 2021** and averaged **1,152 new jobs from 2017-21**.
- Using the hiring of a first employee as a proxy for startup, data reveals there were 8,197 startup⁴ firms in the KC area in 2021.
- Startups create good jobs. Startups pay starting salaries that exceed the area's average wage. In 2021, startups paid an average of \$73,190 in starting wages compared with the average wage of \$65,525.

¹ Wiens, Jason and Chris Jackson. "The Importance of Young Firms for Economic Growth." Ewing Marion Kauffman Foundation, 13 Sept. 2015. http://www.kauffman.org/what-we-do/resources/entrepreneurship-policy-digest/the-importance-of-young-firms-for-economic-growth.

² Parker, Kim and Juliana Menasce Horowitz. "Majority of workers who quit a job in 2021 cite low pay, no opportunities for advancement, feeling disrespected." Pew Research Center, 9 March 2022. https://www.pewresearch.org/fact-tank/2022/03/09/majority-of-workers-who-quit-a-job-in-2021-cite-low-pay-no-opportunities-for-advancement-feeling-disrespected/.

³ The Kansas City nine-county area includes Johnson, Leavenworth, Miami and Wyandotte in Kansas, and Cass, Clay, Jackson, Platte and Ray in Missouri.

⁴ This report identifies a startup firm as a firm hiring its first employee, as measured by compliance with unemployment insurance laws. The firm may or may not have had operations prior to the hiring of the first employee. Firms were further sorted for those with fewer than 20 employees upon first time filing, to eliminate large companies moving into the area.

WHY ENTREPRENEURSHIP?

New and young firms are the primary source of job creation in the U.S. economy, according to the Ewing Marion Kauffman Foundation.⁵ The Kauffman Foundation reports that these new businesses account for a disproportionate amount of new job growth, creating all net new jobs and almost 20% of gross job creation.

Because new and young firms are vital to job creation, KCSourceLink quantified these firms' impact in the Kansas City metro area. Using data from the Quarterly Census of Employment and Wages, KCSourceLink calculated for the first time the impact of startups on job growth in the organization's inaugural 2017 We Create Jobs report.

Since then, KCSourceLink has continued to track the number of jobs created by first-time employers who employed fewer than 20 employees.

MEASURING WHAT MATTERS: ENTREPRENEURSHIP IN KANSAS CITY

Access to the raw QCEW data from Missouri and Kansas allows for an in-depth look at job creation, wage growth, number of startups and the industrial density of startups. Employment and wage information is collected for workers covered by unemployment insurance laws. The QCEW data set contains information on employers and workers that can be explored to generate measurements of and insights into the entrepreneurial ecosystem. New firms (startups) are defined as the first appearance of an establishment in the data set.

This report provides 2021 data around job creation, tech job creation, number of startups and wages. It provides year-to-year comparisons on key metrics and demonstrates the ongoing impact of new and young firms on the Kansas City area economy.



GROWING JOBS AND REVITALIZING A SMALL TOWN

When Dave Alburty started his business, he didn't want to live close to work. He wanted to work close to home.

"I chose Drexel, Missouri, for my first company because I wanted to start a company where I wanted to live," he says.

With a population fewer than 1,000 residents, Drexel is a hidden gem south of Kansas City, and it has been perfect for Dave's ventures. He started AlburtyLab and then microbiology tool manufacturer InnovaPrep LLC in the town.

Today, InnovaPrep employs 40 people. When it comes to attracting and retaining team members, the location has been a draw, not a hindrance. Employees who travel from the metro have a reverse commute. And for those who live around Drexel, InnovaPrep offers interesting work.

"Drexel is cost effective," Dave says. "We make stuff, so we need space. We can put money into growth instead of into rent.

Drexel is an entrepreneurial town."

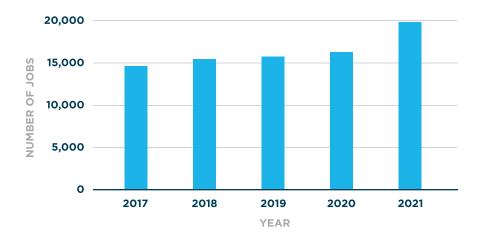
Remote work and easy shipping empower small businesses like InnovaPrep to select locations that are right for them — not necessarily in traditional centers of commerce. And these choices can help communities thrive.

⁵ Wiens, Jason and Chris Jackson. "The Importance of Young Firms for Economic Growth." Ewing Marion Kauffman Foundation, 13 Sept. 2015. http://www.kauffman.org/what-we-do/resources/entrepreneurship-policy-digest/the-importance-of-young-firms-for-economic-growth.

JOBS

JOB CREATION FROM FIRST-TIME EMPLOYERS

First-time employers in Kansas City that employed fewer than 20 employees created 19,849 jobs in 2021. These new and young firms contributed an average of 16,413 new jobs to the region for the past five years (Figure 1).



TREND

Figure 1: Kansas City startups increased their contributions to job creation in 2021 by 22%.

Taking into consideration the number of employees these same firms hired in 2017 and in each succeeding year as well as job losses, startups created 86,761 jobs from 2017 to 2021. This accounts for 62.9% of new jobs added and 8.2% of all jobs in Kansas City in 2021 (Figure 2).



IMPACT

Figure 2: Over the past five years, KC startups have created 86,761 jobs.

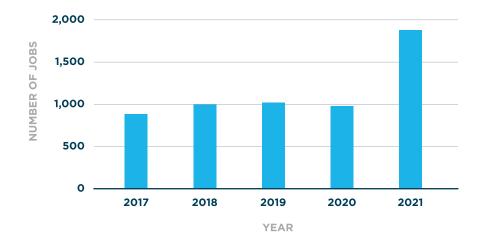
New firms experience a high rate of closure in the years after starting,⁶ and those that close eliminate all the jobs they created. A high closure rate holds true with firms in the Kansas City QCEW data, which shows that of the 6,049 first-time employers in 2017, just under half were still operating with employees in 2021 (Figure 6).

According to the job numbers, these firms that survive increase their hiring and help make up for the jobs lost by the startups that ceased operations.

⁶ According to the U.S. Bureau of Labor Statistics, about 20% of small businesses fail within their first year. U.S. Bureau of Labor Statistics. "Table 7. Survival of Private Sector Establishments by Opening Year." https://www.bls.gov/bdm/us_age_naics_00_table7.txt

JOB CREATION FROM HIGH-TECH STARTUPS

The QCEW data indicates that wages for tech startups are one-and-a-half times the average wage paid by all firms (Figure 10). Because of these higher-wage jobs' sizable economic contribution, it's useful to quantify the number of jobs created in this sector. In 2021, high-tech startups in Kansas City created 1,879 new jobs, nearly double the number of jobs created in 2020 (Figure 3). Over the past five years, these tech startups created an average of 1,152 jobs per year.



TREND

Figure 3: KC tech startups created 92% more jobs in 2021 than 2020.

Accounting for the employees these same firms hired in each succeeding year and accounting for job losses as well, tech startups created 8,387 jobs from 2017 to 2021, up 120% over the previous five-year totals (Figure 4).



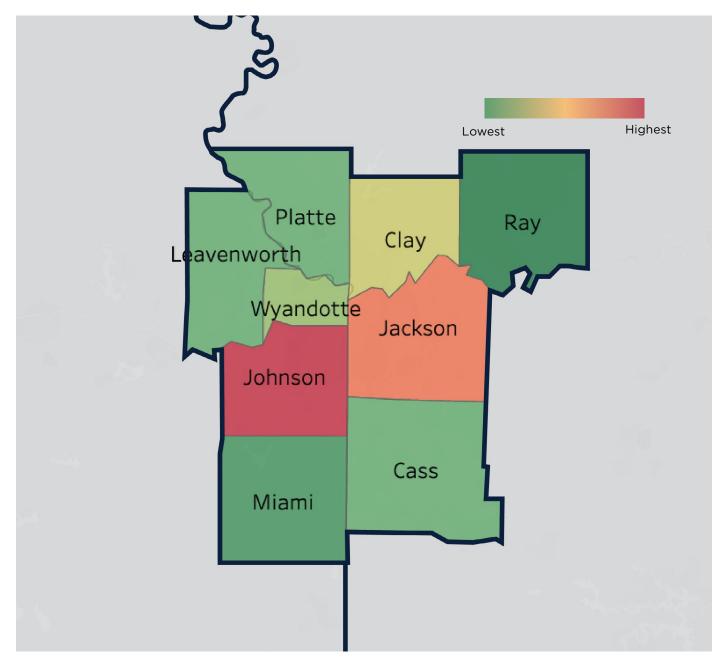
IMPACT

Figure 4: KC tech startups created 8,387 jobs over the past five years.

STARTUP DENSITY IN KANSAS CITY

This report identifies a startup as a firm hiring its first employee. Using this definition, the Kansas City metro, defined as the nine counties depicted below, created 8,197 startups in 2021, up from 6,327 in 2020. As might be expected, most of the firms cluster in the metro's most populous counties, though there are first-time employers located throughout the metro, as depicted in the heat map (Figure 5).

Figure 5: Density of Startups by Geography



The QCEW data set allows for analysis of new and young firms themselves, as well as the jobs they create. In 2021, 8,197 firms with fewer than 20 employees hired their first employee, up 30% over 2020. The number of startups has seen a steady increase since 2016, with a dip in 2018, a bounce back to 6,110 startups in 2019 and a surge to 8,197 in 2021.

QCEW data also enables the calculation of survival rates for these firms. Kansas City startups appear to be slightly more successful keeping their doors open through Year 2 compared with the national average. The chart below chronicles the survival rate of 2017 startups (Figure 6).

Figure 6: Survival rates for 2017 KC startups

Year	Number of firms	Survival rates, KC firms	Survival rates, national firms ⁷
Year 1	6,049		
Year 2	4,999	83%	80%
Year 3	3,910	65%	70%
Year 4	3,299	55%	No data
Year 5	2,902	48%	50%



CREATING JOBS DURING THE PANDEMIC

Pandemic challenges abound for business owners, but for those who are prepared, like Yogurtini owner Isaac Lee Collins, it's also an opportunity for growth.

With financial assistance from the Economic Development Corporation of Kansas City and AltCap, Isaac and his wife, Rachel, were able to expand to a third frozen yogurt location amid the crisis and now employ 42 workers.

"I've always prided myself on having a good team, trusting them and delegating responsibility, but I learned that delegating isn't good enough," he says. "You also have to develop your people along the process with training that empowers them to do more and be more."

Isaac also cultivates value that goes beyond just selling frozen yogurt, including regularly supporting fundraisers and hosting donation events.

"We're huge in community involvement, partnering with nonprofits and other local organizations that are doing really cool things," Isaac says.

The company is also creating an entire training program that includes soft-skills learning and ongoing education. Yogurtini also aims to prepare youth for higher education, future internships and eventual careers.

"Our most successful initiative is our culture building," says Isaac. "We treat our team like family, so they want to stay with us."

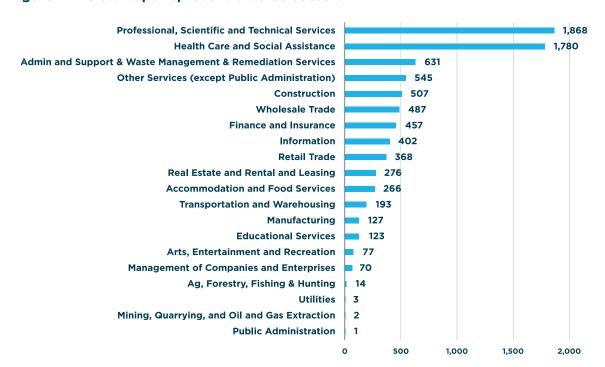
Isaac, who also owns a consulting business and a yoga studio, estimates he has created over 400 jobs since he became an entrepreneur 10 years ago.

⁷ Mcintyre, Georgia. "What Percentage of Small Businesses Fail?" Fundera. June 2019. Based on U.S. Bureau of Labor Statistics data. https://www.fundera.com/blog/what-percentage-of-small-businesses-fail

Most startups in 2021 were categorized in the Professional, Scientific and Technical Services industry (1,868), which includes computer systems design as well as management and technical consulting. There were more than 700 more startups in this sector in 2021 compared with 2020. The second highest industry for startups was the Health Care and Social Assistance

industry (1,780), which includes individual and family health services and other health practitioner offices. This sector may include many contracted single health care workers; the true number of health care and social assistance startups may be lower. These two industry segments have remained at the top for several years (Figure 7).

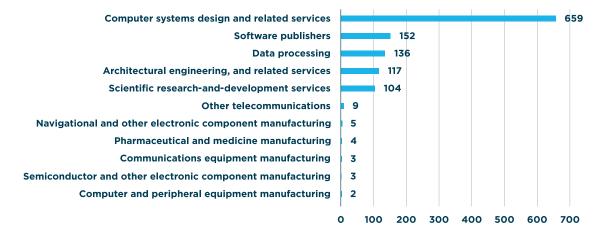
Figure 7: KC startups represent diverse sectors



The tech sector in the Kansas City region saw a substantial increase in the number of startups and jobs created in 2021, after a dip in both numbers between 2019 and 2020. Computer Systems Design and Related Services had the most

startups in the tech sector in 2021 with 659, up 73% over 2020, followed by Software Publishers (152) and Data Processing (136)—the latter of which saw a 172% increase in startup firms created in 2021 (Figure 8).

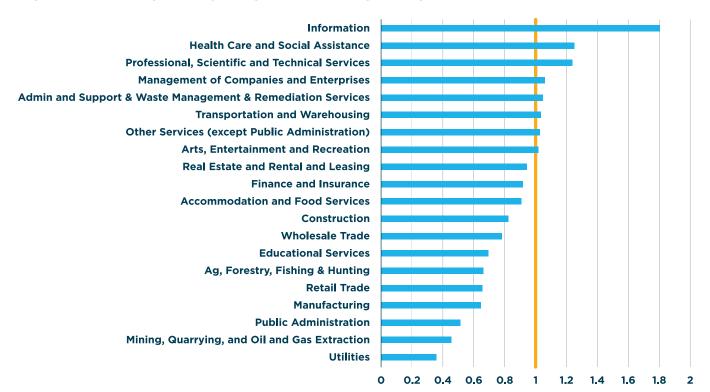
Figure 8: Computer-related sector dominates KC tech startups



A growing industry requires a high number of startups. The quantity of startups compared with the total industry is reflected by the Startup Density Index.⁸ A startup density index can be calculated as the ratio of the startup density in a particular industry to the average startup density in the Kansas City region overall. If the industry's startup density is higher than average, the index is above 1.0. If it is less than average, the index is less than 1.0.

From 2017 to 2021, the Information sector again had the highest density in the Kansas City region, followed by Health Care and Social Assistance (Figure 9). Between 2020 and 2021, the indices for Information; Professional, Scientific and Technical Services; and Management of Companies and Enterprises saw the largest increases in density while Mining, Quarrying and Oil and Gas Extraction saw the largest decrease in startup density.

Figure 9: KC startup density is higher than average in eight industries



⁸ The Startup Density Index repurposes location quotient to measure industrial startup activity.

WAGES

WAGES PAID BY NEW AND YOUNG FIRMS

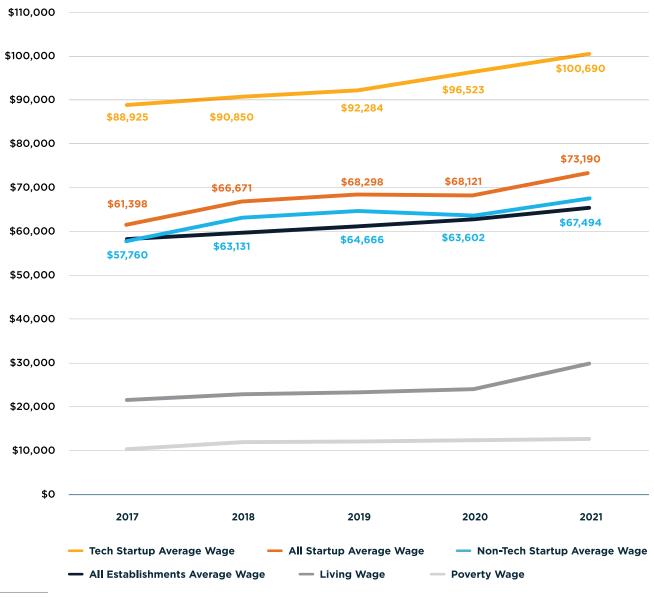
One of the measures of a quality job is how earnings contribute to workers' well-being. Employees who earn wages above the poverty line can more easily fulfill their personal and family obligations in terms of food, shelter and health care.

Jobs created by startups in 2021 had an average starting salary of \$73,190, well above both poverty and living wage in Kansas City, Missouri, (Figure 10) and above the city's average wage.

(The poverty wage for a single adult in Kansas City, Missouri, is about \$12,875 per year. A living wage is about \$34,840.10)

In 2021, average wages in tech firms in Kansas City start 42% higher than the average wage (\$100,690 vs. \$65,525). The tech startup average wage, non-tech startup average wage, all startup average wage and all establishments average wage are compared in the graph below, along with the living wage and poverty wage.

Figure 10: KC tech startup wages exceeded the wage of all startups by 31.6% in 2021.



¹⁰ Living Wage Calculator for Kansas City, Missouri. Created by Dr. Amy K. Glasmeier at MIT, calculated for one adult, no children. http://livingwage.mit.edu/metros/28140

METHODOLOGY

Kansas City wants to be the most entrepreneurial city in America, and that's also its goal for economic growth. The community has recognized the importance of actual job creators. To this end, *We Create Jobs* seeks to create a characteristic profile of Kansas City entrepreneurial firms.

To understand how entrepreneurs fit into the local economy, We Create Jobs' exploratory analysis uses one of the most comprehensive employment data sets: The Quarterly Census of Employment and Wages. QCEW contains individual records of wages paid for unemployment insurance records. This data has proved useful in previous attempts to understand labor markets (Spletzer, 2000; Ferree and Smith, 2013; Dolfman et al. 2007; Salamon and Sokolowski, 2005.)

State laws require employers to report quarterly unemployment insurance contributions for all wages paid to State Employment Security Agencies, or SESAs, for the Unemployment Compensation for Federal Employees program. Benefits of the QCEW include an ability to accurately identify firm birth and death, track longitudinal employment levels and distinguish between industries.

As state level organizations, Missouri and Kansas report data differently. This report employs the best practices recommended by the respective SESAs for counting job contributions and combines them to form the Kansas City metro area observations.

Missouri: Firm-level job counts average employer reported monthly employment in the QCEW employer file for quarterly observations.

Kansas: Firm-level job counts are the number of wage records for a given unemployment insurance number in each quarter. This method is employed because reported employment observes a large number of misreported observations.

For both Missouri and Kansas data, the number of jobs includes any employment — full time, part time and multiple jobs — but does not include self-employed.

Note: Each year, Kansas provides additional information that allows for matching some existing firms with new unemployment insurance records. This tends to lower the Kansas totals from previously reported calculations.

This report draws from raw QCEW data, and the statistical methods used for calculating total employment differs

from the methods used for QCEW data published by the U.S. Bureau of Labor Statistics. The bureau uses a six-step statistical test we are unable to replicate. This appears to result in higher absolute numbers.

DEFINITION OF A STARTUP

A new startup is identified with the first appearance of firm records in the employer file with no predecessor record. In this method, new startups (firms) are new establishments. Size has been restricted to establishments with fewer than 20 employees at birth.

Some establishments demonstrate seasonal activity when they report employment one quarter but not in following quarters, and then report again in later quarters. To account for intermittent activity in the identification of newness, the report identifies birth using the full data set and then subsets for firms born since the year 2010, effectively preventing any firms that left the records and reentered before the records became available from being misidentified as new.

The geographical area used is the Mid-America Regional Council's county definition of the Kansas City metro. Missouri includes Cass, Clay, Jackson, Platte and Ray counties. Kansas includes Johnson, Leavenworth, Miami and Wyandotte counties.

STATISTICS DEFINITIONS

- Number of startups each year counts the number of new establishments with fewer than 20 employees in each quarter for each year.
- The number of new jobs from startups is the sum of Quarter 4 jobs created by startups born that year.
- Average wages are total wages each establishment reports in the employer file divided by the total employment from each state's respective counting method, weighted by removing outliers.
- High-tech, four-digit NAICS sources were determined from the report linked here: https://www.kauffman.org/wp-content/uploads/2019/12/
 bdstechstartsreport.pdf

















ACKNOWLEDGMENTS

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