Large urban areas are often hustling and bustling with city-goers moving from place to place. What are some of the labor market trends that set these densely populated areas apart? The Bureau of Labor Statistics Job Openings and Labor Turnover Survey (JOLTS) program publishes estimates on job openings, hires, and separations. JOLTS estimates can provide insights into labor market dynamics, such as labor demand and labor turnover that other employment measures cannot. In June 2020, the JOLTS program published Metropolitan Statistical Area (MSA) research estimates. The JOLTS MSA research estimates offer valuable information at finer geographic detail than national, regional, or state-level estimates. This Beyond the Numbers article features JOLTS MSA research estimates for the 18-largest MSAs. In this article, we explore trends in a number of
measures—job openings, hires, separations (including quits and layoffs and discharges), labor churn, and unemployment—that allow us to compare labor markets in metropolitan areas.

**Unique labor patterns by area**

Labor force patterns in each metropolitan area can vary widely. Each MSA has its own unique way of life that include differences in culture, climate, labor force demographics, major industries, and more. The JOLTS MSA research estimates were developed for the 18-largest MSAs, which are those with 1.5 million or more employees. The 18-largest MSAs are spread across the country in all 4 geographic regions.

- Midwest: Chicago, Detroit, Minneapolis;
- Northeast: Boston, New York, Philadelphia;
- South: Atlanta, Dallas, Houston, Miami, Washington, DC; and

Although these 18 metropolitan areas are the largest in the United States, they vary greatly in employment size—ranging from 1.5 million employees in the San Diego metro area to 9.9 million employees in the New York metro area. Among these large metropolitan areas, the unemployment rates also vary. In 2019, the San Francisco metro area had the lowest average unemployment rate of the group, at 2.6 percent; while the Detroit metro area had the highest, at 4.3 percent. For 10 of the 18 metro areas, trade, transportation, and utilities was the major industry with the largest number of employees in 2019. For five metro areas, the major industry was professional and business services, and for three, it was education and health services. Labor market differences are also evident in job openings, hires, and separations.

**Trends in job openings**

Figure 1 shows the percentage point change in job openings rates from December 2018 to December 2019 for the 18-largest metro areas. For 13 of these metropolitan areas, job openings rates were lower in December 2019 than a year earlier. The job openings rates were higher in four metropolitan areas, and remained the same in one. Of these, the Washington, DC metro area had the highest job openings rate in December 2019, at 4.7 percent—an increase of 0.3 percentage points than a year before. The Seattle metro area had the lowest job openings rate, at 3.3 percent, which was a decrease of 0.3 percentage points from the rate in December 2018. For comparison, the U.S. job openings rate was 4.2 percent in December 2019—a decrease of 0.3 percentage points. The Los Angeles metro area had largest positive percentage point change in the job openings rate, rising 0.7 percentage points to 4.0 percent in December 2019. By contrast, the Houston area had the largest negative percentage point change, declining 1.3 percentage points to 3.9 percent in December 2019.
JOLTS MSA research estimates allow for the comparison of unemployment (labor supply) to job openings (labor demand) at the metropolitan level. The number of unemployed persons per job opening factors in both the supply of unemployed persons and the demand from employers. The number of unemployed persons per job opening is a ratio of the level of unemployed persons, as published by the Current Population Survey (CPS), and the level of job openings. A ratio of 1.0 means there is a job for every unemployed person. Lower ratios signal tighter labor markets with firms having more job openings than there are people available to work. Higher ratios indicate there are more unemployed people competing for each job opening. All 18 MSAs had series peaks in the number of unemployed persons per job opening in the months following the Great Recession of 2008. In September 2009, the Riverside metro area had the highest peak of 15.1 unemployed persons per job opening. The Washington, DC metro area had the lowest peak of 3.3 unemployed persons per job opening in July 2009. Among all 18 MSAs, the Riverside metro area had the highest average unemployed persons per job opening ratio, at 1.3 in 2019. The
Boston, Minneapolis, and San Francisco metro areas had the lowest ratios in 2019, at 0.6 unemployed person per job opening.

**Chart 1. Unemployed persons per job opening in the United States and 18-largest Metropolitan Statistical Areas, January 2005–December 2019, not seasonally adjusted**

Trends in churn rates

The churn rate is defined in this article as the sum of the hires rate and the separations rate. A high churn rate indicates a labor market with a high hires rate, a high separations rate, or both. And it can signify more frequent job-to-job movement of workers in the labor market. Conversely, a low churn rate indicates a labor market with a low hires rate, a low separations rate, or both. Of the 18-largest MSAs, none had a churn rate higher than the U.S. average of 7.7 in 2019. The Dallas and Phoenix metro areas had the same rate, at 7.6 percent. The Boston and New York metro areas had the lowest churn rates, at 5.6 percent in 2019. Of the six metro areas with the highest churn rates, four are in the South. The three metro areas with the lowest churn rates are all in the Northeast.
Trends in separations often mirror the trends in hires. As seen in chart 2, metro areas with higher hiring rates, such as the Dallas metro area, also tend to exhibit higher separations rates. JOLTS defines separations as the number of employees separated from the payroll during the month. Total separations are composed of quits, layoffs and discharges, and other separations. Other separations are not published with the release of MSA research estimates as they are a minor portion of total separations.

Quits, a component of total separations, are voluntary separations initiated by the employee. Quits can show employee confidence in the labor market. Employees tend to quit their jobs more frequently when they are confident they can find another one. As chart 3 shows, 2 of the 18-largest MSAs, the Phoenix and Dallas metro areas, had quits rates that were higher than the U.S. average in 2019. The Phoenix and Dallas metro areas had
the highest average quits rates for 2019, at 2.4 percent and the New York metro area had the lowest, at 1.4 percent.

Layoffs and discharges are involuntary separations initiated by the employer. All of the 18-largest MSAs had layoffs and discharges rates that were lower than the U.S. average in 2019. In 2019, six of the metro areas experienced series lows in average layoffs and discharges rates (Atlanta, Chicago, Detroit, Minneapolis, Philadelphia, and Phoenix metro areas). Chart 3 shows that in 2019, average quits rates varied more than layoffs and discharges rates for the 18-largest metropolitan areas.

**Chart 3. Average monthly quits and layoffs and discharges rates in the United States and 18-largest Metropolitan Statistical Areas in 2019, not seasonally adjusted**

Note: JOLTS MSA research estimates (released June 16, 2020) and JOLTS United States data are presented as not seasonally adjusted 3-month moving averages.
Conclusion

Through job openings, hires, and separations, JOLTS MSA research estimates provide valuable information about labor demand and labor turnover. JOLTS MSA research estimates provide detailed geographic labor market information, compared with other series that provide estimates at the national, regional, or state level.

The analyses in this article show differing labor trends between the largest 18 metropolitan areas across the United States. The estimates indicate that MSAs reacted differently following the Great Recession of 2008 in unemployed persons per job opening ratios. In addition, the article exhibits clear variations in job openings, hires, and separations amongst MSAs in 2019. JOLTS MSA research estimates allow researchers and policymakers to better understand economies at the metropolitan area level, and help businesses and workers make informed decisions at a more granular geographic level.

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NOTES

1 The JOLTS program publishes monthly estimates for major industries at the national level and total nonfarm estimates at the regional level. Users expressed a desire for metropolitan area-level estimates, therefore the JOLTS program developed and published the MSA research estimates series for the first time in June 2020. The experimental models enable the production of estimates at the MSA total nonfarm level, using a combination of the current JOLTS sample, data from the Quarterly Census of Employment and Wages (QCEW), and data from the Current Employment Statistics (CES) program. Information on the methodology can be found on the JOLTS MSA research estimates website.

2 For more information on CES State and Area total nonfarm employment used in this analysis, see https://www.bls.gov/sae/.

3 For more information on census regions and divisions of the United States, see https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf.

4 Please note that not seasonally adjusted annual averages are used in this analysis. For more information on employment by metropolitan area, see www.bls.gov/sae/data/home.htm.
Please note that not seasonally adjusted annual averages are used in this analysis. For more information on unemployment rates by metropolitan area, see https://www.bls.gov/lau/.

Please note that not seasonally adjusted annual averages are used in this analysis. The 10 metro areas that had the largest number of employees in trade, transportation, and utilities were: Atlanta, Chicago, Dallas, Houston, Los Angeles, Miami, Minneapolis, Phoenix, Riverside, and Seattle. The list of major industries (or supersectors) for CES can be found at https://www.bls.gov/sae/additional-resources/naics-supersectors-for-ces-program.htm. For information on employment by industry for metropolitan areas, see www.bls.gov/sae/data/home.htm.

The five metro areas that had the largest number of employees in professional and business services were Denver, Detroit, San Diego, San Francisco, and Washington DC.

The three metro areas that had the largest number of employees in education and health services were Boston, New York, and Philadelphia.

Job openings, hires, and separations at the national level can be found at https://www.bls.gov/jlt/.

To calculate this ratio, divide the number of people who are unemployed by the number of job openings. Unemployment levels for the nation are published by the Current Population Survey, and unemployment levels for metro areas are published by the Local Area Unemployment Statistics (LAUS). Persons are classified as unemployed if they do not have a job, have actively looked for work in the prior 4 weeks, and are currently available for work. For more information, see www.bls.gov/cps/lfcharacteristics.htm#unemp.

The JOLTS MSA research series dates back to February 2001 to December 2019. For more information on recessions as determined by the National Bureau of Economic Research (NBER), see https://www.nber.org/cycles.html.

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