



# How Reno’s Minimum-Lot-Size Regulations Are Blocking Affordable Homeownership for Nevadans

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September 2024

Minimum-lot-size regulations are virtually universal among American municipalities, and Nevada’s cities are no exception. To the extent that these regulations require more land for a single home than the market demands, they raise the cost of homes and decrease housing density while adding to infrastructure expense.

This policy brief examines the effects of minimum lot sizes for single-family homes in Reno, Nevada, a city in which housing prices have soared above the rate of wage increases in recent years.<sup>1</sup> I find that lot minimums impose significant and binding constraints on a metropolitan housing market that would otherwise supply lower-cost homes on smaller lots. These constraints drive up housing prices across the board, increasing housing costs for Nevadans and placing homeownership out of the reach of many potential buyers. To address these issues, state policymakers should consider measures that would cap minimum lot sizes and lot frontage mandates in areas served by public water and sanitary sewers.

## **Reno’s Single-Family Zoning: A Familiar Puzzle**

Reno’s Annexation and Land Development Code (the Code)<sup>2</sup> contains 34 base zoning districts as of 2022, excluding general overlay districts, neighborhood planning overlay districts, and conservation and historic overlay districts. Of the 34 base districts, 10 are exclusively reserved for residential use. Of these 10, 7 are single-family residential districts, which generally allow only a single house per lot. Each of these 7 districts mandates minimum acreage or square footage for house lots; a minimum lot width; minimum front, side, and rear setbacks; and maximum building coverage. Selected requirements for each of these districts are set out in table 1.

Reno’s single-family zoning categories are typical of American municipal zoning ordinances, which commonly divide the category of single-family detached housing into multiple zones

**TABLE 1. Reno’s single-family residential zones**

City of Reno single-family residential zones	Minimum lot size	Minimum lot width	Front setback	Side setback
LLR-2.5 large lot	2.5 acres	150 feet	30 feet	15 feet
LLR-1.0 large lot	1.0 acres	120 feet	30 feet	12 feet
LLR-0.5 large lot	0.5 acres	100 feet	30 feet	10 feet
SF-3: single family	15,000 square feet	80 feet	30 feet	5 feet
SF-5: single family	9,000 square feet	70 feet	10 feet	5 feet
SF-8: single family	6,000 square feet	60 feet	10 feet	5 feet
SF-11: single family	4,000 square feet	40 feet	10 feet	5 feet

Source: City of Reno Annexation and Land Development Code.

Note: Corner lots for SF-8 must be 7,000 square feet, and for SF-11, they must be 5,000 square feet.

arranged not by use but by size and shape of buildable lots.<sup>3</sup> These divisions are often present even where the underlying infrastructure is indistinguishable and no obvious health or safety rationale exists for imposing a range of dimensional requirements.<sup>4</sup>

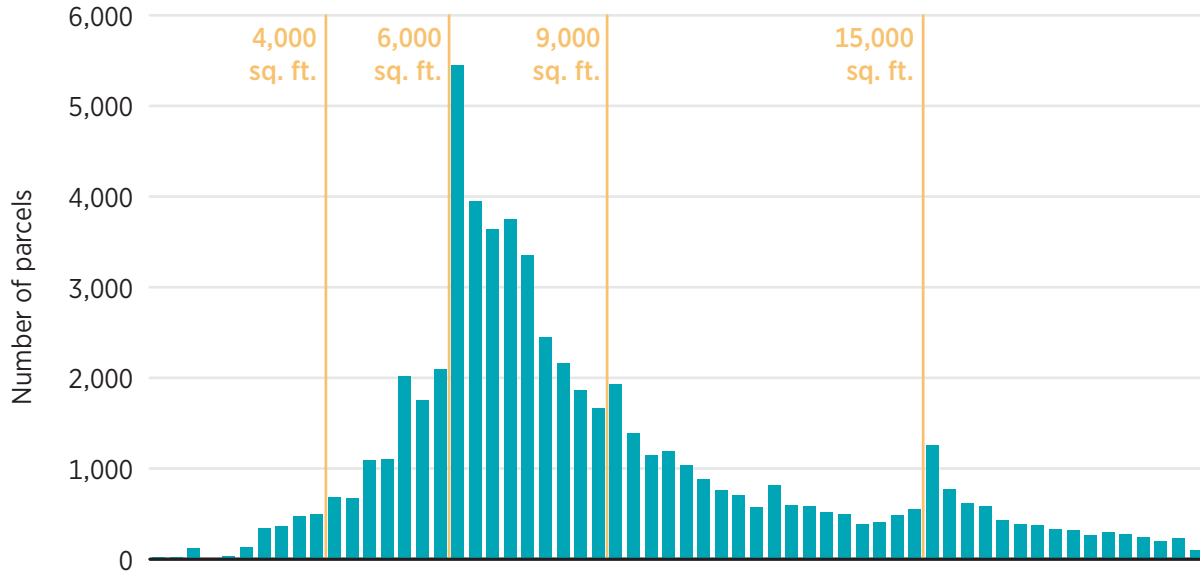
In similar fashion, Reno’s Code provides no explanation for why there are seven zones for single-family housing, each with its own requirements for lot size and width. Because the primary purpose of five of the zones is simply to accommodate single-family residential uses,<sup>5</sup> what legitimate policy objective is served by this variation in lot-size and lot-width requirements?<sup>6</sup> In the MF-30 multifamily zone, moreover, it appears that two detached single-family homes would be allowed on one lot of 3,000 square feet, suggesting that the city has no health or safety concern with free-standing homes on as little as 1,500 square feet of land.<sup>7</sup> Many houses on small lots already exist and serve as homes to Nevada families: property records reveal the presence of nearly 2,500 single-family dwellings on lots of less than 4,000 square feet, of which 176 are on less than 2,000 square feet and 21 are on less than 1,000 square feet.<sup>8</sup>

The 622-page Code’s silence is conspicuous regarding the planning and policy basis for the residential zones that define most of the city,<sup>9</sup> but the effect of that zoning on the form and cost of housing, as detailed in the section titled “Counting the Costs of Regulation,” is significant.

### **Does Reno’s Single-Family Zoning Constrain Homebuilders?**

If minimum lot sizes do not affect homebuilders’ preferences, one could hypothesize that a lot-size frequency chart would show a fairly smooth distribution of lot sizes with no major discontinuities. Alternatively, if lot-size mandates interfere with preferences by causing builders to consume more land for each home than they would otherwise choose, one would expect a bunching of lot sizes that coincides with zoning categories.<sup>10</sup>

**FIGURE 1.** The distribution of Reno’s single-family homes by lot size



Source: Washoe County Assessor’s Office data for fiscal year 2023.

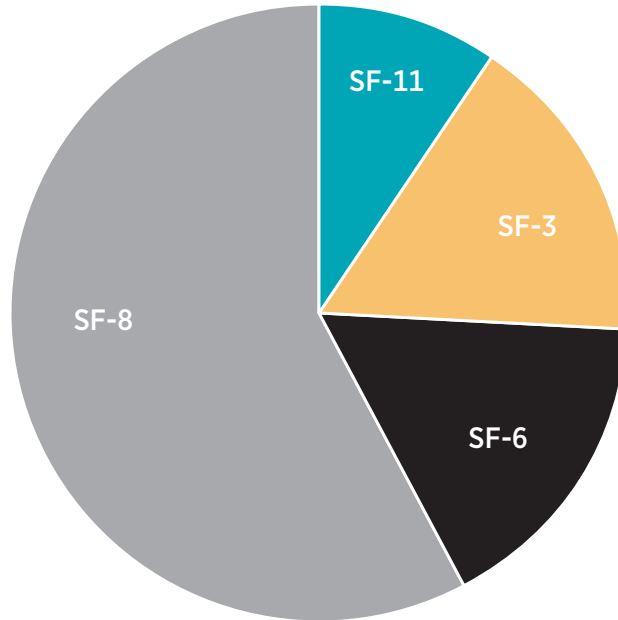
A frequency chart (figure 1) plots single-family house lots for the city of Reno using parcel data for fiscal year 2023 obtained from the Washoe County Assessor’s Office. The data sample excludes undeveloped lots and, for scale and legibility, has been narrowed to those lots of 20,000 square feet or less.<sup>11</sup>

Noticeable bunching occurs at 6,000 square feet, coinciding with the SF-8 zoning district. Smaller discontinuities are visible at 9,000 square feet and 15,000 square feet, aligning with the SF-5 and SF-3 zoning districts. This histogram distribution of parcel sizes is evidence that homebuilders desire to provide smaller lots but are prevented from doing so by Reno’s minimum-lot-size requirements. This effect is particularly acute for lots larger than 6,000 square feet, suggesting that the Code may have mandated thousands of lots of 6,000 square feet or slightly larger when otherwise lots would have occupied less land and used less street frontage.<sup>12</sup>

The magnitude of the discontinuity at 6,000 square feet is partially explained by the mapping of Reno’s Code, under which 57.5 percent of all parcels zoned for single-family use are categorized as SF-8, which requires 6,000 square feet for interior lots (see figure 2). The SF-11 zone, which allows interior lots to be as small as 4,000 square feet, covers only 9.5 percent of parcels zoned for single-family use.

Undeveloped areas of Reno are planned for even lower single-family housing densities. According to the Code, the largely vacant Mortensen-Garson Overlay District is planned for approximately

**FIGURE 2.** The share by number of developed lots in Reno’s single-family (SF) zoning districts, 2024



Source: City of Reno GIS Open Data Hub.

523 acres of 6,000-square-foot lots, 26 acres of 15,000-square-foot lots, and 0 acres of 4,000-square-foot lots.<sup>13</sup>

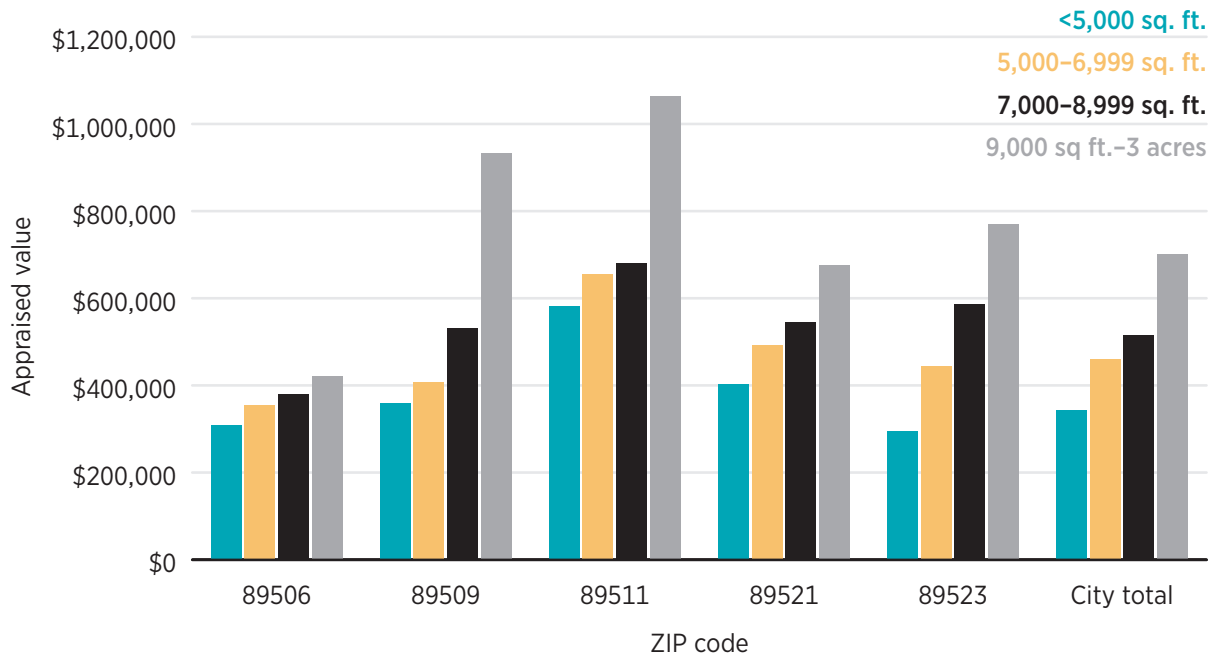
### Counting the Costs of Regulation

What are the implications of Reno’s single-family residential zoning for builders, buyers, and Nevada as a whole? A review of property appraisals for nonvacant parcels for all Reno ZIP codes (see figure 3) shows a direct relationship between the size of lots with single-family homes and the appraised value of those homes. Frontage requirements have a clear relationship as well (as shown later in figure 5). Finally, these regulations impede state goals by running counter to Nevada policies for water conservation and land use.

#### Minimum lot sizes drive up home prices

Among single-family homes built between 2014 and 2023, those properties on parcels of less than 5,000 square feet were appraised at an average of \$343,000. Homes on lots between 5,000 and 7,000 square feet averaged \$461,000, homes on lots of between 7,000 and 9,000 square feet averaged \$515,000, and homes on lots between 9,000 square feet and three acres averaged \$701,000. Figure 3 indicates that the discount for smaller lots tends to be pronounced in the more expensive ZIP codes, indicating the benefit of allowing flexibility in lot sizes in high-demand areas. These results are similar to those found in a study on lot sizes in the Dallas metropolitan area.<sup>14</sup>

**FIGURE 3.** The average appraised value of single-family homes built in Reno between 2014 and 2023



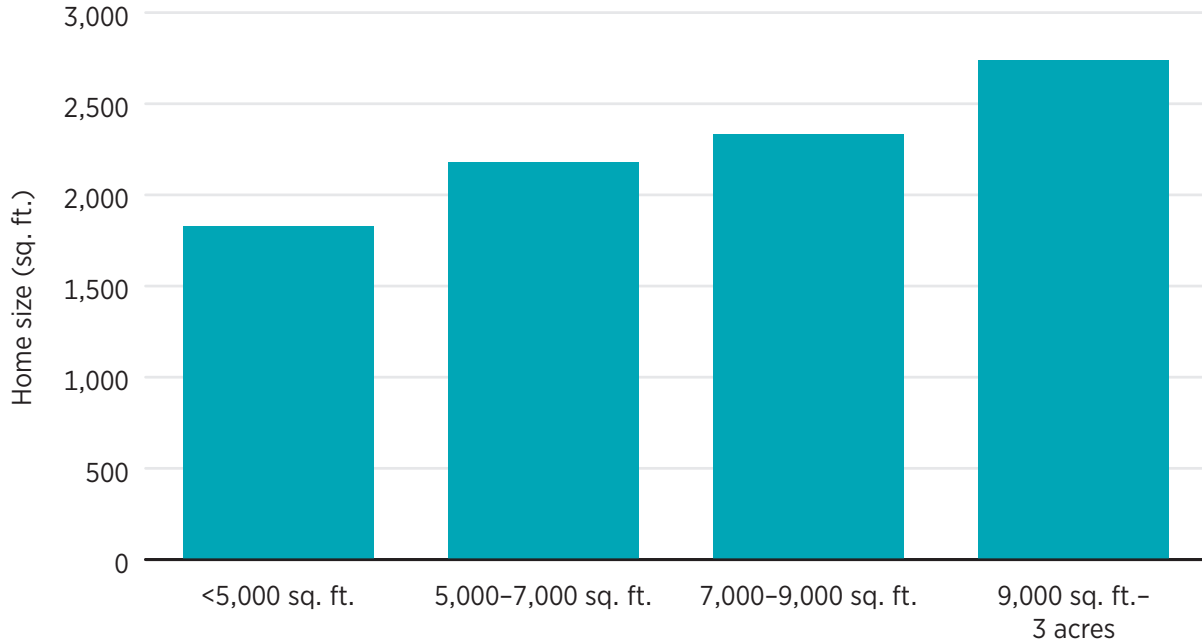
Source: Washoe County Assessor's Office data for fiscal year 2023.

Note: ZIP codes with fewer than 10 homes in any one category were omitted. City total contains all single-family homes, including those in omitted ZIP codes.

Why are homes with small lots cheaper? A primary reason is that smaller lots simply tend to be used for smaller homes. As shown in figure 4, homes on lots of less than 5,000 square feet are the only category among the four studied in which houses averaged less than 2,000 square feet. Interestingly, there is little difference in the actual bedroom count among these categories: All three lot-size categories for homes on lots of less than 9,000 square feet averaged 3.3 bedrooms per home, and homes on lots of between 9,000 square feet and three acres averaged only slightly higher at 3.6 bedrooms.<sup>15</sup> Although more detailed study of floor plans and layouts would be necessary to confirm this point, it appears that homes on small lots may feature more efficient floor plans, offering the same number of bedrooms at much lower cost to families. Despite these advantages, houses on lots of less than 5,000 feet represent only 13 percent of the homes built from 2014 to 2023, consistent with the proportion of SF-11 zoning in figure 2.

These cost differences have significant implications for affordability and homeownership. A popular mortgage calculator estimates that the average Reno home built on less than 5,000 square feet between 2014 and 2023 will be affordable to the median Nevada household earning \$72,300 but that homes on 5,000 square feet or greater will not.<sup>16</sup> Breaking down affordability further, one finds that the average Reno home sitting on less than 5,000 square feet will be affordable to

**FIGURE 4.** Size of homes in Reno according to lot size, 2023



Source: Washoe County Assessor's Office data for fiscal year 2023.

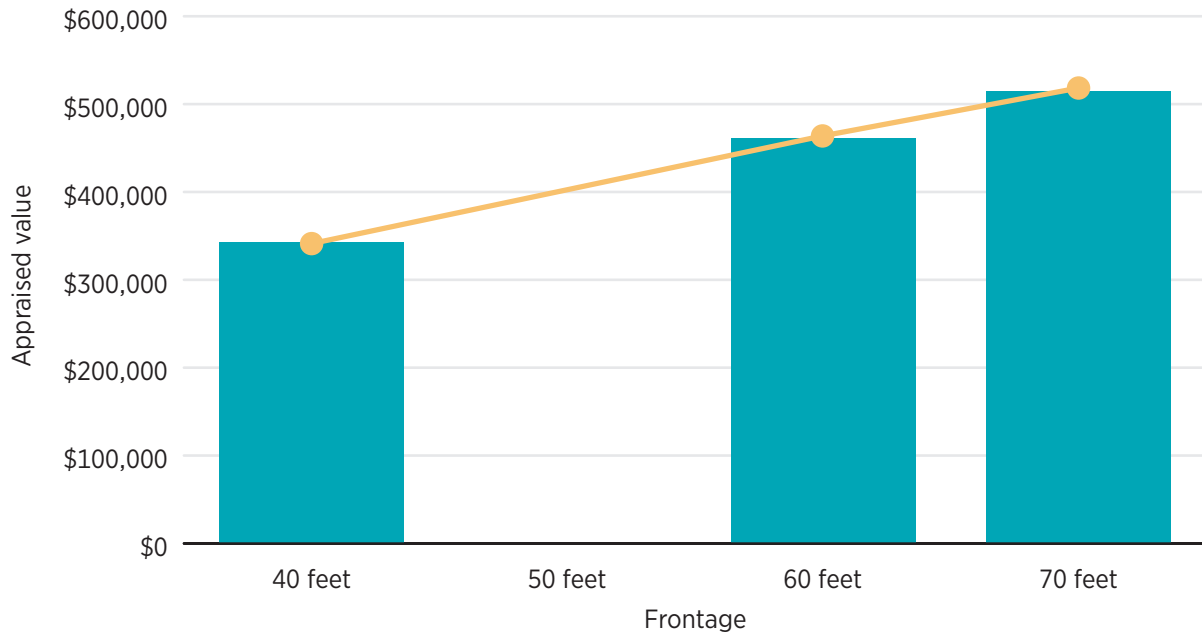
approximately 48 percent of Nevada households, the average home on less than 7,000 square feet will be affordable to approximately 35 percent, the average home on less than 9,000 square feet will be affordable to approximately 32 percent, and homes of lots between 9,000 square feet and three acres will be affordable to only 17 percent.

#### Frontage mandates: Increasing infrastructure, boosting prices

Frontage requirements, to the extent that they are also in excess of homebuilders' preferences, impose infrastructure costs on builders (for construction) and taxpayers (for maintenance) that may contribute as much or more to home prices than lot sizes. For example, the SF-8 district requires street frontage 50 percent greater than the SF-11 district—60 feet rather than 40 feet. By contrast, the SF-9 district requires only 17 percent more street frontage than SF-5.

These numbers align well with the difference in values among housing in the various zones, with homes in SF-8 being 34 percent more expensive than those in SF-11 and homes in SF-5 being 12 percent greater than those in SF-8. The ratio of frontage increases to price increases is almost identical ( $34/50 = 68$  percent,  $12/17 = 70$  percent). Given these numbers, I tentatively estimate that each increase of 10 feet in frontage requirements adds approximately \$60,000 to the cost of a home in the city of Reno (see figure 5). Reductions to less than 40 feet would be expected to result in further savings and in homes available at lower cost than those in Reno's SF-11 district.

**FIGURE 5.** Appraised values of Reno homes by frontage requirements, 2023



Source: Washoe County Assessor's Office data for fiscal year 2023.

Note: There is no single-family zone with a minimum frontage of 50 feet under Reno's Code. From this chart, it can be inferred that the average value of homes in such a zone would be \$405,000.

As with the lot-size requirements, the Code provides no explanation for the variation in lot-width requirements among single-family residential zones. The Code authors evidently do not perceive anything substandard in terms of health or safety for lots 40 feet in width. Moreover, for the MF-30 zone, it appears that two single-family homes may be built on a lot 50 feet in width, suggesting that the Code authors have no objection to lot widths of 25 feet for single-family homes.<sup>17</sup>

Further underlining the absence of a clear health and safety basis for these regulations, during a 2024 "Zoning Code Clean-Up," the city of Reno staff recommended "allowing duplex, triplex and fourplex units in the SF-3 and SF-5 zoning districts, with the approval of a Conditional Use Permit."<sup>18</sup> This change would have allowed up to four dwelling units on a 9,000-square-foot lot, implying that staff viewed 2,250 square feet of land per unit, or as little as 17.5 feet of frontage per unit, as acceptable. According to the city, this recommendation "was generally not supported by Council and has been removed." The city of Reno staff further recommended *no minimum lot size* for accessory dwelling units (ADUs), which are standalone single-family dwellings.<sup>19</sup> In effect, this change would allow two homes on a 4,000-square-foot lot.<sup>20</sup>

Interfering with state goals for water conservation and land use

Minimum lot sizes and frontage requirements conflict with other important state priorities. For example, Nevada has had a long-standing concern with water conservation, with the Southern

Nevada Water Authority paying residents to remove grass lawns<sup>21</sup> and the Nevada legislature recently passing a bill that will prohibit the use of Colorado River water for irrigation of ornamental turf for many properties.<sup>22</sup> With Nevada taking steps to discourage or prohibit water-intensive grass, why are Nevada's cities outlawing the option of small backyards in so many districts?

Additionally, both Nevada's governor and Nevada's representatives in Congress have been active in advocating for reforms that would open more federal property for urban growth in a state where federal agencies own over 80 percent of all land.<sup>23</sup> The lack of available land has been identified as a contributor to Nevada's rising housing costs.<sup>24</sup> With buildable land at a premium, why are Nevada's cities mandating that homes occupy as much as or more than 15,000 square feet of ground? These mandates are needlessly intensifying an acute affordability problem and are placing unnecessary pressure on state officials by consuming available land at an artificially accelerated rate, and all without evident justification.

## **Conclusion**

Nevada's home prices have risen rapidly in recent years, and one research team predicts that Nevada's homes will be the second least affordable to in-state buyers in the United States by 2030.<sup>25</sup> Minimum lot sizes and frontage requirements are a major contributor to the lack of affordable housing options in Reno. Mandating an increased consumption of land and increased linear feet of street per home beyond what builders would choose to provide drives up both purchase costs for Nevada buyers and maintenance costs for Nevada taxpayers while frustrating state policy objectives. Similar lot-size and frontage requirements exist in other Nevada cities and, if this case study on Reno is any indication, may contribute to increased housing and infrastructure costs in those cities as well.<sup>26</sup>

If Nevada's cities do not have the resources or the initiative to alleviate Nevada's worsening housing crisis by reforming their lot-size requirements as cities like Houston<sup>27</sup> and Austin, Texas, and Spokane, Washington, have done, the Nevada legislature retains the option of restoring property rights to Nevadans by capping minimum lot sizes, limiting frontage requirements, or both. Many states have been active in the zoning field in the recent past, with 20 states having enacted 65 housing supply bills in the 12 months ending June 2024.<sup>28</sup> Over the past two years, every state surrounding Nevada has enacted housing legislation; Oregon, California, Arizona, Utah, and Idaho have all passed housing supply bills.<sup>29</sup> Looking a little farther afield, one sees that Montana, Colorado, and Washington have recently adopted major housing supply packages.<sup>30</sup> Nevada's inaction on housing supply has become regionally distinctive.

The question remains what the appropriate lot size and frontage should be. A similar study on the city of Dallas concluded that lot size is simply not worth regulating, and this study agrees with that assessment. Lot width is likewise not worth regulating.<sup>31</sup> Externalities such as distance between homes or light and air can be addressed by putting in place reasonable setback regulations, height limitations, and other regulations aimed at the relationship among structures rather than by



setting arbitrary minimums for each dwelling unit. Lower-cost homes are an amenity to Nevadans looking for a place of their own, and legislative action on lot sizes and dimensions can provide needed housing relief for Nevada’s residents without taxpayer expense.

## About the Author

Charles Gardner is a research fellow at the Mercatus Center whose research focuses on planning law and housing affordability. He has testified before several state legislatures and frequently advises local government officials on zoning matters. He has also served as a local elected official and as an active participant in state policy making on the Connecticut Advisory Committee to the US Commission on Civil Rights and on the Commission on Connecticut’s Development and Future.

## Notes

1. Shannon Pettypiece, “A Six-Figure Income and a Struggle to Afford a House in a Nevada Battleground County,” *NBC News*, July 27, 2024 (noting that home prices in Washoe County have increased 46 percent since 2019, whereas weekly wages have increased only 27 percent).
2. City of Reno, *Annexation and Land Development Code*, ordinance no. 6638, adopted October 28, 2022 (Supp. No. 2).
3. See Charles Gardner, “Urban Minimum Lot Sizes: Their Background, Effects, and Avenues to Reform” (Mercatus Policy Brief, Mercatus Center at George Mason University, Arlington, VA, August 14, 2023).
4. See, for example, the New Canaan, Connecticut, zoning code.
5. For SF-11, attached single-family residential is a listed purpose, and for LLR-2.5 and LLR-1.0, agricultural uses are listed. The Code also justifies the lot sizes in the LLR-2.5 and LLR-1.0 zones by stating that they are “intended to preclude premature development of rural land on the fringes of the urban area and protect environmental resources.” The Code’s definition of development, however, appears to include subdivisions into lots of one or two-and-one-half acres. See the Code, § 18.09.307, 9-39–9-40.
6. *Nevada Revised Statutes* § 278.250 (2022) provides the purposes for which zoning must be designed.
7. City of Reno, *Annexation and Land Development Code*, Chapter 18.02.210, table 2-13.
8. Washoe County Assessor’s Office data for fiscal year 2023.
9. According to Washoe County Assessor’s Office data for fiscal year 2023, 69.5 percent of all structures in the city of Reno—including both residential and nonresidential buildings—are single-family homes.
10. For an application of this method in Texas cities, see Salim Furth and M. Nolan Gray, “Do Minimum-Lot-Size Regulations Limit Housing Supply in Texas?” (Mercatus Research Paper, Mercatus Center at George Mason University, Arlington, VA, May 1, 2019). For an application of the method in studying the adoption of minimum-lot-size ordinances in American municipalities, see Tianfang Cui, “Did Race Fence Off the American City? The Great Migration and the Evolution of Exclusionary Zoning (working paper, Furman Center, New York University, 2024).
11. According to Washoe County Assessor’s Office data for fiscal year 2023, 78.8 percent of single-family homes in the city of Reno are on lots of 20,000 square feet or less.
12. Conservatively estimating that 1,000 homes built to meet a 6,000-square-foot minimum would otherwise have been built on lots averaging 5,000 square feet or less yields an excess of 1 million square feet of land and approximately four miles of additional streets and infrastructure.
13. City of Reno, *Annexation and Land Development Code*, Chapter 18.02.603, 2-60, table 2-39.

14. Salim Furth, “Minimum Lot Size Regulations Are a Barrier to Homeownership in Dallas” (Mercatus Policy Brief, Mercatus Center at George Mason University, Arlington, VA, December 6, 2023).
15. Nevada has an average household size of 2.62, according to 2022 American Community Survey five-year data.
16. I assumed that buyers had no debts, provided a 20 percent down payment, and received a 7 percent interest rate on a 30-year mortgage, consistent with rates in mid-2024. See “How Much House Can I Afford?,” *NerdWallet*, accessed July 26, 2024, <https://www.nerdwallet.com/mortgages/how-much-house-can-i-afford/calculate-affordability>. (Income data are from American Community Survey 2022, one-year data).
17. City of Reno, *Annexation and Land Development Code*, Chapter 18.02.210, 2-18, table 2-13.
18. “City of Reno Zoning Code Clean-Up,” accessed July 29, 2024, <https://www.reno.gov/government/departments/development-services/zoning-code/zoning-code-clean-up>.
19. “City of Reno Zoning Code Clean-Up.”
20. The city of Reno staff recommended that ADUs be allowed in all zones in which single-family homes are allowed, including SF-11, which allows lots of 4,000 square feet. Placing an ADU on such a lot would result in two detached dwelling units on a single 4,000-square-foot lot. “City of Reno Zoning Code Clean-up.”
21. See Southern Nevada Water Authority, “Water Smart Landscapes Rebate,” at <https://www.snwa.com/rebates/wsl/> (accessed August 15, 2024).
22. Nevada Legislature, 81st Session, AB 356 (2021).
23. Nevada Policy Research Institute, “Breaking the Red Tape: Nevada’s Solution to the Housing Shortages,” June 19, 2024, <https://www.npri.org/nevadas-solution-to-the-housing-shortages/>.
24. See Nevada Policy Research Institute, *The Construction of a Crisis: Why Nevada’s Housing Is So Expensive* (Las Vegas: NPRI, 2022).
25. Larry Martino, “Nevada Houses 2nd Most Expensive In U.S.A. by 2030,” *96.3 KKLZ*, May 14, 2024.
26. See, for example, *City of Las Vegas Unified Development Code*, §19.06.0101 et seq. (containing five single-family detached residential districts with lot sizes and frontages ranging from 18,000 square feet/100 ft. to 3,000 square feet/35 feet); *City of Henderson Development Code*, §19.2.2 (containing five single-family detached residential districts with lot sizes ranging from 40,000 square feet to 4,000 square feet); *Carson City Zoning Code*, §18.04.040 et seq. (containing six single-family residential zones ranging from five acres to 6,000 square feet).
27. For an examination of how Houston’s minimum-lot-size reforms contributed to housing affordability, see Emily Hamilton, “Learning from Houston’s Townhouse Reforms” (Mercatus Policy Brief, Mercatus Center at George Mason University, Arlington, VA, April 11, 2023); Emily Hamilton, “The Effects of Minimum-Lot-Size Reform on Houston Land Values” (Mercatus Policy Brief, Mercatus Center at George Mason University, Arlington, VA, January 9, 2024).
28. Eli Kahn and Salim Furth, “Laying Foundations: Momentum Continues for Housing Supply Reforms in 2024” (Mercatus Policy Brief, Mercatus Center at George Mason University, Arlington, VA, July 22, 2024).
29. Kahn and Furth, “Laying Foundations”; Eli Kahn and Salim Furth, “Breaking Ground: An Examination of Effective State Housing Reforms in 2023” (Mercatus Policy Brief, Mercatus Center at George Mason University, Arlington, VA, August 1, 2023).
30. Kahn and Furth, “Laying Foundations”; Kahn and Furth, “Breaking Ground.”
31. Detached homes are rarely less than 14 feet wide (a typical width for manufactured homes), which when combined with a 5-foot setback from the property line would imply a practical minimum of around 25 feet for a detached home. Some cities permit lesser side setbacks.