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Summary and Findings: Reducing the Burden: Increasing Housing Supply to Lower Housing Costs

Everyone needs a home—but in the current housing market, many Tennesseans might never be able to afford one. Like much of the country, Tennessee has seen housing and rental prices soar in the last several years, but the problem manifests differently in different parts of the state. In some cases, Tennesseans may be unable to afford a home located close to family or their workplace, while in others, homeowners and renters alike are under financial strain just to keep the homes they already have. In yet other communities where more homes may be available and prices generally lower, the housing stock might be older with many homes in need of expensive renovations. In fact, the median sales price of all homes in Tennessee as of 2022 reached $325,000, an increase of 44% since 2019. Those elevated prices have increasingly moved homeownership out of reach for many, including key members of the workforce. In 86 of Tennessee's 95 counties, the median-priced home costs more than three times the median salary of a local teacher, and in 15 counties it is more than six times as much. As of 2022, 17.9% of Tennessee homeowners were rated as cost-burdened—that is, paying more than 30% of their incomes towards housing—while 43.4% of renters were.

A lack of affordable housing can have far-reaching effects on the state's workforce and larger economy, on how cities and counties grow—including demands placed on their infrastructure—on property values and property taxes, and even on community concerns like public health and homelessness. In light of this, House Joint Resolution 139 by Representative Sparks in 2023 asked the Commission to study housing affordability and how it might be affected by impact fees (see appendix A); after discussion with the sponsor, stakeholders, Commission members, and legislative leadership, the scope of the study was broadened to consider other factors beyond impact fees. The good news is that while the problem of housing is extremely complex and multifaceted, both the state and local governments already have many policy tools at their disposal to address it, with the potential for the state to assist local governments in implementing selected reforms.

Impact fees are used by some local governments to manage the costs of growth and have a limited effect on housing affordability.

Wherever there is new development, whether it is a single house or an entirely new neighborhood, it is likely to add to a community's need for infrastructure and local services, even if the increases are incremental. Eventually, to accommodate that growth, a community may need to build roads, lay down sewer lines, build additional schools, hire new teachers, expand the capacity of its emergency services like police and fire departments, and more. Building and maintaining this infrastructure and providing these services requires funding, for which there are two main local revenue options: either a fee or tax that is levied on newly constructed homes—which includes what are known as impact fees and development taxes, among others—or property taxes, which, directly or indirectly, are paid by all members of the community. A local option sales tax is another possible source of funds, though many jurisdictions are already at the maximum 2.75% rate.

There is debate about which approach to financing growth is more equitable. Some stakeholders, including homebuilders and realtors, have argued that impact fees and related taxes are unfair to those who buy new homes; others argue that those who generate the need for new infrastructure should pay for it, rather than asking other residents to shoulder the cost through higher property taxes or sales taxes. State law requires that any impact fees local governments collect be spent only on infrastructure needs rising from the development they came from.[1] There are many dimensions to this debate, and different communities may prefer one option or the other depending on their local circumstances. The question of how a community should pay for the costs of growth, however, is a separate one from whether and how impact fees affect housing affordability.

Only a few local governments in Tennessee have impact fees or development taxes, or even the authority to levy them (see table 1). Where they do exist, they will add to the baseline cost of any new housing that is built—although they also add to property value. The total cost of housing is determined by a complicated web of factors in which impact fees and development taxes are only one element, and not necessarily a very large one. In a recent study based on survey responses from its members, the National Association of Home Builders (NAHB) estimated that just under a quarter of the cost of a home could be attributed to government regulations of some kind. These estimates, however, are drawn from national data, and Tennessee-specific data are not available. The study also acknowledged that the regulations it examined may serve important purposes and did not attempt to judge what costs may be excessive. But more to the point, the NAHB data encompassed a number of regulations, not just impact fees, and no one regulatory factor alone accounted for more than a few percentage points of the cost of a house.

In the case of Tennessee, residential impact fees and development taxes are levied at different rates depending on the location—either at a rate per square foot, or as a flat fee

[1] The adequate facilities tax—a type of development tax—that some counties are authorized to levy under the County Powers Relief Act must be earmarked for capital expenditures related to education, such as constructing schools (Tennessee Code Annotated 67-4-2911).

(see appendix B)—but with a development tax at a rate of $1 per square foot, for example, a 2,500 square foot home would naturally yield a $2,500 tax. In the current housing market, that would be less than 1% of the cost of a median-priced new home in the state.

Thus, while impact fees do add to housing costs, they are far from being the largest or most influential factor affecting housing affordability in the state today. To understand the root causes of Tennessee's housing affordability problems and what can be done to most effectively address them, it is necessary to take a broader view.

Table 1. Local Government Impact Fees and Development Taxes in Tennessee, Fiscal Year 2021-22

County or City	Revenue
Impact Fees	
Macon	$ 968,873
Maury	-
Spring Hill	3,181,985
Robertson	-
White House	495,705
Portland	105,590
Rutherford	-
La Vergne	338,666
Murfreesboro*	-
Smyrna	2,696,315
Williamson	-
Brentwood	549,607
Franklin	12,157,190
Nolensville	-
Wilson	-
Lebanon	2,953,338
Mt. Juliet	991,268
Total	**$ 20,493,931**
Development Taxes**	
Bedford	$ 781,039
Cannon	92,338
Cheatham	1,133,698
Kingston Springs	10,919
Pegram	6,749
Dickson	1,228,671
Fayette	928,587
Hickman	294,480

County or City	Revenue
Jefferson	1,520,746
Loudon	3,308,441
Marshall	886,604
Maury	3,733,279
Columbia	417,740
Spring Hill	1,664,428
Montgomery	2,983,940
Sumner	3,440,718
Robertson	2,485,980
Rutherford	5,484,390
Trousdale	162,050
Williamson	22,761,451
Williamson	5,323,212
Brentwood	528,221
Fairview	343,542
Franklin	3,669,629
Nolensville	1,140,117
Wilson	16,936,412
Total	**$ 81,267,381**
Counties	**$ 57,518,497**
Cities	**31,251,009**
Total	**$ 88,769,506**

*Murfreesboro's impact fee will be implemented in fiscal year 2023-24.

**Development taxes may carry various other names, such as facilities taxes.

Source: Commission staff review of Tennessee state law; Tennessee Comptroller of the Treasury; and correspondence with staff of cities and counties.

Housing affordability hinges on housing supply.

Many factors have contributed to rising housing costs nationally in the last several years, from the increasing cost of construction materials to elevated interest rates to housing being bought up for short-term rentals or by large institutional investors who can outbid ordinary homebuyers. Many of these cost-drivers, though, like interest rates, are outside the control of the state or local governments, and others may only reflect the ups and downs of the economy. But if there is one problem that stands out—and that stakeholders, state data, and the existing literature have all pointed to as being at the core of the housing affordability issue—it is that housing supply is simply insufficient to meet demand.

Like most other things that people buy and sell, housing is subject to supply and demand. Whether because of the disruptions of the pandemic years, the prolonged slowdown in home construction that followed the Great Recession, or even deeper problems that may trace back to changes in land use policy decades ago, the supply of homes has not kept up with demand. There are various estimates for how many more housing units are needed to catch up. One national housing research group, Up For Growth, estimated Tennessee needed 22,000 additional housing units as of 2019. The next year, though, that number had more than doubled to 56,000. Other groups estimate comparable numbers just for individual cities in the state, like an estimate by Zillow that Nashville alone needed 35,000 housing units as of 2019. But in any case, there is general agreement that the state's housing supply falls short. Meanwhile, demand for housing continues to grow along with the state's rising population, which surged by more than 125,000 people from 2020 to 2022. And when there are more people seeking to buy a limited supply of homes, competition will drive prices up—and out of reach for many.

According to a Commission staff analysis of 20 Tennessee counties for which complete data were available from 2011 to 2022, per capita income had the strongest effect on median home sale prices. According to the analysis, a 1% increase in per capita income was associated with a 1.3% increase in median home sale prices—which is to be expected, as those with more financial means begin to bid up home prices. A comparison of 2021 and 2022 to the previous decade indicates that the effect may be strengthening. In contrast, increasing housing supply at a faster rate than population growth was associated with lower home sale prices, all else being equal, with a 1% increase in housing units per capita associated with a 0.4% decrease in median home sale prices.

Increasing the supply of housing, even at higher price levels, can help improve affordability for all.

In discussions about housing affordability, there are often questions about where to focus policy efforts. Some policy measures are targeted directly at subsidizing housing that is affordable for those making something less than the median income in an area, while other measures may be designed more broadly to increase the supply of housing for a wider range of incomes. Research suggests that both approaches have their place. As one housing specialist described it, housing markets without enough supply can behave like a game of musical chairs: those with the most means will quickly grab what's available, leaving others with nowhere to go. Or to put it another way, when there is not enough housing supply, those with higher incomes will buy up homes that otherwise might go to those with medium incomes, who will in turn take the homes that might instead go to those with lower incomes, creating a ripple effect that pushes would-be homebuyers down the housing market and then out of it altogether. Conversely, when there are enough homes at different price points, those in higher income brackets will turn elsewhere, relieving some of the pressure for those with lower incomes. Research on real-world housing markets has concluded that this does work in practice: increasing the supply of unsubsidized or "market-rate" homes for those at medium and higher income levels does at least stem overall price growth and alleviate pressure on the housing market at the lower end, although it is not necessarily enough on its own to bring home prices back down to levels that everyone can afford. Therefore, using a dual approach of supporting both subsidized housing and market-rate housing at the same time, rather than either alone, may be most effective.

The state could offer some additional tools to help local governments increase their housing supply.

One basic factor limiting housing supply is the supply of land—to add to the number of homes, there has to be somewhere to put them. While the overall amount of land in a county is fixed, there are a few tools that the state could provide local governments to help them make more land available for housing, or secure existing housing stock that is already affordable, while continuing to protect agricultural, natural, and recreational land. As the Commission found previously in its 2012 report *Dealing with Blight: Strategies for Tennessee's Communities*, "Land bank corporations can be used as a legal and financial mechanism to return vacant, abandoned, and tax-foreclosed properties to productive use through rehabilitation, demolition, or redevelopment." One such productive use, of course, is housing, and land banks in some other states have a special focus on converting blighted property into affordable housing. Land banks may be all the more useful for some communities in Tennessee where the leading housing affordability issue is not necessarily the high cost of new homes, but an excess of aging properties in disrepair. Under current state law, however, only a handful of cities and counties in Tennessee have been granted the authority to establish land banks, and only four currently exist. Therefore, to assist local governments with blight and help them increase the land available for housing, **the Commission recommends that the General Assembly authorize all local governments to establish land banks.**

The state and local governments may also already possess property that could be used for housing. As explored in the 2019 Commission report *Improving Management of Government-Owned Real Property in Tennessee*, governments sometimes have real estate that is no longer needed and may be sold off as surplus property, some of which might be usable for housing development. Connecting potential developers with the property could help make that a reality. The Tennessee Department of General Services (DGS) currently collects information on state-owned real property, but in line with the Commission's 2019 report, greater integration and coordination among information sources would be beneficial, and local governments could reach a wider audience by having property information listed on DGS's website. **As in 2019, the Commission recommends that the state help local governments reach a wider audience of potential buyers for their surplus real properties—including tax-delinquent properties—by allowing those local governments that have their own surplus-property websites to post links to their websites on the state website where the state advertises its surplus real property.**

Additionally, as found in the Commission's 2019 report on government-owned real property, excess or underused public land can be put to better use, but to do so the state and local governments need detailed information on what land is available. Several stakeholders who spoke with staff said they had or were interested in conducting public land inventories for the sake of housing, and state and local governments could evaluate what current property uses of their own land might be compatible with residential development. The city of Atlanta, for example, has undertaken a program of redeveloping vacant and underutilized city property to add housing. By mid-2023, 35 projects were in the works, including adding 1,300 housing units to an underused civic center site.

In addition to subsidizing the construction of new affordable housing, communities can also benefit from the preservation of existing affordable housing. For example, in Charlotte, North Carolina, the preservation of existing units is one of the uses of the city's housing trust fund, which provides funding to developers to subsidize the cost of acquiring and rehabilitating properties for affordable housing. The city's financial support, as described in a profile by *Fast Company*, helps developers purchase "housing complexes that are priced for the lower end of the renter spectrum, and instead of raising the rents as other buyers likely would, the new owners commit to keeping prices affordable for 20 years." Because Charlotte's housing trust fund relies on general obligation bonds, local governments in Tennessee cannot currently copy its exact funding structure. Under the Tennessee State Constitution and state law, cities and counties are generally limited in their authority to provide direct funding to private enterprises—including those developing affordable housing.

Local governments already possess—and should retain—land use authority, but the state could provide guidance and incentives for zoning reforms to increase the supply of housing.

Zoning, or the authority to organize and regulate how land is used in a community, is one power that local governments in Tennessee already have. State law does preempt local governments on a few matters, such as prohibiting requirements that new developments include a certain portion of affordable units (i.e., inclusionary zoning) or regulations of rental pricing in private housing, but otherwise local governments have broad authority over their own land use. Zoning does serve many vital purposes, including separating dangerous or noxious land uses from where people live and ensuring adequate infrastructure is available where people need it. Yet as both research and local stakeholders have found, certain types of zoning can also hinder housing supply, in turn leading to affordability problems. These include regulations that enforce low housing density, such as zoning residential lots for no more than one housing unit or requiring residential lots to be a minimum size. Strict separation of residential and commercial zones, instead of allowing mixed-use development where homes can be built next to or above offices and shops, can also limit the amount of space where housing can be built. Other regulations, like a required minimum number of parking spaces per housing unit, can directly add to the construction cost of a home. And many stakeholders argue that permitting processes can create delays to construction that also add to overall costs.

A slate of reforms has been endorsed by housing advocates, researchers, and other states to help increase housing supply and alleviate housing affordability issues. These include reducing lot size or parking requirements, streamlining permitting processes, allowing mixed-use zoning, and revising single-family zoning to allow for what is called missing middle housing—that is, a range of housing types that allows for a kind of modest density somewhere between the low density of detached single-family homes and the high density of apartment buildings. Missing middle housing includes duplexes, triplexes, townhouses, cottage courts, accessory dwelling units that sit alongside single-family homes, and more. These reforms, researchers and stakeholders agree, have the potential to facilitate housing development by allowing more homes to be built within a fixed area and make more efficient use of available land.

Zoning reform may also come with other benefits. For instance, building more housing units at a greater density can achieve efficiencies for development and lower costs. Stakeholders have noted that when lot sizes for single-family homes are required to be large, it is only cost-effective to build larger and more expensive houses, while the American Enterprise Institute has observed that home prices in Tennessee cities tend to be lower where housing is built more densely. Zoning reforms that allow missing middle housing can increase the variety of housing options to satisfy different preferences and needs among residents. Building housing at greater density can also lower household transportation costs by putting residents closer to workplaces, schools, and shops while helping to preserve farmland by reducing sprawl. Moreover, greater housing density is associated with a lower per capita cost of infrastructure and services over the longer term.

While zoning reform can have substantial affordability benefits and is squarely within the power of local governments, many communities are reluctant to enact it. Local officials might be hesitant to adopt unfamiliar zoning changes, and some residents may raise concerns that greater density could change the aesthetic character of their community, lead to increased traffic and noise, lessen privacy, or—because property tax assessments are based on a property's highest and best use—cause increased property tax bills for existing residents even when no change has been made to their property. Local officials also rightly point out that new development comes with upfront costs and that financing those costs can create challenges, with the current avenues for financing largely limited to, again, either increasing the property tax or levying development taxes, impact fees, or local option sales taxes, all of which may face opposition.

In the last few years, several states faced with urgent housing problems—such as California, Oregon, Washington, and Maine, among others—have begun to preempt local governments by imposing zoning reform through statewide mandates. Montana followed suit last year, although it presented local governments with a list of reforms and required them to implement a minimum of five reforms from the list, leaving some local discretion but still resulting in a degree of preemption.

State approaches that rely on preemption have important drawbacks. In particular, the effectiveness of individual zoning reforms at improving housing supply and affordability depends on local conditions. Given the wide variation among communities across Tennessee and their housing needs, current levels of affordability, existing land use and availability, and many other factors, there is no one-size-fits-all solution. Proponents of zoning reform concede that trying to impose it in broad strokes may not be viable. Instead, what may be most effective are solutions that are locally tailored.

Tennessee could, like Montana, provide local governments with a menu of zoning reform options, out of which local governments could then adopt the reforms that make the most sense for their communities (see exhibit 1). But unlike Montana, rather than requiring local governments to adopt reforms from the list, Tennessee could incentivize adoption. One way to do so would be to provide local governments that adopt five or more of the reform options with a portion of the existing realty transfer or mortgage taxes—jointly referred to as recordation taxes—collected within their county. The allocations could be distributed among the county government and municipal governments within the county in proportion to their respective populations, on the basis of weighted full time equivalent average daily attendance—as is used for school funding—or through some other method. Table 2 provides example distribution methods that assume 20% of recordation taxes are shared with local governments. That table also includes scenarios for two other potential uses of recordation taxes that are discussed below.

A voluntary, options- and incentive-based approach could encourage local governments to implement beneficial land use changes for housing without unduly limiting their discretion over land use, while also providing local governments with additional revenue streams to help offset some of the costs of growth. Thus, **the Commission recommends that the state offer an incentive for local governments to adopt zoning reforms that support housing development—such as allowing mixed-use development, reducing lot size requirements, or allowing types of missing middle housing—by sharing some of the state's realty transfer tax or mortgage tax revenue with local governments whose land use regulations meet a minimum number of criteria out of a menu of optional measures (see exhibit 1). The portion of realty transfer tax or mortgage tax revenue used could be phased in as state revenue growth allows.**

Zoning reform, however, does have potential drawbacks. Whenever land use changes lead to higher property values, it can mean higher property tax bills that may burden existing residents, even leading to them being displaced by more affluent newcomers—or what is often referred to as gentrification. **The Commission recommends that the effects of zoning reform on existing residents be mitigated by assessing property based on its zoning prior to reform, similar to the way Tennessee's current Greenbelt law bases property tax assessment on the land's actual use rather than its highest and best use. If developers were to later take advantage of the reformed zoning to add more housing and improvements to a property, a rollback provision could ensure that some of the amount of taxes saved would be recaptured by local governments.**

The state supports affordable housing via a number of programs.

Stakeholders agree that, because the basic costs to construct a home generally exceed what lower-income working families can afford, the only way to make new construction affordable is to subsidize it; without this, even nonprofits like Habitat for Humanity that specialize in affordable housing might have to operate at a loss.

Tennessee already has a number of programs in place that subsidize and support affordable housing at both the state and local level. The Tennessee Housing Development Agency (THDA), for example, administers federal funding for a suite of programs that aid renters, homebuyers, and homeowners, with 6,889 affordable rental units across the state being supported by federal low-income housing tax credits (LIHTC) last year, while 2,195 first-time homeowners benefited from THDA's Great Choice home loan program. Many local governments have public housing agencies that act in partnership with THDA to support affordable rental housing, homeownership, housing rehabilitations and repairs, and more. These local agencies largely operate using the funds that THDA administers, although some also receive local funding, such as the Barnes Fund in Nashville, which in fiscal year 2024 was allocated $20.5 million and, as of last year, has led to the development of 3,310 affordable housing units since it started in 2013.

THDA has its own housing trust fund, which allocated $8.2 million in 2022 to various housing programs for low-income Tennesseans who are elderly or have special needs. The trust fund receives no state appropriations; instead, it is funded by revenues from THDA's mortgage loan program, and there may be potential for augmenting the fund, or another one like it. Oklahoma recently established a new trust fund program with an appropriation of $215 million, most of which will be used to make zero-interest loans to builders to produce affordable homes and rental units. Staff with Oklahoma's state housing agency said their goal is for the revolving loans from the fund to be sustained indefinitely and lead to at least several thousand new housing units. Such a loan program can work in parallel with tax credit programs for affordable housing, and because the loans are often made and then repaid on timeframes of a year or less, they can yield relatively quick results.

Therefore, **the Commission recommends** a**nother possible use of the realty transfer and mortgage tax revenues would be to fund either the existing housing trust fund or a new trust fund from which THDA might make low- or zero-interest construction loans for affordable housing.** This could be achieved with either annual appropriations from the General Assembly, or a one-time appropriation, the interest from which could be used to support affordable housing programs indefinitely. An example assuming 20% of the taxes are earmarked for this use annually is included in Table 2.

Reserve funding may also help to stabilize construction employment in the face of economic downturns.

As witnessed during both the Great Recession and the pandemic, the construction industry can be vulnerable to volatile swings depending on what is happening in the economy at large, which, among other things, can have lingering effects on housing supply and affordability. Infrastructure projects that occur during recessions, though, provide much needed jobs when unemployment rates are high, possibly speeding up economic recovery. A reserve fund could be established for this purpose. **To soften the effects of downturns and forestall the loss of construction employment, the Commission recommends that funding from the realty transfer and mortgage taxes could also be reserved by the state for infrastructure in ways that smooth out the ups and downs of the business cycle.** An example assuming 5% of the taxes are earmarked for this use is included in Table 2.

Table 2. Example Distribution of Recordation Tax Revenue, Fiscal Year 2021-22

	Unearmarked Realty Transfer Tax	Mortgage Tax Revenue	Total
Total Revenue, Fiscal Year 2021-22	$ 282,015,535	$ 147,835,371	$ 429,850,907
20% for Affordability Reform Incentives	$ 56,403,107	$ 29,567,074	$ 85,970,181
20% for THDA Trust Fund	$ 56,403,107	$ 29,567,074	$ 85,970,181
5% for Off-cycle Reserve Fund	$ 14,100,777	$ 14,783,537	$ 28,884,314

Source: Commission staff analysis of Tennessee Department of Revenue data.

Exhibit 1. Sample Zoning Reforms to Improve Housing Supply

Land Use Measure	Potential Benefits	Additional Considerations and Examples
Allow duplexes on any lots zoned for single-family homes.	Increases the number of potential housing units in an area.	Montana, Oregon, Washington, et al.
Allow up to quadplexes, townhouses, and cottage courts on any lots zoned for single-family homes.	Increases the number of potential housing units in an area and offers more choice in housing types.	Montana, Oregon, Washington, et al.
Zone for at least a certain minimum housing density on main streets and transit corridors and near workplaces, business districts, colleges, and other population centers.	This can increase housing in proximity to where it may be needed most, and where infrastructure is already in place to support it.	Standards may need to be set for the minimum required density, how activity or population centers are to be identified, and how far from the center the zoning applies. Massachusetts's Chapter 358, Acts of 2020, for example, requires special residential zones near transit centers to allow for at least 15 housing units per acre and be within one-half mile of a transit station. Other states include Montana, Maryland, and Utah.
Allow multifamily housing by right anywhere zoned for offices, retail, or commercial—that is, allow mixed-use development.	Mixed-use development increases the amount of land where housing can be built while also putting that housing closer to amenities.	Montana; Florida, with some conditions
Authorize faith institutions, universities, and healthcare facilities to build multifamily housing by right on their existing land, provided there is sufficient sewer access.	Some institutions own underutilized land and may be interested in supporting affordable housing; authorizing them to build housing improves land availability.	California preempted local governments to allow faith institutions and universities to develop housing in 2023.

Land Use Measure	Potential Benefits	Additional Considerations and Examples
Review and reduce requirements on aesthetics, bulk standards, FAR (floor area ratio), etc. that either reduce density or inhibit development.	Various other zoning regulations and building requirements can reduce the amount of housing that can be built on a lot of a given size, making the housing that is built more expensive. Judiciously reducing such requirements can allow more housing on a given parcel of land.	Montana
Reduce or eliminate minimum lot sizes, provided there is sufficient sewer access.	Smaller lot sizes are associated with lower housing costs.	Reducing lot sizes may not be feasible in areas without sewer access.
Reduce or eliminate setback requirements.	Reducing setback requirements makes building housing on smaller lots more feasible.	Montana
Reduce or eliminate minimum parking requirements to one parking space per unit or less.	Required parking can take up space and add to construction costs for a housing unit; reducing the number of parking spaces required of housing developments can thus both lower costs and leave more room for housing.	Montana; in Tennessee, the City of Jackson has eliminated parking requirements, while Nashville and Chattanooga have limited them in certain districts.
Allow at least one accessory dwelling unit on single-family lots with an existing single-family home.	Like duplexes, accessory dwelling units can increase the number of potential housing units in an area, while their smaller size may be better suited to the needs of some.	Vermont has preempted local governments from placing any requirements on accessory dwelling units that exceed those for single-family homes.
Allow for single-room occupancy developments.	Single-room occupancy housing provides another affordable option for individuals with limited incomes, including wage employees.	Montana
Provide zoning that allows or encourages development of tiny houses as defined in the International Residential Code.	Tiny homes offer the possibility of housing at a lower overall cost and may be better suited to the needs of smaller households.	Montana

Land Use Measure	Potential Benefits	Additional Considerations and Examples
Make available pre-approved plans (e.g., in a pattern book), including ones for missing middle homes.	Pre-approved plans can help simplify and expedite the permitting process.	The City of Memphis has explored the use of pre-approved plans.
Make available a pre-approved list of third-party professionals that are authorized to review permit applications or conduct inspections.	Third-party review can expedite permit approvals if a local government faces a backlog of planning applications.	Texas, Florida

Source: Commission staff analysis.

Analysis: Reducing the Burden: Increasing Housing Supply to Lower Housing Costs

Housing affordability can be measured in different ways and may mean different things depending on the exact context, but stakeholders who spoke with Commission staff nonetheless agreed that a general lack of affordability has become a widespread issue in the state. Today, a family earning the median income may be unable to buy a typically priced home in many parts of the state, potentially driving them away from some communities. Elsewhere, many other households may be putting half of their incomes or more to either mortgages or rents. In still other cases, residents in some communities are faced with aging homes in dire need of repairs that they cannot afford.

In light of this, House Joint Resolution 139 by Representative Sparks in 2023 asked the Commission to study housing affordability and how it might be affected by impact fees (see appendix A); after discussion with the sponsor, stakeholders, Commission members, and legislative leadership, the scope of the study was broadened to consider other factors beyond impact fees. The resolution was approved in the House, and the Commission voted to take up the study at its meeting in June of 2023.

Housing affordability matters not just for quality of life but also for public health, economic productivity, and workforce development.

Each individual and family is naturally concerned with their own housing; to have a place one can call home is, for most, an indispensable part of their personal welfare and quality of life. Thus, when the housing market puts the possibility of a home out of reach, or makes families' housing situations precarious, it can become an overriding concern on a personal level. But even for those who may already be securely settled and own their own home, the conditions of housing and affordability in the community outside their front door can still matter, because a lack of affordable housing can have a host of negative effects on their community at large and on the local economy.

Economic Productivity and the Workforce

Several studies have found correlations between housing affordability and economic productivity. One study examining the impacts of housing costs on GDP noted that in areas where households spend over 30% of their income on housing costs, local consumptive expenditures may decrease.[2] Assuming that housing has been constrained in cities like San Francisco, San Jose, and New York for decades (thereby driving up house prices and in turn driving away workers from those cities), one study found that if

[2] Anthony 2022.

housing had been unconstrained in just those three cities, annual US GDP growth would have been 36% higher.[3]

A lack of affordable housing may also impact labor mobility, hindering workers from relocating to higher-paying jobs in cities where housing may be more expensive. According to one study, "Affordability of housing prices may be one of the most important determinants for the [job and housing] imbalance, and thus this imbalanced condition may force the middle and low-income workers to undertake longer commutes to find housing within their budgets."[4] One study found that 58% of larger companies that lack nearby affordable housing options report that employees claim long commute times as their reason for leaving.[5] According to the Tennessee Business Leaders Survey administered by the Boyd Center for Business and Economic Research at the University of Tennessee, 28% of respondents cited housing availability as an issue, while 46.5% cited the cost of housing as a factor in their business's ability to attract and retain workers.[6] And as several Tennessee stakeholders said, housing affects their local communities' labor force,[7] with the inability to find stable affordable housing also making finding and maintaining employment difficult.

Opportunity Costs to the Wider Economy

Housing can have various complex effects on consumption, self-employment, entrepreneurship, and other investments. Although home price growth can be beneficial for homeowners—there are indications it is associated with more small business formation, seemingly because entrepreneurs may make use of home equity loans to start their businesses,[8] and with older workers retiring earlier from the workforce[9]—it can also compel homeowners, buyers, and renters to divert more of their incomes towards

[3] Hsieh and Moretti 2019.

[4] Sultana 2002.

[5] Shroyer and Gaitan 2019.

[6] Haslam College of Business 2023.

[7] Interviews with Ken Moore, mayor, and Vernon Gerth, assistant city administrator, City of Franklin, August 1, 2023; Larry Waters, mayor, Sevier County, August 2, 2023; Angela Hubbard, director of housing division, Gregory Claxton, planner, Todd Okolichany, deputy executive planning director, and Lucy Kempf, executive director, Metro Nashville Planning Department, August 23, 2023; and Ralph Perrey, executive director, Tennessee Housing Development Agency, speaking at the Commission meeting on September 28, 2023.

[8] Henley 2005; and Kerr, Kerr, and Nanda 2015.

[9] Favilukis and Li 2023.

housing and away from other goods and services.[10] Housing is often the single largest expense for many households, and having to meet that cost—to pay a mortgage or rent on time—can create dilemmas for spending on other essentials.[11] One study, for example, found that food insecurity rose along with annual rent increases.[12] The cumulative effects can be large, as by one estimate, the high housing burden in New York City dampened local consumer spending by $7 billion as of 2015.[13] At the same time, investment in housing can have a positive impact on the state and local economies: the Tennessee Housing Development Agency (THDA) estimates its several programs' economic impact in 2022 ranged from $115,077 for Carroll County to $902,059,934 for Davidson County, averaging out at $23,727,684.[14]

Health and Education

Housing is considered a social driver of health as it influences physical and mental health outcomes as well as social wellbeing. In 2002 the National Institutes of Health found that 35% of low-income housing had lead-based paint hazards, compared with 19% of housing not considered low-income.[15] Poor housing conditions can also lend themselves to adverse health effects, like respiratory illnesses.[16] Housing insecurity including concerns about affordability can lead to chronic stress and anxiety, which can harm both physical and mental health.[17]

There are several consequences of the lack of affordable housing on the educational impacts of children including the correlation between affordable housing and poverty. Research has shown an association between school performance and access to stable, affordable housing. Affordable housing may provide stability to families' living situations, which may reduce the frequency of unwanted moves and interruptions in children's educational instruction, such as excessive absenteeism and disruption of peer

[10] Choi, Goodman, and Bai 2018.

[11] Schanzenbach et al. 2016.

[12] Fletcher, Andreyeva, and Busch 2009.

[13] Global Cities Business Alliance 2016.

[14] Tennessee Housing Development Agency 2023a.

[15] Jacobs et al. 2002.

[16] Swope and Hernandez 2019.

[17] Ibid.

networks.[18] Additionally, overcrowding because of a lack of affordable housing has been linked to lower math and reading scores, fewer years of school, and a decreased likelihood of graduating from high school.[19]

Homelessness

When housing is unaffordable, it can contribute directly to homelessness. Research shows that homelessness climbs with the share of income that people spend on rent, and then rises even faster at the 22% and 32% thresholds.[20] And chronic homelessness, beyond the many harms to the individual, is also costly to a community, potentially costing tens of thousands of dollars to local governments per year as homeless individuals are detained in jails or must seek help at emergency rooms—so much so, in fact, that it may often actually save local governments to pay for supportive housing instead.[21] Patterns of homelessness have also shifted in recent years, and now more frequently affects older individuals aged 55 and up.[22]

According to the Annual Homelessness Assessment Report (AHAR) to Congress, 10,567 people in Tennessee were homeless in a single night's survey in 2022. This includes 6,133 unsheltered homeless individuals.[23] Once a family or individual loses their home, they are faced with complex challenges that can trap them in a cycle of homelessness, and accessing shelter and necessities as well as maintaining physical and mental health can make it difficult to secure employment and manage finances to find stable, affordable housing.[24] Unfortunately, the longer an individual is homeless, the more difficult it becomes to break the cycle. Homelessness also affects youth, and homeless youth are at higher risk for poor physical, mental, and sexual health outcomes and experience greater barriers to care.[25]

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[18] Brennan 2011.

[19] Ibid.

[20] Zillow Research 2018; and Glynn, Byrne, and Culhane 2021.

[21] National Alliance to End Homelessness 2017; and Culhane, Metraux, and Hadley 2002.

[22] Najmabadi 2023.

[23] US Department of Housing and Urban Development 2022.

[24] Abdel-Samad et al. 2020.

[25] McKinnon et al. 2023.

Housing affordability is a multifaceted issue, but by most any measure it has declined over time.

Between the second quarter of 2020, when the COVID-19 pandemic had just begun, and the last quarter of 2022, the median home price nationally shot up 49%, reaching a record high. While home prices have moderated somewhat since then, they are still more than a third greater than they were when the pandemic started.[26] But unlike in the Great Recession, many financial analysts do not expect housing prices to abate any time soon,[27] at least not for Tennessee: the real estate firm Zillow has forecasted that by the end of 2024, 24 out of 26 cities in the state are expected to continue to see home values increase at least modestly.[28]

Yet while the pandemic years have seen dramatic shifts in the housing market, housing cost inflation has outpaced general consumer inflation since at least the late 1980s (see figure 1). Rising housing costs, therefore, are not just a problem of the moment, but one that has been slowly growing for some time.

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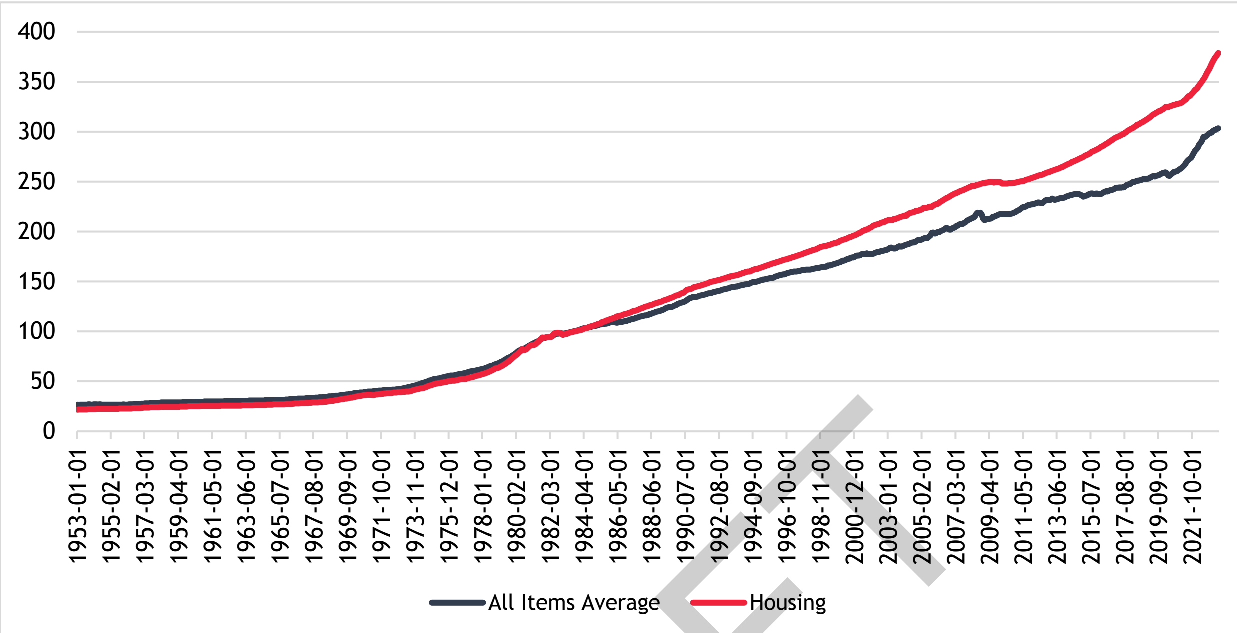
[26] Commission staff analysis of Federal Reserve Bank of St. Louis data, "Median Sales Price of Houses Sold for the United States."

[27] Karoui et al. 2023.

[28] Zillow Research 2024.

Figure 1. Inflation in Housing Costs vs. All Items over Time (1982-1984 = 100, Seasonally Adjusted)



Source: Federal Reserve Bank of St. Louis, "Consumer Price Index for All Urban Consumers: All Items in US City Average" and "Consumer Price Index for All Urban Consumers: Housing in US City Average." Figure shows data for the Urban Consumer Price Index.

Affordability, however, is something more than just the price on a home, but a question of whether someone can attain—and then maintain—stable housing. For that, there is no one definitive measure. Stakeholders debate how best to define affordability, and some prefer to speak in other terms, like attainability or accessibility, noting that what is affordable to one household may not be affordable to others.[29] Nevertheless, there are several generally agreed-upon indicators, each of which can illuminate a different aspect of housing affordability, and all of which seem to agree that affordability has deteriorated overall.

Subjectively, many seem to feel that affordability has deteriorated. As of December 2023, a record low of just 14% of people in the US believed it was a good time to buy a home.[30] Additionally, a 2021 national survey found that 49% of respondents identified the availability of affordable housing as a "major problem" in their community, up from 39%

[29] Interview with Scott Conger, mayor, Lauren Kirk, chief innovation officer, and Claire Pierson, community development coordinator, City of Jackson, August 31, 2023.

[30] Fannie Mae 2023.

just three years prior.[31] That same survey found 70% of respondents felt it was harder for young adults to buy a home than it was for earlier generations, something reflected in declining homeownership rates over time: while 45-45.4% of Baby Boomers and Gen Xers became homeowners when aged 25-34, that rate slipped to 37% for Millennials.[32]

One of the more intuitive measures for affordability is to look at the ratio of the median household income in an area to the median home price—essentially, how many years' worth of income is a house. On the national level between 1980 and 1999, that ratio hovered between 3.1 and 3.4,[33] and most real estate experts and financial advisors recommend that the cost of a home should be no more than 2.5 times, or even just 2.0 times, a household's income to be affordable.[34] By 2022, however, the median home sales price in Tennessee was $325,000 for all homes and $408,000 for new homes alone—overall, up 43.8% from 2019[35]—making the median price approximately five times the state's median income.[36]

For a closer look into what this measure looks like within Tennessee's counties, staff looked to ESRI's 2023 Housing Affordability Index (HAI) model[37] which measures affordability using an index to illustrate a typical household's ability to purchase an existing home in the area.[38] An HAI greater than 100 indicates homes are more likely to be affordable for the average household and an HAI less than 100 indicates homes are less likely to be affordable. For Tennessee as a whole, the 2023 HAI stands at 102, down

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[31] Schaeffer 2022.

[32] Choi, Zhu, and Goodman 2018.

[33] Hermann 2018.

[34] McWhinney 2022; and CNN Business 2024.

[35] Commission staff calculation based on a statewide median sales price for new and existing homes of $226,000 in 2019, based on Tennessee Housing Development Agency 2023b.

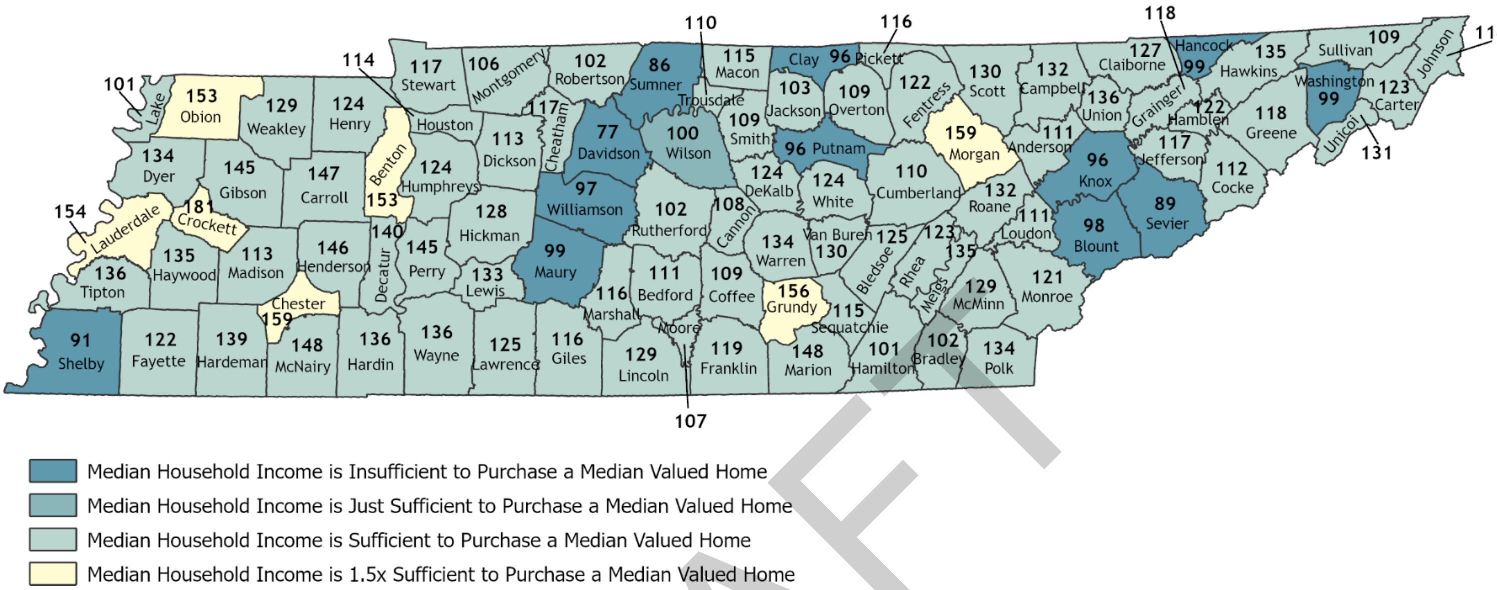
[36] Tennessee Housing Development Agency 2023c; and Commission staff calculation based on a median household income of $65,380 in the same year according to the Federal Reserve Bank of St. Louis data "Median Household Income in Tennessee."

[37] ESRI's HAI model combines the national average effective mortgage rate from the Federal Housing Finance Agency with sources reflecting trends in the current housing market to derive a current borrowing rate. A 30-year conventional fixed mortgage is assumed with a down payment of 20% of the home price. Regional property tax rates from the latest American Community Survey are applied, and the model follows the Federal Housing Administration's guidelines for debt service ratios. HAI is evaluated at the median value of household income and the median value of all owned dwellings within an area. See Esri Data Development 2023a.

[38] See Esri Data Development 2023b.

from 122 in 2022.[39] While our statewide HAI sits right on the threshold for affordability, 12 counties fall below, meaning that the median household income is not enough to purchase a median valued home in that area. See map 1.

Map 1. 2023 Housing Affordability Index for Tennessee Counties



Source: Esri 2023.

Another commonly used indicator of affordability is looking at the proportion of a household's income that it must spend on housing, with the federal Department of Housing and Urban Development rating any household spending 30% or more of its pre-tax income on housing as being cost-burdened, and 50% or greater severely cost-burdened.[40] In Tennessee, the most recent estimates suggest that 17.9% of homeowners are cost-burdened, while 43.4% of renters are.[41] And between both groups, about 13.4%, or roughly one out of every eight households in the state are severely cost-burdened.[42] While the cut-off point of 30% is seen to be somewhat arbitrary by many researchers,[43] increasing levels of cost burden in a community have been seen to predict a rise in homelessness. See map 2.

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[39] Esri Data Development 2018; and Esri 2023.

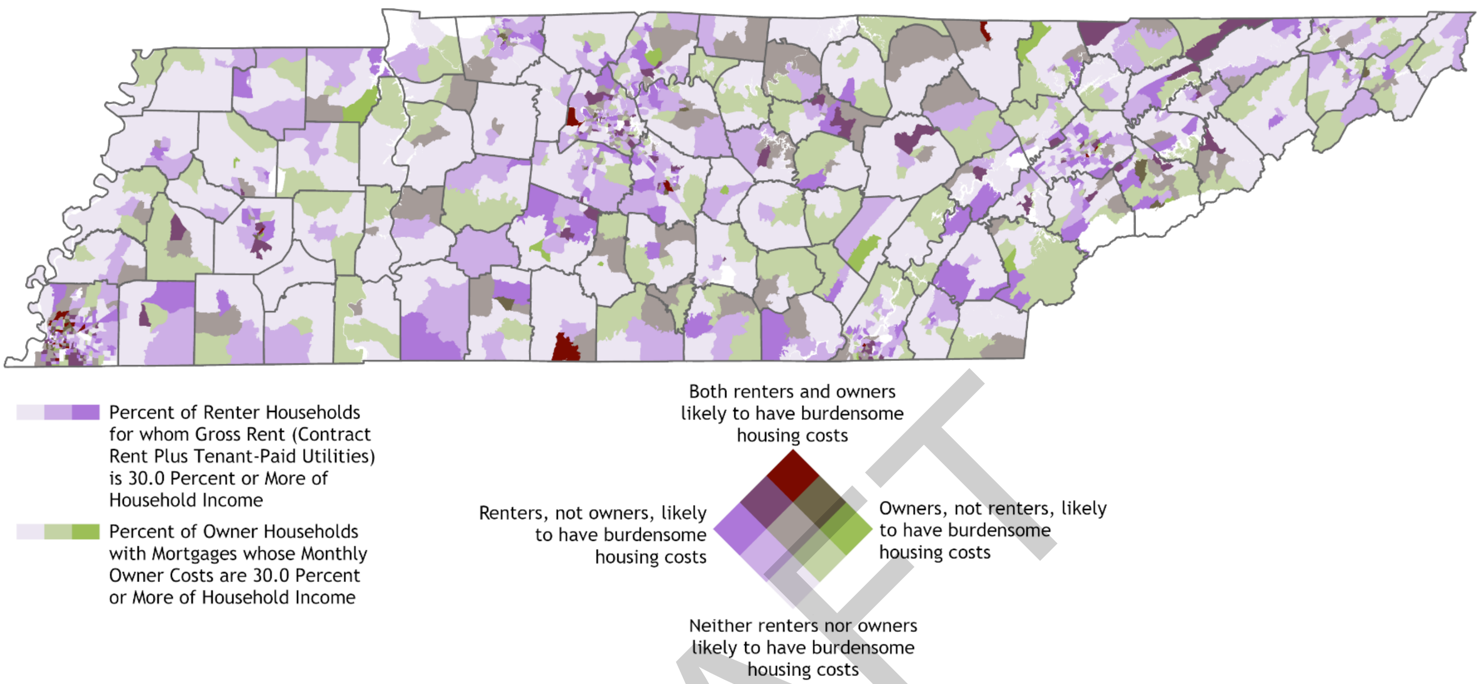
[40] US Department of Housing and Urban Development 2014.

[41] US Census 2023b.

[42] Joint Center for Housing Studies of Harvard University 2023.

[43] Interview with Arthur C. Nelson, professor emeritus of urban planning and real estate development, University of Arizona, October 17, 2023.

Map 2. Tennessee Households with Burdensome Housing Costs



Source: US Census 2022.

Housing Affordability versus Affordable Housing

To many specialists in housing, "affordable housing" specifically refers to housing that is made affordable for households at lower income levels as measured relative to an "area median income" computed by HUD. For the purposes of this report, however, affordability is considered more broadly, as stakeholders have reported affordable challenges for many groups, including more middle-income households.

When housing costs are out of sync with the spending power of households, it limits their options. Understandably, even if there might be a surplus of homes for sale in a community, it does a family little good if they are priced too far beyond their means. Another way to consider affordability is thus to look at what percentage of homes on the market are actually within reach of a household making the median income. By that measure, as of April 2023, only 23% of houses on the market nationally were within the purchasing range of a household making $75,000 (roughly the median income), whereas if the market were evenly distributed, 51% of houses would be—a total difference of 319,460 houses effectively missing just for that income group.[44] The American Enterprise

[44] Yun et al. 2023.

Institute has an analogous measure that looks at whether a typical tradesperson involved in home construction—specifically, a carpenter—earning the average salary for their job could afford even just an entry-level home in their community, and found that as of last year a carpenter in Nashville would have been able to afford just 18.7% of the entry-level homes available.[45] The problem of housing availability becomes especially acute at lower income levels; Tennessee has an estimated 217,445 extremely low-income households—that is, those making 30% of the area median income or less—and of those, 69% are severely cost-burdened; yet among this group, for every 100 households, there are just 41 affordable rental units available.[46]

Commission staff extended this concept to look at whether a teacher earning the median salary could afford the median-priced home in the county where they worked. In all but nine counties, the median-priced home costs three times the median salary of a local teacher, and in 15 counties it is more than six times as much as the median teacher salary.[47]

Unsurprisingly, the rental market has seen its own cost increases. In the first two decades of this century, median asking rent more than doubled,[48] and as of this year a Tennessee resident would on average need to make an hourly wage of at least $20.76 to pay for a "fair market rent" home without being cost-burdened, or else work at least 97 hours a week at the current minimum wage of $7.25 an hour.[49]

Determining how many people might be unhoused is notoriously difficult, and the conventional methods appear to regularly produce severe undercounts,[50] but by one estimate Tennessee had 10,567 people who could be documented as homeless and not in a shelter on a single night in 2022, although federal data for the 2021-2022 school year counted 17,512 students in Tennessee who were homeless.[51] More than these absolute counts, though, there is the speed with which homelessness has worsened: Tennessee

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[45] Pinto and Peter 2023.

[46] National Low Income Housing Coalition 2023a.

[47] Commission staff analysis of US Census Bureau American Community Survey 2021 5-year data.

[48] Desmond 2020.

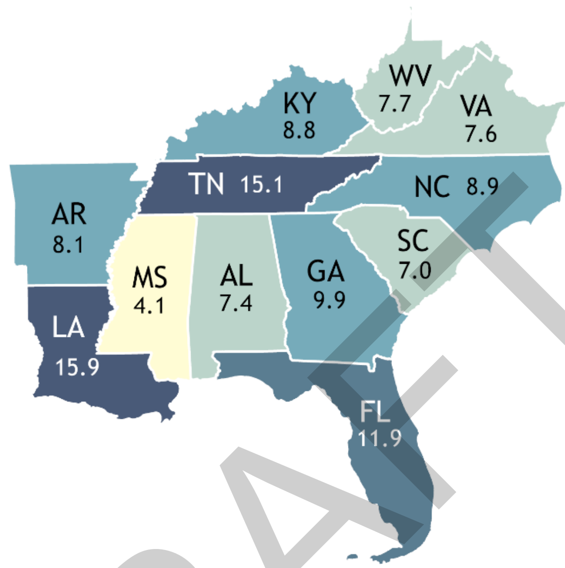
[49] National Low Income Housing Coalition 2023b. Fair market rent is defined under federal regulation (24 CFR 888.113) as the 40th percentile rent for standard quality housing within a local market.

[50] Interview with Marybeth Shinn, professor, Department of Human and Organizational Development, Vanderbilt University, July 31, 2023.

[51] National Center for Homeless Education 2023.

has seen the third fastest growth in homelessness of any state, and at an estimated 15.1 people per 10,000, the rate of homelessness in Tennessee is significantly higher than in neighboring states.[52] See map 3.

Map 3. Estimated Number of People Who Are Homeless, per 10,000 Population, in Southeastern States, 2022



Source: De Sousa et al. 2022.

While precise estimates are difficult to pin down, there is general agreement that many communities need more housing than they currently have available.

The problem of housing affordability often appears hand-in-hand with a problem of housing availability, as has been the case in recent years: for example, by the middle of 2023, as home prices hovered near historic highs, there were 39% fewer homes for sale nationally than there had been five years earlier.[53] Yet as with affordability itself, a lack of housing availability has been a long-simmering problem.

In the wake of the Great Recession, there was a sharp fall in housing construction, and thanks to the resulting years of slower production, the National Association of Home Builders estimated in 2023 that the country is suffering from a shortage of 1.5 million

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[52] De Sousa et al. 2022.

[53] Anderson 2023a.

residences.[54] That, however, is actually one of the lowest estimates. Various real estate groups have put forward housing shortage estimates of anywhere from 2.3 million to 6.5 million, partly by factoring in considerations like households "doubling up," where, for example, adult children might live with parents for lack of anywhere affordable to move to.[55] Fannie Mae, meanwhile, has estimated a shortage of 4.4 million housing units just in the 75 largest metropolitan areas alone.[56] And the National Low Income Housing Coalition goes further, estimating that the United States is short of 7.3 million affordable rental homes.[57]

This same variation applies to Tennessee itself. One housing research group estimated that, in 2019, Tennessee as a whole was short 22,000 housing units.[58] The very next year, however, that number had more than doubled to 56,000.[59] Yet other estimates have found comparable numbers just for individual cities in the state, with Zillow projecting that Nashville needs 35,000 housing units,[60] even as Nashville's Affordable Housing Task Force reported a need of nearly 54,000 by 2030 over what was available in 2019.[61] Stakeholders also estimated figures of 35,000 for Memphis and perhaps as much as 8,000 for Chattanooga.[62]

As these divergent estimates suggest, there is no one methodology for determining how many housing units a community may need to satisfy demand, and many different data points might be taken into account to try to capture nuanced questions of pent-up or induced demand and changing household demographics. Some of the more basic factors that shape housing availability, though, include:

- Vacancy rates of existing homes

54 Thompson and Pagan 2023.

55 Trapasso 2023; and Divounguy 2023.

56 Fannie Mae 2022.

57 National Low Income Housing Coalition 2023a.

58 Up For Growth 2022.

59 Up For Growth 2023.

60 Divounguy 2023.

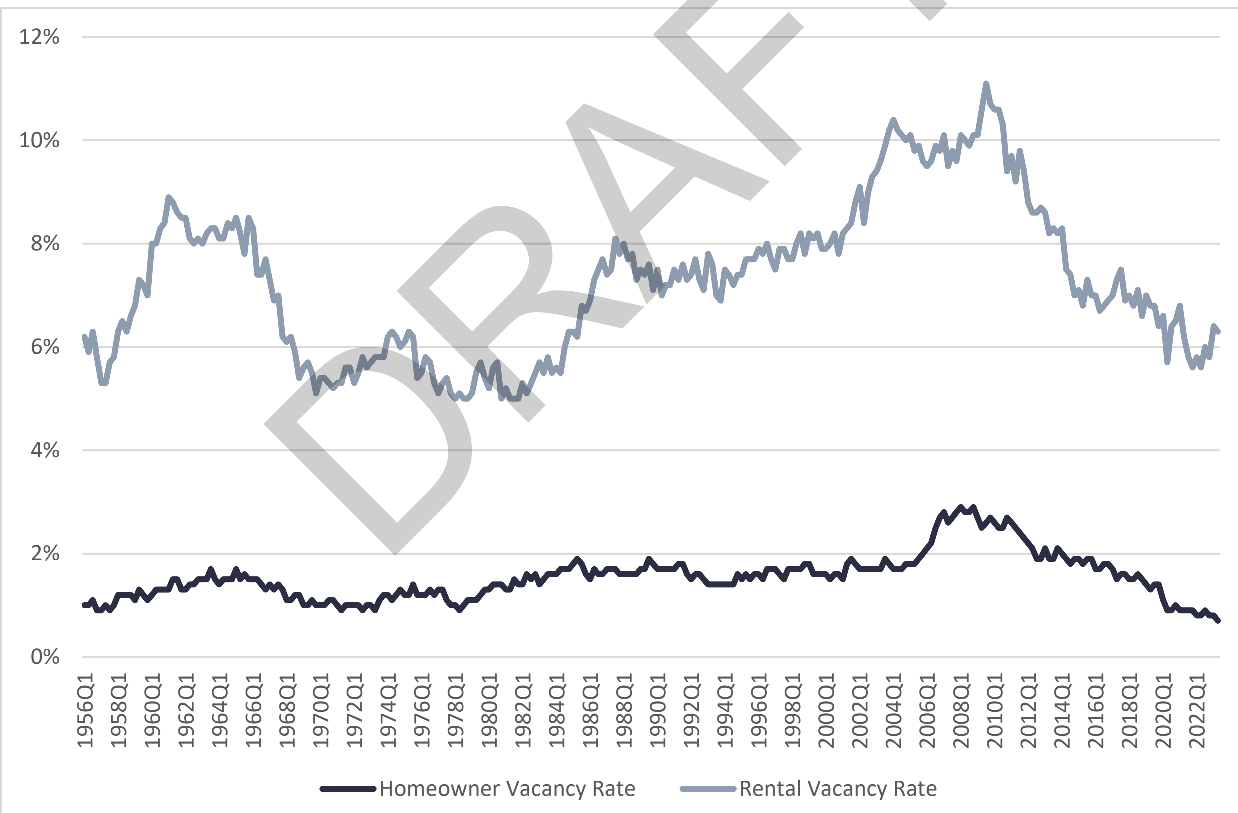
61 Nashville Affordable Housing Task Force 2021.

62 Interviews with John Zeanah, director, Memphis & Shelby County Division of Planning & Development, August 24, 2023; and Jens Christensen, CEO, Habitat for Humanity of Greater Chattanooga, August 7, 2023.

- Housing quality and the number of units that need to be replaced because of aging and deterioration
- Population growth projections, including growth that might be anticipated from economic development projects

Taken individually, data for each of these factors suggest that housing availability is and may continue to be a challenge in Tennessee. The first of the factors, vacancy rates, has shown a long decline nationally since the Great Recession for both owner-occupied and rental housing and are now at historically low levels. In fact, the national rental vacancy rate (6.6% for Q3 of 2023) has not been so low since the 1980s, while the owner-occupied vacancy rate is the lowest it has been since records began in 1956, at just 0.8% in Q3 of 2023 (see figure 2).

Figure 2. Homeowner-Occupied and Rental Housing Vacancy Rates at the National Level, 1956-2022



Source: US Census Bureau 2023a.

In Tennessee, the homeowner vacancy rate for Q3 of 2023 was higher than the national rate at 1.2%. And while rental vacancies decreased for the state from the previous quarter, Tennessee's rental vacancy rate was still higher than the national rate at 7%.[63] Markets where the available housing supply is limited are more likely to have low vacancy rates, which often leads to an increase in rents and home prices. On the other hand, when a market has an excess of available housing, high rates of housing vacancy are usually observed.[64]

The age of a community's housing stock can serve as an indicator for both future housing needs and the need for renovation or repair. Overall, 44.1% of Tennessee's housing has been built since 1990,[65] although the portion of newer and older housing stock age varies widely from county to county (see appendix F). For example, a plurality of the housing in Anderson County (37.8%) was built between 1960 and 1989, while more than two-thirds of housing in Williamson County (70.4%) has been built since 1990.[66]

Areas with an aging housing stock may have a greater need for housing repair, as deterioration can pose a danger to residents. Many communities, though, do not have building codes or officials to regulate development.[67] However, older and depreciated housing can also be more affordable to rent or own, while communities with stable populations may see continuous renovation of older homes.[68] Aging and disrepair may be a particular issue for public housing, as according to the Department of Housing and Urban Development, approximately 45% of Tennessee's public housing buildings were built between 1950 and 1969 and 34% were built between 1970 and 1989.[69] Stakeholders have also expressed concerns with their aging public housing stock and the extraordinary work to get them up to modern standards, and yet, in some cases, demolition can be challenging because they must first prove that new construction would be cheaper than renovation.[70]

Just as existing affordable properties are in need of renovation, the overall demand for housing and the need for new construction is also increasing. In 2020, Tennessee had an

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63 Middle Tennessee State University Business and Economic Research Center 2023.

64 Tennessee Housing Development Agency 2020.

65 Commission staff calculations of data from US Census Bureau 2023b.

66 Commission staff calculations of data from US Census Bureau 2023b.

67 Interview with Tom Skehan, regional planner, Southwest Tennessee Development District, September 20, 2023.

68 Tennessee Housing Development Agency 2020; and Sisson 2023.

69 Commission staff analysis of US Department of Housing and Urban Development 2023.

70 Interview with Susan Minor, chief operating officer, Franklin Housing Authority, July 31, 2023.

estimated population of 6.9 million.[71] By 2040, that number is projected to increase by 14.4%, or close to one million, reflecting a growth of approximately 50,000 people per year.[72] The Blue Oval City project alone could bring more than 176,000 new residents to West Tennessee by 2045.[73] By 2070, the state's population is projected to reach close to 9.5 million. See figure 3.

With a majority of Tennessee counties projected to experience growth in the coming years (see appendix D), stakeholders have expressed concern about how to house the incoming residents and how some communities just don't have the infrastructure to support more growth.[74] Stakeholders also say that many communities have gone years without building enough housing to keep up with population growth, which has resulted in a limited housing supply and increased prices.[75]

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[71] Boyd Center for Business and Economic Research 2022a.

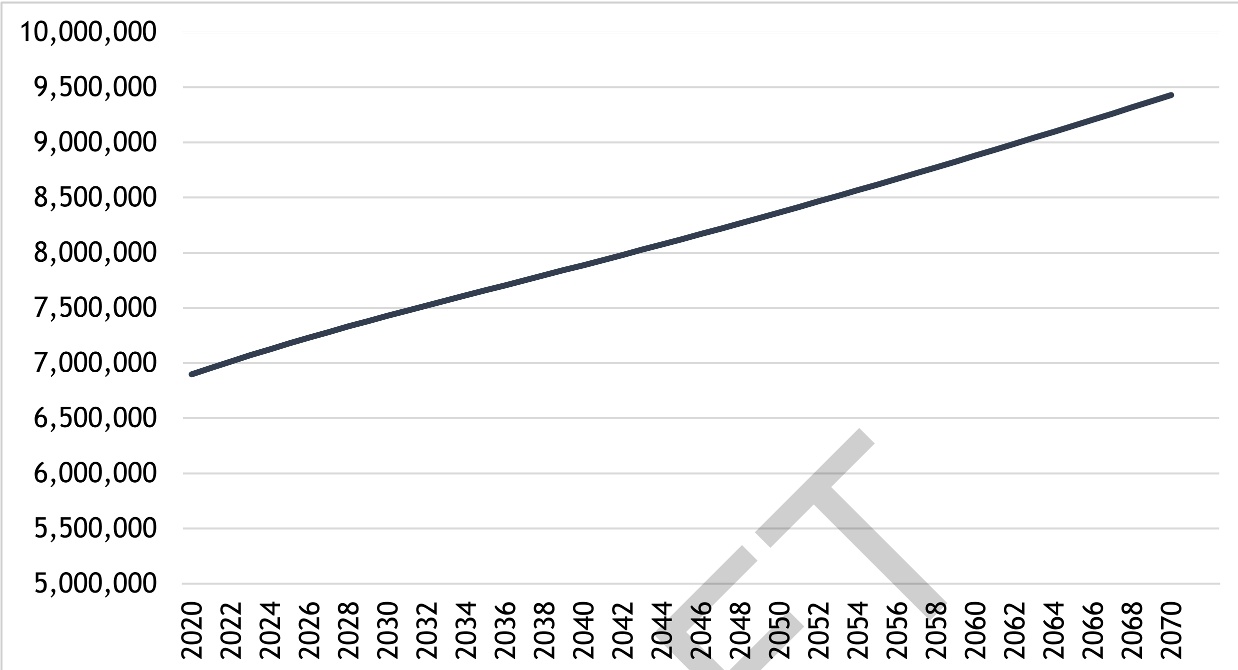
[72] Boyd Center for Business and Economic Research 2022a; and Boyd Center for Business and Economic Research 2022b.

[73] Coil 2023.

[74] Interviews with William Veazey, planner, Tipton County, August 24, 2023; Scott Conger, mayor, Lauren Kirk, chief innovation officer, and Claire Pierson, community development coordinator, City of Jackson, August 31, 2023; and Bob Rial, mayor, Terry Malone, business development coordinator, and Amanda Harrington, planning and policy analyst, Dickson County, December 5, 2023.

[75] Interview with Ralph Perrey, executive director, Tennessee Housing Development Agency, August 30, 2023.

Figure 3. 2020 to 2070 Tennessee Population Projection



Source: Boyd Center for Business and Economic Research 2022a.

Still, if an exact number for housing needs at either the state or local level is difficult to pin down, these estimates do at least point towards the same conclusion: that the current housing supply in Tennessee is not enough to meet demand.

It should be noted that, more recently, there have been signs of improvement in housing availability, at least on some fronts. The years of 2020 to 2022 did see a boom in apartment construction nationwide with 1.2 million units added in that time, and parts of Tennessee were at the forefront of that expansion.[76] The Nashville metropolitan area was ranked 18th in the country for the number of apartments added, with still more expected to be completed in 2023,[77] possibly helping to ameliorate rental cost growth.[78] And according to the National Association of Realtors, the metropolitan areas of Chattanooga, Memphis, and Nashville seem to be issuing new housing permits at a rate sufficient to keep up with the addition of new jobs—though only when counting multifamily housing along with single-family dwellings.[79] But this upturn in multifamily housing production would

[76] Grecu 2023.

[77] Ibid.

[78] Wethington 2023.

[79] National Association of Realtors 2023a.

likely need to be sustained for years to come before it could fully reverse the long-standing undersupply of new homes.

Affordability is more than just the purchase price of a home.

The cost of a home is never just the purchase price. Even in cases where someone has bought a home with cash and has no mortgage payments to make, there are still ongoing costs such as maintenance, insurance, and property taxes, all of which may be magnified when the prices of neighboring homes start to rise. Affordability, therefore, is not just about whether a family can buy a home, but also whether it can keep it.

When homeowners are unable to afford maintaining or repairing their homes, they may end up abandoning them. This can lead to a decline in property values as well as community spirit and responsibility. The needs for renovating properties can vary by community. Stakeholders mentioned that in some areas of the state the disrepair of the older housing is so extensive that it has to be torn down and built new. Some communities, like the city of Jackson, have developed programs for housing repair, including aging in place modifications, but currently have a waitlist as demand is more than they are able to provide.[80] Communities, like Memphis, experience a larger challenge than most. A 2015 analysis estimated there were at least 13,000 structures or vacant lots in Memphis that qualified as being "blighted."[81] "Blighted" is a term commonly used to refer to property that is out of compliance with modern building codes or otherwise dangerous to the safety and welfare of the general public.

The negative effects of blighted properties and structures are well documented as are the significant community costs associated with these properties. One study found that abandoned or vacant properties heighten the need for emergency services, code enforcement, property maintenance and demolition, and increase government expenditures. Another study on blight in Washington, DC, found that vacant, blighted properties are often tax delinquent, lead to lower property values, and result in the loss of tax revenue. Similarly, a 2010 study commissioned by Philadelphia found that "vacant property reduces market values by 6.5% citywide and by as much as 20% in neighborhoods with the most empty lots and structures." In addition to community costs, blighted property can also negatively affect individual homeowners and residents. Homeowners in blighted neighborhoods may encounter higher insurance premiums or lose their coverage completely. Property values are more likely to decline when a

[80] Interview with Scott Conger, mayor, Lauren Kirk, chief innovation officer, and Claire Pierson, community development coordinator, City of Jackson, August 31, 2023.

[81] Memphis Fights Blight. "Blight Elimination Steering Team."

neighborhood has a large number of vacant homes, which in turn causes more homes to be abandoned. This trend may also lower the quality of life in these neighborhoods.

As much as they may seem separate, housing and transportation are inescapably related to one another. The type of housing a community builds—or doesn't build—will shape its transportation needs, and vice versa. Although home prices can often be lower outside of denser, more urbanized core areas, the added distance to workplaces, schools, shopping, and other amenities may create costs for transportation. Or to put it another way, if a family moves farther away from a city center to lower their housing costs, they may inadvertently end up shifting some or all of those savings into their transportation expenses, wiping out any real gain.[82] Stakeholders said that suburban and rural areas surrounding high-growth cities have increasingly absorbed the spillover of workers who are compelled to move out of the more expensive housing market in their city, but continue to work there.[83] That too can have a wider economic impact, as a study in Boston found that the 164 hours that Boston-area drivers spend in traffic each year is equivalent to a productivity cost of $4.1 billion.[84]

As previously mentioned, one common measure of affordability is that housing costs not exceed 30% of a household's pre-tax income. The Center for Neighborhood Technology notes that, by this measure, 55% of US neighborhoods could be considered affordable for the typical household, but that, because transportation costs are often a household's second-largest expenditure, once those are factored in alongside housing costs, the number of affordable neighborhoods falls to 26%.[85] Looking at the combination of housing and transportation costs—commonly referred to as H+T—offers a more expanded view of affordability. An H+T index like that from the Center for Neighborhood Technology estimates housing and transportation costs as a percentage of average total income.

Map 4 shows housing affordability for each county in Tennessee using the traditional housing cost only measure compared with the combined housing and transportation cost

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[82] The cost of car-based transportation includes maintenance and depreciation in the car's value from added mileage. See, for example, American Automobile Association 2023.

[83] Interviews with David Connor, executive director, Tennessee County Services Association, July 11, 2023; Chad Jenkins, deputy director, Tennessee Municipal League, August 22, 2023; Bob Rial, mayor, Terry Malone, business development coordinator, and Amanda Harrington, planning and policy analyst, Dickson County, December 5, 2023.

[84] Shroyer and Gaitan 2019.

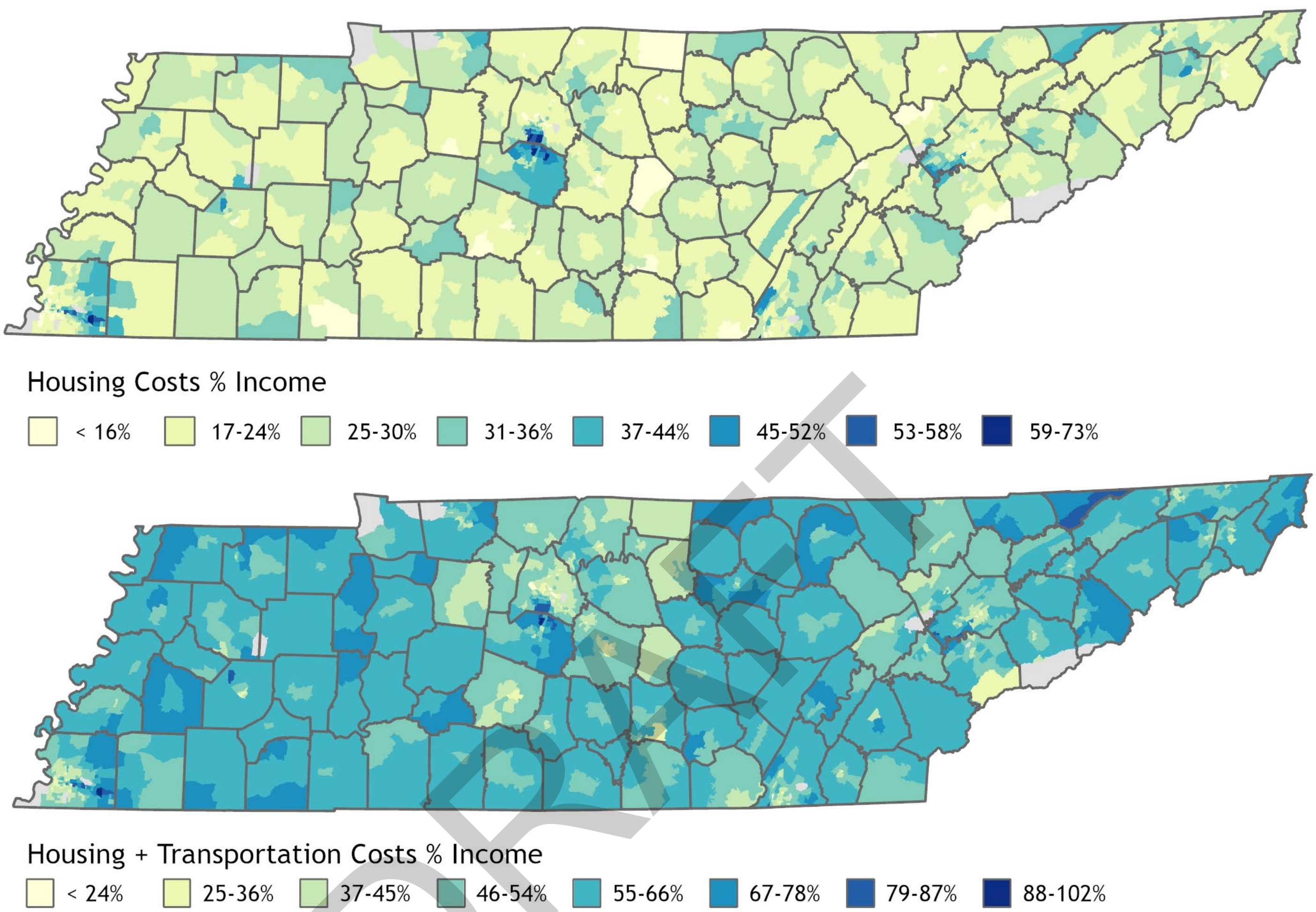
[85] Center for Neighborhood Technology "Housing + Transportation Index."

index. For Tennessee, when looking only at housing costs as a measure of affordability, approximately 84% neighborhoods are considered affordable for a typical household.[86] However, in line with the general estimate from the Center for Neighborhood Technology seen above, when transportation costs are factored in, the number of affordable neighborhoods in Tennessee also drops to approximately 26%.[87]

[86] Center for Neighborhood Technology (CNT) data used for a "typical household" assumes a household earning the median income for the region, with the average household size for the region, and the average number of commuters per household for the region. See Center for Neighborhood Technology 2022b.

[87] Commission staff calculations based on Center for Neighborhood Technology 2022a.

Map 4. Housing Costs as a Percentage of Income vs Housing and Transportation Costs Together as a Percentage of Income, 2019



Source: Center for Neighborhood Technology 2019.

Stakeholders have expressed an increasing need for workforce housing in Tennessee, as workers, especially those in the hospitality industry, cannot afford to live where they work.[88] The American Community Survey reported in its 2022 5-year estimates that the average commute time for Tennesseans was 25.5 minutes, a 4.1% increase (or one minute daily) from 2015.[89] That one minute increase in the state equates to a loss of 13.4 million person-hours of potential productivity a year.[90] The increase in commute time is

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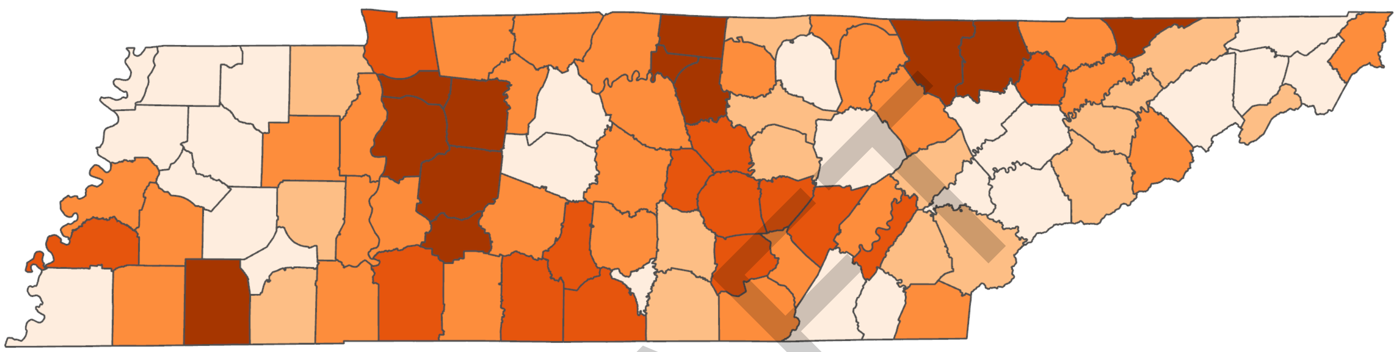
[88] Interviews with Ken Moore, mayor, and Vernon Gerth, assistant city administrator, City of Franklin, August 1, 2023; and Chad Jenkins, deputy director, Tennessee Municipal League, August 22, 2023.

[89] Commission staff calculations based on US Census Bureau 2015 and US Census Bureau 2023b.

[90] That is one additional minute per day with 250 commuting days per year over 3,213,248 workers who commute in the state.

especially pronounced in Tennessee's more rural counties with Anderson, Campbell, Hardeman, Houston, Lewis, Rhea, Smith, and Unicoi counties experiencing a more than 15% increase since 2015 and Trousdale and Humphreys counties experiencing an increase of more than 30%.[91] These counties also have a notably higher HAI score (see map 4) than their surrounding counties—meaning that these counties are more affordable to purchase a house in based on the average household income. Map 5 shows the percent of workers in each Tennessee county whose commute is 60 minutes or more.

Map 5. Workers with a Commute Time of 60 Minutes or More by County, 2022



Source: US Census 2022.

Housing and transportation costs combined are a better indicator of household expenses than either measure alone.[92] When combined, it becomes clear that households with access to good transportation can more comfortably afford their home, while housing in an outlying suburb or rural area can be more expensive after accounting for transportation costs. Thus, there is a tradeoff between transportation and housing expenses—when one falls, the other rises (see appendix D for housing and transportation costs by county).

While using public transit can help in reducing transportation costs for some people, its frequency and coverage are often insufficient to significantly lower transportation expenses for many users. This is because public transit systems cannot entirely replace a personal vehicle for many households in Tennessee. Additionally, public transit infrastructure in Tennessee is primarily focused on transporting people from home to work, which means that households that rely on public transit still need to use personal

[91] Commission staff calculations based on US Census Bureau 2015 and US Census Bureau 2023b.

[92] Haas 2023.

vehicles for other purposes like grocery shopping, going to the doctor, or attending extracurricular activities.[93] A 2022 national survey of 51 US transit agencies on the coordination of public transit and affordable housing indicated the importance of improving transit accessibility to affordable housing and the lack of cooperation between most transit agencies and affordable housing authorities.[94] Researchers at University of Tennessee recently published a study, sponsored by TDOT, proposing a method for evaluating the transit equity of existing affordable housing units, with case studies from Nashville, Memphis, and Chattanooga.[95] They recommended that local transit agencies and housing authorities coordinate transit planning and affordable housing development.

THDA uses an H+T index in an effort to transition to a more holistic interpretation of housing affordability and that there has been a growing movement towards counting both housing and transportation costs together.[96] Illinois's H+T Affordability Index Act adopted into law the 45% H+T affordability measure with bipartisan support to be used by government agencies for both financing and siting decisions.[97] The Illinois General Assembly found that

> Affordability is enhanced by locating residential units that have been thoughtfully planned to lessen sprawl in mixed-use, transit-rich communities near shopping, schools, and work, and that residents of communities with low transportation costs benefit from using transit for the mobility required to undertake activities associated with daily life; residents of these types of communities own fewer cars and drive them shorter distances, thereby reducing environmental impacts and lowering their cost of living.[98]

Similarly, the city of El Paso, TX, adopted a 50% H+T affordability standard for city funding and policy decisions.[99] The Federal Low Income Housing Tax Credit (LIHTC)

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[93] Yadudu 2018.

[94] Zimmerman, Posthumus, and Howell 2022.

[95] Guo et al. 2022; and Guo et al. 2023.

[96] Interview with Jeremy Heidt, director of government affairs, and Dhathri Chunduru, director of research and planning, Tennessee Housing Development Agency, July 10, 2023.

[97] Illinois Compiled Statutes 20-25/1 et seq.

[98] Illinois Compiled Statutes 20-25/5.

[99] Guerra and Kirschen 2016.

allocations and HUD's Sustainable Communities Initiative grants can also use an H+T Affordability Index in their determinations. However, the accessibility of transportation is not currently considered in the process of allocating LIHTC for affordable housing planning in Tennessee.[100]

Housing affordability is fundamentally shaped by the supply of homes and the demand of changing populations.

Because housing has so many complex connections to issues ranging from construction material supply chains to interest rate policy and beyond, there are numerous factors that can drive housing costs and affordability in one direction or another. Yet one overarching, powerful determinant of affordability is the simple fact of supply and demand. Every individual and family needs some place to call home, but if the supply of available homes falls short of the need, then inevitably there will be competition for the supply of housing that is available, eventually driving home prices up and then out of reach of more and more people. And while housing supply and demand both have many complexities of their own, they largely boil down to just a few critical factors: the growth in population, the supply of land, and, in particular, the capacity to build that is influenced by land use policy and regulations.

Home construction has lagged population growth for generations.

The relationship of population to housing demand is fairly straightforward: all else being equal, the more people in a community, the more housing that is needed. That means that population growth can be a strong driver of housing demand and, if supply does not keep up with it, housing affordability. And that may be a special concern for Tennessee, which has seen rapid growth in recent years from people moving into the state from elsewhere around the country. From 2020 to 2022, the state's population rose by 125,000 people, with 83,000 added in 2022 alone, or growth of 1.2%—and all needing some kind of housing.[101]

This inflow of people may have been drawn to Tennessee for any number of reasons, but many stakeholders cited this addition of people as adding pressure to housing demand and helping to drive up costs.[102] This movement of people could, in theory, drive up

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[100] Tennessee Housing Development Agency 2022.

[101] Boyd Center for Business and Economic Research 2022c; and US Census Bureau 2023c.

[102] Interviews with David Connor, executive director, Tennessee County Services Association, July 11, 2023; Kevin Rigsby, town planner, City of Smyrna, July 11, 2023; Nicole Heyman, chief housing officer, City of Chattanooga, August 3, 2023; Angela Hubbard, director of housing division, Gregory Claxton,

housing demand in those receiving communities, but as yet data on how remote work may have shifted population are scarce and the effects are speculative. Some early research, though, suggests that remote work has increased vacant housing in urban centers while diminishing it in outlying areas,[103] and two studies have estimated that remote work (or time spent at home as a proxy measure) may account for about half of the spike in home prices during the earlier part of the pandemic.[104] Another study observed that remote work appears to add a slight premium of 3.8% to housing costs, seemingly because it demands additional space in the home.[105] For Tennessee, however, it is difficult to judge just how many people now work remotely, although data do indicate that as of 2022, those moving into the state were more likely to work remotely than current residents at rates of 21.1% versus 13.2%, respectively.[106]

The key for affordability, though, is not really how much the population grows, but whether the supply of housing keeps up. In 2022 and as Tennessee's population surged by 83,000, just a little over 53,000 housing permits were issued state-wide.[107] That yields a permitting rate of about 7.6 homes for every 1,000 people in the state. While there is no set target rate for housing permits per capita, it is easy for home construction to fall behind—and that is precisely what has happened in the US over the past half century.

Housing construction has oscillated along with turns in the wider economy over the years, rising and falling repeatedly from at least 1968 into the early 2000s, but it fell to a nadir in the years following the Great Recession and only slowly climbed back upwards over the course of the 2010s. At present, and even with the steep rise in construction seen recently in some places, homebuilding remains well below the booms seen in previous decades of the late 20th century (see figure 4).

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planner, Todd Okolichany, deputy executive planning director, and Lucy Kempf, executive director, Metro Nashville Planning Department, August 23, 2023; and Retha Patton, housing program director, Tennessee's Community Assistance Corporation, September 18, 2023.

[103] Gupta et al. 2021.

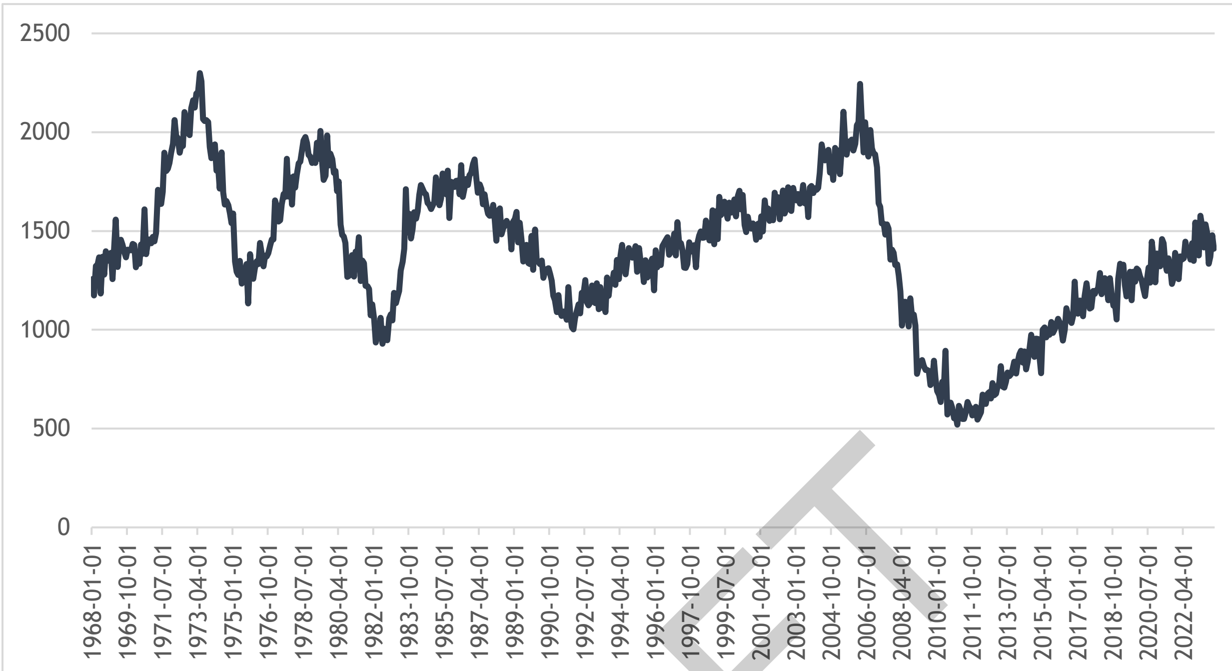
[104] Mondragon and Wieland 2022; and Gamber, Graham, and Yadav 2021.

[105] Stanton and Tiwari 2021.

[106] Email correspondence with Tim Kuhn, director, Tennessee State Data Center, December 5, 2023.

[107] Boyd Center for Business and Economic Research 2023c; and US Census Bureau 2023c.

Figure 4. Housing Units Completed Nationally, in Thousands, 1968-2023



Source: US Census Bureau data via the Federal Reserve Bank of St. Louis, "New Privately-Owned Housing Units Completed: Total Units."

Yet taken alone, home construction totals mask a more serious—and enduring—decline, because the country's population has also been growing steadily over the decades. When in 1970 some 18.4 million homes were built, the US population was just barely above 200 million.[108] The nearly 16.7 million homes that were then completed in 2022 might not appear to be far off from the 1970 total, but the national population is more than half again larger than it was then, now standing at upwards of 330 million.[109] In other words, for any given number of homes built and sold today, there are about 62% more people seeking to fill them than there would have been in 1970. To put it simply, housing construction has not kept up with population growth for several generations, and even with the recent surge in construction, the country's homebuilding rate per capita today is still far below what it averaged in the decades before 1990 (see figure 5).

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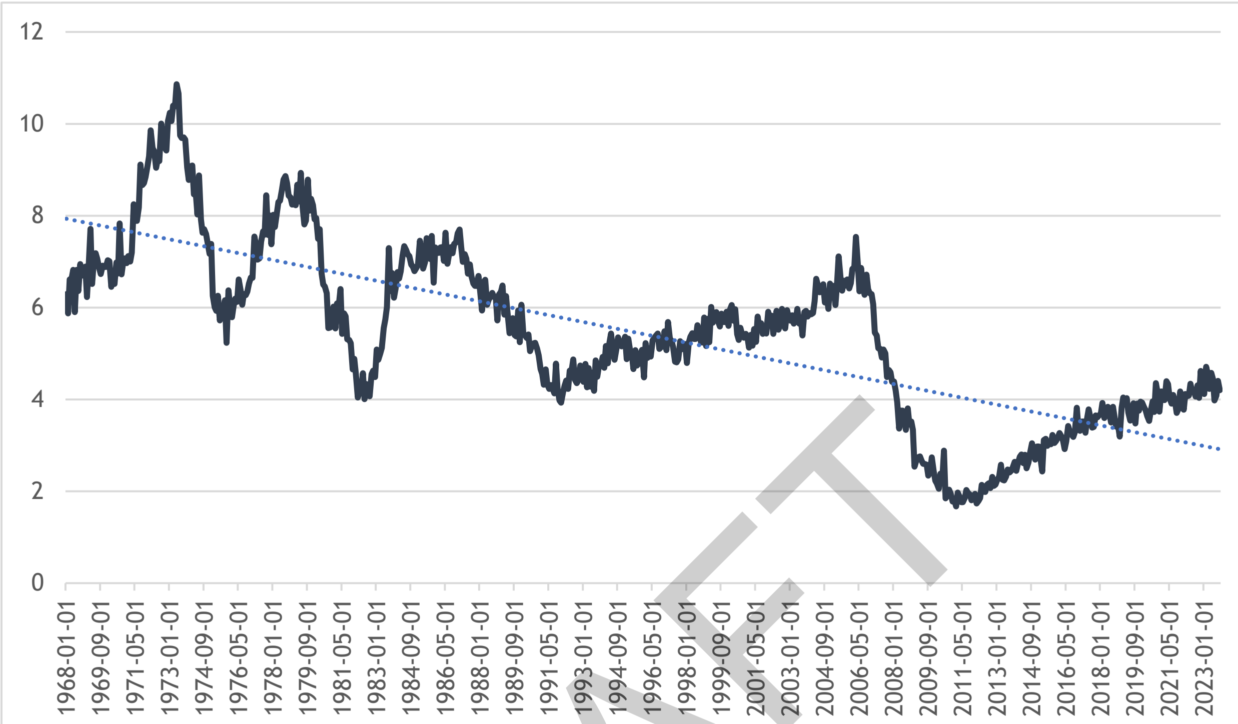
[108] US Census Bureau data via the Federal Reserve Bank of St. Louis, "Population."

[109] US Census Bureau data via the Federal Reserve Bank of St. Louis, "New Privately-Owned Housing Units Completed: Total Units" and "Population."

Figure 5. Total Number of Housing Units Completed Nationally per Thousand People, 1968-2023



Source: Commission staff analysis of US Census Bureau data via the Federal Reserve Bank of St. Louis, "New Privately-Owned Housing Units Completed: Total Units" and "Population." The dotted line marks the average trend over the total period.

This exact type of data is not available at a state-level, but similar data on building permits and estimates of housing stock for Tennessee paint a similar picture, with weak construction activity in the wake of the Great Recession: from 2011 to 2016, for instance, the housing stock in the state grew by less than three units per 1,000 people each year.[110] Considered from a different angle, over that same timespan and for each home added to the state's housing stock, the population expanded by anywhere from 2.6 to 4.8 people, or more than average household size.[111] Moreover, stakeholders with knowledge of the state's housing market have attested that an undersupply of homes relative to demand is one of—if not the—primary forces driving affordability issues in Tennessee.[112]

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[110] Commission staff analysis of US Census Bureau 2023b.

[111] Commission staff analysis of US Census Bureau 2023b.

[112] Interviews with Hunter McDonald, Chris Wilson, Candy Joyce, and Ryan Folz of Middle Tennessee Association of Realtors, July 7, 2023; Jeremy Heidt, director of government affairs, and Dhathri Chunduru, director of research and planning, Tennessee Housing Development Agency, July 10, 2023; Kevin Rigsby, town planner, City of Smyrna, July 11, 2023; Nicole Heyman, chief housing officer, City of Chattanooga, August 3, 2023; Dan Reuter, executive director, Chattanooga-Hamilton County Regional

The housing supply may not match current and evolving household needs.

A simple imbalance between population and housing supply can upend affordability, but there are nuances to how population growth, and more precisely demographic changes in household structure, might affect housing demand. Despite the norm of talking about housing "units," it is important to remember that housing is not a simple, standardized commodity, as if any given house could be exchanged for another. A one-bedroom apartment is not equivalent to a five-bedroom house, and the housing needs of a young family with several children are not likely to be the same as a single individual in their twenties or a retiree living on their own. Thus, a mismatch between the types of housing available in a community and the households that live there can also create a tension between demand and supply—because, ultimately, even if a community has a surplus of homes, it may do little good if they are not built and sized in a way to suit residents' needs.

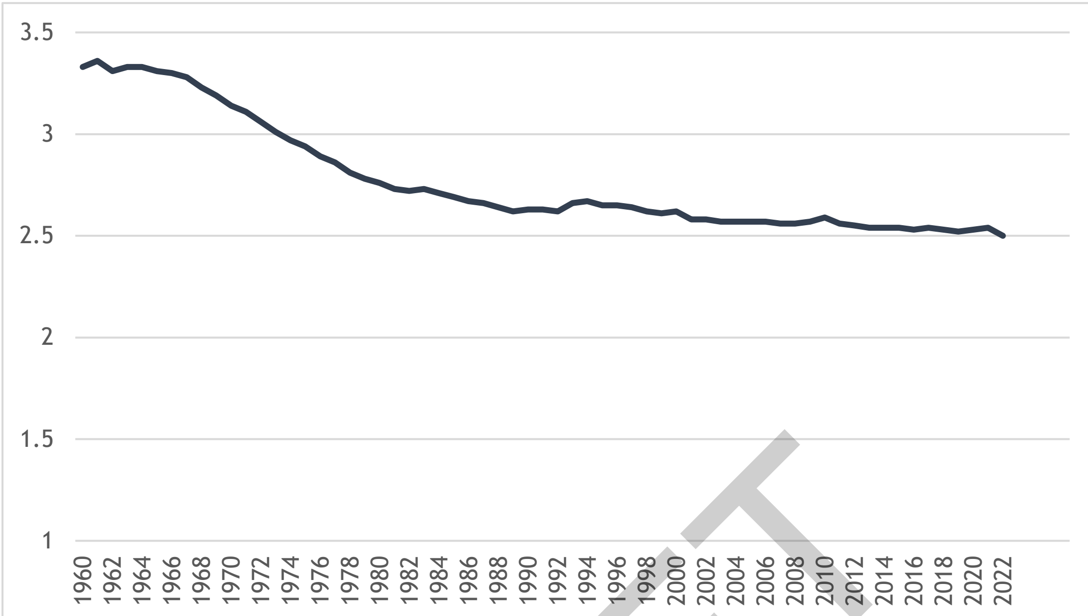
A speculative factor that some have noted is whether smaller households might be creating more demand, because all else being equal, the fewer people there are in the average household, the more households there will be, meaning more homes are required for a population of a given size.[113] The average household size in the US has been on a long-term decline for well over a century—even as the average amount of floor space per housing unit has increased.[114] However, despite a marked drop in the mid-20th century, average household size has in fact moved very little in the last four decades (see figure 6).

Planning Agency, August 4, 2023; Jenny Schuetz, senior fellow, Brookings Institution, August 17, 2023; Ralph Perrey, executive director, Tennessee Housing Development Agency, August 30, 2023; Nick Ogden, owner, Clear Blue Development, September 13, 2023; Ed Pinto, co-director, AEI Housing Center, September 18, 2023; and Arthur C. Nelson, professor emeritus of urban planning and real estate development, University of Arizona, October 17, 2023.

[113] Interview with Brian Straessle, executive director, and Mandy Spears, deputy director, Sycamore Institute, August 21, 2023.

[114] Moura, Smith, and Belzer 2015.

Figure 6. Change in the Average US Household Size over Time



Source: US Census Bureau "Current Population Survey, Table HH-4."

The number of households has grown rapidly just within the last several years, though, seemingly in part because of pent-up demand among adults in their 30s and early 40s to have their own homes. Whereas three separate surveys tracking the number of households estimated there were between 1.4 million and 1.5 million new households added per year from 2017 to 2019, that rate shot up to somewhere between 2.0 million and 2.4 million new households per year from 2019 to 2021.[115]

But looking past simple averages, the overall distribution of households of different sizes has been changing—and that too has implications for housing demand. For instance, the share of single-person households made up of older individuals has been rising, particularly in rural areas.[116] Meanwhile, multigenerational households—that is, households in which there are either at least two adult generations living together under the same roof or grandchildren living with grandparents—have also been growing in number, and whereas 7% of the country's population lived in a multigenerational household in 1971, by 2021 that had risen to 18%.[117] Looking at Tennessee, there is a distribution in the size of households with approximately 80% composed of three or fewer people (see figure 7).

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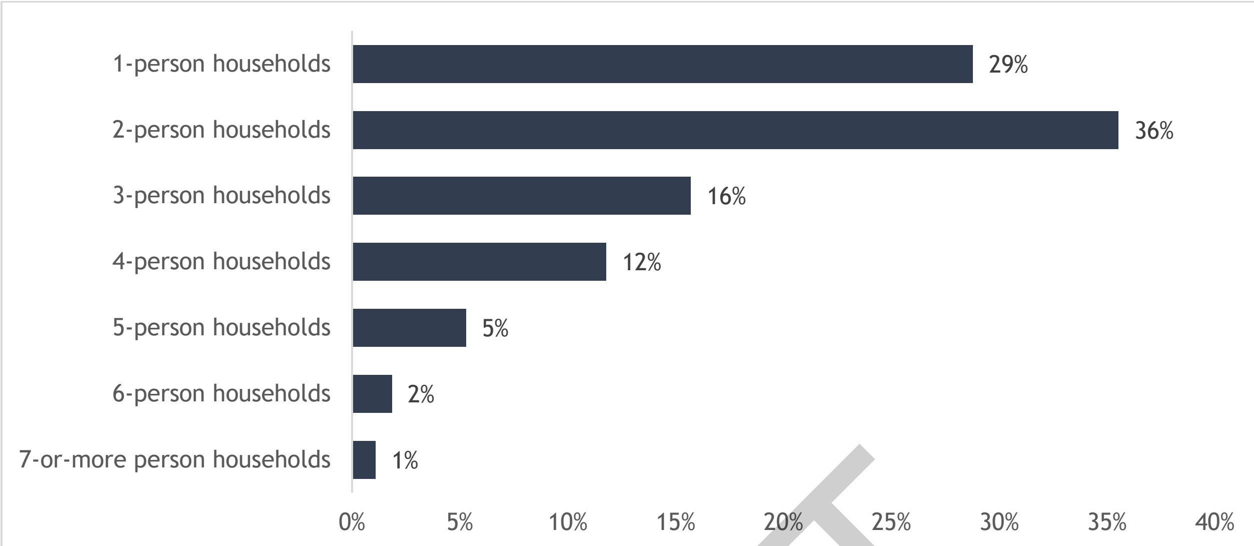
[115] McCue 2023.

[116] Anderson, Washington, Kreider, and Gryn 2023.

[117] Cohn et al. 2022.

Figure 7. Households by Size in Tennessee



Source: Commission staff analysis of US Census Bureau 2023b.

But as the size and structure of households may have been growing more diverse, the size of houses themselves appears to have been moving in the other direction, with a trend since 1980 of fewer one- and two-bedroom homes, and instead a rising number of four-bedroom homes.[118] An estimated 59% of homes today, or 44 million, have at least one spare bedroom,[119] even as one-bedroom units—especially in large cities with some of the most severe housing affordability problems—are facing overcrowding.[120]

Meanwhile, older adults (or those born before 1964) own about 46 million homes in the US, and, as they begin to vacate those homes in the coming years, demographers have questioned what might result in the housing market.[121] While in an ideal scenario the homes left by older generations could be recycled into the housing supply, the data is not promising: many of the homes owned by seniors appear to be in areas with little growth or demand, or again may be larger than what many households need, which means that many older individuals could even face having to sell their homes for less than they may

118 Loh and Farrar 2020.

119 Arroyo and Burns 2018.

120 Loh and Farrar 2020.

121 Myers and Simmons 2018.

have been counting on.[122] This also applies to Tennessee.[123] As described by one pair of researchers, "All this means that while young people battle over the few available homes that suit their needs and preferences, older adults will be unable to sell their homes to the emerging generation of would-be homeowners."[124] In order for housing supply to effectively boost affordability, it has to be appropriately located and built to meet the actual demand of diverse households.

Communities must make the most of their land supply.

Yet as Tennessee's population has grown, and especially in certain counties, several stakeholders who spoke with Commission staff made note of an old adage: you can't make new land. Land acquisition costs are a basic component of housing costs, making up perhaps 55% of the cost of a median-priced home nationally,[125] and they have grown at a faster rate than home prices in general.[126] Stakeholders agree that land costs have been an in issue in Tennessee, particularly in some places where land available for housing is all the more constrained because of the local topography.[127] How communities make use of the land that they do have, therefore, is crucial, but there are a few tools that can help to make more land available for housing or secure existing housing stock.

Parcels of land may sometimes be left vacant, abandoned, tax delinquent, and, eventually, blighted. That can be problematic for communities and local governments for a variety of reasons, but it can also subtract from the amount of available land for housing. One established means for dealing with this type of problem is a land bank, a legal entity established by a government to acquire real estate property that may be vacant or tax-foreclosed and rehabilitate it for productive use. As the Commission found previously in its 2012 report *Dealing with Blight: Strategies for Tennessee's Communities*, "Land bank corporations can be used as a legal and financial mechanism to return vacant,

122 Nelson 2020.

123 Interview with Arthur C. Nelson, professor emeritus of urban planning and real estate development, University of Arizona, October 17, 2023.

124 Loh and Farrar 2020.

125 Parrott and Zandi 2021.

126 Davis and Heathcote 2006.

127 Interviews with Hunter McDonald, Chris Wilson, Candy Joyce, and Ryan Folz of Middle Tennessee Association of Realtors, July 7, 2023; Jeremy Heidt, director of government affairs, and Dhathri Chunduru, director of research and planning, Tennessee Housing Development Agency, July 10, 2023; Jens Christensen, CEO, Habitat for Humanity of Greater Chattanooga, August 7, 2023; and Jackie Mayo, president and CEO, HomeSource East Tennessee, September 12, 2023.

abandoned, and tax-foreclosed properties to productive use through rehabilitation, demolition, or redevelopment."[128] This means that land banks can also be an impactful tool for promoting affordable housing development in Tennessee,[129] particularly for those facing an excess of aging properties in disrepair. Land banks in some other states operate with a special focus on affordable housing, such as by partnering with nonprofits, as the Metro Atlanta Land Bank does,[130] or even producing affordable housing themselves on land they acquire, such as with the Cuyahoga County, Ohio, land bank.[131]

However, current state law only permits a select few local governments to establish a land bank authority.[132] Tennessee's Local Land Bank Program was initially launched as a pilot program in 2012 that was limited to the city of Oak Ridge.[133] The General Assembly subsequently passed legislation extending the authority to establish a land bank to a few other cities and counites.[134] See table 3.

Table 3. Local Governments in Tennessee Authorized to Establish Land Banks

Legislative Designation	Geographic Equivalent
Any home rule municipality	Chattanooga Clinton East Ridge Etowah Johnson City Knoxville Lenoir City Memphis Mt. Juliet Oak Ridge Red Bank Sevierville Sweetwater Whitwell
Specifically designated municipalities	Kingsport Cleveland Germantown

128 Tennessee Advisory Commission on Intergovernmental Relations 2012.

129 Tennessee Comptroller of the Treasury 2019.

130 Metro Atlanta Land Bank 2023.

131 Cuyahoga Land Bank.

132 Mansa 2016; and Tennessee Code Annotated 13-30-101 et seq.

133 Tennessee Advisory Commission on Intergovernmental Relations 2019.

134 Tennessee Code Annotated 13-30-103.

Legislative Designation	Geographic Equivalent
	Columbia
Any county having a metropolitan form of government	Hartsville-Trousdale County Lynchburg-Moore County Nashville-Davidson County
Specifically designated counties	Blount County Hardeman County Sevier County

Source: Commission staff analysis of Tennessee Code Annotated 13-30-101 et seq.

Tennessee now has four land banks established through this statute, with the most recent addition being the City of Cleveland in late 2023. The cities of Oak Ridge, Chattanooga, and Memphis have also established land bank authorities under this legislation. Shelby County also has an entity called a land bank, although it was established earlier under a separate statute,[135] has much more limited powers over the land it acquires such as not being able to quiet title (that is, resolving any third-party claims on the property), and so "does not fit the traditional definition of a land bank."[136]

Seventeen states, including Tennessee, have enacted land bank legislation.[137] Yet some of these states—again including Tennessee—have limited the power to establish a land bank to certain local governments. For example, Missouri limits the power to municipalities located "wholly or partially within a county in which a land trust [was previously] created,"[138] and Pennsylvania limits the power to "a county, a city, a borough, a township and an incorporated town with a population of more than 10,000, or two or more municipalities with populations less than 10,000 that enter into an intergovernmental cooperation agreement."[139] Recently, a law passed in Michigan that expanded the authority to create land banks from only the counties and city of Detroit to include any city with a population of more than 50,000.[140] Unlike Tennessee, most states with enabling land bank legislation allow any local government to elect to create a land

135 Tennessee Code Annotated 67-5-2507.

136 Shah 2016.

137 Center for Community Progress 2024.

138 Missouri Revised Statutes 141.980.

139 Pennsylvania Consolidated Statutes Annotated 68-2103.

140 Begay 2023; and Michigan Compiled Laws 124.753 and 124.773(4), (5).

bank. As the Commission has recommended before, the state could extend that authority to all local governments.[141]

Rather than waiting for land to become blighted, however, the state and local governments can also take a more proactive approach and conduct inventories of what land they currently possess themselves and whether there might an opportunity for using it for housing. As explained in the 2019 Commission report *Improving Management of Government-Owned Real Property in Tennessee*, on occasion, parcels of government-owned land may no longer be needed for government use, at which point they may be put up for sale to private buyers, such as profit or nonprofit housing developers. As the Commission has found previously, the state and some local governments do publish information on such surplus land, although it is not aggregated in a single source.[142] Assembling listings of surplus government-owned land, such as by allowing local governments to have links to surplus property they may have to the Tennessee Department of General Services' website, could help developers find additional land for housing.

Additionally, as the Commission also found in the aforementioned 2019 report, governments can find ways to make more of the land in their possession available for reuse, but this requires more detailed information on what land is available. Several stakeholders expressed an interest in conducting inventories of government-owned property or exploring public-private partnerships for housing.[143] Local governments in some other states have also begun to look not only at disused government-owned land, but land that is underused. Atlanta, for example, has started a program to assess municipal land to see where it could be redeveloped, maintaining its government use while adding housing on top of it—in some cases quite literally, as with a plan to rebuild a fire station while adding 30 stories of apartments above it.[144] A related plan will remake the city's civic center into mixed-use development, including 1,300 housing units, more than a third of which will be affordable housing.[145]

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[141] Tennessee Advisory Commission on Intergovernmental Relations 2012; and Tennessee Advisory Commission on Intergovernmental Relations 2019.

[142] Tennessee Advisory Commission on Intergovernmental Relations 2019.

[143] Interviews with Heidi Campbell, senator, Tennessee District 20, July 18, 2023; Joe Carr, mayor, and Will Denami, assessor, Rutherford County, October 5, 2023; and Michael Hendrix, policy director, Office of the Governor of Tennessee, December 14, 2023.

[144] Smith 2023.

[145] Kavanagh, McAdams, and Carr 2022.

Meanwhile, with the continuing realignment around remote work and office vacancies in some larger cities hovering around 50%,[146] there have been growing calls to convert office buildings into residences. Making the necessary structural changes to create homes out of offices is not easy, or necessarily financially viable in all cases,[147] but at least some fraction of office space may be suitable. How much, exactly, is unclear; estimates range from just 1.1% of all office space—assuming strict criteria for vacancy, location, and feasibility of conversion based on the building's structure and age—to 15% under looser criteria.[148] Under the more generous estimates, perhaps 400,000 apartment units could be developed nationally. Some cities have launched initiatives for such conversions, including New York and Boston, which are using zoning changes and property tax incentives, respectively.[149] The same concept might be extended to other commercial property as well, though; one study has estimated that if 10% of the strip malls in the country were converted to multifamily housing, they could yield up to 700,000 additional units.[150]

Relatedly, there have been projects to convert defunct hotels and similar properties, particularly to house those who are homeless. King County, Washington, is also seeking to convert disused hotel properties into 1,600 housing units, funded by a 0.1% sales tax.[151] All of these strategies may be gaining steam, as in late 2023 the federal government announced that office and commercial property conversions to housing would be part of a larger effort to bolster housing supply, with both HUD and the Department of Transportation supporting residential development transit centers—or what is called transit-oriented development—and in underutilized commercial areas through some of their funding programs, such as Community Development Block Grants.[152]

In addition to subsidizing the construction of new affordable housing, communities can also benefit from the preservation of existing affordable housing. For example, in Charlotte, North Carolina, the preservation of existing units is one of the uses of the city's housing trust fund, which provides funding to developers to subsidize the cost of

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146 Kastle 2023.

147 Brey 2023.

148 Tong and Schoenmaker 2023; and Gupta, Martinez, and Nieuwerburg 2023.

149 New York City Office of the Mayor 2023; and Boston Planning and Development Agency 2023.

150 Abu-Khalaf 2023.

151 King County Department of Community and Human Services 2024.

152 US Office of the White House 2023.

acquiring and rehabilitating properties for affordable housing.[153] The city's financial support, as described in a profile by *Fast Company*, helps developers purchase "housing complexes that are priced for the lower end of the renter spectrum, and instead of raising the rents as other buyers likely would, the new owners commit to keeping prices affordable for 20 years."[154] According to a stakeholder interested in developing similar projects in Tennessee, financing from the city—which in Charlotte's case is in the form of a 20-year, 0% interest, interest-only loan—is crucial for making these projects financially viable for the private-sector partners that invest in them.[155]

Because Charlotte's housing trust fund relies on general obligation bonds, local governments in Tennessee cannot currently copy its exact funding structure.[156] Cities and counties in Tennessee are generally limited in their authority to provide direct funding to private enterprises—including those developing affordable housing—under the Tennessee State Constitution and state law. As the Commission observed in its 2021 report on broadband deployment, availability, and adoption, Article II, Section 29 of the Tennessee Constitution states that

> the credit of no County, City or Town shall be given or loaned to or in aid of any person, company, association or corporation, except upon an election to be first held by the qualified voters of such county, city or town, and the assent of three-fourths of the votes cast at said election. Nor shall any county, city or town become a stockholder with others in any company, association or corporation except upon a like election, and the assent of a like majority.

As a result of these provisions, according to the Tennessee Court of Appeals in 2001,

> political subdivisions were not absolutely forbidden to use their credit in aid of private enterprises, *but the three-fourths vote required for this action was a powerful limitation*.[157] (emphasis added)

The state could potentially resolve this issue by authorizing local governments to make multiyear funding commitments to affordable housing projects either through existing

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[153] Charlotte 2023.

[154] Berg 2023.

[155] Interview with Matt Wiltshire, housing policy expert, Davidson County, January 12, 2024.

[156] Ibid.

[157] Ragsdale v. City of Memphis, 70 S.W.3d 56 (Court of Appeals of Tennessee at Memphis 2001).

entities, such as industrial development boards (IDB), or by establishing a new entity similar to sports authorities. As the Commission wrote in 2021,[158]

> IDBs are already authorized to participate in and provide funding for other types of projects,[159] and local governments with central business improvement districts are authorized to make multiyear pledges of local revenues—except property tax revenue—to IDB projects that "consist of public infrastructure, public improvements or other public facilities" located in areas designated by a resolution or ordinance as center city areas.[160] Similar local authority to make multiyear pledges of revenues other than property taxes for specific types of projects also exists under statutes authorizing the creation of sports authorities and convention center authorities.[161]

However, the Commission in 2021 also observed that authorizing local governments to make multiyear pledges of local revenue carries risks to taxpayers.[162] In its 2018 report on IDBs and payment in lieu of tax (PILOT) agreements, the Commission found it is not uncommon for IDBs in Tennessee to include performance criteria or clawbacks in contracts for projects receiving incentives such as PILOT agreements—which allow businesses to reduce or eliminate the amount they would otherwise owe in property taxes. But the inclusion of performance criteria or clawbacks is not required by law. As the Commission wrote in 2018,

> PILOT agreements usually include goals that businesses are expected to meet, such as creating a certain number of jobs or making a certain capital investment amount. . . . To hold the businesses accountable, a clawback provision or a list of performance criteria is often included in the agreements. A clawback provision requires the business to repay the

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[158] Tennessee Advisory Commission on Intergovernmental Relations 2021.

[159] Tennessee Code Annotated, Section 7-53-101 et seq.

[160] Tennessee Code Annotated, Section 7-53-315; and email from Tracy Johnson, Raymond James, November 5, 2020.

[161] Tennessee Code Annotated, Sections 7-67-116 and 7-89-115; telephone interview with Jeff Oldham, attorney, Bass, Berry and Sims, Richard Dulaney, managing director, Public Finance, Debt Investment Banking, Raymond James, Mark Smith, attorney, Miller and Martin, Brent Greer, mayor, Henry County, and Terry Wimberley, general manager, Paris Utility Authority, October 22, 2020; and email from Tracy Johnson, Raymond James, November 5, 2020.

[162] Tennessee Advisory Commission on Intergovernmental Relations 2021.

amount of the taxes that were abated if they fail to reach the goals in the agreement or possibly pay a financial penalty in addition to the amount of taxes that were abated. With performance criteria, if the business fails to reach its goals, the time period for the PILOT may be reduced or the PILOT may be eliminated entirely. In Tennessee, businesses seem to prefer performance criteria. It has been estimated that 80% of PILOT agreements have these performance criteria or clawbacks in them, and 80% of these provisions are enforced. Clawbacks and performance criteria are not required by law to be a part of the PILOT agreements. Several reports including the 2008 Commission report *Getting It Right: The Effect on the Property Tax Base of Economic Development Agreements and Property Tax Incentives for Businesses* recommend using clawbacks to hold the businesses accountable and protect taxpayers in case the business fails to meet the objectives set forth in the agreement.[163]

Increasing the supply of housing at different price levels can improve affordability for all.

If fostering greater housing supply is one of the best ways to address affordability problems, then one question that often follows is: supply of what kind of housing, at what price points? Given that affordability is, logically, more strained for those at lower-income levels, it may be natural to assume that the best course of action is to develop and subsidize affordable housing—that is, in the technical sense as used by HUD and other agencies, housing priced within reach of those making a certain fraction of AMI. That is not always easy to do, though, as it may require subsidies that are in limited supply. An alternative view is that the goal should be to increase the supply of housing in general, even if it is "market-rate."[164] Research in the last several years has crystallized around this question, with reviews of dozens of studies indicating that increasing the supply of market-rate housing at the very least can stop home prices from rising further and worsening affordability, though it may not necessarily always be enough on its own to bring prices back down.[165] A dual approach of supporting both subsidized housing and market-rate housing at the same time, rather than either alone, may therefore be most effective.

[163] Tennessee Advisory Commission on Intergovernmental Relations 2018.

[164] See, for example, Phillips, Manville, and Lens 2021.

[165] Been, Gould Ellen, and O'Regan 2019; and Phillips, Manville, and Lens 2021.

As one housing specialist described it, housing markets without enough supply can behave like a game of musical chairs: those homebuyers with the most means will quickly grab what's available, while some others, by necessity, wind up with no place to go.[166] Or to put it another way, when there is not enough housing supply, those with higher incomes will buy up homes that otherwise might go to those making medium incomes, who will then in turn take the homes that might instead go to those on lower incomes, creating a ripple effect that pushes would-be homebuyers down the housing market and then out of it altogether. On the other hand, when there are enough homes at varying price points on the market, those with more wealth may turn to higher-priced housing, freeing more affordable housing for those who truly need it.[167] Tellingly, a Commission staff analysis of 20 Tennessee counties for which complete data were available from 2011 to 2022 found that a 1% increase in per capita income was associated with a 1.3% increase in median home sale prices—which is to be expected, as those with more financial means begin to bid up home prices. A comparison of 2021 and 2022 to the previous decade indicates that the effect may be strengthening. In contrast, increasing housing supply at a faster rate than population growth was associated with lower home sale prices, all else being equal, with a 1% increase in housing units per capita associated with a 0.4% decrease in median home sale prices.[168]

Zoning and land use planning can either constrain or enable housing supply, and with it, affordability.

In simple terms, zoning is designating how a given parcel of land can be legally used. When land is zoned as residential, for instance, it typically permits only housing to be built there and excludes the possibility of any shops or businesses. It can also designate what kind of housing can be built, how much of the lot it can take up, how far it must be set back from the street, and even what the façade must look like. In the United States, zoning has traditionally been a power exercised at the local level, and as such, there is no

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166 Interview with Ed Pinto, co-director, AEI Housing Center, September 18, 2023.

167 Ibid.

168 As related in a memo to the Commission at the November 15, 2023, meeting, preliminary Commission staff analysis of county-level data shows a 4% greater population growth rate from 2010 to 2020 was associated with a 1% lower housing availability rate (that is, the percentage of housing units in a county that are vacant, excluding those that are sold or rented but unoccupied for whatever reason). The correlation between population growth over that timeframe and the availability rate is -65%, meaning the higher the population growth, the lower the availability. Two variables reflecting land use regulation—whether a county has an impact fee and the percentage of the population of a county that lives where there is zoning—are also negatively correlated with the availability rate at -55% and -46%, respectively. The availability rate itself is negatively correlated with measures of housing price and housing affordability, meaning higher availability is associated with lower prices.

one uniform set of zoning codes: different cities and counties may create and tailor their own zoning classifications, which can have multiple subcategories with many detailed distinctions between them.

Zoning is an important part of a local government's powers to protect public health, safety, and welfare, as has been affirmed by the US Supreme Court in the past.[169] It allows a community to ensure, for example, a safe distance between dangerous or noxious activities and land uses—like waste sites, chemical plants, or sewage treatment—and where people live. Zoning also allows local governments to create standards for the size, placement, and aesthetics of buildings, regulating, for example, a minimum size for lots or what percentage of a lot a building can occupy. Yet a wealth of research has found that some common types of zoning can also constrict housing development and may have been exacerbating housing affordability problems for years.[170]

Although zoning regulations can vary from place to place, there are certain patterns that have prevailed since at least the mid-20th century, and today in most Tennessee cities and counties, zoning has placed residential areas completely apart from areas with shops, schools, and workplaces, and those residential areas then usually restrict each parcel of land to a single house built for a single family—or more simply, what is referred to as single-family zoning. Zoning can effectively dictate the maximum population that a city can accommodate, creating what is sometimes referred to as a zoning capacity. In Los Angeles, for example, the zoning that was in place in 1960 would have allowed the city proper to have enough housing for a maximum population of roughly 10 million.[171] Following a wave of changes to predominantly single-family zoning over the next two decades, though, the city's zoning capacity plummeted to just four million people. Since then, Los Angeles's population has been constantly pressing up against that ceiling of four million, while simultaneously the city's home prices have skyrocketed; indeed, a lack of zoning capacity has been cited as a factor driving elevated home prices statewide in California.[172]

Moreover, research that has emerged in the past several years has reexamined the housing market bust in the Great Recession and found that zoning restrictions may have

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[169] Village of Euclid v. Ambler Realty Co. 272 US 365 (1926).

[170] Mayer and Somerville 2000; Quigley and Rosenthal 2005; Saks 2005; Knaap et al. 2007; Ikeda and Washington 2015; Molloy 2017; Been, Gould Ellen, and O'Regan 2019; Gyourko, Hartley, and Krimmel 2019; JCHS 2023; and Gray 2022.

[171] Morrow 2013.

[172] Monkkonen, Lens, and Manville 2020.

been at the root of the problem. While early analysis of the housing market crash attributed much of it to overleveraging and defaults among homebuyers, enabled by questionable lending practices by some banks,[173] later studies have reevaluated this: "There is no indication within any income group of systematic overleverage during the [housing] boom."[174] In fact, defaults during the boom appear to have been more common among more well-off households, who may have defaulted strategically.[175] And while there certainly may have been widespread issues with some mortgage loans being made, further research has suggested that the housing boom may have begun at different times in different cities, even as early as the mid-1990s, driven by rising incomes and housing supplies that failed to expand with rising demand.[176] One researcher has made an extensive case that some of the cities that have been the most attractive destinations to move to in the past like New York, Boston, and Los Angeles, are also those with some of the most stringent zoning and inelastic housing supplies. By the 1990s, this contradiction—people trying to live in places where the housing supply would barely budge—was leading to escalating home prices in those leading cities.[177] As this played out over several years, population began to leave those cities for more affordable ones elsewhere, thereby adding pressure to the local housing demand and creating a cascading effect of rising demand that eventually spread to most of the country.

> A strong economy in [a city like] Boston is still a draw to new residents. What has changed is that Boston is no longer willing to accommodate much population growth. Thus, when migrants are drawn in, home prices must rise to a level that forces a similar number back out. . . . Price is simply the means of rationing the approximately five million spots available in the Boston area.[178]

It may seem unsurprising, but as one study found, the greater the zoning capacity in a jurisdiction, the more housing development it saw.[179] And yet, as measured by one widely-used index of land use regulation, cities around the country appear to have been

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[173] Mian and Sufi 2008.

[174] Erdmann 2021; see also Foote, Loewenstein, and Willen 2016.

[175] Amromin et al. 2011.

[176] Ferreira and Gyourko 2011.

[177] Erdmann 2021.

[178] Erdmann 2021.

[179] Knaap et al. 2007.

growing more restrictive in their zoning over time.[180] And greater regulation in one community appears to have spillover effects that can raise home prices in neighboring communities.[181]

Measuring the exact effects of zoning on housing costs in Tennessee is difficult, however, because while information is available on which counties have adopted zoning regulations and which have not, what matters is the exact details of the zoning that is used: how much land is zoned for a certain housing density and subject to what limiting conditions. And currently, there is no comprehensive source on how communities around the state are zoned. A national project based at Cornell University is underway to change that, though, called the National Zoning Atlas.[182] The Tennessee affiliate of the project has begun mapping the zoning around Tennessee, and though it has only published maps for six of the 95 counties so far, the initial results show that, even in fast-growing, high-demand counties in Middle Tennessee, the great majority of residential land is zoned for single-family homes and no more. On 94% of the land in the six counties studied (Davidson, Maury, Rutherford, Sumner, Wilson, and Williamson), triplexes and larger multifamily housing are not allowed.[183] Even in Davidson County, 82.4% of the land only allows single-family homes. However, even when just distinguishing between Tennessee counties with zoning and those without, the presence of zoning regulations was still associated with a lower rate of available housing.[184] See appendix E for a breakdown of each county's housing stock by type.

Zoning for Housing Density

If conventional zoning practices suppress housing development, then one avenue to increasing housing supply—and thus abating higher costs—is simply to reform local zoning and land use practices so that more housing can be built. This includes a wide swath of possible changes that can be loosely grouped under the rubric of "upzoning," or modifying zoning to allow for greater housing density. This can sometimes mean rezoning areas of a community piecemeal, or, as some states and cities have increasingly

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[180] Gyourko, Hartley, and Krimmel 2019.

[181] Pollakowski and Wachter 1990.

[182] National Zoning Atlas 2024.

[183] Beacon Center 2023.

[184] Based on Commission staff analysis of state and county data, housing availability and the existence of zoning regulations yielded a correlation of -0.46. Housing availability was defined here as housing units that were counted as vacant in the US Census's American Community Survey 5-year estimates using 2021 data, but excluding those that would not be available for sale or rent, such as vacation homes.

done, adopting comprehensive measures that apply all throughout a community to increase density.

Zoning for housing density can be effective in increasing housing supply and moderating housing costs, although it depends on how it is implemented and the starting conditions in a given community.[185] One major review of 21 discrete types of upzoning changes in 1,136 US cities (although many of them implemented more on a piecemeal or localized basis) found they collectively achieved only a modest boost in housing supply and did not necessarily lead to lower home prices—but at the same time, "downzoning," or zoning in a way that reduces housing density, was decidedly linked to increased housing costs.[186] It is also possible that zoning for greater density will only be effective if there is already demand for more housing; elsewhere, it might be expected to make no difference.[187] More comprehensive upzoning may be more effective, as four cities that adopted citywide upzoning measures (Minneapolis, MN; New Rochelle, NY; Portland, OR; and Tysons, VA) saw rent growth from 2017 to 2023 of just 1% to 7% versus an average of 31% nationally, even as their number of households grew faster than the national average.[188] Minneapolis has perhaps made the most headlines, having adopted an upzoning plan in 2018 called Minneapolis 2040 that largely put an end to single-family zoning and opened up most of the city to duplexes and similar types of housing.[189] That plan was recently stymied by a lawsuit brought by some local residents,[190] who argued that the plan had not undergone a state-required environmental review process. But while the program was in effect, it may have been successful at increasing the housing supply, and, to the extent that it tamed housing cost growth, some have even credited it with helping to rein in local inflation.[191]

But while keeping in mind that upzoning is not a silver bullet, and different versions of it may be more or less effective depending on local conditions, it is still an option that has been endorsed by a range of experts, including the American Planning Association,[192]

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[185] Freemark 2023.

[186] Stacy et al. 2023.

[187] Interview with Yonah Freemark, senior research associate, Urban Institute, August 16, 2023.

[188] Horowitz and Canavan 2023a; Horowitz and Canavan 2023b.

[189] Minneapolis 2040 Plan.

[190] Du 2023.

[191] Niquette and Saraiva 2023.

[192] Brooks et al. 2019.

and a number of stakeholders have recognized zoning reforms as a possible means of improving housing supply.[193] There is potential for upzoning in Tennessee. While there has been an uptick in multifamily housing construction in Tennessee in recent years (see figure 8), the state's housing stock still skews more towards single-family detached homes than the average for the country: 68.6% of Tennessee households live in detached single-family housing (7.2 points more than the national average) but only 5.4% live in multifamily housing consisting of 20 housing units or more (versus 9.9% nationally).[194]

There is a range of ways to zone for more housing, as demonstrated by measures that cities and other states have adopted, and they do not necessarily have to extend all the way to allowing high-rise apartment buildings in every community. As many housing advocates have pointed out, most residential construction in the US either takes the form of single-family homes or, less often, large apartment complexes, representing both low- and high-density housing. But there is a plethora of other housing options in between these two that are not often allowed under most current zoning codes, such as duplexes, triplexes, quadplexes, townhouses, and cottage courts. These other housing forms—neither the low density of single-family homes on large lots nor the high density of apartment tower blocks—are thus referred to by many as "missing middle" housing. Related to these are what are called accessory dwelling units (ADU), or smaller, subsidiary homes that sit alongside a more conventional single-family house, as well as tiny houses, which are often defined as homes built at about 400 square feet or less.[195] But whatever the exact form, housing types beyond conventional detached, single-family homes have the potential to increase availability. In Houston, Texas, for example, redevelopments from single-family lots to townhouses created 4.2 times as much floor area on the average parcel of land, and without compromising on the amount of floor space per home.[196]

Although missing middle housing was historically more common in much of the US,[197] these other types of housing are not often built today, and in fact duplexes, triplexes, and

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[193] Interviews with Dan Reuter, executive director, Chattanooga-Hamilton County Regional Planning Agency, August 4, 2023; Jason Edmonds, policy analyst, Beacon Center, August 17, 2023; John Zeanah, director, Memphis & Shelby County Division of Planning & Development, August 24, 2023; Hollie Berry, mayor, City of Red Bank, August 29, 2023; Scott Conger, mayor, Lauren Kirk, chief innovation officer, and Claire Pierson, community development coordinator, City of Jackson, August 31, 2023.

[194] US Census Bureau 2023b.

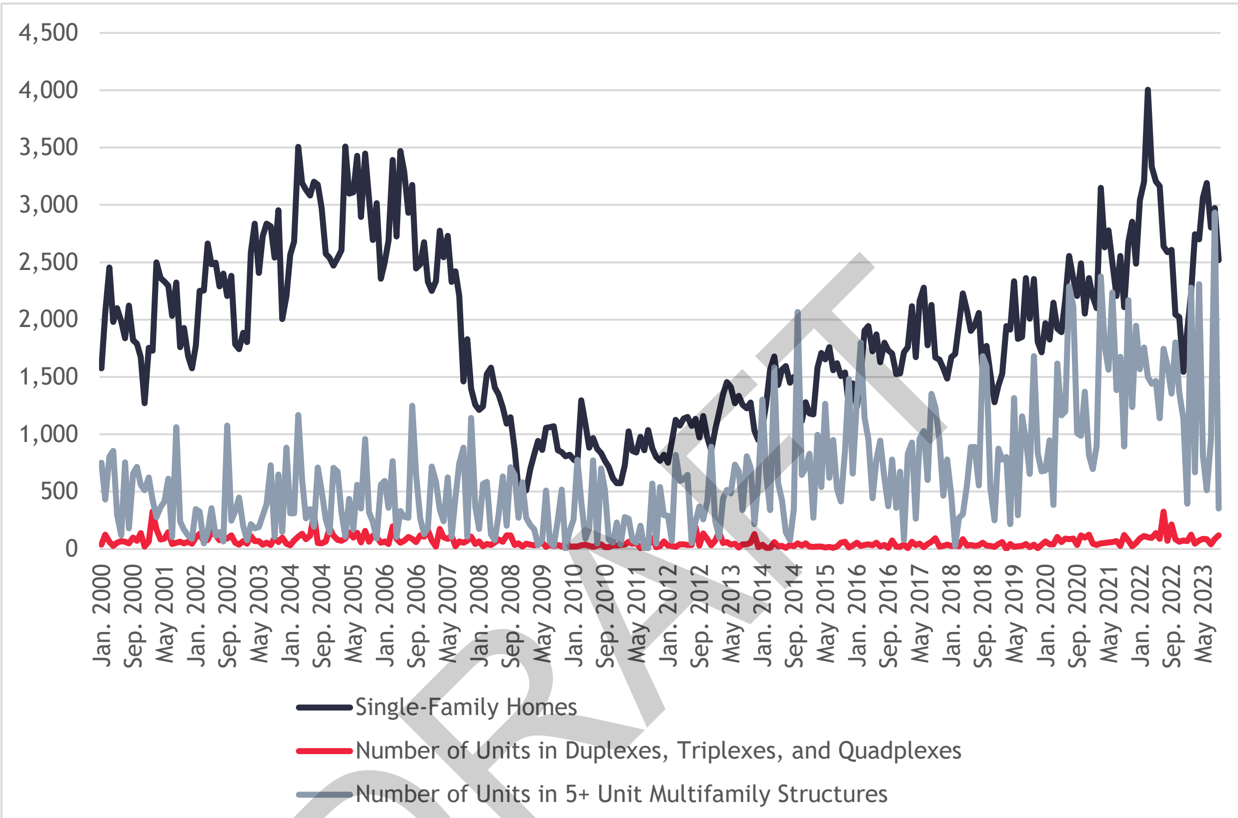
[195] Alterman 2022.

[196] Wegmann, Noman Baqai, and Conrad 2023.

[197] Garcia et al. 2022.

quadplexes have made up only a tiny number of building permits issued in Tennessee since at least the start of the century (see figure 8), in part perhaps because they are largely prohibited by single-family zoning codes.

Figure 8. Monthly Housing Building Permits Issued in Tennessee by Type, 2000 to 2023



Source: Commission staff analysis of US Census Bureau 2023c.

Missing middle housing is subject to various limiting factors under many zoning codes, including regulations around floor area ratios (the ratio of a building's floor area to its footprint on a lot), setbacks from the street, and other design standards, not to mention additional considerations in the subdivision process or ownership that do not apply with single-family homes.[198] Minneapolis's upzoning, in fact, may have achieved less than it could have because, even while it allowed missing middle housing to be built on any residential lot, such requirements were made with single-family homes in mind and might hamper the construction of other housing types.[199] Many builders today may also

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[198] Ibid.

[199] Interview with John Zeanah, director, Memphis & Shelby County Division of Planning & Development, August 24, 2023.

no longer be familiar with the idiosyncrasies of constructing such homes or find them less profitable than larger developments, and they may come with building code requirements that can have benefits but do not apply to single-family homes (like fire suppression sprinkler systems, which can help improve safety but also add to the costs of construction).[200] Despite all of this, there are potential advantages for affordability, as one study suggested that single-family homes are on the whole 2.7 times more expensive than a unit in a quadplex.[201]

Other states and local governments have begun to make space for missing middle housing. Besides the aforementioned cities, Austin, Texas, recently authorized some types of missing middle homes throughout the city.[202] And more recently, the city of Knoxville has floated plans to address its housing needs in part through added missing middle housing.[203] At the state-level, California, Maine, Montana, Oregon, Vermont, and Washington have all passed laws to variously permit duplexes, ADUs, and other types of missing middle housing wherever single-family homes can be built,[204] although some of these states have conditioned the requirements on the size of local populations. For example, Oregon's law only requires cities with populations of between 10,000 and 25,000 and not in the Portland region to allow duplexes, while larger cities and those in the orbit of Portland must go further to allow up to quadplexes and townhouses. Montana's set of zoning reforms works differently from those in other states, in that it is partly voluntary, and local governments have some discretion over the degree of density in missing middle housing they might want to allow. In this way, communities can make incremental increases to their housing density. Additionally, in an effort to aid homebuilders and residents, some jurisdictions have also taken to releasing what are called pattern books, or collections of pre-approved housing plans and designs, which may include designs for missing middle housing.

There are also zoning reforms to help make housing available in more parts of a community and nearer to where it may be needed. These include

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200 Ibid.

201 California Community Builders 2022.

202 Fechter 2023.

203 Sloan 2023.

204 California Chapter 162, Acts of 2021; Maine Chapter 672, Acts of 2022; Montana Chapter 500, Acts of 2023; Oregon Chapter 639, Acts of 2019; Vermont Act No. 47 of 2023; and Washington House Bill 1110 and House Bill 1337 of 2023.

- zoning for more housing on main streets and transit corridors, as well as within a certain distance of workplaces, business districts, colleges, and other population centers;
- zoning for mixed-use development—that is, allowing housing to be built by right anywhere zoned for offices, retail, or commercial development; and
- authorizing faith institutions, universities, and healthcare facilities to build multifamily housing by right on their existing land.

California in late 2023 passed legislation that enables religious and higher education institutions to build affordable housing on their lands if they choose to do so.[205] A Florida bill from 2023 requires counties to allow mixed-use and multifamily development anywhere zoned for commercial, industrial, or mixed use provided that at least 40% of the units included are rated as affordable.[206] Maryland established a transit-oriented development capital fund for grants and loans in 2023.[207] As of 2020, Massachusetts requires any community served by the Massachusetts Bay Transportation Authority to provide for at least one district that is zoned for multifamily housing by right within one-half mile of a transit station and with a minimum density of 15 housing units per acre.[208] Similarly, in 2021, Utah allowed cities to establish transit-oriented developments around the state's FrontRunner train stations and, in return, receive a portion of the growth in the local sales tax revenues; the developments must plan for at least 50 housing units per acre, be mixed use, and make 10% of units affordable.[209] And not least, Montana's list of zoning reform provisions includes making any commercially zoned land into mixed-use.[210]

Minimum Lot Sizes

Many zoning codes will specify minimum sizes for housing lots, whether a few thousand square feet or even several acres. There can be valid reasons for setting a minimum lot size, particularly in areas without sewer access where the lot must be large enough to accommodate a septic tank. But as lot size requirements directly determine housing

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[205] California Chapter 771, Acts of 2023.

[206] Florida Chapter 2023-17.

[207] Maryland Chapter 512, Acts of 2023.

[208] Massachusetts Chapter 358, Acts of 2020.

[209] Utah Senate Bill 217 of 2021.

[210] Montana Chapter 500, Acts of 2023.

density, they also effectively reduce the supply of land for housing: quite simply, the larger the lot size, the fewer homes there can be in an area.

Minimum lot size requirements appear to have become a more commonly used regulation over time,[211] and may sometimes go beyond either what is strictly necessary or what homebuyers want, resulting in an inefficient use of land. A study of four suburban areas in Texas found that single-family home lots, when actually subdivided by homebuilders, tended to cluster just above the local minimum lot size for the given zone they were in—in other words, implying that when given the opportunity, homebuilders and buyers may opt for smaller lots.[212]

According to stakeholders, a large minimum lot size adds greater land costs to the price of a home, limiting the potential for affordability,[213] and leading for some to call for the reduction of minimum lot sizes wherever possible.[214] Reducing lot sizes has in some cases also helped with infill development.[215] As such, zoning reform efforts in other states like Montana have included reducing minimum lot sizes as one provision,[216] and some local governments in Tennessee have already moved in that direction.[217]

Parking Space Requirements

Numerous studies have attempted to tally the number of parking spaces both in individual cities and in the country as a whole, and while the number of spaces varies depending on the region and population density, the consistent finding has been a super-abundance of parking—cutting into the amount of space available for housing. For

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[211] Gyourko, Hartley, and Krimmel 2019.

[212] Gray and Furth 2019.

[213] Interviews with Jason Edmonds, policy analyst, Beacon Center, August 17, 2023; Ralph Perrey, executive director, Tennessee Housing Development Agency, August 30, 2023; and Susan Minor, chief operating officer, Franklin Housing Authority, July 31, 2023.

[214] Interviews with Jason Edmonds, policy analyst, Beacon Center, August 17, 2023; and Bobby Eason, executive director, Foothills Community Development Corporation, September 12, 2023.

[215] Interview with John Zeanah, director, Memphis & Shelby County Division of Planning & Development, August 24, 2023.

[216] Montana Chapter 500, Acts of 2023.

[217] Interviews with John Zeanah, director, Memphis & Shelby County Division of Planning & Development, August 24, 2023; and Kay Senter, councilmember, Andrew Ellard, assistant city manager, Morristown, Josh Cole, senior planner, and Lori Matthews, senior planner, City of Morristown, August 10, 2023.

example, a study on cities of varying sizes found that parking spaces outnumbered households by wide margins—approximately 19 to 1 in Des Moines, Iowa, and even 27 to 1 in Jackson, Wyoming.[218] Depending on what type of parking is included, there may be as many as eight parking spaces per vehicle in the US,[219] with parking in urban areas estimated to consume 22% on average in city centers.[220]

And that parking can be expensive: as of 2023, an above-ground parking structure added $29,000 per space to a development—and that is just in the construction cost and not including other costs, like land acquisition or environmental review.[221] A 2016 study estimated that, at the time, constructing garage parking for apartment complexes added an annual cost of $1,700 for renting households on average, regardless of whether they owned a car.[222] And in one early study looking at the city of Oakland, California, parking requirements were connected to an 18% reduction in housing investment.[223] And parking requirements can sometimes be out of step with the known and actual needs of residents.[224] Some new housing developments elsewhere in the country have begun to experiment with excluding parking completely, instead adopting mixed-use design to bring amenities into easy walking distance.[225]

Some governments have begun to reduce or eliminate parking requirements,[226] leaving it to property owners to determine for themselves how much parking they wish to build. In Tennessee, several cities such as Nashville, Chattanooga, and Clarksville have reduced parking requirements in some of their busier districts, while the city of Jackson has eliminated parking requirements altogether.[227] Other states have taken preemptive approaches, such as restricting cities' abilities to impose parking mandates, at least around transit, in the case of Oregon and California, and, in Maine, limiting how many

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218 Scharnhorst 2018.

219 Chester, Horvath, and Madanat 2021.

220 Hoffman and Lefebvre 2023.

221 WGI "Parking Structure Cost Outlook for 2023."

222 Gabbe and Pierce 2016.

223 Shoup 1997.

224 Interview with Ralph Perrey, executive director, Tennessee Housing Development Agency, August 30, 2023.

225 Broudway 2023.

226 Gould 2022.

227 Parking Reform Network "Mandates Map."

spaces cities can require for ADUs and affordable housing developments. Montana, likewise, has made reducing or eliminating parking requirements as a provision for local governments to adopt. There has even been a federal bill filed to preempt parking minimum requirements nationally.[228]

Even street widths have come under scrutiny, with one study finding that even just in the 20 largest counties in the country, residential streets account for nearly $1 trillion in land value, and in an expensive housing market like Santa Clara, California, reducing the required street width in residential areas to the bare minimum while excluding on-street parking could reduce home prices by about $100,000.[229]

Permitting Processes

In general, before new housing can be built, it has to undergo review by local planning authorities. That is often an essential process that can help to ensure the new housing meets safety standards or that the construction does not produce unintended consequences like rainwater runoff and flooding of neighboring properties. But the planning review process may not always run as smoothly as it could. For instance, developers might submit plans for a new development, but when local government planning staff review the plans they might find points where they do not comply with local or state building codes, and there can then follow some back-and-forth discussion to try correct the plans.[230] That and any other delays may contribute to housing cost.[231] A survey of homebuilders found that they rated "permitting/development approval process" as the highest regulatory challenge.[232] And one study looking at local regulations and housing supply elasticity—that is, how much housing supply increased or not in response to rising house prices—found that, more than for any other variable examined, the longer it took to get planning approvals in a given city, the worse the city's housing supply elasticity.[233]

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228 US Congress H.R.3145 of 2023.

229 Millard-Ball 2022.

230 Interview with John Zeanah, director, Memphis & Shelby County Division of Planning & Development, August 24, 2023.

231 Interviews with Hunter McDonald, Chris Wilson, Candy Joyce, and Ryan Folz of Middle Tennessee Association of Realtors, July 7, 2023; Jann Dower, director, Home Builders Association of Tennessee, July 19, 2023; and David Hayes, owner, Hayes Associates, September 6, 2023.

232 Colton and Ahluwalia 2019.

233 Trulia 2016.

While single-family homes can often be built "by right," meaning they are subject to only a perfunctory review, other and often larger housing developments may face greater scrutiny, including debate before public hearings. Some, however, have argued that public input at such hearings regularly leans towards opposition to new housing, and yet may only be a vocal minority and not reflective of the larger community.[234] This opposition—popularly summarized as "not in my back yard" or NIMBYism—may often come from homeowners who perceive new development to be a risk to their own property values.[235] One empirical study in Massachusetts, for example, found a mere 15% of members of the public who spoke on new developments at planning meetings spoke in favor of them, even at a time when 58% of the state's voters approved a referendum for more affordable housing development.[236] Those who spoke at the planning meetings were also more likely to be homeowners and older, longtime residents than the general population. Such public opposition to new housing developments can create delays to approval, and a study from the NAHB claimed that, nationally, those delays average to 7.4 months for multifamily housing, accounting for 5.6% of the final cost.[237]

Because there can be so many unique variables involved in any given build site, some amount of planning review may always be necessary to avoid a building creating unintended consequences, and because new developments can have externalities that affect the surrounding community, public input on development remains vital. But there are some ways the process might be streamlined without compromising standards. The NAHB has produced its own recommendations for revamping permitting processes, which include "allow[ing] broad and inclusive public participation in formulation of plans and ordinances but more limited participation at [the] site-specific permit stage," creating fully online systems to manage applications, applying specific time limits to review processes, conducting review steps in parallel rather than sequentially when possible, and so forth.[238] Other states, however, have arrived at some similar ideas for permitting process improvements on their own. Massachusetts previously produced a guide of 26 recommended best practices for permitting, including:

- Produce flowcharts that educate the public on the process;

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234 Phillips 2020.

235 Fischel 2001.

236 Einstein, Palmer, and Glick 2018.

237 Emrath and Walter 2022.

238 National Association of Home Builders 2017.

- Introduce online portals that help applicants track the progress of their applications and let them see where their applications might get stuck;
- Appoint a single point of contact for each application.[239]

Some states, including California and Washington, have created fast tracks that exempt housing from steps like environmental review under some conditions, such as when the housing is located in an urban infill area.[240] Other states have introduced "shot clocks" that enforce a time limit for how long a local government has to review planning applications. In Florida, for example, a local government that fails to render a decision on a planning application by the statutory deadline must refund a portion of the application fee for each day it is late.[241] In 2023, Texas passed legislation that added 15 days onto existing permitting decision deadlines, after which an applicant has the option to seek out a qualified third-party engineer or other professional to review their application.[242]

Some local governments have also issued their own pattern books, or pre-approved house plans that homebuilders and residents can use off-the-shelf and rest assured will pass review. Similarly, planning departments might allow developers to submit a prototype plan they intend to use repeatedly for multiple sites and ask to get it pre-approved.[243] Then, when it comes time to review the plan for a particular site for code compliance, planners need only check that the design already has approval, shortcutting the process.

State-Level Efforts to Promote Zoning Reform

Other states have pursued or at least contemplated several strategies to advance zoning reform for greater housing development. The most direct approach, of course, is simple preemption, and it is one that a number of states have turned to recently as housing affordability has worsened. California's Home Act of 2021, for example, allows up to four housing units to be built on land parcels previously zoned for single-family homes, effectively ending single-family zoning across the entire state. An act passed in Oregon in 2019 and a slate of bills passed in Washington in 2023 are similar, if perhaps more

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[239] Massachusetts Association of Regional Planning Agencies 2007.

[240] California's SB 35 of 2018; and Washington HB 5412 of 2023.

[241] Florida Annotated Statutes 553.792.

[242] Texas HB 14 of 2023.

[243] Interview with John Zeanah, director, Memphis & Shelby County Division of Planning & Development, August 24, 2023.

nuanced, by tiering zoning reforms to cities' populations.[244] Thus, in Oregon, cities with populations of 10,000 to 25,000 (and that are not in the Portland region) must allow duplexes on land previously zoned for single-family homes, while larger cities and those in Portland's region must allow up to quadplexes, townhouses, and cottage clusters. Massachusetts, by comparison, conditions zoning reform on proximity to transit, requiring communities served by the Massachusetts Bay Transportation Authority to provide for at least one district that is zoned for multifamily housing within a half mile of a transit station.[245] Several other states, however, recently sought to pass land use reform preemptions and failed. In Arizona last year, one bill would have required a variety of changes to local housing planning, including increasing density and upzoning of single-family residential areas, but did not pass.[246] Similarly, in neighboring Colorado, a bill last year that would have mandated larger cities allow denser development and most other cities allow at least ADUs was unable to pass, despite being championed by the governor.[247] And in 2021, North Carolina considered a bill that would have required local governments to allow for missing middle housing, though it did not pass.[248]

Some states have experimented with less preemptive means of zoning reform, though. Last year, Montana passed a major piece of legislation that, among other things, presents local governments with a menu of discrete zoning and permitting measures designed to encourage housing development.[249] The law requires local governments to implement at least five of fourteen listed measures, but not all of them, leaving local governments with some discretion as to exactly how they reform their land use regulations.

California has also explored another approach in which preemption is only triggered if local governments fail to meet certain metrics for housing. In 1969, the state introduced the Regional Housing Needs Allocation (RHNA), a system of assigning housing production targets to local governments.[250] The RHNA had no enforcement mechanism,

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[244] Oregon House Bill 2001 of 2019; for Washington, see House Bill 1110, House Bill 1337, House Bill 1042 of 2023 as examples.

[245] Massachusetts Chapter 358, Acts of 2020.

[246] Arizona Senate Bill 1117 of 2023.

[247] Colorado Senate Bill 23-213.

[248] North Carolina Senate Bill 349 of 2021.

[249] Montana Chapter 500, Acts of 2023.

[250] California Department of Housing and Community Development "Regional Housing Needs Allocation."

though, until 2017, when the "Builder's Remedy" was introduced.[251] Under the new law, if a local government failed to authorize enough new housing to meet its RHNA target, then developers were automatically exempted from certain planning review requirements, allowing them to build multifamily housing in most any infill area by right. In the first four years of implementation, the Builder's Remedy was credited with adding 18,000 housing units to the state.[252]

Lastly, states have begun to look at ways of incentivizing or rewarding local zoning reform rather than mandating it. In 2021, a Maine state commission recommended the creation of a financial reward program for municipalities that committed to zoning reform policies to support housing. Although the state has not adopted such an incentive as yet, another state, Indiana, implemented something similar last year with a newly established housing infrastructure assistance program and fund. Projects that seek loans from the fund are to be prioritized, in part, on meeting certain conditions like planning for greater housing density, reusing commercial buildings for residential development, including ADUs, and waiving parking or lot size requirements.[253] In a blend of this incentive-based approach and Montana's options approach, Utah in 2019 passed a bill requiring certain municipalities and counties to adopt at least several measures out of a list to promote "moderate income housing" to qualify for access to transportation funds.[254] Tennessee, were it to adopt an incentive program, might do so by allocating some portion of the realty transfer or mortgage taxes to local governments, which could be apportioned according to either population within cities and counties or on the basis of the weighted full time equivalent average daily attendance (WFTEADA), an already well-established method defined in statute for allocating revenues like those from property taxes between cities and counties for the sake of education funding.[255]

It should also be noted that the federal government has recently backed a variety of upzoning tools. This has included a grant program, dubbed Pathways to Removing Obstacles, or PRO Housing, in which states and local governments could apply for grants to conduct studies into how they might remove regulatory barriers to affordable housing development.

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[251] California Senate Bill 35 of 2017.

[252] Manji and Finnigan 2023.

[253] Indiana House Bill 1005 of 2023.

[254] Utah Senate Bill 34 of 2019.

[255] See Tennessee Code Annotated 49-3-302(19).

Public Receptiveness to, and Benefits of, Zoning Reform

Zoning reforms to increase housing supply are not without their challenges and may not be appropriate or necessary in every community. Local officials might be hesitant to adopt unfamiliar zoning changes, and some residents may raise concerns that greater density could change the aesthetic character of their community,[256] lead to increased traffic and noise or less privacy,[257] or, because property tax assessments are based on a property's highest and best use, cause increased property tax bills for existing residents even when no change has been made to their property.[258] Local officials also rightly point out that new development comes with upfront costs,[259] and that financing those costs can create challenges, with the current avenues for financing largely limited to, again, either increasing the property tax or levying development taxes, impact fees, or local option sales taxes, all of which may face opposition. There may be solutions for at least some of these concerns—for example, the state allows for lower property tax value assessments on land in greenbelt areas, so that those properties' tax assessments are not affected by the rising market values of other nearby properties; and only when those properties are sold do rollback taxes apply, allowing local governments to recoup some of the taxes foregone under the greenbelt status.[260] A similar mechanism might work in cases of zoning reform, sparing existing property owners from property tax bill increases. Local officials also rightly point out that new development comes with upfront costs and that financing those costs can create challenges. But it is worth noting that zoning reforms can offer some unexpected benefits for both housing affordability and local governments.

Although not all residents or communities desire density, others do. Several surveys show a general receptiveness to zoning changes to allow greater housing density.[261] A 2023 Pew survey found large majorities of Americans (70% or more) supported measures like allowing apartments near transit stations or job centers; allowing more affordable housing or dorms on college campuses or faith institution property; allowing apartments

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[256] Interviews with Paige Brown, mayor, Gallatin, July 13, 2023; and Ralph Perrey, executive director, Tennessee Housing Development Agency, August 30, 2023.

[257] Pinto, Peter, and Hamilton 2022.

[258] Kazis 2023; and Fremark 2023.

[259] Interview with Dan Reuter, executive director, Chattanooga-Hamilton County Regional Planning Agency, August 4, 2023.

[260] Chervin 2009.

[261] Nelson 2013.

near offices and stores; allowing ADUs; and above all, expediting permitting.[262] A separate survey by Redfin, a real estate platform, reported that 78% of respondents supported building more housing, and while only a minority of 32% would support a "large apartment complex" in their neighborhood, another 48% were neutral, leaving just 20% opposed.[263] The National Association of Realtors conducts a periodic national survey on community and transportation preferences, and in 2023 found that 56% of respondents preferred housing in walkable, denser communities.[264] This preference was also strongest in both the youngest and oldest age groups. And, from 2015 to 2023, receptiveness to living in attached housing like an apartment or townhouse rose from 45% to 53%. As stakeholders have said, allowing apartments, duplexes, townhouses, ADUs, and other such housing gives Tennesseans more options, and while many may still prefer single-family homes, others may not want some of the work that comes with them, like yard maintenance.[265]

Moreover, this preference for more density was strong enough that most respondents said they were willing to pay more to live in such communities. This was particularly true for younger generations, with roughly 90% of younger respondents saying they would pay more for housing in a denser, more walkable location, and a third saying they would pay "a lot more." But given the prevailing single-family zoning in many cities today, only 3.2% of the country's population lives in an area that could be counted as very walkable,[266] indicating a wide gap between the demand and supply of denser housing options—which may be why homes in walkable areas command a premium.[267] Although survey data specific to Tennessee is lacking, what is available could suggest that, again, perhaps half of Tennesseans share a preference for denser housing and the more walkable communities that can come with it, but only a fraction of them may be able to find it given the current housing supply.[268]

Because zoning reform can allow more homes to be built within a fixed area, it can make more efficient use of available space, potentially preserving greenbelt and farmland from

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262 Horowitz and Kansal 2023.

263 Anderson 2023b.

264 National Association of Realtors 2023b.

265 Interviews with Retha Patton, housing program director, Tennessee's Community Assistance Corporation, September 18, 2023; and Paige Brown, mayor, City of Gallatin, July 13, 2023.

266 Talen and Koschinsky 2013.

267 Van Gieson 2019; and Hamilton and Dourado 2018.

268 Nelson 2013.

further development. It may also be more cost efficient for construction. One study suggested that detached single-family homes can cost 2.7 times as much as a unit in missing middle housing like a quadplex.[269] Home prices in a given city also tend to be lower where the number of homes per acre is higher, a pattern observed with real estate data in cities across Tennessee—for instance, in 2019 in Murfreesboro, the median market value for detached single-family homes in the lowest group for density (1.5 housing units per acre) was $120,000 or more than a third greater than that for comparable homes in the highest group for density (8.6 housing units per acre).[270] Attached homes like townhouses showed the same trend and cost even less. And when it comes to the size of developments, more units may mean a lower average cost. For instance, a US Government Accountability Office report on affordable housing found that developments with 100 housing units or more cost approximately $85,000 less per unit than developments with 37 or fewer units.[271]

Furthermore, given how the placement of housing interacts with transportation, increasing housing density can lead to savings for households in their transportation costs. As past research has found, when housing and transportation costs are considered together, those living in transit-oriented developments or within proximity of transit stations tend to have lower combined costs.[272] And households that live within a mile of five "activity centers"—areas with high concentrations of amenities and jobs—end up driving 42% fewer miles each year than households that live at least 10 miles from an activity center.[273]

Finally, greater housing density can also come with benefits for the cost-efficiency of local government services and infrastructure. As the Commission has found previously, typical residential development often requires more spending than it generates in tax revenue—that is, it may not be able to pay for itself. In an earlier study of Robertson County, "for each $1 of revenue received from residential properties in fiscal year 2005, Robertson County spent $1.13 providing services to those lands. For each $1 from commercial and industrial land uses, the county spent 22 cents; and for each $1 received from farmland, the county spent 26 cents providing services."[274] But, as also found in a

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269 California Community Builders 2022.

270 American Enterprise Institute "New Home Construction and As-Built Density Relationships."

271 US Government Accountability Office 2018.

272 Renne et al. 2016; and Dong 2021.

273 Tomer and George 2023.

274 American Farmland Trust 2006.

related Commission staff report: "Development in infill areas where infrastructure is already in place may not require additional investments for water and sewer beyond relatively minor upgrades to old systems. Growth that can be served by surplus capacity will have no substantial effect on community resources."[275] Other research taking a national scope has also found that the per capita construction and operational costs of roads, parks, sewer, and water infrastructure all tend to be lower when density is greater.[276] The organization Smart Growth America, which advocates for density as a part of more efficient land use policy, claims that denser or "smarter" development can reduce upfront infrastructure costs by 38%,[277] and has previously presented data to show that with three distinct residential neighborhoods in Nashville, net revenues increased with the density of households per acre (see table 4).

Table 4. Local Services Costs per Capita in Three Nashville Communities of Different Densities

	Bradford Hills (conventional suburban subdivision)	Lenox Village (denser, mixed-use subdivision)	The Gulch (high density area in downtown)
Total Housing Units	538	1,715	4,552
Housing Units per Acre	2.91	9.27	59.9
Service Costs per Housing Unit	$1,590	$1,260	$1,440
Revenue per Housing Unit	$1,620	$1,340	$3,370
Net Revenue per Housing Unit	$30	$80	$1,930
Net Revenue per Acre	$100	$780	$115,720

Source: Fulton et al. 2013 and Commission staff calculations.

[275] Naccarato et al. 2006.

[276] Mattson 2021.

[277] Fulton et al. 2013.

Impact Fees and Development Taxes

New housing can come with the need for new infrastructure, like additional or expanded streets, stormwater drains, and water and sewer lines, not to mention a need to augment services like fire departments, emergency medical services, policing, and schools, even if that increase in needed services is only incremental. Local governments have a few options for meeting the costs of such infrastructure, primarily property taxes or impact fees and development taxes.[278] A local options sales tax may also be possible, though many jurisdictions may already use the maximum 2.75% rate allowed.[279]

A small number of Tennessee local governments—18 counties and 15 cities—use impact fees or development taxes.[280] These fees and taxes can have various names and subtypes, like a road impact fee or adequate facilities tax, and can be levied in different ways, but what sets them apart from property taxes is that they only apply to new construction, not existing homes. Across all jurisdictions in the state, together these fees and taxes generated a total of $110 million in fiscal year 2021-22.[281] See table 1 (reposted).

Table 1 (Reposted). Local Government Impact Fees and Development Taxes in Tennessee, Fiscal Year 2021-22

County or City	Revenue
Impact Fees	
Macon	$ 968,873
Maury	-
Spring Hill	3,181,985
Robertson	-
White House	495,705
Portland	105,590
Rutherford	-
La Vergne	338,666
Murfreesboro*	-
Smyrna	2,696,315
Williamson	-
Brentwood	549,607
Franklin	12,157,190

[278] Green and Young 2002.

[279] Tennessee Code Annotated 67-6-702.

[280] Commission staff analysis of local government ordinances.

[281] Tennessee Comptroller of the Treasury 2023 and Commission staff correspondence with local officials.

County or City	Revenue
Nolensville	-
Wilson	-
Lebanon	2,953,338
Mt. Juliet	991,268
Total	**$ 20,493,931**
Development Taxes**	
Bedford	$ 781,039
Cannon	92,338
Cheatham	1,133,698
Kingston Springs	10,919
Pegram	6,749
Dickson	1,228,671
Fayette	928,587
Hickman	294,480
Jefferson	1,520,746
Loudon	3,308,441
Marshall	886,604
Maury	3,733,279
Columbia	417,740
Spring Hill	1,664,428
Montgomery	2,983,940
Sumner	3,440,718
Robertson	2,485,980
Rutherford	5,484,390
Trousdale	162,050
Williamson	22,761,451
Williamson	5,323,212
Brentwood	528,221
Fairview	343,542
Franklin	3,669,629
Nolensville	1,140,117
Wilson	16,936,412
Total	**$ 81,267,381**
Counties	**$ 57,518,497**
Cities	**31,251,009**
Total	**$ 88,769,506**

*Murfreesboro's impact fee will be implemented in fiscal year 2023-24.

**Development taxes may carry various other names, such as facilities taxes.

Source: Commission staff review of Tennessee state law; Tennessee Comptroller of the Treasury 2023; and correspondence with staff of cities and counties.

Although cities may attempt to enact new impact fees through a private act, counties are preempted from doing so. The County Powers Relief Act of 2006 authorizes a school facilities tax in 33 fast-growing counties but precludes counties from relying on subsequently enacted or amended private acts to impose or increase their development taxes.[282] This has led counties to rely on other sources of revenue instead. For example, Rutherford County recently increased its property tax rate because, according to the county mayor, they "didn't have the tools to make sure that growth could pay for itself."[283] Previously, Rutherford County repealed their private act development tax, which could not be increased, and adopted the school facilities tax that is authorized by the County Powers Relief Act. This tax is assessed on the basis of the square footage of the property, so that more taxes would be paid on a larger house than a smaller one. State law permits a county to levy such taxes at an initial rate of $1.00, which can then be increased, but only once every four years, and then by no more than 10% at a time.[284] Revenue from these taxes may only be "used exclusively for the purpose of funding capital expenditures for education, including the retirement of bonded indebtedness."[285]

There is a robust debate around impact fees and whether they are a fair way to cover the costs of a community's growth. Developers and some related stakeholders oppose the taxes and fees, noting that they add to the cost of housing,[286] and even if they may not be the largest components of overall housing prices, they are at least one that local governments have control over.[287] Some say that the fees can be burdensome for smaller homebuilding businesses in particular, who must shoulder the cost until the home is sold, while larger builders can cope more easily.[288] Opponents also say that one of the

[282] State of Tennessee, Office of the Attorney General and Reporter, Opinion 07-06 (2006).

[283] Interview with Joe Carr, mayor, and Will Denami, assessor, Rutherford County, October 5, 2023.

[284] Tennessee Code Annotated 67-4-2908.

[285] Tennessee Code Annotated 67-4-2911.

[286] Interviews with Hunter McDonald, Chris Wilson, Candy Joyce, and Ryan Folz of Middle Tennessee Association of Realtors, July 7, 2023; Ashley Sugar, governmental affairs director, and Addison Russell, assistant general counsel, Tennessee Association of Realtors, July 13, 2023; and Jann Dower, director, Home Builders Association of Tennessee, July 19, 2023.

[287] Interview with Ashley Sugar, governmental affairs director, and Addison Russell, assistant general counsel, Tennessee Association of Realtors, July 13, 2023.

[288] Interview with Hunter McDonald, Chris Wilson, Candy Joyce, and Ryan Folz of Middle Tennessee Association of Realtors, July 7, 2023.

rationales for impact fees and development taxes—that they are meant to meet the cost of supplying infrastructure for a growing population—does not hold, because those who buy newly constructed homes are often existing residents of a community and not newcomers who are adding to the population.[289] Moreover, the newly created infrastructure might be seen as a benefit to the community as a whole, and therefore not the responsibility of only a few. For these reasons, opponents of impact fees have suggested measures such as requiring that impact fees or development taxes only be paid once a certificate of occupancy is issued[290]—thereby taking the cost off of smaller builders—and that the cost of infrastructure could instead be covered by some other revenue stream.[291]

Proponents of impact fees, however, say that it is more equitable to charge developers than to increase property tax rates for all property owners in a county or city, and caution that property taxes are a government power that should be exercised with care given the strong effects they can have on households.[292] To raise the same amount of revenue through property taxes, counties and cities would need to increase their property tax rates by $0.012 to $0.415 per $100 of assessed value (see appendix C). As to the question of equity, at least some local governments also conduct studies to determine precisely how much their fees or taxes need to be to meet the cost of added amenities and services, so as to ensure the fees do not exceed what is required.[293] They also note that impact fees and some development taxes are earmarked so that they can only be used for infrastructure needs directly arising from the new development they are levied on.[294] And while those who buy a new home may not always be new residents in a community,

[289] Interviews with Ashley Sugar, governmental affairs director, and Addison Russell, assistant general counsel, Tennessee Association of Realtors, July 13, 2023; and Jann Dower, director, Home Builders Association of Tennessee, July 19, 2023.

[290] Interview with Hunter McDonald, Chris Wilson, Candy Joyce, and Ryan Folz of Middle Tennessee Association of Realtors, July 7, 2023.

[291] Interview with Ashley Sugar, governmental affairs director, and Addison Russell, assistant general counsel, Tennessee Association of Realtors, July 13, 2023.

[292] Interviews with Kevin Hensley, director of public policy, and Shelby Vannoy, assistant director of public policy, Tennessee Farm Bureau, August 14, 2023; and Joe Carr, mayor, and Will Denami, assessor, Rutherford County, October 5, 2023.

[293] Interviews with Ken Moore, mayor, and Vernon Gerth, assistant city administrator, City of Franklin, August 1, 2023; and Kevin Rigsby, town planner, City of Smyrna, July 11, 2023.

[294] Interviews with Ken Moore, mayor, and Vernon Gerth, assistant city administrator, City of Franklin, August 1, 2023, and Kevin Rigsby, town planner, City of Smyrna, July 11, 2023; Tennessee Code Annotated 67-4-2901 et seq.; and Green and Eldridge 2006.

proponents of impact fees say that new construction will still incur new infrastructure needs, whereas if an existing home changes hands and is taken up by newcomers to a community, it does not change the balance of needs.[295] There are many dimensions to this debate, and different communities may prefer one option or the other depending on their local circumstances, which is why in 2005 the Commission recommended granting local governments flexibility to levy impact fees and adequate facilities taxes—one type of development tax in Tennessee.[296]

The question here, however, is simply whether and how impact fees affect the affordability of housing. Although paid by developers, impact fees and development taxes are likely passed through to purchasers of new housing in the form of higher housing prices.[297] Tennessee law, in fact, requires that on the first sale of a home, any impact fees or development taxes paid should be disclosed to the buyer.[298] And the fees and taxes can vary widely across jurisdictions. Some are assessed on a certain rate per square foot of a housing unit, with different localities having rates that range from $0.25 to $2.50, while others are assessed as a flat fee, sometimes modulated by conditions like the type of unit—for instance, whether it is a detached single-family dwelling or a unit in a multifamily building—and are typically in the range of several thousand dollars (see appendix B). The highest single fee in the state is $12,399, which is assessed in Williamson County on houses of at least 3,400 square feet that are outside of the Franklin Special School District.

Past research looking at impact fees in Florida and Washington state indicate that for each $1 of impact fees levied, the price of homes increased by about $1.60 to $1.66.[299] But it is still difficult to disentangle the effects of impact fees per se and the infrastructure improvements they support. As one housing researcher has noted, "Discussing the effect impact fees may have on the affordability of housing in the abstract without a comparison to the effect that alternative forms of financing will have on affordability is not helpful. . . . If the infrastructure is provided, it must be paid for, and every source of financing will have effects on the affordability of housing or some other basic item in a household's budget."[300]

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[295] Interview Joe Carr, mayor, and Will Denami, assessor, Rutherford County, October 5, 2023.

[296] Tennessee Advisory Commission on Intergovernmental Relations 2005.

[297] Ihlanfeldt and Shaughnessy 2004.

[298] Tennessee Code Annotated 66-5-211.

[299] Ihlanfeldt and Shaughnessy 2004; and Mathur, Waddell, and Blanco 2004.

[300] Been 2005.

In any case, the contribution of impact fees and development taxes to housing costs is often limited. The NAHB previously surveyed its members to estimate how much various regulations might contribute to housing costs, concluding that 23.8% of housing costs could be attributed to regulations of some form, including impact fees.[301] This data, however, was drawn from the national level, and Commission staff were unable to obtain data specific to Tennessee, so it is uncertain how well the overall estimate translates to the state. But the 23.8% figure also breaks down into a miscellaneous assortment of costs, no one of which accounts for more than a few percentage points, and the category for fees—which included other fees beyond impact fees—accounted for just 3% of the average housing cost nationally. In Tennessee, assuming a tax at $1 per square foot—a typical rate of jurisdictions with a development tax based on square footage—a 2,500 square foot new home would simply result in a development tax of $2,500. However, with the median cost of new homes in Tennessee reaching $408,000 as of 2022,[302] that tax bill would amount to just 0.6% of the home price. Therefore, even if multiple fees and taxes are combined, they may account for no more than a few percentage points of the total sales price.

Other factors contribute to housing costs, although few straightforward policy options currently exist to address them.

The supply and demand for housing may be at the core of affordability issues, but there are of course other factors that housing specialists have pointed to as contributing to housing costs. Several of these, such as the heightened cost of construction materials and interest rates, have become all the more prominent within the past several years. State and local governments may have few policy options to affect these matters; however, it is still important to be aware of their role in driving housing costs.

Construction and Labor Costs

Both construction labor and material costs—particularly for softwood lumber—have risen sharply in recent years; the increases in material cost are attributable in part to both pandemic supply chain disruptions and other miscellaneous issues affecting international trade.[303] An evaluation of 2022 construction industry data revealed that 71% of all construction material costs and equipment prices increased, as well as 98% of all

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301 Emrath 2021.

302 Tennessee Housing Development Agency 2023c.

303 Parrott and Zandi 2021.

labor wage rates.[304] Stakeholders have also witnessed the effects firsthand on Tennessee's housing market,[305] as construction and related costs generally constitute the majority of the overall cost of housing cost—somewhere between very roughly 50% and 70% of the total.[306] There are few policy levers by which the state might improve these conditions, but as analysts of the construction industry have noted before, it may be overdue for some improvements to productivity.[307]

Manufactured homes—that is, homes built in a factory before being moved to a location or assembled on-site from factory-made modular components—have been explored as a way to mitigate the growing costs of construction and labor. Because of lower costs of materials and faster build timelines, manufactured homes are often priced between 10% and 35% less per square foot than traditional homes.[308] However, in a 2017 survey, 85% of single-family builders were using traditional on-site, stick-built methods, and just 4% were using modular or factory-built construction.[309] Nevertheless, the same study revealed some optimism among industry respondents that factory-built homes would be on the rise in the coming years. Tennessee state law does allow for manufactured housing, and in fact prohibits zoning authorities from excluding a manufactured home "solely because the dwelling is partially or completely constructed in a manufacturing facility,"[310] although case law has established that, to be protected, a manufactured home must also have "the same general appearance as required for site-built homes."[311] Along similar lines, there may also be some other innovations in construction on the horizon that could lower costs, such as 3D printing or novel building materials; but while these

[304] Gordian 2022.

[305] Interviews with Ben Bentley, executive director, Knoxville Community Development Corporation, July 25, 2023; Ken Moore, mayor, and Vernon Gerth, assistant city administrator, City of Franklin, August 1, 2023; John Zeanah, director, Memphis & Shelby County Division of Planning & Development, August 24, 2023; Nick Ogden, owner, Clear Blue Development, September 13, 2023; and Retha Patton, housing program director, Tennessee's Community Assistance Corporation, September 18, 2023.

[306] Hoyt and Schuetz 2020; see also GAO 2023.

[307] Barbosa et al. 2017.

[308] Bond and Fontinelle 2023.

[309] Colton and Ahluwalia 2019.

[310] Tennessee Code Annotated 13-24-201.

[311] Tennessee Manufactured Housing Association v. Metropolitan Government of Nashville, 798 S.W.2d 254.

have attracted interest, it is likely to still be some years before they come to fruition and have any meaningful effect on the housing market at large.[312]

The supply of construction labor, on the other hand, is no less important,[313] and something that the state has already invested in with various supports for vocational training, including the creation of the Go Build Tennessee Program.[314] But as was seen briefly during the start of the pandemic and, far more so, in the wake of the Great Recession, employment in the construction industry can fluctuate dramatically in response to what is happening in the economy at large, and when that might lead to fewer construction workers being available, housing costs tend to rise on the back of increasing labor costs.[315]

Interest Rates

While outside of state control, interest rates can play a significant role in home-purchasing power and perceptions of affordability, as pointed out by many stakeholders.[316] Rising interest rates can translate into higher mortgage payments, reduced purchasing power, and slower market activity. See figure 9 for an example of monthly mortgage payments at different interest rates on a $400,000 home (on par with the median price of a new home in Tennessee for 2022) with a $40,000 down payment.

[312] Interviews with Jeremy Heidt, director of government affairs, Tennessee Housing Development Agency, May 26, 2023; and Michael Hendrix, policy director, Office of the Governor of Tennessee, December 14, 2023.

[313] Interviews with Ralph Perrey, executive director, Tennessee Housing Development Agency, August 30, 2023; and Michael Hendrix, policy director, Office of the Governor of Tennessee, December 14, 2023.

[314] Tennessee Code Annotated 4-41-105.

[315] Neal and Goodman 2020; and US Bureau of Labor Statistics "Construction, All Employees, Tennessee."

[316] Interviews with Ken Moore, mayor, and Vernon Gerth, assistant city administrator, City of Franklin, August 1, 2023; Ashley Sugar, government affairs director, Tennessee Realtors, August 31, 2023; Jenny Schuetz, senior fellow, Brookings Institution, August 17, 2023; and Retha Patton, housing program director, Tennessee's Community Assistance Corporation, September 18, 2023.

Figure 9: Monthly Mortgage Payment at Different Interest Rates on a $400,000 House

Source: Commission staff calculations.

Note: Interest rates were determined using the lowest, average, and highest 30-year fixed-rate interest rates over the past five years (Commission staff analysis of historical mortgage rate data, see Freddie Mac "Mortgages Rates").

Based on historical data, home price appreciation and annual changes in mortgage rates have a negligible association with one another.[317] More recently, however, interest rates have taken center stage. In the Home Ownership Availability Monitor (HOAM) Index, for example, interest rates have been the main driver behind declines in the index since the second quarter of 2022.[318]

Housing Being Treated as an Investment

Housing is a necessity, but many property owners and buyers may also choose to treat it as an investment, expecting home values to appreciate over time and generate some kind of eventual financial return.[319] Within the past twenty years or so, however, there have been two rising trends for treating housing as an investment that may either lead to higher prices in general or reduce the availability of homes, namely homes being built or bought up by institutional investors, and homes being built for or converted into short-term rentals.

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[317] Goodman and Neal 2022.

[318] Commission staff analysis of data from Federal Reserve Bank of Atlanta, "Home Ownership Affordability Monitor."

[319] Case and Shiller 2003.

Institutional Investors

Over the past few decades, there has been an increase in investor-owned residential properties. As seen in the figure below, the investor market share—the percentage of total home sales in which an investor was the buyer—at the national level (analyzed using data from the 41 most populous metro areas), has steadily increased over the past two decades apart from a momentary dip because of the COVID-19 pandemic (see figure 10).[320]

Large investors (with more than 100 properties in their portfolio) went from being about 16% of the buyers for single-family homes from 2017 through 2019 to 28% at the start of 2022.[321] Institutional investors appear to have driven home prices up after the Great Recession, even as homeownership rates declined, while also pushing up rent growth.[322] One analysis found that institutional investors tend to drive price increases specifically in lower-cost housing. Overall, an increase in purchases by institutional investors of 7.78% accelerated home price growth by 1.46 percentage points, or even 2.29 percentage points when looking just at the bottom tier of the market.[323]

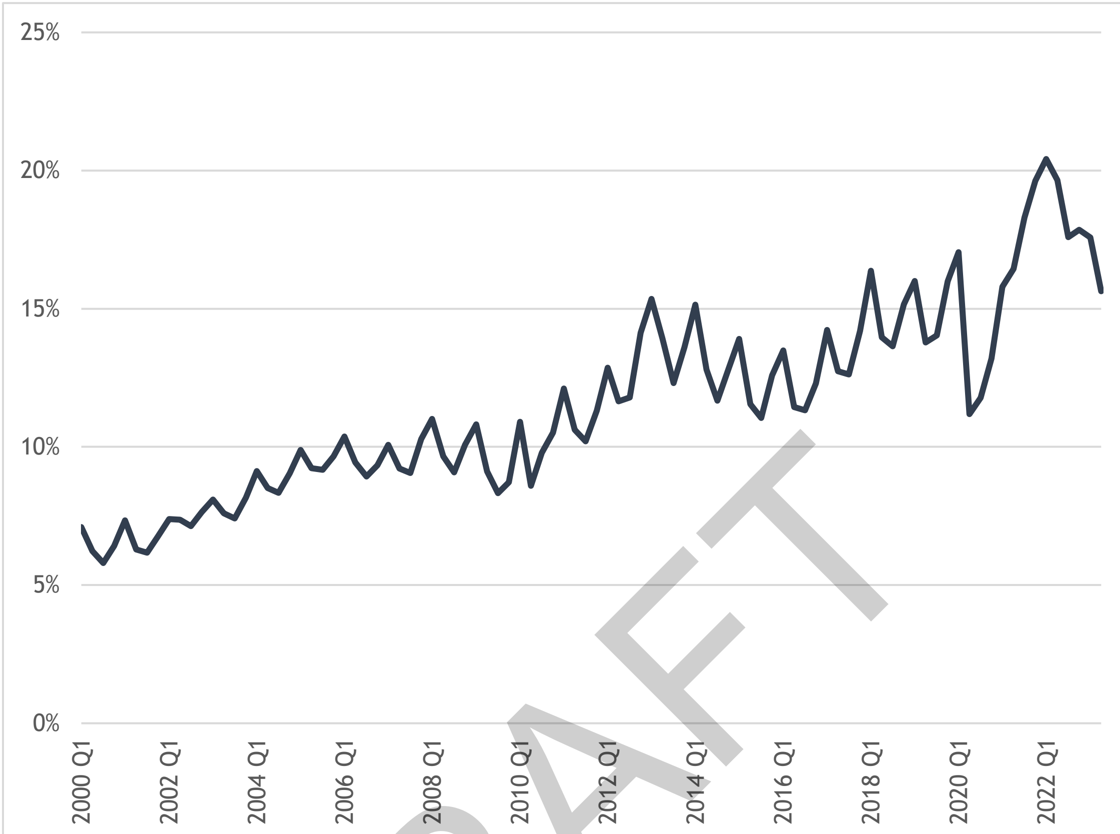
[320] Redfin "Data Center."

[321] Joint Center for Housing Studies of Harvard University 2023.

[322] Lambie-Hanson, Li, and Slonkosky 2019.

[323] Garriga, Gete, and Tsouderou 2020.

Figure 10. Percentage of Total Homes Sold Nationally Bought by an Institutional Investor



Source: Redfin "Data Center."

Short-Term Rentals

As short-term vacation rentals have risen in popularity, concerns have emerged that their share of the market has an impact on available and affordable housing, and several Tennessee stakeholders have expressed concern about the rise of short-term rentals in areas such as Sevier County and Chattanooga.[324] Research does suggest that short-term rentals may diminish the availability of housing, although the exact size of the effect is difficult to judge. One study found that the presence of short-term rentals has led to increases in rental rates and home prices, with the effect being stronger in zip codes with a lower share of owner-occupiers.[325] According to the study, the "results translate to an annual increase of $9 in monthly rent and $1,800 in house prices for the median zip code

[324]Interviews with Larry Waters, mayor, Sevier County, August 2, 2023; Nicole Heyman, chief housing officer, Chattanooga, August 3, 2023; and Dan Reuter, executive director, Chattanooga-Hamilton County Regional Planning Agency, August 4, 2023.

[325] Barron, Kung, and Proserpio 2017; see also Merante and Horn 2017.

. . . which accounts for about one-fifth of actual rent growth and one-seventh of actual price growth."

Other perspectives claim that short-term rentals have little to no impact on affordable housing. One study from California claimed that short-term rentals only account for 1% of the state's housing stock and most are "expensive single-family homes that would not otherwise add to needed affordable housing supply."[326] Despite the mixed evaluations on short-term rentals' impact on affordable housing, municipalities throughout the country are beginning to regulate them. Types of regulations on short-term rentals include the following:

- Permitting and licensing—meeting certain standards and paying permitting and licensing fees
- Occupancy limits
- Parking requirements
- Taxes—requiring additional taxes to be collected on top of state taxes; usually paid by guests but collected and distributed back to the state by hosts[327]
- Zoning restrictions—prohibiting short-term rentals in some areas of the municipality
- Insurance requirements
- Limiting the number of short-term rentals in municipalities
- Limiting the days/year units may be rented out
- Requiring the host to have primary residence in the unit
- Requiring minimum stays

Many municipalities have enacted a combination of regulations. In New York City, for example, Local Law 18 went into effect in September 2023 and requires short-term rental hosts to register with the Mayor's Office of Special Enforcement, only permits units that serve as legal primary residences (based on being occupied over half of the year) to be rented short term, prohibits entire apartments from being rented out for less than 30 consecutive days, and requires the owner of the rental unit to be sharing the residence

[326] Dubetz, Horton, and Kesteven 2022.

[327] Steamboat Springs, Colorado enacted a 9% tax on short-term rentals in 2022 to fund affordable housing developments. See Pandy, Latu, and Davis 2023.

through the duration of a guest's stay.[328] Additionally, no more than two guests are allowed per stay and hosts must pay various taxes and fees.[329] Local law 18 is an example of one of the most extensive and restrictive regulations on short-term rentals to date, although beyond such regulations, some municipalities have even banned short-term rentals entirely.[330]

Research on whether regulating and restricting short-term rentals produces the desired results is mixed: one study found that short-term rental regulations reduced rent prices by 2% in Los Angeles,[331] while another found a reduction in property prices of 30% in New Orleans.[332] One study compared Airbnb listings and residential permit applications in the three years before and after a short-term rental restriction was passed in a given neighborhood and identified a downward trend in both listings and permits after regulation was enacted: Airbnb listings fell by an average of 9% and residential permits fell by an average of 11%.[333]

Tennessee state law, however, includes a legacy clause for short-term rentals, such that if a local government adopts regulations of short-term rentals, they do not apply to properties already operating as short-term rentals in that jurisdiction, but only to new ones.[334]

Income Inequality

Income inequality could theoretically drive housing price increases through one of several mechanisms: inequality may simply leave those on lower income tiers too poor to afford housing; it may inspire conspicuous consumption, driving some to spend more than they reasonably can on housing; or, financial strains may force different income groups to shift across housing quality markets, either with those at higher income levels bidding up prices or crowding the lower end of the housing market by buying up properties.[335]

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[328] New York City Office of Special Enforcement "Registration for Hosts."

[329] Hostfully.

[330] Park Township, MI, for example, prohibits short-term rentals in residential neighborhoods.

[331] Koster, Van Ommeren, and Volkhausen 2021.

[332] Valentin 2020.

[333] Bekkerman et al. 2021.

[334] Tennessee Code Annotated 13-7-603.

[335] Dewilde and Lancee 2013.

Whatever the mechanism, though, there is some indication that inequality can worsen affordability problems. One study showed that, all else being equal, an increase of 0.1 in the Gini coefficient—a standard measure of income inequality across a population that can range from zero to one—was associated with 2.2 and 4.4 percentage points more severely rent-burdened low-income households in 2000 and from 2008 through 2012, respectively.[336] Increases in the Gini coefficient have also been associated with greater crowding. One study revealed that "tight" housing markets tend to be those where incomes are rapidly rising at the higher end, while incomes at the low end move upward slightly or not at all and lower-income households have experienced greater crowding.[337] Commission staff analysis of 2020 county-level data in Tennessee, however, did not find a noteworthy correlation between the Gini coefficient of counties and either the home price-to-income ratio or the percentage of the population who were housing cost-burdened.

Many additional strategies and programs are available to support housing development, homeowners, and renters.

While an ample housing supply is crucial for affordability, it may not be the only requisite. Stakeholders have said that, to support housing for working Tennesseans with lower incomes, some amount of subsidy may inevitably be needed,[338] as without it, even a nonprofit like Habitat for Humanity would have to operate at a loss.[339] Meanwhile, others have pointed out that housing affordability extends to problems of not just attaining a home, but maintaining it, which might suggest policies to support accessibility, preservation, and stability in housing.[340] For instance, parts of the state—some urban, but especially rural areas—do not suffer from housing shortages so much as an aging housing stock, where repairs are desperately needed but difficult to finance.[341]

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[336] Dong 2018.

[337] Matlack and Vigdor 2006.

[338] Interview with Ralph Perrey, executive director, Tennessee Housing Development Agency, August 30, 2023.

[339] Jens Christensen, CEO, Habitat for Humanity of Greater Chattanooga, speaking at the Commission meeting on September 27, 2023.

[340] Phillips 2020; and interview with Roshun Austin, CEO, and Steve Barlow, vice president, The Works, July 19, 2023.

[341] Interviews with Dwayne Barrett, tax attorney, Reno and Cavanaugh, August 21, 2023; Will Veazey, planner, Tipton County, August 24, 2023; and Retha Patton, housing program director, Tennessee's Community Assistance Corporation, September 18, 2023.

There is a panoply of policy solutions to meet these and related problems, many of which already exist in some form in Tennessee in either state or local programs. These include, among other things, tax credits; payments in lieu of taxes (PILOT); tax increment financing (TIF); financial programs for home construction, purchasing, or repair, including down payment assistance and appraisal gap financing; rental assistance; landlord registries and programs for ensuring code compliance in rental properties; and much more. An exhaustive review of all of the options is not possible here, but some of those highlighted by stakeholders are worth noting.

Tax Credits and Trust Funds for Affordable Housing Development

THDA already administers a number of programs in support of affordable housing, often conducted in partnership with locally based public housing authorities. At present, the organization receives no funding from the state, relying entirely on revenue generated from its home loan program and federal contracts to cover its entire operating budget.[342] The funding it administers for federal housing programs is provided by Congress. And among its programs, THDA has several that promote the production of new affordable housing units for households of very low to moderate incomes, including loan and bond programs, but one of the mainstays of affordable housing development are tax credits.

In tax credit development programs, developers and their investors receive credits against their tax liabilities for building or redeveloping housing that is priced to be affordable to those with lower incomes making a certain percentage of the area median income (AMI).[343] The most well-known example is the Low-Income Housing Tax Credit (LIHTC) Program, a federal tax credit that affordable housing developers and investors can receive for 10 years on a given development. The amount of tax credits is based on the costs of development as determined by THDA and the number of qualified units provided for low-income households.[344] In 2022, 6,889 affordable rental units across the state were being supported by LIHTC.[345] A bill currently before Congress, the Affordable Housing Credit Improvement Act, may expand funding for the LIHTC program, potentially allowing for more such housing to be developed in Tennessee. The bipartisan act includes provisions to increase the number of credits available to states by 50% for the

[342] Tennessee Housing Development Agency 2019.

[343] AMI is formally defined by the US Department of Housing and Urban Development and is based on the median income of households with two or more people in a given metropolitan statistical area. See US Department of Housing and Urban Development 2023.

[344] Tennessee Housing Development Agency "Low-Income Housing Tax Credit Program."

[345] Commission staff calculations of Tennessee Housing Development Agency 2023a.

next two years, make the temporary 12.5% increase in tax credits available for low-income housing secured in 2018 permanent, and decrease the amount of private activity bonds needed to secure funding from 50% to 25%.[346]

Several stakeholders noted that LIHTC is subject to inclusion in property tax assessments, which, they say, undercuts affordability.[347] But as noted in the Commission's 2015 report *Assessing the Value of Low-Income Housing for Property Tax Purposes*,

> Interpreting Tennessee law and the state constitutional requirement of uniformity in assessment and tax rates, Tennessee courts have recognized the credits as an indicator of property value that is properly considered when assessing the value of LIHTC properties. In *Spring Hill, L.P., et al. v. Tennessee State Board of Equalization, et al.* (2003), the court of appeals noted that "the tax credits are not being taxed as intangible property . . . [and their] inclusion does not constitute a tax on those intangibles." The court further noted that "the tax credits are irrevocably attached to the real property" and concluded that they "relate directly to the real property and are not a tangible benefit severable and sold to third parties and that they were properly included in the valuation" of the Spring Hill property and two others. (internal citations omitted).[348]

Some local governments may grant PILOTs to affordable housing developments, which may reduce some of the cost, but not every local government may be able or willing to do so,[349] and PILOTs are typically not permanent, creating a risk for keeping a property affordable over the long term.[350]

In its 2015 report, the Commission recommended spreading the credits' cumulative annual present values evenly over the restricted-rent period, thereby evening out the annual tax bill to eliminate the cash-flow problem that owners of LIHTC properties sometimes face, while still retaining the full value of the tax credits for property tax

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346 The Action Campaign 2023.

347 Interviews with Phyllis Vaughn, consultant, Vaughn Development, August 7, 2023; and Dwayne Barrett, tax attorney, Reno and Cavanaugh, August 21, 2023.

348 Tennessee Advisory Commission on Intergovernmental Relations 2015.

349 Interviews with Phyllis Vaughn, consultant, Vaughn Development, August 7, 2023; and David Hayes, owner, Hayes Associates, September 6, 2023.

350 Interview with Roshun Austin, CEO, and Steve Barlow, vice president, The Works, July 19, 2023.

purposes.[351] In 2016, the Tennessee State Board of Equalization adopted rules allowing LIHTC property owners to opt to have their properties assessed using the Commission's recommended approach.[352]

South Carolina, North Carolina, and Georgia have state programs that match LIHTC, increasing the tax credits available for a development.[353] South Carolina created their tax credit program in 2020, later amending it in 2022 because there was no limit on the number of credits or projects that could be funded, resulting in oversubscription by developers.[354] Consequently, their General Assembly imposed a $20 million annual cap for tax credits. The credits were initially a dollar-for-dollar matching of federal LIHTC, but the revision turned them into more of a gap financing device.[355]

Although Tennessee does not have a LIHTC-matching program, it does have a tax credit program of its own, the Community Investment Tax Credit (CITC), which is cooperatively administered by THDA and the Department of Revenue.[356] State law allows for financial institutions to obtain a credit of 5% for a qualified loan (10% for a grant) against their franchise and excise tax when they extend qualified loans, qualified investments, grants, or contributions to eligible housing entities for engaging in certain low-income housing activities.[357] As one stakeholder described it, the program used to be easy to use, but added application requirements have made it more cumbersome.[358] For instance, applying for the credits now requires the exact addresses of where homes will be built be provided upfront, which can delay the process because an applicant has to purchase the lots for the homes before securing the credits. Another suggested that

351 Tennessee Advisory Commission on Intergovernmental Relations 2015.

352 Rules and Regulations of the State of Tennessee, Chapter 0600-10-.03.

353 Interview with Dan Reuter, executive director, Chattanooga-Hamilton County Regional Planning Agency, August 4, 2023.

354 Interview with Kim Wilbourne, LIHTC manager, South Carolina State Housing Finance and Development Authority, and Julie Davis, multifamily development director, South Carolina State Housing Finance and Development Authority, October 13, 2023.

355 Ibid.

356 Tennessee Housing Development Agency 2018.

357 Tennessee Code Annotated 67-4-2109(h) and 67-4-2109(k); and Tennessee Housing Development Agency "Community Investment Tax Credit."

358 Interview with Retha Patton, housing program director, Tennessee's Community Assistance Corporation, September 18, 2023.

allowing more types of institutions to access the state's CITC could help in building more affordable housing.[359]

But there are possibilities for aiding affordable housing production beyond tax credits, including trust funds of various types. Some of these exist at the local level, such as the Barnes Fund in Nashville, which since its inception in 2013 has contributed to the development of 3,310 affordable housing units,[360] and in fiscal year 2024 was allocated $20.5 million.[361] THDA has its own housing trust fund, which allocated $8.2 million in 2022 to various housing programs for low-income Tennesseans who are elderly or have special needs.[362] The trust fund, however, receives no state appropriations, but rather is funded by annual revenues from THDA's mortgage loan program.[363] Other states have begun to explore ways to make more of such trust funds. Oklahoma recently established a new trust fund program with an appropriation of $215 million, most of which is geared towards making zero-interest loans to builders to produce affordably priced homes and rental units.[364] Oklahoma's state housing agency hopes that the revolving loans from the fund can be sustained indefinitely and lead to at least several thousand new housing units.[365] Such a loan program in Tennessee could be funded, at least in part, through revenues from the realty transfer or mortgage taxes, with interest from the fund used to support affordable housing indefinitely.

Inclusionary Zoning

One method of promoting affordable housing, called inclusionary zoning, is currently prohibited by state law.[366] Despite its name, it is not a form of zoning as most people might think of it, but is an incentive or requirement for developers to set aside a percentage of units in new housing developments to be affordable for lower-income

[359] Interview with Ben Bentley, executive director, Knoxville Community Development Corporation, July 25, 2023.

[360] The Metropolitan Government of Nashville and Davidson County 2022.

[361] The Metropolitan Government of Nashville and Davidson County 2023.

[362] Tennessee Housing Development Agency 2023a.

[363] Interview with Ralph Perrey, executive director, Tennessee Housing Development Agency, August 30, 2023.

[364] Oklahoma Housing Finance Agency 2023.

[365] Interview with Valenthia Doolin, homeownership director, and Darrell Beavers, housing development programs director, Oklahoma Housing Finance Agency, October 9, 2023.

[366] Tennessee Code Annotated 66-35-102.

households. Jurisdictions throughout the country have adopted inclusionary zoning, but Tennessee is one of seven states that preempt local governments from mandating it.[367] Stakeholders have said that, in their understanding, Tennessee's statute not only prohibits local governments from requiring developers include affordable housing units in their developments but also from offering them incentives like density bonuses or greater height allowances to do so on a voluntary basis. Stakeholders have said the law limits local governments' abilities to create needed housing,[368] with one describing the state's law against zoning and incentives on affordable housing as "the nail in the coffin" for their efforts to promote affordability.[369]

Exploring Rural Housing Development

Stakeholders have also suggested that housing should be considered in rural economic development,[370] and that there need to be more incentives to attract investments into rural communities.[371] In 2021 Tennessee's Department of Economic and Community Development (ECD) proposed creating a new Rural Development program to equip community leaders with a resources, best practices and funding for housing solutions.[372] They said that developers were struggling to make, entry-level, workforce housing financially viable and that rural communities did not know how to incentivize the workforce housing development they needed.[373] ECD proposed a plan with a $10.6 million budget, but did not receive funding in 2023.[374]

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367 Grounded Solutions Network 2019.

368 Interviews with Ken Moore, mayor, and Vernon Gerth, assistant city administrator, City of Franklin, August 1, 2023; Nicole Heyman, chief housing officer, Chattanooga, August 3, 2023; Angela Hubbard, director of housing division, Gregory Claxton, planner, Todd Okolichany, deputy executive planning director, and Lucy Kempf, executive director, Metro Nashville Planning Department, August 23, 2023; with Scott Conger, mayor, Lauren Kirk, chief innovation officer, and Claire Pierson, community development coordinator, City of Jackson, August 31, 2023; and Heidi Campbell, senator, Tennessee District 20, July 18, 2023.

369 Interview with Susan Minor, chief operating officer, Franklin Housing Authority, July 31, 2023.

370 Interview with Ryan Egly, president and CEO, and Ben Barnett, project manager, Lawrence County Chamber of Commerce, September 12, 2023.

371 Interview with Dwayne Barrett, tax attorney, Reno and Cavanaugh, August 21, 2023.

372 Correspondence with Brooxie Carlton, assistant commissioner, Rural Development, Tennessee Department of Economic and Community Development, August 29, 2023.

373 Interview with Brooxie Carlton, assistant commissioner, Rural Development, Tennessee Department of Economic and Community Development, August 29, 2023.

374 Ibid.

Supports for Current Homeowners

There are a number of programs in place to directly assist homeowners, buyers, and renters in a variety of ways. For example, THDA's Great Choice Home Loan program offers 30-year, fixed-rate mortgages with low interest to qualified first-time, repeat, and military veteran homebuyers,[375] and benefited 2,195 households in 2022.[376] Stakeholders have expressed an interest in adding or expanding other such programs to address a mix of housing needs.

A key issue for many is home repairs.[377] One estimate from the Federal Reserve Bank of Philadelphia is that $126.9 billion was needed for home repairs nationwide as of 2018.[378] While repair needs for some homes may be minor, for others the state of disrepair may make them dangerous or unlivable, thus undercutting the housing stock and having a knock-on effect on housing affordability at large. The census region with the highest average need, as the Federal Reserve Bank found, was the South, with $3,094 in repairs needed per home.[379] THDA provides funding for home repairs to Tennesseans who are low-income, elderly, disabled, or have special needs through the Tennessee Housing Trust Fund's Emergency Repair Program,[380] but the agency's funding for repairing and renovating existing homes is "oversubscribed."[381]

State law requires that home renovations costing more than $25,000 have a licensed general contractor.[382] Anything falling below that cost threshold can be done by a home improvement contractor. Some stakeholders say this threshold is too low and that more expensive projects could be adequately handled by home improvement contractors.[383]

375 Tennessee Housing Development Agency 2023d.

376 Tennessee Housing Development Agency 2023a.

377 Interviews with Julie Keel, program director, Mountain TOP, August 28, 2023; and Scott Conger, mayor, Lauren Kirk, chief innovation officer, and Claire Pierson, community development coordinator, City of Jackson, August 31, 2023.

378 Wallace 2019.

379 Federal Reserve Bank of Philadelphia 2019.

380 Tennessee Housing Development Agency "Home Repairs."

381 Interview with Ralph Perrey, executive director, Tennessee Housing Development Agency (THDA), August 30, 2023.

382 Tennessee Code Annotated 62-6-120.

383 Interview with Jason Edmonds, policy analyst, Beacon Center, August 17, 2023.

Senate Bill 1444 and House Bill 655 was introduced last year to raise the threshold to be in line with inflation—from $25,000 to $50,000—but it did not pass.

For other Tennesseans who own their homes but have limited incomes, property tax increases can be a consequence of rising home values, thus becoming an affordability issue all their own.[384] State law provides for property tax relief for low-income elderly and disabled homeowners, as well as disabled veteran homeowners or their surviving spouses.[385] Each year, more than 100,000 individuals receive benefits from a program authorized by the General Assembly for this purpose, which has total funding of $41 million.[386] Additionally, Article II, Section 28 of the Tennessee Constitution gives the General Assembly the authority to authorize counties and municipalities to implement a local option property tax freeze for taxpayers 65 years of age or older. In 2007, the 105th General Assembly enacted the Property Tax Freeze Act which established the tax freeze and authorized the legislative body of any county or municipality to adopt the property tax freeze program.[387] The program allows qualifying homeowners to have their property taxes on their primary residence frozen at the amount they owed in the year they first qualified for the program. As long as the owner continues to meet the program's eligibility criteria, the amount of property taxes owed generally won't change, even if there is a property tax rate increase or county-wide reappraisal.

Supports for Renter Households

Those who rent their homes face some unique affordability challenges, particularly because their living situations are less assured, and therefore potentially less stable, than for homeowners. THDA administers Tennessee's Section 8 Rental Assistance program, a tenant-based rental assistance or voucher program funded by HUD.[388] The program helps low-income households obtain decent, safe, and sanitary housing by THDA paying a portion of rental costs (including utilities) directly to a landlord in the private rental market. THDA also sponsors a free online website for advertising and locating available rental properties and other resources for renters.[389] However, federal funding for Section

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384 Interviews with Rogers Anderson, mayor, Williamson County, July 18, 2023; and Julie Keel, program director, Mountain TOP, August 28, 2023.

385 Tennessee Code Annotated 67-5-701 through 67-5-704.

386 Tennessee Comptroller of the Treasury "Property Tax Relief."

387 Tennessee Comptroller of the Treasury "Property Tax Freeze."

388 Tennessee Housing Development Agency "THDA Programs."

389 Tennessee Housing Development Agency 2024.

8 vouchers is limited, and nationally only one in six families who qualify for vouchers can receive them.[390] State law also prohibits local governments from adopting rent control measures.[391]

But apart from any issue with rental costs, many Tennesseans who rent may also face challenges with housing stability. Tennessee has some statewide tenant protection laws; most notably the state's Uniform Residential Landlord and Tenant Act makes it unlawful for a landlord to discriminatorily increase a tenant's rent, decrease a tenant's services, or threaten to bring an action against a tenant because the landlord is retaliating against the tenant.[392] However, stakeholders say there is still a need to ensure that landlords are accountable for keeping rental housing up to standard without requiring tenants to turn to the courts.[393] One way of doing so may be to allow local governments to create landlord registries to help ensure code compliance.[394] State law, however, preempts local governments from doing so, and only Davidson County currently has the authority to operate such a registry.[395]

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[390] Desmond 2020.

[391] Tennessee Code Annotated 66-35-102.

[392] Tennessee Code Annotated 66-28-5.

[393] Interview with Roshun Austin, CEO, and Steve Barlow, vice president, The Works, July 19, 2023.

[394] Interview with Scott Conger, mayor, Lauren Kirk, chief innovation officer, and Claire Pierson, community development coordinator, City of Jackson, August 31, 2023.

[395] Tennessee Code Annotated 66-28-107.

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Appendix A: House Joint Resolution 139 by Sparks

<BillNo> <Sponsor>

HOUSE JOINT RESOLUTION 139

By Sparks

A RESOLUTION relative to home affordability and impact fees.

WHEREAS, home affordability is an increasingly pressing issue for many Tennesseans; and

WHEREAS, according to statistics from 2020, the median value of existing homes in the State is $191,000, while a new home price in Tennessee is $387,961; and

WHEREAS, with the cost of living rising faster than incomes, more and more people are struggling to keep up with the expense of owning or renting a home, especially in areas with higher than average real estate prices; and

WHEREAS, for low- to moderate-income households, climbing real estate prices, in addition to issues such as predatory lending practices, make it difficult to access quality housing options and find secure and affordable homes within their budgets; and

WHEREAS, the increasing rate of impact fees, taxes levied on new developments, is another factor affecting potential homeowners; and

WHEREAS, commonly assessed to pay for the cost of infrastructure needed as a result of population growth, impact fees are rising due to increased demand and costs and could have serious negative consequences, such as increasing housing prices and limiting development in certain areas; and

WHEREAS, there are additional concerns that impact fees could lead to a decrease in available land for development or an increase in regional inequality by favoring wealthier communities that can afford these costs over less wealthy communities that cannot afford the costs; now, therefore,

BE IT RESOLVED BY THE HOUSE OF REPRESENTATIVES OF THE ONE HUNDRED THIRTEENTH GENERAL ASSEMBLY OF THE STATE OF TENNESSEE, THE SENATE CONCURRING, that we hereby request TACIR to undertake a comprehensive review of all existing impact fee policies, with particular focus on any potential challenges caused by increasing fees, seeking input from local governments in addition to economic experts.

BE IT FURTHER RESOLVED, that the State should work toward developing alternative approaches where necessary to ensure access to infrastructure is equitable across all communities while avoiding excessive rate hikes that could place an undue burden on citizens.

BE IT FURTHER RESOLVED, that an appropriate copy of this resolution be transmitted to the executive director of TACIR.

Appendix B: Local Government Rates for Impact Fees and Development Taxes

County or City	Name of Fee or Tax	Rates
Bedford	School Facilities Tax	$1 per sq. ft. (residential only)
Cannon	School Facilities Tax	$0.90 per sq. ft. (residential only)
Cheatham	Development Tax	Single Family: $3,000 per lot Multi Family: $3,000 per unit (residential only)
	Adequate Facilities Tax	$0.50 per sq. ft. (residential only)
Kingston Springs	Adequate Facilities Tax	$0.40 per gross sq. ft. of floor area (residential only)
Pegram	Adequate Facilities Tax	- Residential: $0.75 per gross sq. ft. of floor area - Non-residential: $0.40 per gross sq. ft. of floor area
Dickson	Adequate Facilities Tax	- Residential: $1 per gross sq. ft. - Commercial: $0.25 per gross sq. ft. - Industrial: $0.15 per gross sq. ft.
Fayette	Adequate Facilities Tax	- Residential: $0.99 per heated sq. ft. - Commercial: $0.25 per total sq. ft. under roof
Hickman	Development Privilege Tax	- Residential: Greater of $1 per sq. ft. or $1,500 - Commercial/Industrial: Greater of $0.25 per sq. ft. or $1,500
Jefferson	School Facilities Tax	$1 per sq. ft. (residential only)
Loudon	School Facilities Tax	$1 per sq. ft. (residential only)
Macon	Development Impact Fee	- Residential: $2.50 per sq. ft. - Commercial: $0.50 per sq. ft.
Marshall	Adequate Facilities Tax	- Residential: $1 per sq. ft. - Commercial: $0.60 per sq. ft.
Maury	Adequate Facilities Tax	- Residential: $0.50 per gross sq. ft. - Non-residential: $0.30 per gross sq. ft.

County or City	Name of Fee or Tax	Rates
Columbia	Sewer Impact Fee	- $1,060 for a 5/8" meter - $1,484 for a 3/4" meter - $2,968 for a 1" meter Note: Larger meter sizes, with correspondingly larger fees, are included the fee schedule but are not typical for residential use.
Spring Hill	Adequate Facilities Tax	- Residential: $1 per gross sq. ft. Non-residential: $2 per gross sq. ft.
—	Construction Impact Fee	- Single Family Detached: $3,361 per dwelling - Multi Family: $2,606 per dwelling - Senior Housing Detached: $1,515 per dwelling - Senior Housing Attached: $1,316 per dwelling - Other Development: rates vary
Montgomery	Adequate Facilities Tax	$500 per lot and $500 per dwelling unit (residential only)
Sumner	Adequate Facilities Tax	- Residential: $0.70 per gross sq. ft. - Industrial: $0.40 per gross sq. ft.
Robertson	Adequate Facilities Tax	- Residential: $1.50 per sq. ft. - Commercial: $0.30 per sq. ft.
White House	Impact Fee	- Single Family: $3,740 per dwelling ($1,147 roads, $1,189 parks, $846 police, $558, fire) - Duplex: $2,690 per dwelling ($778 roads, $876 parks, $624 police, $412 fire) - Multi Family: $2,381 per dwelling ($778 roads, $736 parks, $522 police, $345 fire) - Other Development: rates vary
Portland	Impact Fee	-Single Family: $1,243 per unit - Multi Family: $743 per unit - Other Development: rates vary

County or City	Name of Fee or Tax	Rates
Rutherford	Development Tax	Note: Applies only to platted subdivisions recorded prior to July 1, 2021 - If plat required: $750 per lot or unit upon plat approval and $750 per lot or unit on issuance of building permit - If no plat required: $1,500 per lot or unit on issuance of building permit (residential only)
—	School Facilities Tax	$1 per sq. ft. (residential only)
La Vergne	Impact Fee	- Single Family detached: $3,718 per dwelling - Multi Family: $2,850 per dwelling - Other Development: rates vary
Murfreesboro	Impact Fee	- Single Family: Lesser of $1.50 per sq. ft. of gross floor area or $10,952 (the per sq. ft. rate is set to increase to $2 on July 1, 2024) - Multi Family: $7,624 per unit - Other Development: rates vary
Smyrna	Impact Fee	- Single Family Detached: $3,870 per dwelling ($2,239 roads, $1,032 parks, $599 safety) - Multi Family: $2,606 per dwelling ($1,274 roads, $842 parks, $490 safety) - Other Development: rates vary
Trousdale	Adequate Facilities Tax	$1,000 per dwelling other sources $1 per sq. ft. (residential only)

County or City	Name of Fee or Tax	Rates
Williamson	Impact Fee	- Residential Inside Franklin Sp. Sch. Dist.: $602 if 1,399 sq. ft. or less, $1,868 if 1,400 to 1,899 sq. ft., $2,843 if 1,900 to 2,399 sq. ft., $3,632 if 2,400 to 2,899 sq. ft., $4,296 if 2,900 to 3,399 sq. ft., $4,877 if 3,400 sq. ft. or more - Residential Outside Franklin Sp. Sch. Dist.: $1,681 if 1,399 sq. ft. or less, $4,864 if 1,400 to 1,899 sq. ft., $7,305 if 1,900 to 2,399 sq. ft., $9,285 if 2,400 to 2,899 sq. ft., $10,948 if 2,900 to 3,399 sq. ft., $12,399 if 3,400 sq. ft. or more
_	Adequate School Facilities Tax	$1 per gross sq. ft. (residential only)
_	Adequate Facilities Tax	- Residential: $1 per gross sq. ft. - Commercial: $0.34 per gross sq. ft.
Brentwood	Construction Impact Fee	Single Family detached: $6,105 per dwelling Single Family attached: $4,835 per dwelling Senior Adult Housing detached: $2,755 per dwelling Senior Adult Housing attached: $2,390 per dwelling Other Development: rates vary
Fairview	Adequate Facilities Tax	- Residential: $0.25 per sq. ft. - Non-residential: $0.50 per sq. ft.
Franklin	Adequate Facilities Tax	- Single Family detached: $0.89 per gross sq. ft. - Other residential: $0.71 per gross sq. ft. - Non-residential: $1.18 per gross sq. ft.

County or City	Name of Fee or Tax	Rates
—	Construction Impact Fee	- Single Family detached: $8,251 per dwelling - Multi Family: $5,233 per dwelling - Mobile Home Park: $3,930 per dwelling - Congregate Care Facility: $1,836 per dwelling - Other Development: rates vary
Nolensville	Adequate Facilities Tax	- Residential: $1 per gross sq. ft. of floor area - Non-residential: $2 per gross sq. ft. of floor area
—	Impact Fee	- Single Family Detached: $5,928 per dwelling - Multi Family: $3,320 per dwelling - Other Development: rates vary
Wilson	Adequate Facilities Tax	- Residential: $5,000 per unit - Non-residential: rate varies by square footage with minimum of $5,000
Mt. Juliet	Residential Construction Impact Fee	$0.50 per gross sq. ft. (residential only)

Source: Commission staff analysis of local laws and regulations.

Appendix C: Property Tax Increases Required to Match Impact Fee and Development Tax Collections

County or County	Total Impact Fee and Development Tax Revenue Reported (Unadjusted) 2022	2022 Property Tax Rate	1 Cent Levy from Total Assessment (at 95% Collections)	Increase in Property Tax Rate per $100 Assessed Value to Equal Impact Fee and Development Tax Revenue
Bedford	$ 781,039	2.33	$ 131,313	$ 0.059
Cannon	$ 92,338	2.46	$ 27,686	$ 0.033
Cheatham	$ 1,133,698	2.48	$ 109,349	$ 0.104
Kingston Springs	$ 10,919	0.77	$ 9,459	$ 0.012
Pegram	$ 6,749	0.48	$ 5,743	$ 0.012
Dickson	$ 1,228,671	2.35	$ 146,641	$ 0.084
Fayette	$ 928,587	1.29	$ 139,563	$ 0.067
Hickman	$ 294,480	2.33	$ 52,546	$ 0.056
Jefferson	$ 1,520,746	2.19	$ 135,328	$ 0.112
Loudon	$ 3,308,441	1.52	$ 229,289	$ 0.144
Macon	$ 968,873	2.40	$ 39,713	$ 0.244
Marshall	$ 886,604	1.82	$ 106,293	$ 0.083
Maury	$ 3,733,279	1.91	$ 383,911	$ 0.097
Columbia	$ 417,740	0.83	$ 147,319	$ 0.028
Spring Hill*	$ 4,846,413	0.74	$ 199,570	$ 0.243
Montgomery	$ 2,983,940	2.99	$ 513,124	$ 0.058
Robertson	$ 2,485,980	2.58	$ 189,687	$ 0.131
White House	$ 495,705	1.29	$ 23,257	$ 0.213
Portland*	$ 105,590	1.06	$ 43,513	$ 0.024
Rutherford	$ 5,484,390	1.62	$ 1,447,448	$ 0.038
LaVergne	$ 338,666	0.54	$ 157,735	$ 0.021
Smyrna	$ 2,696,315	0.53	$ 254,775	$ 0.106
Sumner	$ 3,440,718	2.26	$ 643,909	$ 0.053
Trousdale	$ 162,050	1.94	$ 31,379	$ 0.052
Williamson	$ 30,860,909	1.88	$ 1,744,331	$ 0.177
Brentwood	$ 1,077,827	0.29	$ 425,718	$ 0.025
Fairview	$ 343,542	0.88	$ 32,533	$ 0.106
Franklin	$ 15,826,819	1.36	$ 700,216	$ 0.226
Nolensville	$ 3,012,386	0.29	$ 72,506	$ 0.415
Wilson	$ 16,936,412	1.91	$ 651,318	$ 0.260
Lebanon	$ 2,953,338	0.69	$ 189,095	$ 0.156
Mt. Juliet	$ 991,268	0.11	$ 192,592	$ 0.051

Source: Source: Staff calculations based on Tennessee Comptroller of the Treasury 2022; and email from Donna Ryan, chief deputy trustee, Williamson County Trustee's Office, August 8, 2023.

Appendix D: Housing Costs and Population Data by County in Tennessee

	Median Home Price, New and Existing Homes, in 2022	Ratio of Median Price to Median Household Income	Home-ownership Rate	Vacancy Rate	Percentage of Households Cost-Burdened	Housing + Transportation Costs as a Percentage of Income	Housing Costs as a Percentage of Income	Transportation Costs as a Percentage of Income	Projected Change in Population, 2023-2030
Tennessee	$325,000	5.1	67.1	11.1	26%	48%	24%	25%	+357,587
Anderson	$247,964	4.1	69.8	11.5	23%	49%	23%	26%	+1,658
Bedford	$290,500	4.8	70.4	6.8	26%	56%	24%	32%	+3,898
Benton	$139,750	2.9	73.9	21.1	18%	65%	28%	37%	-20
Bledsoe	$193,500	3.7	80.6	17.2	19%	61%	26%	35%	+606
Blount	$336,500	4.7	76.3	11.0	21%	53%	25%	27%	+8,232
Bradley	$273,500	4.5	68.0	8.0	24%	54%	25%	29%	+5,941
Campbell	$210,000	4.4	67.3	19.4	23%	46%	19%	27%	-781
Cannon	$264,000	4.6	76.6	9.0	19%	43%	17%	26%	+481
Carroll	$125,000	2.5	74.5	15.8	20%	58%	24%	34%	-619
Carter	$199,000	4.1	73.3	14.1	21%	52%	22%	30%	-1,454
Cheatham	$350,000	4.5	81.2	6.9	19%	47%	22%	25%	+937
Chester	$183,000	3.2	76.6	15.5	16%	57%	25%	32%	+199
Claiborne	$200,000	4.7	71.6	12.2	23%	64%	27%	36%	+443
Clay	$140,000	3.5	78.6	23.8	17%	73%	30%	44%	-15
Cocke	$210,000	4.7	70.8	18.4	25%	64%	27%	37%	+409
Coffee	$279,900	4.9	69.0	9.1	23%	52%	23%	29%	+2,603
Crockett	$134,500	2.3	68.8	11.5	22%	56%	23%	33%	-101
Cumberland	$275,000	4.9	79.0	11.9	20%	54%	24%	30%	+3,881
Davidson	$429,945	6.0	54.2	9.3	34%	44%	25%	20%	+33,672
Decatur	$144,750	3.0	78.2	33.7	20%	63%	28%	36%	-93

	Median Home Price, New and Existing Homes, in 2022	Ratio of Median Price to Median Household Income	Home-ownership Rate	Vacancy Rate	Percentage of Households Cost-Burdened	Housing + Transportation Costs as a Percentage of Income	Housing Costs as a Percentage of Income	Transportation Costs as a Percentage of Income	Projected Change in Population, 2023-2030
DeKalb	$254,000	5.4	68.6	15.6	28%	57%	23%	33%	+919
Dickson	$315,000	4.6	79.8	10.6	19%	44%	20%	25%	+3,288
Dyer	$140,000	2.6	63.3	10.1	26%	55%	24%	32%	+50
Fayette	$339,900	4.2	81.6	7.6	21%	60%	29%	31%	+2,852
Fentress	$229,489	4.8	77.4	17.4	20%	63%	23%	40%	+197
Franklin	$275,000	4.7	76.0	14.2	24%	54%	24%	30%	+515
Gibson	$175,000	3.2	66.3	11.0	24%	55%	24%	31%	+486
Giles	$196,500	3.5	73.2	18.6	20%	54%	23%	31%	-303
Grainger	$224,900	4.8	77.0	19.5	23%	57%	24%	33%	+415
Greene	$214,000	4.1	75.4	14.0	19%	57%	25%	33%	+515
Grundy	$222,450	4.6	83.6	20.1	19%	60%	23%	37%	-569
Hamblen	$235,000	4.7	67.2	8.5	24%	53%	23%	30%	+1,999
Hamilton	$331,678	4.8	64.6	9.0	26%	52%	27%	26%	+17,597
Hancock	$134,900	4.2	77.9	22.8	22%	80%	35%	45%	-271
Hardeman	$137,375	3.2	70.6	15.8	29%	62%	27%	36%	-554
Hardin	$200,000	4.3	75.6	27.4	21%	58%	23%	35%	-179
Hawkins	$192,950	3.6	78.2	16.0	20%	55%	24%	31%	-310
Haywood	$135,900	3.0	58.1	13.0	32%	63%	27%	37%	-824
Henderson	$165,500	3.2	71.3	16.8	21%	58%	24%	34%	+395
Henry	$163,500	3.4	75.4	22.6	21%	62%	27%	34%	-44
Hickman	$209,500	3.8	79.4	15.7	21%	61%	26%	35%	+717
Houston	$190,000	3.7	80.0	23.5	21%	62%	27%	36%	+136
Humphreys	$185,000	3.4	79.2	24.3	21%	57%	24%	33%	+84
Jackson	$179,900	4.2	83.0	21.7	17%	60%	24%	36%	+193

	Median Home Price, New and Existing Homes, in 2022	Ratio of Median Price to Median Household Income	Home-ownership Rate	Vacancy Rate	Percentage of Households Cost-Burdened	Housing + Transportation Costs as a Percentage of Income	Housing Costs as a Percentage of Income	Transportation Costs as a Percentage of Income	Projected Change in Population, 2023-2030
Jefferson	$277,148	4.6	74.5	16.4	20%	58%	26%	32%	+2,379
Johnson	$215,000	4.5	76.2	21.4	17%	65%	27%	38%	-295
Knox	$325,000	4.7	64.9	8.1	26%	51%	26%	25%	+29,074
Lake	$75,000	2.3	46.4	19.7	21%	58%	23%	35%	-101
Lauderdale	$123,250	2.6	62.0	14.8	27%	58%	24%	35%	-247
Lawrence	$199,900	3.9	75.4	11.7	23%	59%	25%	34%	+607
Lewis	$195,000	4.4	78.6	10.7	24%	67%	28%	38%	-40
Lincoln	$198,750	3.2	76.3	10.6	20%	57%	25%	32%	+752
Loudon	$374,715	5.0	81.6	9.3	19%	51%	24%	27%	+4,510
Macon	$251,000	4.9	71.8	14.3	24%	40%	15%	25%	+1,801
Madison	$219,900	4.0	62.1	10.4	31%	56%	27%	29%	+463
Marion	$215,000	3.7	77.7	14.4	19%	50%	20%	29%	-254
Marshall	$300,000	4.6	76.9	9.3	22%	53%	23%	30%	+2,367
Maury	$385,500	5.4	72.0	8.9	25%	44%	21%	23%	+10,372
McMinn	$200,000	3.4	74.1	11.3	20%	58%	26%	32%	+1,394
McNairy	$145,000	3.1	79.1	21.1	19%	65%	27%	38%	+340
Meigs	$250,000	4.2	76.6	14.6	20%	55%	24%	31%	+392
Monroe	$239,000	4.6	72.1	11.3	23%	60%	27%	34%	+1,622
Montgomery	$310,000	4.6	62.6	7.7	28%	54%	26%	28%	+29,543
Moore	$268,000	3.9	84.4	14.2	28%	60%	27%	32%	+87
Morgan	$172,500	3.3	81.5	17.0	22%	51%	21%	30%	+338
Obion	$135,500	2.7	65.7	12.5	20%	60%	26%	35%	-693
Overton	$210,000	4.5	78.9	14.8	19%	61%	25%	36%	+712
Perry	$148,000	2.6	76.2	38.6	17%	58%	21%	36%	+179

	Median Home Price, New and Existing Homes, in 2022	Ratio of Median Price to Median Household Income	Home-ownership Rate	Vacancy Rate	Percentage of Households Cost-Burdened	Housing + Transportation Costs as a Percentage of Income	Housing Costs as a Percentage of Income	Transportation Costs as a Percentage of Income	Projected Change in Population, 2023-2030
Pickett	$239,000	5.4	81.7	34.4	15%	61%	25%	36%	-145
Polk	$216,750	4.0	78.9	18.2	16%	53%	22%	31%	+422
Putnam	$294,000	5.4	60.9	7.8	29%	60%	29%	32%	+6,259
Rhea	$238,950	4.3	73.5	16.0	16%	62%	28%	34%	+1,184
Roane	$260,000	3.9	77.3	13.8	21%	51%	23%	28%	-245
Robertson	$360,000	4.8	76.3	5.4	23%	47%	23%	25%	+5,096
Rutherford	$405,000	5.2	65.2	7.1	27%	46%	23%	23%	+57,383
Scott	$165,000	4.2	71.6	12.4	24%	61%	25%	36%	-27
Sequatchie	$220,000	4.1	76.6	14.3	21%	51%	21%	30%	+863
Sevier	$349,950	5.8	72.2	32.7	24%	55%	25%	31%	+8,302
Shelby	$285,000	4.8	55.2	10.8	34%	53%	28%	25%	+9,624
Smith	$250,000	4.3	74.8	10.5	21%	43%	18%	25%	+658
Stewart	$180,000	3.1	81.4	25.1	20%	54%	24%	31%	+218
Sullivan	$212,000	3.9	72.5	10.7	23%	54%	25%	29%	+894
Sumner	$415,000	5.1	72.9	6.0	27%	49%	25%	24%	+20,884
Tipton	$259,130	3.7	75.8	7.0	21%	57%	26%	31%	+1,739
Trousdale	$310,000	5.0	76.7	5.9	30%	45%	19%	26%	+536
Unicoi	$188,000	3.8	73.3	12.4	21%	55%	25%	30%	+55
Union	$268,450	4.7	80.5	21.4	18%	50%	21%	28%	+47
Van Buren	$218,000	4.9	80.4	16.0	19%	61%	25%	37%	-123
Warren	$225,000	4.2	71.0	12.3	21%	59%	24%	35%	+437
Washington	$270,000	4.6	64.3	8.7	24%	57%	28%	29%	+5,748
Wayne	$120,000	2.4	80.3	20.0	20%	59%	23%	36%	-427
Weakley	$145,000	3.0	65.2	12.5	21%	59%	24%	35%	-72

	Median Home Price, New and Existing Homes, in 2022	Ratio of Median Price to Median Household Income	Home-ownership Rate	Vacancy Rate	Percentage of Households Cost-Burdened	Housing + Transportation Costs as a Percentage of Income	Housing Costs as a Percentage of Income	Transportation Costs as a Percentage of Income	Projected Change in Population, 2023-2030
White	$231,800	4.8	75.9	10.8	23%	61%	25%	36%	+1,346
Williamson	$835,000	6.6	79.9	3.9	24%	61%	38%	23%	+43,269
Wilson	$438,000	4.9	77.1	6.7	24%	50%	26%	24%	+21,177

Source: Commission staff calculations based on Boyd Center for Business and Economic Research 2022a; Center for Neighborhood Technology 2022a; Tennessee Housing Development Agency 2023c; and US Census Bureau 2023b.

Appendix E: Tennessee Counties' Housing Stock by Type

	Detached Single-Family Homes	Attached Single-Family Homes	Housing Units in Duplexes	Housing Units in Triplexes and Quadplexes	Housing Units in Small Buildings (5-19 Unit Structures)	Housing Units in Large Buildings (20+ Units)	Mobile Homes, Boats, RVs, etc.
Tennessee	68.6%	3.6%	2.5%	3.2%	8.0%	5.4%	8.5%
Anderson	69.6%	3.0%	2.1%	3.4%	7.3%	4.4%	10.2%
Bedford	74.8%	0.8%	3.0%	1.8%	5.1%	1.4%	13.1%
Benton	67.8%	0.3%	0.5%	0.5%	1.7%	0.7%	28.4%
Bledsoe	68.7%	0.5%	0.3%	1.6%	1.8%	0.1%	26.7%
Blount	76.8%	1.7%	1.1%	2.3%	4.2%	2.6%	11.2%
Bradley	69.6%	3.0%	4.0%	4.8%	5.6%	2.6%	10.3%
Campbell	70.8%	1.0%	1.9%	3.4%	5.2%	2.2%	15.5%
Cannon	78.9%	0.6%	0.5%	1.0%	2.0%	0.5%	16.6%
Carroll	73.2%	0.3%	3.4%	2.8%	2.4%	1.1%	16.7%
Carter	68.0%	1.1%	2.1%	4.4%	4.5%	1.0%	18.6%
Cheatham	78.9%	2.2%	1.0%	0.9%	2.5%	3.1%	11.4%
Chester	76.9%	0.4%	3.4%	0.3%	1.8%	1.0%	15.8%
Claiborne	66.4%	1.4%	2.5%	1.4%	2.9%	0.4%	24.8%
Clay	64.3%	0.4%	0.6%	1.3%	2.4%	1.0%	29.7%
Cocke	63.8%	0.2%	2.9%	2.3%	1.9%	0.2%	28.4%
Coffee	71.2%	1.7%	3.6%	1.4%	6.3%	2.8%	13.0%
Crockett	79.4%	0.7%	4.0%	0.3%	1.4%	0.1%	13.9%
Cumberland	73.2%	2.0%	2.0%	3.5%	3.8%	0.7%	14.1%
Davidson	51.3%	8.7%	3.3%	3.4%	14.7%	17.2%	1.3%
Decatur	75.5%	0.2%	1.2%	0.2%	1.0%	0.6%	20.8%
DeKalb	73.5%	1.5%	3.0%	2.7%	2.4%	0.3%	16.4%
Dickson	77.2%	1.9%	2.2%	1.3%	4.3%	0.6%	12.5%
Dyer	78.3%	0.2%	4.7%	4.5%	4.3%	1.6%	6.4%
Fayette	83.3%	1.2%	1.2%	1.1%	1.8%	0.3%	11.2%
Fentress	72.8%	0.2%	1.2%	2.7%	3.0%	0.3%	18.9%
Franklin	81.5%	1.4%	5.2%	1.2%	1.1%	0.3%	9.0%
Gibson	72.4%	1.4%	5.8%	2.6%	3.2%	1.7%	12.9%
Giles	71.4%	1.4%	2.6%	1.5%	3.5%	1.4%	18.0%
Grainger	63.0%	0.4%	0.2%	1.5%	2.9%	0.4%	30.6%
Greene	68.9%	0.8%	1.5%	2.0%	3.2%	1.3%	22.4%
Grundy	71.5%	0.3%	0.8%	1.7%	2.9%	0.0%	22.6%

	Detached Single-Family Homes	Attached Single-Family Homes	Housing Units in Duplexes	Housing Units in Triplexes and Quadplexes	Housing Units in Small Buildings (5-19 Unit Structures)	Housing Units in Large Buildings (20+ Units)	Mobile Homes, Boats, RVs, etc.
Hamblen	71.3%	1.7%	5.3%	4.0%	6.0%	2.6%	9.3%
Hamilton	68.3%	3.9%	5.3%	2.5%	8.6%	8.3%	3.1%
Hancock	67.7%	0.5%	1.2%	3.1%	2.5%	0.1%	24.0%
Hardeman	74.3%	0.7%	1.5%	1.0%	0.4%	0.4%	21.6%
Hardin	76.2%	0.7%	1.2%	2.5%	1.3%	0.9%	16.8%
Hawkins	67.8%	0.7%	1.3%	1.6%	5.3%	1.1%	21.9%
Haywood	73.4%	2.4%	4.8%	3.6%	4.7%	0.6%	10.4%
Henderson	69.9%	0.2%	3.6%	2.8%	1.0%	0.6%	21.5%
Henry	63.5%	1.5%	3.0%	1.2%	2.8%	1.4%	26.4%
Hickman	73.4%	0.3%	0.3%	1.1%	1.3%	0.9%	22.3%
Houston	74.9%	0.6%	1.3%	0.7%	1.3%	0.2%	21.1%
Humphreys	75.1%	0.2%	2.8%	0.4%	3.9%	0.9%	16.4%
Jackson	70.3%	0.2%	0.3%	0.8%	1.2%	0.9%	25.8%
Jefferson	66.9%	1.4%	1.9%	3.1%	3.0%	0.4%	23.2%
Johnson	71.9%	0.9%	1.2%	1.4%	4.0%	0.6%	19.8%
Knox	66.2%	5.5%	1.9%	3.1%	11.6%	7.6%	3.9%
Lake	63.9%	0.4%	8.9%	4.9%	12.1%	3.9%	5.8%
Lauderdale	74.5%	0.7%	4.1%	2.6%	3.5%	1.1%	13.4%
Lawrence	77.9%	1.3%	3.0%	1.6%	2.1%	1.7%	12.1%
Lewis	70.4%	0.8%	0.0%	0.3%	1.4%	0.4%	26.3%
Lincoln	78.3%	0.8%	2.6%	3.3%	1.6%	0.4%	12.6%
Loudon	81.9%	3.8%	1.2%	0.9%	2.3%	2.3%	7.5%
Macon	71.3%	0.9%	3.3%	2.3%	3.3%	1.2%	17.1%
Madison	79.1%	0.5%	1.1%	1.3%	0.4%	0.0%	17.5%
Marion	68.3%	0.0%	2.8%	2.7%	2.3%	0.4%	23.2%
Marshall	71.9%	2.0%	4.0%	5.4%	8.1%	3.3%	5.2%
Maury	73.8%	0.9%	1.6%	1.3%	1.3%	0.4%	20.5%
McMinn	82.7%	0.8%	1.3%	1.8%	2.8%	1.1%	9.5%
McNairy	72.9%	3.1%	3.4%	2.7%	7.9%	1.7%	8.3%
Meigs	62.5%	0.2%	1.0%	1.0%	0.2%	0.1%	33.2%
Monroe	66.7%	0.5%	2.3%	3.1%	2.2%	1.0%	23.1%
Montgomery	72.8%	2.8%	2.3%	6.2%	8.5%	3.2%	4.2%
Moore	86.2%	0.2%	0.2%	0.0%	2.3%	0.3%	10.3%
Morgan	70.9%	0.1%	0.6%	0.6%	1.7%	0.0%	25.9%
Obion	75.2%	1.5%	4.4%	3.4%	3.3%	0.8%	11.3%
Overton	77.7%	0.6%	1.0%	1.0%	0.5%	0.1%	19.1%

	Detached Single-Family Homes	Attached Single-Family Homes	Housing Units in Duplexes	Housing Units in Triplexes and Quadplexes	Housing Units in Small Buildings (5-19 Unit Structures)	Housing Units in Large Buildings (20+ Units)	Mobile Homes, Boats, RVs, etc.
Perry	64.8%	0.3%	1.4%	0.5%	1.5%	0.0%	31.4%
Pickett	74.9%	0.0%	0.6%	0.6%	3.1%	0.4%	20.3%
Polk	69.6%	0.4%	0.7%	0.7%	2.8%	0.2%	25.0%
Putnam	65.2%	1.3%	3.7%	7.1%	11.7%	2.5%	8.3%
Rhea	68.0%	0.8%	3.8%	3.7%	2.0%	0.4%	21.1%
Roane	74.5%	2.1%	1.8%	2.6%	2.9%	2.2%	13.5%
Robertson	81.9%	1.8%	2.0%	1.5%	3.7%	1.4%	7.7%
Rutherford	67.5%	7.0%	1.4%	2.9%	11.9%	6.6%	2.8%
Scott	61.2%	0.4%	1.5%	1.8%	3.8%	1.0%	29.3%
Sequatchie	71.0%	1.4%	1.3%	2.6%	0.6%	0.1%	22.5%
Sevier	70.2%	1.7%	2.8%	2.1%	6.2%	5.5%	11.3%
Shelby	66.5%	4.5%	1.9%	5.5%	13.7%	6.8%	1.1%
Smith	73.7%	1.1%	0.9%	1.2%	3.3%	0.3%	19.3%
Stewart	75.5%	1.9%	1.3%	1.0%	1.1%	0.4%	17.7%
Sullivan	70.0%	2.3%	3.2%	3.6%	7.5%	2.3%	10.9%
Sumner	73.3%	3.4%	1.8%	2.2%	7.2%	5.7%	6.3%
Tipton	82.7%	0.8%	0.8%	2.3%	2.1%	1.0%	10.2%
Trousdale	72.0%	1.2%	1.6%	2.1%	0.6%	2.5%	20.0%
Unicoi	68.3%	2.1%	1.9%	3.3%	6.0%	0.7%	17.6%
Union	71.6%	1.4%	0.4%	0.1%	2.5%	0.0%	23.8%
Van Buren	68.4%	1.2%	1.5%	2.2%	0.3%	0.0%	26.3%
Warren	72.2%	1.7%	5.3%	2.5%	4.0%	1.2%	12.2%
Washington	63.8%	3.3%	3.1%	5.3%	10.4%	4.9%	9.1%
Wayne	68.2%	0.4%	0.7%	2.3%	1.2%	1.0%	25.9%
Weakley	69.7%	1.0%	5.3%	5.3%	4.1%	0.5%	13.8%
White	75.2%	0.4%	1.3%	1.0%	2.1%	0.4%	19.7%
Williamson	78.0%	5.7%	0.8%	1.4%	5.8%	6.9%	1.5%
Wilson	76.8%	3.7%	2.7%	1.5%	5.5%	4.0%	5.7%

Source: Commission staff calculations of US Census Bureau American Community Survey 2022 5-year estimates.

Appendix F: Age of Tennessee's Housing Stock by County

	Built 1959 or earlier	Built 1960-1989	Built from 1990 to present
Tennessee	18.2%	37.7%	44.1%
Anderson	31.0%	37.8%	31.2%
Bedford	18.8%	33.4%	47.7%
Benton	16.3%	41.3%	42.4%
Bledsoe	10.9%	31.5%	57.5%
Blount	18.0%	34.6%	47.4%
Bradley	14.1%	41.6%	44.3%
Campbell	17.5%	44.0%	38.5%
Cannon	22.6%	28.6%	48.8%
Carroll	23.7%	41.4%	34.9%
Carter	28.1%	38.4%	33.5%
Cheatham	12.6%	37.5%	49.9%
Chester	13.7%	36.3%	50.0%
Claiborne	14.1%	43.3%	42.6%
Clay	14.4%	48.7%	36.9%
Cocke	18.2%	38.1%	43.7%
Coffee	14.7%	40.6%	44.7%
Crockett	21.0%	43.3%	35.7%
Cumberland	7.8%	36.1%	56.1%
Davidson	19.4%	38.8%	41.8%
Decatur	16.9%	41.2%	41.9%
DeKalb	14.2%	43.0%	42.8%
Dickson	15.9%	38.5%	45.6%
Dyer	22.6%	46.4%	31.0%
Fayette	8.2%	30.4%	61.4%
Fentress	9.4%	41.3%	49.3%
Franklin	18.9%	39.2%	41.9%
Gibson	29.1%	37.5%	33.5%
Giles	18.8%	43.0%	38.2%
Grainger	15.3%	34.0%	50.7%
Greene	20.7%	41.1%	38.2%
Grundy	19.4%	40.9%	39.7%
Hamblen	16.4%	48.7%	34.9%
Hamilton	24.8%	38.6%	36.7%
Hancock	22.3%	40.4%	37.2%

	Built 1959 or earlier	Built 1960-1989	Built from 1990 to present
Hardeman	20.5%	44.9%	34.6%
Hardin	11.2%	46.8%	42.0%
Hawkins	19.2%	39.6%	41.1%
Haywood	21.8%	51.1%	27.1%
Henderson	13.4%	41.3%	45.4%
Henry	19.9%	41.7%	38.4%
Hickman	15.6%	39.3%	45.1%
Houston	20.3%	43.9%	35.8%
Humphreys	21.3%	40.7%	37.9%
Jackson	17.0%	41.6%	41.4%
Jefferson	15.7%	35.5%	48.8%
Johnson	20.5%	41.1%	38.4%
Knox	20.4%	37.9%	41.7%
Lake	23.5%	56.9%	19.6%
Lauderdale	21.1%	39.9%	39.0%
Lawrence	21.2%	43.4%	35.3%
Lewis	14.5%	36.6%	48.8%
Lincoln	21.8%	35.7%	42.5%
Loudon	18.2%	29.6%	52.1%
Macon	22.1%	36.3%	41.6%
Madison	15.0%	43.0%	42.1%
Marion	16.1%	36.2%	47.7%
Marshall	18.2%	39.4%	42.4%
Maury	12.7%	45.9%	41.4%
McMinn	19.5%	30.5%	50.0%
McNairy	16.7%	31.6%	51.7%
Meigs	10.0%	32.0%	58.0%
Monroe	10.3%	39.2%	50.6%
Montgomery	9.6%	29.7%	60.6%
Moore	13.9%	33.4%	52.7%
Morgan	20.0%	37.7%	42.2%
Obion	25.1%	46.2%	28.6%
Overton	20.2%	39.7%	40.1%
Perry	19.2%	36.3%	44.5%
Pickett	7.7%	42.0%	50.3%
Polk	17.0%	35.9%	47.0%
Putnam	10.8%	39.6%	49.6%
Rhea	12.1%	38.5%	49.4%

	Built 1959 or earlier	Built 1960-1989	Built from 1990 to present
Roane	25.7%	39.9%	34.4%
Robertson	12.6%	34.3%	53.2%
Rutherford	6.3%	26.5%	67.2%
Scott	11.1%	40.8%	48.1%
Sequatchie	10.8%	31.9%	57.3%
Sevier	7.2%	33.3%	59.5%
Shelby	27.2%	42.3%	30.5%
Smith	23.0%	36.9%	40.1%
Stewart	12.6%	40.9%	46.5%
Sullivan	28.0%	39.9%	32.2%
Sumner	7.8%	36.3%	55.9%
Tipton	12.5%	32.1%	55.4%
Trousdale	14.0%	43.5%	42.5%
Unicoi	30.2%	39.1%	30.7%
Union	10.5%	34.0%	55.5%
Van Buren	14.4%	49.0%	36.6%
Warren	18.3%	47.9%	33.7%
Washington	20.4%	35.5%	44.1%
Wayne	16.4%	43.7%	39.9%
Weakley	22.9%	44.0%	33.1%
White	16.9%	38.6%	44.5%
Williamson	4.4%	25.2%	70.4%
Wilson	7.2%	32.9%	59.8%

Source: Commission staff calculations of US Census Bureau American Community Survey 2022 5-year estimates.