

How Property Is Taxed in Philadelphia

What the city collects and how the process compares with other big cities

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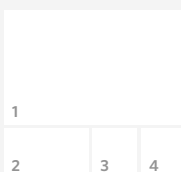
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Overview

Many Philadelphians dislike the city's property tax. In a Pew Philadelphia Poll conducted in early 2022, respondents ranked the tax's fairness below that of the city's wage and sales taxes. And when property values from the latest round of assessments were posted in May, some City Council members said they were flooded with calls from outraged constituents.¹

Residents hold these views even though property taxes in Philadelphia—which help fund both city government and the school district—are lower than in many other large cities, and City Hall gets less of its general fund revenue from property taxes than many of its big-city counterparts do. Over the years, policymakers and advocates have frequently debated whether City Hall's share of property taxes should be increased to allow for a reduction in the share coming from wage and business taxes. But the issue has drawn renewed attention as officials ponder how they can promote economic growth and equity as the city continues to recover from the COVID-19 pandemic.

Some business leaders and economists argue that Philadelphia would benefit by shifting more of its overall tax burden to the property tax.² They say the city's heavy reliance on wage and business taxes, which is relatively uncommon among major cities, stymies economic development.³ In addition, as other municipalities' 2020 experience demonstrated, city budgets that are more dependent on property taxes, which are relatively stable from year to year, fare better during economic downturns than do those that rely on more volatile wage and business taxes.⁴

But many elected officials, as demonstrated by their decisions in 2022 and in years past, have been opposed to making such a shift on a large scale. They cite a widespread lack of confidence in the property tax, fueled by a long history of irregular, inconsistent, and seemingly unfair assessments.⁵ In addition, the city has one of the highest homeownership rates among lower-income households of any major city in the country.⁶ Higher property taxes would hit those households hard, although the city has several programs in place to help them pay their tax bills. With real estate values rising, as reflected in the assessments issued this year, officials worry that higher tax bills would put additional strain on already tight budgets, perhaps forcing some owners to sell their homes and leave their neighborhoods.

This report aims not to resolve this debate but, rather, to offer facts about Philadelphia's property tax and how it works, and how the city's situation compares with that of 10 other large cities—Atlanta; Baltimore; Boston; Chicago; Columbus, Ohio; Detroit; Houston; New York; Pittsburgh; and Washington.⁷

Among the key findings:

- Philadelphia's reliance on property tax revenue to fund city government is relatively low. The city received 15.4% of its general fund revenue from the tax in fiscal year 2021 and 14.5% in fiscal 2020; for 2020, the median for the 10 peer cities considered in this report was 31.5%. The 14.5% figure for Philadelphia has changed little over the past decade.
- At the same time, however, the dollar amount that the tax has raised for both the city and the school district has grown by 60% over the past decade, from \$1 billion in fiscal 2010 to \$1.6 billion in fiscal 2021.
- The overall property tax bill for the typical owner-occupied home in Philadelphia—\$1,131 in 2021—was less than in any of the comparison cities except Detroit. But Philadelphia's overall household tax burden, including the wage tax and other levies, is higher than in most of the other municipalities.
- Seventy-one percent of Philadelphia's property tax revenue came from residential parcels, the highest share among the comparison cities, in fiscal 2021—well above both the median of 56% and the 37% levels in Boston and Washington, which had the lowest share among the 11 cities.
- Since the launch of the Actual Value Initiative (AVI), the sweeping overhaul of the property tax system that took effect in fiscal 2014, numerous studies have shown improvement in the quality of the property

assessments on which individual tax bills are based. But most of those evaluations judged assessment quality to have fallen short of industry standards. The Office of Property Assessments' (OPA's) analysis of its most recent assessments, which were posted in May 2022, found that the valuations for residential properties met industry standards citywide, a finding backed by an independent review by the International Association of Assessing Officers (IAAO).⁸ However, OPA's study also found that assessment quality still fell short in parts of West and North Philadelphia.

- About \$54.5 billion worth of property in Philadelphia, 32% of the city's total assessed value, was exempt from the real estate tax for 2021. More than half of the exemptions went to government buildings, houses of worship, universities, hospitals, and other structures whose owners have tax-exempt status. The rest came from targeted tax relief programs, primarily from the homestead exemption and the abatement that exempts, for 10 years, some or all of a property's increased value resulting from rehabilitation and new construction.

This is a key moment for Philadelphia's property tax system. The new assessments for fiscal 2023, released in May 2022, increased the overall assessed value of the city's real estate—residential, commercial, industrial, and vacant—to \$204 billion, up from \$168 billion in fiscal 2020, the year of the last citywide update to assessments. The value of the residential sector alone rose by 27%.⁹ At the same time, the city made several changes to its property tax system, all designed to cushion the impact on homeowners without lowering the tax rate. How well those adjustments are received, along with the new assessments, will go a long way toward determining whether Philadelphians become more accepting of the property tax.

Philadelphia's property tax as a revenue source for city government and the school district

Philadelphia's property tax generated \$1.6 billion in fiscal 2021. Forty-five percent of the revenue went to the city government, while the other 55% supported the School District of Philadelphia. (See Table 1.) Levied at a rate of 1.3998%, the tax applies to the assessed value of real property after accounting for any exemptions.¹⁰

Table 1

Philadelphia's Real Estate Tax Fiscal 2021 rates and revenue

Tax	Rate	Revenue	Percentage of revenue
City	0.6317%	\$723,321,000	45%
School district	0.7681%	\$879,773,621	55%
Total	1.3998%	\$1,603,094,621	100%

Sources: City rate schedule; city 2021 Annual Comprehensive Financial Report; school district 2021 Annual Comprehensive Financial Report

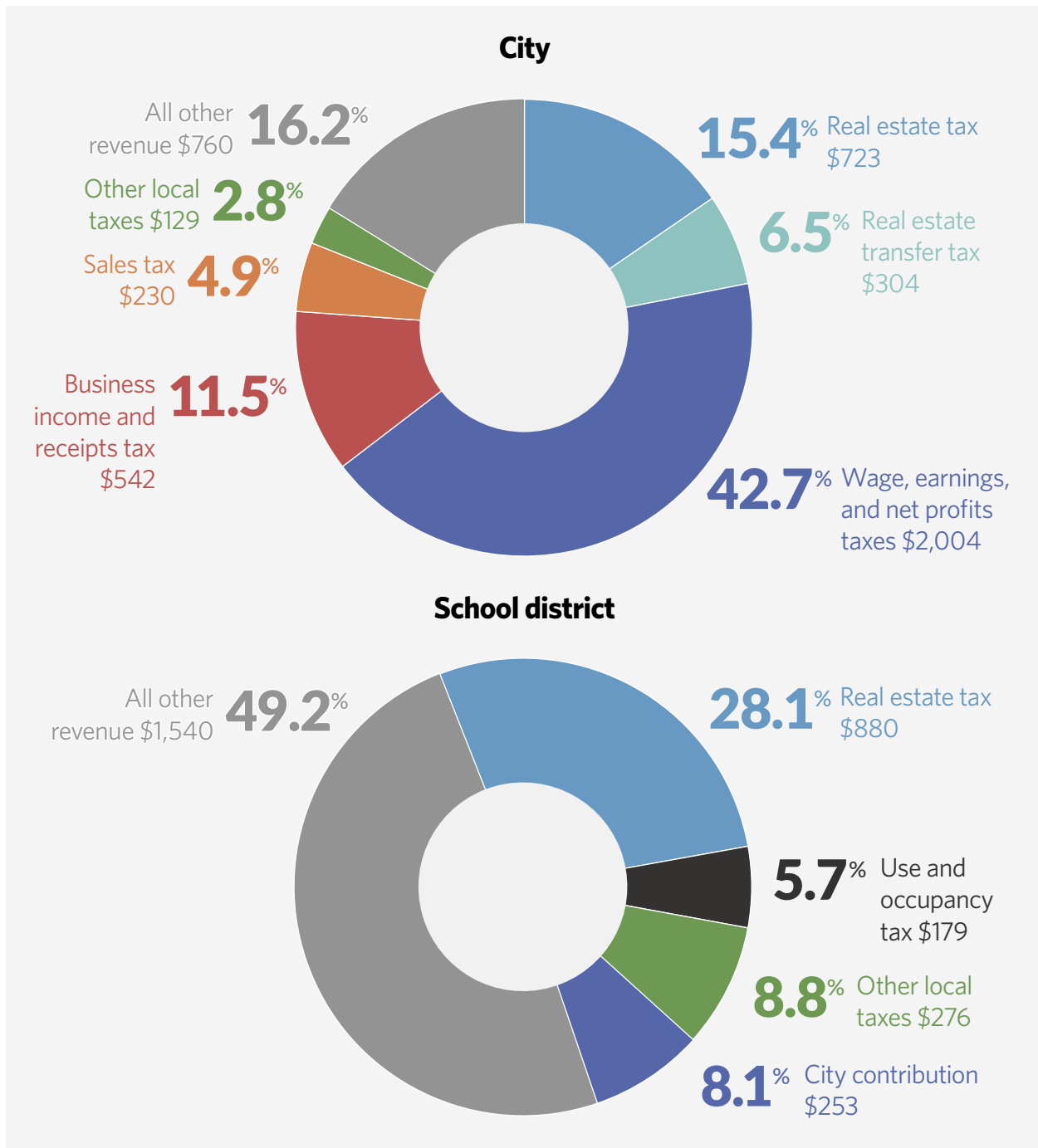
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For city government, about 15% of the general fund—the primary operating account for basic government functions—came from the property tax in fiscal 2021. (See Figure 1.) For the school district, the tax accounted for 28% of its general fund revenue. The use and occupancy tax, levied on property used for business purposes, added nearly another 6%. (See "Other Taxes on Property in Philadelphia" below.)

Figure 1

Sources of General Fund Revenue for the City and School District of Philadelphia

Fiscal 2021, in millions of dollars



Note: School district percentages do not add up to 100% due to rounding.

Sources: City 2021 Annual Comprehensive Financial Report; School District 2021 Annual Comprehensive Financial Report; Philadelphia Quarterly City Manager's Reports, March 2022

Other Taxes on Property in Philadelphia

The real estate tax is not the only levy imposed on property in Philadelphia. Two others generate substantial revenue for the city and the school district.

The real estate transfer tax is levied on the value of property at the time of sale. The rate is 4.278%, of which 1 percentage point goes to the state. In 2021, the tax raised \$304 million for the city's general fund.

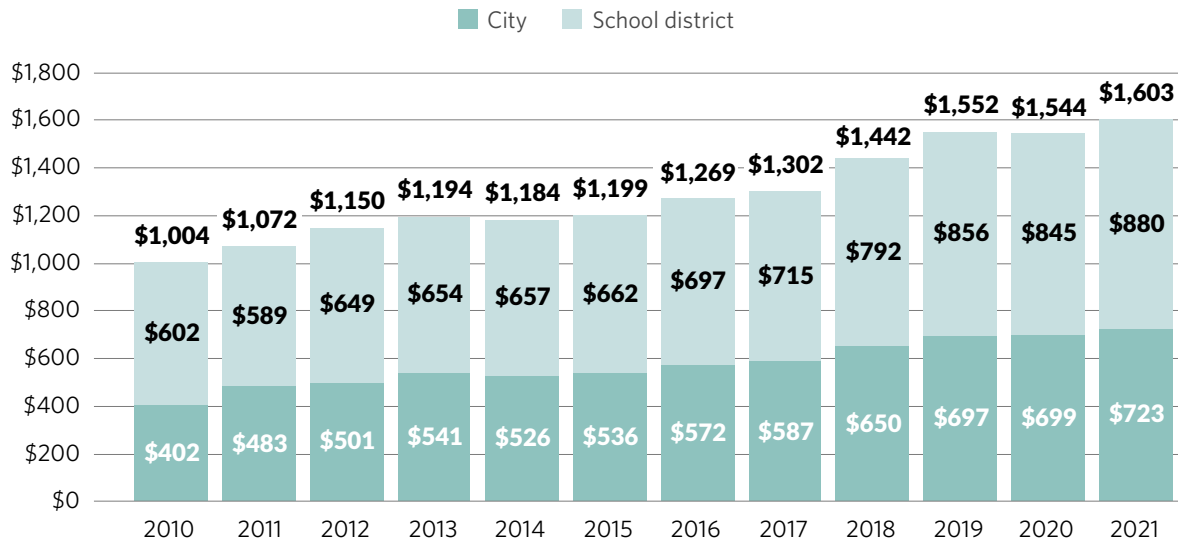
Property used for business purposes is subject to the use and occupancy tax. The 1.21% levy applies to the taxable value of the portion of the property used in for-profit commercial activity. Many cities accomplish a similar result by imposing higher base tax rates on commercial and industrial parcels. But that approach is not permitted under the uniformity clause in Pennsylvania's Constitution, as interpreted by the state courts.¹¹ In 2021, Philadelphia collected \$179 million in use and occupancy tax revenue, all of which went to the school district. By comparison, commercial and industrial properties owed about \$430.9 million to the city and schools through the property tax itself.¹²

From 2010 to 2021, the amount of money raised through the real estate tax for both the city and the school district increased by 60%. (See Figure 2.) This was the result of four rate increases, a series of reassessments, and the value added to the base as renovation projects and new construction became fully taxable at the end of the 10-year abatement period that the city granted.¹³

Figure 2

Property Tax Revenue in Philadelphia, 2010-21

Total collected, in millions of dollars



Note: Annual totals may not add up precisely due to rounding.

Sources: City and School District Annual Comprehensive Financial Reports, 2010-21

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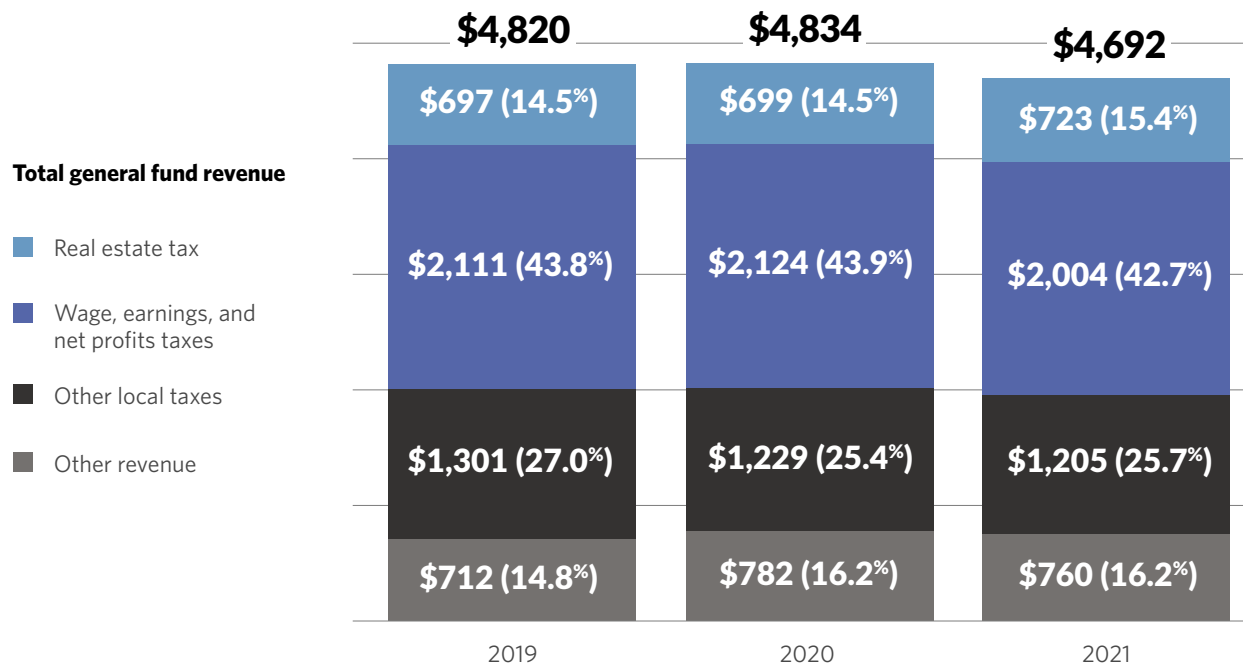
The property tax’s contribution to Philadelphia’s general fund

The city’s general fund received 15.4% of its revenue from the property tax in 2021, up from 12.7% in 2010. (See Figure 3.) Tax hikes in 2011 and 2013 helped push the tax’s share of general fund revenue to 14.7% in 2013, just before the sweeping overhaul of the property tax system known as AVI. With AVI in place, the share held steady at roughly 14% until it surpassed the 15% mark in 2021. That recent uptick stems from the pandemic’s economic impact. From fiscal 2019, the last fully pre-pandemic year, to 2021, as the city began to recover from the worst of the COVID-19 economic downturn, the amount raised by the property tax continued to grow as a result of higher assessments, while revenue from other taxes fell. (See Figure 3.) Advocates of the property tax cite its relative stability in volatile times as one of its strong points.¹⁴

Figure 3

Effect of the Pandemic on Philadelphia’s General Fund Revenue

In millions of dollars and percentage of total general fund



Note: Percentages and totals may not add up precisely due to rounding.

Sources: City Annual Comprehensive Financial Reports, 2019-21; Philadelphia Quarterly City Manager’s Reports, March 2020-22

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Using a longer time frame, the amount of property tax raised for the city’s general fund grew 80% from 2010 through 2021, a period in which overall general fund revenue rose by 48%, not accounting for inflation. (See Table 2.) Only revenue from the real estate transfer tax grew at a faster rate.

Table 2

Change in Philadelphia General Fund Revenue, 2010 vs. 2021

In millions of nominal dollars

Source	2010	2021	Change	Percentage change
Real estate tax	\$402	\$723	+\$321	+80%
Wage, earnings, and net profits taxes	\$1,404	\$2,004	+\$600	+43%
Business income and receipts tax	\$365	\$542	+\$177	+49%
Real estate transfer tax	\$119	\$304	+\$185	+155%
Sales tax	\$207	\$230	+\$23	+11%
Other local taxes	\$95	\$129	+\$35	+37%
All other revenue	\$575	\$760	+\$185	+32%
Total general fund revenue	\$3,167	\$4,692	+\$1,525	+48%

Notes: "All other revenue" includes local nontax revenue, use of reserves, and funds from other governments. Totals may not add up precisely due to rounding.

Sources: 2010 and 2021 Annual Comprehensive Financial Reports; March 2011 and 2022 Philadelphia Quarterly City Manager's Reports

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The Property Tax's Unpopularity

The Pew Charitable Trusts probed Philadelphians' attitudes about the property tax in a poll conducted in January 2022.¹⁵

The survey asked Philadelphians to rate the tax's fairness on a four-point scale. They judged the tax to be less fair than either the wage or sales tax and slightly fairer than the levy on sodas and other beverages. Forty-nine percent gave the property tax an unfair rating (3 or 4), 38% judged it fair (1 or 2), and the rest had no opinion.

Residents were also asked about the idea of raising the property tax to make up for lost revenue as part of any plan to cut wage or business taxes. Only 23% favored that option, with 76% against.

Among homeowners, 84% opposed the idea, compared with 69% of renters. There was a similar differential between age groups, with 89% of people over age 65 opposed, compared with 63% of 18-to-29-year-olds.

The property tax contribution in Philadelphia compared with other cities

Philadelphia's share of property tax revenue all goes into the general fund, which accounts for about two-thirds of governmental activity. This is not the case in every city. So, to make comparisons among them, we looked at property taxes' contribution to both the general fund and all city funds.

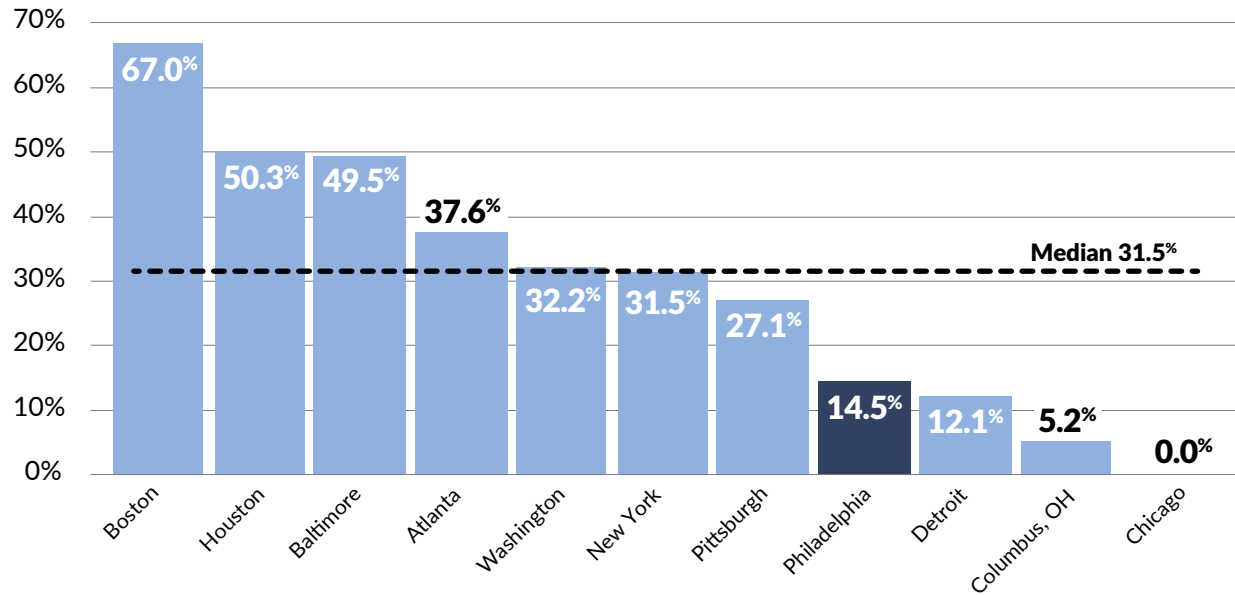
Figure 4 shows the share of revenue that the property tax represents in Philadelphia and 10 other cities for fiscal 2020, the most recent year for which complete data was available. Philadelphia's 14.5% share of general fund revenue was less than half the median of 31.5%. In terms of all city funds, the property tax contributed 9.5% in Philadelphia, lower than that of any other city considered except Columbus and again less than half the median. Pittsburgh, which operates under the same state constitutional constraints as Philadelphia, came in at or near the median on both measures.

Figure 4

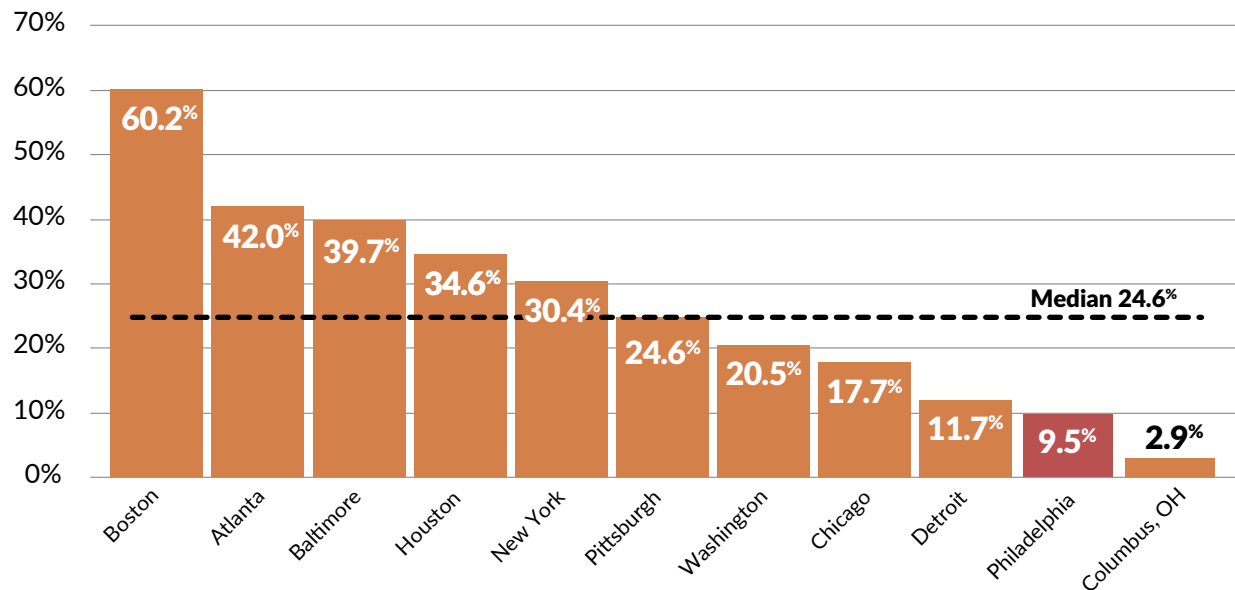
City Government's Comparative Property Tax Reliance, Philadelphia and 10 Other Cities, 2020

Property taxes as a percentage of revenue

City general fund



All city funds



Note: The general funds of Baltimore, Boston, New York, and Washington include the local school district. Chicago's general fund does not include the pension and debt obligations to which the city's property tax revenue is devoted; hence the 0% listing in the first chart.

Sources: Annual Comprehensive Financial Reports for all 11 cities

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In 2017, the last year for which data was available, the property tax accounted for 26.5% of all local tax revenue collected by the governmental entities serving Philadelphians, which was less than in any other city considered and well below the median of 49.4%.

Figure 5 shows the property tax's contribution to all governments that serve city residents, including the city, the county (which are one and the same in Philadelphia), the school district, and special service districts for items such as sewers and parks. These numbers are derived from the Lincoln Institute of Land Policy's Fiscally Standardized Cities database. The database takes into account factors such as whether the schools are included in the city budget, as they are in Baltimore, Boston, New York, and Washington, or whether they are separate, as is the case in Philadelphia.¹⁶

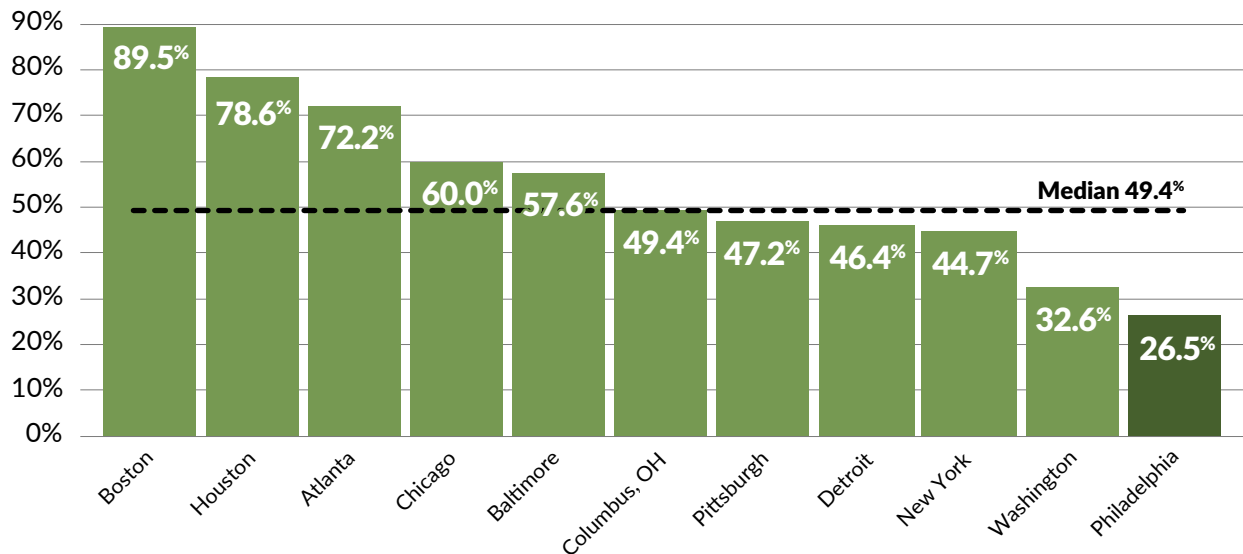
In 2017, the last year for which data was available, the property tax accounted for 26.5% of all local tax revenue collected by the governmental entities serving Philadelphians, which was less than in any other city considered and well below the median of 49.4%. At the other end of the chart, property taxes accounted for nearly 90% of local taxes in Boston.

Figure 5

All Local Taxing Entities' Comparative Property Tax Reliance, Philadelphia and 10 Other Cities, 2017

Property taxes as a percentage of tax revenue

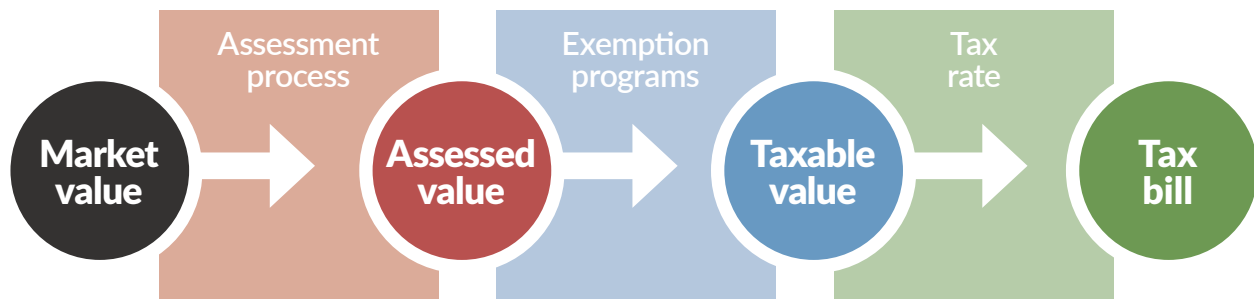
Local tax revenue



Source: Lincoln Institute of Land Policy, Fiscally Standardized Cities database

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How property taxes are determined in Philadelphia



Before real estate tax bills are sent out and revenue can be collected, several things need to happen. Each property must be assigned an assessed value, which is an estimate of its market value. For any number of reasons, some or all of the assessed value may be exempt from taxation. This amount is subtracted from the assessed value to yield the taxable value—which is then multiplied by the tax rate to yield a property’s tax liability. In Philadelphia, assessments are handled by OPA, an agency that reports to the Office of the Director of Finance; exemptions are created by state or local ordinance, and tax rates are set by City Council and the mayor as part of the annual budget process.

OPA primarily uses two approaches to estimate a property’s market value, depending on the nature of the parcel. For commercial and industrial properties, hotels, and large apartment buildings, the office uses the income method, which estimates a property’s market value based on the annual net income it produces and the capitalization rate—a ratio between net income and the market value derived from recent sales of similar properties. For single-family homes, condominiums, and vacant land, OPA uses the sales comparison method, which estimates market value from data on recent sales of similar parcels, making adjustments to account for the property’s characteristics, such as its condition and square footage.

Under Pennsylvania law, the city is required to certify the assessed values for the coming fiscal year, which starts in July, by March 31. The timing of the certification is intended to allow policymakers to consider changes in the property tax base when setting the tax rate.¹⁷ The values for fiscal 2023 were not certified until April 30, 2022, giving City Council less time to adjust tax policy.¹⁸

A single rate applies to all properties, whether they are modest row houses or multistory office buildings. Although other cities have different rates—for residential, commercial, industrial, and/or vacant tracts—such variations are banned in Pennsylvania because of the state Supreme Court’s long-standing interpretation of the state constitution’s uniformity clause.¹⁹

Before real estate tax bills are sent out and revenue can be collected, several things need to happen. Each property must be assigned an assessed value, which is an estimate of its market value. For any number of reasons, some or all of the assessed value may be exempt from taxation. This amount is subtracted from the assessed value to yield the taxable value—which is then multiplied by the tax rate to yield a property’s tax liability.



The Actual Value Initiative

Philadelphia's current property tax system stems from an overhaul that went into effect for fiscal 2014 called the Actual Value Initiative (AVI), an attempt by city officials to address several major problems that had accumulated over time.²⁰

One was the irregularity of reassessments, in terms of both timing and geography. Many tracts had not been re-examined in a decade, some not since the 1980s. And there was a widespread sense that officials had occasionally authorized reassessment for some parts of Philadelphia—but not others—when city government needed additional revenue.²¹ All of this led to wide variations in assessments, and thus tax bills, among similar properties.²²

With the advent of AVI, citywide reassessments were supposed to occur annually. But that has not happened. City officials cite various reasons for this, including the thousands of appeals filed against the fiscal 2014 assessments, changes in methodology, and technology-related issues. Following the initial assessments under AVI, there has been only one full reassessment, for 2019; a handful of ad hoc partial reassessments; and a percentage factor adjustment of existing values for 2020. The results of the next full reassessment were announced in spring 2022.

Another problem that AVI addressed was the assessments' complexity. Pre-AVI, tax bills were supposed to be based on 32% of assessed value, which made the calculation confusing to many. In fact, independent studies showed that tax bills, on average, were based on roughly 13% of market value, with big differences among neighborhoods. Under AVI, taxes were supposed to be based on 100% of value, easier to understand and presumably fairer.²³

This latter set of changes meant that assessments rose dramatically for 2014. To offset that, officials adjusted the real estate tax rate downward, from 9.771% to 1.34%, and roughly the same amount of revenue was collected in fiscal 2014 as in fiscal 2013.²⁴

The attempt to correct the inequities of the past meant tax increases for some property owners and decreases for others. The net effect was to hike the residential share of the tax base, because residential properties, especially those in appreciating real estate markets, generally had been underassessed to a greater degree than commercial properties were.²⁵ This shift was partially offset by two new tax relief programs for homeowners: the homestead exemption and Longtime Owner Occupants Program, discussed below in the sections about residential taxpayer assistance programs.²⁶

Philadelphia's property tax base

According to OPA, the aggregate value of all property in Philadelphia was \$170 billion in fiscal 2021, the most recent year for which complete data was available.²⁷ Approximately one-third of the total value was exempted for various reasons, leaving a taxable base of \$115.4 billion. Pew's analysis of the numbers found that Philadelphia's tax base had some distinctive characteristics:

- Seventy-one percent of the tax base was residential, a higher percentage than in all but two of the comparison cities—Chicago and Columbus.
- On a per capita basis, the tax base was \$72,000, near the median for the comparison cities and on a par with Chicago and Baltimore.
- The assessed value of the base grew by 26% from 2014 to 2021.
- Of the \$54.5 billion that was tax-exempt, just over half of the properties were owned by houses of worship, universities, government, and other such institutions. The rest were exempt as a result of programs designed to assist other groups, many of them residential property owners.

Table 3 shows the residential/nonresidential breakdown of property in the city as of 2021. Of all taxable value, 47% came from single-family homes, 8% from condominiums, and 16% from apartments—for a total of 71% residential. The nonresidential 29% came from commercial, industrial, or vacant parcels.

Table 3

Philadelphia's Property Assessments, 2021

Dollar values in billions

Property type	Properties	Assessed value	Taxable value	Percentage of taxable value
Residential	503,567	\$105.3	\$82.5	71%
Single-family homes	429,205	\$69.0	\$54.6	47%
Condo units	32,371	\$11.0	\$9.0	8%
Apartment buildings	41,991	\$25.2	\$18.9	16%
Nonresidential	77,889	\$64.7	\$32.9	29%
Commercial	28,924	\$55.6	\$27.2	24%
Industrial	4,354	\$4.5	\$3.6	3%
Vacant land	44,611	\$4.5	\$2.2	2%
Total	581,456	\$170.0	\$115.4	100%

Note: Totals may not add up precisely due to rounding.

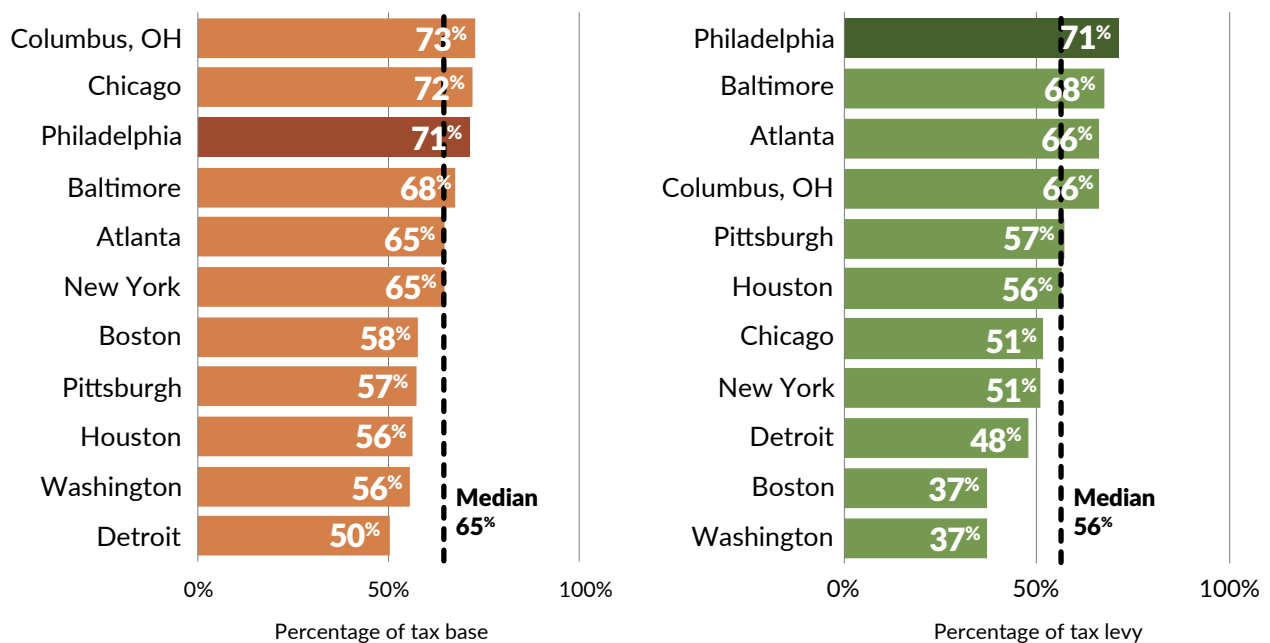
Source: Pew analysis of data from the Philadelphia Office of Property Assessment and Department of Revenue

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The residential share of Philadelphia’s property tax base was the third-largest among the cities studied, behind only that of Chicago and Columbus. (See graphic on left side of Figure 6.)

The right side of Figure 6 shows the percentage of real estate tax revenue (for all purposes, including schools) that comes from residential property in each city. Because Philadelphia has only one tax rate for all types of property, having a residential sector that is 71% of the base means that 71% of the revenue comes from residential tracts. This is not the case in six of the other cities studied. In Boston, Chicago, and Washington, all residential properties pay a lower rate than other property types, as do single-family homes and small apartments in Columbus and New York, and owner-occupied homes in Detroit. In Chicago, for example, the residential sector constitutes 72% of the base, as shown on the left, but only 51% of revenue, as shown on the right. In terms of revenue generated, Philadelphia’s 71% figure is the largest among the cities studied; the median is 56%. Besides Philadelphia, the residential share exceeds 60% in only three of the other cities: Baltimore, Atlanta, and Columbus.

Figure 6
Residential Property as a Percentage of Tax Base and Taxes Levied
 In Philadelphia and comparison cities, 2021



Note: If Philadelphia’s use and occupancy tax were counted as a tax on real estate, the share levied on residential properties would fall to 64%.

Source: Pew analysis of city assessment data

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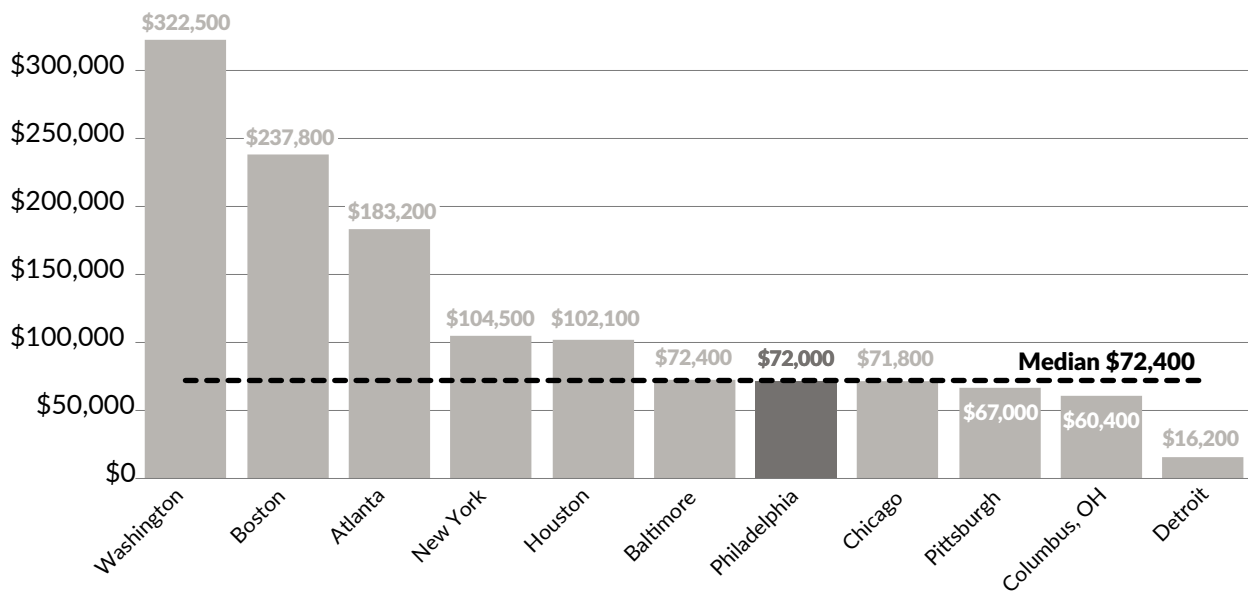
The high residential share in Philadelphia—and the constitutional inability to charge higher rates on commercial and industrial property—makes it difficult for policymakers to raise the property tax rate in the city; a higher rate would affect everyone. And the demographics of homeownership in Philadelphia make raising rates difficult politically. Among the comparison cities, Philadelphia had the highest homeownership rate overall and the highest rate among low-income households as well: As of 2019, some 40% of the approximately 213,300 Philadelphia households with annual incomes below \$30,000 owned their homes. The majority (62%) of those low-income homeowners—roughly 52,700 households—owned their homes free and clear, with no mortgage, which makes the property tax one of the major costs.²⁸

Taxable value per capita

On a per capita basis, Philadelphia’s tax base of \$72,000 in 2021 was only slightly below the median of the cities shown in Figure 7, roughly on a par with Chicago and Baltimore, though far below several others. For instance, Washington’s tax base per capita was more than four times larger than Philadelphia’s, Boston’s was more than three times greater, and Atlanta’s was more than double.²⁹ With a smaller base, it takes a higher rate to generate a set amount of revenue. With a larger base, a lower rate can produce that amount.

Figure 7

Property Tax Base per Capita in Philadelphia and Comparison Cities, 2021



Source: Pew analysis of city assessment data

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From 2014 to 2021, Philadelphia’s taxable base grew from \$92 billion to \$115.4 billion, a 26% increase due primarily to appreciation of existing properties. Expiring abatements added approximately \$5.6 billion to the taxable base over the period, accounting for roughly one-quarter of the growth.

Philadelphia’s exempt property

As of fiscal 2021, about 32% of all property value in Philadelphia, \$54.5 billion of the \$170 billion, was exempt from the property tax. Nearly \$30 billion of the exempted value was owned by tax-exempt entities. Another roughly \$25 billion was exempted through targeted exemption programs. (See Table 4.)

Table 4

Philadelphia’s Exempt Properties, 2021

By property type, in billions of dollars

Property type	Assessed value	Exempt by ownership	Exempt through targeted programs	Taxable value
Residential	\$105.3	\$1.6	\$21.2	\$82.5
Single-family homes	\$69.0	\$0.5	\$14.0	\$54.6
Condo units	\$11.0	\$0.0	\$2.1	\$9.0
Apartment buildings	\$25.2	\$1.1	\$5.2	\$18.9
Nonresidential	\$64.7	\$28.1	\$3.7	\$32.9
Commercial	\$55.6	\$25.2	\$3.2	\$27.2
Industrial	\$4.5	\$0.6	\$0.3	\$3.6
Vacant land	\$4.5	\$2.3	\$0.1	\$2.2
Total	\$170.0	\$29.7	\$24.9	\$115.4

Note: Totals may not add up precisely due to rounding.

Source: Pew analysis of data from the Philadelphia Office of Property Assessment and Department of Revenue

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Under state law, the property of churches, cemeteries, public parks, government buildings, nonprofit hospitals, universities, museums, and other civic institutions is fully exempt as long as any revenue it generates is used to support the organization’s mission. As of 2021, a total of \$29.7 billion in assessed value was exempted on this basis, representing 23,320 properties and 17% of the city’s total assessed value. (See Table 5.) Properties or portions of properties used for a purpose unrelated to the mission are taxable.³⁰

Table 5

Types of Tax-Exempt Properties in Philadelphia, 2021

By ownership

Tax-exempt entity type	Properties	Exempt value (in billions of dollars)	Percentage of value exempted
Public property	17,537	\$14.4	48%
City of Philadelphia	14,441	\$11.3	38%
Federal government	178	\$1.3	4%
Commonwealth of Pennsylvania	346	\$0.9	3%
SEPTA	276	\$0.3	1%
Other public entities	2,296	\$0.6	2%
Private institutions	5,783	\$15.3	52%
Institutions of learning	645	\$7.2	24%
Medical and health facilities	197	\$2.3	8%
Religious institutions	2,387	\$2.0	7%
Cultural institutions	96	\$0.7	2%
Railroads other than SEPTA	222	\$0.3	1%
PECO Energy	126	\$0.1	0%
Cemeteries	56	\$0.1	0%
Other nonprofit organizations	2,054	\$2.7	9%
Total exempt entities	23,320	\$29.7	100%

Note: Totals may not add up precisely due to rounding.

Source: Pew analysis of data from the Philadelphia Office of Property Assessment and Department of Revenue

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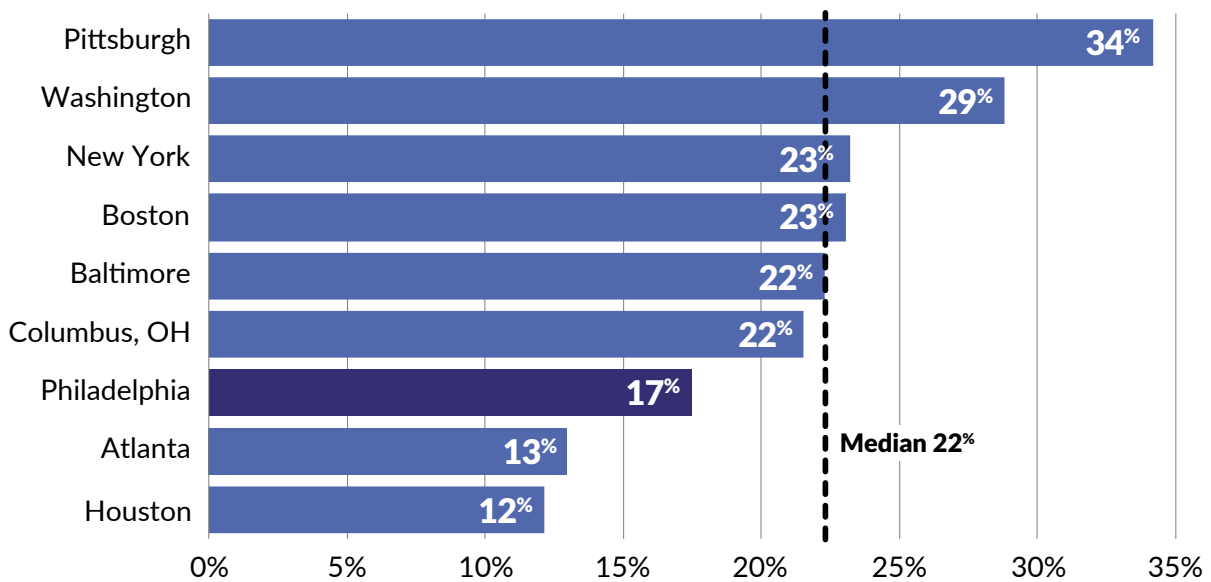
Tax-exempt entities in Philadelphia compared with those in other cities

For years, local policymakers have bemoaned having so much property exempt from taxation under state law. In fact, the percentage of property in this category, which comes to 17% of the total value of the city, is not atypical among the cities studied in this report. Philadelphia's percentage is actually below the median of the comparison cities. (See Figure 8.)

Figure 8

Percentage of Assessed Value Exempted Due to Nature of Ownership, 2021

In Philadelphia and comparison cities



Note: Chicago and Detroit are not shown because they do not assess tax-exempt entities' property.

Source: Pew analysis of city assessment data

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Targeted exemption programs

In addition, exemptions in Philadelphia come from various programs designed to assist residential taxpayers and produce economic benefit. As shown in Table 6, these programs affected nearly 266,000 properties in 2021, exempting a total of \$24.9 billion, 15% of the city's assessed value.

Table 6

Impact of Tax-Exempt Programs in Philadelphia

2021 figures

Targeted program type	Properties	Exempt value (in billions of dollars)	Tax reduction (in millions of dollars)	Percentage of value exempted
Economic development programs	15,611	\$13.1	\$182.8	52%
Real estate tax abatement	15,424	\$12.0	\$167.9	47%
Keystone Opportunity Zone	187	\$1.1	\$14.9	4%
Residential taxpayer assistance programs	250,275	\$11.8	\$171.1	48%
Homestead exemption	223,276	\$9.9	\$139.0	39%
Longtime Owner Occupants Program	15,526	\$1.7	\$24.3	7%
Senior tax freeze	10,567	n/a	\$5.8	2%
Disabled veteran exemption	906	\$0.1	\$2.1	1%
Total targeted programs	265,886	\$24.9	\$353.9	100%

Notes: The senior freeze is a tax credit, so there is no valued exemption in connection with that program. The equivalent exemption would be \$400 million. Totals may not add up precisely due to rounding.

Source: Pew analysis of data from the Philadelphia Office of Property Assessment and Department of Revenue

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How Philadelphia's Property Taxes Are Changing for 2023

In May 2022, the city's Office of Property Assessment (OPA) announced the results of its first comprehensive reassessment in four years, raising the assessed value of property in Philadelphia from \$170 billion to \$204 billion for 2023.³¹

In response, the city enacted a series of measures designed to mitigate the impact of the higher assessments, especially on low-income homeowners, all without reducing the tax rate.

Philadelphia raised the homestead exemption, which reduces the taxable portion of owner-occupied residences, from \$45,000 to \$80,000, a move that dramatically lowered—and in some cases eliminated—the tax liabilities of owners of the most modest homes. And it allocated additional funds for several targeted relief programs.

"One thing that we cannot allow to have happen is a person being in a position where they may lose their home as a result of something that we did," City Council President Darrell Clarke told his fellow councilmembers as they gave the package their initial approval.³²

The original proposal, drafted by Mayor Jim Kenney's administration, called for a \$65,000 homestead exemption and a wage tax reduction. But councilmembers increased the homestead exemption and trimmed the proposed wage tax cut, while also making a modest reduction in business taxes.³³

For OPA, the real test will come in the final months of 2022, when it learns how many homeowners were upset enough to challenge their new assessments. In an interview in February, James Aros Jr., who runs OPA, said that a high number of appeals would make less staff time available to do another citywide reassessment for 2024. The agency, he said, is committed to regular reassessments, which might or might not be annual, the frequency depending on OPA's resources and market conditions—as well as the appeals.³⁴

Residential taxpayer assistance programs

Homestead exemption: Introduced in conjunction with AVI, the homestead exemption, the largest of the residential assistance programs, exempts a set amount of assessed value for all owner-occupied homes that enroll. The exemption was initially set at \$30,000 for fiscal 2014, raised to \$40,000 for 2019, then \$45,000 for 2020, and \$80,000 for 2023.³⁵ Properties enrolled in the real estate tax abatement program are not eligible for the homestead exemption.³⁶

Longtime Owner Occupants Program: Also introduced with AVI, the program—known as LOOP—caps the amount by which an assessment can increase for owners who have lived in their homes for 10 years or more and meet certain income qualifications. Initially, the program limited the annual increase to 200% and locked in that value for 10 years. Starting in fiscal 2018, the cap on annual increases was lowered to 50% and the benefit period was extended for as long as the property owner remains in the house and meets the income criteria.³⁷ As part of the system changes enacted for 2023, the cap was redefined as 50% in one year or 75% over five years. The total tax value of the program is subject to an upper limit, initially set at \$20 million per year, then increased to \$25 million for tax year 2019 and to \$35 million for 2023.³⁸



Approximately 240,000 homes are enrolled in either LOOP or homestead; homeowners who qualify for both must choose one or the other, presumably the one that benefits them most. According to the U.S. Census Bureau's American Community Survey, Philadelphia has more than 300,000 owner-occupied households, suggesting that the programs are undersubscribed. To qualify for any assistance programs, a homeowner must submit applications.

Senior tax freeze: Under this program, the property taxes due from qualifying low-income Philadelphians ages 65 and over remain fixed at the amount at the time of enrollment, regardless of changes in the property tax rate or assessed value, for as long as the property owner remains in the home and meets income criteria. Starting in 2023, qualified new older adult enrollees, regardless of their current age, can freeze their tax bills at what they were when the enrollees turned 65 or in 2018, whichever is more recent.³⁹

Disabled veterans: Under state law, those who are 100% disabled as a result of military service are exempt from paying property taxes.⁴⁰

Economic development programs

Real estate tax abatement: Intended to encourage development, the real estate tax abatement program accounts for nearly half of the property exempted in the target programs—\$12 billion. It exempts for 10 years some or all of the increase in assessed value resulting from new construction and rehabilitation. For properties that enrolled before Jan. 1, 2022, 100% of the added value is exempt for the full term. For properties enrolling starting on that date, the exemption for residential rehabilitation remains unchanged; the exemption for new residential construction starts at the same 100% in year one, then steps down in 10% increments in each of the next nine years; and the exemption for nonresidential construction or rehabilitation is 90% for the full term.⁴¹

Keystone Opportunity Zone: Intended to attract business to areas in need of economic development, the program exempts properties located in state-designated areas from most state and local taxes, including property taxes, for as long as the designation is in place—typically 10 years but sometimes longer and subject to extension.⁴²

How the Exemptions Influence How Much People Pay

As illustrated by the homestead exemption in Table 7, residential taxpayer assistance programs can make a big difference in how much property tax a homeowner pays—and whether he or she actually pays the nominal rate of 1.3998% of assessed value or something lower.

Table 7

How the Homestead Exemption Affects Property Tax Liabilities in Philadelphia

Effective tax rate calculations for four single-family homes

Sample single-family homes	Assessed value	–	Exempted value	=	Taxable value	×	Nominal tax rate	=	Tax due	Effective tax rate
Low-value home with homestead	\$107,900		\$80,000		\$27,900		1.3998%		\$391	0.36%
Median-value home, no exemptions	\$172,100		\$0		\$172,100		1.3998%		\$2,409	1.3998%
Median-value home with homestead	\$172,100		\$80,000		\$92,100		1.3998%		\$1,289	0.75%
High-value home with homestead	\$369,600		\$80,000		\$289,600		1.3998%		\$4,054	1.10%

Notes: The low-value home represents the 25th percentile in the assessments for 2023, with the high-value home at the 90th percentile. The effective tax rate is the tax due divided by the assessed value.

Source: Pew calculations based on preliminary data downloaded from OpenDataPhilly on May 12, 2022, and the fiscal 2023 homestead and tax rate

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The homestead exemption’s value is the same for all owner-occupied properties in Philadelphia, at \$80,000, producing a tax savings of \$1,120 or the total tax amount, whichever is greater. In terms of the effective rate paid, the exemption has a far greater impact on low-value homes than on high-value ones, as shown in Table 7. With the exemption, the owner of the low-value home pays an effective tax rate of 0.36%, while the owner of the high-value home pays a rate three times as high.

Comparative rates

Bound by the state uniformity clause prohibition on having different rates for different types of property, Philadelphia has one rate, 1.3998%, that applies equally across the board.

Of the 10 other cities studied in this report, five make distinctions between property types when levying the property tax, either via different rates (Boston and Washington); taxing different property types at different percentages of assessed value (Columbus and Chicago); or a combination of the two (New York). A sixth, Detroit, levies a lower rate on owner-occupied homes.

The tax rates shown in Table 8 combine nominal rates and assessment percentages into a single figure that can be compared across cities. For example, in New York, the nominal rate for residences with three or fewer units is 21.045%, but that gets applied to only 6% of the value, making the rate effectively 1.263% ($21.045\% \times 6\%$). The rates are the totals of all citywide local, school district, county, and state taxes that apply to real property in the 11 cities.



Chris Boswell/iStock/Getty Images

Table 8

Rates by Property Type for Taxes Paid in 2021

For Philadelphia and comparison cities

City	Tax types	All property	Residential	Nonresidential	Additional
Atlanta	1	1.62%			
Baltimore	1	2.36%			
Detroit	1	4.381%			
Houston	1	2.331%			
Philadelphia	1	1.3998%			
Pittsburgh	1	2.299%			
Boston	2		1.07%	2.46%	
Columbus, OH	2		3 or fewer units: 1.866% 4 or more units: 2.618%	2.6180%	
New York	3		3 or fewer units: 1.263% 4 or more units: 5.520%	4.812%	
Chicago	4		2.009%	5.023%	Vacant: 2.009% Nonprofit: 4.018%
Washington	6		0.85%	Assessed value: Less than \$5M: 1.65% \$5M-\$10M: 1.77% Over \$10M: 1.89%	Vacant: 5.0% Blighted: 10.0%

Notes: In Atlanta, Chicago, Columbus, Detroit, and New York, nominal tax rates are adjusted to account for assessment percentages and other factors. Chicago also has several economic development-oriented incentive programs that offer qualifying projects lower effective tax rates for a limited time, typically 12 years. Detroit's homestead program levies a lower rate of 3.481% on owner-occupied residential property. Separate rates for personal property and utility property are not included.

Sources: Cities' official websites and published documents

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Washington’s system is the most varied, with six rates: one for residential; three for commercial, depending on the property’s assessed value; and two separate rates for vacant and blighted properties. As a result, the tax bill for a commercial property will be 1.9 to 2.2 times higher than for a residential property of the same assessed value.

Chicago has four effective rates and New York has three, while Boston and Columbus have two each. In all five cities, a single-family home’s tax liability is lower than that of a commercial property with the same assessed value; in three of those cities (Boston, Chicago, and New York), it’s less than half. Columbus and New York treat properties with four or more units differently than other residential properties, taxing them at the nonresidential rate in Columbus and at a rate higher than nonresidential in New York.

All 11 cities have one or more homestead programs giving preferential tax treatment to owner-occupied residential properties. The most common form, found in Philadelphia and seven other cities, is a partial exemption or credit of a fixed dollar amount, resulting in tax reductions ranging from \$303 in New York to \$3,153 in Boston. In other places, the reduction is a percentage of assessed value. In four cities, homestead programs also set a cap on annual increases in the assessed value of owner-occupied property.⁴³

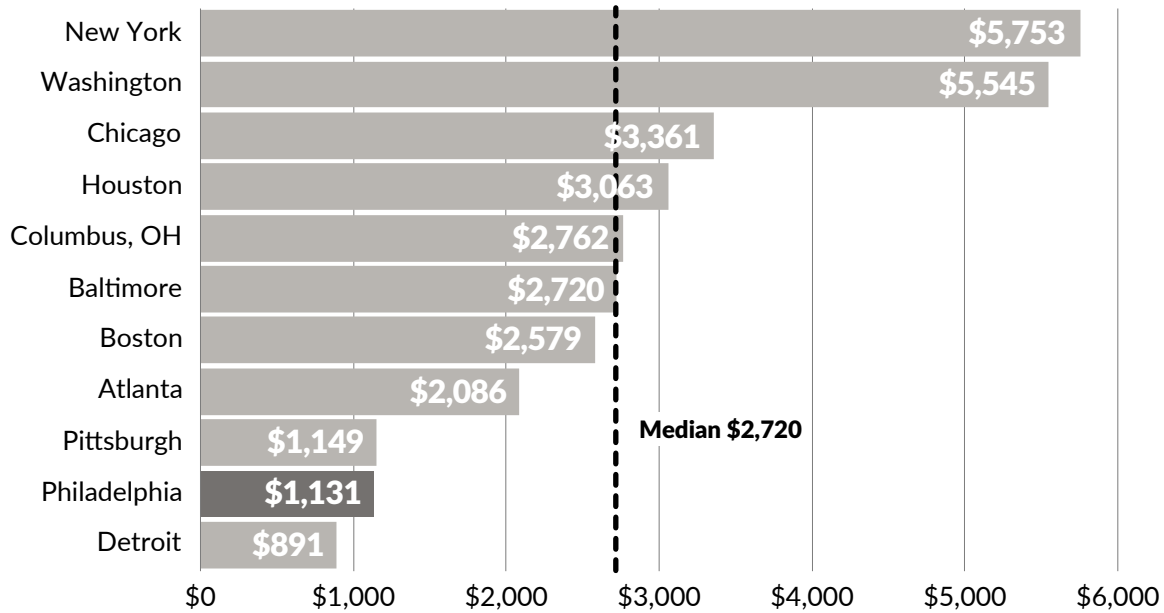
Comparing residential tax bills

The property tax bill for a homeowner living in the median single-family home in Philadelphia in 2021 was \$1,131, the second-lowest among the cities considered—owing to a combination of relatively low housing values, a low tax rate, and a comparatively generous homestead exemption. (See Figure 9 for each city’s median tax liability.) Pew based the calculation on the median assessed value of single-family homes in each city’s assessment data, taxed at the residential rate shown in Table 8, while accounting for any homestead exemptions or credits that are available to all owner-occupants.⁴⁴ The reduction in tax liability that the various homestead programs confer on the median home range from 2% in Columbus to 55% in Boston. In Philadelphia, the \$45,000 homestead exemption in place at the time reduced the tax liability on the median home, assessed at \$125,800, by 36%.

Figure 9

Property Tax Liability of Owner-Occupied Residential Properties at Median Value, 2021

For Philadelphia and comparison cities



Source: Pew calculations based on each city's assessment data

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Even though the property tax liability for homeowners tends to be lower in Philadelphia than in the other cities, the overall tax burden in Philadelphia is relatively high due to other levies, such as the wage tax, that either don't exist elsewhere or are imposed at lower rates. According to a study from Washington's chief financial officer, a family with a 2019 income of \$50,000 (which is near Philadelphia's family median figure of \$54,978) would have a higher overall state and local tax burden in Philadelphia than in six of nine of the comparison cities, with only Baltimore, Detroit, and Chicago coming in higher. Pittsburgh was excluded because the study was limited to the largest city in each state.⁴⁵

Measuring Philadelphia's assessment performance

Among the keys to having a property tax system that is perceived as reasonable are fair and consistent assessments—in other words, that tracts in comparable neighborhoods have similar assessments. Assessed values are meant to reflect market values.⁴⁶ Most homeowners have a sense of how much their house would go for were they to put it up for sale, providing a rough sense of the assessment's accuracy.

Historically, assessments have been a problem in Philadelphia. They were not conducted on any regular basis, meaning they were often out of date, and the numbers were seen by many property owners as inconsistent and illogical, with assessments based on a fraction of market value and varying widely among neighborhoods. Nearly a decade ago, the city sought to correct the mistakes of the past through AVI. The new assessments, which took effect for fiscal 2014, were meant to reflect full market value, and they were to be updated frequently.⁴⁷

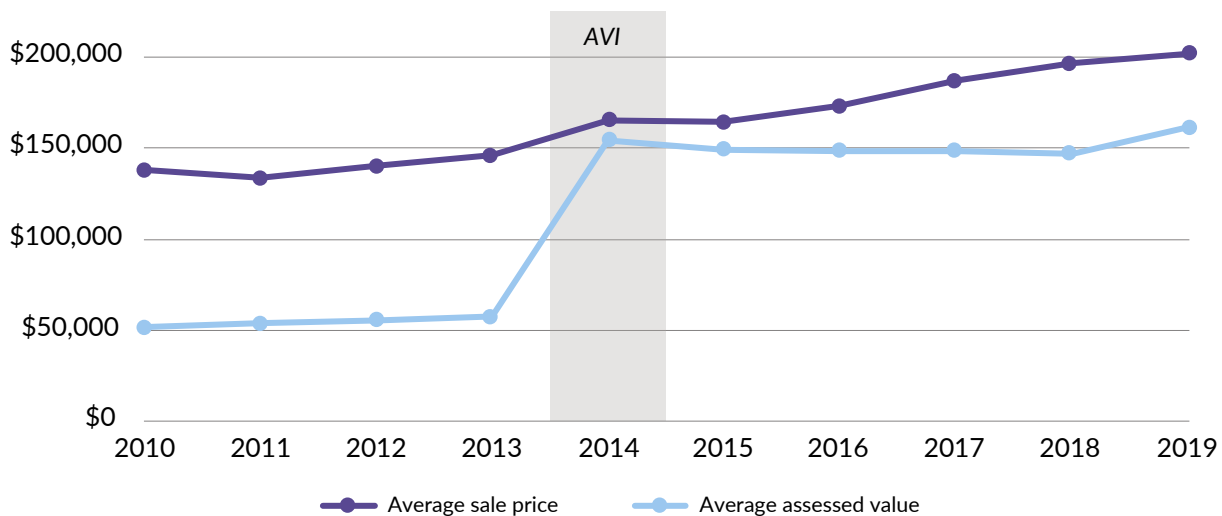
According to most independent studies, five of which are detailed in the appendix, the system is better now. But it remains far from perfect.

An independent analysis published in December 2021 by the Federal Reserve Bank of Philadelphia focused on single-family homes from fiscal 2010 to fiscal 2019 and found general improvement in the assessments' accuracy, as shown in Figure 10. In 2010, the average sale price of homes in Philadelphia was roughly 2.7 times the average assessed value. With AVI's arrival in 2014, the two averages became almost equal. From 2014 on, the gap between sale price and assessment grew. Then, a second reassessment in 2019 helped bring valuations closer to market levels.⁴⁸

Figure 10

Philadelphia Residential Properties' Average Sale Price and Average Assessed Value

2010–19



Source: Adapted from Federal Reserve Bank of Philadelphia, "Assessment Frequency and Equity of the Real Property Tax: Latest Evidence From Philadelphia" (2021)

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The paper concluded that having more frequent assessments, ideally annually, is key to retaining public trust and ensuring a fair distribution of the tax burden.

The study also showed that assessments have become more equitable since AVI's implementation, although with considerable room for improvement. And it found there had been less progress in neighborhoods that were majority Black or low income, or that had low property values. In majority-Black neighborhoods, assessment variability actually increased.⁴⁹

Modernizing the Way Property Is Assessed in Philadelphia

Valuing 580,000 properties is a significant undertaking. One reason that Philadelphia has struggled to provide annual reassessments is that it has not had a modern computer system designed for the task. A CAMA system—short for computer-assisted mass appraisal—integrates multiple assessment office functions, including data collection and storage, property assessment, appeals, and quality control analysis. These are functions that OPA has handled in separate systems.

The city first tried to move to a CAMA system in 2006, signing a vendor contract for a system that was never implemented. That contract was terminated in 2011.⁵⁰

Although the 2010 legislation creating OPA explicitly called for annual reassessment using a CAMA system, Philadelphia did not attempt to implement a system again until 2015.⁵¹ And it took until 2017 for the city to reach an agreement with a vendor, signing an \$8 million implementation contract with Tyler Technologies.⁵²

In 2020, the first phase of the system went live, incorporating OPA's data management and the appeals conducted by the Board of Revision of Taxes (BRT).⁵³ The second and third phases, which will integrate field collection of property data and launch a public access portal for exemption applications and appeals, are expected to be implemented in 2022.

Why Philadelphia hasn't had regular reassessments in recent years

When the initial AVI assessments for fiscal 2014 were released, city officials were inundated with complaints from constituents who felt their assessments were too high.⁵⁴ Some of the initial ire was based on an incomplete understanding of how the new assessments would affect tax bills, and OPA officials had difficulty communicating how they arrived at their numbers.⁵⁵ In response, City Council passed legislation requiring OPA to release its methodology and publish annual ratio studies.⁵⁶ For more information on the ratio studies, see the appendix.

Over the next four years, the city did not undertake another full reassessment, nor did OPA comply with the new transparency requirements. During that time, several partial reassessments took place, affecting various segments of the property tax base. One, for fiscal 2017, effectively raised the taxable value of many abated structures by revaluing the land underneath them, which remains fully taxable throughout the abatement period.⁵⁷ Another, for fiscal 2018, leveraged improved building revenue data to revalue properties, including commercial properties and larger apartment buildings; owners of those properties have challenged that reassessment in the courts on uniformity grounds.⁵⁸

The next full reassessment was conducted for fiscal 2019. As in previous years, the new values were not accompanied by the methodology and ratio studies, though a brief methodology came a year later.⁵⁹ The reassessment raised single-family homes' median assessed value by more than 10%.⁶⁰ City Council commissioned an audit, which found "substantive deficiencies" in OPA's assessment policies and procedures.⁶¹ In response, OPA hired an outside expert, who recommended that the office postpone the full reassessment that had been planned for the following year so it could make improvements.⁶²

For 2020, OPA used averages derived from sales data to make percentage adjustments to the prior year's assessed values, which the Kenney administration portrayed as a way to keep up with changes in the market while giving OPA time to reform its assessment process.⁶³

Plans for another round of percentage adjustments for fiscal 2021 were abandoned after an internal analysis raised concerns about the practice’s accuracy. City officials pledged to conduct a full reassessment the following year, to give OPA more time to implement its new computer system.⁶⁴ But the planned fiscal 2022 assessment was delayed again, this time because of the pandemic, which OPA said delayed employee training on the new system.⁶⁵

In the four years since the fiscal 2019 assessment, OPA has made several changes to how it operates, including several measures that the council audit recommended. Reforms include transitioning to a CAMA system, hiring a vendor to collect data on property condition and construction quality, and creating a dedicated team to screen real estate transfer data so that only true market-rate sales—as opposed to, say, low-dollar transactions among family members—are incorporated into OPA’s assessment models.⁶⁶

At OPA’s request, the International Association of Assessing Officers conducted a comprehensive evaluation of the office’s work in producing the new assessments released in May 2022 and issued a report offering recommendations for improvements. As part of that evaluation, the IAAO also conducted a ratio study of residential properties, finding that the new assessments met industry standards citywide.



Olga Kaya/Getty Images

Appealing Assessments

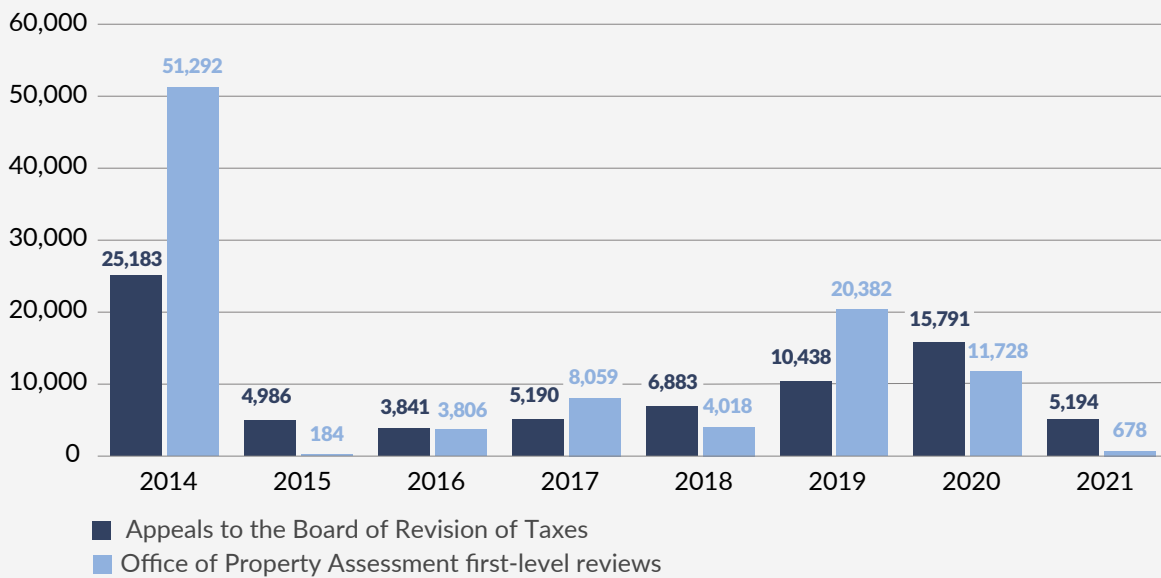
Property owners who wish to contest their assessments may do so by filing for a first-level review with OPA or an appeal with the BRT. Or they can do both.

OPA created its review process in an attempt to reduce the number of appeals reaching the BRT, a seven-member body that, before OPA, did assessments but now exists only to hear appeals.⁶⁷ Whichever route an owner chooses, he or she must present evidence showing that the property's assessed value is either not reflective of market values or inconsistent with that of similar properties—or that some key characteristic of the property, such as its square footage or condition, is incorrect in OPA's data.⁶⁸

After the first AVI values were released in 2014, some 25,183 property owners filed appeals with the BRT, and 51,292 filed for first-level reviews with OPA. (See Figure 11.) Many owners did both; the total number of contested assessments was about 60,000, with more than 20,000 securing assessment reductions.

Since 2014, the number of appeals each year has been lower, spiking in years when there has been significant revision to values, notably in 2019 and 2020. Over the entire period, 65% of the appeals decided by the BRT have resulted in decreases, as have 26% of the first-level reviews decided by OPA.

Figure 11
Number of Assessment Appeals in Philadelphia
2014–21



Source: Pew analysis of Board of Revision of Taxes appeals data and first-level review statistics provided by the Office of Property Assessment

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Conclusion

Philadelphia is less dependent on the property tax than other places are, but the tax is a significant source of revenue for the city and the school district. And as the pandemic-related downturn reaffirmed, it is also one of the more stable sources of local revenue, less volatile than taxes on wages or consumption, making city governments that rely more on property taxes than Philadelphia does better able to deal with economic uncertainties. So, despite its unpopularity, the property tax is likely to remain a key revenue source for Philadelphia—with the conversation about how it's administered and its appropriate role in the city's overall tax mix still ongoing.

In dealing with the property tax, Philadelphia has some distinctive issues that some other cities do not—issues that have complicated some city leaders' efforts to shift more of the overall tax burden to it. One is the large share of the base that is residential, with a high rate of homeownership among low-income households. Another is Philadelphia's legal inability, under Pennsylvania's Constitution, to tax different types of property at different rates. Beyond those factors are decades of mistrust, rooted in a now-reformed assessment system that had long failed to produce equitable results.

Over the past decade, city officials have taken steps to make the tax fairer, by bolstering tax relief programs for homeowners, improving assessments' accuracy, and making the relationship between assessments and tax bills easier to understand. Yet work remains to be done. In the new assessments' aftermath, the system is once again being put to the test. Philadelphians may never come to like the property tax. But more could come to accept it.

Appendix

Review of ratio studies

The quality of a jurisdiction's assessments is measured by a statistical analysis called a ratio study, which takes a representative sample of property transactions and compares sale prices with assessed values. Because buyers and sellers may sometimes agree on sale prices that diverge from market expectations, assessments will never align perfectly with sale prices. But the International Association of Assessing Officers (IAAO) sets target ranges for the statistical tests of quality, which are the accepted industry standards.

Following are three of the most common metrics:

- The **assessment-sales ratio** is a measure of accuracy, the degree to which assessments approximate market value, calculated by dividing a property's assessed value by its sale price. An assessment ratio of 1 indicates that the assessment matches the sale price. At the city level, assessment performance is evaluated by the median of property-level ratios. The IAAO standard is a median assessment-sales ratio of 0.9 to 1.1.
- The **coefficient of dispersion (COD)** is a measure of variability, the degree to which properties with similar attributes are assessed similarly, calculated as the deviation from the median assessment ratio and expressed as a percentage. A lower percentage indicates more uniform assessments; however, the IAAO cautions that a very low result is improbable and may suggest a problem with the calculation. The standard for an older city like Philadelphia is between 5% and 15%.
- The **price-related differential (PRD)** is a measure of regressivity and/or progressivity, the degree to which parcels with similar market values are assessed similarly, calculated by dividing the mean assessment-sales ratio by the mean assessment-sales ratio weighted by sale price. A value greater than 1 suggests that properties with a higher market value are underassessed compared with lower-value properties (regressivity), and a value less than 1 suggests the opposite (progressivity). The IAAO suggests a target range of 0.98 to 1.03.⁶⁹

The IAAO says an assessment system can still be considered "good" if it meets one or two of the standards.⁷⁰

For real estate taxes, variability and regressivity/progressivity are better measures of fairness than is accuracy. That's because when all properties are overassessed or underassessed to the same degree, everyone is being treated the same. But when similar properties are assessed at different levels, as measured by the coefficient of dispersion and price-related differential, that's not the case. Consequently, ratio studies tend to focus on those two measures.

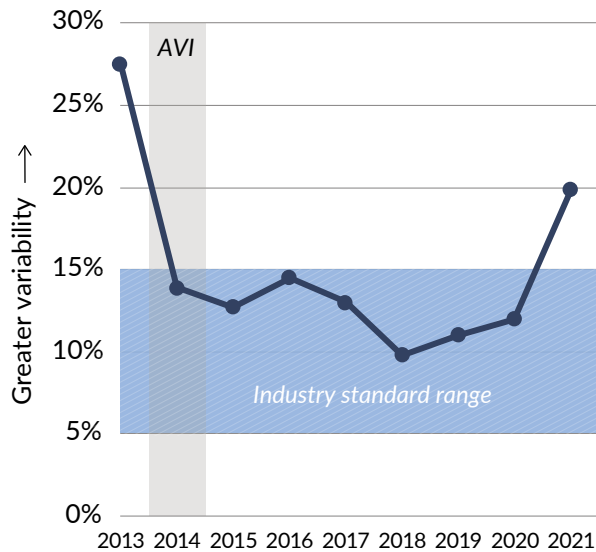
In July 2022, OPA released a ratio study of the 2023 assessments, reporting that the citywide statistics for COD and PRD were within the industry standard ranges. But the agency also found that single-family homes in four of 16 geographic zones had higher than standard levels of variability and/or regressivity.⁷¹ The zones cover most of West, Southwest, and lower North Philadelphia—areas with some of the city's highest poverty rates. In Philadelphia, OPA is supposed to publish detailed ratio studies every year but had done so only once before, in May 2019, for the fiscal 2020 assessments. In other years, annual reporting has been limited to a few topline figures in the mayor's proposed budget and five-year plan. OPA's figures through 2021 are presented in Figure A1.

Figure A1

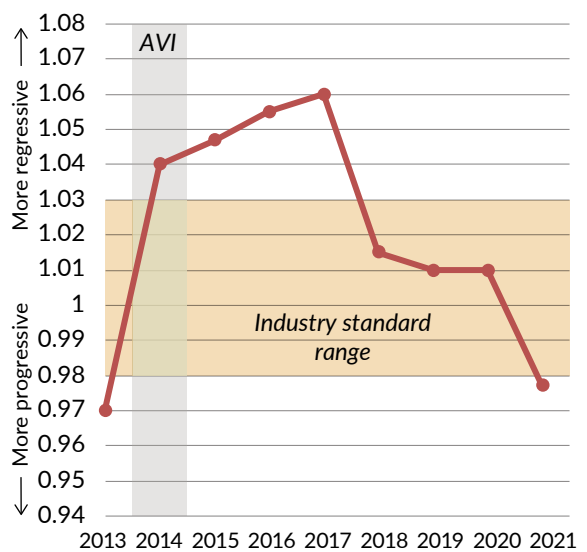
Accuracy of Residential Assessments in Philadelphia, 2013–21

Statistics from the Office of Property Assessment

Coefficient of dispersion



Price-related differential



Sources: Philadelphia Office of Property Assessment, 2019; City of Philadelphia Five-Year Financial and Strategic Plans, 2021-23

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OPA’s statistics show that AVI brought the coefficient of dispersion, as shown in the left half of Figure A1, into the acceptable range in 2014, and that it remained there through 2020. But it rose out of the range to 19.9% in 2021. The office’s price-related differential statistics, shown in the right half of Figure A1, went from out of the standard range on the progressive side in 2013 to out of range on the regressive side with AVI’s arrival the next year, came back within standard range from 2018 through 2020, then fell back below in 2021. OPA attributes the 2021 figure to assessments not keeping up with changes in the market (as discussed below).

The IAAO recommends independent studies to evaluate assessments.⁷² Five such studies were conducted before and after AVI’s implementation. The overall picture they paint is one of a system that has improved but still does not meet industry standards. Some of the studies were authorized by other city agencies, while some were done by other groups.

City-ordered studies

Robert Strauss, 2013

When OPA released the first new assessments under AVI, economist Robert Strauss of Carnegie Mellon University, working for then-City Controller Alan Butkovitz, found both the new and old assessments to be deficient, with the new assessments more variable and regressive than what came before. The study found that properties in neighborhoods with higher percentages of Black and Hispanic residents tended to be overassessed to a greater degree than the city as a whole, with the inverse true for majority-White areas.⁷³

Officials in then-Mayor Michael Nutter's administration called the study politically motivated and the findings not credible.⁷⁴

J.F. Ryan Associates, 2018

Working for City Council, the appraisal firm J.F. Ryan Associates looked at OPA's assessments for fiscal 2019 and found that only condominiums met IAAO standards for quality. Assessments for single-family properties met the standard for the median assessment ratio, while falling short on variability and regressivity. Geographically, the study found single-family assessment quality to be highest in the Northeast and lowest in West and Southwest Philadelphia.⁷⁵

OPA asserted that the findings were invalid because they were based on sales data that hadn't been fully vetted.⁷⁶

City Controller, 2019

The Office of City Controller Rebecca Rhynhart conducted a study of single-family assessments from fiscal 2014 to fiscal 2019. The study backed OPA's assertion that the 2019 assessments met IAAO standards for the city as a whole, but a neighborhood-level analysis found deficiencies in seven of 14 geographic zones. The areas with the highest variability and regressivity in assessments tended to be those with the lowest incomes, including West, Southwest, and North Philadelphia.⁷⁷

Mayor Kenney's administration said that OPA's own unreleased ratio study looked at the same geographic metrics as the controller and did not uncover the same issues. While acknowledging room for improvement, the administration said that the assessments' quality had been getting better.⁷⁸

Independent studies

University of Chicago, 2020

As part of a national project looking at regressivity in residential property taxes, the University of Chicago's Center for Municipal Finance found that Philadelphia assessments, as measured by both the COD and the PRD, had improved significantly after AVI's implementation, though they remained deficient by industry standards.⁷⁹

Federal Reserve Bank of Philadelphia, 2021

The Federal Reserve Bank of Philadelphia analysis discussed earlier also calculated the COD and PRD for 2010-19, finding that assessments became more equitable with AVI's implementation. From 2013 to 2019, the COD dropped from 55% to 32%, markedly better though still above the 15% standard set for variability. Likewise, the PRD dropped from 1.39 to 1.14, meaning that assessments became less regressive; the standard is within the range of 0.98 to 1.03.

And the Federal Reserve found that the improvements were smaller in neighborhoods that were majority Black or low income, or that had low property values. In majority-Black neighborhoods, assessment variability actually increased.⁸⁰

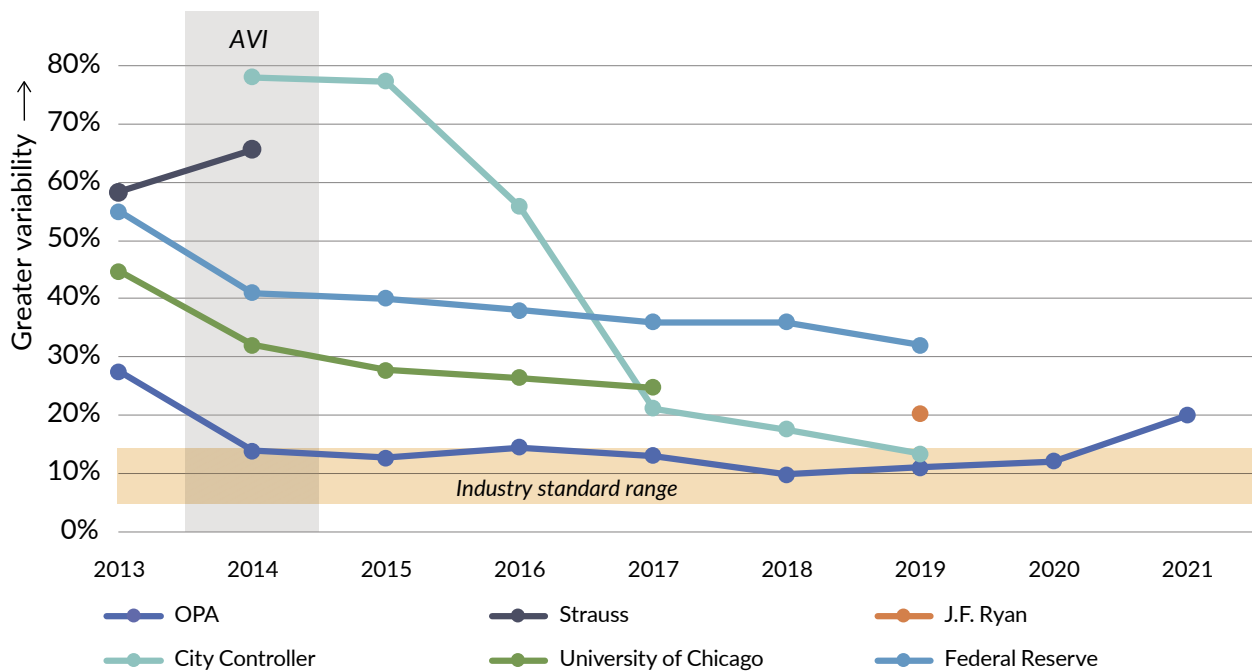
Comparison of various audits and analyses of assessment quality

Figure A2 shows the coefficients of dispersion, the degree to which properties with comparable attributes are assessed similarly, as measured by OPA and the studies discussed above. Taken together, the studies show clear improvement since AVI's implementation. OPA's own calculations are consistently the most favorable.

Figure A2

Coefficients of Dispersion in Residential Property Assessments in Philadelphia

As calculated in various studies covering 2013-21



Sources: Office of Property Assessment data and studies by Robert Strauss (2013), J.F. Ryan Associates (2018), the Philadelphia City Controller's Office (2019), the University of Chicago (2020), and the Federal Reserve Bank of Philadelphia (2021)

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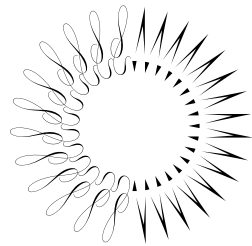
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