Fiscal Benefits of Housing Construction: Methodology Overview

The Pew Charitable Trusts commissioned this research, and a vendor created the methodology. Pew is not responsible for any errors.

Introduction

This memo serves as a methodological supplement to "Building Housing Near Jobs and Transit Good for Local and State Budgets," a fiscal analysis of housing development scenarios across ten U.S. states: Arizona, Florida, Maryland, Minnesota, Montana, North Carolina, New Hampshire, Pennsylvania, Texas, and Washington. Published by The Pew Charitable Trusts, this analysis seeks to compare the fiscal benefits of building future housing alongside existing infrastructure of U.S. communities that are already rich in amenities, destinations, and transportation options versus building along the urban fringe, which is one of the dominant development paradigms today. The housing development scenarios that inform this analysis were produced by experts at the World Resources Institute's New Urban Mobility Alliance (NUMO) and ECOnorthwest.

This document first outlines the methods for projecting the development type, location, and density of new housing units constructed under various scenarios. These housing unit projections were applied to the fiscal and economic assessment described here that was developed by ECOnorthwest to evaluate how different patterns of housing development affect construction costs, infrastructure needs, long-term public maintenance obligations, tax generation, and fiscal contributions. We follow a description of the methodology with analysis limitations and assumptions.

Estimating location and quantity of housing production

NUMO led the development of housing unit scenarios to project where housing would be built if states close their housing underproduction gap with development in status quo locations or with more infill development, which support fewer vehicle miles traveled (VMT). These scenarios were disaggregated into single-family and multifamily units and further distinguished by development location (infill vs. greenfield), based on previous patterns of development. The number of units in each category varies by state, reflecting differing population levels, land use, and housing policy conditions. These categorized housing unit estimates were provided to ECOnorthwest to model housing production costs and fiscal impacts. Below we describe in more detail how we arrived at state housing unit scenario estimates.

Ten states (Arizona, Florida, Maryland, Minnesota, Montana, North Carolina, New Hampshire, Pennsylvania, Texas, and Washington) were selected for this analysis. State selection strove to have balanced representation, taking into account population, area, geography, level of housing underproduction, recent housing growth trajectory, political orientation, urbanization, and existing land use.

Housing Production

Housing production estimates follow a methodology based on projected population growth as well as existing housing underproduction.[1]

- 2023 state-level population data from the U.S. Census Bureau was combined with annual population growth rate adapted from Berrill and Hertwich, 2021 to determine a aggregate county growth rate projections to the state level through 2033.[2] Berrill and Hertwich, 2021 incorporated local housing market conditions in their population growth forecast and assumed that market disequilibria could be addressed by policy. This likely returns a more accurate projection of future growth than assuming a uniform state growth rate or relying on historical trends.
- Housing shortage data, as a percentage of existing homes in each state, comes from Up For Growth's Housing Underproduction in the U.S. report.[3] While this dataset (published in 2024) accounts for year 2022 conditions, supplemented with more recent data, we use the percentage underproduction for 2024-based estimates, although this is likely conservative due to continued housing underproduction since 2022. This housing underproduction may be a conservative estimate of how much housing would be needed to achieve broad affordability in the highest cost metropolitan areas as it is likely that filling the housing shortage would induce more population inflow from other states. Under this assumption, the magnitude of the analysis results would likely be much larger in states such as California, Washington, and New York, which could see substantial migration.

Combining these data sources provided an estimate of housing stock growth that meets demand and reduces underproduction over the 10-year period of the analysis (2023-2033). Under each scenario, the absolute housing stock growth was divided by ten to provide a linear estimate of annual housing construction over the analysis period. Exhibit 1 provides annual unit estimates and the full 10-year estimate for each of the states in the study split out by meeting demand and reducing underproduction.

The analysis considers the fiscal outcomes of each state meeting its estimated housing demand and 100% of underproduction. However, the analysis does not look at housing units due to vacant units falling into disrepair, especially in blighted areas or those places experiencing population decline. The analysis also

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[1] The methodology corresponds to the following report: Muralidharan et al. (2024) "Why State Land Use Reform Should Be a Priority Climate Lever for America" https://rmi.org/why-state-land-use-reform-should-be-a-priority-climate-lever-for-america/.

[2] Berrill, P., & Hertwich, E. G. (2021). Material flows and GHG emissions from housing stock evolution in US counties, 2020–60. *Buildings and Cities*, 2(1), 599–617. DOI: *https://doi.org/10.5334/bc.126*. This paper adapts county-level population projections initially developed by Hauer (2019) as an input to estimating the needed housing stock. Hauer, M. E. (2019). Population projections for U.S. counties by age, sex, and race controlled to shared socioeconomic pathway. Scientific Data, 6, 1–15. DOI: https://doi.org/10.1038/sdata.2019.5

[3] Up For Growth 2024 Housing Underproduction in the U.S. report. https://upforgrowth.org/apply-the-vision/housing-underproduction-reports/

does not take into account housing obsolescence, which may account for an annual loss of 0.4% of housing units, calculated for U.S. one-to-four-unit buildings, or 560,000 units based on about 140 million units existing nationwide.[4]

Development Type, Location, and Density

To estimate the fiscal development impact of building new housing, ECOnorthwest considered scenarios based on location, housing density, and housing type in each state.

Two scenarios for housing location were considered: (1) homes built near jobs, stores, and transit scenario and (2) homes built at the urban fringe, in line with most current development patterns ("business as usual" scenario). Locations for these scenarios were identified based on data about current driving patterns (vehicle miles traveled or "VMT") in each census tract, a relatively small, neighborhood-sized geographical unit. The analysis used Replica census tract level VMT data from 2024 to retrieve the distribution of VMT in each census tract. Scenario 1 (homes built near jobs, stores, and transit) assumes that the new housing construction occurs in census tracts associated with the 90% lowest VMT. Scenario 2 (homes built at urban fringe, in line with current development patterns) assumes that the VMT of the new housing production corresponds to the average VMT per capita.

This data is joined with Replica data on the number of dwelling units and type of dwelling units in each census tract. For the analysis, housing unit data was combined into two typologies: (1) single-family units and (2) multifamily and mixed-use units (called "multifamily"). Joining the data provided an estimate of housing density (dwelling units per acre), housing typology (single-family versus multifamily), and VMT per capita in each census tract.

Within each of the development location scenarios, the analysis estimated the proportion of new housing that would be built as infill versus greenfield. The analysis used the cutoff of 5 dwelling units per acre (DU/ac) to differentiate between infill (≥5 DU/ac) and greenfield (<5 DU/ac). This metric was determined using research published by Housing Policy Debate[5], Municipal Research and Services Center[6], and through discussions with collaborators from the Terner Center for Housing Innovation at UC Berkeley.

This data provided the proportion of new housing that would be directed into each typology (single-family or multifamily) and each development density (infill or greenfield) under two location scenarios (homes near jobs, stores and transit vs homes on the urban fringe). Exhibit 2 provides the proportions by development location, housing typology, and density. These proportions varied extensively across the

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[4] Kaul, K., Goodman, L., and Neal, M. "The Role of Single-Family Housing Production and Preservation in Addressing the Affordable Housing Supply Shortage". Urban Institute. https://www.urban.org/sites/default/files/publication/105265/the-role-of-single-family-housing-production-and-preservation-in-addressing-the-affordable-housing-supply-shortage.pdf

[5] Landis, J. D., Hood, H., Li, G., Rogers, T., & Warren, C. (2006). The future of infill housing in California: Opportunities, potential, and feasibility. *Housing Policy Debate*, *17*(4), 681–725. https://doi.org/10.1080/10511482.2006.9521587

[6] Bengford, B. "Visualizing Compatible Density". Municipal Research and Services Center. https://mrsc.org/stay-informed/mrsc-insight/april-2017/visualizing-compatible-density

states as they are representative of each state's existing housing typologies and development patterns. For instance, high-growth states in the sunbelt characterized by higher VMT such as North Carolina, had 72% of new housing under the low-VMT scenario built in greenfield locations.

To calculate the absolute number of housing units built within each housing typology category and development type, these proportions were applied to the number of units built to meet each state's underproduction.

The model also estimates the total land used for each location scenario, depending on development density and typology. Baseline assumptions for land used for each housing typology are 0.16 acres per single-family unit (6.25 units per acre) and 0.033 acres per multifamily unit (30.3 units per acre) (See Exhibit 4). Additional adjustments were made for a more compact use of land at infill densities, reducing land acres used by 20 to 33% for each housing type. This results in range of 7.8 to 9.3 units per acre for infill single-family and 38 to 45 units per acre for infill multifamily.

Fiscal Analysis Methodology

This analysis was conducted to understand various fiscal outcomes associated with different housing development scenarios across U.S. states. The work draws on both primary inputs and ECOnorthwest's prior experience in housing and infrastructure cost modeling to produce a transparent, scalable, and geographically differentiated analysis.

Building on prior work in housing cost modeling, ECOnorthwest estimated development costs separately for single-family and multifamily housing types. Greenfield development costs differentiated by the addition of infrastructure costs associated with new rights-of-ways, as compared to infill housing requiring little infrastructure investment. This reflects the assumption that infill development leverages existing infrastructure in adjacent rights-of-way, whereas greenfield development typically necessitates new capital investments in roads, water, sewer, and utilities to serve newly subdivided development sites. This differentiation helps illustrate the additional public and private costs associated with outward development expansion. Note, this analysis did not take into account differences among funding sources that support infrastructure maintenance and development.

All core development cost components (hard costs, soft costs, and infrastructure costs) were priced in 2024 dollars based on ECOnorthwest's internal development cost research. See Exhibit 3 for cost proportions by scenario, housing type, and density and Exhibit 4 for underlying assumptions and data sources common across states. To reflect regional variation in construction pricing, we applied location-specific adjustment factors based on RSMeans Construction Cost Index data. For each state, we used the cost index from the highest population metropolitan area (or areas) to adjust the base cost assumptions, allowing the analysis to account for localized labor, material, and construction market differences. (See Exhibit 5 for state-specific assumptions).

In addition to upfront housing and infrastructure development costs, we estimated ongoing public sector obligations for infrastructure maintenance. These include the long-term costs of maintaining roads and water/wastewater systems. Maintenance costs were modeled on a per-mile basis using multiple national-level data sources for annual operations, maintenance, and repair expenditures. (See Exhibit 4 for assumptions across states).

Fiscal analysis estimated property taxes generated from the new units. For property tax estimation, we utilize statewide average property tax rates on assessed values. Because these housing developments would be new, we assume that the construction and land cost are equivalent to the assessed value. This analysis does not consider how assessed values increase over time nor how property tax rates change.

In addition to property taxes, we also examined the construction-related sales and use tax and property tax collections associated with each development scenario. We utilized statewide average sales and use tax rates applied to the portion of construction hard costs that would be subject to taxes.

Analysis Limitations

This modeling is designed to provide high-level, magnitude-based estimates to inform housing policy decisions. Actual development costs and fiscal outcomes may vary due to factors such as permitting, labor and material availability, fees, and contract terms. The model does not account for the timing of build-out, depreciation, inflation, or changes in tax rates. Additionally, it assumes static per-unit costs and tax conditions, which may not reflect future policy or market shifts.

Two components of the model warrant additional explanation. The use of static, statewide assumptions may yield results that differ significantly from those produced by an analysis focused on a specific local market. Additionally, investment and upkeep scenario differ by local context and governance. The modeling here reflects both idealized infrastructure investment obligations and average investment levels. Both of these sets of assumptions – necessary for modeling at the state level – may vary in local implementation contexts.

Property Taxes

This analysis uses statewide average effective property tax rates that do not differentiate tax rates, including between single-family and multifamily housing. This does not capture variation in local rates or actual tax incidence that may arise from differences in classification, exemptions, or assessment methodologies.

Although this analysis applies the same statewide average tax rate to all housing, prior research indicates that commercial properties (larger multifamily properties are generally classified as commercial real estate) bear higher effective property tax burdens on property owners than single-family owner-occupied homes. A 2005 nationwide study using 2001 Residential Finance Survey data found multifamily properties faced property tax incidence at least 25 percent higher than single-family.[7] The paper discusses classification differences, homeowner tax protections, assessment practices, and lower apartment property values per unit as possible contributors to that gap. Our cross-market modeling does not incorporate these patterns because we do not have access to a recent dataset defining the different property tax incidences.

Property assessment practices differ substantially between single-family owner-occupied homes and multifamily rental properties:

- Single-family homes are generally assessed using a comparative sales approach. A growing body of evidence documents that assessed values diverge from market values, potentially leading to regressive outcomes such as underassessment at the high end and overassessment in lower-value neighborhoods.[8] These patterns can distort property tax payments relative to true market value.
- Multifamily rental properties, by contrast, are commonly assessed using an income-based valuation approach. Because income-producing properties are routinely bought and sold, their valuations are reassessed at transaction and more closely track market conditions. Although income-based assessments have their own limitations, they are not implicated in the regressivity concerns documented for owner-occupied housing.

As a result, effective tax burdens can diverge in practice. These nuances are not captured in our statewide, magnitude-based modeling. Assuming equal tax rates for single-family and multifamily units effectively means that single-family units generate higher modeled tax receipts per unit, reflecting their higher per-unit construction and land costs. In reality, if actual assessed values were used for each property type within a defined local market, we would expect aggregate trends to show:

- Lower realized property tax receipts per single-family unit, due to assessment inaccuracy and the prevalence of homeowner exemptions, and;
- Higher realized receipts per multifamily unit, because commercially operated properties face more consistent assessment practices and tend to maintain full tax compliance.

We expect this would result in an overestimation of property tax receipts for land use scenarios that emphasize single-family housing growth, like the housing built at urban fringe scenario, and an underestimation of tax receipts for land use scenarios that emphasize multifamily housing growth, like the housing built near jobs, stores, and transit scenario.

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[7] Goodman, Jack. *Houses, Apartments, and Property Tax Incidence.* W05-2, Joint Center for Housing Studies, Harvard University, February 2005. https://www.jchs.harvard.edu/sites/default/files/w05-2.pdf

[8] Schleicher, David. *"Your House Is Worth More Than They Think: The Strange Case of Property Tax Regressivity."* Harvard Law Journal on Legislation 62, no. 1 (Winter 2025). Accessed November 21, 2025. https://journals.law.harvard.edu/jol/2025/02/22/your-house-is-worth-more-than-they-think-the-strange-case-of-property-tax-regressivity/

Infrastructure Construction and Maintenance

Our infrastructure maintenance assumptions reflect two realities, idealized infrastructure investment obligations and average investment levels, neither of which precisely reflect infrastructure realities faced in a given local context. Under ideal conditions, public agencies consistently fund annual operations, maintenance, and capital replacement at levels sufficient to preserve infrastructure over its full-service life and replace it in an efficient manner. We take these ideal investment obligations figures from the U.S. Department of Transportation.[9]

In practice, governments might struggle to maintain stable capital accounts due to limited tax bases, fragmented governance structures, and sprawling development patterns. To reflect this, we also report the typical average annual expenditure per lane mile as reported by the Congressional Budget Office[10] and American Society of Civil Engineers Infrastructure Report Cards.[11] These average figures simplify what might be a varied landscape of infrastructure investment, with some jurisdictions maintaining certain assets at ideal levels while others are relatively disinvested.

Chronic underfunding of water and wastewater systems, roads, and stormwater systems can accelerate deterioration, reduce useful life, and require costly replacement due to the increased risk of catastrophic failure. However, our model does not simulate catastrophic infrastructure failure, backlog accumulation, or the fiscal ramifications of deferred maintenance.

Jurisdictions with distinct growth patterns might experience different rates of infrastructure failure when maintenance is postponed, or budgets are constrained. Case studies and practitioner discussions, including from Strong Towns, highlight how suburban-style growth patterns can create long-term liabilities that can exceed future tax revenues, resulting in infrastructure "fiscal cliffs" as systems reach the end of their useful lives without adequate reserve funding.[12] Our cost estimates do not incorporate this risk, nor the perception of heightened probability of failure in jurisdictions with extensive, low-density infrastructure networks.

To accurately capture the fiscal challenges discussed in the infrastructure literature, one would need to model alternative investment regimes, such as deferred maintenance, inconsistent capital planning, emergency repairs, or cyclical budget shortfalls. These regimes are not universally practiced, but they characterize many local governments. Because our modeling framework assumes optimal stewardship or

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[9] U.S. Department of Transportation, Federal Highway Administration, and Federal Transit Administration. *Status of the Nation's Highways, Bridges, and Transit: Conditions & Performance Report to Congress*, 25th ed. Washington, DC: U.S. Department of Transportation, 2024. https://www.fhwa.dot.gov/policy/25cpr/pdf/CP25_Full_Report.pdf.

[10] Congressional Budget Office. *Public Spending on Transportation and Water Infrastructure, 1956 to 2023*. Washington, DC: Congressional Budget Office, February 2025. https://www.cbo.gov/system/files/2025-02/60874-InfrastructureSpending.pdf.

[11] American Society of Civil Engineers. *2025 Report Card for America's Infrastructure*. Reston, VA: American Society of Civil Engineers, 2025. https://infrastructurereportcard.org/wp-content/uploads/2025/03/Full-Report-2025-Natl-IRC-WEB.pdf.

[12] Marohn, Charles. "What Strong Towns Really Says about Infrastructure Spending." *Strong Towns*, July 22, 2024. https://www.strongtowns.org/journal/2024-7-22-what-strong-towns-really-says-about-infrastructure-spending

average investments, the analysis does not reproduce the “fiscal cliff” or early replacement cost dynamics that are noted in some environments.

Given these constraints, the infrastructure component of the analysis should be interpreted as a comparative indicator of relative cost intensity, not a prediction of actual lifecycle expenditures.

Modeling Assumptions and Inputs

Exhibit 1. Annual Housing Production Estimates to Meet Demand and Fill 100% of Underproduction Shortage

	Annual Estimate			10-Year Estimate		
State	Estimated Demand	Meet 100% Underproduction	Total Units	Estimated Demand	Meet 100% Underproduction	Total Units
Arizona	36,381	11,403	47,784	363,810	114,034	477,844
Florida	135,912	24,875	160,787	1,359,120	248,748	1,607,868
Maryland	15,683	9,500	25,183	156,830	95,000	251,830
Minnesota	15,062	9,941	25,003	150,620	99,412	250,032
Montana	4,155	1,370	5,525	41,550	13,704	55,254
New Hampshire	-	2,645	2,645	-	26,449	26,449
North Carolina	44,517	4,232	48,749	445,170	42,322	487,492
Pennsylvania	584	10,571	11,155	5,840	105,706	111,546
Texas	203,254	32,599	235,853	2,032,540	325,995	2,358,535
Washington	39,234	14,018	53,252	392,340	140,179	532,519
Total 10 states	494,782	121,155	615,937	4,947,820	1,211,551	6,159,371

Source: Experts from WRI and ECOnorthwest, Up For Growth Housing Underproduction in the U.S. report

Exhibit 2. Existing Unit Share Distribution by Development Location, Density, and Housing Type

Scenario 1: Housing built near jobs, stores, and transit

Average of Unit Share	Homes Built Near Jobs, Stores, and Transit scenario				Scenario Total
	Greenfield / Greyfield		Infill		All Locations
State	Multifamily	Single-Family	Multifamily	Single-Family	All Housing Types
Arizona	4%	7%	42%	47%	100%
Florida	5%	14%	34%	47%	100%
Maryland	2%	12%	40%	46%	100%
Minnesota	7%	15%	37%	41%	100%
Montana	14%	41%	16%	29%	100%
New Hampshire	24%	42%	24%	10%	100%
North Carolina	20%	52%	13%	15%	100%
Pennsylvania	20%	52%	13%	15%	100%
Texas	7%	20%	29%	43%	100%
Washington	9%	16%	40%	35%	100%

Scenario 2: Housing built near the urban fringe, in line with today's patterns

Average of Unit Share	Business As Usual scenario				Scenario Total
	Greenfield/Greyfield		Infill		All Locations
State	Multifamily	Single-Family	Multifamily	Single-Family	All Housing Types
Arizona	8%	37%	22%	33%	100%
Florida	8%	44%	19%	29%	100%
Maryland	8%	50%	19%	23%	100%
Minnesota	13%	59%	13%	14%	100%
Montana	17%	67%	6%	10%	100%
New Hampshire	25%	66%	6%	3%	100%
North Carolina	16%	71%	6%	7%	100%
Pennsylvania	16%	71%	6%	7%	100%
Texas	11%	45%	17%	27%	100%
Washington	11%	49%	20%	20%	100%

Source: ECOnorthwest analysis of U.S. Census Bureau and Replica data.

Exhibit 3. Cost Share Components by Case, Location, and Housing Type

Scenario, Location, and Housing Type	Hard Construction Cost share	Soft Construction Cost share	Infrastructure Cost share	Land Costs share
Homes Built Near Jobs, Stores, and Transit scenario				
Greenfield/Greyfield				
Multifamily	62%	12%	8%	18%
Single Family	62%	7%	13%	18%
Infill				
Multifamily	65%	13%	4%	18%
Single Family	69%	8%	5%	18%
Business As Usual scenario				
Greenfield/Greyfield				
Multifamily	62%	12%	8%	18%
Single Family	62%	7%	13%	18%
Infill				
Multifamily	65%	13%	4%	18%
Single Family	69%	8%	5%	18%
Grand Total	**65%**	**10%**	**8%**	**18%**

Note: cost share components by case, location, and housing type are the same across all the states in the sample.

Source: ECOnorthwest analysis.

Overall Analysis Assumptions

Exhibit 4 details the source of assumptions as well as cites the estimates that are consistent across states for modeling.

Exhibit 4. Modeling Assumptions Consistent Across States

ASSUMPTION	DESCRIPTION	VALUE	SOURCE

Hard Costs	Direct costs of building housing structures (materials, labor, etc.).	Varies by state	*ECOnorthwest, 2024; RSMeans Construction Cost Location Factor, 2021*
Soft Costs	Costs related to design, permitting, financing, and administration.	Varies by state; Assumed at 12% of hard costs for single-family and 20% of hard costs for multifamily	*ECOnorthwest, 2024; RSMeans Construction Cost Location Factor, 2021*
Infrastructure Costs	Upfront capital costs for roads, water, sewer, and utilities needed to serve new units.	Varies by state	*ECOnorthwest, 2024; RSMeans Construction Cost Location Factor, 2021*
Land Costs	Average land acquisition cost relative to construction cost	Assumed at 17.5% of total construction costs	*ECOnorthwest calculation; National Association of Home Builders, 2025*
Road Maintenance	National annual average actual expenditures per lane-mile on maintaining roads serving the housing.	Assumed at $14,000 per lane-mile	*ECOnorthwest calculation; Congressional Budget Office, 2025; Infrastructure Report Card, 2025*
Road Maintenance Obligation	National annual average cost per lane-mile to properly maintain roads serving the housing.	Assumed at $27,300 per lane-mile	*ECOnorthwest calculation; U.S. Department of Transportation, 2024*
Water and Wastewater	National annual average operations, maintenance, and repair costs per mile of water and sewer infrastructure.	Assumed at $39,300 per lane-mile	*ECOnorthwest calculation; Congressional Budget Office, 2025; Infrastructure Report Card, 2025*
Property Tax Rates	Statewide effective property tax rate	Varies by state	*Tax Foundation, 2023*
Sales and Use Tax Rates	Statewide sales and use tax rates	Rates vary by state; assumed percentage of	*Tax Foundation, 2025; ECOnorthwest calculation*

		hard costs subject to tax at 51%	*of U.S. Census Bureau Economic Census, 2022*
Linear Feet of Infrastructure	Linear feet of road and water/wastewater infrastructure	Assumed at 70 linear feet per unit for single-family and 11 linear feet per unit for multifamily	*ECOnorthwest, 2024*
Land Acres per Housing Unit	Number of acres needed for each housing unit type	Assumed at 0.16 acres per unit for single-family and 0.033 acres per unit for multifamily	*ECOnorthwest, 2024*

Exhibit 5. Construction and Tax Modeling Assumptions that Vary by State

STATE	ASSUMPTION	VALUE
Arizona	Construction Costs Per Unit	*State-adjusted costs range from $547,000 for single-family greenfield/greyfield development to $179,000 for multifamily infill developments*
	Construction Cost Location Factor	*Location factor relative to US is 87.0*
	Property Tax Rate	*Effective property tax rate is 0.52% in 2023*
	Sales and Use Tax Rate	*Statewide/local average sales and use tax rate is 8.41% in 2025.*
Florida	Construction Costs Per Unit	*State-adjusted costs range from $528,000 for single-family greenfield/greyfield development to $173,000 for multifamily infill developments*
	Construction Cost Location Factor	*Location factor relative to US is 84.0*

	Property Tax Rate	*Effective property tax rate is 0.79% in 2023*
	Sales and Use Tax Rate	*Statewide/local average sales and use tax rate is 6.95% in 2025.*
Maryland	Construction Costs Per Unit	*State-adjusted costs range from $591,000 for single-family greenfield/greyfield development to $194,000 for multifamily infill developments*
	Construction Cost Location Factor	*Location factor relative to US is 94.0*
	Property Tax Rate	*Effective property tax rate is 1.21% in 2023*
	Sales and Use Tax Rate	*Statewide/local average sales and use tax rate is 6.0% in 2025*
Minnesota	Construction Costs Per Unit	*State-adjusted costs range from $673,000 for single-family greenfield/greyfield development to $220,000 for multifamily infill developments*
	Construction Cost Location Factor	*Location factor relative to US is 107.0*
	Property Tax Rate	*Effective property tax rate is 1.04% in 2023*
	Sales and Use Tax Rate	*Statewide/local average sales and use tax rate is 8.12% in 2025.*
Montana	Construction Costs Per Unit	*State-adjusted costs range from $571,000 for single-family greenfield/greyfield development to $187,000 for multifamily infill developments*
	Construction Cost Location Factor	*Location factor relative to US is 90.9*

	Property Tax Rate	*Effective property tax rate is 0.75% in 2023*
	Sales and Use Tax Rate	*Statewide/local average sales and use tax rate is 0% in 2025.*
North Carolina	Construction Costs Per Unit	*State-adjusted costs range from $547,000 for single-family greenfield/greyfield development to $179,000 for multifamily infill developments*
	Construction Cost Location Factor	*Location factor relative to US is 87.0*
	Property Tax Rate	*Effective property tax rate is 0.70% in 2023*
	Sales and Use Tax Rate	*Statewide/local average sales and use tax rate is 7.0% in 2025.*
New Hampshire	Construction Costs Per Unit	*State-adjusted costs range from $611,000 for single-family greenfield/greyfield development to $200,000 for multifamily infill developments*
	Construction Cost Location Factor	*Location factor relative to US is 97.3*
	Property Tax Rate	*Effective property tax rate is 1.8% in 2023*
	Sales and Use Tax Rate	*Statewide/local average sales and use tax rate is 0% in 2025.*
Pennsylvania	Construction Costs Per Unit	*State-adjusted costs range from $728,000 for single-family greenfield/greyfield development to $238,000 for multifamily infill developments*
	Construction Cost Location Factor	*Location factor relative to US is 115.8*

	Property Tax Rate	*Effective property tax rate is 1.35% in 2023*
	Sales and Use Tax Rate	*Statewide/local average sales and use tax rate is 6.34% in 2025.*
Texas	Construction Costs Per Unit	*State-adjusted costs range from $544,000 for single-family greenfield/greyfield development to $178,000 for multifamily infill developments*
	Construction Cost Location Factor	*Location factor relative to US is 86.6*
	Property Tax Rate	*Effective property tax rate is 0.52% in 2023*
	Sales and Use Tax Rate	*Statewide/local average sales and use tax rate is 8.2% in 2025.*
Washington	Construction Costs Per Unit	*State-adjusted costs range from $671,000 for single-family greenfield/greyfield development to $219,000 for multifamily infill developments*
	Construction Cost Location Factor	*Location factor relative to US is 106.7*
	Property Tax Rate	*Effective property tax rate is 0.84% in 2023*
	Sales and Use Tax Rate	*Statewide/local average sales and use tax rate is 9.43% in 2025.*

References

American Society of Civil Engineers. *2025 Report Card for America's Infrastructure*. Reston, VA: American Society of Civil Engineers, 2025. https://infrastructurereportcard.org/wp-content/uploads/2025/03/Full-Report-2025-Natl-IRC-WEB.pdf.

Berrill, P., & Hertwich, E. G. (2021). Material flows and GHG emissions from housing stock evolution in US counties, 2020–60. *Buildings and Cities*, 2(1), 599–617. DOI: *https://doi.org/10.5334/bc.126*

Congressional Budget Office. *Public Spending on Transportation and Water Infrastructure, 1956 to 2023*. Washington, DC: Congressional Budget Office, February 2025. https://www.cbo.gov/system/files/2025-02/60874-InfrastructureSpending.pdf.

Goodman, Jack. *Houses, Apartments, and Property Tax Incidence.* W05-2, Joint Center for Housing Studies, Harvard University, February 2005. https://www.jchs.harvard.edu/sites/default/files/w05-2.pdf

Marohn, Charles. “What Strong Towns Really Says about Infrastructure Spending.” *Strong Towns*, July 22, 2024. https://www.strongtowns.org/journal/2024-7-22-what-strong-towns-really-says-about-infrastructure-spending

National Association of Home Builders. *Special Study: Cost of Constructing a Home-2024* (January 20, 2025). Washington, DC: National Association of Home Builders, 2025. https://www.nahb.org/-/media/NAHB/news-and-economics/docs/housing-economics-plus/special-studies/2025/special-study-cost-of-constructing-a-home-2024-january-2025.pdf.

Schleicher, David. *“Your House Is Worth More Than They Think: The Strange Case of Property Tax Regressivity.”* Harvard Law Journal on Legislation 62, no. 1 (Winter 2025). Accessed November 21, 2025. https://journals.law.harvard.edu/jol/2025/02/22/your-house-is-worth-more-than-they-think-the-strange-case-of-property-tax-regressivity/

Tax Foundation. *Property Taxes by State and County, 2023*. Washington, DC: Tax Foundation, 2023. https://taxfoundation.org/data/all/state/property-taxes-by-state-county-2023/.

Tax Foundation. *State and Local Sales Tax Rates, Midyear 2025*. Washington, DC: Tax Foundation, 2025. https://taxfoundation.org/data/all/state/sales-tax-rates-2025/.

U.S. Census Bureau. *2022 Economic Census*. Washington, DC: U.S. Department of Commerce, 2022. https://www.census.gov/programs-surveys/economic-census.html.

U.S. Department of Transportation, Federal Highway Administration, and Federal Transit Administration. *Status of the Nation’s Highways, Bridges, and Transit: Conditions & Performance Report to Congress*, 25th ed. Washington, DC: U.S. Department of Transportation, 2024. https://www.fhwa.dot.gov/policy/25cpr/pdf/CP25_Full_Report.pdf.

U.S. Federal Highway Administration. “Appendix A: Highway Investment Analysis Methodology,” in *Status of the Nation’s Highways, Bridges, and Transit: Conditions & Performance Report* (23rd ed.), Part V. Washington, DC: U.S. Department of Transportation, Federal Highway Administration, 2021. https://www.fhwa.dot.gov/policy/23cpr/appendixa.cfm.

Up For Growth. “2024 Underproduction Report.” https://upforgrowth.org/apply-the-vision/housing-underproduction-reports/