



RETHINKING REVENUE

RETHINKING PROPERTY TAXES

Making property taxes more fair, stable and predictable to benefit both taxpayers and the financial condition of local governments



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ABOUT GFOA

The Government Finance Officers Association (GFOA) represents over 21,000 public finance officers throughout the United States and Canada. GFOA's mission is to advance excellence in government finance. GFOA views its role as a resource, educator, facilitator, and advocate for both its members and the governments they serve and provides best practice guidance, leadership, professional development, resources and tools, networking opportunities, award programs, and advisory services.

ABOUT THE RETHINKING REVENUE PROJECT

Many local government revenue structures are based on assumptions that no longer hold today due to digitization, data globalization, demography, political changes, and other trends. Further, fairness is becoming an increasingly important concern for public finance. For these reasons, the Rethinking Revenue project is taking a fresh look at how revenues are raised.

You can learn more about the project and other topics at gfoa.org/rethinking-revenue.

SUMMARY OF KEY IDEAS | SHAREABLE INFOGRAPHIC

RETHINKING

PROPERTY TAX

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Property taxes are the most important local source of revenue for local governments. Property tax is stable, transparent, and highly visible. Plus, the tax base of property tax is immobile. Yet, it is a very unpopular tax.



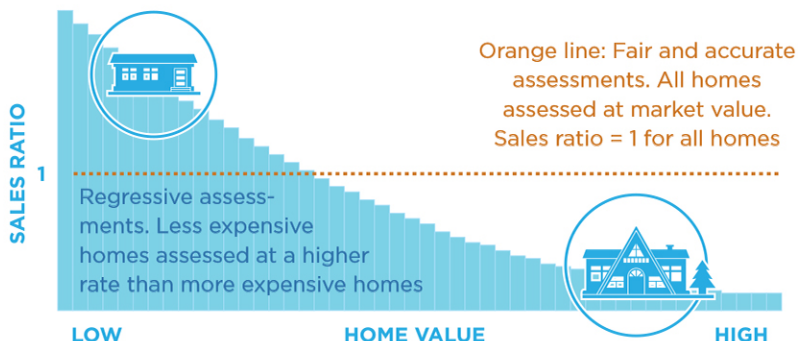
RETHINKING THE PROPERTY TAX REQUIRES CENTERING THE INTERESTS OF TAXPAYERS

1:1

PROVIDE ACCURATE & FAIR VALUATION OF TAX LIABILITY

Accurate assessments are needed for the property tax to be fair.

Across 90% of the United States, properties of above-average market value are consistently under-valued by the assessment process, and properties of below-average market value are consistently over-valued.



HOW TO SOLVE



High-Quality Data Science.

Assessment is a math problem. Better data science will often be best and cheapest way to improve assessment accuracy.



Assess properties frequently, ideally annually.

The longer between re-assessments, the greater the tax inaccuracy.



Conduct a sales ratio study.

Find the shape of the blue curve and why it exists in your community.

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PROVIDE STABLE, PREDICTABLE COSTS TO TAXPAYERS

Most property tax revolts are a response to dramatic increases in property taxes. Greater stability in taxes could be a way to improve public opinion of the tax.

HOW TO SOLVE

1

Public officials can be mindful of how tax rates will interact with valuation trends and affect taxpayers' total liability. Assessors can provide data to local officials and local officials can set rates that don't result in big increases.

3

Make assessments more accurate. More accurate assessments means assessments change less dramatically after each re-assessment.

2

Offer targeted relief strategies. Targeted tax relief strategies help those who need it most, like "house rich, cash poor" seniors or low-income people.

4

Send tax bills more frequently and provide payment plans. Getting one or two large bills per year is harder for taxpayers to manage.



Why Are We Rethinking Property Taxes?

Property taxes are the most important *local* source of revenue for cities, counties, schools, and many types of special districts.* Yet it is also an unpopular tax. Until recently, it was the *most* unpopular tax. That distinction now belongs to the federal income tax. Nevertheless, the property tax is still more unpopular than the sales tax and state income taxes (from which many local revenues are derived when the state shares revenues with localities).[†]

Between the high revenue the property tax generates and the low regard in which it is held, there would be substantial benefits from improving the tax. Before we get to how we might improve the tax, we should address a natural question: If the property tax is so reviled, why not “rethink” having a property tax at all? The property tax has several redeeming qualities:

- **It is a stable revenue compared to sales taxes or income taxes.** This makes it easier for local governments to continue to provide essential services during economic downturns.
- **The tax base is immobile.** A high sales tax rate might cause shoppers to shop elsewhere, or a high local income tax might cause jobs to locate outside of city limits. Land and buildings cannot pick up and leave. This feature of the tax provides local governments with autonomy in their fiscal policies because it makes it practical to have different tax rates than nearby jurisdictions.
- **The property tax is a benefits tax, which means the local services taxpayers get are connected to the source of revenue.** For example, taxpayers of local property tax get public schools located nearby and local government services that preserve private property, like fire and police. Further, if designed correctly, a property tax can align with the ability-to-pay principle of taxation.**
- **It is highly visible, so the public can easily evaluate the amount of taxes they are paying.** For example, a sales tax is spread across many transactions, so it is difficult to estimate the total sales taxes one has paid in a year.

Next, we will discuss the two overarching goals for rethinking property taxes. Then we will describe how local governments could achieve them. We will include actionable recommendations for state and local government officials with responsibility for property tax policy/administration and for officials of local governments who derive their revenues from the property taxes, even if their power over the tax isn’t much more than adjusting the tax rate from year to year.

*Intergovernmental revenue is an important source of revenue for many local governments, but it is more dependent on state or federal policy. Though state policy impacts the property tax, important aspects of the tax usually remain under local control.

[†]This principle holds that it is fair for wealthier people to pay more in taxes than less wealthy. You can learn more about criteria for evaluation revenue sources at: <https://www.gfoa.org/materials/rethinking-local-government-revenue-systems-p2>

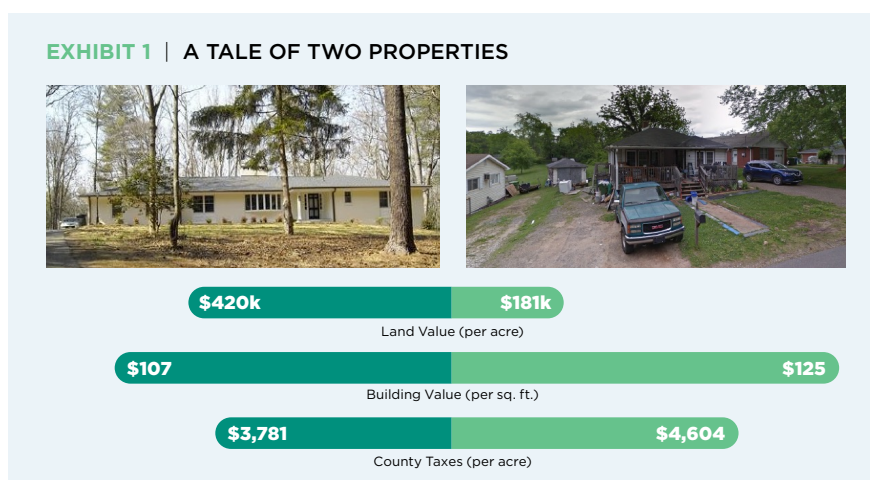
Setting the Goals of Rethinking Property Taxes

Let's begin with the end of rethinking in mind,² by setting the two goals of rethinking property taxes. We will see that both goals are centered around the interest of taxpayers. Achieving the goals would have benefits for taxpayers and the financial condition of local governments. After we describe the goals, we'll describe strategies for reaching them.

GOAL #1: Provide Accurate and Fair Valuations of Total Tax Liability for Taxpayers

High-quality assessment practices are foundational to the property tax. Accurate assessments are needed so that a taxpayer's liability bears the closest relationship to the underlying value of the property. This has implications for tax fairness, which is vital for the ongoing legitimacy of the tax. It also has implications for the revenue that the property tax yields to local governments that depend on it.

Let's start with the fairness implications. In Exhibit 1, we see how assessment practices can lead to unfair outcomes in data collected by urban planning firm Urban3. Though this example focuses on two homes in the same city* and county, later we will show that the same problem occurs in more than 90% of counties across the United States. Turning our attention to Exhibit 1, we see two homes: Home "A" is in a well-to-do neighborhood and is of typical size, quality, etc., for homes there. Home "B" is in a working-class neighborhood and is also typical for that neighborhood. We see that the land value *on a per-acre basis*[†] is higher for Home A. This is not surprising and shows us that the real estate



market places a higher value on land in that neighborhood. The surprise is that the county's assessment practices result in a higher building value *per square foot* for Home B! This leads to higher taxes for Home B *on a per-acre basis*. Home A sits on a larger plot of land and has more square feet, so Home A's **total** tax bill is higher than Home B's, but the size of the bill is not proportional to the underlying value of the property (and the underlying value of the building).

Properties like Home B tend to be owned by lower-income people. This leads to over-taxing of lower-income people.[‡] This reduces their net income, leading to more financial hardship, including increased likelihood of tax delinquency and foreclosure.³ Given that home ownership is an element of generational wealth, this can have long-term consequences.

Exhibit 1 is not an isolated case but rather illustrates a widespread problem. There is evidence that across 90% of the United States, properties of above-average *market value* are consistently under-valued by the assessment process, and properties of below-average market value are consistently over-valued.⁴

*The city has a population of about 100,000.

[†]We use a per-acre analysis to provide comparability between the two properties.

[‡]Though income levels are the primary vector of tax unfairness, there is research that suggests that racial minorities face other tax disadvantages beyond that caused by income. This is due to factors like African American families being less likely to appeal property taxes due to less access to the resources needed to appeal. See: Avenancio Leon, C. & Howard, T. (2022). The assessment gap: Racial inequalities in property taxation. *Quarterly Journal of Economics*, 137(3), 1383-1434.



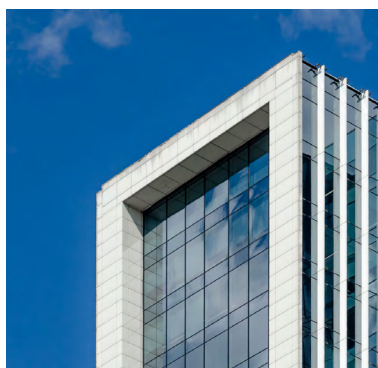
These problems with assessment practices could impact the revenue that local governments receive.

If the local tax system is “rate driven,” where the total revenue received by a local government is determined by multiplying the tax rate by the assessed value, there will be a revenue loss from the problem shown in Exhibit 1. There are many reasons why the over- and under-valuing of properties do not “balance out” total tax revenues. The most important reason is that the scale of the under-valuations is larger than the scale of the over-valuations. As an example, imagine a \$1 million home is under-valued by 10% and a \$100,000 home is over-valued by 10%. Local government revenues will come out behind in this case.

There are many reasons why the over- and under-valuing of properties do not “balance out” total tax revenues. The most important reason is that the scale of the under-valuations is larger than the scale of the over-valuations.

Some local governments have a property tax system that is “budget driven.” This means that the government passes a total levy amount, and the tax burden to generate that amount of money is apportioned among taxpayers according to their relative share of assessed value. For a local government under this property tax system, the assessment problems we described could lead to an indirect revenue loss. Low-income people tend to spend more of their income on taxable goods than high-income people.⁵ So if the distribution of property taxes puts more burden on low-income people, those people will have less net income to spend.

Finally, regardless of whether there is a “rate-driven” or “budget-driven” system, the increase in financial hardship for low-income people and consequences for generational wealth are not good for a local government’s tax base.



Residential vs. Commercial Property

Though the goals we describe apply to commercial and residential properties, this report will focus on residential properties for two reasons: First, residential properties have more electoral power, so the continued legitimacy of the property tax requires that residents feel the tax is fair. Second, available research on property tax focuses on residential properties, so we can offer more fact-based guidance on residential property taxes. Research is underway on commercial property taxes. We will publish guidance on this when results are available.

GOAL #2: Provide Stable, Predictable Costs to Taxpayers

Many causes of the property tax's unpopularity are related to how the property tax is administered. Left unaddressed, the tax's unpopularity can lead to decreased legitimacy for the local government. For example, consider that most property tax revolts are a response to dramatic increases in property taxes, particularly when the increase in taxes results from a rise in property values.⁶ This could be galling to the taxpayer for two reasons: First, rises in property values can be “surprising.” Most people do not pay attention to a theoretical market value of their property.* Second, especially for homeowners, a rise in property values does not come with a rising income stream with which to pay increased taxes.[†]

Rises in property values can be “surprising.” Most people do not pay attention to a theoretical market value of their property.

Thus, attenuating tax increases that result from increasing property tax values could be a way to reduce the unpopularity of the tax and the likelihood of tax revolts. However, not every means of attenuating these tax increases is equally good.

Goal #2 also includes providing options for people who have a tough time paying their taxes. The public and its government are better off if all taxpayers pay their tax obligations, even if some taxpayers need accommodation to do so.

Before we move on, let's end this section with a note of optimism: Generally, most people are not opposed to taxes.

Consider that over 90% of Americans agree that “it is every American's civic duty to pay their fair share of taxes.” Another view on this widespread consensus is that “the percentage of Americans who deny that taxpaying is a civic duty is nearly equal to the percentage of Americans who report believing that there is a chance that Elvis Presley is still alive (7%) or that the moon landing was faked (6%).”[‡] This provides hope that rethinking property taxes has potential to change attitudes for the better.



* Compare this to the price of gas or groceries, where many people are aware of even week-to-week shifts in prices.

† Compare this to the price of gas or groceries, where many people are aware of even week-to-week shifts in prices.

‡ Information for this section is from: Williamson, V. S. (March 2017). *Read my lips: Why Americans are proud to pay taxes*. Princeton, NJ: Princeton University Press.

How to Reach Goal #1:

Accurate and Fair Valuations of Tax Liability for Taxpayers

The most obvious cause of inaccurate assessments is that too much time has passed since the last re-valuation. The longer a jurisdiction goes without re-assessing property values, the greater the tax inaccuracies. Properties with the slowest growth in values (or largest declines) become increasingly over-taxed. Properties with the fastest growth become under-taxed. To illustrate, one of the authors of this report worked with a county on financial management reforms, where properties hadn't been re-assessed in forty (40) years! Needless to say, the problems with the local tax were large and obvious. Though this is an extreme case, the problem is replicated in miniature whenever there is a less dramatic duration between re-assessments.

If too much time between assessments is the cause, then the solution is to shorten this time. The optimal time between re-assessments is one year because that's how often tax bills are issued. Also, annual re-valuations allow assessments to track real estate market activity. Imagine re-valuations occur every three years. If market prices go up 5% per year, a taxpayer would see an eye-popping 15% increase when they get their new valuation.

Re-assessments cost money, though. What's the best way to contain the cost of re-assessments? The first is to automate or substitute machines for labor. When it comes to re-assessments, machines are computerized algorithms and data stores that can be used to create accurate assessments with less human intervention. The second is to achieve economies of scale or to spread fixed costs over larger production. Fixed costs could include software or specialized personnel, like data scientists.

Let's consider the case of Cook County, Illinois, and Maricopa County, Arizona. Cook County includes the City of Chicago and many suburbs. Cook County has been successful at reducing the kinds of problems we saw in Exhibit 1 and improving the fairness of the tax. Though the County is not able to re-value properties annually, the steps taken are getting it closer and are instructive for how the cost-effectiveness of assessments can be improved. Maricopa County includes the City of Phoenix and many suburbs. Maricopa has an annual assessment process and has also been working on improving property tax fairness. These efforts have produced impressive results: The appeal rate in Maricopa is less than 1% for all parcels, including commercial, and below that for residential.⁷ How have these counties made progress?

First, both counties have invested in data science capabilities. Cook County's data team developed a residential valuation model using open-source software. Since 2019, the model has been refined each year by collaborating with valuation experts who have years of assessment and appraisal experience in Cook County. Because location matters to property values, the data team focused on adding geospatial features to the assessment model, such as distance to amenities (like the lakefront or public transit) and other geographies (such as school districts) that affect property value and assessment accuracy. Maricopa County has blended traditional computer-aided mass appraisal methods with statistical tools. For example, the County has improved its ability to find and correct outliers in the assessment data, which reduces the number of appeals.

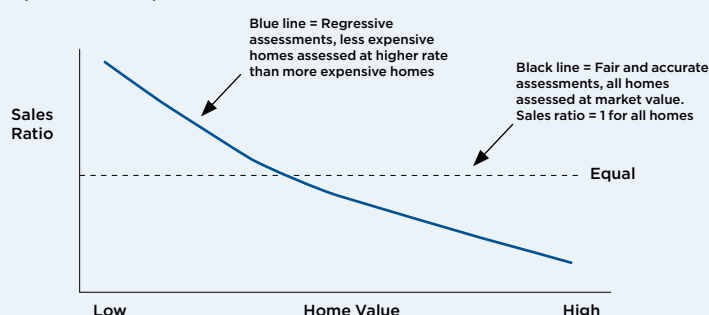
Second, the Cook County assessor has invested in improving data quality for residential properties. On-line filings have replaced a paper-based system for construction permits. This notifies the assessor of any substantial change in a property's characteristics. Office staff can use online tools to validate property characteristics without having to visit the property. Maricopa County has added the ability to model market influences in certain neighborhoods throughout the County.

Third, both Maricopa and Cook County are quite large. Both assess hundreds of billions worth of property. Hence, these counties can generate economies of scale in assessment activities. This does not mean that smaller assessor offices can't improve. For example, it may be possible to work with other assessors to procure beneficial technology or talent. Or assessors could share statistical methods and models. In fact, Cook County has published its methods and models on an open-source platform so other assessors could use it and contribute to its improvement. Smaller assessors could form joint purchasing agreements for third-party data sets, thus increasing their market power. Smaller assessors could even cooperate on contracting for data science capabilities. It may not be cost-effective for them to hire a full-time data scientist on staff. Multiple assessors, as a group, could shift the market to third-party contractors who support assessors. This group could articulate the demand for data science capabilities to address the challenges shown in this report and, thereby, encourage a capable supply of contractors.

Neither county has solved all the challenges with property taxes. Though Cook County has increased its capacity, it has barriers to overcome before annual re-valuations become possible. Also, Cook County has made more progress on improving the cost-effectiveness of assessing residential properties than it has on commercial properties. Commercial properties are more difficult to value because the characteristics of properties vary widely. For instance, while a mansion is different from a condo, a large factory is very different from a convenience store. Also, more assessments mean more appeals. Even if appraisals are more accurate, increasing the volume of assessments will result in more appeals. Cook County re-values every three years, so annual re-valuations would triple the volume of assessments. Perhaps it would not triple if assessments were more accurate. As we saw earlier, Maricopa has a very small appeal rate. Nevertheless, the Cook County government would need to consider how to handle the possibility of more appeals.

EXHIBIT 2

A FAIR PROPERTY TAX ASSESSMENT SYSTEM VS. UNFAIR (IN THEORY)



A fair assessment system produces a straight horizontal line because the sales ratio (the assessor's estimate of property value divided by sales price) is the same for all home values. In most counties, we will find something closer in shape to the blue line.

If the obvious cause of inaccurate assessments is infrequent assessments, the less obvious cause was previewed in our Tale of Two Properties (Exhibit 1): consistently unfair assessments. Let's start by defining what a fair and accurate system looks like. This will set us up to define the solutions.

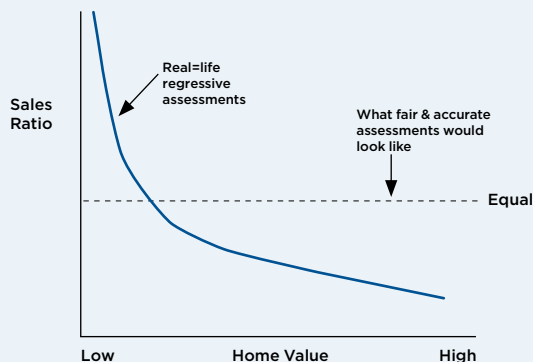
Exhibit 2 shows the "sales ratio" plotted against "home value." The sales ratio is the assessor's estimate of a property's value divided by the property's sale price. Ideally, assessments reflect market values.* If assessment practices are successful in assigning consistent, fair values to homes of different values, then we'd have a straight line like we do in Exhibit 2. However, based on Exhibit 1, the sales ratio

often does not produce a straight line. Lower-value homes are often over-assessed and higher-value homes are under-assessed. We depict this with the blue line on Exhibit 2 to show lower-value properties getting a sales ratio above the black dotted line. This means the assessor's valuation of the property is greater than the sales price. The line slopes downward, which means that higher-value properties are under-assessed.

*In theory, the assessment ratio under a fair system would be equal to 1.0. However, local laws may result in a fair ratio that is something other than 1.0. To illustrate, for residential property owners in Cook County, the assessed value equals 10% of the fair market value of the home. Thus, the ideal assessment ratio in Cook County is 0.10.

EXHIBIT 3

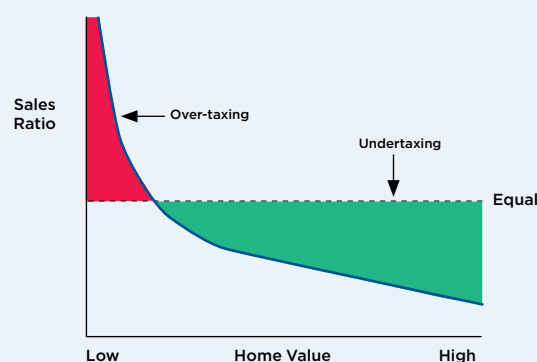
NATIONWIDE SALES RATIOS VS. HOME VALUES



Nationwide, lower-value homes are consistently over-assessed.

EXHIBIT 4

TAX SHIFTING FROM HIGH- TO LOW-VALUE PROPERTIES



The difference in size between the red (over-taxed) and green (under-taxed) is the net subsidy to higher-value properties

Exhibit 2 is an ideal, intended to show how we can examine property tax fairness. Let's look at real-life data in Exhibit 3. It shows the equivalent of the blue line from Exhibit 2 but for almost every county in the United States.⁸ It is far from a straight horizontal line. Similar charts can be developed for individual counties. You can see the chart for almost any county as well as the top 50 largest cities⁹ in the United States at [this website](#)¹⁰ developed by the University of Chicago.

The curves as we see in Exhibit 3 show that low-income people tend to pay an unfair share of property taxes because they tend to occupy lower-value properties. We can see the relative size of the tax burden imbalance between low- and high-value properties in Exhibit 4, where we added color shading. The red-shaded area is the "over-taxing" of low-value properties. The green-shaded area is the "under-taxing" of high-value properties. As you can see, the green-shaded area is materially larger than the red-shaded area. The difference in the size between these two areas is the shifting of property tax burden to low-value properties from high-value properties and, therefore, to low-income people from high-income people.

We've made the case that tax shifting is a problem, but fixing it requires knowing why it happens. As is the case with complicated problems, there are many causes. We can start with causes stemming from assessment practices. We can broadly label the challenge that assessors face as "the flaw of averages."¹¹ Assessors must value many properties, and each property is different. Averages offer a shortcut to summarize many different properties together. However, this shortcut tends to benefit high-value properties and disadvantage low-value properties. Let's examine some important reasons for this.

An individual home has many features that are observable to buyers and sellers, so they will be reflected in the market price. However, some of these features are not observable to an assessor, so they are not included in the assessed value. For example, imagine a neighborhood with homes that are similar from the outside, but one home has upgraded kitchens and bathrooms. That home would command a higher price on the open market but would be valued, for tax purposes, at the average of the other homes. It is easy to imagine that high-end properties are more likely to have upgrades that impact sales prices, but which are not visible to assessors.

*The point along the vertical axis (sales ratio) that the black line intersects determines the relative sizes of the shaded areas. Recall that the black line that intersects the vertical axis represents perfect accuracy.

Kitchen and bath upgrades are not the main cause of the shaded areas in Exhibit 4, but they do illustrate a broader problem. An example of this might be building materials. All else being equal, a brick house is more expensive than a cement block house, which is more expensive than wood. Due to the distribution of incomes (there are fewer wealthy people than middle-income people), there will be fewer homes made from premium building materials than from average-quality materials. There will also be fewer buildings made from the cheapest materials because there are fewer low-income people than middle-income people. Imagine middle-income people tend to have cement block homes, wealthy people have brick, and low-income people have wood. Assessment methods based on “average” home features (cement block) will over-value the homes of low-income people and under-value those owned by high-income people.

We can see a real-life example of this in data collected by Urban3. Assessments are often done by “tracts,” where many properties are grouped for assessment purposes. A tract typically contains a few thousand people or so. Exhibit 5 shows two homes on either side of a tract borderline. The homes look similar, but the one on the right is in a tract that the assessor determined to be worth more. As a result, the one on the right received a higher increase in their taxable value because it was “averaged in” with the more expensive homes.

In addition to assessment practices, there are also policy choices that can worsen the problems we described. For instance, a policy can limit the amount that assessments can increase in a year. Such a policy has the biggest impact on properties that are most rapidly appreciating in *market* value. The policy shifts tax burden to those that are not appreciating as much. To illustrate, imagine there is policy that limits assessment growth to 5% per year. If properties in a wealthy neighborhood experience a 10% increase in market value (because the area is desirable to live in), then those properties will have their assessed value artificially limited. Meanwhile, imagine properties in a less desirable neighborhood aren’t appreciating by more than 5%—they will not benefit from this policy. The result is that the homes in the wealthy neighborhood are assessed at less than their market value while the homes in the less desirable neighborhood are taxed at their full market value.

Also, property appeals processes are more often pursued by wealthy individuals.¹² Reasons for this may include less access to the appeals process for low-income people (e.g., less access to attorneys to represent them) or the high dollar amounts at stake for owners of high-value properties might provide an incentive for them to appeal.

EXHIBIT 5 | FROM THE WRONG SIDE OF THE TRACT

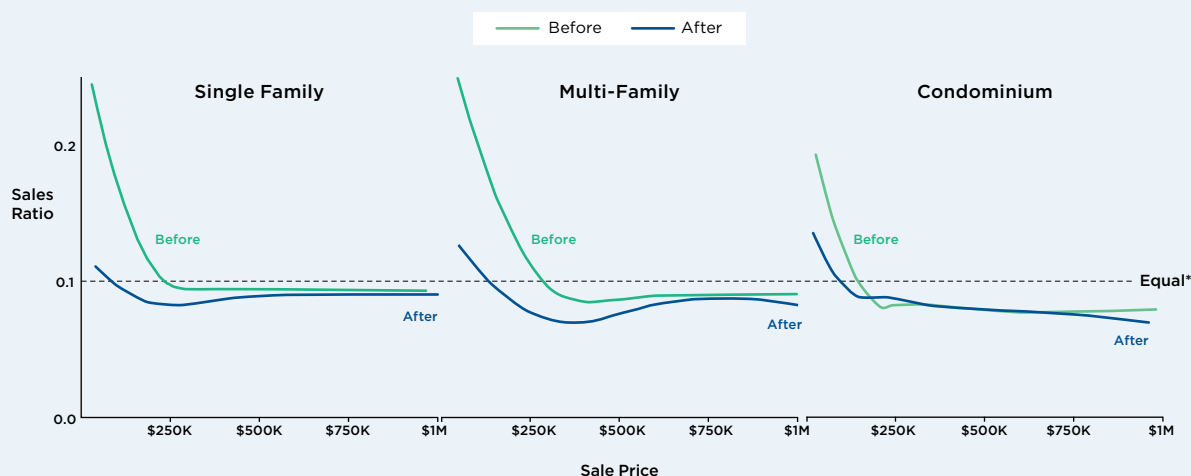


← This side of the tract: 102% increase

This side of the tract: 316% increase →

Using average characteristics for properties across an assessment tract resulted in a large increase in assessed value for a modest home that happened to be grouped into a tract with higher values.

EXHIBIT 6 | ASSESSMENT RATIOS BEFORE AND AFTER REFORMS IN COOK COUNTY



**In Cook County, for residential property owners, the assessed value equals 10% of the fair market value. Thus, the ideal assessment ratio in Cook County is 0.10.*

There is much that can be done to address the problems we’ve described in this paper. Cook County and Maricopa County are examples of local governments that have made progress. For example, an independent evaluation of Cook County’s efforts by the University of Chicago shows that Cook County has made a lot of progress toward a fair assessment system.¹³ Exhibit 6 shows the assessment ratio in Cook County before and after the reforms that started in 2019. You can see that the “before” line looks a lot like the curve we saw in Exhibit 3, while the “after” line looks more like the ideal state (black dotted line).

Let’s look at what local officials can do to help flatten the curve, including both tax assessors and local officials who have rate-setting authority.

Tax assessors who would like to flatten the assessment ratio curve in their jurisdictions can start by investigating the causes of regressivity in assessment models. Look at sales ratio studies, and look for bias patterns by price decile, neighborhood or geography, and racial (or demographic) group. Use third-party sources for decile price patterns. Hold conversations with the field, modeling staff, and software vendors, and look for ways that operations may build in biases or miss key information.

Next, assessors can look for deficiencies in the physical census of properties. These can arise because of shortcomings in the reporting of building permits or stale fieldwork. Or fieldwork might miss factors that are not reported, such as upgrades to the interior of a building that don’t require a permit. Improved data can help here. For example, Cook County has improved the transmission of construction permitting data from permitting authorities to the assessor’s office. This makes the assessor aware of a greater number of property upgrades than before.

Once the causes are understood, solutions can be developed. That said, the best solutions will usually be through better modeling rather than better fieldwork. Both Cook and Maricopa counties have invested heavily in improving their modeling and data abilities.

Finally, assessors can work with others who are trying to make property taxes fairer. The authors of this report are working to convene a network of local governments that are working on this problem. Get in touch with the authors to learn more and be introduced to the network.

Local officials with rate-setting authority cannot flatten the curve on their own. Nevertheless, they have a vested interest in better assessments because fairness to the taxpayer is essential for maintaining the legitimacy of the revenue system that pays for much of local government—and because of the direct impact that low-quality assessments can have on local government revenue.

Local officials can start by getting a handle on the quality of local assessments. The University of Chicago's [property tax fairness website](#) is a good starting point. You can look up the shape of the sales ratio curve in your county.*

From there, local officials can take steps to better understand local assessment practices. Here are some questions that local officials can ask of their county assessors:

Is there a sales ratio study? What are the results by geographic region and/or types of properties? A sales ratio study would provide more insights into the sales ratio curve than is available from the University of Chicago's website. The presence or absence of such a study may be a clue as to how attuned the assessor is to the issue of tax accuracy and fairness.

Where does sales data come from? What level of confidence do you have in building characteristics data? Is there a physical census of properties? These questions speak to the building blocks of high-quality assessments.

How are residential values modeled? As we have seen, better use of data science has much potential for improving the assessment quality. Local officials can learn whether the assessor is using leading data science practices.

If local officials and the assessor agree that there are opportunities to improve property tax fairness, then there are ways they can cooperate. The public needs to have confidence that assessment reform is not a covert attempt to raise taxes. Local officials with rate-setting responsibilities can commit to raising total revenue consistent with past trends and forgo any “windfall” revenue that might arise from new assessment methods.

*In theory, a fair assessment ratio would be equal to 1.0. However, local laws may result in a fair ratio that is something other than 1.0. To illustrate, for residential property owners in Cook County, the assessed value equals 10% of the fair market value of the home. Thus, the ideal assessment ratio in Cook County is 0.10.



What About Tax-Exempt Properties?

The financial contributions to public services, or lack thereof, made by tax-exempt properties can be a point of contention in some communities. You can see how Boston has developed agreements with tax-exempt institutions to make fair contributions to local government in [Boston's PILOT \(Payments in Lieu of Taxes\) Project](#).

Local officials can also help communicate the reasons for revising assessment practices. Even though there will be “winners” and “losers” from assessment reform, progress is possible. Consider the case of Cook County. Chicago does not have a reputation for honesty and integrity in local government.¹⁴ Hence, the public has reason to be skeptical of attempts at property tax reform. Nevertheless, Cook County assessor Fritz Kaegi has found that “there is often great relief in knowing that formulas and valuation calculations are public; that lawyers have no special advantage in appeals; that backdoor favors are not available. In many cases, I see greater awareness of progress on this front than where any individual sits on the curve of winners or losers.” Kaegi won re-election for a second term with 81% of the vote.

Split-rate taxation has been shown to provide many of the same benefits of land value taxation, and it has the potential to increase property tax fairness.

Before moving on to Goal #2, we will examine a strategy for *reducing* the importance of the building assessments by increasing the weight land value receives in the tax bill. As Exhibit 1 implied, it is easier to assess the value of land accurately compared to structures. A form of property taxation called “land value taxation” taxes *only* the land, *not* the structures built on it. Advocates for a land value tax provide evidence that it is less distorting of economic behavior than a conventional property tax, and it is more effective at encouraging land development.¹⁵ For our purposes, the potential of a land value tax to improve the fairness of the property tax is interesting.

A pure land value tax system does not exist in the United States, but several jurisdictions have employed a hybrid system known as “split-rate taxation.”¹⁶ This applies different tax rates to the land and property, with a much higher rate applied to the land.* Split-rate taxation has been shown to provide many of the same benefits of land value taxation, and it has the potential to increase property tax fairness.¹⁷

How to Reach Accurate and Fair Valuations of Tax Liability for Taxpayers: Checkpoints

- ☐ Assess properties often, ideally each year.
- ☐ Contain the cost of re-assessments by using technology and data science for the bulk of assessment work and by conducting assessments at a large scale.
- ☐ Even if properties are assessed frequently, there is often a shifting of property tax burden to low-value properties from high-value properties and, therefore, to low-income people from high-income people. There are multiple causes, but the main cause is that analytical methods used by assessors do not make enough distinctions between different types of homes.
- ☐ Higher-quality data science will often be the best way to improve the accuracy of assessments and tax fairness.
- ☐ Assessors and local officials should work together to make a smooth transition to a reformed assessment process.

*For example, the report “Split-Rate Property Taxation in Detroit: Findings and Recommendations” recommends a five times greater tax rate for land.

How to Reach Goal #2: Provide Stable, Predictable Costs to Taxpayers

People like to have predictability in the expenses that they face, and that applies to taxes too. Large, unpredictable tax increases are a primary source of dissatisfaction with the property tax.¹⁸

To introduce more stable, predictable costs to taxpayers, we need to identify the reasons that a property tax bill might change from one year to the next:

- **Administrative.** For example, a property is re-valued after many years and the new valuation causes taxes to go up.
- **Market.** The market values the home more, causing values and taxes to go up. Market values might increase quite a bit in “hot” real estate markets, causing sudden increases in taxes.
- **Policy.** The community decides to raise taxes on itself, either through a referendum or a decision by its elected representatives.

For this discussion’s purposes, we will put policy reasons aside. If the community has agreed to tax itself more for some reason, then the increase should be predictable. Readers wishing to learn more about how communities can successfully consider new taxes are invited to read [“New Taxes That Work: How Local Governments Can Raise New Revenues.”](#)

That leaves administrative reasons and market reasons.

Market-based increases are, in theory, legitimate because a rising property value increases the wealth of the taxpayer. However, this kind of wealth increase often doesn’t come along with an increased income stream, especially for owner-occupied homes. Further, a tax increase from increasing market values doesn’t get factored into the “mental accounting” of most people’s expectations for their annual spending. Compare this to an income tax. If you were to get a big raise at work, you are aware that you can expect to pay more income taxes, all else being equal.

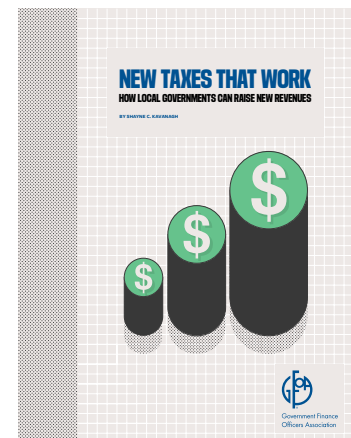
Given that consistency and predictability in the taxpayer’s total bill is important to maintaining public support, how can we provide it?

To start, officials who set rates can be more mindful of how the rates they set will interact with valuation trends and affect taxpayers’ total liability. There are several ways this could be done.

First, assessors can provide data to local officials to support setting rates that are responsive to market conditions and that don’t result in large increases for property owners. Maricopa County provides worksheets to local governments that distinguish increased value between new and existing construction, providing insight into the impact of a tax rate on existing properties. The County also has reports that break down valuation trends by property classification. Providing trend data allows jurisdictions to forecast impacts on values and subsequently to tax bills.

Second, we described the difference between a “rate-driven” and a “budget-driven” system. A budget-driven system should be less volatile from the taxpayer’s perspective because the taxing government is only asking for the total amount of taxes it would like to collect. Thus, local control of the property tax liability is focused on the outcome of interest to the taxpayer and taxing government.

Third, the total amount collected could be limited, unless a specific authorization from the voters is given to collect more. This would provide taxpayers with more assurance of stable tax bills. This leads us to the issue of tax and levy limits.



Responsive rate setting is important for providing stable, predictable costs to taxpayers. Some taxpayers may need extra consideration to help them afford their taxes. The classic case of this problem is the “house rich, cash poor” taxpayer, like a senior citizen who is on a fixed income but whose home is appreciating. Low-income homeowners in gentrifying neighborhoods or people who have lost their jobs may also need consideration. Targeted relief can be offered to people in these circumstances.

For example, a “circuit breaker” provides relief to people paying a high share of their income in property taxes by offsetting taxes above a certain amount of income. Just over half of states have some kind of circuit breaker program but over half provide this program exclusively to senior citizens. States could expand circuit breakers to low-income payers and make sure the benefits are enough to prevent taxpayers from being unable to pay their taxes.¹⁹

Another relief strategy for senior citizens with unaffordable taxes is a tax deferral that allows homeowners to delay payment of their taxes until their home is sold or inherited. Then taxes are due along with interest. For example, Massachusetts’s property tax deferral for senior citizens allows them to defer payment until the senior sells the property or passes away.

These relief strategies are desirable because they offer *targeted relief* to the people who need it most. *Broad* strategies like tax limits or limits on growth in assessed value can backfire. For example, a broad tax limit will not be a good fit for every local government and might cause them to rely on regressive revenue sources, like user fees.

Limitations on growth in assessed value can also backfire. They create winners and losers in the tax system. For instance, they shift the tax burden from appreciating properties to properties that aren’t appreciating as much. California’s Proposition 13 limits the property tax rate to 1% of assessed value at the time of purchase and restricts annual tax increases to no more than 2% until the property is sold. The result is that a long-time homeowner whose home is identical to their just-moved-in neighbor would be paying vastly less taxes.²⁰

Taxpayers want (and deserve) predictable, stable tax bills. Are there other ways to achieve this goal, without the drawbacks we described?

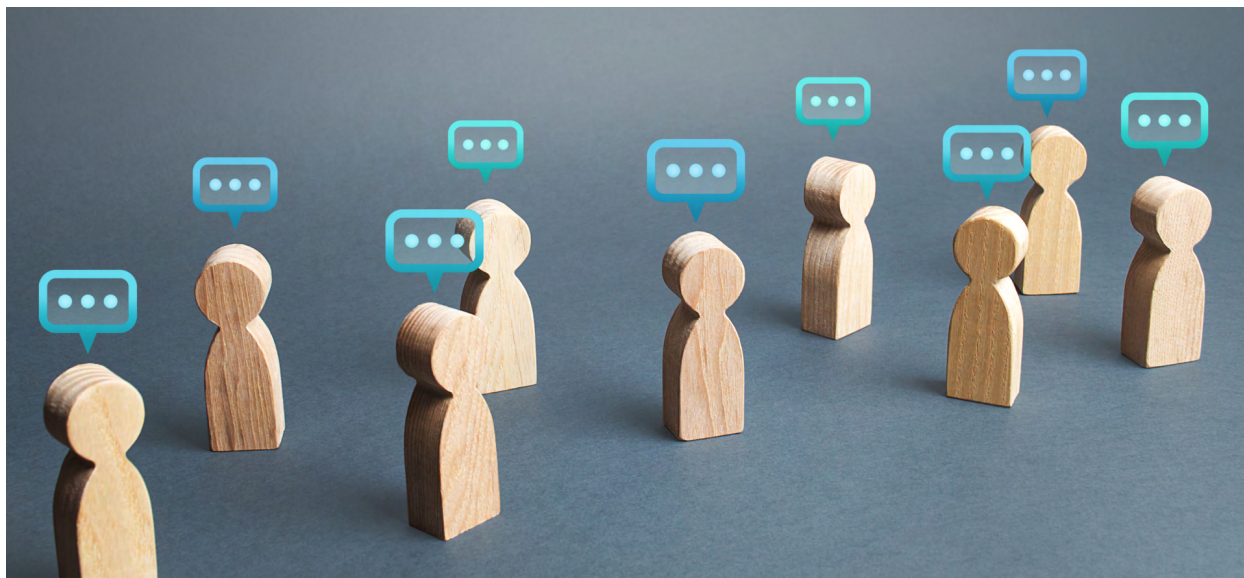
That said, we must recognize the reason these broad tax relief strategies exist: Taxpayers want (and deserve) predictable, stable tax bills. Are there other ways to achieve this goal, without the drawbacks we described? One might be to focus on the outcome taxpayers care about (their total bill), instead of trying to manipulate the inputs (rate and assessment) to get to the outcome. Some of the strategies described earlier could help. For example, a budget-driven assessment system would make it easier for local officials to keep taxes stable. If the tax levy calls for 3% more revenue, then taxpayers’ taxes would not go up more than 3% on average. However, the problem of unstable bills is most felt at the extremes, not the average. There could be added guarantees for individuals that their annual tax bill won’t increase more than some given amount in a year, with exceptions for when the community has decided to tax itself more. There could even be a role for local governments to rebate taxes collected over a certain amount.*

Now let’s move on to discuss administrative reasons for unstable/inconsistent tax liabilities.

If jurisdictions carry out quality assessments, as described under “How to Reach Goal #1,” then that solves much, but not all, of the administrative problems that contribute to taxpayers’ view of unstable, inconsistent tax bills.

Aside from the quality of the assessments, there are other ways to improve the perception of the property tax by adjusting the administration of the tax.

*It would be ideal to collect the correct amount of taxes in the first place. However, rebates could be given by a taxing jurisdiction, so that may be a strategy that can be used by local governments without changes in state law. Furthermore, people seem to enjoy federal income tax rebates even though it would be ideal if the correct amount of income taxes were collected in the first place.



Typically, property tax bills are sent out once or twice per year. Taxpayers may find these infrequent, large bills surprising. Evidence shows that homeowners who pay their property taxes into an escrow account as part of their monthly mortgage payment are less likely to end up in mortgage delinquency.* On the other hand, the property tax has shown to be less salient to those who pay by escrow. Those taxpayers are less informed about their property tax burden, less likely to appeal when they are over-assessed, and more likely to be over-taxed.†

One solution might be to send a monthly property tax statement to every taxpayer, even those paying via escrow, and allowing those not on escrow to set up monthly automatic payments. This practice would make the tax more salient to those paying by escrow while allowing those not paying by escrow to make predictable monthly payments. For example, Cass County, Missouri, provides a monthly program for people who are current on their tax bills. Payments are deducted from the taxpayer's bank account.

Another administrative strategy for increasing people's satisfaction with the property tax is to format the bill in such a way that taxpayers can better understand it. Here are four ways to do it:

- **Clarity of tax liability and calculation.** Provide a breakdown of different components of the tax and how calculations are made.
- **Use of plain language.** The bill should avoid jargon or technical terms. Simple sentence structures also help.
- **Visual presentation.** Formatting and headings can help draw the taxpayer's eye to the right parts of the bill, in the right order. Graphs could be used to help taxpayers better grasp their tax liability.
- **Comparative information.** Research shows that taxpayers are often less concerned with the size of their tax bill than they are with everyone paying their fair share. No one wants to feel they are being made to bear an undue burden. The tax bill could include information about other people's tax liabilities and relative fairness. People also want fair value for their tax money. The bill could show how tax money is being used.

Research shows that taxpayers are often less concerned with the size of their tax bill than they are with everyone paying their fair share.

*Based on a study of subprime borrowers. See: Anderson, N. B. & Dokko, J. K. (2008). Mortgage Delinquency and Property Taxes. *Proceedings, Annual Conference on Taxation and Minutes of the Annual Meeting of the National Tax Association*, 101, 176-185. <http://www.jstor.org/stable/prancotamamnta.101.176>

†Hayashi, A. T. (2014). The legal salience of taxation. *The University of Chicago Law Review*, 81(4), 1443-1507. <http://www.jstor.org/stable/43151584>

Any local government that levies a property tax can provide a more compelling property tax bill. The City of Shakopee, Minnesota, created [a property tax receipt](#) that shows how the City's share a given home's property taxes support different city functions.

Finally, some taxpayers will fall behind on their tax bills and become delinquent. Conventionally, tax liens and sales have been used for delinquent properties. However, there is mounting evidence that this approach has drawbacks. For example, ideally, a delinquent taxpayer never reaches the point of tax liens and sales because the process is slow, costly, and often ineffective at getting properties back on the tax rolls. Alternatives include assistance programs for struggling taxpayers and collection methods other than tax liens and sales.²¹

How to Provide Stable, Predictable Costs to Taxpayers: Checkpoints

- ☐ A property tax bill might change from year to year due to administrative, market, or policy reasons.
- ☐ Policy reasons refer to a community electing to tax itself more. If a community decides to do this, then the increased tax should be predictable.
- ☐ Market reasons refer to appreciating property values. Local government officials, who set tax rates, should be mindful of how their rate-setting choices impact tax bills and then adjust rates to provide stability in total tax liability. Assessors can help by providing data on changes in values.
- ☐ There could be legislative limits on taxes to prevent market forces from greatly increasing tax bills. Ideally, legislative limits would focus on the outcome taxpayers care about (their total bill) instead of trying to manipulate the inputs (rate and assessment) to get the desired outcome.
- ☐ If jurisdictions carry out quality assessments, then that solves most of the administrative problems that contribute to taxpayer perceptions of unstable, inconsistent tax bills.
- ☐ More frequent (i.e., monthly) bills, wider availability of auto-deduction options, and clearer presentation of property tax bills could help limit administrative reasons for taxpayers perceiving property taxes as unstable.
- ☐ Reasonable accommodation should be made for those who fall behind on taxes.

Conclusion

The property tax is a critical tax for local government. It funds a large portion of many public services, and it provides local governments with autonomy to better match local tax rates with local service demands. The property tax is also an old tax, having been in place before the United States was founded. There are opportunities to rethink the property tax to make it fairer, to make the tax burden more predictable/consistent from year to year and, thereby, to protect and enhance the legitimacy of the property tax. We invite readers to join us at gfoa.org/rethinkingpropertytax for more information and to learn about ways to help make these changes happen.

ENDNOTES

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- ³ Atuahene, B. & Berry, C. (2019). *Taxed out: Illegal property tax assessments and the epidemic of tax foreclosures in Detroit*. 9 U.C. Irvine L. Rev. 847. <https://scholarship.law.uci.edu/ucilr/vol9/iss4/3>
- ⁴ *Reassessing the property tax*. Working paper (2023). Center for Municipal Finance. The University of Chicago.
- ⁵ This can be seen by the fact that wealthy people tend to save more. So an additional dollar of disposable income for a wealthy person is more likely to be saved, while a low-income person is more likely to spend. Spending is more likely to impact the local economy and will likely do more to help local government revenue. Savings may be more likely to enter a global market.
- ⁶ Fisher, R. C., Bristle, A. & Prasad, A. (2010). *An overview of the implications of eliminating the property tax: What do recent state debates and prior state experience tell us?* The Property Tax and Local Autonomy (ed. Michael E. Bell, David Brunori, and Joan Youngman). Cambridge, MA: Lincoln Institute of Land Policy.
- ⁷ From personal correspondence with the assessor's office.
- ⁸ Data set covers roughly 2,600 out of 3,000 counties in the U.S.
- ⁹ Ibid
- ¹⁰ xiaoyanw. (Apr 18, 2021). Property tax project featured in Wall Street Journal. The University of Chicago. Harris School of Public Policy. <https://propertytaxproject.uchicago.edu>
- ¹¹ Credit to Sam Savage for coining the term in his book *The Flow of Averages*.
- ¹² Ross, R. Working paper (2017). *The impact of property tax appeals on vertical equity in Cook County, IL*. Center for Municipal Finance, The University of Chicago.
- ¹³ Evaluation performed in 2024.
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- ¹⁵ For a summary of evidence supporting land taxation, see: Dye, R. F. & England, R. (2010). *Assessing the theory and practice of land value taxation*. Lincoln Institute of Land Policy. http://library.uniteddiversity.coop/Money_and_Economics/Land_Value_Tax/Assessing_the_Theory_and_Practice_of_Land_Value_Taxation.pdf
- ¹⁶ Pennsylvania is the most widely studied state where split-rate taxation exists. About 20 municipalities have a split-rate system, including Pittsburgh and Scranton.
- ¹⁷ For a summary of studies on the effects of split-rate taxation see: Anderson, J. E. & Allen, N. (April 2022). *Split-rate property tax in Detroit: Findings and recommendations*. Lincoln Institute of Land Policy. <https://www.lincolnlust.edu/publications/other/split-rate-property-taxation-in-detroit>
- ¹⁸ Fisher, R. C., Bristle, A. & Prasad, A. (2010). *An overview of the implications of eliminating the property tax: What do recent state debates and prior state experience tell us?* The Property Tax and Local Autonomy (ed. Michael E. Bell, David Brunori, and Joan Youngman). Cambridge, MA: Lincoln Institute of Land Policy.
- ¹⁹ Information in this paragraph taken from: Samms, B. (May 11, 2023). *Preventing an overload: How property tax circuit breakers promote housing affordability*. Institute on Taxation and Economic Policy.
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