Kem C. Gardner POLICY INSTITUTE
THE UNIVERSITY OF UTAH
DAVID ECCLES SCHOOL OF BUSINESS
10 YEARS OF IMPACT 2015-2025

TAX SYSTEM DESIGN - EFFICIENCY


# How Do Taxes Impact Efficient Economic Performance?

## Different Taxes Create Different Types of Economic Distortion

An ideal tax system minimizes market distortions. Policymakers must balance the economic and societal benefits of public services against their economic and societal costs.

An economically efficient and neutral tax system minimizes adverse effects on household and business decisions by imposing low tax rates across a broad tax base; treats similar transactions similarly; and allows free markets to drive economic decisions through the following characteristics:

**Low and broad** – Imposes low tax rates across a broad tax base.
**Transactional fairness** – Treats similar transactions similarly.
**Broad applicability** – Allows free markets to drive economic decisions by broadly focusing on widely-applicable tax provisions rather than narrow tax provisions only for certain taxpayers.
**Conducive to growth** – Fosters a positive overall climate for economic growth.
**Properly placed incentives** – Avoids using the tax system to incent desired behavior that would occur absent any incentive.
**Explains and reviews special treatment** – Articulates the justification for preferential tax treatment (if any) and regularly scrutinizes special treatment (if any) for promised outcomes.
**Zero-sum distortions** – Prevents tax-driven zero-sum behaviors among local jurisdictions or taxpayers.
**Economic competitiveness** – Cultivates economic competitiveness with other states and nations.

## Economic Efficiency

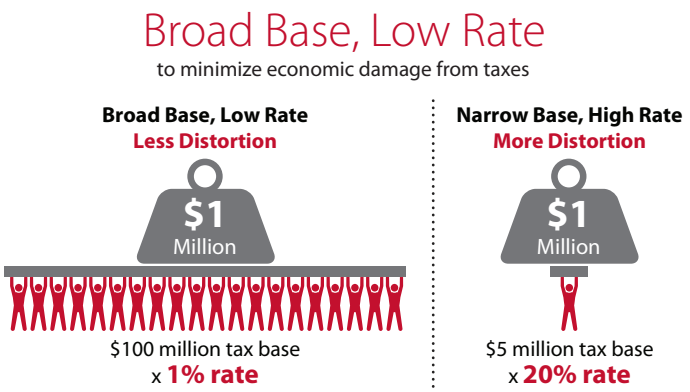
Taxes generate revenue to pay for public services demanded by citizens. These services, such as transportation, public safety, corrections, courts, health care, water, air quality, parks, and education provide economic and societal benefits.

These benefits come at a cost. Revenues from taxes, fees, intragovernmental transfers, and other sources cover the service spending levels policymakers select. This brief focuses on how the tax portion of these revenue sources impacts the economy.

### Weighing Costs and Benefits

In setting tax policy, informed decision-makers consider tradeoffs between the downsides of a tax system's economic drag and the positive economic and societal impacts of public services. Tax-induced distortions can misallocate economic resources, thereby reducing the economy's overall size. The tax ideal of efficiency contemplates economic drag, or how much a tax distorts behavior away from the economic optimum. Because higher tax rates generally increase tax distortions, the common "broad base, low rate" public finance mantra tends to enhance economic efficiency when implemented.

**Figure 1: Broad Tax Bases Facilitate Lower Tax Rates**

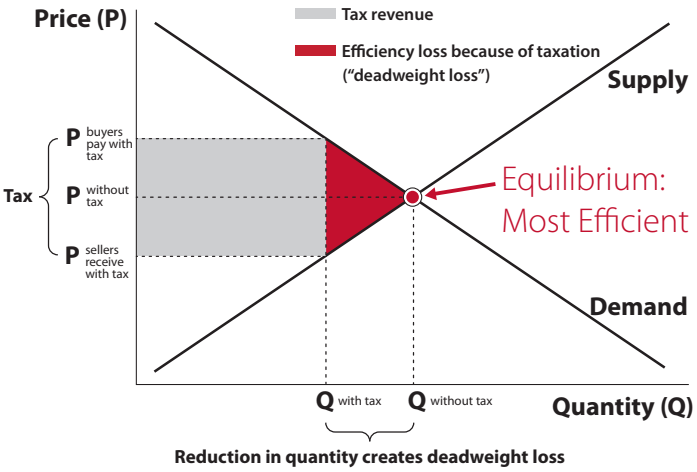



Source: Kem C. Gardner Policy Institute

While taxes typically cause economic distortions, tax-funded public services can enhance economic efficiency when delivered effectively. For example, a healthy transportation system facilitates getting goods to market, delivery of raw materials, and employee movement to and from worksites. A viable public safety, law enforcement, and court system protects

**Figure 2: Economic Tax Theory**

*Taxes cause inefficiencies because they prevent buyers and sellers from realizing some of the gains of trade.*




***What does this mean?***

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| People respond to incentives | Taxes change incentives | Consumers purchase less | Producers produce less | Markets shrink below their optimum |

Source: Kem C. Gardner Policy Institute

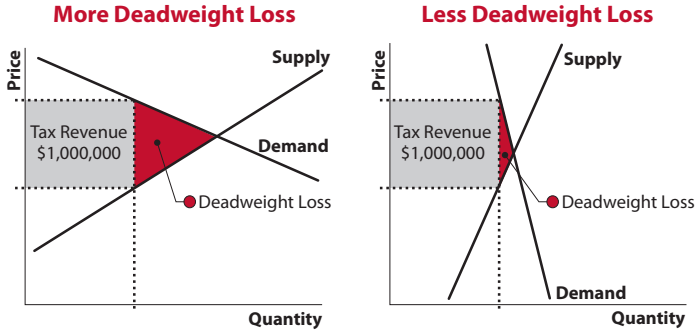
> *"Whatever you tax you get less of."*
>
> – Alan Greenspan –

property rights, enhancing economic efficiency. A workforce with education and skills aligned with market demands enriches firm productive capacity and spurs new business ideas, facilitating economic growth.

### Taxes Change Behavior

Prices serve as the rationing mechanism in a market economy, sending signals to both buyers on how much to buy and to sellers on how much to sell. By changing prices, taxes alter market price signals.

**Figure 3: Example of Deadweight Loss by Elasticity**




Source: Kem C. Gardner Policy Institute

These tax-induced price changes modify both consumer and firm behavior, sometimes a little and sometimes a lot. When economic transactions that would otherwise occur disappear because of taxes, the resulting distortionary economic drag pushes the economy away from the efficient economic optimum. Ultimately, the degree of market responsiveness to price changes (termed "price elasticity") determines the negative impacts of taxes on the economy.

The term "deadweight loss" refers to a tax's economic inefficiency – that is, the level of economic value lost when a tax distorts choices away from the economic optimum. This distortion creates a larger impact on the economy beyond just the dollar amount of taxes paid.

### Economic Distortion Escalates with Higher Tax Rates

Higher tax rates increase economic drag. Broader tax bases facilitate lower tax rates. Conversely, tax base narrowing (through tax exemptions or exclusions) requires imposing higher tax rates than otherwise needed to generate a specific revenue amount.

Critically important when considering the overall mix of a tax portfolio's components, tax distortions do not grow linearly with the tax rate imposed. Rather, tax distortions accelerate more the higher the tax rate imposed.[1] For example, shifting from a 5% tax rate to a 10% tax rate does not double the economic deadweight loss of a tax – it quadruples it.

Taxing two tax bases at lower rates generally damages the economy less than taxing one tax base at a high rate. Because lower tax rates generate less economic drag, a higher rate on a generally-less-distortionary tax could potentially generate more economic loss than a lower tax rate on a generally-more-distortionary tax or foregone public services.

For example, if eliminating Utah's income tax resulted in doubling the tax rate of another tax (such as the sales and use tax), the resulting deadweight loss of the alternative tax would quadruple rather than double. Understanding the total economic impact of tax policy shifts means considering the benefit of the reduced distortion from the reduced (or eliminated) tax rate, along with increased distortion from any tax rate increase on an alternative tax or foregone public services.

This fact inspires the public finance mantra to broaden the tax base and lower the rate and motivated many base-broadening structural tax system changes over the decades. Lower tax rates reduce economic drag.

### Minimizing Tax-Induced Economic Distortions

In addition to maintaining low tax rates, designing a tax base that taxes activities or assets with less responsiveness to price changes also causes less distortion. For example, taxing necessities like food or medicine would tend to result in less

deadweight loss than taxing more discretionary purchases. However, these efficiency-enhancing approaches may face tradeoffs with other tax ideals, such as perceptions of fairness.

In part because tax bases for each major tax vary between states, state revenue streams experience different responsiveness to economic changes (elasticities). For example, a state could design its income tax system to effectively function as a consumption tax on residents by exempting savings from taxation while taxing spent income (which equates to consumption). This would create different economic effects than a system taxing all income.

### Sales and Use Taxes

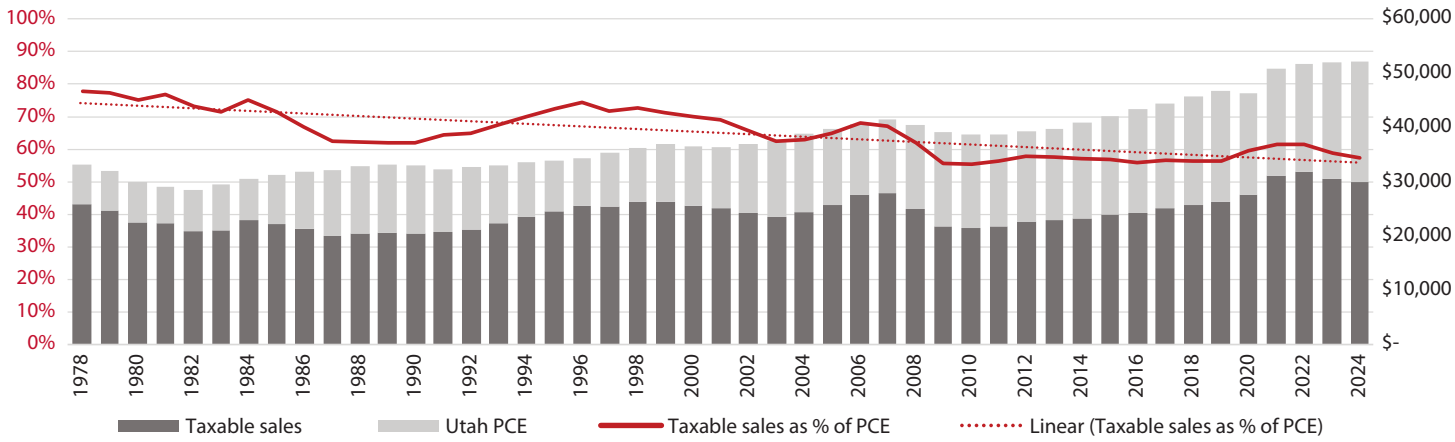
Sales and use taxes ("sales taxes") distort how people spend money. This distortion occurs because sales taxes increase the total price paid for goods and services and reduce the amount sellers receive. In response, some consumers choose to buy less, and sellers sell less.[2] This reduces the number of market transactions, resulting in deadweight loss from the lost economic value of these foregone transactions.

When taxes vary across purchase types, sales taxes can distort purchasing decisions between types of purchases. For example, Utah taxes most personal consumption spending on goods (about 80%) but a much smaller share of services (about 30%), which represent the more rapidly growing portion of the economy. This discrepancy in taxing different types of consumption introduces tax-induced distortions into Utah's economy. That is, compared to a neutral tax system designed to tax all consumption equally, Utah's current tax system encourages people to spend more on untaxed services rather than on taxed goods because the tax makes services relatively cheaper.

In addition, sales taxes can distort the location where people buy goods. For example, because sales tax rates vary among localities, people may seek to buy large durable goods like furniture or a car in jurisdictions with a lower sales tax rate. Businesses may also advertise lower tax rates, leading to forum shopping.

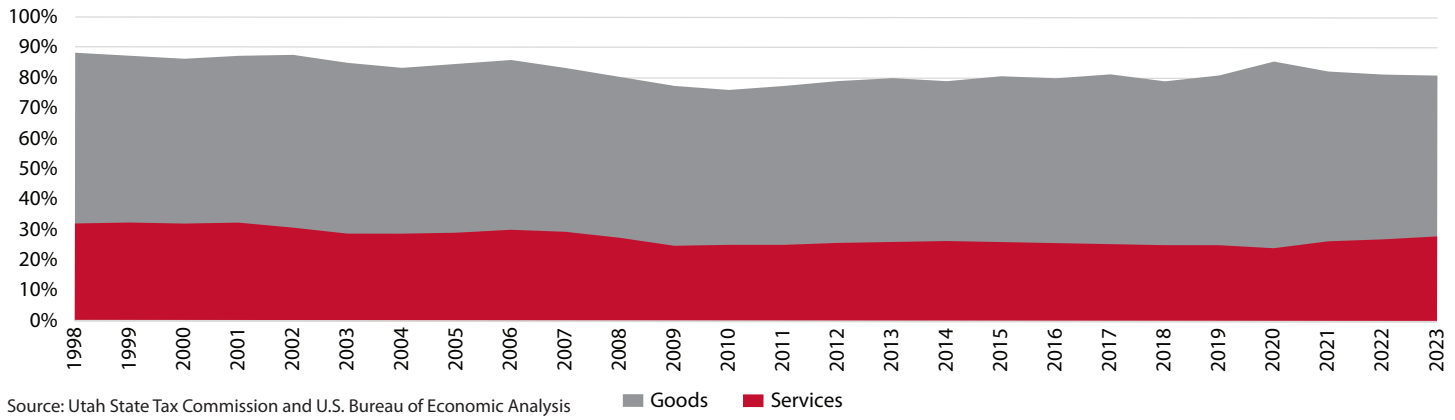
Higher sales tax rates cause greater economic distortions because they discourage more consumers from making purchases or businesses from making sales. Over time, Utah's combined state and local sales tax rate continues to increase. Although Utah's state sales tax rate remained largely constant over the past four decades, local sales taxes increased significantly. This increase largely comes from new earmarked local sales tax rates, particularly sales taxes for transportation.

**Figure 4: Utah Real Per Capita Taxable Sales Amounts and as a Percent of Utah Personal Consumption Expenditures (PCE), 1978-2024 ($2024)**




Source: Utah State Tax Commission, U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, and U.S. Census Bureau

**Figure 5: Taxable Sales as a % of Utah Personal Consumption Expenditures for Goods and Services, 1998-2023**




Source: Utah State Tax Commission and U.S. Bureau of Economic Analysis

## Income Taxes

Income taxes may decrease people's willingness to work and save because they do not receive the full benefit of these efforts.[3] Alternately, income taxes may cause people to work more because they receive less take-home pay and therefore work more to maintain purchasing power. Similar to sales taxes, income taxes reduce purchasing power. This reduced after-tax purchasing power can cause workers to work fewer hours or, in some cases, not work at all in favor of greater leisure, thereby reducing economic activity that would otherwise occur.

Income taxes also reduce the incentive to save and invest because the tax system requires tax payment on income earned from these investments (such as interest, dividends, business profits, and capital gains), thereby reducing the net after-tax investment return.

As with other taxes, income taxes may also distort location and income timing decisions. For example, similar to costs for wages, utilities, transportation, and regulatory expenses, taxes represent a cost to businesses, so along with other cost factors may play into business location decisions. Tax considerations may also influence the timing of asset sales, which impact income taxes on capital gains.

The Legislature has not increased income tax rates in the past 50 years. Rather, Utah's individual top income tax rate declined from 7.75% in 1975 to a single statutory tax rate of 4.50% in 2025.

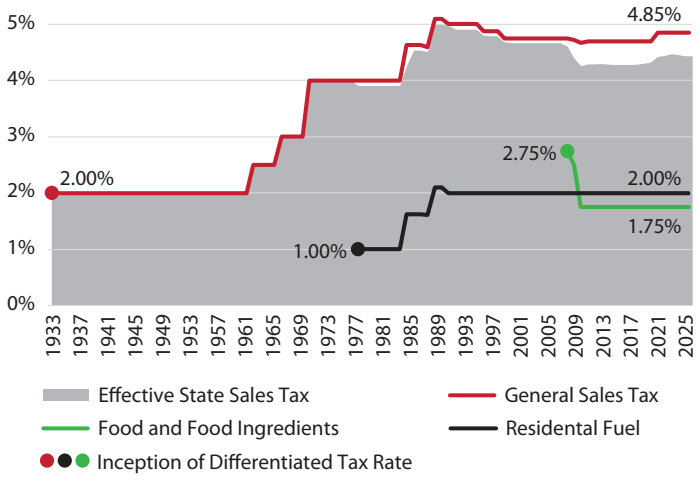
## Property Tax

Economists have long argued that of the major taxes, the property tax (primarily imposed on the value of land and structures) generally creates less deadweight loss, making it one of the most economically efficient taxes.

### *Tax on land values and improvements*

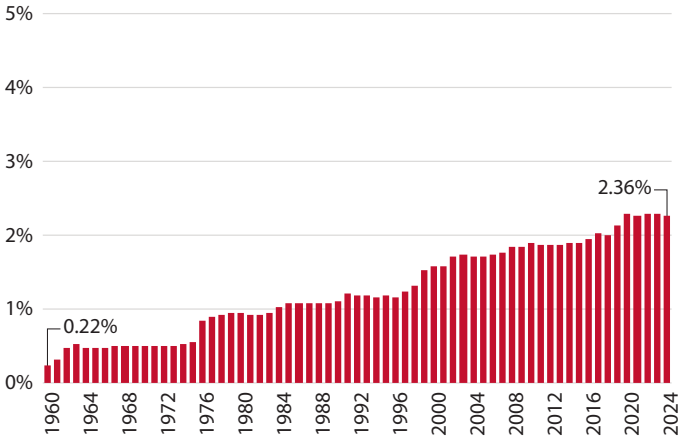
Public finance analysts particularly find that a tax on land value (excluding the value of real property structures and other improvements or personal property like equipment or vehicles) minimizes economic losses from taxation.[4] This occurs because the supply of land remains fixed by nature and therefore does not change when taxed.

**Figure 6: Utah State Sales Tax Rate History, FY 1933 to 2025**



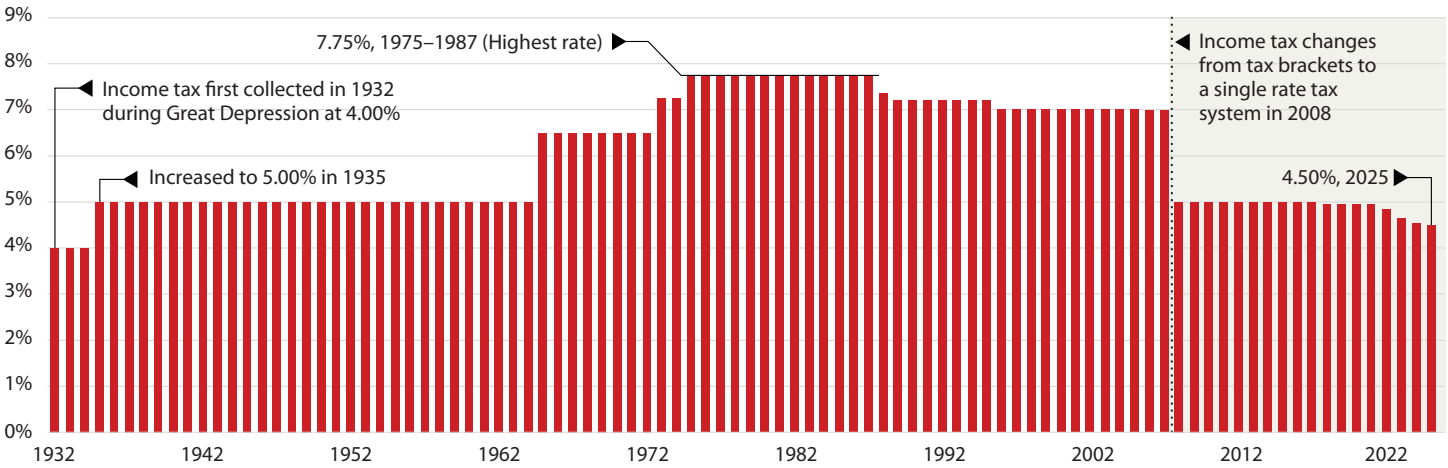

Source: Utah State Tax Commission

**Figure 7: Average Utah Statewide Effective Local Sales Tax Rate,1960-2025e**




Source: Utah State Tax Commission

**Figure 8: Top Statutory Marginal Tax Rate in Utah, 1932-2025**




Source: Utah State Tax Commission

# What is Tax Capitalization?

Broad econometric evidence indicates that the market largely capitalizes the benefits and costs of property tax into property values. This means that, all else equal, the value of a property decreases when the tax on a property increases. Similarly, to the extent clear public benefits occur, such as an improved school system or enhanced police and fire and protection of property, the market also capitalizes these benefits into increased property values—that is, public service benefits increase property values.

While many mechanisms likely drive the capitalization process, a prospective homeowner looking to finance a property with a mortgage shows an example of capitalization effects. Prior to a tax increase, a prospective homeowner may have been willing to pay $400,000 for a property, with a monthly principal, interest, and tax payment of $2,565. The tax increase reduces by $7,000 the principal amount the prospective homeowner would be willing to pay, so the monthly payment equals the same $2,565 payment. The property seller absorbs the economic impact of this tax increase through a reduced property sale value. Because these effects occur in prices rather than directly in the taxation process itself, sometimes these very real impacts from market-driven capitalization escape review.

**Table 1: Example of Property Tax Capitalization from Tax Increase**

| | Prior to Property Tax Increase | After Property Tax Increase |
|---|---|---|
| Annual Property Tax | $2,000 | $2,500 |
| Principal Value | $400,000 | $393,000 |
| Monthly Principal and Interest (30-year, 6% interest rate) | $2,398 | $2,357 |
| Monthly Property Tax (1/12 of Annual Property Tax) | $167 | $208 |
| **Monthly Principal and Interest Plus Property Tax** | **$2,565** | **$2,565** |

Property taxes may increase if a local government issues general obligation bonds for infrastructure and repays the debt with an added property tax levy. Advocates of general obligation bonds for infrastructure sometimes assume that repaying the debt with property tax ensures that future property owners help pay for that infrastructure over time. However, this does not take into account the economics of the property tax. Due to capitalization, the owner at the time of a property tax increase bears the economic burden of the expected future property taxes through decreased property values, and may also reap the benefits from anticipated future services through an offsetting higher property value.

## Capitalization Example – Public Service Benefits

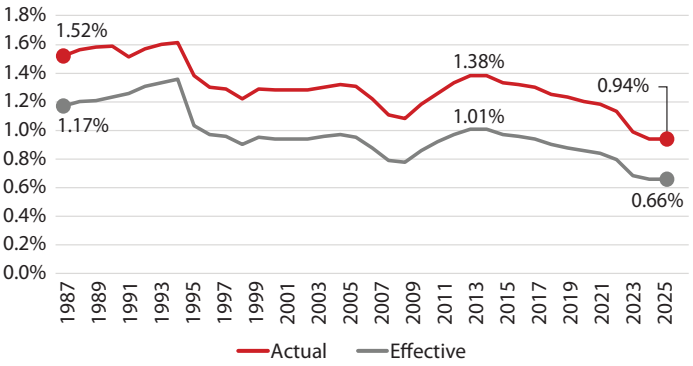

Source: Kem C. Gardner Policy Institute

As a result, unlike most other taxes that negatively impact consumption and production levels to some extent, a land value tax does not change the amount of land in existence. However, it may incentivize different uses of that land, typically by incentivizing more intensive land use. Notably, broad societal actions (including public investments such as access to transportation and utilities and the intensity of broad societal interest for property in a particular location) tend to determine land values in an area.

Individual efforts impact improvements to individual properties (such as creating or upgrading a building, fence, or landscaping). Unlike a tax on land only, which does not alter the amount of land in existence, property taxes on buildings or other real property improvements, or on personal property like business equipment, can discourage property or business development because that development drives a higher tax. For example, the presence of a property tax may make a homeowner less likely to add additional square footage to a building or a firm less likely to build or make improvements to a commercial space or to invest in machinery.

Deadweight loss refers to the economic value of this distortion (Figure 2). To the extent policymakers want to reduce distortionary deadweight loss, economists often encourage taxing land more heavily than structures. Current language in the Utah Constitution may require amendment to pursue separate land value taxation.

**Figure 9: Actual and Effective Property Tax Rates For All Taxable Property, FY 1987–2025**




Source: Utah State Tax Commission

***Capitalization – Relationship between property taxes, public services, and property values***

Analysts also consider property taxes comparatively efficient because property taxes and the services they fund interact closely with property values through capitalization. Publicly provided goods and services funded by property taxes can increase property values. These include many services directly related to property—roads providing property access, utilities expanding property usage options, and fire and police protection of property. In addition, even though it does not directly deliver services to property in the same way, numerous studies quantify the strong relationship between high-quality schools and higher property values in nearby areas.[5]

While these publicly provided benefits generally increase property values and degradation of these public services would decrease property values, the offsetting cost of the property tax itself reduces property values. The market capitalizes the net public service benefits and property tax costs into property values. Because of this, many consider the property tax a benefits tax.

Considering interstate competition, Utah's property tax rates consistently rank among the lowest in the nation, particularly for primary residences due to the 45% primary residential exemption.

Because of the design of Utah's Truth in Taxation system, property tax rates in Utah declined over recent decades as property values increased. The statewide average property tax rate decreased by about 40%, from 1.52% in FY 1988, to 1.38% in FY 2013, and to 0.94% by FY 2025.

**Table 2: Utah Tax Rate Competitiveness Comparison to Other States**

| Tax | Rate | Rank Among States |
|---|---|---|
| **Property Tax** – Effective statewide rate on owner-occupied property | 0.47% | **46th highest** (2023) |
| **Property Tax –** Effective rate on commercial property for largest city in each state | 0.93% (SLC) | **43rd highest** (SLC 2024) |
| **Sales and Use Tax** – Combined weighted average state and local sales and use tax | 7.42% | **20th highest** (July 2025) |
| **Income Tax** – Individual state-level income tax top marginal rate | 4.50% | **29th highest** state-level income tax (January 2025) |
| **Business Taxes** – State and local effective rate (total business tax collections as a % of private sector GDP) | 3.60% | **44th highest** (2023) |

Source: Tax Foundation, Lincoln Institute of Land Policy, and EY

## Tax Rate Competition with Other States

Because states value and tax property differently, effective tax rates (taxes as a percentage of market value) provide the most consistent property tax rate comparison. Utah consistently ranks among the lowest effective property tax rates overall and particularly for primary residential properties. As of the most recent Tax Foundation data (2023), Utah ranks 46th among states for effective property tax rates on owner-occupied properties. Due to market data limitations, determining accurate statewide effective tax rate comparisons for non-primary-residential properties proves challenging. However, an analysis from the Lincoln Institute of Land Policy comparing property taxes in each state's largest city shows a consistent trend of comparatively low property taxes. For example, Salt Lake City ranks 49th in property taxes on apartments (in large part due to the 45% primary residential exemption) and 43rd among the largest cities in each state for commercial property taxes.[6]

Utah ranks much less competitively on combined state and local sales tax rates. As of the most recent data (2025), the Tax Foundation ranks Utah 20th highest among states for sales tax rates.

Utah's state individual income tax rate (reduced during the 2025 legislative session to 4.50%) ranked 29th among states coming into the year. Unlike Utah, some states allow local income tax rates, which this ranking excludes, so Utah's Tax Foundation ranking likely would come in lower after adjusting for local income taxes in other states.

Because business tax structures vary among companies and taxes on businesses vary among states, a more comprehensive measure than just corporate income tax better captures competitive impacts for taxes on businesses. Utah's overall business taxes rank among the lowest in the nation (44th) as a percentage of private sector state GDP.

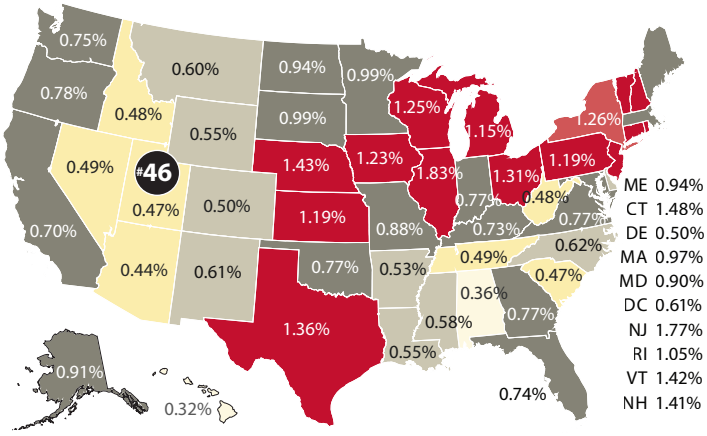
## Summary

Taxes generate revenue for essential public services, yet revenue collection typically comes with economic efficiency losses. Policymakers can strategically reduce these inefficiencies while upholding other tax principles by imposing low rates to broad bases, treating similar transactions similarly, and allowing free markets to drive economic decisions. Greater efficiency, balanced with other tax ideals, helps secure sufficient revenue while promoting overall economic growth.

*"Every tax ought to be so contrived as both to take out and keep out of the pockets of the people as little as possible over and above what it brings into the public treasury of the state."*

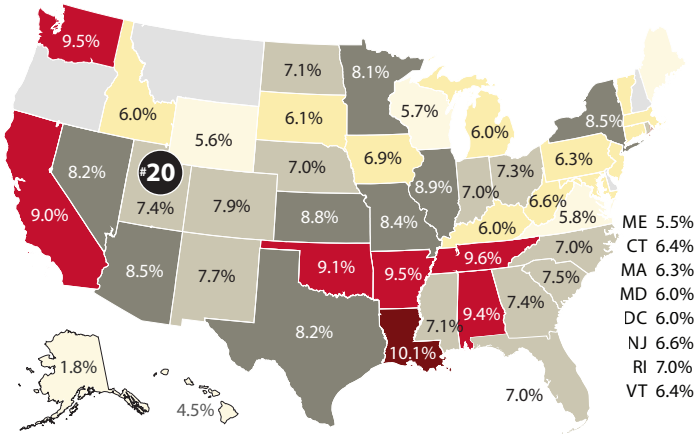
–Adam Smith, The Wealth of Nations –

### Figure 10: Property Taxes Paid as Percentage of Owner-Occupied Housing Value, 2023



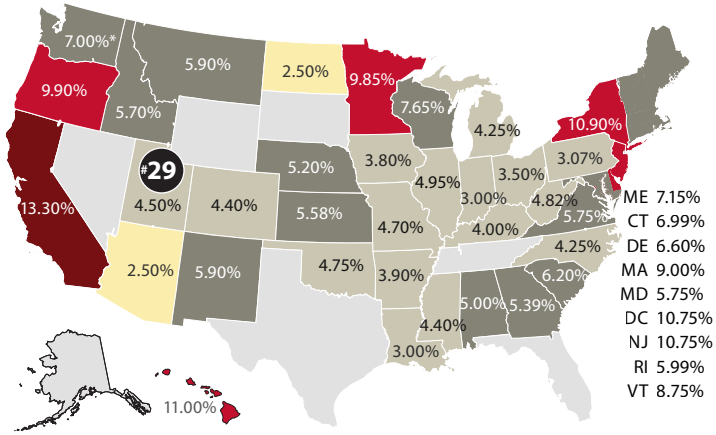

Note: Values represent effective property tax rates on owner-occupied housing, meaning data exclude property taxes paid by businesses, renters, and others. Utah's rank represents its standing among all 50 states, with 1 being the highest.
Source: Tax Foundation

### Figure 11: Combined State & Average Local Sales Tax Rates, July 2025



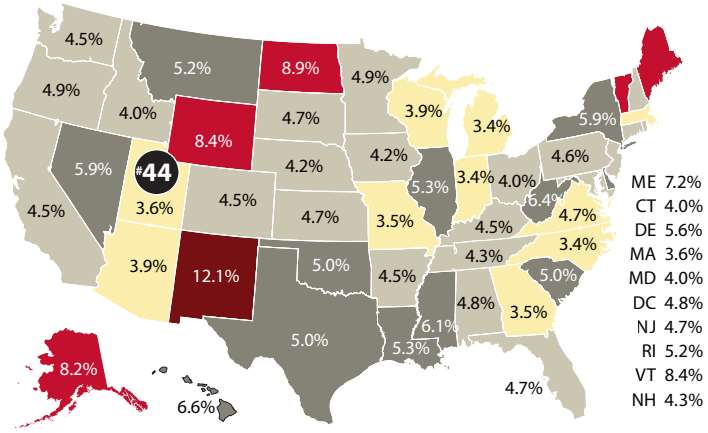

Note: Since city and county rates vary, values represent weighted average state and local tax rates. The sales tax base also varies by region. Utah's rank represents its standing among all 50 states, with 1 being the highest.
Source: Tax Foundation

### Figure 12: Top Marginal State-level Individual Income Tax Rates, 2025




* Rate imposed on high earners' capital gains only.
Note: Ten states allow cities and/or counties to impose local income taxes: Alabama, Indiana, Iowa, Kentucky, Maryland, Michigan, Missouri, New York, Ohio, and Pennsylvania. In other states, including California, Colorado, Delaware, Kansas, New Jersey, Oregon, and West Virginia, certain jurisdictions impose local payroll taxes, flat-rate wage taxes, or interest and dividend income taxes.[7] Utah's rank represents its standing among all 50 states, with 1 being the highest. In the 2025 legislative session, the Utah Legislature reduced Utah's income tax rate to 4.50% from the 4.55% rate reflected in the original Tax Foundation data.
Source: Tax Foundation

### Figure 13: State and Local Total Business Tax Effective Rates (Collections as Percentage of Private Sector State GDP), FY 2023




Note: Utah's rank represents its standing among all 50 states, with 1 being the highest.
Source: EY

**Endnotes**

1. Proportional with the tax rate squared.
2. Harberger. 1964. *Taxation, Resource Allocation, and Welfare*
3. Mirrlees. 1971. *An Exploration in the Theory of Optimum Income Taxation*; Feldstein. 1978. *The Welfare Cost of Capital Income Taxation*
4. Oates. 1969. *The Effects of Property Taxes and Local Public Spending on Property Values: An Empirical Study of Tax Capitalization and the Tiebout Hypothesis*; Arnott and Stiglitz. 1979. *Aggregate Land Rents, Expenditure on Public Goods, and Optimal City Size*; Murphy and Seegert. 2024. *Implicit Land Taxes and Their Effect on the Real Economy*
5. Ross and Yinger. 1999. *A Review of the Literature on Urban Public Finance*; Nguyen-Hoang and Yinger. 2011. *The Capitalization of School Quality Into House Values: A Review*
6. Lincoln Institute of Land Policy. 2025. *50-State Property Tax Comparison Study*
7. Tax Foundation. 2025. *State Individual Income Tax Rates and Brackets, 2025*

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