



Philadelphia's Small and Midsize Business Landscape

A look at the city's smaller companies and how they compare with those elsewhere

Contents

- 1 **Overview**
- 2 **Glossary**
- 4 **Philadelphia's business ecosystem**
 - Establishments and employment **4**
 - Business density **8**
 - Births, deaths, and relocations **9**
 - Industry sectors **11**
 - Traded and supply chain categories **16**
- 19 **Business locations**
- 22 **Owners and entrepreneurs**
 - Self-employed characteristics **22**
 - Business characteristics **26**
- 29 **Financial condition**
 - Sales, payroll, and profits **29**
 - Taxes **31**
- 35 **Conclusion**
- 36 **Methodology**
- 45 **Appendix**
- 46 **Endnotes**

The Pew Charitable Trusts

Michael Caudell-Feagan, *executive vice president and chief program officer*

Frazierita Klasen, *vice president, Philadelphia*

Elinor Haider, *director, Philadelphia policy*

About this report

This report was researched and written by Thomas Ginsberg, senior officer with The Pew Charitable Trusts' Philadelphia research and policy initiative, along with senior associate Jason Hachadorian. It was edited by Larry Eichel, senior adviser to the initiative, along with Erika Compart, Cindy Murphy-Tofig, and Bernard Ohanian.

Acknowledgments

We are grateful to Amelia Hoover Green and Richardson Dilworth of Drexel University for their analysis of National Establishment Time Series data.

We also thank the following individuals, whose cooperation and data were crucial to this report. From the Philadelphia Department of Commerce: Sylvie Gallier Howard, acting director; Libby Peters, director, policy and performance; and Karen Fegely, deputy director. From the Philadelphia Industrial Development Corp.: Anne Bovaird Nevins, president; Jennifer Lucas Crowther, vice president, product and resource development; and Sam Rhoads, executive vice president. From the Philadelphia Department of Revenue: Mike Isard, research director; Tilahun Afessa, director of policy, planning, and outreach; Shruti Venkatesh, data research analyst; and Miguel Garcia, data research analyst. From Ben Franklin Technology Partners of Southeastern Pennsylvania: Margaret Berger Bradley, vice president, strategic initiatives; and David L. Cohen, former director, program analysis and development. From the Federal Reserve Bank of New York: Claire Kramer Mills, assistant vice president and director of community development analysis; and Scott Lieberman, community development associate. From IHS Markit: Phil Hopkins, associate director of consulting, economics, and country risk. From Drucker & Scaccetti: Clare Porreca, principal.

The following individuals gave their insights. From The Enterprise Center: Della Clark, president and CEO; Jeff Wicklund, executive vice president, community team; and Seulky McInneshin, executive vice president, core team. From the Federal Reserve Bank of Philadelphia: Ashley Putnam, director, Economic Growth and Mobility Project; and Alvaro Sanchez, analyst, Economic Growth and Mobility Project. From the Ewing Marion Kauffman Foundation: Travis Howe, senior program officer; and Sameeksha Desai, director of knowledge creation and research. Also: John Haak, director, policy and analysis division, Philadelphia City Planning Commission; Mary Livingston, Philadelphia chapter chair/president, SCORE Association; Donavan West, former president and CEO, and Steven S. Bradley, chairman, African-American Chamber of Commerce of Pennsylvania, New Jersey, and Delaware; Narasimha B. Shenoy, president and CEO, Asian American Chamber of Commerce of Greater Philadelphia; Jennifer Rodríguez, president and CEO, Greater Philadelphia Hispanic Chamber of Commerce; James W. Haile Jr., director, partnership and outreach, Goldman Sachs 10,000 Small Businesses, Community College of Philadelphia; Charles B. Crawford Jr., chairman and CEO, Hyperion Bank; Beth McConnell, policy director, Philadelphia Association of Community Development Corporations; Jay R. Goldstein, chairman and CEO, Spring Garden Lending; Morgan Berman, founder and CEO, MilkCrate; Raavi Iqbal, co-founder and CEO, SocialLadder; Robert J. Moore, co-founder and CEO, Crossbeam; Anna Shipp, executive director, Sustainable Business Network of Greater Philadelphia; Michael Banks, managing director, employment opportunities and entrepreneurship, United Way of Greater Philadelphia and Southern New Jersey; Luis E. Mora, former president,

FINANTA; Maura I. Shenker, director, Temple University Small Business Development Center; Lynne Cutler, president, Women's Opportunities Resource Center; Brad Denenberg, formerly of Seed Philly; Leslie Benoiel, president and CEO, Entrepreneur Works; and Stephen P. Mullin, president and principal, Econsult Solutions Inc.

We are grateful to our outside reviewers: Paul R. Flora, manager, regional economic analysis, Federal Reserve Bank of Philadelphia; Mercedes Delgado, research director and research scientist, MIT Innovation Initiative Lab for Innovation Science and Policy, and senior associate, Harvard Business School; and Kim Korejko, manager, data coordination, Delaware Valley Regional Planning Commission.

This report does not necessarily reflect the views of these individuals or their institutions.

On Nov. 4, 2020, Figures 16 and 17 in this report were updated to clarify what was included in the calculations for each column.

Photography: Lexey Swall for The Pew Charitable Trusts

Contact: Elizabeth Lowe, communications officer

Email: elowe@pewtrusts.org

Project website: pewtrusts.org/philaresearch

The Pew Charitable Trusts is driven by the power of knowledge to solve today's most challenging problems. Pew applies a rigorous, analytical approach to improve public policy, inform the public, and invigorate civic life.

Overview

Small and midsize businesses play a crucial role in the U.S. economy—as employers, taxpayers, innovators, neighborhood institutions, wealth builders, and suppliers of goods and services. When these smaller and often local employers thrive and multiply, they can help residents of all backgrounds prosper.

In Philadelphia, small and midsize businesses—defined in this report as those with one to 499 employees—operated around 23,000 establishments in 2017, before the current downturn; employed 4 in 10 workers; and paid 50% of all business taxes. These restaurants and accounting firms, retailers and tech labs, banks and factories, nonprofit organizations, and many other types of companies enable the activities of daily life, create new products, and form the business ecosystem from which the next Comcast or Amazon may spring.

Before the COVID-19 pandemic and the associated economic downturn, Philadelphia was an underperformer compared with the 12 other major cities examined in this report on a variety of measurements of small and midsize business activity.

In this report, a “small” business has one to 99 employees or less than \$10 million in gross sales and excludes those with no paid workers, while a “midsize” company is one with 100 to 499 employees or \$10 million to less than \$50 million in annual gross sales. The report compares Philadelphia with a dozen other large cities for which similar, uniform business data is available: Baltimore; Boston; Denver; Indianapolis; Jacksonville, Florida; Lexington, Kentucky; Nashville-Davidson County, Tennessee; New Orleans; New York; San Francisco; St. Louis; and Washington. (See the methodology for full details.)

Among these cities, Philadelphia had the fewest small and midsize business establishments per capita in 2016, the last year that cross-city data was available. This means the city had a comparatively sparse ecosystem of businesses for residents to patronize and find jobs with, for entrepreneurs to partner with and compete against, for lenders and investors to help grow, and for city agencies and schools to rely on for tax revenue.

Just 5.6% of Philadelphia adults identified themselves as self-employed business owners in 2017. This relatively low figure—not uncommon for a city with a high poverty rate—translated into less small-scale business activity and thinner ranks of individuals and families starting businesses, building wealth, and planting the seeds of entrepreneurship.

In addition, the financial condition of Philadelphia’s small and midsize businesses was generally more tenuous than those in the other cities: Their gross receipts, commercial credit ratings, and on-time payment ratings were usually lower than peers elsewhere during and after the Great Recession.

Compared with the other cities, Philadelphia also consistently had a low business “birth rate,” meaning its ecosystem was less fruitful, particularly in high-paying sectors such as financial services, and professional and technical services. The city’s business birth rate exceeded those of other cities in only a few sectors, including lower-paying transportation and food or hospitality businesses.

But there were also several positive signs about Philadelphia’s small and midsize businesses in the pre-pandemic period. For starters, the city’s business “death rate”—the percentage of small and midsize businesses that ceased operations—was no worse than elsewhere. And during the recently concluded period of economic expansion, the city bucked the national trend of declining entrepreneurship; in 2017, it had its most small and midsize business establishments since 1990.

Before the COVID-19 economic shock, employment growth in Philadelphia’s small and midsize businesses outpaced that of other cities in the fields of health care, and transportation and warehousing. Many

neighborhoods outside Center City saw business growth and diversification. And the city's overall population grew among two groups with high rates of entrepreneurship: immigrants and college graduates.

The Pew Charitable Trusts produced this report to help the public and local policymakers better understand the role of Philadelphia's small and midsize businesses, as well as their owners' demographics. The report examines conditions and trends during and since the 2007-09 recession, providing information that may offer insights on what to expect in the current downturn and eventual recovery. These businesses, more so than large ones with national markets, tend to be affected by local business regulations and conditions, making their status particularly important for local policymakers.

"We've had this economic 'Hurricane Katrina,' with a ton of businesses way below sea level in Philadelphia. That's what we have to deal with," said Donovan West, former president and CEO of the African-American Chamber of Commerce of Pennsylvania, New Jersey, and Delaware, speaking in an interview with Pew.

It's important to note that while this report focuses on the city, Philadelphia is part of an economy stretching across an 11-county metropolitan region. The region's per capita number of small and midsize businesses was on a par with other regions and higher than the city's number. However, in recent years, suburban small business formation and growth trailed both the city and other metropolitan areas.

Other key findings:

- Compared with Philadelphia's large businesses, small and midsize employers were hit harder during the 2007-09 recession and grew more slowly during the subsequent expansion, posting smaller gains in sales and employment, and ending up with a smaller share of the city's labor market.
- In recent years, most small and midsize businesses that have employees—which many small businesses locally and nationally don't—were more dependent than those in the comparison cities on selling locally, as opposed to nationally or globally. While this situation has helped keep dollars circulating in Philadelphia, economists say it has also limited the growth potential of businesses and the city's economy overall.
- Relative to other cities since at least 2007, Philadelphia has seen lower rates of self-employment among Blacks, whites, and women, while immigrants and Asians have had higher rates. Higher entrepreneurship among minority groups is an economic development goal of Philadelphia officials and business advocates.

After the 2007-09 recession, Philadelphia city government leaders created new programs and tax incentives aimed at helping businesses of all sizes and spurring economic activity. In a 2019 Pew poll, 67% of city residents said they supported this approach, agreeing with the statement that the city "should offer tax breaks" to support and lure businesses.

Over the past decade, public agencies and private organizations mounted many campaigns and programs to facilitate financing, boost entrepreneurship, increase ownership diversity, and lower bureaucratic hurdles—topics that are not addressed in this report but that merit further research. This report is intended as a starting point.

Glossary

Age: In this report, businesses are considered "new" if they've been in operation for one year or less, "young" if they've been around for two to five years, and "mature" if they've been operating for six or more years.

Business density: The number of businesses per capita in an area, computed from establishments divided by population. In most instances, this report uses the population of residents ages 16 and older, the population most likely to be working or owning businesses.

Business size: The report defines “small” businesses as having one to 99 employees, “midsize” as having 100 to 499 employees, and “large” as having 500 or more employees, except in discussing city taxes, when it defines small as having less than \$10 million in gross receipts, midsize as having \$10 million to less than \$50 million in gross receipts, and large as having \$50 million or more in gross receipts.

Business taxes: This report uses the “tax due” figure that businesses report on their Philadelphia Business Income and Receipts Tax (BIRT) and Net Profits Tax (NPT) forms. Other local taxes and fees, such as commercial property taxes, are omitted for the sake of simplicity.

Employer firm: A firm or company with employees on payroll at one or more establishments or locations, with its size based on the company’s total workers at all of its establishments in an area. If the company has several locations, this report counts the establishments individually but categorizes them by the overall size of the parent company. Employer firms may be for-profit or nonprofit but not governmental.

Establishment: An establishment is a single physical location where payroll employees on staff conduct business or perform services. It may be part of a larger company, along with other establishments, or it may constitute the entire company. Employment at the establishment is based on the number of people working full or part time, excluding owners, contractors, and temporary workers.

Gross receipts: Also known as sales, these are revenues that a business receives for goods or services from customers, before subtracting costs such as payroll, materials, rent, taxes, and other expenses.

Local versus traded industries: A way to categorize industry sectors based on whether their businesses primarily sell products or services within their geographic areas (“local”) or across regions (“traded”). This report uses a categorization developed at Harvard University that is explained in the methodology.

Nonemployer firm: A business entity with no employees but one or more owners, such as a holding company, partnership, or freelance “gig” business. An individual may own more than one nonemployer firm, perhaps to supplement regular employment. This report counts nonemployer firms separately from employer firms.

Profits: Also known as net earnings, these are a business’s revenues remaining after payroll and other expenses. Privately held companies, in contrast to publicly traded companies, are not required to disclose profits, often making their financial condition opaque to policymakers and analysts. This report viewed the data from business tax filings held by the Philadelphia Department of Revenue under strict confidentiality; only aggregate summaries are presented in this report.

Self-employed worker: Individuals ages 16 and older working at least 15 hours a week in an incorporated or unincorporated business that they own or in which they have an ownership stake. Incorporated self-employed workers typically own small businesses that may or may not have paid employees. Unincorporated self-employed workers typically include freelancers and contractors operating without employees. Researchers consider self-employment data a reliable way to view the personal characteristics of owners of smaller businesses, albeit with limited detail about the companies themselves.

Supply chain versus business-to-consumer industries: A way to categorize industries based on whether their products or services are sold primarily to other industries (supply chain) or to personal consumers (business to consumer). This report uses a categorization developed by researchers at MIT and Harvard Business School, as explained in the methodology.

Philadelphia's business ecosystem

In Philadelphia and other big cities, large companies dominate the skylines, headlines, and economic trend lines. But most local businesses are small or midsize, and they play several crucial roles.

Research has shown that smaller businesses—nonprofit and for-profit, new and old—enable numerous activities of daily life, giving many residents their first work experiences, and sustaining and revitalizing neighborhoods.¹ They are sources of innovation, generating more patents per employee than large companies do.² They embody entrepreneurship when they launch or hire as well as cut back or shut down, all aspects of a healthy market life cycle that economists sometimes call “creative destruction.”³ And they provide essential community, civic, and social services, often as tax-exempt nonprofit businesses, which are counted alongside other small and midsize businesses in this report.⁴

Establishments and employment

Small and midsize businesses represented a significant, but shrinking, part of the economy in Philadelphia and some other cities in this report in the years leading up to the pandemic.

In 2016, the latest year for which data is available for this measure, Philadelphia had 27,929 business establishments or workplaces owned by companies based in the city or elsewhere. Of those establishments, 76% belonged to small companies with 99 or fewer employees, and another 6% were owned by midsize businesses with 100 to 499 employees.⁵ The remaining 18% were owned by large companies, many of them national chains. This means that 82% of all private sector business establishments—22,853 in all—were in the small and midsize segment.

These entities consisted of law offices and nursing facilities, auto repair shops and cafes, corner stores and trade schools, nonprofits and for-profits, stand-alone local businesses and parts of chains. While most of the city's businesses were small or midsize, they employed only about 4 in 10 workers, or 242,000 people in 2017. About 14% of them were at midsize businesses and 25% at small ones, the latter mostly “micro” sized, with nine or fewer employees.

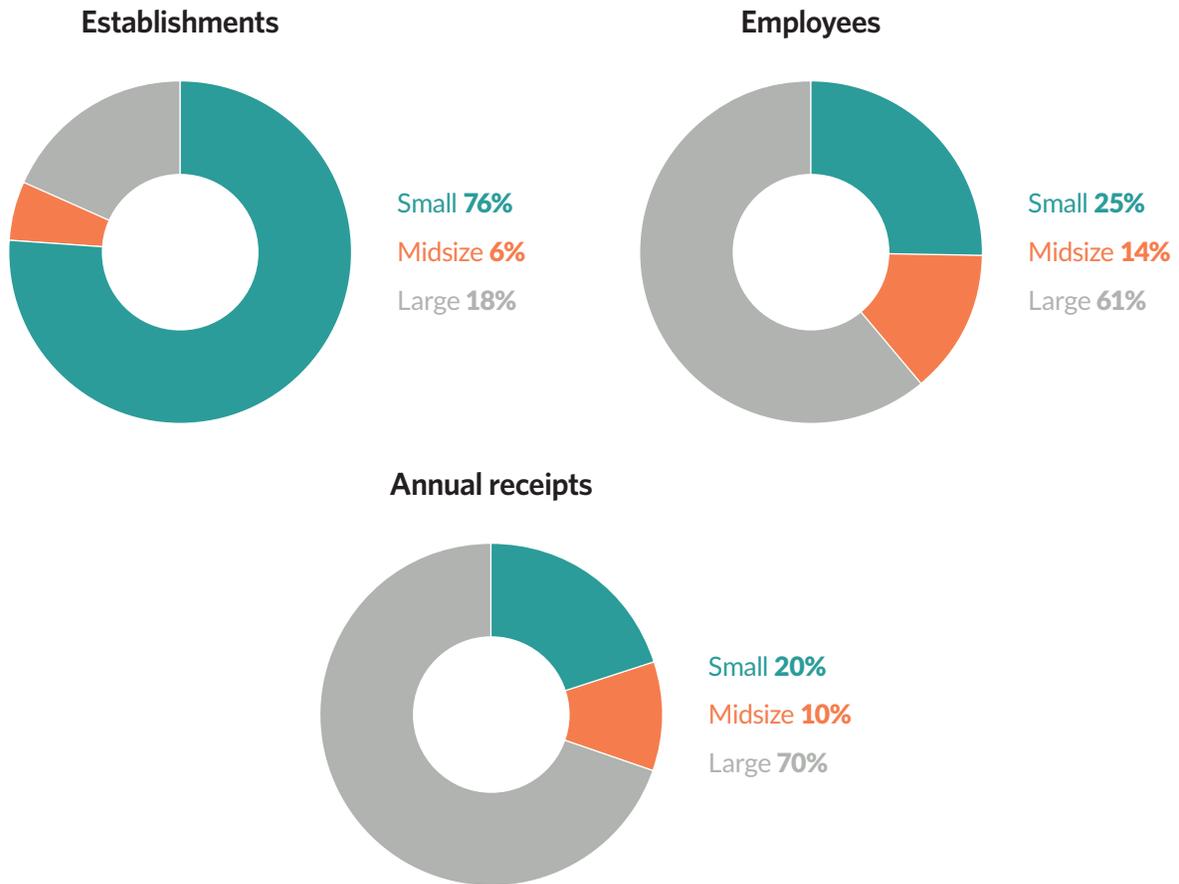
According to figures from 2012, the latest available, just over 30% of annual sales at businesses with employees in Philadelphia were made at small and midsize establishments—20% at small ones and 10% at midsize ones. The rest were at large establishments. (See Figure 1.)



Figure 1

Business Establishments, Employment, and Receipts by Company Size in Philadelphia

Establishments and employment for 2016, receipts for 2012



Compared with large companies, small and midsize entities with employees operate many more establishments but employ fewer people and generate less in sales. This pattern is similar across other cities and the country as a whole. These charts show establishment and employment figures from 2016 and receipts from 2012, the latest data available in each category.

Source: U.S. Census Bureau, Statistics of U.S. Businesses

© 2020 The Pew Charitable Trusts

Some 22,853 establishments in Philadelphia were owned by small and midsize companies in 2016, the city's highest number since 1990, mirroring an increase nationwide and accompanying the rising city population in recent years. Preliminary figures for 2017 showed that the number of establishments in this segment continued to rise.

Employment at private sector businesses of all sizes reached 622,100 in 2018, a level not seen in at least 20 years. Overall, employment in the city grew 6% from 2007 to 2016.

However, most of the employment growth came at establishments run by large companies, collectively up 9.5% over the same time period. At small and midsize businesses, employment rose only 1%, far below the median of 10% in the other cities. During that period, large companies in Philadelphia expanded faster than small or midsize ones; small or midsize companies grew to the point that they became large ones; and not enough smaller companies were created to counterbalance large ones' growth.

Consequently, the small and midsize segment's share of workers in Philadelphia fell from 41% to 39%. This decline began at least two decades ago but accelerated after the 2007-09 recession, which hit small and midsize businesses particularly hard. Only in recent years have smaller companies begun to catch up with large ones in their employment growth rates. (See Figure 2.)

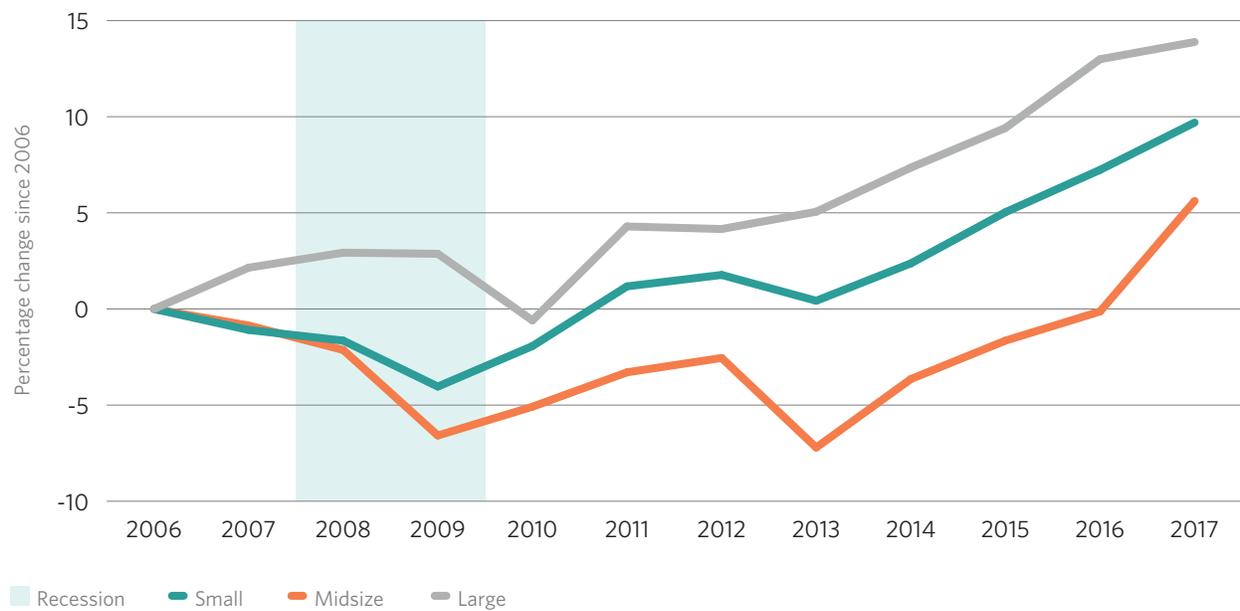
Philadelphia's large establishments overall were bigger than their peers in other cities, while its small and midsize establishments were at the median, with an average of 10.6 employees.

"Large companies have gained a lot of the share of the job base. The reason partly is that 'mom and pop' businesses are getting crushed by big retailers, particularly online and particularly in urban areas," Mark Zandi, chief economist at Moody's Analytics, said in an interview with Pew before the COVID-19 pandemic. "And small and midsize businesses are having increasing difficulty getting debt and equity capital, unless you're in San Francisco or Boston or D.C."



Figure 2

Employment Growth Rates by Company Size in Philadelphia, 2006-17



Indexed to 2006, job growth rates at small and midsize businesses lagged those at large companies for most of the decade. Employment at midsize businesses lagged the most.

Source: U.S. Census Bureau, Longitudinal Employer-Household Dynamics

© 2020 The Pew Charitable Trusts

As seen in Figure 2, employment at the city's small and midsize businesses fell sooner and more sharply during the 2007-09 recession than at its large businesses. The smaller ones also began rehiring sooner—although in lower numbers—than large companies did.⁶

On the whole, small and midsize companies' financial footprint relative to that of large ones was shrinking. Their percentage of total gross receipts in the city dropped from 31.3% in 2007 to 30% in 2012, according to U.S. Census Bureau data.⁷ The decline appears to have continued in the years before the COVID-19 pandemic, according to tax data from the city of Philadelphia, discussed below.

In 2017, about 3% of workers at Philadelphia businesses—some 20,000 people—were employed at “new” companies of any size created within the previous year. Almost 8%—about 47,000—were at “young” businesses created in 2012 through 2015, in the growth spurt after the 2007-09 recession. The remaining 89% worked at “mature” companies created in 2011 or earlier.⁸

Young businesses, which tend to be small or midsize, generally create a majority of an area's new jobs at any time. But they also shed more jobs than older, large companies do, and their net job creation rate fluctuates widely from year to year.⁹

Business density

Despite Philadelphia's increase in the number of establishments owned by small and midsize companies in recent years, the city still had fewer businesses per capita than the other cities studied in this report.

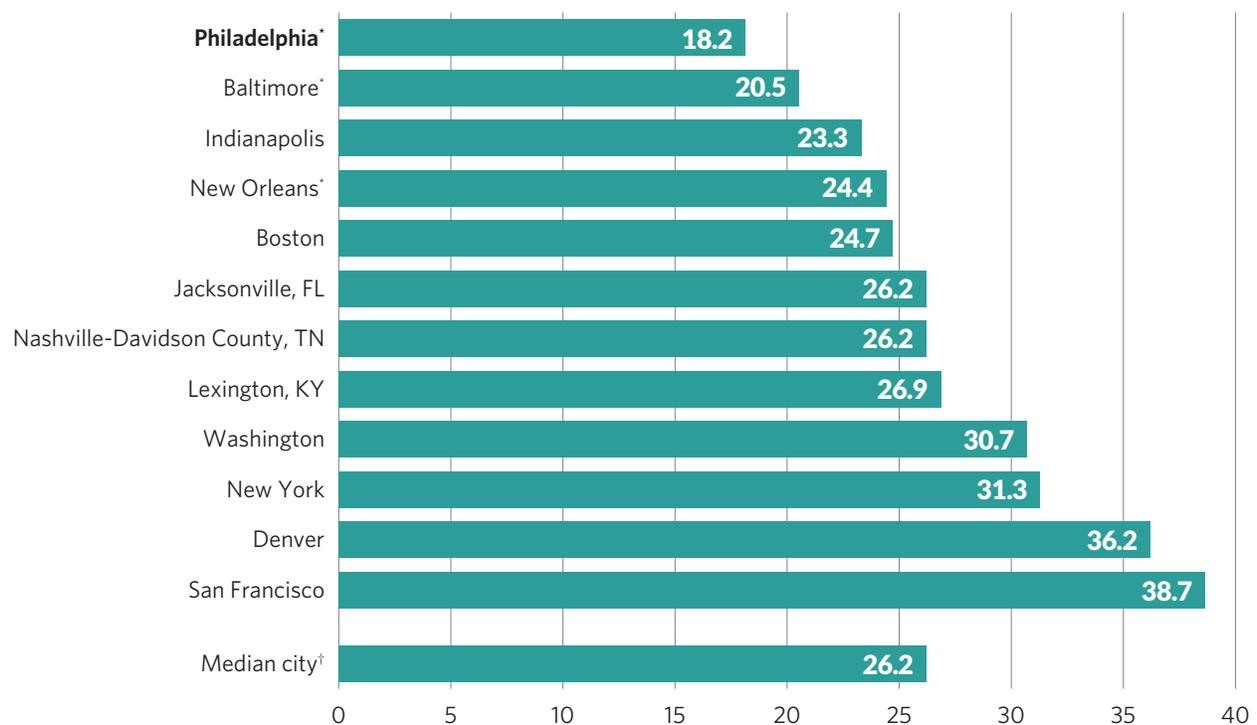
In 2016, the latest year that cross-city data was available, Philadelphia had 18.2 small and midsize establishments per 1,000 residents ages 16 and older, a measurement known as business density. That was half as many as Denver or San Francisco; the median figure for the comparison cities was 26.2.¹⁰

Of the cities studied, most of those below the median—Philadelphia, Baltimore, Indianapolis, New Orleans, and Boston—had relatively high poverty rates, and three were above 20%. The four cities with the most establishments per capita—Washington, New York, Denver, and San Francisco—had lower poverty rates and higher median incomes. (See Figure 3.) Research has shown that low business density, everything else being equal, is correlated with fewer business births, lower economic output, and higher poverty within an area.¹¹

Figure 3

Small and Midsize Business Establishments per Capita, 2016

Number of establishments per 1,000 residents ages 16 and older



Philadelphia has fewer small and midsize establishments per capita than the comparison cities. Lower business density is associated with higher poverty and lower startup rates.

* At least 20% of residents live below the poverty line. St. Louis was omitted because of data comparability issues.

† Median excludes Philadelphia.

Source: U.S. Census Bureau, Statistics of U.S. Businesses and American Community Survey

© 2020 The Pew Charitable Trusts

Metro View: Philadelphia Area on a Par With Others

On the basic measures of small and midsize businesses, Philadelphia's 11-county metropolitan area was generally comparable to other metro areas—and healthier than the city alone.

In 2016, small and midsize businesses accounted for nearly 47% of all jobs in the Philadelphia area, close to the median share of 12 metro areas that include the other cities studied in this report, and substantially above the city's 39%. Overall, the Philadelphia region's job total was flat since the 2007-09 recession, while there was substantial growth in the other metro areas.

In the Philadelphia region, small and midsize businesses accounted for one-third of all business receipts in 2012 (the last year available), matching the other areas and slightly exceeding the city's figure.

Business density across the region was 24.7 establishments per 1,000 residents ages 16 and older. That was slightly below the other areas' median density but markedly higher than the city's 18.2.

Among the comparison cities, Philadelphia had the fewest small and midsize establishments per capita in the professional, financial, construction, real estate, and business service industries. It came closer to other cities' median per capita number in education, corporate management, and transportation.¹²

Births, deaths, and relocations

A city's economy gains business establishments when companies are born, split off from existing ones, move in from elsewhere, or open up new locations, and it loses them when companies go out of business, scale back, or move out.¹³

Over the 2007-16 decade in Philadelphia, companies created or opened establishments—mostly small ones—at a narrowly higher rate than they shuttered them, on average. The gap between establishment birth rates and death rates averaged 0.6 percentage points over the decade. For the comparison cities, the median was 1.1 points, meaning their births exceeded deaths by nearly double the Philadelphia margin.¹⁴

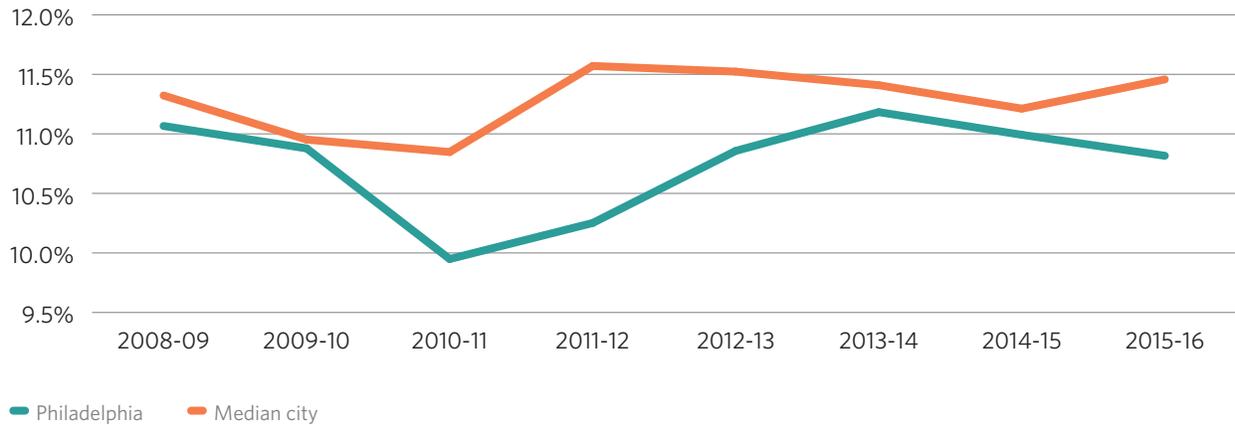
Philadelphia's relatively weak performance in this regard was due more to a lack of establishment births than to excessive deaths. The city's birth rates (new establishments as a percentage of the number of existing establishments a year earlier) were slightly, though consistently, below the median city rate over the decade, averaging 10.9% compared with 11.4%. Death rates matched the median, an average 10.3%. (See Figure 4.)

Figure 4

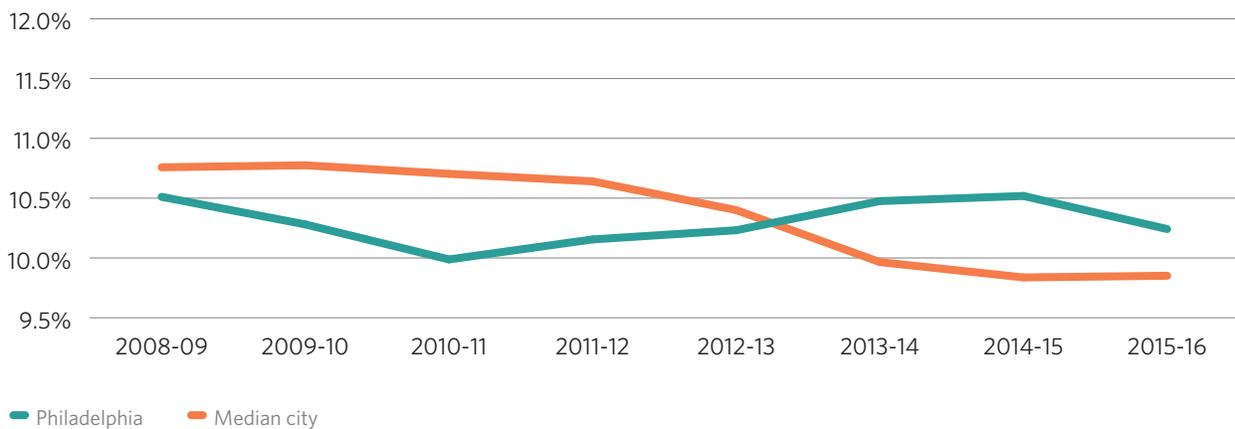
Establishment Birth and Death Rates, 2008-16

Rolling average percentages, Philadelphia versus comparison city median

Births



Deaths



Compared with the other cities, Philadelphia has had lower establishment birth rates and fairly typical death rates over the past decade. The rates are calculated from employment records at establishments over a one-year period, which are then combined into three-period rolling averages to smooth out unusual spikes; each average is labeled on the x-axis by its final period. For instance, the x-axis point labeled "2008-09" represents the average of periods 2006-07, 2007-08, and 2008-09.

Source: U.S. Census Bureau, Statistics of U.S. Businesses

© 2020 The Pew Charitable Trusts

From 2006 to 2016, net job growth at new establishments was also about half the rate elsewhere, an average 0.8% per year. And new establishments lagged existing establishments of any size in creating jobs, with an average 8.4% annual increase from 2006 to 2016. Though strong, that was below the median city rate of 9.3%.¹⁵

Relocations are another factor in business dynamism; companies pack up and move operations for various reasons. Entrepreneurial hot spots like San Francisco, Denver, and Boston each have large numbers of moves in and out, a sign of vibrancy as long as arrivals outpace departures. Local officials and economic development agencies spend significant time—and sometimes tax dollars—coaxing companies, especially big ones, to move to or remain in their cities.¹⁶

In Philadelphia and the other cities in this report, data suggests that relocations were rare and paled in comparison to births and expansions as a source of new establishments and jobs. That said, when relocations happened, they were more prevalent among small companies than among large ones, making them a distinctive feature of the small and midsize ecosystem.

Metro View: Philadelphia Region Lags Others on Births

Like its core city, the Philadelphia metro area lagged other areas in its rate of business establishment births, while matching them on death rates.

Over the 2013-16 period, the 11-county region's annual average establishment birth rate was 9.6% per year, compared with a median 10.8% for the comparison cities' metro areas. Average death rates, on the other hand, were 9.1% and 8.9%, respectively.

Metro-level data is more detailed than county-level data, allowing for analysis of birth and death rates at small, midsize, or large companies; the data shows the Philadelphia area lagged other metros in the rate at which establishments were opened by small companies, but not by midsize or large ones.

From 2015 to 2017, less than a tenth of 1% of all small establishments in Philadelphia—around 50 businesses—were ones that had moved into the city from somewhere else in any year, on average. A slightly higher percentage moved out, though still just a fraction of 1%.¹⁷ The city lost far more companies and jobs from outright closure than from out-migration.

Compared with the median city, Philadelphia both gained fewer and lost fewer small businesses as a result of relocations, another sign that its ecosystem has less dynamism than elsewhere. Data was not readily available on where Philadelphia's departing companies went and which sectors they represented; some research suggests that most stay within their metropolitan region.¹⁸

Industry sectors

Within the private sector, Philadelphia has a diversified mix of small and midsize establishments, operating in hundreds of industry sectors and lines of business. But a concentration in the health care and social assistance sector makes the mix slightly less diversified than in the other cities.

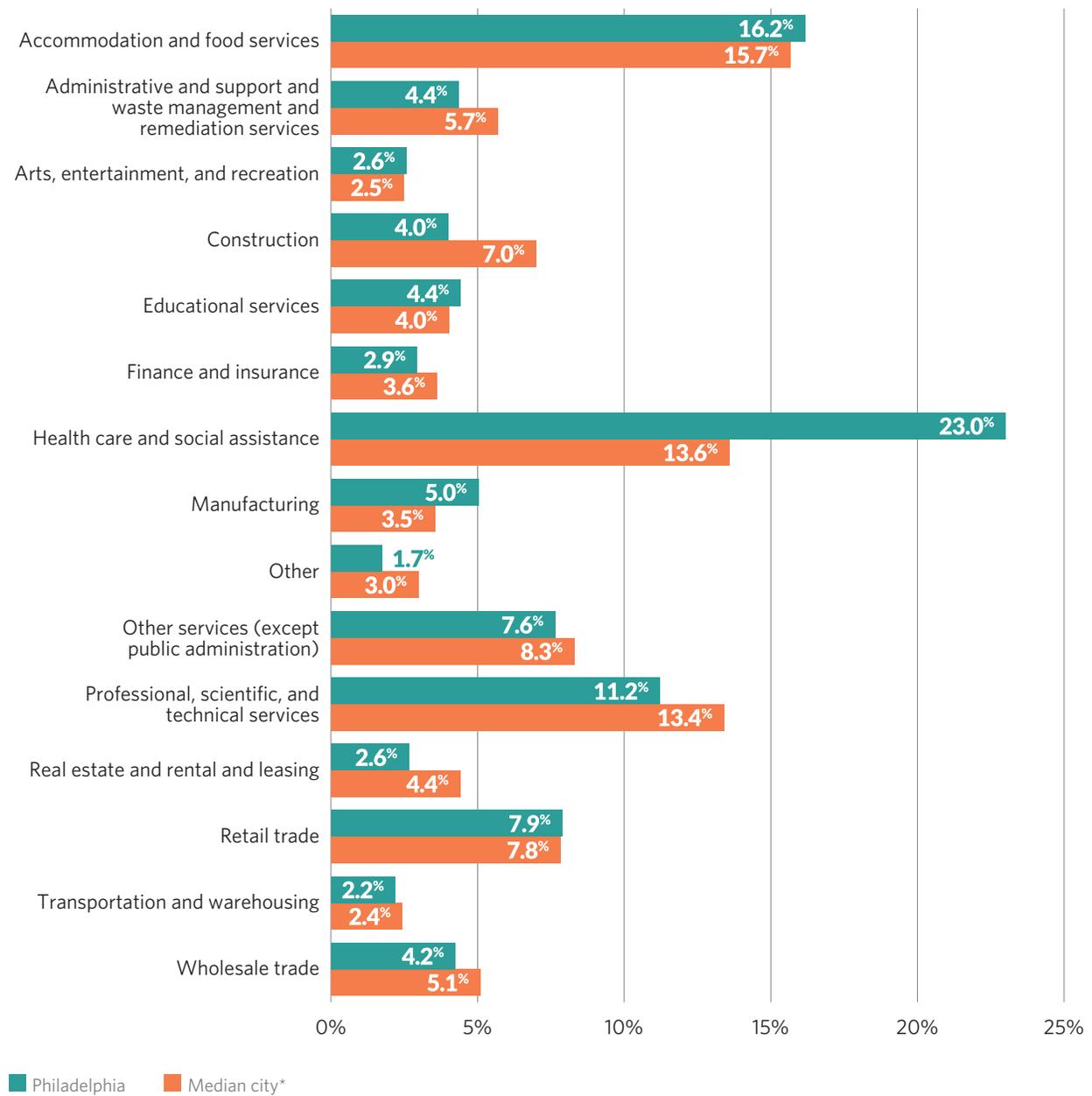
In 2017, 23% of workers at small and midsize businesses in Philadelphia were found in the health care and social assistance industry; no other city in this study had such a high share, the closest being St. Louis (18%) and Baltimore (15%). Within the industry, the biggest number worked at doctors' or dentists' offices and at facilities for youth, older adults, or the disabled.

After health care and social assistance, the next-largest small and midsize employer groups were accommodation and food services (16% of workers); professional, scientific, and technical services (11%); and retail trade (8%).¹⁹ (See Figure 5.)

Figure 5

Small and Midsize Business Employment by Sector, 2017

Share of workers in Philadelphia versus comparison city median



Employment at these businesses in Philadelphia was highest in the health care/social assistance and accommodation/food services sectors, the former significantly more so than in the median comparison city.

Note: "Other" includes agriculture, information, management of companies, mining, utilities, and public administration.

* Median excludes Philadelphia.

Source: U.S. Census Bureau, Longitudinal Employer-Household Dynamics

© 2020 The Pew Charitable Trusts

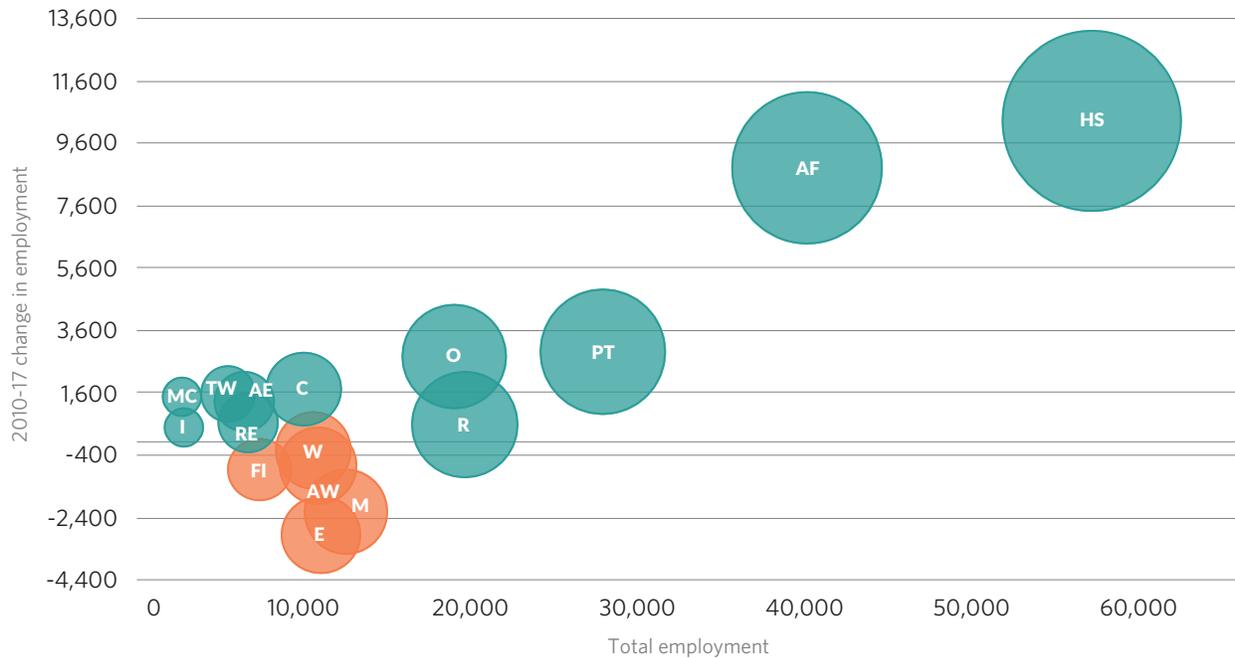
During the economic expansion that ended with the COVID-19 emergency, some industries other than health care stood out. From 2010 to 2017, for instance, job growth in the city's transportation and warehousing businesses (including ride-hailing services and logistics delivery) exceeded their counterparts in many of the comparison cities. Consumer and business services ("Other services") also slightly outpaced the average job growth elsewhere.

Employment in several industries in Philadelphia—including hospitality and retail, which tend to be lower paying, and professional/technical services—grew on a par with their peers elsewhere. A few others lagged; among them were manufacturing, finance, and the information sector, including high-tech digital media, which was essentially flat from 2010 to 2017. Figure 6 shows all major sectors' total number of jobs in 2017 and change in number of jobs since 2010.



Figure 6

Employment by Sector at Small and Midsize Establishments in Philadelphia, 2010-17



■ Employment rose ■ Employment fell

AF	Accommodation and food services	M	Manufacturing
AW	Administrative and support/waste management and remediation services	O	Other services (excluding public administration)
AE	Arts, entertainment, and recreation	PT	Professional, scientific, and technical services
C	Construction	RE	Real estate and rental and leasing
E	Educational services	R	Retail trade
FI	Finance and insurance	TW	Transportation and warehousing
HS	Health care and social assistance	W	Wholesale trade
I	Information		

Each bubble represents jobs at small and midsize businesses in major industry sectors. They are sized, colored, and positioned according to number in 2017 and growth since 2010. For example, health care and social assistance businesses (HS), which had about a quarter of all jobs (bubble size), added about 10,300 jobs (vertical axis) over the period and had 57,100 jobs total in 2017 (horizontal axis).

Note: Excludes sectors with fewer than 2,500 workers in 2017 (agriculture, mining, utilities, and management of companies).

Source: U.S. Census Bureau, Longitudinal Employer-Household Dynamics

© 2020 The Pew Charitable Trusts

Andy Rachlin, managing director for lending and investment at Reinvestment Fund and a former economic development official for Philadelphia’s city government, said before the COVID-19 economic shock that the city had “seen a sharpening of old trends.

“If it’s a business that serves the life sciences, Philly is in a competitive position. If it’s a traditional manufacturing business, the cost basis continues to be tough,” Rachlin said in an interview with Pew, referring to labor, real estate, and other costs.

Employment in small and midsize educational companies also lagged other cities, falling 21% from 2010 to 2017 because of a decreasing number of specialty training schools and test prep companies. These job losses were counterbalanced by 36% job growth at large businesses and institutions over the same period.



Traded and supply chain categories

This report offers two alternative ways to categorize industry sectors, and both show challenges for Philadelphia's small and midsize business community.

In the first way, establishments are grouped according to where most of their sales take place, either inside the metropolitan area where they are located or not. This distinction is "local" versus "traded," such as a neighborhood pizza shop versus a national distributor of pizza shop supplies.

Economists consider traded activity to be beneficial for an area because it tends to bring in new capital—in the form of revenue and credit—and create higher-paying positions and jobs that require a greater skill level. This additional capital and buying power, in turn, raises demand for goods and services, often from small businesses.²⁰ On the other hand, local activity is crucial to an area's business ecosystem, job market, livability, and sense of community, even if it does not lead directly to net economic growth.²¹

In 2015, some 19% of small and midsize establishments in Philadelphia were in the traded category—well below the median of 27% for the other cities—with the remaining 81% in the local category, according to the latest data available for this analysis. Philadelphia's traded share was lower than every other city in this study except for St. Louis.²² (See Figure 7.)

"The takeaway is that we might want to stimulate the growth in the traded [category]. Philadelphia has a slow-growing local economy, and the way you can grow is to export to growth markets," said Christopher Swann, a Temple University economist formerly at Select Greater Philadelphia and the U.S. Bureau of Economic Analysis, speaking in an interview with Pew.

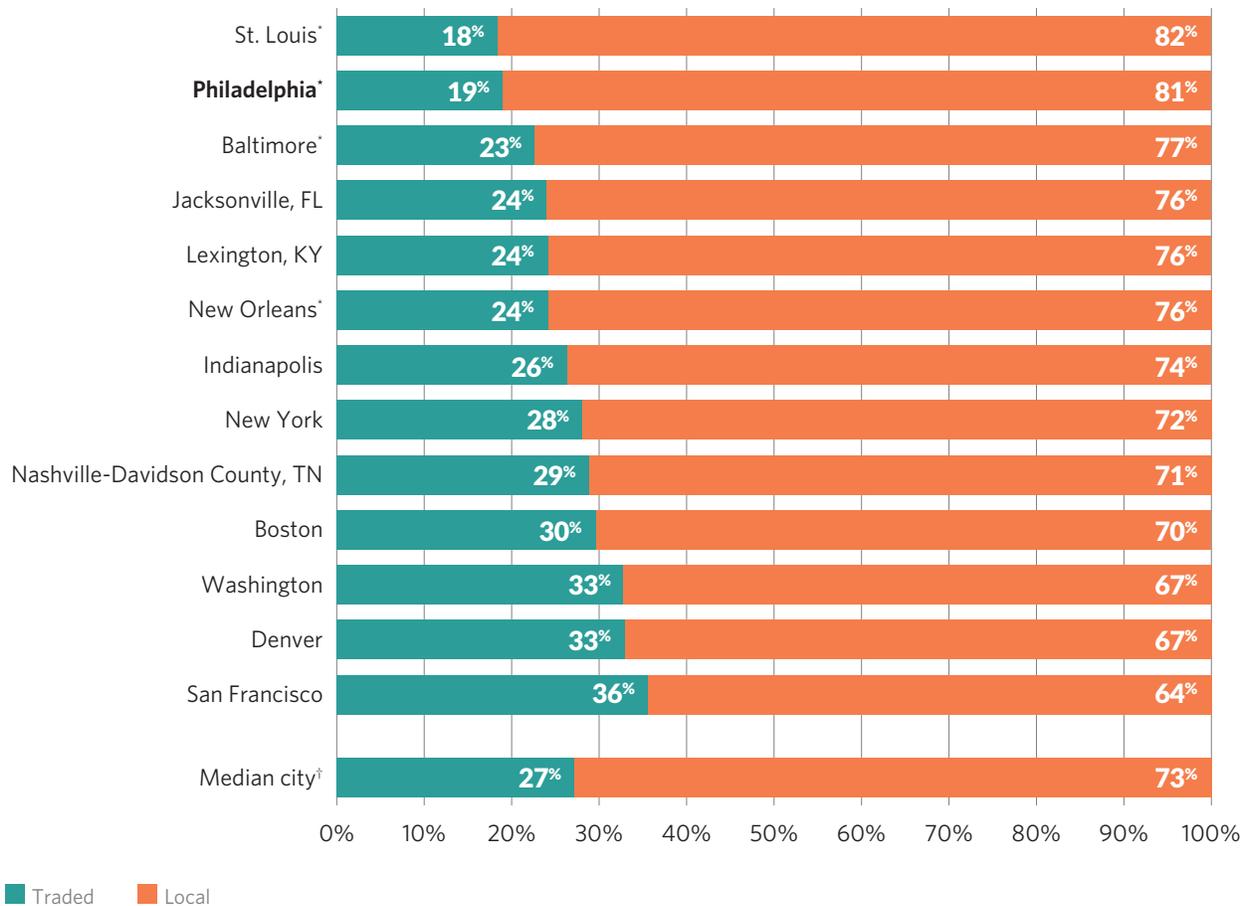
Community advocates point out that "local" business activity also can be beneficial even if its jobs pay less and don't lift the overall economy.

"The owner may not have wealth to build anything else. But the business may allow them to send a kid to college," said Beth McConnell, policy director at the Philadelphia Association of Community Development Corporations. "They also help stabilize neighborhoods."

Figure 7

Small and Midsize Businesses in Traded or Local Category, 2015

Philadelphia and comparison cities



Philadelphia’s small and midsize establishments, as a group, depend on local markets and workers more heavily than do businesses in most other cities studied in this report.

* At least 20% of residents live below the poverty line.

† Median excludes Philadelphia.

Source: Pew analysis of County Business Patterns data, based on categorizations developed at Harvard Business School and MIT

© 2020 The Pew Charitable Trusts

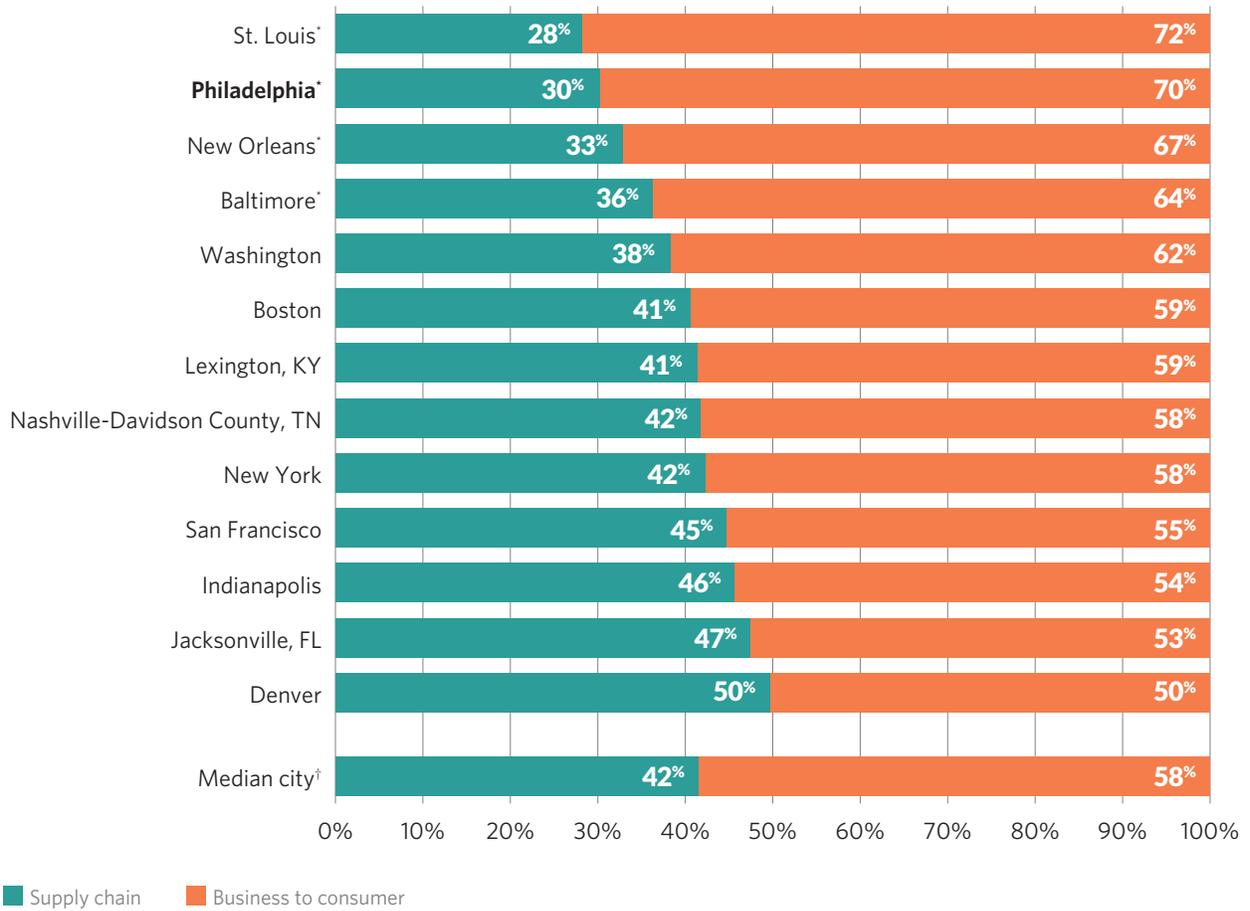
The other categorization classifies establishments by whether they are “supply chain” businesses, selling goods or services primarily to other companies and governments; or “business to consumer” sellers of products or services to end users. Researchers have found that supply chain businesses tend to be more innovative and pay higher salaries than consumer-facing companies, although they may create fewer jobs than local service businesses do.²³

In Philadelphia, 30% of small and midsize companies were supply chain businesses in 2015, and 70% were business to consumer. The city’s supply chain percentage was significantly lower than the median city’s share of 42%. It also was lower than that of all other cities except St. Louis. (See Figure 8.)

Figure 8

Small and Midsize Businesses in Supply Chain or Business-to-Consumer Category, 2015

Philadelphia and comparison cities



Philadelphia's small and midsize establishments, as a group, were more likely than their peers to serve consumers directly rather than to supply other businesses. Some bars differ slightly in length due to rounding.

* At least 20% of residents live below the poverty line.

† Median excludes Philadelphia.

Source: Pew analysis of County Business Patterns data, based on categorizations developed at Harvard Business School and MIT

© 2020 The Pew Charitable Trusts

One example of a traded, supply chain company in Philadelphia is RJMetrics, a provider of back-end data analytics for online commerce companies around the world.²⁴ Its co-founder, Robert J. Moore, said Philadelphia needs both a startup support system and urban livability—including high-quality schools—to create conditions for entrepreneurial success stories like his.

“The nature of being a traded company is that your ability to grow extends way beyond the city you’re in, and that affects your access to capital and talent. If you want to recruit people, assume you want them to work here. So the city has to be competitive as a city,” Moore said in an interview with Pew.

The number of jobs provides another way to look at traded and supply categories, although data was not available to distinguish smaller businesses from larger ones on this measure. Philadelphia matched the other cities in its share of jobs in the traded economy, at about one-third; this included employees in higher education. But a smaller share of the city’s workers was in the supply chain category (23% vs. 37%), which included wholesalers, enterprise software designers, commercial builders, and others serving businesses and governments.

Business locations

Philadelphia has many hubs of small and midsize business activity. The locations of these businesses, which are often regulated by zoning laws, can affect neighborhood livability and development, and vary by industry type, proximity of workers, concentration of customers and suppliers, size of business, and owner preference or history, among other factors.

The city has more than 260 distinct commercial zones, roughly 80 of them officially designated as business corridors where thousands of “mom and pop” stores, cafes, boutiques, repair shops, dry cleaners, bars and restaurants, and other establishments provide goods, services, amenities, livability, stability, and sometimes security and spirit for their blocks.²⁵

Center City has the largest share of small and midsize businesses. In 2017, the latest period available, Center City (including Chinatown) was home to 24.4% of all of Philadelphia’s small and midsize establishments with employees, compared with 26% in 2006.²⁶ Over the preceding two decades, however, particularly since the 2007-09 recession, the number of these establishments increased in many of the neighborhood commercial corridors more than it did in Center City.

Major hubs gaining on Center City were Spring Garden/Northern Liberties, University City, the Navy Yard, and the Northeast, the last of which is the second-biggest nexus of business establishments and a top destination for new residents, particularly immigrants. The same areas saw the biggest percentage drops in vacant storefront and commercial properties from 2014 to 2018, according to postal service delivery records.²⁷

ZIP code area data shows that Center City’s 19103 ZIP code remained the main nexus for “white collar” professional, financial, and corporate management firms, as well as a growing zone for publishing, real estate, and staffing agencies.²⁸ Northeast Philadelphia continued to be a major hub for construction companies and logistics businesses, which also were found in Southwest Philadelphia, near the airport. (See Figure 9.)

Notable subsectors included used car dealers in Lower Northeast Philadelphia (ZIP code 19124) and jewelers in eastern Center City (19106), although both areas saw their concentrations decline a bit between 2006 and 2017. The subsector with the highest geographic concentration, and by some estimates the most economic potential, was biotechnology research; 65% of those companies were found in University City (19104).

Figure 9

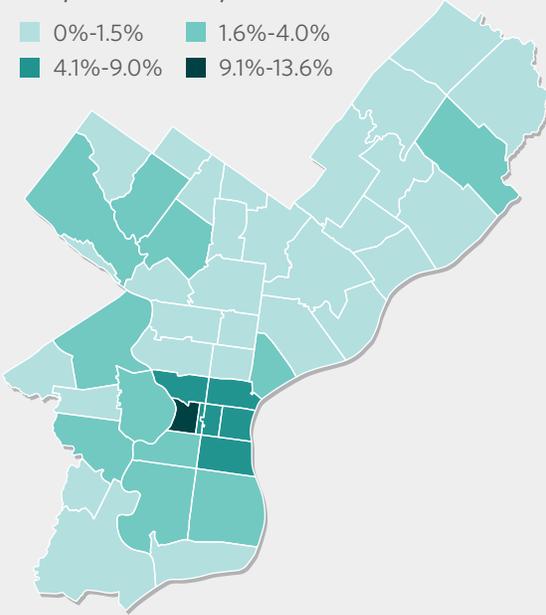
Sector Concentrations of Small and Midsize Businesses by ZIP Code, 2017

Select industries with notable concentrations or dispersions

Percentage of city's establishments

Arts, entertainment, and recreation

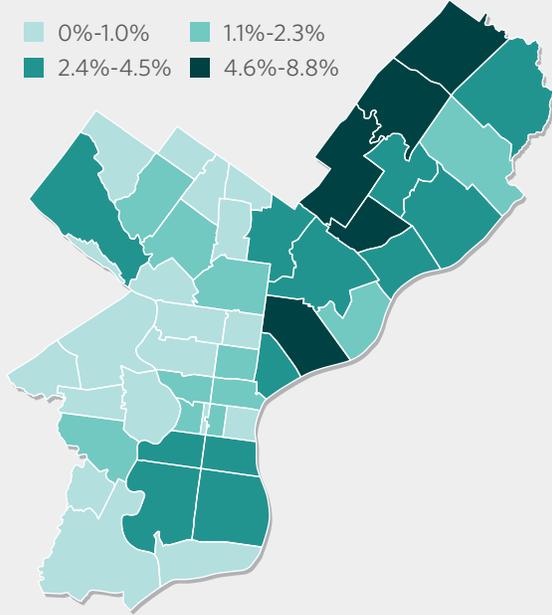
- 0%-1.5%
- 1.6%-4.0%
- 4.1%-9.0%
- 9.1%-13.6%



Percentage of city's establishments

Construction

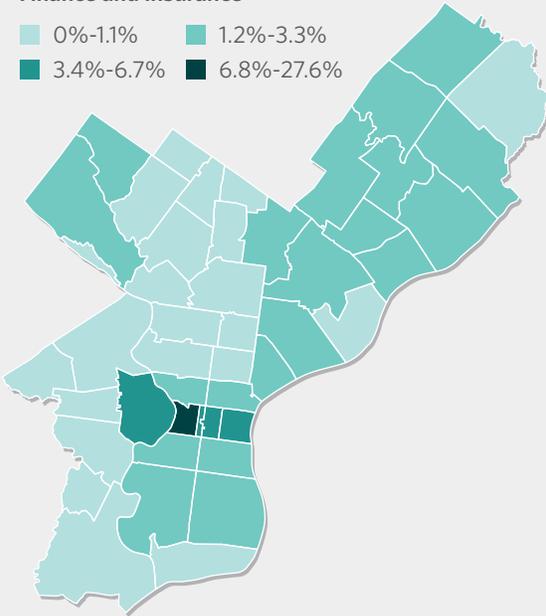
- 0%-1.0%
- 1.1%-2.3%
- 2.4%-4.5%
- 4.6%-8.8%



Percentage of city's establishments

Finance and insurance

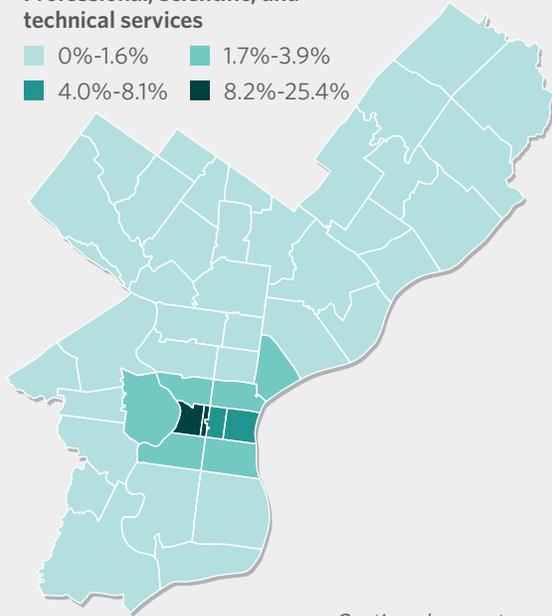
- 0%-1.1%
- 1.2%-3.3%
- 3.4%-6.7%
- 6.8%-27.6%



Percentage of city's establishments

Professional, scientific, and technical services

- 0%-1.6%
- 1.7%-3.9%
- 4.0%-8.1%
- 8.2%-25.4%



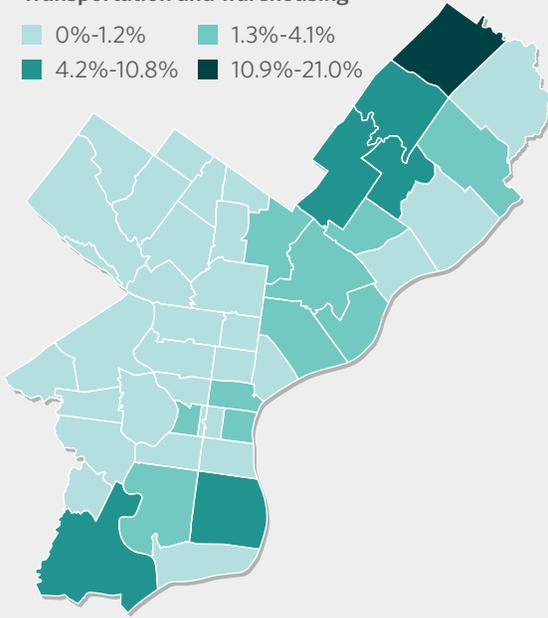
Continued on next page

Figure 9 (continued)

Percentage of city's establishments

Transportation and warehousing

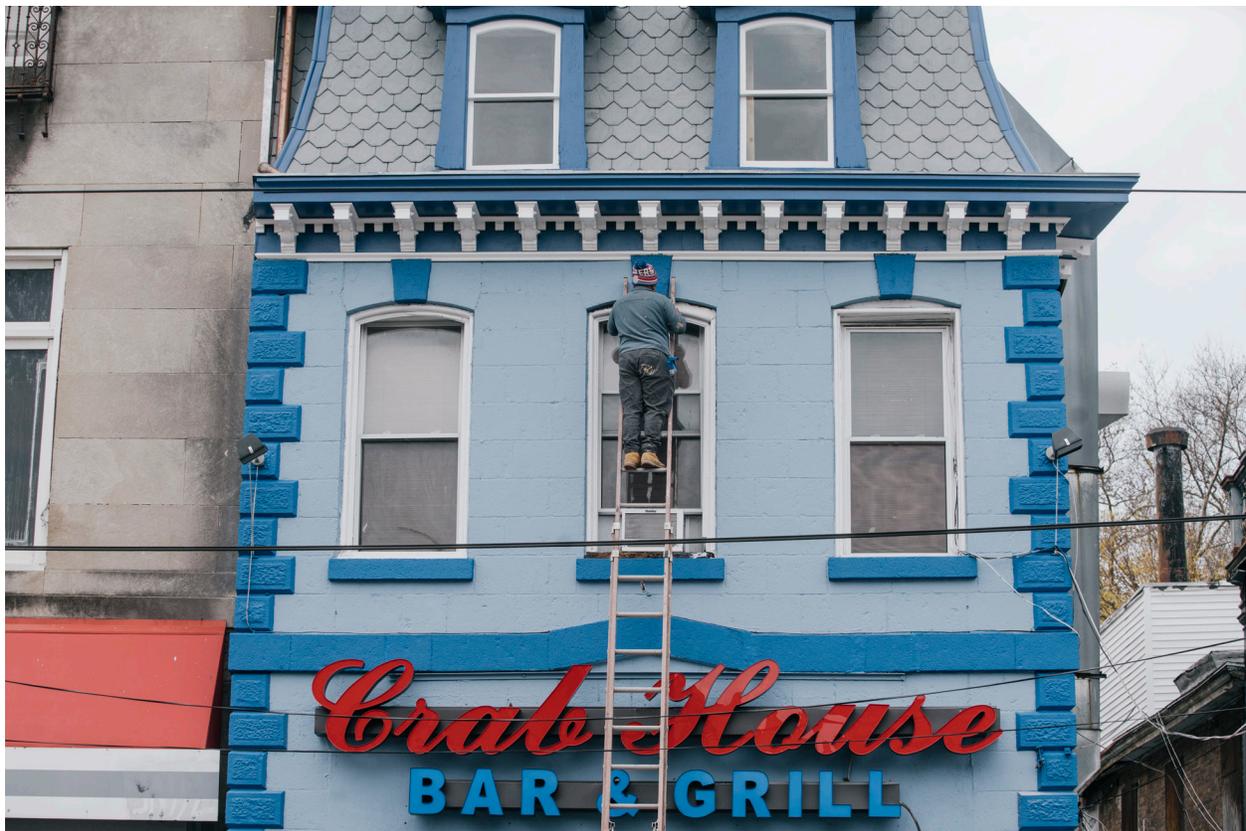
- 0%-1.2%
- 1.3%-4.1%
- 4.2%-10.8%
- 10.9%-21.0%



Philadelphia's small and midsize businesses in transportation and warehousing were most concentrated near the airports and ports, while professional service companies were most concentrated in Center City, with financial and insurance establishments dispersed citywide.

Source: U.S. Census Bureau, ZIP Codes Business Patterns

© 2020 The Pew Charitable Trusts



Owners and entrepreneurs

Philadelphia city officials have made boosting entrepreneurship by underrepresented groups, especially racial and ethnic minorities, a focus of their economic development activities and programs. The data paints a mixed picture of the diversity of entrepreneurs and business owners, with Philadelphia in many cases lagging other cities, particularly those with lower poverty rates.

Self-employed characteristics

Self-employment in this report is defined as people ages 16 and older who reported in census surveys working for themselves at least 15 hours per week at a for-profit incorporated or unincorporated business that they owned or had an ownership stake in.²⁹ This may include “solopreneur” or “gig” contractors working alone, as well as employers of wage-earning workers at small businesses—but not usually midsize or larger entities. Economists consider it an acceptable glimpse of an area’s entrepreneurship.³⁰

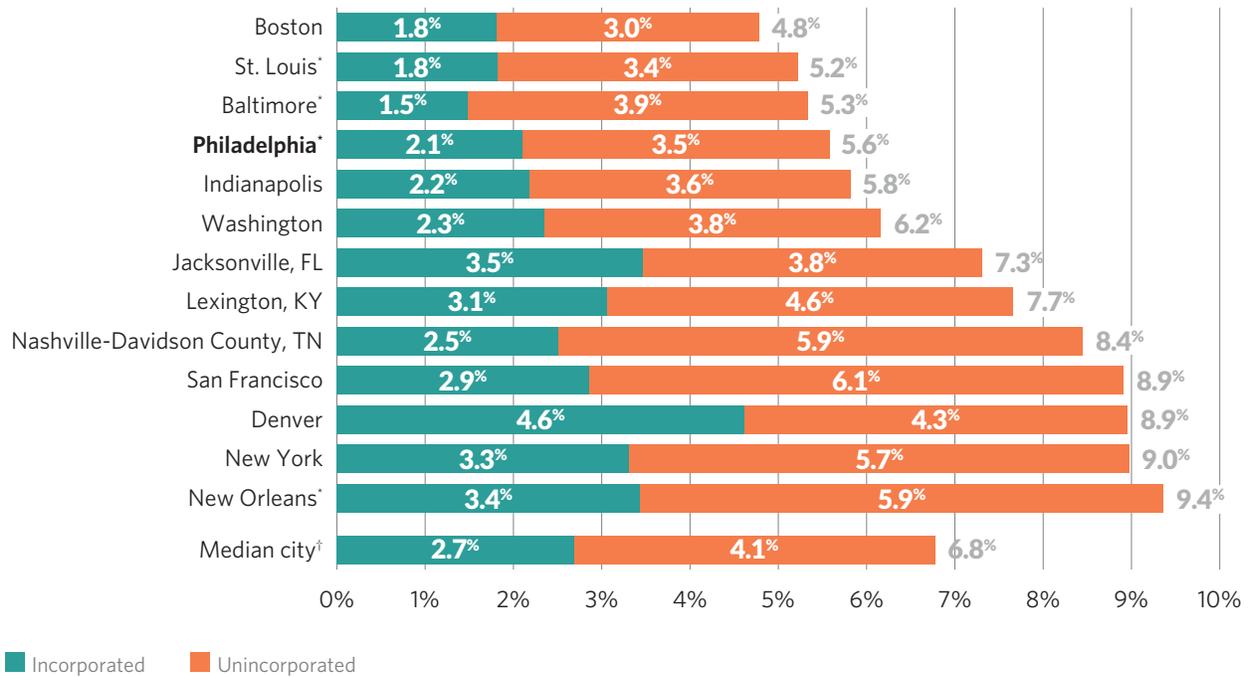
According to this data, Philadelphians overall were less likely to be in this category than were the residents of most other cities in this study. In 2017, just 5.6% of Philadelphians ages 16 and older were self-employed at a business they owned, below the median 6.8% in other cities.³¹ Less than half of self-employed Philadelphians’ businesses were incorporated, a legal and tax status determined by the owners themselves and often signaling a higher stage of growth. (See Figure 10.)



Figure 10

Self-Employment in Philadelphia and Comparison Cities, 2017

Percentage of residents 16 and older who were self-employed at least 15 hours per week



Philadelphians were less likely than their counterparts in other cities to be self-employed entrepreneurs and business owners. Residents of higher-poverty cities generally were less likely to be self-employed than those in lower-poverty cities, while self-employed owners of unincorporated businesses outnumbered incorporated ones to varying degrees across all cities. Due to rounding, some bars may not appear to add up exactly to the percentage written in gray.

* At least 20% of residents live below the poverty line.

† Median excludes Philadelphia.

Source: U.S. Census Bureau, American Community Survey, one-year microdata, 2017

© 2020 The Pew Charitable Trusts

The city's self-employment was in line with that of most other cities with relatively high poverty rates, including St. Louis and Baltimore in this study. Cities with lower poverty rates, such as San Francisco and Denver, tended to have more self-employed individuals.

Looking at specific groups, 10.3% of Philadelphia immigrants and 6.9% of Asians were self-employed, both above the other cities' median rate. Philadelphia also was near the median rates for Hispanics (6.8%) and for veterans (4.8%). But it came in below the medians for whites (6.9%), Blacks, (3.5%), women (4%), and men (7%).³²

Entrepreneurship rates tend to track with other characteristics, particularly income and educational attainment. Research also shows that these rates can be related to creditworthiness, access to capital, networks of mentors and business leaders, and core motivation—was the entrepreneur really intent on building a growing business or just unable to make a good living otherwise, especially during a recession?³³

Metro View: Philadelphia Area Lags on Entrepreneurship

Entrepreneurship across the 11-county Philadelphia metropolitan area, as measured by the self-employment rate, lagged behind other metro areas in 2017, the latest year available.

About 6.8% of residents ages 16 and older across the metropolitan region reported being self-employed at a business in which they had an ownership stake, higher than the city's 5.6% figure but slightly below the median 7.6% for the other regions.

Certain groups also trailed their peers in other metro areas in self-employment rates, including Blacks (3.5%), whites (7.9%), and women (4.6%). There were some 193,000 self-employed business owners across the region, roughly a quarter of whom were based in the city.

Narasimha B. Shenoy, president and CEO of the Asian American Chamber of Commerce of Greater Philadelphia, said in an interview with Pew that many Asian immigrants in Philadelphia who lack skills to get jobs just “start a small business. Many of these mom and pops don’t want to grow. Their objective is basically to stay in business just enough to educate their kids.”

For those intent on building long-term, sustainable businesses, research has found that many rely heavily on personal wealth to operate, expand, and get through tough times, especially in the beginning years. A lack of entrepreneurial mentors or relatives decreases the odds of self-employment, and heavy student debt also appears to squelch entrepreneurship among young adults; both are big factors in Philadelphia.³⁴ For existing businesses, surveys show that members of minority groups are less likely than whites to obtain capital from traditional lenders.³⁵

Della Clark, president and CEO of The Enterprise Center, an incubation and support organization focused on minority enterprises, said in an interview with Pew: “In the minority entrepreneurship community, no matter how much training you do or how much you work with small businesses, if there’s no capital to finance the growth and development of that business, it’s just not going to grow. And capital happens to be one of the shortfalls for minority enterprises in this city.”

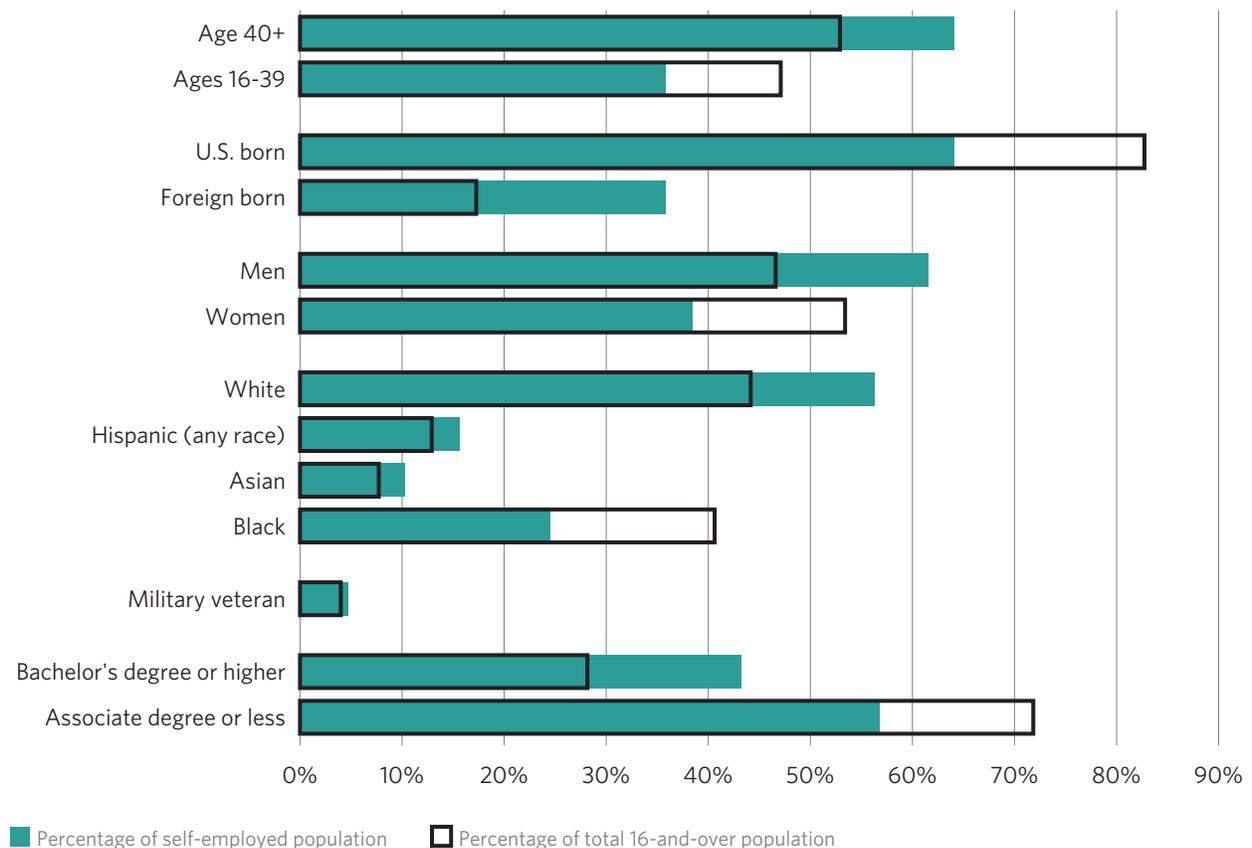
For some, the challenges are a bit different. “Latinos don’t have an entrepreneurship challenge. We start businesses at three times the rate of the general population,” Jennifer Rodríguez, president and CEO of the Greater Philadelphia Hispanic Chamber of Commerce, said in an interview with Pew. “The issue is scaling those businesses.”

All these issues are exacerbated by Philadelphia’s entrenched poverty, estimated at 24.5% in 2018, or about 377,000 people, disproportionately minorities. The sheer size of this group stifles the business ecosystem in two ways: First, there are fewer individuals with the personal means, knowledge, and networks it takes to start or sustain a small business; and second, there are limited customers for high-value goods and services from small businesses, as shown by Philadelphia’s relatively low “consumer buying power” rating among the cities in this study.³⁶

At the same time, Philadelphia has recently outpaced many of the other cities in the growth of two groups with relatively robust entrepreneurship and startup rates: immigrants and college graduates. From 2010 to 2018, the city’s foreign-born population grew 31%, and its college-educated population increased 51%.³⁷

The city's self-employed population numbered roughly 46,300 in 2017. Whites made up a bigger share of this group (56.3%) than of all residents 16 and older (42%).³⁸ Likewise, residents with at least a bachelor's degree and those over age 40 accounted for bigger shares of the self-employed segment than of the total population. Immigrants' self-employed share was twice as high as their citywide share. Hispanics' share was also higher than their citywide share. On the other hand, Blacks, women, and people ages 16-39 each had disproportionately low self-employed shares. (See Figure 11.)

Figure 11
Self-Employed Business Owners in Philadelphia by Grouping, 2017
 Compared with the total population



Immigrants and residents ages 40 and older are disproportionately likely to be self-employed, while residents under 40, women, Blacks, and the U.S.-born are disproportionately unlikely to be entrepreneurs. These businesses include “solopreneur” and “gig” contractors as well as employers.

Notes: Self-employment refers to residents ages 16 and older working at least 15 hours per week at an incorporated or unincorporated business in which they had an ownership stake, excluding those whose employment class could not be determined. See methodology for details.

Source: U.S. Census Bureau, American Community Survey, one-year microdata, 2017

© 2020 The Pew Charitable Trusts

The areas of the city where self-employed residents live say something about them and their role in enhancing neighborhood livability and stability. Research has found that small-business owners, compared with the general population, tend to own higher-value homes, change residences less often, and give more to charities.³⁹

In Philadelphia, residents of Center City and Northwest Philadelphia were most likely to be self-employed, followed by residents of Northeast and South Philadelphia. Residents least likely to be self-employed were in North, West, and Southwest Philadelphia, according to census data for the 2013-17 period.

About 69% of self-employed individuals working in Philadelphia were city residents, up from 62% a decade earlier. Small businesses with the highest resident-owner percentages were in construction and consumer services, such as dry cleaning; those with the lowest resident-owner shares were in manufacturing, and arts and entertainment.⁴⁰

Business characteristics

A different picture of owners emerges from looking at the characteristics of businesses rather than of self-employed individuals.

One distinguishing characteristic among small businesses is whether they have paid employees. Companies without paid employees—called nonemployer companies—include contracting and freelance businesses, partnerships, and holding companies, sometimes set up by people as alternate sources of income or as side gigs. Nonemployer companies tend to generate much less income and economic impact than employer firms, and only a small share turn into job creators. But they have grown substantially over the past decade.

In 2017, Philadelphia's nonemployer businesses numbered about 100,000, four times more than employers and growing faster than in the median comparison city.⁴¹ The biggest growth of nonemployer businesses over the preceding decade was in transportation, which included ride-hailing services.

Compared with employer businesses, nonemployer businesses were far more likely to have nonwhite and Hispanic owners, making them a major locus of entrepreneurship for minority groups. Blacks—either Hispanic or non-Hispanic—owned 6% of Philadelphia's companies with employees and 30% of those without employees, according to data for 2017 and 2012, respectively.⁴² Both percentages were higher than the medians in the other cities, largely because of Philadelphia's larger African American share of the population.

Hispanics in Philadelphia owned about 4% of employer firms and 13% of nonemployer firms, the latter almost double the median.

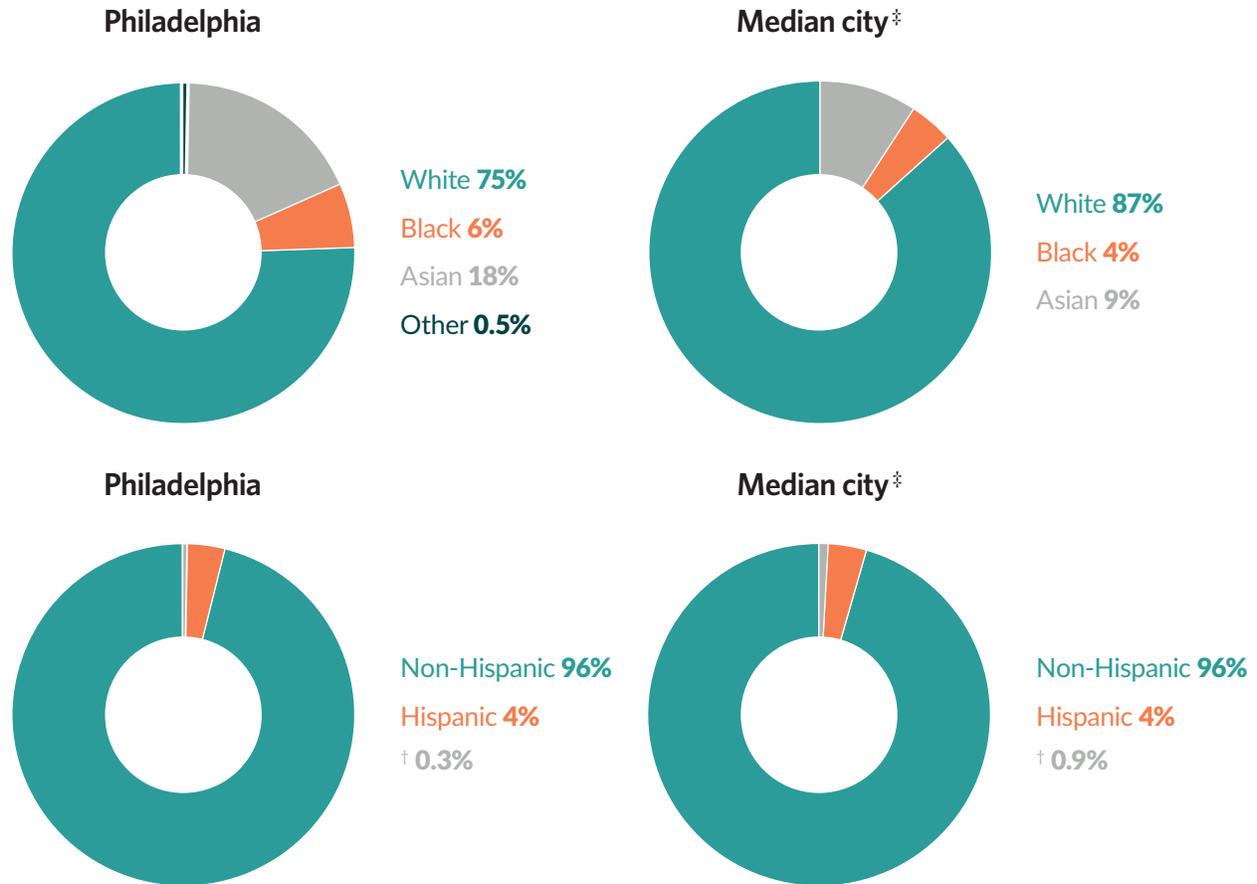
Asian and white entrepreneurs, on the other hand, operated a greater share of businesses with workers than without. Asians owned about 18% of Philadelphia employer firms and 10% of nonemployer firms. Whites—either Hispanic or non-Hispanic—owned about 75% of businesses with employees and 54% of those without employees. (See Figure 12 for employer firms and Figure 13 for nonemployers.)

Among employer businesses of all sizes, minority-owned companies tend to generate lower revenues and pay lower wages than nonminority-owned businesses do. In 2017, the latest data available, Philadelphia's average Black-owned business generated \$853,500 in annual sales, its average Asian-owned business \$840,600, and Hispanic-owned \$1.18 million. In contrast, the average white-owned business took in \$2.58 million a year.

Figure 12

Employer Businesses by Owners' Race or Ethnicity,* 2017

Companies with employees in Philadelphia and the median comparison city



Compared with their counterparts in other cities, Philadelphia businesses with employees (“employer businesses”) were slightly more likely to have Black and Asian owners than Hispanic proprietors. All the figures are affected by the minority share of the general population.

* The U.S. Census Bureau provides two categories for “ethnicity”: Hispanic and non-Hispanic. Business owners who identify as one or the other may be of any race.

† Equally Hispanic and non-Hispanic. Ownership race or ethnicity is based on people who own 51% or more of the business’s equity, interest, or stock.

‡ Median excludes Philadelphia.

Note: Numbers may not add up to 100% due to rounding.

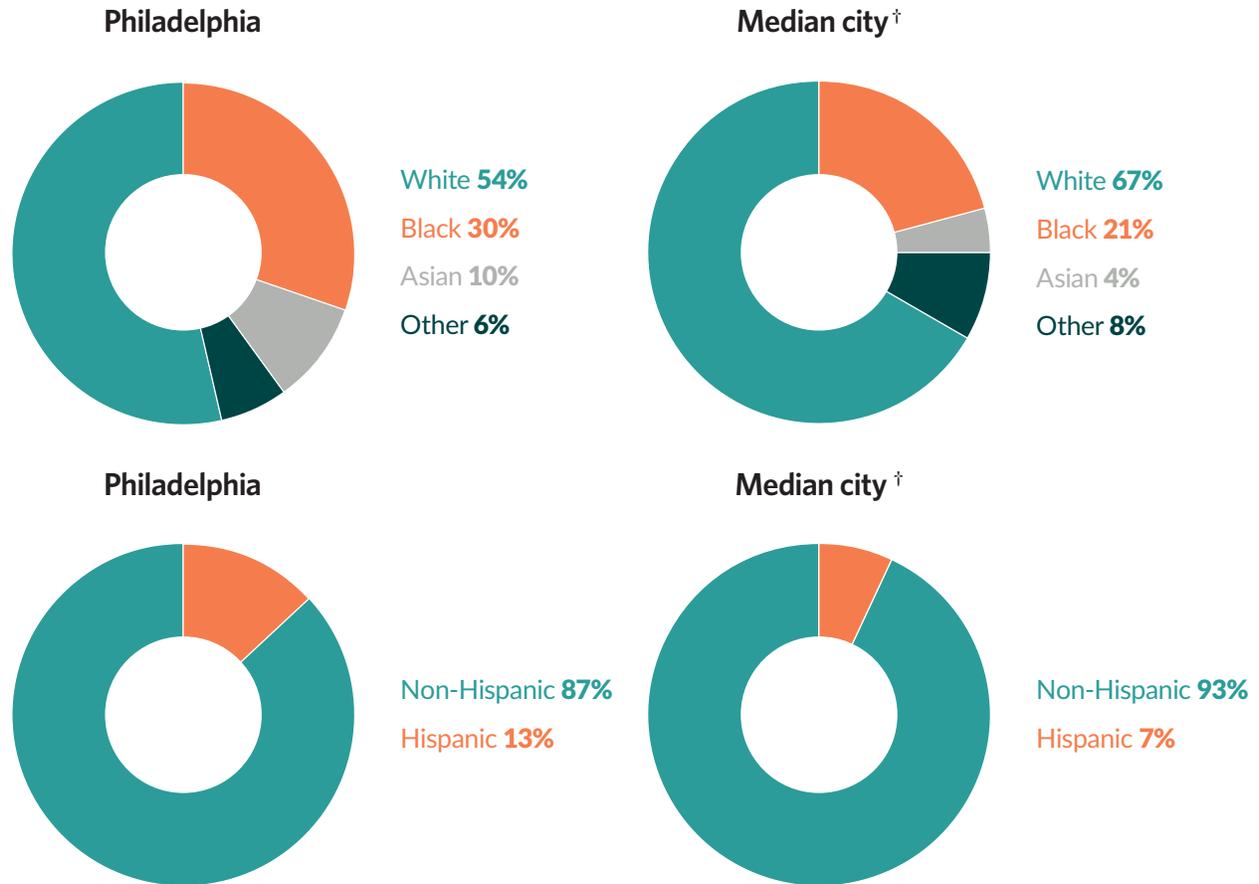
Source: U.S. Census Bureau, Annual Business Survey

© 2020 The Pew Charitable Trusts

Figure 13

Nonemployer Businesses by Owners' Race or Ethnicity,* 2012

Companies without employees in Philadelphia and the median comparison city



Philadelphia's nonemployer businesses had higher minority ownership than those in other cities. All the figures are affected by the minority share of the general population.

* The U.S. Census Bureau provides two categories for "ethnicity": Hispanic and non-Hispanic. Business owners who identify as one or the other may be of any race.

† Median excludes Philadelphia.

Source: U.S. Census Bureau, Survey of Business Owners and Self-Employed Persons, 2012

© 2020 The Pew Charitable Trusts

One characteristic of employer businesses is whether they are headquartered within or outside the metro region. Over the 2009-18 decade, an annual average 85% of Philadelphia small and midsize establishments with employees had their headquarters in the metro area. That was very close to the other cities' average, 84%.⁴³

Financial condition

Philadelphia's small and midsize businesses have tended to expand and contract with the national economy on pace with their peers in the other cities but have had lower average sales and worse credit records.

Their financial health reflected and, to some extent, drove economic conditions in Philadelphia, also affecting the amount of revenue the city received from business income taxes and property taxes.

Sales, payroll, and profits

Indications of the health and profitability of Philadelphia's small and midsize businesses come from their sales, payroll, borrowing, and on-time payment records, among other factors.

The average Philadelphia small or midsize company generated \$2.23 million in gross receipts and spent \$490,000 on payroll in 2012 (the last year cross-city data by company size was available), both slightly below the median.⁴⁴

On the whole, Philadelphia's output per capita, reflecting businesses of all sizes, was below that of the other cities in most sectors, except information, health care, and education. The 2018 GDP of all private sector industries in the city was \$106.7 billion, or \$84 per resident 16 and older, compared with a median of \$117 per resident in the comparison cities.⁴⁵

Financial health also shows in businesses' credit scores and timeliness in paying bills, as indicated by ratings from the private business data company Dun & Bradstreet. The ratings are contained in the National Establishment Time Series dataset, analyzed by Drexel University for the 2007-14 period.⁴⁶

The data shows that more small and midsize establishments had weak credit scores in Philadelphia than in the other cities during the recent strong economy, although their scores were in line with the median during and just after the 2007-09 recession.

In addition, according to Dun & Bradstreet's "Paydex" ratings of timeliness in paying bills, Philadelphia's small and midsize businesses generally scored lower than the median of the comparison cities.⁴⁷ (See Figure 14.) Research by the Federal Reserve Bank of St. Louis has found that extreme lateness in paying bills was an indicator of financial vulnerability—which, along with low liquidity and high debt, raised the risk of collapse during and after the recession a decade earlier.⁴⁸

Businesses in Philadelphia that took longest to pay bills were in manufacturing (15 to 18 days late, on average) and construction (12 to 15 days late, on average). Those that paid fastest, though still late, were in finance and professional services (both eight to 12 days late, on average). Current timeliness ratings were not readily available. (These assessments did not cover all companies in each city.)

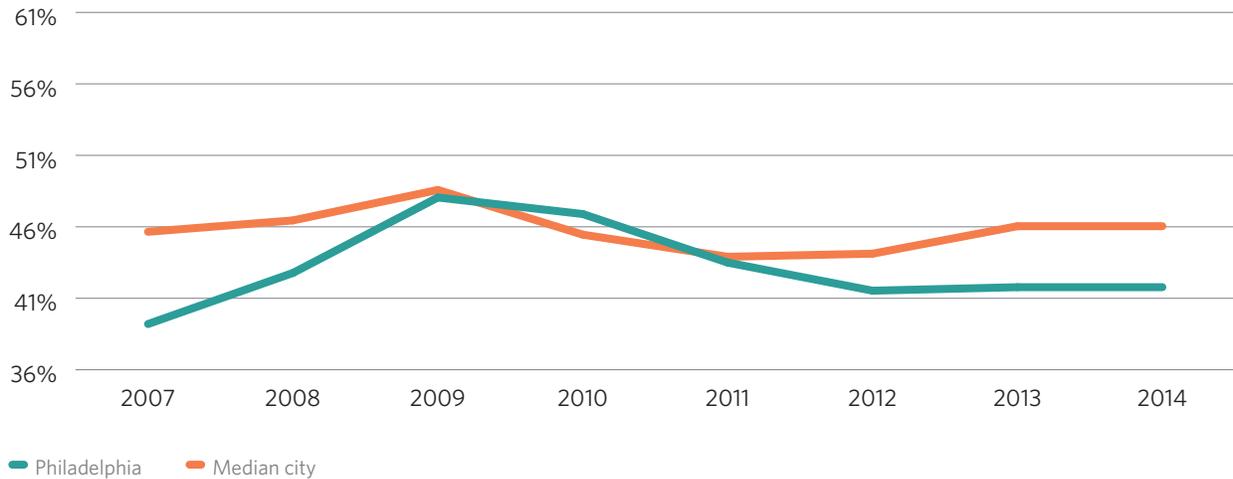
A more detailed view just of Philadelphia's business ecosystem comes from tax returns filed with the city's Department of Revenue. Although self-reported figures from tax returns should be taken with caution, changes over time can offer a glimpse at underlying conditions.

Figure 14

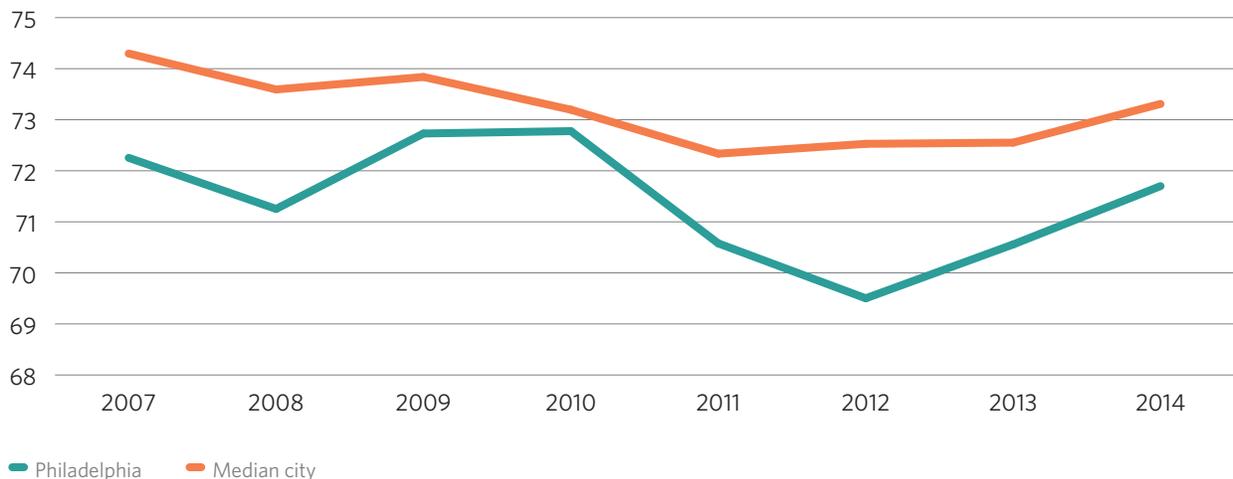
Business Credit Ratings and Bill Payments, 2007-14

Dun & Bradstreet's "Composite Credit" and "Paydex" ratings in Philadelphia and median comparison city

Percentage of businesses with "strong" or "good" credit rating



Average business rating on timeliness in payments



The analytics company Dun & Bradstreet uses banking and other data to appraise thousands of businesses' creditworthiness and timeliness in paying bills. The first chart shows the percentage of small and midsize establishments in Philadelphia and the median city getting "strong" or "good" credit ratings during and after the recession. The second chart shows bill payment timeliness for Philadelphia and the median city, with higher scores indicating greater punctuality. Philadelphia establishments generally underperformed the other cities on both measures.

Source: National Establishment Time Series, analyzed by Amelia Hoover Green and Richardson Dilworth, Drexel University

© 2020 The Pew Charitable Trusts

Business profits are defined here as net revenue before city tax exemptions or deductions. The average small or midsize company reported 31% less in profits in 2017 than in 2011, adjusted for inflation, while the average large business reported 78% more. As a result, the small and midsize segment represented only 14.2% of all business profits in 2017, down from 33.5% in 2011.⁴⁹ Possible factors in those divergent profit trends for smaller versus larger companies included changes in local business conditions and in the tax code meant to help city-based companies, as described below.

In terms of gross receipts, the recession had a widely varying impact on different sectors of small and midsize companies, based on data for the 2007-11 period versus 2011-17. On average, small or midsize businesses in information and manufacturing had the biggest declines in gross sales up through the recession; the biggest gains post-recession were in manufacturing, health care and social assistance, and accommodation and food services. (See Figure 15.)

Taxes

Philadelphia's tax bill on small and midsize businesses had been shrinking for a decade, as a result of modest sales growth and lower reported profits, as well as lower tax rates, bigger tax exemptions, and changes in the tax code meant to help local employers.

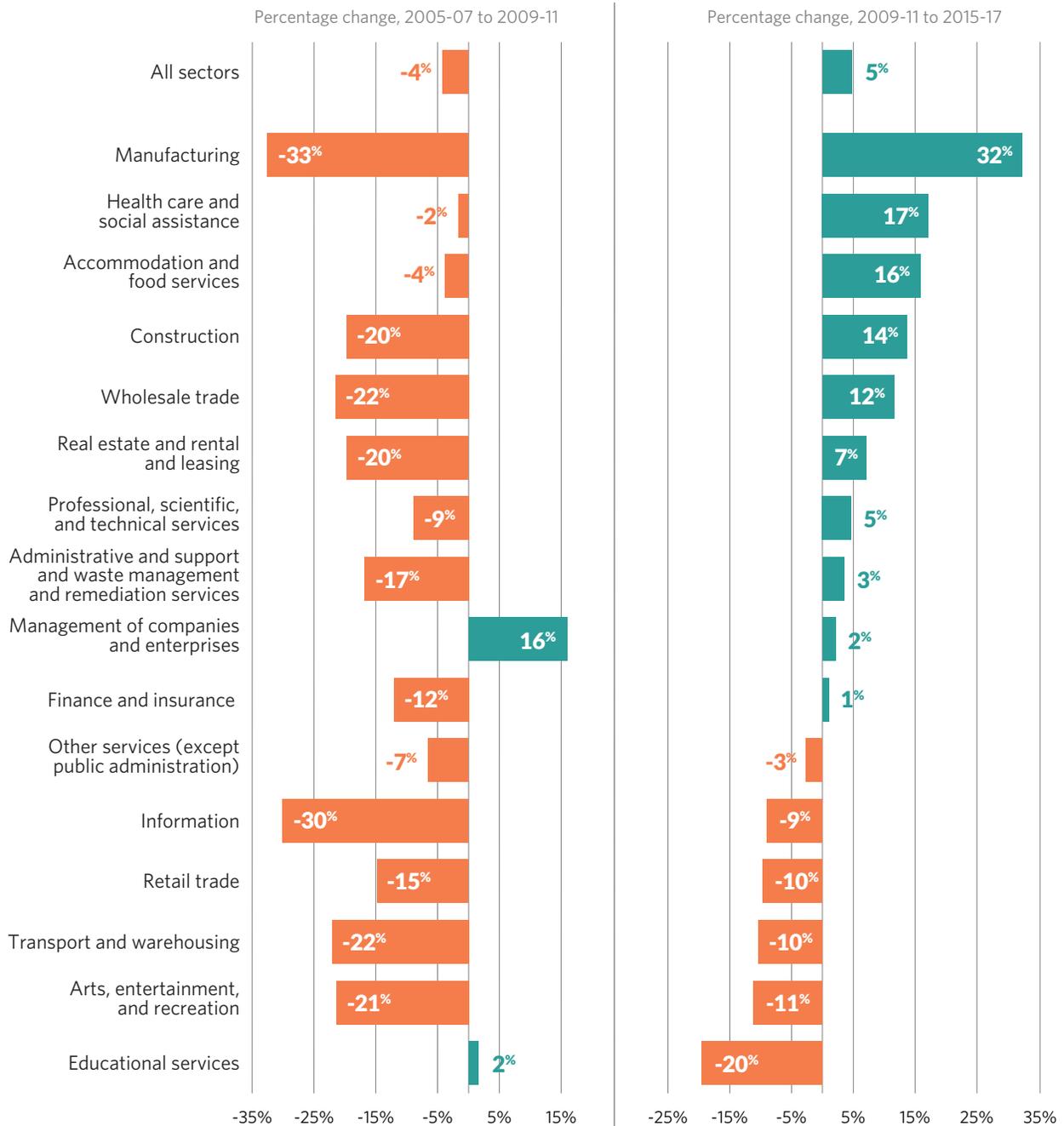
In the 2015-17 period, the small and midsize segment—including those with and without employees—accounted for 50.1% of the total Business Income and Receipts Tax (BIRT) and Net Profits Tax (NPT) bill in Philadelphia.



Figure 15

Gross Receipts by Sector, 2007-17

Change in average receipts of small and midsize businesses by sector in Philadelphia



Receipts declined in most sectors in the period covering the 2007-09 recession, then grew in subsequent years.

Note: Each year shown is the final year of a three-year average computed to smooth out annual fluctuations.

Source: Pew analysis of Philadelphia Department of Revenue data

© 2020 The Pew Charitable Trusts

That came to \$307.3 million owed per year on average. A decade earlier, in the 2005-07 period, the share was 58.3% and the total was \$377.3 million.⁵⁰ (See Figure 16.)

Although lower reported profits drove some of the decline, changes in Philadelphia’s tax policy also played a role. City officials waived BIRT payments for certain new businesses starting in 2013, and in 2014 began exempting all businesses from tax on the first \$50,000 in receipts, rising to \$100,000 by 2016. The city also began requiring companies to use a different formula, “single sales factor,” for calculating taxable sales that was meant to stop disadvantaging city-based companies.⁵¹ All told, the changes had a big impact on smaller and younger businesses’ tax bills.

Figure 16
Business Receipts and Taxes by Company Size in Philadelphia
 Annual averages, 2005-07 and 2015-17, in millions

	2005-07				2015-17			
	Receipts	BIRT	NPT	Total tax	Receipts	BIRT	NPT	Total tax
Small and midsize	\$100,414.0	\$273.1	\$104.3	\$377.3	\$128,340.0	\$200.8	\$106.5	\$307.3
Large	\$3,280,567.0	\$225.5	\$44.7	\$270.2	\$7,111,639.0	\$242.2	\$63.6	\$305.8
Total	\$3,380,981.0	\$498.6	\$149.0	\$647.6	\$7,239,980.0	\$442.9	\$170.1	\$613.0

Small and midsize businesses, in aggregate, owed \$307.3 million per year on Philadelphia’s Business Income and Receipts Tax (BIRT) and Net Profits Tax (NPT) on average in the 2015-17 period. Over the preceding decade, a modest increase in sales along with lower effective tax rates caused a decrease in these businesses’ aggregate tax bill, which rose for large companies. (All figures are in 2017 dollars. Some figures do not add up exactly due to rounding.)

Note: Dollar amounts in the “Receipts” column refer to receipts that companies reported from all operations anywhere in the world, not just in Philadelphia. Amounts in the “BIRT,” “NPT,” and “Total tax” columns refer to the companies’ tax liabilities on receipts generated only in Philadelphia.

Source: Pew analysis of Philadelphia Department of Revenue data

© 2020 The Pew Charitable Trusts

“My general sense is that it has been helpful. Anything we can do to remove regulatory or tax burdens is helpful,” said Charles B. Crawford Jr., chairman and CEO of Hyperion Bank, a community lender with mostly commercial borrowers, based in the Kensington neighborhood, speaking in an interview with Pew.

The changes’ impact can be seen in a breakdown of Philadelphia business taxpayers by company age and revenue size: The total BIRT and NPT liability for smaller companies less than a year old fell by 67% over the decade, adjusted for inflation, while tax bills rose 13% for the big, usually older companies. (See Figure 17.)

Figure 17

Business Taxes by Company Age in Philadelphia

Annual averages, 2005-07 and 2015-17, in millions

	2005-07				2015-17			
	Receipts	BIRT	NPT	Total tax	Receipts	BIRT	NPT	Total tax
New small and midsize (<1 year)	\$5,320	\$13.3	\$5.9	\$19.2	\$4,208	\$4.0	\$2.2	\$6.3
Young small and midsize (1-5 years)	\$26,998	\$71.7	\$29.0	\$100.7	\$30,524	\$43.4	\$27.6	\$71.0
Mature small and midsize (6+ years)	\$68,094	\$188.1	\$69.3	\$257.4	\$93,607	\$153.3	\$76.7	\$230.0
Large, any age	\$3,280,567	\$225.5	\$44.7	\$270.2	\$7,111,639	\$242.2	\$63.6	\$305.8
Total	\$3,380,981	\$498.6	\$149.0	\$647.6	\$7,239,980	\$442.9	\$170.1	\$613.0

“New” small and midsize businesses (those under a year old), as a group, owed \$6.3 million in Business Income and Receipts Tax (BIRT) and Net Profits Tax (NPT) in the 2015-17 period. That was one-third of the amount they owed a decade earlier, while older companies’ aggregate bill was bigger than before. (All figures are in 2017 dollars. Some figures do not add up exactly due to rounding.)

Note: Dollar amounts in the “Receipts” column refer to receipts that companies reported from all operations anywhere in the world, not just in Philadelphia. Amounts in the “BIRT,” “NPT,” and “Total tax” columns refer to the companies’ tax liabilities on receipts generated only in Philadelphia.

Source: Pew analysis of Philadelphia Department of Revenue data

© 2020 The Pew Charitable Trusts

In the most recent period, the average small or midsize business got a BIRT and NPT bill of \$2,196, compared with \$3,433 a decade earlier. The sectors with the biggest reduction in average BIRT and NPT liability were information, arts and entertainment, and education; those with the biggest increases were accommodation and food services, real estate, and construction.

Meanwhile, the percentage of small and midsize businesses that were nonprofits did not change much, making up about 7% of Philadelphia’s small and midsize segment in 2017, a slight decline from 8% a decade earlier.⁵²

The increasing value of local tax breaks, exemptions, and deductions for businesses of all sizes has led the city to begin scrutinizing many of the programs to determine their effectiveness and consider reforms.⁵³

In a June 2019 poll, Pew asked Philadelphia residents about business taxes. One question asked which of two statements came closest to their view: “Reducing the city tax on businesses will help create jobs” or “Reducing the city business taxes will only help businesses to make more profits.” A majority agreed with the first statement over the second, 56% to 41%.⁵⁴

An even larger majority, 67%, agreed that the city “should offer tax breaks to businesses to get them to locate within the city.”

Conclusion

Small and midsize businesses are indispensable innovators, employers, neighborhood institutions, wealth builders, and providers of amenities in cities. In Philadelphia, they accounted for 4 in 10 workers and 8 in 10 establishments at last count; in 2017, small and midsize establishments reached their highest number since 1990—as did the overall population.

Even before the COVID-19 pandemic, however, Philadelphia’s small and midsize business segment was underperforming compared with those in the 12 other major cities examined in this report. In the years since the 2007-09 recession, the segment grew more slowly than large businesses in Philadelphia and accounted for a smaller portion of total sales, taxes, and workers in the city. And Philadelphia had fewer small and midsize establishments per capita—fewer businesses to pay city taxes and for residents to work for, entrepreneurs to nurture, and lenders to help grow.

Compared with those in the other cities, Philadelphia’s small and midsize establishments were more concentrated in sectors that primarily serve local customers, as opposed to national or global markets with greater growth prospects. More of its businesses served consumers, rather than other companies in the so-called supply chain economy, which tends to have higher wages and productivity growth.

In addition, Philadelphia’s business ecosystem was somewhat less prolific and dynamic than the other cities’, with lower business birth rates and relocation rates (moves both in and out). City residents were less entrepreneurial as a group than were residents of other cities: 5.6% of adults identified as self-employed business owners, compared with 6.8% elsewhere.

With a quarter of its population living below the poverty line, Philadelphia has had proportionately fewer people with the means to own or start businesses, as well as less buying power to fuel small businesses than most other cities in this study.

This report is designed to help policymakers and the public better understand Philadelphia’s smaller businesses, which often get less attention than large companies but suffer more during downturns and may depend more on local policies and programs. Understanding their status and trajectories before the onset of the COVID-19 pandemic and recession should help policymakers and the public chart the local economy’s course for recovery.

Methodology

Comparison geographies

This report compares Philadelphia with other large cities whose populations make up all, or nearly all, of the residents of their counties—the geographic level at which federal statistical agencies provide business data. It also looks at independent cities, which are equivalent to counties in federal statistics. We selected cities based on the following criteria, using the American Community Survey 2017 one-year sample data: It had at least 300,000 city residents; and its residents represented at least 85% of the population of the county or independent city, or its city workers represented at least 95% of the labor force of the county or independent city.

We found 13 cities, including Philadelphia, that met these criteria. All are designated as “highly urbanized” by the Census Bureau, and four are located along the U.S. Northeast Corridor. Here are the cities and some of their other key characteristics:

City (county)	City population	City population's percentage of county population	City workers' percentage of county workers	County poverty rate	County median household income	County residents with bachelor's degree or higher	County residents who were nonwhite	County residents who were foreign-born	City or county has a local business income tax
Baltimore (independent city)	611,648	100%	100%	22.2%	\$47,131	30.4%	69.9%	8%	
Boston (Suffolk County)	797,939	86%	96%	18.0%	\$66,459	43.6%	44.2%	30%	
Denver (Denver County)	704,621	100%	100%	12.2%	\$65,224	46.5%	24.6%	16%	
Indianapolis (Marion County)	950,082	91%	95%	17.1%	\$47,344	29.7%	36.8%	9%	
Jacksonville, FL (Duval County)	937,934	95%	96%	15.1%	\$52,062	28.7%	40.3%	10%	
Lexington, KY (Fayette County)	321,959	100%	100%	16.5%	\$56,137	41.8%	24.5%	9%	
Nashville, TN (Davidson County)	691,423	96%	91%	14.5%	\$58,490	39.1%	35.2%	13%	✓
New Orleans (Orleans Parish)	388,122	100%	100%	26.2%	\$36,999	36.5%	66.2%	6%	
New York (Bronx, Kings, New York, Queens, and Richmond counties)	8,622,698	100%	100%	18.0%	\$60,879	36.7%	57.8%	37%	✓

Continued on next page

Philadelphia (Philadelphia County)	1,580,863	100%	100%	25.7%	\$39,759	27.1%	57.9%	13%	✓
San Francisco (San Francisco County)	884,363	100%	100%	10.0%	\$110,816	55.8%	54.4%	35%	✓
St. Louis (independent city)	308,626	100%	100%	20.3%	\$41,441	34.1%	53.7%	7%	
Washington (District of Columbia)	693,972	100%	100%	16.6%	\$82,372	56.6%	59.0%	14%	✓

For metropolitan areas, the report uses the Census Bureau’s MSA level code 310. In Philadelphia’s case, that comprises 11 counties: Philadelphia, Bucks, Chester, Delaware, and Montgomery in Pennsylvania; Burlington, Camden, Gloucester, and Salem in New Jersey; New Castle in Delaware; and Cecil in Maryland.

Establishments and employment data

This report uses three different federal datasets on businesses or employment by size of establishment at the county level. The figures in each dataset may differ slightly. We take pains to keep the data and references separate in this report.

For our analyses of the number of establishments, business density, and annual receipts by size, we use [Statistics of U.S. Businesses](#) (SUSB), produced by the U.S. Census Bureau in collaboration with the U.S. Small Business Administration. The data comes from the bureau’s Business Register (BR), a repository compiled from federal and state administrative records that is not otherwise publicly available. See its methodology at <https://www.census.gov/programs-surveys/susb/technical-documentation/methodology.html>. SUSB classifies businesses by size according to the total employment at all establishments (“establishments”) found in the same state and sector, summed up to the level of the parent company (“firm”) or conglomerate (“enterprise”). For example, a restaurant firm with five establishments across a city, each with 25 employees, is counted as five establishments in the midsize segment, because the parent company has a total of 125 workers at the locations in the same state and same sector (accommodation and food services). If the firm operated just one establishment with 25 workers, it would be counted as one establishment in the small segment. Sales receipts are likewise derived from establishment-level figures, summed up to the firm or enterprise level, although they are contained only in the five-year version of SUSB. We use SUSB for the core analysis because it provides the clearest picture of firm-level trends.

For the analysis of industry sectors and locations, the report uses County and ZIP Codes Business Patterns (CBP and ZBP), also produced by the Census Bureau and derived from its Business Register. Its methodology is found at <https://www.census.gov/programs-surveys/cbp/technical-documentation/methodology.html>. Unlike SUSB, CBP classifies business size by the number of employees just at the establishment, not summed up to its firm or enterprise. This produces different numbers in the small, midsize, or large categories. Using the example above, the restaurant’s five establishments would be counted in the small segment (25 workers each), even though the parent firm has 125 employees in total. CBP data is the most current and is useful for viewing the local business landscape as experienced by customers, residents, and workers. We use CBP for analysis of sectors, and for

mapping by ZIP code, because only this dataset provides the necessary industry sector codes and ZIP codes by size.

To the right, this table of 2016 Philadelphia establishment counts illustrates the difference between SUSB and CBP size definitions, each having the same total but different breakdowns.

	SUSB	CBP
Small	21,260	27,052
Midsize	1,593	762
Large	5,076	115
Total	27,929	27,929

For the analysis of employment by firm size and age, the report obtained data from Quarterly Workforce Indicators, a project of the Census Bureau’s Longitudinal Employer-Household Dynamics (LEHD) program and its Business Dynamics Statistics section, based on administrative and survey data. A description and glossary can be found at https://lehd.ces.census.gov/doc/QWI_101.pdf. LEHD defines establishment size by the firm’s total at the state level, similar to SUSB. But LEHD sets slightly different size thresholds than SUSB: A small business has zero to 49 employees, midsize has 50 to 499 employees, and large has 500 or more. This report uses the LEHD variable “EMP—Beginning of Quarter Employment Counts.”

In all the datasets above, we isolate private sector establishments and workers for this report by excluding those classified under the “public administration” sector 92 in the North American Industry Classification System, or NAICS. This sector, however, includes some businesses that are private but that serve the public through government contracts, such as public health care providers and school bus companies.

Business density

We compute business density, or establishments per capita, using the number of establishments from SUSB divided by the 16-and-older population, which is taken from the Census Bureau’s American Community Survey (ACS), Table B20005, 2017 one-year sample. We use this population for consistency with the Census Bureau’s definition of working age, which starts at 16. It also excludes the child population, which is unlikely to include business owners.

Births and deaths

The rates of establishment formation (“births”) and closure (“deaths”) come from SUSB “Employment Change” tables, found at <https://www.census.gov/data/tables/2015/econ/susb/2015-susb-employment.html>. SUSB figures represent only the creation or opening of individual establishments by a firm or enterprise and may or may not represent the creation of an entirely new entity. Births refer to establishments that were reported as having at least one employee in the first quarter of one year and zero employees in the first quarter of the previous year, with “birth rate” being the number of births divided into the total number of previous-year establishments. An establishment birth could be the opening of a new establishment that is also a new firm or a new location of an existing one. Likewise, deaths represent establishments that had zero employees in the first quarter of one year after having at least one employee in the first quarter of the prior year. A full glossary can be found at <http://www.census.gov/programs-surveys/susb/about/glossary.html>.

Relocations and resident owners

Relocation rates and resident ownership rates were obtained from Your Economy Time Series (YTS), a proprietary dataset produced by the University of Wisconsin’s Business Dynamics Research Consortium based on surveys by the private analytics company Infogroup. YTS determines “move in” and “move out” when the company’s physical address in one year in a Census Bureau Statistical Area, or CBSA, changes in the subsequent year to a different CBSA. We compute the relocation rate by dividing the number of moving establishments into

the number of total establishments. YTS defines a resident-owned establishment as a stand-alone establishment in a CBSA or one that reports to another establishment in the same CBSA, while a nonresident-owned establishment reports to one located in a different CBSA. Its methodology can be found at <https://wisconsinbdc.org/wp-content/uploads/sites/6/2020/01/YEvarsDefs2020.pdf>.

Economic diversification

This report measures business diversification by the distribution of workers across the major industry sectors, using the two-digit level of NAICS. Using the LEHD Quarterly Workforce Indicator data (explained earlier in this methodology), we find the number of employees at small and midsize private sector firms within each of the 19 major sectors, excluding “public administration” or government. Then we calculate the sectoral diversity using a formula known as the Herfindahl-Hirschman Index (HHI), expressed as:

$$HHI = S_1^2 + S_2^2 + S_3^2 + S_4^2 + \dots + S_{19}^2$$

where S_n is the share of total employees in the sector n . The result is a decimal usually between 0.01 and 0.25, with the lower figure indicating more diversification and competition, and the higher figure indicating less diversification and competition. Here are the fractions for each county and business segment, showing Philadelphia with higher scores (lower diversification) in both segments:

	Baltimore	Boston	Denver	Indianapolis	Jacksonville, FL	Lexington, KY	Philadelphia
Large	0.15	0.14	0.07	0.11	0.10	0.12	0.14
Midsize-small	0.09	0.11	0.09	0.08	0.09	0.10	0.12

	Nashville-Davidson County, TN	New Orleans	New York	San Francisco	St. Louis	Washington	Median excluding Philadelphia
Large	0.10	0.10	0.11	0.10	0.12	0.12	0.11
Midsize-small	0.09	0.13	0.09	0.12	0.10	0.14	0.09

Traded versus local industry categorization

Traded industries are those that sell their goods and services across regions and countries (e.g., universities and financial services). Local industries are those that sell services or goods primarily in their own local or regional market (e.g., retail stores and restaurants).

This report uses the traded or local designation developed by Mercedes Delgado, Richard Bryden, and Samantha Zyontz, based on the work of Michael Porter (Harvard University). A full explanation of their method can be found in the paper “[Categorization of Traded and Local Industries in the U.S. Economy.](#)” Using the most detailed NAICS categories—the six-digit level, numbering 978 industries—they assign each industry to traded or local categories based on the distribution of the industry’s employees across a sample of economic regions. They use 179 economic areas (EAs), as defined by the U.S. Bureau of Economic Analysis. An industry is considered to be traded if it meets the following three conditions: It had 10 or fewer employees in at least 50% of the regions; the share of a sector’s employment in the top 10% of the regions by employment-based location quotient (LQ) was 25%; and the difference between LQ at the 90th percentile and LQ at the median across all regions was at least 1.5 points in the sector. Industries that met none of the criteria were classified as local. Industries that met just one or two criteria were examined on a case-by-case basis.

Supply chain versus business-to-consumer industry categorization

Mercedes Delgado and Karen G. Mills (Harvard Business School) created another industry categorization based on the type of customers served. Companies in supply chain sectors primarily sell goods and services to businesses and governments, while those in the business-to-consumer sectors primarily sell goods and services to consumers. A full explanation can be found in the paper "[The Supply Chain Economy: A New Industry Categorization for Understanding Innovation in Services.](#)"

The researchers designate each NAICS six-digit sector as supply chain or business to consumer based on a measurement of sales activity called personal consumption expenditure (PCE), found in the U.S. Benchmark Input-Output Accounts, produced by the Bureau of Economic Analysis. The researchers assign an industry to the supply chain economy if less than 35% of its output falls under PCE; the remaining industries are classified as business to consumer.

Business locations

Analysis of businesses by sector by ZIP code is based on ZIP Codes Business Patterns (ZBP), an extension of the CBP dataset. The ZIP code data is published in two different ways to prevent identification of individual establishments: One contains the number of employees by establishment size by ZIP code, and the other the number of establishments by two-digit NAICS sectors by ZIP code. This report used both batches, downloaded from <https://www2.census.gov/programs-surveys/cbp/datasets/2017>.

Commercial property vacancies

The U.S. Postal Service maintains a status list of addresses from observations by its carriers, known as the [Computerized Delivery Sequence](#), or CDS, which is released quarterly to approved users and certain researchers. The file classifies properties by type (residential or commercial) and occupancy status (occupied, vacant, or no status). We obtained data through the analytics company [Valassis Lists](#) for commercial properties in every Philadelphia census block group at two points in time: third-quarter 2014 and third-quarter 2018. Then we computed the percentage change in "vacant" properties, a term meaning the carrier could make a delivery but believed the property had been unoccupied for at least 90 days. That contrasts with "no stat," meaning the property was not occupiable as a result of demolition or blight.

Self-employment

Self-employment data is taken from the "class of worker" variable found in the American Community Survey. We use ACS microdata from IPUMS, a project of the [Institute for Social Research and Data Innovation](#) at the University of Minnesota. The variable includes a delineation between those owning incorporated versus unincorporated businesses. First, we exclude nonresponses ("N.A."), then isolate respondents who worked at least 15 hours in the previous week, as a way of focusing just on those who were likely full-time, active business owners.

To count self-employed workers by personal characteristics, we cross-tabulate "class of worker" with the ACS variables for sex, race, ethnicity, educational attainment, foreign-born, veteran status, age, and household income, using the ACS 2017 one-year microdata for each county. For all but one of these variables, we limit the sample universe to individuals 16 and older, the usual working age. For the educational attainment variable, we limit the sample universe to individuals 25 and older, to eliminate those not old enough to have attained at least a bachelor's degree.

To count self-employed workers by residence inside or outside Philadelphia, we cross-tabulate "class of worker" with the ACS "place of work" variable, using 2013-17 five-year microdata for the Philadelphia metro area.

To count self-employed workers by neighborhoods or areas within Philadelphia, we cross-tabulate the “class of worker” variable with the geographic variable for “public use microdata area,” or PUMA, which is the smallest geographic area available in microdata. PUMAs are typically composed of 30 to 40 tracts. Using the 2013-17 five-year sample, we find the number of self-employed in each PUMA, then divide by the total 16-and-older population of each PUMA, to arrive at the self-employed share in each PUMA.

The margin of error for these subgroup figures in the ACS microdata is ± 5 percentage points.

There are some caveats with self-employment data. While researchers consider this dataset a valid way—and sometimes the only way—to view demographics of owners of smaller businesses at the local level, the data misses owners who do not identify as self-employed. That likely includes owners of larger companies with a corporate status that classifies them as employees, shareholders, or partners. The demographic profile of such owners likely differs from those at smaller companies, which are sometimes characterized as “mom and pop” or “Main Street” businesses. Even within this dataset, the self-employed who report owning an incorporated business differ demographically from those who own unincorporated businesses, with the former much more likely to be male and white.

Businesses by owner characteristics

Data on businesses by owners’ race and ethnicity is compiled and released by the Census Bureau every five years. At the time of this report, the latest data covered 2017 but included only businesses with employees (“employer firms”) from the Census Bureau’s Annual Business Survey. Race and ethnicity data on owners of businesses without paid employees (“nonemployer firms”) was available only for 2012 from the Survey of Business Owners and Self-Employed Persons. Both datasets categorize businesses as minority owned if at least 51% of owners were nonwhite or Hispanic. Both categorize businesses as employer firms if they paid at least one person a wage or a salary. Neither dataset provided a breakdown of businesses at the county level by employment size, which this report uses to classify them as small, midsize, or large.

Credit and on-time payment reports

Drexel University professors Amelia Hoover Green and Richardson Dilworth analyzed credit ratings, sales, and employment data found in the National Establishment Time Series (NETS), a dataset of basic metrics on 28 million U.S. businesses, including those in our target counties. NETS is assembled from data obtained by the analytics company Dun & Bradstreet, then supplemented and refined through follow-up contacts, and is considered one of the most comprehensive proprietary datasets of its kind.

Green and Dilworth performed data-cleaning operations to deal with known weaknesses in NETS, including removing all establishments with five or fewer employees because of the unreliability of that data, and reducing all employee totals by one to match the Census Bureau’s practice of excluding the owner.

The researchers grouped all businesses into small and midsize categories by county. Then they looked at two assessments of company health contained in NETS. One is Dun & Bradstreet’s “D&B Rating,” a measure of commercial creditworthiness expressed in a three-digit score: The first two digits represent size, age, and other company characteristics; the third digit represents Dun & Bradstreet’s “Composite Credit Appraisal,” with the numeral 1 meaning “strong” credit, 2 meaning “limited,” 3 “fair,” and 4 “poor.” The researchers summed the establishments by size at each score. Then the third digit was isolated, and establishments at each credit level were summed and divided into the total number of establishments by year, for an aggregate percentage achieving that score over time.

The other financial health assessment is the “D&B Paydex Score,” a revenue-weighted indicator of whether a company was paying its suppliers and vendors on time and as terms dictated, based on historical records.

The Paydex figure falls between 1 and 100, with a score of 80 meaning the company was paying on time and according to terms, 75-79 meaning it was paying two to eight days late, and 70-74 meaning it was paying nine to 15 days late. We found the average Paydex score for establishments by size, sector, county, and year.

Gross domestic product

Gross domestic product (GDP) is a measure of the value of the goods and services produced by businesses or organizations located in the county. The county-level GDP figures are produced by the U.S. Bureau of Economic Analysis (BEA) within the U.S. Department of Commerce, the same agency that produces the widely cited national GDP. A full description of the BEA's methodology can be found here: https://www.bea.gov/system/files/2019-12/One_Page_Methodology_v6.pdf. To make comparisons among counties of different sizes, this report uses GDP per capita, based on populations of residents ages 16 and older, to avoid skewing the per capita figures with children, who do not typically participate in the economy as business owners or paid workers.

Philadelphia tax, receipts, and profits data

Pew set out to assess the financial health and tax payments of small and midsize businesses operating in Philadelphia based on their city tax returns. Under a signed agreement with the Philadelphia Department of Revenue, and working on its premises, Pew was allowed to view tax return data contained in city databases on condition that it not retain any data containing names of companies or taxpayers and not print or speak about companies or taxpayers by name in any way that could make them identifiable. This is in keeping with the strict confidentiality of city tax records.

On the advice of department staff that employment counts were unreliable, we classified filers as small, midsize, or large based on their reported gross receipts on Business Income and Receipts Tax (BIRT) returns. Using financial characteristics found in federal data, we set small businesses as up to \$10 million in gross receipts, midsize between \$10 million and \$50 million, and large \$50 million or more.

We viewed gross receipts, profits, and taxes due from 2005 to 2017, the most recent year for which tax data was substantially complete at the time this research began. We used annual averages of the data at three periods—2005-07, 2009-11, and 2015-17—to help maintain confidentiality and reduce the impact of outlier data in any given year.

Our first step was to eliminate individual-level errors in the data and perform other data-cleaning operations after consulting with Revenue Department staff:

If a taxpaying company did not have a start date, the entity was dropped from the analysis.

If a taxpaying company did not have an NAICS code, or if the NAICS code was an error, Pew assigned these entities to an “unassigned” industry category.

Defining a small or midsize business:

We classified filers' size based on reported gross receipts in 2017 dollars, the final year of data in this study, using data from BIRT Schedule D Line 1, BIRT-EZ Line 8, or BIRT Schedule H Lines 1 and 4.

We inflation-adjusted each year's size thresholds to 2017 dollars. For example, \$50 million in 2010 was \$44.45 million in 2017 dollars. We used the U.S. Bureau of Labor Statistics' consumer price index calculator, found at http://www.bls.gov/data/inflation_calculator.htm.

If a taxpaying company filed a form for the Net Profits Tax (NPT) but not the BIRT—meaning the filer resided within Philadelphia but conducted all of its business outside the city—there was no place for it to report gross

receipts and therefore no basis for determining its size in our analysis. Since large and midsize companies almost always use a corporate structure requiring that they file a BIRT form, we classified the NPT-only filers as small businesses.

Defining a Philadelphia business:

This report is focused on Philadelphia companies, but many non-Philadelphia businesses pay Philadelphia taxes too. We created a definition of a Philadelphia company with two criteria, at least one of which had to be met for a tax filer to be counted:

- Operated at least one physical, functioning location within the city limits during the relevant tax year, as found in the Revenue Department's business location data.
- Apportioned at least 50% of its gross receipts to Philadelphia. To calculate this percentage, we divided each filer's gross receipts apportioned to Philadelphia (reported on BIRT Schedule D Line 6, BIRT-EZ page 2 Line 8, or BIRT Schedule H Line 8) by total gross receipts (as described earlier in this methodology).

Defining age of businesses:

We calculated a business's age based on the first year it opened a tax account with the city, as listed in tax filings with the city. For each year and each taxpayer, we classified them as:

- New: less than 1 year old (using the last day of the tax year as the "end" point)
- Young: from 1 to 6 years old during that tax year
- Mature: 6 or more years old during that tax year

Defining industry sector of businesses:

To analyze companies by industry sector, we started by finding their five-digit NAICS codes in the Revenue Department data. In some cases, the department instead lists a Standard Industrial Classification (SIC) code, in which case we found the nearest NAICS equivalent. If neither code was shown, we marked the business as "unclassifiable." Then, for our analysis, we truncated all the five-digit codes to three- or two-digit codes to help ensure confidentiality.

Calculating receipts:

To view businesses' financial condition, we calculated gross receipts using the same process as described for classifying them by size: We summed the reported gross receipts for each three-year period, as reported on BIRT Schedule D Line 1, BIRT-EZ Line 8, or BIRT Schedule H Lines 1 and 4, all adjusted to 2017 dollars.

Calculating profits:

For each year and each taxpayer, we summed the net profits figures found on BIRT Schedule B Line 3, BIRT Schedule A Line 7, BIRT-EZ page 2 Line 5, BIRT Schedule H Line 3, or NPT Line 4 Worksheet B. All figures were inflation-adjusted and averaged using the process described earlier in this methodology.

Calculating taxes due:

For each year and each taxpayer, we calculated the taxes due for BIRT and NPT, found on BIRT page 1 Line 3, BIRT-EZ page 1 Line 3, BIRT Schedule B Line 15 or Schedule A Line 15, and NPT Line 15. Then we summed the BIRT and NPT "past taxes paid" calculations to determine the total amount of taxes due, all inflation-adjusted and averaged as usual.

Inflation adjustment

In this report, dollar figures were inflation-adjusted in most cases to 2017 dollars, the latest year for most analyses. We used the U.S. Bureau of Labor Statistics' inflation calculator, found at http://www.bls.gov/data/inflation_calculator.htm. The table below lists the multipliers we used to adjust each year to 2017-equivalent figures.

2000	1.416804598
2001	1.395155631
2002	1.362763958
2003	1.337623440
2004	1.295449291
2005	1.252662602
2006	1.221625372
2007	1.173722600
2008	1.172650646
2009	1.141584356
2010	1.124761040
2011	1.092399589
2012	1.073706125
2013	1.057820458
2014	1.049878200
2015	1.042274601
2016	1.021090825
2017	1.000000000

Pew survey

The 2019 Philadelphia Residents Survey was conducted for The Pew Charitable Trusts via phone, web, and mail surveys by SSRS, an independent research company. The field period for this study was from March 18 to May 16, 2019, and during that time, SSRS collected data from a sample of 1,303 adults ages 18 and older who live in Philadelphia County (600 via phone, 490 via web, and 213 via mail). The margin of error for total respondents is ± 3.72 at the 95% confidence level.

Appendix

Philadelphia Business Tax Liability of Small and Midsize Companies by Sector

Annual averages, 2005-07 and 2015-17, inflation-adjusted to 2017 dollars

NAICS two-digit sector (sector code)	2005-07			2015-17		
	BIRT	NPT	Total	BIRT	NPT	Total
Management of companies and enterprises (55)	\$781,849	\$210,404	\$992,254	\$1,534,510	\$1,024,676	\$2,559,187
Accommodation and food services (72)	\$13,103,596	\$2,783,213	\$15,886,810	\$12,335,795	\$3,074,905	\$15,410,699
Transportation and warehousing (48-49)	\$1,735,660	\$325,100	\$2,060,760	\$1,610,610	\$350,188	\$1,960,798
Construction (23)	\$15,526,878	\$3,191,969	\$18,718,846	\$14,718,402	\$3,037,142	\$17,755,544
Educational services (61)	\$1,383,095	\$277,269	\$1,660,364	\$970,432	\$487,956	\$1,458,388
Professional, scientific, and technical services (54)	\$42,741,508	\$19,890,765	\$62,632,274	\$32,421,360	\$21,164,356	\$53,585,716
Real estate and rental and leasing (53)	\$68,242,793	\$34,084,816	\$102,327,608	\$54,415,153	\$32,297,334	\$86,712,487
Arts, entertainment, and recreation (71)	\$2,036,899	\$974,540	\$3,011,439	\$1,699,654	\$800,000	\$2,499,654
Health care and social assistance (62)	\$19,134,301	\$7,068,223	\$26,202,524	\$15,601,594	\$5,729,452	\$21,331,046
Agriculture, forestry, fishing, and hunting (11)	\$28,590	\$2,019	\$30,609	\$12,812	\$11,815	\$24,627
Mining, quarrying, and oil and gas extraction (21)	\$25,444	\$120	\$25,564	\$17,281	\$1,488	\$18,769
Finance and insurance (52)	\$26,313,988	\$7,637,857	\$33,951,845	\$16,047,620	\$8,024,825	\$24,072,445
Unclassifiable (99)	\$6,243,807	\$3,196,942	\$9,440,748	\$2,629,628	\$3,990,920	\$6,620,549
Administrative and support and waste and remediation services (56)	\$5,567,225	\$1,176,763	\$6,743,989	\$3,132,673	\$1,143,140	\$4,275,813
Retail trade (44-45)	\$20,802,140	\$3,958,503	\$24,760,643	\$12,484,515	\$3,035,500	\$15,520,014
Other services, except public administration (81)	\$8,845,085	\$3,017,989	\$11,863,073	\$4,959,060	\$2,360,274	\$7,319,334
Utilities (22)	\$299,536	\$1,774	\$301,309	\$173,170	\$2,551	\$175,721
Wholesale trade (42)	\$9,028,625	\$466,727	\$9,495,352	\$4,755,991	\$452,789	\$5,208,780
Manufacturing (31-33)	\$8,510,687	\$619,486	\$9,130,173	\$3,400,220	\$570,976	\$3,971,195
Information (51)	\$2,932,145	\$349,870	\$3,282,015	\$967,102	\$447,257	\$1,414,360
Public administration (92)	\$8,425	\$5,235	\$13,659	\$140	\$4,438	\$4,578
Total small and midsize	\$253,292,276	\$89,239,584	\$342,531,860	\$183,887,722	\$88,011,980	\$271,899,702
Total large and other non-Philadelphia	\$245,295,981	\$59,723,430	\$305,019,411	\$259,060,013	\$82,085,015	\$341,145,028
Total all sizes	\$498,588,256	\$148,963,014	\$647,551,271	\$442,947,734	\$170,096,995	\$613,044,730

Note: Some figures do not add up exactly due to rounding.

Source: Pew analysis of Philadelphia Department of Revenue data

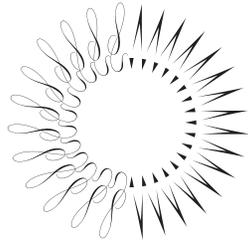
© 2020 The Pew Charitable Trusts

Endnotes

- 1 A. Nijhuis and K. Zeuli, "The Critical Role Small Businesses Play in Inner City Revitalization," *Initiative for a Competitive Inner City* (blog), May 3, 2017, <http://icic.org/blog/critical-role-small-businesses-play-inner-city-revitalization>.
- 2 A. Breitzman and D. Hicks, "An Analysis of Small Business Patents by Industry and Firm Size" (Rowan University, 2008), <http://icic.org/blog/critical-role-small-businesses-play-inner-city-revitalization>.
- 3 J.A. Schumpeter and E.B. Schumpeter, *History of Economic Analysis* (New York: Oxford University Press, 1994).
- 4 This report does not distinguish between nonprofit and for-profit businesses, both of which are classifiable by employment, sector, annual revenues, and other business characteristics. One exception is in ownership and self-employment data, explained further below.
- 5 U.S. Census Bureau, Statistics of U.S. Businesses (SUSB), accessed October 2019 at <https://www.census.gov/programs-surveys/susb/data.html>. Federal statistical agencies ascertain the primary physical business location from surveys and state government administrative records.
- 6 National Establishment Time Series (NETS), 2014 edition, analysis by Amelia Hoover Green and Richardson Dilworth, Drexel University, 2019.
- 7 U.S. Census Bureau and U.S. Small Business Administration, Statistics of U.S. Businesses (SUSB), accessed April 20, 2020, <https://www.census.gov/programs-surveys/susb/data.html>. The comparison cities' median share fell from 32.9% to 30.4% from 2007 to 2012. Data for 2017 had not been released at the time of this research.
- 8 U.S. Census Bureau, Longitudinal Employer-Household Dynamics (LEHD), Quarterly Workforce Indicators, accessed Jan. 8, 2019, <https://lehd.ces.census.gov/data/#qwi>.
- 9 S.J. Davis, J. Haltiwanger, and S. Schuh, "Small Business and Job Creation: Dissecting the Myth and Reassessing the Facts" (working paper, NBER, 1993), <https://www.nber.org/papers/w4492>.
- 10 U.S. Census Bureau, Statistics of U.S. Businesses. This dataset omits establishments in certain sectors, including public administration. Population of residents ages 16 and older for each county and metro area comes from U.S. Census Bureau, American Community Survey, Table B20005.
- 11 Y. Lowrey, senior economist, Office of Advocacy, U.S. Small Business Administration, "Business Density, Entrepreneurship and Economic Well-Being" (presentation, 2005 American Economic Association Meeting, Philadelphia), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=744804. When calculating business density using metro population instead of city population, as a way of controlling for differences in economic geographies, Philadelphia's per capita figure came closer to the median of the other cities, although still below it.
- 12 Data on business density by sector comes from County Business Patterns. Its data on the large establishments in two sectors, retail and real estate, is suppressed by the Census Bureau for confidentiality reasons. The educational services sector includes schools run by private organizations, such as most charter schools, but excludes those run by public agencies, such as school districts.
- 13 R.A. Decker et al., "Declining Business Dynamism: Implications for Productivity?" (2016), https://www.brookings.edu/wp-content/uploads/2016/08/haltiwanger_conference_draft.pdf.
- 14 U.S. Census Bureau, Statistics of U.S. Businesses.
- 15 Ibid.
- 16 J. Goodman and M. Robyn, "Lessons for Governments From Amazon's Headquarters Search" (The Pew Charitable Trusts, 2019), <https://www.pewtrusts.org/en/research-and-analysis/articles/2019/04/25/lessons-for-governments-from-amazons-headquarters-search>.
- 17 University of Wisconsin Business Dynamics Research Consortium, Your Economy Time Series, 1997-2019, accessed April 20, 2020, <https://wisconsinbdr.org/data/>. See methodology for details.
- 18 B. Theodos, A. Boddupalli, and M. Randall, "Footloose or Stuck in Place? A Six Metro Look at Firm Mobility" (The Urban Institute, 2018), https://www.urban.org/sites/default/files/publication/99332/footloose_or_stuck_in_place.pdf.
- 19 U.S. Census Bureau, Longitudinal Employer-Household Dynamics.
- 20 M. Porter, "The Economic Performance of Regions 551," *Regional Studies* 37:6-7 (2003): 549-78, <https://pdfs.semanticscholar.org/de0e/a94b8048b7e7ce4d1ac7193d99fb9847f735.pdf>. See also E. Moretti, *The New Geography of Jobs* (Boston: Mariner Books, 2012).
- 21 Moretti, *The New Geography of Jobs*.
- 22 Pew analysis of County Business Patterns data using classifications by Porter et al. In these classifications, health care is considered local, even though Philadelphia and other cities do have institutions—usually large ones—serving many patients from outside the region. See methodology.
- 23 M. Delgado and K. Mills, "The Supply Chain Economy and the Future of Good Jobs in America," *Harvard Business Review*, March 9, 2018, <https://hbr.org/2018/03/the-supply-chain-economy-and-the-future-of-good-jobs-in-america>.

- 24 RJMetrics was acquired in 2016 by Magento Inc., a division of Adobe Inc.
- 25 EConsult Corp., “Commercial Corridors: A Strategic Investment Framework for Philadelphia” (Philadelphia LISC, 2009), http://archive.instituteccd.org/uploads/iccd/documents/commercial_corridors_in_philadelphia.pdf.
- 26 U.S. Census Bureau, ZIP Codes Business Patterns, 2000-2017, <https://www.census.gov/data/developers/data-sets/cbp-nonemp-zbp/zbp-api.html>. ZIP codes were mapped to business corridors as defined by the Philadelphia Department of Planning and Development, found at <https://openmaps.phila.gov>.
- 27 U.S. Postal Service Computerized Delivery Sequence (CDS) data, processed by and obtained from Valassis Lists, 2019, <https://www.valassislists.com>.
- 28 U.S. Census Bureau, ZIP Codes Business Patterns.
- 29 U.S. Census Bureau, “Class of Worker” definition, <https://www.census.gov/topics/employment/industry-occupation/about/class-of-worker.html>.
- 30 C. Christnacht, A. Smith, and R. Chenevert, “Measuring Entrepreneurship in the American Community Survey: A Demographic and Occupational Profile of Self-Employed Workers” (working paper, U.S. Census Bureau, Social, Economic, and Housing Statistics Division, 2018), <https://www.census.gov/content/dam/Census/library/working-papers/2018/demo/SEHSD-WP2018-28.pdf>. See also R. Fairlie, S. Desai, and A.J. Herrmann, “2017 National Report on Early-Stage Entrepreneurship” (Ewing Marion Kauffman Foundation, 2019), <https://indicators.kauffman.org/wp-content/uploads/sites/2/2019/02/2017-National-Report-on-Early-Stage-Entrepreneurship-February-2019.pdf>.
- 31 U.S. Census Bureau, American Community Survey microdata, 2017 five-year sample, processed and provided by University of Minnesota Institute for Social Research and Data Innovation, IPUMS USA, Steven Ruggles, Sarah Flood, Ronald Goeken, Josiah Grover, Erin Meyer, Jose Pacas, and Matthew Sobek, accessed 2020, <https://usa.ipums.org/usa/>. See methodology for details.
- 32 This report adopts the terminology and definitions of race and ethnicity used by federal statistical agencies. Individuals are classified as “Asian” if they self-identify as having personal origins in the nations of the Far East, Southeast Asia, or the Indian subcontinent. They are classified as “Black or African American” if they choose one of those terms or identify as having origins in the nations of Africa (excluding North Africa). They are classified as “white” if they choose that term or have origins in the nations of Europe, the Middle East, or North Africa. They are classified as “Hispanic” or “Latino” if they self-identify as having origins in Mexico, Puerto Rico, Cuba, South or Central America, or other nations of “Spanish culture,” regardless of race. Business owner data at the county level did not distinguish race from ethnicity—meaning, for example, that a Black business owner could be Hispanic or non-Hispanic.
- 33 V. Hwang, S. Desai, and R. Baird, “Access to Capital for Entrepreneurs: Removing Barriers” (Ewing Marion Kauffman Foundation, 2019), <https://www.kauffman.org/what-we-do/entrepreneurship/research/capital-landscape-report>. See also R.W. Fairlie and F.M. Fossen, “Opportunity Versus Necessity Entrepreneurship: Two Components of Business Creation” (working paper, Stanford University Institute for Economic Policy Research, Stanford, CA, 2017), <https://siepr.stanford.edu/sites/default/files/publications/17-014.pdf>.
- 34 V. Revzin and S. Revzin, “Student Debt Is Stopping U.S. Millennials From Becoming Entrepreneurs,” *Harvard Business Review*, April 26, 2019, <https://hbr.org/2019/04/student-debt-is-stopping-u-s-millennials-from-becoming-entrepreneurs>.
- 35 Federal Reserve Bank of New York, “Small Business Credit Survey: Report on Employer Firms” (2019), <https://www.newyorkfed.org/smallbusiness/small-business-credit-survey-2018>.
- 36 Environics Analytics, Consumer Buying Power Category Summary, 2019, accessed Jan. 13, 2020, <https://en.environicsanalytics.com>. Philadelphia’s 2019 average value of consumer purchases, known as “buying power,” was 19% below the national average, compared with 5% above the nation for the median comparison city. Consumer buying power affects businesses of all sizes, not just small and midsize.
- 37 U.S. Census Bureau, American Community Survey. See also M. Lofstrom and C. Wang, “Immigration and Entrepreneurship” (IZA World of Labor, 2019), <https://wol.iza.org/articles/immigrants-and-entrepreneurship/long>.
- 38 U.S. Census Bureau, American Community Survey. This analysis counts race and ethnicity separately. As a result, a white person, for example, could be counted either as Hispanic or non-Hispanic, and a Hispanic person as white, Black, or other race.
- 39 Experian Information Solutions Inc., “Providing More Insight Into the Small Business Owner” (2007), https://www.experian.com/whitepapers/BOLStudy_Experian.pdf.
- 40 U.S. Census Bureau, American Community Survey.
- 41 U.S. Census Bureau, Nonemployer Statistics, 1998-2017, <https://www.census.gov/programs-surveys/nonemployer-statistics/data/datasets.html>.
- 42 The U.S. Census Bureau in 2020 shifted to a new schedule for releasing certain business datasets, leaving a time gap in some demographic data. At the time of this report, the latest data on race and ethnicity of owners of employer firms was its 2017 Annual Business Survey, <https://www.census.gov/programs-surveys/abs.html>. The latest comparable data on owners of nonemployer firms was its 2012 Survey of Business Owners and Self-Employed Persons, <https://www.census.gov/programs-surveys/sbo.html>. All percentages are based on firms whose ownership was classifiable by the Census Bureau, which excluded nonprofit and publicly traded companies.

- 43 University of Wisconsin Business Dynamics Research Consortium, Your Economy Time Series.
- 44 U.S. Census Bureau, Statistics of U.S. Businesses. Data for 2017 had not been released at time of this research.
- 45 U.S. Bureau of Economic Analysis, Local Area Gross Domestic Product, found at <https://www.bea.gov/data/gdp/gdp-county>. Population 16 and older from U.S. Census Bureau, American Community Survey, Table B20005.
- 46 Green and Dilworth, analysis of “D&B Ratings” data found in the NETS dataset.
- 47 Green and Dilworth, analysis of “D&B Paydex Score” found in the NETS dataset. This report omits utilities and public administration sectors, which are mostly publicly owned in Philadelphia.
- 48 M. Famiglietti and F. Leibovici, “COVID-19’s Shock on Firms’ Liquidity and Bankruptcy: Evidence From the Great Recession” (working paper, Federal Reserve Bank of St. Louis, St. Louis, MO, 2020), <https://doi.org/10.20955/es.2020.7>
- 49 Pew analysis of Philadelphia Department of Revenue data, accessed and analyzed under confidentiality agreements with the city of Philadelphia. All figures are based on averages of three-year periods 2005-07, 2009-11, and 2015-17 to reduce the effect of unusual annual spikes; all dollar figures are inflation-adjusted to 2017 dollars. See methodology for details.
- 50 Philadelphia Department of Revenue.
- 51 S. Arvind, “BIRT: An Evolving Tax for a Changing City,” *The Latest* (blog), City of Philadelphia Department of Revenue, Nov. 27, 2018, <https://www.phila.gov/2018-11-27-birt-an-evolving-tax-for-a-changing-city/>. See also City of Philadelphia, “FY 2020-FY 2024 Five Year Financial Plan” (2019), <https://www.phila.gov/finance/pdfs/FY20-24%20Five%20Year%20Plan%20Adopted.pdf>.
- 52 University of Wisconsin Business Dynamics Research Consortium, Your Economy Time Series.
- 53 L. Eichel and T. Ginsberg, “How to Make Tax Incentives More Effective for Cities,” The Pew Charitable Trusts, Nov. 6, 2019, <https://www.pewtrusts.org/en/research-and-analysis/articles/2019/11/06/how-to-make-tax-incentives-more-effective-for-cities>.
- 54 The Pew Charitable Trusts, survey conducted March 18-31, 2019, margin of error \pm 3.72 percentage points. See methodology for details.



THE
PEW
CHARITABLE TRUSTS

pewtrusts.org