

Methodology appendix

1 Simple Tax Policy To Create Nearly 1 Million New Multifamily Homes

By Thomas Brosy and Corey Husak

A. Impact of expensing on cost recovery deductions and cost of capital

1. Investment in multifamily housing structures from the Bureau of Economic Analysis and Congressional Budget Office

The authors used yearly publicly available private investment data on residential multifamily housing structures from the U.S. [Bureau of Economic Analysis \(BEA\)](#). Data are available yearly until 2024, and then for the first three quarters of 2025. The authors extrapolated future investment in multifamily housing using projected nominal gross domestic product (GDP) growth published by the [Congressional Budget Office \(CBO\)](#)—slightly less than 4 percent annually through 2036. The yearly growth in nominal multifamily housing investment over the past 10 years was 6.1 percent, though it was falling from the third quarter of 2023 through the third quarter of 2025, when it stood at \$114 billion in annual nominal terms. As a result, nominal growth per year since 2021 has fallen to 2 percent yearly.

2. Share of spending by legal form of organization from the BEA and IRS

The authors exploit investment data in residential fixed assets by legal form of organization from the BEA (Fixed Assets Accounts Table 5.7. Investment in Residential Fixed Assets by Type of Owner, Legal Form of Organization, and Tenure Group). The data break down investment between government and private (corporate, pass-through businesses, nonprofits, or household) ownership. The data do not distinguish between single-family and multifamily investment. The authors also obtained data from the [Statistics of Income \(SOI\)](#) from the IRS. The share of assets was estimated from the “Construction of building” minor industry attributable to C-corporations (1120 forms) and to pass-through businesses (forms 1120-S, 1120-REIT, 1120-RIC). Based on these data, the authors assumed the following:

- 8.9 percent of investment is made by nontaxable entities.
- 5.6 percent is made by C-corporations.
- 85.5 percent is made by pass-through businesses.

B. Geographic distribution of investment and new units

1. Total new units from the U.S. Census Bureau

The [Census of New Residential Construction](#) reports the total number of new housing units started and completed for the United States and four regions (Northeast, Midwest, South, and West). The data also report units in buildings with one unit, two to four units, and units in buildings with five or more units. Total new constructions of multifamily housing in 2024 numbered 608,000. In 2023 and 2024, nearly half of new units constructed were in the South.

From January to September 2025, the Census Bureau reported roughly 370,000 new units, or about 500,000, annualized. The three-year average from September 2022 to August 2025 was about 510,000 new units. The authors chose 510,000 as the baseline for 2025 and 520,000 as the baseline for 2026. This baseline was assumed to grow with predicted real GDP growth from the CBO, or roughly 2 percent per year until 2036.

These data could be leveraged to estimate the average reported investment per unit of new multifamily housing. However, the measure would be subject to error because the BEA tracks investment when costs incur, while the Census of New Residential Construction tracks buildings when they are started and completed. For example, a builder that finishes a building in March 2025 would likely report a majority of the costs in 2024. To account for the delay between when investment is reported and when construction is finished, the authors use a three-year average with investment amounts reported lagged by one year. For example, total units completed from 2022 to 2024 were compared with total investment made from 2021 to 2023 (adjusted for inflation to reflect 2024 dollars). The average amount invested per unit in 2024 was estimated to be from \$250,000 to \$275,000.

2. Permits data from Census Bureau [Building Permits Survey](#)

The authors rely on permits data provided by the Census Bureau to estimate the geographic distribution of new units. Permits do not always map into new constructions, and there may be data mismeasurement. However, in the absence of reliable local data on new multifamily constructions, the permits data allowed the authors to distribute new units geographically. The average of permits issued from 2021 to 2024 was used to estimate the share of new permitted units in structures with two or more units. The authors then allocated new units by interacting the total new units constructed with the local share. For example, Los Angeles County had an estimated 2.5 percent share of multifamily permits in the 2021–2024 period, so the number of new multifamily units completed in Los Angeles County in 2025 was assumed to be 12,750, or 2.5 percent of the total 510,000 baseline new units constructed nationally.

The permits data also include estimates of the value per unit permitted. This value is the [cost reported on building permits and permit applications by the building developers](#). The value is [used to calculate various fees](#) assessed by the localities that issue permits and covers the cost of building, [including material and labor costs as well as design costs](#). It excludes costs related to the land and any fees associated with the permit. However, cost estimates from the permits survey are likely underestimates. The authors applied a simple adjustment factor by estimating total investment based on costs reported in the permits survey and total investment reported by

the BEA. They then adjusted the per-unit cost estimate from the permits survey by 39 percent to match the reported BEA investment. The resulting estimated median and average costs were \$208,000 and \$220,000, respectively, in 2025.

3. Rent distribution from IPUMS and the American Housing Survey

Since there are no reliable, publicly available data on the distribution of building costs nationally or across regions, the authors pulled the distribution of rents reported for residents of buildings built since 2010 for each state from [IPUMS USA](#) (which in turn relies on the American Housing Survey from the U.S. Census Bureau). Those include both single-family and multifamily homes, potentially slightly biasing the authors' estimate of cost per unit and covered investment. The authors then assumed that the net operating income of the owners of the buildings was 60 percent, which is in line with [industry surveys](#). The authors then assumed a range of profitability for these properties from 3 percent to 9 percent. This range approximates costs in a market that includes successful and less successful developments, as well as market-rate units and below-market-rate units. This allows for backing out a distribution of what an investor would pay per unit for rents in the observed distribution by state. The implied total investment was then matched to investment as reported in [the national accounts](#). Finally, the authors increased the resulting unit cost for inflation to obtain a rough distribution of recent per-unit building costs in nearly every state across the country from which to project how expensing caps would affect units built in different states.

4. Share of investment covered by expensing policy

With a distribution of average per-unit building costs, the authors then projected how much of the distribution of new buildings would be eligible and covered under various per-unit depreciation caps by state. The cap is assumed to increase with housing cost inflation. Marginal subsidy rates would be higher for developers of projects that are slightly above the \$150,000 and \$250,000 caps but who can marginally lower their average costs—either by increasing their number of units or by taking steps to increase their number of units. The authors assumed that developers with per-unit development costs up to 30 percent above the expensing caps would take steps to reduce their per-unit costs by up to 10 percent or down to the cap. This assumption results in a slightly higher elasticity of units created among these projects and in more units clustering just below the cap amount.

In the model results, 86 percent of new units would be affected by a cap at \$150,000 per unit and 25 percent would be affected by a cap at \$250,000 per unit. These caps exclude roughly 36 percent and 11 percent of all investment, respectively. Units constructed for more than the caps would still receive immediate partial expensing, but the percentage experienced per each unit would decline as units became more expensive.

C. Revenue estimation

1. Yearly increase in cost recovery deductions

Starting with the measure of investment in multifamily residential structures, the authors estimated the amount of cost recovery under the standard depreciation regime and under expensing for each year after 2025. The amount expensed was adjusted based on estimates of the share of investment that could be expensed under various cutoffs (for example, a maximum of \$250,000 per unit). Note the analysis assumed that the per-unit caps would be adjusted for inflation yearly. With full expensing, the present value of tax depreciation would be simply 1. When depreciated straight-line over 27.5 years, the present value of depreciation would be much lower (for example, about 0.4 with a discount rate of 8 percent).

2. Parameters and tax rates

The difference in cost recovery for C-corporations and pass-throughs was attributed based on the estimates described above. For C-corporations, the authors used the statutory rate of 21 percent to estimate the revenue cost. For pass-throughs, they used the average marginal tax rate each year for pass-through income from the [Urban-Brookings Tax Policy Center](#).

3. Adjustment for take-up

To evaluate the revenue cost of introducing expensing or accelerated depreciation, the authors considered that: 1) Many businesses do not have net positive taxable income, or enough taxable income to take full benefits from the policy; and 2) Even for firms with enough income, some businesses may choose the standard depreciation for some of their investments. Some pass-through businesses, for example, may prefer to spread out losses over time, as partners may have income from other sources. The value of expensing also varies depending on how an asset is normally depreciated.

[Brosy, Goodman, and Matheson \(2022\)](#) estimated that even for profitable firms, take-up was about 80 percent from 1999 to 2019 for the expensing of equipment. Take-up was substantially lower for firms without positive net taxable income. Overall, larger firms and/or C-corporations take advantage of expensing more often than pass-through businesses, small firms, or firms with net losses. Take-up rates when bonus depreciation or expensing is available vary by assets, years, size of the firm, legal form of organization, and other factors.

However, the value of expensing for structures is much larger than for short-lived assets, and one would expect a higher take-up rate on expensing structures than on equipment, which already benefits from accelerated depreciation and has a shorter life. For example, revenue estimates from the [Joint Committee on Taxation](#) (JCT) of the BBB suggest a higher take-up and ability to benefit from allowing expensing of qualified production facilities than permanent 100 percent

bonus depreciation. It is worth mentioning that the real estate sector is unique, and one expects to see restructuring in terms of businesses' legal forms of organization, as well as financing organization decisions that could increase take-up rates.

Finally, the less generous a policy is, the higher one expects the take-up rate to be. For example, in many cases, a partnership may wish to avoid a large upfront loss and choose not to expense. On the other hand, it may choose to depreciate the investment under the Modified Accelerated Cost Recovery System (MACRS) 15, which is front-loaded but distributed over 15 years. The authors assumed the following take-up rates: 50 percent with full expensing; 52.5 percent with a \$250,000 per-unit expensing cap; 60 percent with a \$150,000 per unit expensing cap; 60 percent with 50 percent expensing; and 80 percent with MACRS 15.

Table A1 reports revenue estimates over 10 years. In summary, take-up rates should be substantially higher than historical estimates across assets that benefit from bonus depreciation and slightly smaller than what the JCT suggests for expensing of qualified production facilities.

4. Adjustment for dynamic impact

The baseline revenue cost estimates assumed no housing supply response. The authors then adjusted the expected cost to reflect projected higher investment induced by this policy. The estimates of higher investment follow from the estimated change in units in the no-cap policies— if housing supply increases by 10 percent, revenue cost is assumed to be 10 percent higher as well. With the \$150,000 and \$250,000 expensing caps, the authors estimated a housing supply response that assumed limited behavioral changes to lower the cost per unit, in developments where the cost per unit is no more than 30 percent of the cap. Adjustments were assumed to come in two forms: higher take-up and higher elasticity just above the cap. Higher take-up would come from the fact that the subsidy to an additional unit is actually higher than \$150,000 when the variable cost of an additional unit is below the total cost of the unit. That estimated take-up rate is then used to estimate investment change. The authors then adjusted the elasticity to account for the additional subsidy available for units just above the expensing caps, simulating the likely response of some developers to build more units than their originally desired number to take advantage of the extra depreciation/expensing available.

5. Adjustment for refundable investment tax credit or direct pay

To estimate the revenue cost, the authors simply multiplied the estimate of the total baseline number of units and additional units attributable to the policy—i.e., the share of baseline and new units built by nontaxable developers—with the average payment per unit in each county. This report presents results for a scenario in which the federal government would allow businesses to choose a 10 percent refundable tax credit, capped at \$15,000, or expensing. The authors assumed no basis adjustment to the straight-line depreciation if businesses elect the



credit. They also assumed that businesses that take up expensing when available would switch to the credit only if the value of the credit were larger than the present-value tax reduction attributable to expensing. Businesses that chose not to expense would still choose the credit. The model included some friction, so that the total take-up between expensing and the investment tax credit covered 95 percent of investment.

TABLE A1
Yearly revenue costs for multifamily rental housing expensing reform proposals, 2027–2036

	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	Total
Full expensing, with \$15,000 credit option	\$18B	\$19B	\$20B	\$20B	\$21B	\$21B	\$21B	\$22B	\$22B	\$22B	\$206B
\$150,000 expensing per unit, with \$15,000 credit option	\$14B	\$14B	\$15B	\$15B	\$15B	\$16B	\$16B	\$16B	\$17B	\$17B	\$154B
\$250,000 expensing per unit, with \$15,000 credit option	\$17B	\$18B	\$18B	\$19B	\$19B	\$20B	\$20B	\$20B	\$21B	\$21B	\$194B
50% expensing	\$9B	\$91B									
15-year accelerated Modified Accelerated Cost Recovery System depreciation	\$1B	\$3B	\$4B	\$5B	\$6B	\$7B	\$8B	\$9B	\$10B	\$10B	\$63B

Source: Authors' calculations. See Methodology.
 Table: Center for American Progress

D. Impact on cost of capital per unit

1. Cost-of-capital framework

The authors used a standard cost-of-capital framework following [Hall and Jorgenson \(1967\)](#). This framework is the one used at the Tax Policy Center for modeling and at the [Congressional Budget Office](#). The net cost of capital is estimated with consideration to economic depreciation, federal income taxes, local property taxes, and potential asset appreciation with the [parameters](#), in line with those used in the Tax Policy Center's most recent [microsimulation model](#).

Parameters used by the authors to develop estimates of housing tax depreciation proposals

Parameters	
Nominal interest rate	6.24%
Inflation rate	2.24%
Rate of return on equity (nominal)	8.2%
Share financed with debt (C-corporations)	27.5%
Share financed with debt (pass-throughs)	30.5%
C-corporation tax rate	21.0%
Average pass-through marginal tax rate	26.6%
Shareholder effective tax rate on C-corporation income	7.0%
Property tax rate	1.2%
Economic depreciation of residential structures	1.75%

Source: Interest rates, inflation, rate of return, share financed, and share of interest deductible come from the Congressional Budget Office's (CBO) cost of capital model. The shareholder effective tax rate on C-corporation income is based on authors' calculations using CBO and Tax Policy Center parameters and assumptions on distributions and effective capital gains tax rates. The average pass-through tax rate comes from the Tax Policy Center's microsimulation model, described in Urban-Brookings Tax Policy Center (last accessed February 2026). The authors estimated the property tax rate using weighted estimates from the Lincoln Institute of Land Policy of average effective tax burden on commercial property percentage. Lincoln Institute of Land Policy and Minnesota Center for Fiscal Excellence, "50-State Property Tax Comparison Study: For Taxes Paid in 2024" (Cambridge, MA, and St. Paul, MN: 2025). Because cities tend to tax commercial property more heavily, the authors chose a slightly smaller average number for the average across the United States. Economic depreciation of residential structures comes from the Bureau of Economic Analysis. U.S. Bureau of Economic Analysis, "Investment in Fixed Assets" (last accessed February 2026) [<https://www.bea.gov/data/investment-fixed-assets>]. Authors assumed that property taxes were deductible from federal tax payments.

Table: Center for American Progress

2. Cost structure for residential buildings

The cost of building a new structure includes soft costs (such as permits, regulations, and financing costs), hard costs (such as materials and labor), and land. The authors assumed that both soft and hard costs would be fully capitalized and depreciated. Under one version of the policy, all soft and hard costs could be expensed up to the threshold. Marginal cost can be derived as:

$$\rho_{tot} = \alpha_{land} * \rho_{land} + \alpha_{struc} * \rho_{struc}$$

For structures, the authors used the cost of capital described above. For land, it is simply the opportunity cost of holding land, captured by the expected real rate of return and the property tax applied to income generated by the land, net of expected real appreciation of land:

$$\rho_{land} = r + \tau^p - \pi$$

For simplicity, the authors assumed that land had no real appreciation and that land and structures faced the same property tax rate, which is [true in practice](#) in most localities.

The share of land in new residential structures varies substantially. To impute an average estimated share of land in total costs at the county level, the authors combined data on land unavailability from [Lutz and Sand \(2023\)](#) and the Wharton regulation index from [Gyourko, Hartley, and Krimmel \(2019\)](#). Distribution of both variables can be standardized by subtracting the mean and dividing by the standard deviation:

$$Z_c^{Lutz-Sand} = \frac{LU_c - \overline{LU_c}}{sd(LU_c)} \quad \text{and} \quad Z_c^{Wharton} = \frac{Windex_c - \overline{Windex_c}}{sd(Windex_c)}$$

The standardized measures were then combined into a constraint of equal weight:

$$LCI_c^{raw} = Z_c^{Lutz-Sand} + Z_c^{Wharton}$$

The raw constraint was normalized to be between 0 and 1:

$$LCI_c^{01} = \frac{LCI_c^{raw} - \min(LCI_c^{raw})}{\max(LCI_c^{raw}) - \min(LCI_c^{raw})}$$

The authors then imputed the share of land using LCI_c^{01} within the defined range of possible shares, from a minimum of 10 percent to a maximum of 45 percent, based on the literature above. For areas where the share of land was unavailable due to data restrictions—typically more rural or smaller areas—the share of land was assumed to be 15 percent, consistent with the lower



end of national estimates. The national unweighted average was 16 percent, and it was 19 percent when weighted by the number of permits in each county.

E. Impact on housing supply and new units produced

1. Impact of expensing on cost of capital

For the average impact of the proposal on the cost of capital, the authors assumed a share of investments financed with debt as stated in Table A2 (27.5 percent to 30.5 percent). To estimate the average effect of the policy on the cost of capital, the authors incorporated the take-up rate across various policies discussed in “Section C3: Adjustment for take-up.” For example, under full expensing and no unit cost limit, 50 percent of new investment was expensed, and the rest was depreciated according to the standard method. In the analysis where there are per-unit cost limits, the authors incorporated the share of local investment covered by the cost limit. For example, if there is a cost limit of \$150,000 per unit, and it covers 60 percent of total investment in a metropolitan area, 30 percent of new investment was assumed to be expensed (50 percent times 60 percent), and the rest depreciated under the standard method.

In general, the authors estimate that expensing would lower the cost of capital for multifamily structures by 11 percent to 12.9 percent for C-corporations and by 14.3 percent to 16.9 percent for pass-through businesses. Because of the deductibility of interest payments, the reduction in cost of capital would be greatest for businesses that finance developments with equity. The cost of capital for pass-throughs that finance developments with debt is about half the cost of financing with equity. The comparable number for C-corporations is 45 percent. The reduction in cost of capital would be greater in areas where the land share of the cost of housing is lower.

2. Expected increase in number of units by county: Short run and long run

The authors assumed that rents are fixed, such that a decrease in the cost of capital translates into higher building values for multifamily housing. This assumption simplifies the analysis, but in areas where rents fall as supply expands, the model results may overestimate the increase in housing supply from expensing.

Under the assumption of fixed rents, the authors mapped the change in cost of capital into building values. If the marginal cost of building decreases by 5 percent, new building values are assumed to rise by 5 percent. The authors then applied a reduced-form elasticity of housing supply to the predicted change in building value and baseline number of new units constructed to estimate the change in new units:

$$\Delta Q = Q_0 \times -\varepsilon \times \frac{\Delta \rho}{\rho}$$

Where ΔQ is the expected equilibrium quantity change induced by the policy, Q_0 is the current equilibrium baseline quantity, ε is the elasticity of housing supply, and $\frac{\Delta \rho}{\rho}$ is the relative change in the cost of capital.

For example, assume an elasticity of 1.5 and a decrease in the cost of capital of 6 percent: If the baseline number of new housing units were 100, the change would result in an increase of 9 units in equilibrium (a 9 percent increase).

To create a baseline, the authors started with the number of new multifamily constructions in the first three quarters of 2025, then linearly expanded to produce an estimate for 2025 and arrived at an estimate of 520,000 new multifamily units in 2026. The baseline number of expected multifamily units under current policy was then grown by the expected real growth rate of GDP from the [CBO](#).

Elasticities of housing supply come from Saiz (2010), whose estimates reflect historical regulatory and geographic constraints. Saiz's elasticities, which combine single-family and multifamily housing, are suitable for two key reasons. First, there are no widely accepted measures of multifamily housing elasticity. Second, those elasticities capture local geographic and regulatory constraints, which are highly correlated between single-family and multifamily housing. The historical elasticity of multifamily housing supply may have been lower than the overall elasticity of housing supply, due to additional constraints such as zoning, financing, longer planning horizons, and higher fixed costs. However, since approximately 2008, the margin of housing adjustment in many U.S. metro areas has shifted toward multifamily construction. [Per Census Bureau data](#), from 1994 to 2004, multifamily housing made up about 19 percent of all home completions, while over the 2014–2024 period, it made up 30 percent. To the extent that zoning reforms and infill development have relaxed historical constraints on vertical construction, Saiz elasticities may be more informative for multifamily supply today than in earlier periods.

The authors mapped Saiz's elasticities developed for metro areas to counties. About 1.5 percent of permits are in counties for which there is no elasticity; for those, the authors imputed the 75th percentile of elasticity distribution, since those counties are likely to be small and rural with higher elasticity on average. The median weighted elasticity is 1.82, and 90 percent of observations fall between 0.67 and 3.47 elasticity.

The authors' estimates implicitly rely on long-run housing supply elasticities from the literature. These elasticities are best interpreted as conditional on existing regulatory and geographic constraints. In some highly constrained markets, realized responses may be smaller, while in markets that continue to reform zoning and permitting, responsiveness could be higher. For this reason, the estimates should be interpreted as illustrative rather than predictive.

Another consideration is that in the short run, the elasticity will be smaller as the market moves toward equilibrium. Thus, the authors apply Saiz (2010) elasticities for the long run and 40



percent of the long-run elasticity for short-run effects on housing supply. Based on the literature, reasonable short-run elasticities are about 30 percent to 45 percent of the long-run values. This analysis' central estimate relies on the short-run elasticity for the potential increase in 2027 and the long-run elasticity for the potential response in 2036.

The transition from short-run to long-run outcomes is modeled using an exponential (partial-adjustment) process. Rather than assuming that the full long-run response occurs immediately, outcomes adjust gradually toward their long-run equilibrium at a constant proportional rate each period according to the following adjustment process:

$$Y_t = Y^{LR} - (Y^{LR} - Y^{SR}) * \epsilon^t$$

Where $\epsilon = (1 - p)^{1/T}$. This function allowed adjustment to be limited in the first year and slowly ramp up across housing cycles. The authors adjusted the parameters to derive an upper bound, midpoint, and lower bound. For the upper bound, parameters were $p = 0.95$ and $T = 5$, implying that the supply reaches 95 percent of the long-run convergence five years after the policy is implemented. The midpoint assumes $p = 0.85$ and $T = 8$, implying housing supply responses reach 85 percent of the long-run equilibrium after eight years. The lower bound is based on $p = 0.6$ and $T = 10$, implying that after 10 years, the housing supply response is roughly at 60 percent of the authors' long-run estimates.

Based on local elasticities and the authors' imputed share of land, the analysis estimates that expensing multifamily residential structures, in combination with the refundable credit option, is most likely to produce 892,000 additional units by 2036. This also reflects an assumed increase in the baseline number of units created over time to reflect stronger demand from population growth. The model predicts that policy creates an additional 44,000 units in 2027. Estimates of homes created by year are displayed in Figure A3, below.

TABLE A3
Yearly new homes created from multifamily housing expensing proposals, 2027–2036

	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	Total
Full expensing, with \$15,000 credit option	44,000	59,000	71,000	81,000	90,000	98,000	104,000	110,000	116,000	120,000	892,000
\$150,000 expensing per unit, with \$15,000 credit option	37,000	50,000	60,000	69,000	76,000	83,000	88,000	93,000	98,000	102,000	755,000
\$250,000 expensing per unit, with \$15,000 credit option	43,000	57,000	70,000	80,000	88,000	96,000	102,000	108,000	114,000	118,000	876,000
50% expensing	19,000	26,000	31,000	36,000	40,000	43,000	46,000	48,000	51,000	53,000	392,000
15-year accelerated Modified Accelerated Cost Recovery System depreciation	18,000	25,000	30,000	34,000	38,000	41,000	44,000	46,000	49,000	51,000	375,000

Source: Authors' calculations, central estimate. See methodology.
Table: Center for American Progress