



How the Pandemic Has Affected Philadelphia's Economy and Jobs

First findings of a series based on new research show the city is experiencing lingering job losses, with Black and female workers hit hardest

Overview

As Philadelphia leaders try to predict what shape the city's economy will take over the next few years, the biggest unknowns are how long, and in what ways, the COVID-19 pandemic will affect workers and residents. To help shed light on some of those variables, The Pew Charitable Trusts, in collaboration with the William Penn Foundation, is exploring the city's changing economy and the range of opportunities, risks, and responses that city leaders face.

This endeavor aims to help officials determine how they can help Philadelphia's economy grow in a way that provides jobs and career prospects for residents throughout the city, for people with various levels of education and training, and for members of all racial and ethnic groups. It will also strive to help the city review its fiscal policies in a changing economic landscape, adjusting those policies as necessary to ensure that City Hall has sufficient funds to provide needed services in a high-poverty city without deterring broader growth. This project is committed to providing information, insight, and analysis to inform not only these opportunities but also the tough decisions that lie ahead, whether they have to do with taxes, spending, or investments in the city's future.

Based on analysis and research by Econsult Solutions Inc., this brief is the project's first major publication. With jobs in the city as the key metric, regardless of whether they are filled by residents or nonresidents, it highlights how Philadelphia's economy performed in the decade leading up to March 2020; how hard the city's economy was hit by the pandemic; the degree to which it has recovered; and the emerging trends that could affect Philadelphia's attractiveness as a place to live and work in the months and years to come.

Among the key findings:

- In the pre-pandemic decade, from 2010 through 2019, the city economy performed well, matching and in some years outperforming the nation in job generation—something it had not done in half a century. For city residents, however, the job growth was largely confined to low-wage sectors.
- Since the arrival of COVID-19, however, the city has underperformed the national economy, recovering more slowly than many other cities have. Philadelphia is experiencing lingering job losses, particularly in the low-wage sectors, with Black workers and female workers hit the hardest.
- The pandemic-inspired move toward people working from home will probably continue to substantially reduce the number of people in the city during the day, likely reducing demand for office space, public transit, and restaurants and retail establishments—and also lowering wage tax revenue. Also shaping Philadelphia’s future economy will be the degree to which retail continues to shift from in-person shopping to online purchasing, changes in the labor market, and how much business and leisure travel returns.

Understanding the city’s economy—where it has been, where it is now, and the factors that could influence what comes next—is an essential first step in considering the transition ahead and making the recovery as inclusive as possible. This series seeks to facilitate those efforts.

Philadelphia’s pre-pandemic economy

In the decade before the pandemic, Philadelphia’s economic trends were the strongest in its recent history, featuring slow but steady growth in population and employment, with incomes rising and the poverty rate declining from recessionary highs. The number of jobs in the city rose from 657,400 in 2010 to 740,600 in 2019, and the unemployment rate fell from 10.3% to 5.6%, the lowest in many years but well above the national rate. The poverty rate, despite declining from 26.7% to 23.3%, remained the highest among the nation’s 10 largest cities. (See Table 1.)

This endeavor aims to help officials determine how they can help Philadelphia’s economy grow in a way that provides jobs and career prospects for residents throughout the city, for people with various levels of education and training, and for members of all racial and ethnic groups.

Table 1

Economic Change in Philadelphia, 2010–19

| | 2010 | 2019 |
|--|----------------|---------------|
| Population | 1,526,006 | 1,603,797 |
| Gross domestic product | \$87.8 billion | \$121 billion |
| Employment in the city | 657,400 | 740,600 |
| City residents working anywhere | 614,800 | 683,900 |
| Unemployment rate | 10.3% | 5.6% |
| Median household income | \$34,700 | \$47,600 |
| Poverty rate | 26.7% | 23.3% |

Note: The gross domestic product and median household income figures for 2010 and 2019 are both expressed in nominal (current year) terms.

Sources: Population (2020), median household income, and poverty rate from U.S. Census Bureau; gross domestic product from Bureau of Economic Analysis; employment data from U.S. Bureau of Labor Statistics

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However, the overall job gains were not equally distributed. The largest growth came in sectors requiring higher levels of education and training, and many of those jobs were filled by commuters. For city residents, increased employment was concentrated in low-wage sectors, widening the pre-existing disparity between resident and nonresident wages.¹ And the number of middle-wage jobs was essentially unchanged.²

Table 2 shows the distribution of jobs among various groups in 2019. Sectors with lower earnings, such as retail (\$25,800 median earnings) and leisure and hospitality (\$21,100), tended to have heavy representation of city residents and workers without bachelor's degrees; each group accounted for 77% of all workers in those fields. In higher-earning sectors, Black workers were the largest group in the government sector (\$64,400 median), at 45%, while White workers dominated the finance and information sector (\$63,400 median), at 66%.

Table 2

Philadelphia's Pre-Pandemic Workforce Demographics by Sector

Data for second quarter of 2019

| Sector | Median earnings | Employment in thousands | % Asian | % Black | % Hispanic | % White | % Female | % Male | % Non-bachelor's | % Bachelor's | % Resident | % Nonresident |
|------------------------------------|-----------------|-------------------------|-----------|------------|------------|------------|------------|------------|------------------|--------------|------------|---------------|
| Government | \$64,400 | 104.1 | 3% | 45% | 7% | 43% | 41% | 59% | 72% | 28% | 68% | 32% |
| Finance and information | \$63,400 | 57.8 | 6% | 20% | 6% | 66% | 48% | 52% | 57% | 43% | 55% | 45% |
| Professional and business services | \$58,700 | 103.5 | 8% | 21% | 7% | 62% | 49% | 51% | 60% | 40% | 61% | 39% |
| Educational services | \$48,300 | 71.5 | 7% | 24% | 6% | 61% | 63% | 37% | 55% | 45% | 65% | 35% |
| Manufacturing | \$47,500 | 19.6 | 12% | 16% | 14% | 57% | 28% | 72% | 76% | 24% | 61% | 39% |
| Construction | \$46,400 | 12.7 | 3% | 16% | 8% | 73% | 17% | 83% | 77% | 23% | 60% | 40% |
| Transportation and warehousing | \$43,700 | 29.3 | 5% | 41% | 8% | 44% | 34% | 66% | 78% | 22% | 60% | 40% |
| Wholesale trade | \$42,900 | 15.1 | 7% | 14% | 10% | 68% | 32% | 68% | 71% | 29% | 60% | 40% |
| Health care and social assistance | \$42,400 | 170.7 | 7% | 41% | 9% | 41% | 73% | 27% | 70% | 30% | 68% | 32% |
| Other services | \$30,300 | 28.6 | 9% | 27% | 9% | 54% | 51% | 49% | 72% | 28% | 72% | 28% |
| Retail trade | \$25,800 | 48.6 | 9% | 25% | 13% | 51% | 52% | 48% | 77% | 23% | 77% | 23% |
| Leisure and hospitality | \$21,100 | 77.3 | 9% | 29% | 10% | 50% | 49% | 51% | 77% | 23% | 76% | 24% |
| Total | \$43,200 | 738.8 | 7% | 29% | 9% | 53% | 54% | 46% | 67% | 33% | 66% | 34% |

Sources: For earnings and resident percentage, U.S. Census Bureau, American Community Survey, Five-Year Public Use Microdata Samples, 2015-19; for employment figures, U.S. Bureau of Labor Statistics, Current Employment Survey; for all other indicators, U.S. Bureau of Labor Statistics, Quarterly Workforce Indicators

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In this brief, employment statistics for Philadelphia describe the workers holding jobs connected to city workplaces, regardless of where they live and where they were working in 2021. For instance, the category labeled “Black” represents Black workers in Philadelphia, not Black Philadelphia residents. Workforce demographics differ from those of the overall city population because of commuter flows and differing employment rates among demographic groups.

From 2014 through 2019, the two largest private sectors in Philadelphia’s economy—health care and social assistance, and professional and business services—accounted for about 62% of employment gains.

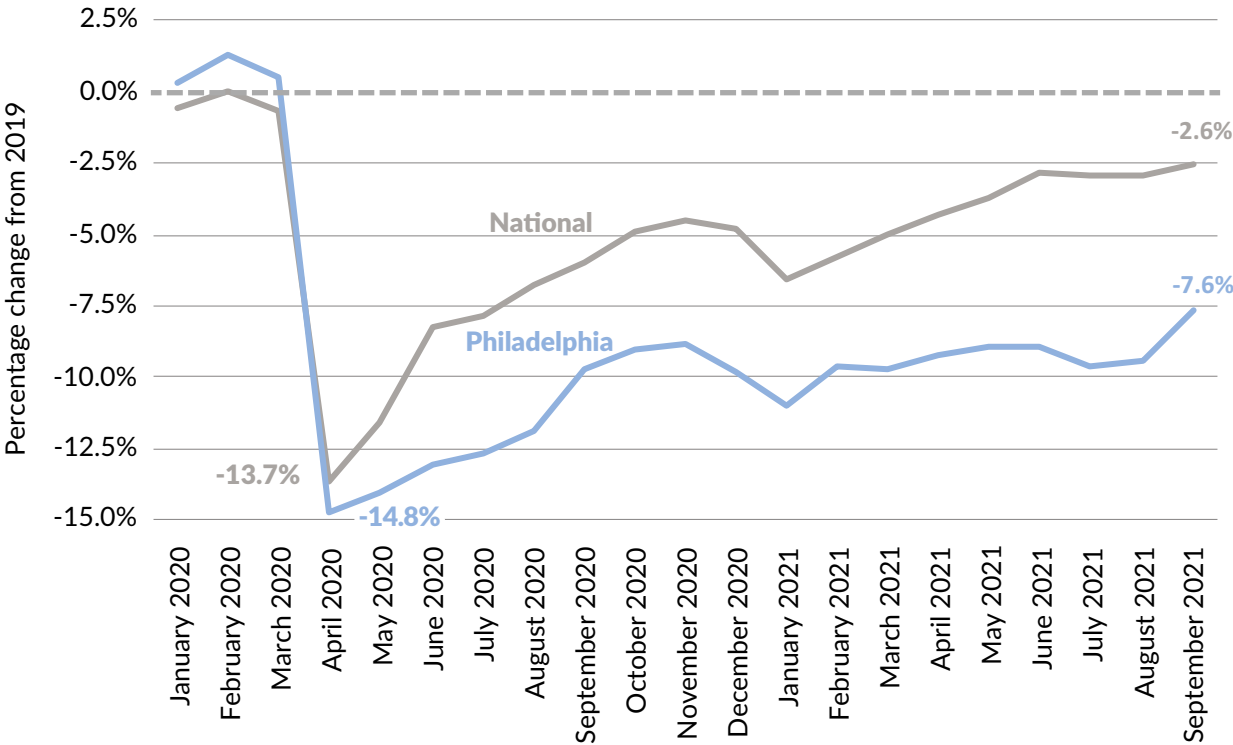
Then came the COVID-19 shutdown.

How the pandemic affected Philadelphia’s economy

Beginning in March 2020, Philadelphia experienced an initial downturn similar to what the rest of the country faced; since then, Philadelphia’s employment recovery has trailed other cities. The city was hit hard by remote work, changes in the labor market, growth in online purchasing, and reduced business travel. The city will have to contend with these factors, which either resulted from or were accelerated by the COVID-19 shutdown, for years to come.

As of September 2021, for instance, the number of jobs in Philadelphia was 7.6% lower than it had been in 2019; the national total was off only 2.6%. (See Figure 1.) In other large East Coast cities, New York’s job total was down 10%, Washington’s was down 6%, and Baltimore’s was up 1%.³

Figure 1
Change in the Number of Jobs, Relative to 2019
 Comparing Philadelphia and the national rate



Source: U.S. Bureau of Labor Statistics, Current Employment Statistics

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Locally, some sectors were hit harder than others—and harder than the same sectors nationally. Through the second quarter of 2021, leisure and hospitality—the city’s fourth-biggest job sector, with city residents representing 76% of its workers—was still down 37%, off 28,800 from 77,300 jobs in the same period of 2019, the last pre-pandemic year. Nationally, the drop was 13%. Health care and social assistance, Philadelphia’s largest sector, was off 4% from 2019 to 2021; the national decline was 2%.⁴

Job losses were greatest in sectors that pay relatively low wages. As shown in Table 3, the 2019-21 job losses were 2% among the city’s high-wage sectors, 7% for the middle-wage sectors, and 24.2% in the low-wage category, with that last figure driven largely by leisure and hospitality.

Table 3

Lost Jobs in Philadelphia by Sector and Earnings Group From Q2 2019 to Q2 2021

Job totals are in thousands

| Sector | Median earnings | Wage group | Employment Q2 2019 | Job change 2019-21 | Percentage change 2019-21 |
|------------------------------------|-----------------|------------|--------------------|--------------------|---------------------------|
| Government | \$64,400 | High | 104.1 | 0.4 | 0.4% |
| Finance and information | \$63,400 | High | 57.8 | -0.9 | -1.6% |
| Professional and business services | \$58,700 | High | 103.5 | -4.7 | -4.5% |
| Educational services | \$48,300 | Middle | 71.5 | -6.1 | -8.5% |
| Manufacturing | \$47,500 | Middle | 19.6 | -2.7 | -13.6% |
| Construction | \$46,400 | Middle | 12.7 | -1.3 | -10.5% |
| Transportation and warehousing | \$43,700 | Middle | 29.3 | -3.5 | -12.0% |
| Wholesale trade | \$42,900 | Middle | 15.1 | -1.3 | -8.4% |
| Health care and social assistance | \$42,400 | Middle | 170.7 | -7.4 | -4.3% |
| Other services | \$30,300 | Low | 28.6 | -4.1 | -14.2% |
| Retail trade | \$25,800 | Low | 48.6 | -4.5 | -9.3% |
| Leisure and hospitality | \$21,100 | Low | 77.3 | -28.8 | -37.3% |
| Total | \$43,200 | | 738.8 | -64.9 | -8.8% |
| High-wage group | | | 265.4 | -5.2 | -2.0% |
| Middle-wage group | | | 318.9 | -22.2 | -7.0% |
| Low-wage group | | | 154.6 | -37.4 | -24.2% |

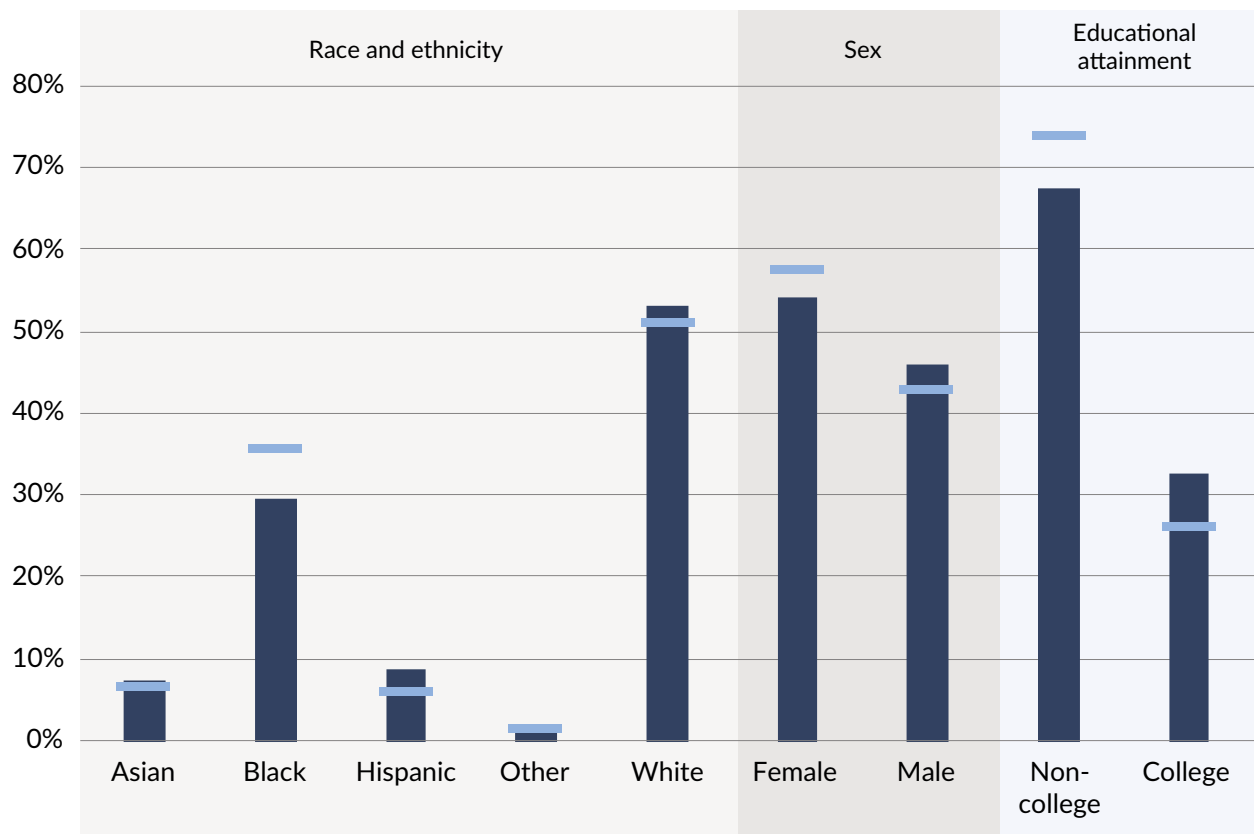
Sources: U.S. Bureau of Labor Statistics, Current Employment Statistics, 2021; U.S. Census Bureau, American Community Survey, Five-Year Public Use Microdata Samples, 2015-19

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In addition, the job losses during the pandemic were not evenly shared among demographic groups. As shown in Figure 2, Black workers and female workers as well as individuals without bachelor’s degrees suffered disproportionately high shares of job losses from the second quarter of 2019 through the corresponding period of 2021.

Figure 2
Share of Pandemic-Related Job Losses, by Demographic Characteristics

From Q2 2019 through Q2 2021



■ Share of jobs in Q2 2019
 — Share of job loss, Q2 2019 to Q2 2021

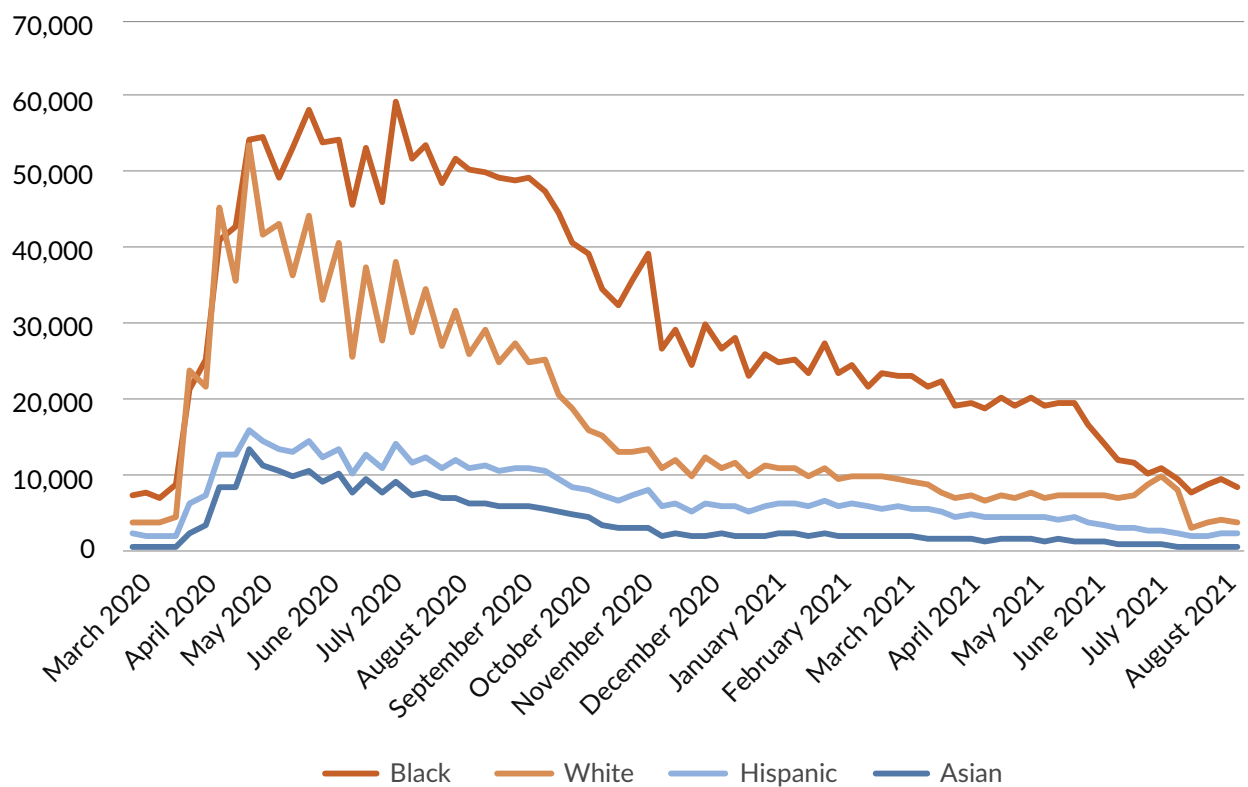
Sources: U.S. Bureau of Labor Statistics, Current Employment Statistics, 2019 and 2021, and Quarterly Workforce Indicators, 2019 and 2020

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The loss of jobs among Black workers was also reflected in the number of city residents filing continuing unemployment claims.

The initial surge of claims was roughly equal for Black residents and White residents, with about 55,000 claims from each group at the beginning of May 2020. But the number of claims from Black Philadelphians stayed high longer and fell more slowly than those from White Philadelphians. Claims for Hispanics and Asians fell gradually over time. (See Figure 3.)

Figure 3
Weekly Continued Unemployment Compensation Claims, March 2020 Through August 2021
By race and ethnicity



Source: Pennsylvania Department of Labor and Industry

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Acknowledging the pre-existing demographic disparities, and the extent to which they have been exacerbated by the pandemic, is important for understanding the equity implications of different potential trajectories for the city's economic recovery.

Key economic trends emerging from the pandemic and what they might mean for the future

The pandemic ushered in or accelerated a series of structural changes in the national economy, including the rise in working from home and online purchasing, changes in the labor market, the decline in business travel, and possible changes in large cities' attractiveness as places to live. All have had an impact on Philadelphia and have the potential to significantly depress economic activity and, thus, the number of jobs in the city, depending on their scope and duration.

1. Working remotely

Perhaps the largest social and economic-related change is the switch from in-office to remote work, initially because of pandemic-related health considerations and restrictions.

Before the pandemic, an estimated 6% of Americans worked remotely all the time—from home in the vast majority of cases.⁵ The extent of remote work in the future, on either full-time or hybrid schedules, will be determined by labor market forces, business and worker preferences, health concerns, and technology. Depending on its prevalence, remote work could have significant long-term implications for Philadelphia's wage tax, which has produced nearly half of the city's locally generated tax revenue in recent years.⁶ This levy applies to suburbanites who work in Philadelphia as well as all working city residents, regardless of where their jobs are located. A high level of remote work could also reduce demand for public transportation, restaurants, and retail shops, plus office and residential space.

To develop a rough estimate of the potential level of net new remote work in Philadelphia, Econsult explored two approaches:

- An observed data approach that sought to quantify remote work over the course of the pandemic.
- An occupational approach that assessed the viability of such work for different job functions and sectors.

A key part of the observed data is a survey done for the U.S. Bureau of Labor Statistics (BLS) showing that 13% of the national workforce "teleworked or worked at home ... specifically because of the coronavirus pandemic" as of summer 2021.⁷ Data from other sources, such as office occupancy rates and a survey by the National Bureau of Economic Research, suggests that the number could be higher.⁸ And although many workplaces are likely to return to in-person work in the months ahead, there are indications that hybrid models could become the norm, with some new jobs considered remote from day one.

The occupational approach is captured in a McKinsey Global Institute study,⁹ which estimates that 29% of work nationwide could be done remotely without productivity loss, with shares ranging from 76% in finance and insurance to 8% in accommodation and food services.

To come up with a Philadelphia remote work figure for 2025, Econsult took the 13% BLS number as the low-end figure and McKinsey's 29% as the high, then adjusted both to take into account both the makeup of Philadelphia's economy and people who had been working at home before the pandemic and appeared to have been included in the McKinsey figure.¹⁰

Based on those assumptions and calculations, Econsult estimated that 14% to 27% of the people who had jobs connected to workplaces in Philadelphia in spring 2021—97,500 to 183,200—and were not working remotely before the pandemic will work remotely some or all of the time moving forward. (See Table 4.)

Table 4

Potential Share of New Remote Workers by Sector in Philadelphia

For jobs connected to workplaces in the city

| Sector | Q2 2021 employment (in thousands) | Low remote work share | High remote work share | Low estimate: remote workers (in thousands) | High estimate: remote workers (in thousands) |
|---|-----------------------------------|-----------------------|------------------------|---|--|
| Total (nonagricultural industries) | 673.9 | 14.5% | 27.2% | 97.5 | 183.2 |
| Health care and social assistance | 163.3 | 9.4% | 16.3% | 15.4 | 26.5 |
| Educational services | 65.4 | 14.5% | 27.1% | 9.5 | 17.7 |
| Professional and business services | 98.8 | 23.7% | 52.0% | 23.4 | 51.3 |
| Finance and information | 56.9 | 26.7% | 64.5% | 15.2 | 36.7 |
| Leisure and hospitality | 48.5 | 3.7% | 8.8% | 1.8 | 4.3 |
| Retail trade | 44.1 | 5.0% | 16.1% | 2.2 | 7.1 |
| Transportation and warehousing | 25.8 | 7.1% | 15.2% | 1.8 | 4.1 |
| Wholesale trade | 13.8 | 8.3% | 37.7% | 1.1 | 5.2 |
| Manufacturing | 17.0 | 11.5% | 14.4% | 2.0 | 2.4 |
| Construction | 11.4 | 3.7% | 13.5% | 0.4 | 1.5 |
| Other services | 24.6 | 7.9% | 14.6% | 2.0 | 3.6 |
| Government | 104.4 | 21.7% | 21.9% | 22.7 | 22.8 |

Note: McKinsey Global Institute did not provide a metric for “Other services.” The value 14.6% was assigned based on the BLS and McKinsey Work From Home ratios.

Sources: Econsult Solutions calculations based on U.S. Bureau of Labor Statistics data (for low-end share) and McKinsey Global Institute analysis (for high-end share)

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Where these workers live and where their workplaces are located are vital in assessing remote work's economic impact on the city. The workers fall into three categories:

Pre-pandemic in-commuters. Some of these workers will no longer come into the city or will do so less frequently, representing a loss in demand for the goods and services that city businesses provide.

Pre-pandemic out-commuters. A portion of Philadelphia residents will no longer travel to jobs outside the city limits, leading to an increase in demand for city businesses.

City worker-residents. Even if they don't go to a workplace, these residents will remain in the city most days, with spending patterns that may or may not change.

Before the pandemic, 34% of people working in the city were in-commuters, and 25% of working Philadelphians were out-commuters.

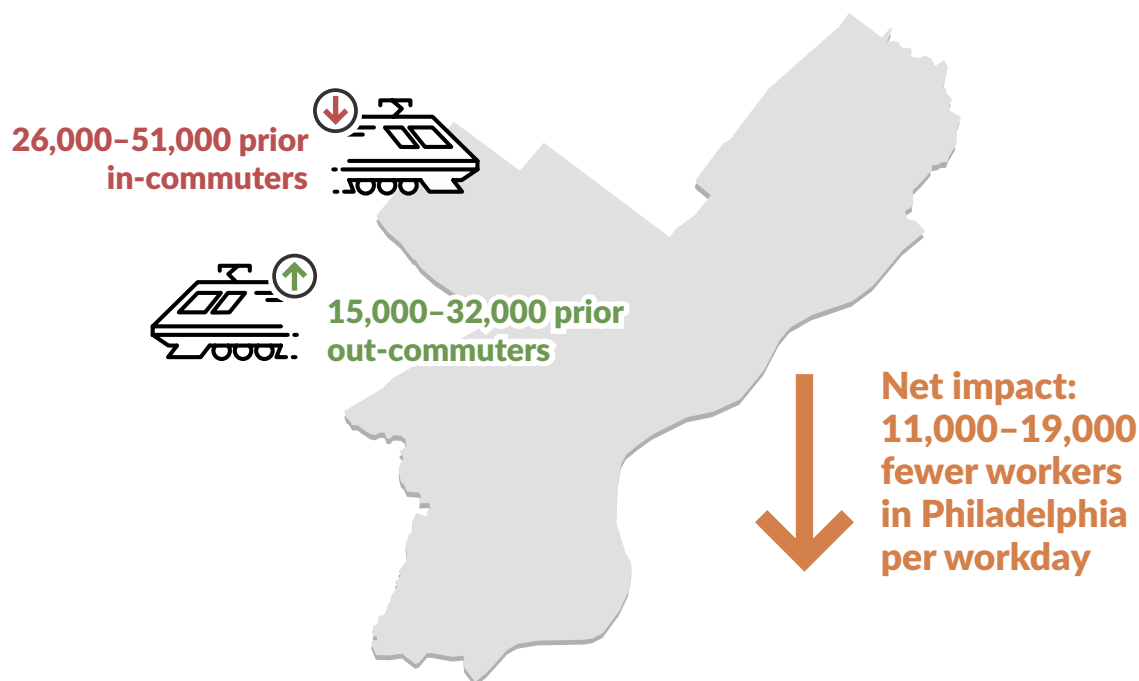
To determine the impact of working from home on Philadelphia, Econsult assumed that half of workers able to work remotely would do so full time and that the rest would do so half time.¹¹

With all these factors accounted for, the estimated net decline in the number of people physically working in Philadelphia some or all of the time comes in at 11,300 to 18,900—with the biggest net declines in professional and business services, government, health care and social assistance, and finance and information. (See Figure 4.)

Figure 4

Potential Net Inflow/Outflow Change for Philadelphia From Remote Work

City could host 11,000 to nearly 19,000 fewer workers per day



Sources: Econsult Solutions calculations based on data from U.S. Bureau of Labor Statistics; U.S. Census Bureau, American Community Survey, Five-Year Public Use Microdata Samples, 2015-19; and McKinsey Global Institute

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These net figures likely understate the impact on the city—in part because in-commuters from the suburbs tend to have higher wages than do out-commuters,¹² and in part because city residents who will be staying home will likely spend less money each day than if they went to a workplace outside their home, with multiple food, beverage, and retail options nearby.

2. Changes in the labor market

Since the onset of the pandemic, the supply of workers has also declined along with the number of jobs. Some individuals whose jobs disappeared or whose work lives were disrupted took early retirement, left positions for family reasons, or abandoned jobs in which they considered the work unsatisfying or the pay inadequate. Through September 2021, the number of Philadelphians in the workforce—meaning either working or seeking work—fell by 4%, or roughly 28,000, from the average for 2019.¹³

The decline in workforce size has slowed the employment recovery and created upward pressure on wages. Several sectors, including retail as well as leisure and hospitality, have struggled to find staff. Eventually, employers will fill some now-vacant positions. Or they will learn to function with fewer workers—either as a response to rising wages or because they simply can't find people willing to take the jobs. How Philadelphia fares on these fronts will help shape the local recovery.

3. Reduced travel activity

The U.S. Travel Association envisions a “return to normal” for all segments of the travel industry by 2024. But many industry analysts believe that remote work technology will reduce expectations for face-to-face interaction—and reduce expenses for businesses—even after health concerns have eased.¹⁴

A shift in the frequency and scale of conventions and business meetings would present a challenge for Philadelphia. Econsult estimated that in 2019 business travelers spent \$1.02 billion in the city (alongside \$2.82 billion in spending by domestic leisure travelers). Thus, a decrease of even 10% in business travel would take about \$100 million away from Philadelphia's economy, resulting in job losses in leisure and hospitality, retail, and other sectors.¹⁵

4. Rise in online spending

Increased online spending by consumers could translate into fewer dollars circulating in the local economy, potentially affecting jobs and decreasing local tax revenues. Nationally, e-commerce rose sharply in the early days of the pandemic, then started to fall but stayed above pre-pandemic levels.¹⁶

Consumer spending changes, coupled with health and safety restrictions, have led to temporary and permanent closures for restaurants, retail, and service businesses. Philadelphia's brick-and-mortar stores had been struggling against e-commerce competitors even before the pandemic. And in 2020, for instance, the city lost nearly 8% of its retail clothing establishments, triple the 2019 loss rate. On the other hand, the city recorded 3.5% net growth in retail grocery stores, double the previous pace. (This data comes from Pew's dashboard tracking Philadelphia's economic recovery.¹⁷)

5. Population and real estate patterns

Although data isn't showing a large-scale exodus of residents from Philadelphia or other large cities, there are some reasons for concern.

Records from the U.S. Postal Service indicate that the net number of people moving out of Philadelphia has grown since the onset of the pandemic. In the year prior to March 2020, the average monthly outflow was about 1,400; in the period from March 2020 to July 2021, it was roughly 2,600, even though the number of people moving into the city did not decline and the residential market in the city remained strong.¹⁸ Fewer residents means less

economic activity, which leads to fewer jobs. Such figures by themselves are indicative but not determinative of population decline; throughout the 2010s, when the population rose by 5%, the city had a net domestic outflow. Those losses were offset by immigration from other countries and births outnumbering deaths.¹⁹

Most of these indicators are consistent with Philadelphia's lagging job recovery to date. However, the strength of residential investment and demand—as evidenced in 2021 by a strong housing market and a high level of new construction—suggests that the city may remain competitive for certain types of economic activity as a result of its location, its cultural and recreational amenities, and its affordability relative to other major East Coast cities.

Conclusion

Philadelphia entered the pandemic after a decade in which it matched and sometimes outpaced the nation in economic growth, and it has underperformed in the nearly two years since. Where does it go from here? How much will the city be affected by the structural economic changes that were created, accelerated, or amplified by COVID-19? Will Philadelphia match or exceed the growth it experienced in the late 2010s? Or will it fall short, failing to create the amount and types of jobs its workforce needs? How will all of this affect the gaps between demographic groups that existed pre-pandemic and were widened by it?

In follow-up reports, Pew will describe scenarios for the next few years and the range of choices that policymakers will confront in navigating this economic transition and Philadelphia's fiscal future.

About this brief

This brief was written by Larry Eichel, senior adviser to The Pew Charitable Trusts' Philadelphia research and policy initiative, based on research performed for Pew by a team at Econsult Solutions Inc., led by Ethan Conner-Ross. Seth Budick, a senior officer with the initiative, also contributed to the research. Pew senior officer Sandra Shea edited the brief, along with Erika Compart, senior manager, editorial.

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Endnotes

- 1 L. Eichel and S. Budick, "Philadelphia Job Growth Not Closing Wage Gap Between Residents and Suburban Commuters," The Pew Charitable Trusts, Aug. 13, 2019, <https://www.pewtrusts.org/en/research-and-analysis/articles/2019/08/13/philadelphia-job-growth-not-closing-wage-gap-between-residents-and-suburban-commuters>.
- 2 S. Budick, "What's Happening With Philadelphia's Middle-Wage Jobs?" (The Pew Charitable Trusts, 2021), <https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2021/04/whats-happening-with-philadelphias-middle-wage-jobs>. Middle-wage jobs were defined as paying within 20% of the median wage among Philadelphia workers in 2019, \$23.26 per hour.
- 3 U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics, 2021, accessed Dec. 13, 2021, <https://www.bls.gov/lau/>.
- 4 Ibid.
- 5 Commuting data from the U.S. Census Bureau's 2019 American Community Survey indicates a national work-from-home percentage of 5.7%, and similar levels for workers in the Philadelphia metro area (5.9%) and among Philadelphia residents (5.1%). Based on these data points, roughly 40,000 people in Philadelphia work from home.
- 6 The Pew Charitable Trusts, "Philadelphia 2021: The State of the City" (2021), <https://www.pewtrusts.org/-/media/assets/2021/04/philadelphia-2021-state-of-the-city.pdf>.
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- 9 S. Lund et al., "What's Next for Remote Work: An Analysis of 2,000 Tasks, 800 Jobs, and Nine Countries" (McKinsey Global Institute, 2020), <https://www.mckinsey.com/featured-insights/future-of-work/whats-next-for-remote-work-an-analysis-of-2000-tasks-800-jobs-and-nine-countries>.
- 10 The overall work-from-home proportions for Philadelphia differ from the national benchmarks from each data source because of the composition of the city economy, which is more heavily weighted toward sectors with higher remote work estimates than the national employment mix. Nationally, BLS data implies a net new remote work proportion of 13%, while McKinsey analysis implies a net new proportion of 23% (29% total minus the 6% pre-pandemic remote work share).
- 11 Based on the available data, Econsult concluded that worker behavior and employer decisions about working from home will be mixed. For that reason, the analysts decided that an assumption of 50% would produce a better estimate than 0% or 100%.
- 12 Eichel and Budick, "Philadelphia Job Growth Not Closing Wage Gap."
- 13 U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics, 2021.
- 14 See, for example, G. Sankary, "Massive Drop in Business Travel Could Be Permanent," *Where Next*, Dec. 21, 2020, <https://www.esri.com/about/newsroom/publications/wherenext/business-travel-decline/>; and WRAL TechWire, "Decline in Business Travel Could Be Permanent, Analyst Beroe Finds," Aug. 6, 2021, <https://www.wraltechwire.com/2021/08/06/decline-in-business-travel-could-be-permanent-analyst-beroe-finds/>.
- 15 This estimate is meant to give an order-of-magnitude sense of what would happen if a fully recovered industry (projected for 2024) does not come to pass. Short-term losses have been much greater.
- 16 J. Verdon, "Adobe: Pandemic Shift Is Permanent, E-Commerce to Hit \$1 Trillion in 2022," *Forbes*, March 15, 2021, <https://www.forbes.com/sites/joanverdon/2021/03/15/adobe-pandemic-shift-is-permanent-e-commerce-to-hit-1-trillion-in-2022/?sh=29a389cd44ce>.
- 17 The dashboard can be accessed at <https://www.pewtrusts.org/en/research-and-analysis/data-visualizations/2021/pew-dashboard-tracks-philadelphias-economic-recovery-and-growth-in-the-age-of-covid>.
- 18 U.S. Postal Service, Change of Address Data, 2019-21, accessed Dec. 13, 2021, <https://postalpro.usps.com/mailing-and-shipping-services/NCOALink>.
- 19 U.S. Census Bureau, "Estimates of the Components of Resident Population Change for Counties: April 1, 2010 to July 1, 2019."

For further information, please visit:
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