



# Environmental and Natural Resources Law Center

## Sustainable Land Use Project

Ariana Buchanan  
J.D. Candidate 2022  
Sustainable Land Use Fellow

Sarah Adams-Schoen  
Assistant Professor

Anthony Jannelli  
J.D. Candidate 2022  
Sustainable Land Use Fellow

Michelle Smith  
ENR Research Associate

Victoria Whalen  
J.D. Candidate 2024  
Sustainable Land Use Fellow

### Middle Housing Misconceptions

This paper provides information and analysis regarding five misconceptions about middle housing generally and Eugene’s implementation of Oregon’s middle housing law specifically.

Misconception	Evidence-Based Analysis
Middle housing reforms in the absence of affordability mandates will drive up the cost of housing.	Even market-based middle housing reforms tend to increase the production of smaller, more affordable housing. The Eugene Planning Commission recommendation goes farther by providing affordability incentives.
Allowing all possible configurations of plexes (duplexes, triplexes & quadplexes) will increase housing prices and result in more existing homes being torn down.	Allowing detached plexes is an important equity and anti-displacement measure that will likely result in (1) more affordable housing overall and (2) fewer teardowns.
Middle housing parking standards will create neighborhood gridlock.	Data suggests most middle housing residents need 0 to 1 parking space and cannot afford the higher rents and sales prices attributable to excessive off-street parking requirements.
Middle housing reforms are not climate responsive.	Middle housing reforms that allow more lots to be developed for housing and encourage smaller housing and housing near transit are climate responsive.
Exceeding Oregon’s minimum middle housing requirements will harm Black, Indigenous, and other People of Color by increasing housing and climate injustices.	The EPC recommendation does more than the state minimum standards to promote housing justice and climate justice.





Although no single land use law reform can solve the City’s housing crisis, the research summarized below suggests that the Eugene Planning Commission’s recommended middle housing code amendments, as compared to the state minimum standards, will probably result in more production—albeit gradually—of smaller and more affordable housing units throughout the City’s neighborhoods and along major transit corridors.

### **Misconception 1 — Middle Housing Reforms Drive Up the Cost of Housing**

Analysis summary: Even market-based middle housing reforms tend to increase the production of smaller, more affordable housing. The Eugene Planning Commission recommendation goes farther by providing affordability incentives.

Middle housing reforms, like the local code amendments being developed and adopted by cities throughout Oregon in response to House Bill 2001, remove a strong regulatory preference for a single housing form: the detached single-family home on a relatively large lot. On a per-housing unit basis, this form of housing costs more to build than other forms of housing. Additionally, by dedicating more land to each unit of housing, single-family zoning constrains the supply of land available for housing development, putting upward pressure on the cost of housing.

Single-family zoning regulations also typically include many additional regulatory requirements that add to the cost to produce housing, including, for example, off-street parking requirements and minimum lot sizes. In the United States, cities tend to increase these regulatory requirements for each additional unit of housing on a lot, often without empirical evidence showing that residents of middle housing or apartments need, for example, one or two parking spaces per unit of housing. In this way, traditional zoning significantly increases the cost to build a duplex, triplex, or other forms of middle and multi-family housing to the point that, even where it is allowed, very little is built. Adjustment of regulations that unnecessarily increase the cost to develop middle housing is an essential step in promoting the development of affordable housing.

To continue, both smaller housing units and housing on smaller lots tend to cost less. Middle housing reforms that allow for the development of smaller housing units by increasing the number of units that can be developed on a lot are therefore likely to result in the development of lower-priced housing units. Additionally, even to the extent that middle housing reforms may increase the development of market-rate housing, many studies find that the removal of regulatory barriers to the production of housing decreases the cost of housing for households across income levels. Research by Breen et al. suggests that restricting supply increases housing prices and that adding supply helps make housing more affordable. The study found that this was true “even in markets where much of the new construction is itself high-end housing that most people can’t afford” because “[a] lack of supply to meet demand at the high end affects prices across submarkets and makes housing less affordable to residents in lower-cost submarkets.”





This is one reason that many urban planners and economists have found that single-family zoning has driven up the cost of sales and rental housing in U.S. cities.

Moreover, a study of various middle housing development scenarios in Eugene, Oregon showed that maximum unit, minimum lot size, and parking requirements are factors that can make the development of rentals unviable or keep rental rates and sale prices in or above the high middle-market range. A consulting firm working with DLCD through the rulemaking process also found that minimum off-street parking requirements, minimum lot size, and floor area ratio can significantly limit development feasibility for triplexes and quadplexes. Maximum density, maximum height, and various design standards also pose potential barriers to the feasibility of middle housing development, and especially affordable middle housing development.

## Sources

Asquith, B. et al. (2020). "Supply Shock Versus Demand Shock: The Local Effects of New Housing in Low-Income Areas, FRB of Philadelphia Working Paper No. 20-07 (finding new buildings decrease nearby rents by 5 to 7 percent relative to locations slightly farther away or developed later and increase in-migration from low-income areas).

Been, V., Gould Ellen, I, O'Regan, K. (2018). "Supply Skepticism: Housing Supply and Affordability," *Housing Policy Debate* 29:25, 26–27 & n.3 (citing and discussing "considerable empirical evidence" that "restricting supply increases housing prices and that adding supply would help to make housing more affordable").

Chapin, B, Jia, W., Wachs, M., "Parking and Affordable Housing in San Francisco," in *Parking and the City*, ed. Donald Shoup (New York: Routledge 2018).

Glaeser, E. L., & Gyourko, J. (2002). "The impact of zoning on housing affordability. National Bureau of Economic Research," Working Paper 8835. <http://www.nber.org/papers/w8835>.

Glaeser, E. L., & Ward, B. A. (2009). "The causes and consequences of land use regulation: Evidence from Greater Boston." *Journal of Urban Economics*, 65(3), 265–278.

Lehe, L. (2018). "How Minimum Parking Requirements Make Housing More Expensive," *Journal of Transport and Land Use* 11:1.

Li, X. (2019). "Do new housing units in your backyard raise your rents?" NYU Wagner & NYU Furman Ctr. Working Papers (2019).

Mast, E. (2019). "The Effect of New Market-Rate Housing Construction on the Low-Income Housing Market." W.E. Upjohn Institute for Employment Research Policy and Research Briefs (finding that 100 new market-rate units create 70 vacancies in middle- and lower-income neighborhoods).





## **Misconception 2** — Allowing All Possible Configurations of Plexes Will Increase Housing Prices and Result in More Existing Homes Being Torn Down

Analysis summary: Allowing detached plexes is an important equity and anti-displacement measure that will likely result in (1) more affordable housing overall and (2) fewer teardowns

Oregon’s middle housing law does not provide direct incentives for the production of middle housing. Rather, the law removes regulatory barriers that have contributed to middle housing not being built even when housing is in demand.

Regulatory restrictions on housing form generally increase construction costs and decrease the number of lots that can accommodate housing development—which is why the state model code encourage cities to allow all configurations of plexes subject only to objective siting and design standards that do not unreasonably delay or add costs to the development of the middle housing type. The state model code definitions of duplex, triplex, and quadplex (which allows side-by-side attached, stacked, and detached configurations) make production of duplexes and other plexes more likely by removing restrictions that tend to increase the cost to build plexes and decrease the number of lots on which plexes may be built.

As a result, although detached housing typically costs more than attached housing, definitions of plexes that allow all configurations allow for production of more housing, which studies show will put downward pressure on sales and rental prices.

By allowing all configurations of plexes, the state model code also removes a potential regulatory incentive to tear down existing housing. For example, by allowing detached duplexes, a property owner who wants to convert an existing detached garage or ADU into a duplex can do so without the expense and waste of tearing down an existing structure. Likewise, property owners who want to use their existing property to develop a duplex or other plex, can keep their existing home intact and add the other plex units. Thus, even in situations where the lot layout or size of an existing home make a duplex conversion or addition of an attached unit impossible or undesirable, property owners who want to build a duplex or other plex can do so without removing or even altering their existing home.

A code that allows homeowners to convert existing accessory structures (like garages, studios, ADUs) into one or more units of a plex, even if these structures are not attached to the existing home, also allows for plex construction at significantly lower costs. For example, rather than spending a couple hundred thousand dollars or more to construct a new attached duplex, a homeowner can convert an existing structure on the property to a detached duplex unit at significantly lower cost. In fact, by letting a detached unit count as half of a duplex, even homeowners who cannot afford the cost of a conversion or new building, “could take





advantage of Senate Bill 458, Oregon’s middle-housing lot split bill, and finance construction of a backyard home simply by selling it to its future resident, who could take out a conventional mortgage to pay for the job.” (Anderson 2022.)

Definitions of plexes that include all possible configurations further the State Planning Goal 10, which requires cities to provide “adequate opportunities” for housing in their community, based on community needs. Communities like Eugene have an acute housing crisis. By adopting a definition that allows all possible configurations of plexes, the state model code definition and cities that adopt that definition remove regulatory barriers that limit the production of needed housing.

## Sources

Model Code for Large Cities, Or. Admin. R. 660-046-0010(4), Exhibit B, ch.1(B) (defining duplex, triplex, and quadplex as two, three, and four dwelling units “on a lot or parcel in any configuration,” respectively) and Figures 7–8, 11 & 13 (illustrating detached configurations).

Or. Admin. R. 660-046-0020 (providing that medium or large cities may define duplex to include detached dwelling units and large cities may define triplexes and quadplexes to include any combination of attached or detached dwelling units).

Adams-Schoen, S., Sullivan, E. (2021). “Reforming Restrictive Residential Zoning: Lessons from an Early Adopter,” *J. of Affordable Housing & Comm. Dev. L.* 30:161.

Anderson, M. (January 5, 2022). “Backyard Homes are Great for Owners of Small Homes,” *Sightline*, <https://www.sightline.org/2022/01/05/backyard-homes-are-great-for-owners-of-small-homes/>.

Hewitt, B., Bump, T. and Saucedo-Andrade, O. (Feb. 18, 2021). “Memo: Evaluation of Middle Housing Development Potential in Eugene,” *ECONorthwest*.





### **Misconception 3 — Middle Housing Parking Standards Will Create Neighborhood Gridlock**

Analysis summary: Data suggests most middle housing residents need 0 to 1 parking space and cannot afford the higher rents and sales prices attributable to excessive off-street parking requirements.

Amendments to residential off-street parking requirements tend to be controversial—implicating issues related to affordability, development costs, climate change, and the real and perceived potential to increase congestion.

Parking demand data suggests that many concerns about congestion related to middle housing are misplaced. Although fewer than 10 percent of U.S. households are zero-vehicle, and most U.S. households own more than one car, households that are likely to live in middle housing are significantly more likely to be zero-or one-vehicle households. Indeed, a study by the US Department of Transportation found that renter households were almost six times as likely as non-renter households to have zero vehicles, households living in condominiums or apartments were almost five times as likely as households living in non-apartment dwellings to have zero vehicles, and households in urban areas were more than twice as likely as those in rural areas to have zero vehicles.

As part of the HB 2001 rulemaking, DLCDC researched parking demand and cost impacts of off-street parking requirements. For all cities, many smaller households and rentals have zero or one car, and off-street parking requirements create an additional cost that these households must bear with no benefit either to the household or the community at large. This represents what economists refer to as deadweight loss or lost economic efficiency. Unlike taxes, which can be reinvested to offset deadweight loss imposed by the tax, parking requirements do not raise revenue to reinvest, so the deadweight loss imposed by parking mandates is borne entirely by households and housing producers.

Regarding the significant costs related to off-street parking minimums, the DLCDC study reported that “nationwide, the cost of garage parking to renter households is approximately \$1,700 per year or an additional 17% of a housing unit’s rent. One parking space per unit increases costs by approximately 12.5%, and two parking spaces can increase costs by up to 25%. This effect is more pronounced for lower priced housing.”

The study also found that minimum off-street parking requirements incentivize developers to build larger, less affordable housing.

The Planning Commission’s recommended code adopts the state maximum of 1 off-street parking area per unit for duplexes, rowhouses and cottage clusters, and between 1 and 4 spaces per lot for triplexes and quadplexes depending on lot size, with three exceptions. To incentivize





the development of more affordable and climate-responsive housing, the EPC recommended code eliminates the off-street parking requirement when:

- At least 50% of middle housing units are for low-income occupants,
- A dwelling is less than 900 square feet, or
- Middle housing is within the buffer of a Frequent Transit Route.

## Sources

Am. Ass'n Of State Hwy. & Transp. (2021) "Officials, Commuting in America: The National Report on Commuting Patterns and Trends" (in 2017, 8.6% of U.S. households were zero-vehicle households, but more than 75% of households with incomes in the bottom quartile were zero-vehicle households).

Adams-Schoen, S., Sullivan, E. (2021). "Reforming Restrictive Residential Zoning: Lessons from an Early Adopter," *J. of Affordable Housing & Comm. Dev. L.* 30:161.

Chapin, B, Jia, W., Wachs, M., "Parking and Affordable Housing in San Francisco," in *Parking and the City*, ed. Donald Shoup (New York: Routledge 2018).

Hanson, B. (n.d.). Chapter 3.1 "Development Patterns and Infill: Parking Maximums," *Sustainable Development Code*, [https://sustainablecitycode.org/brief/parking-maximums-7/#\\_ednref4](https://sustainablecitycode.org/brief/parking-maximums-7/#_ednref4).

Lehe, L. (2018). "How Minimum Parking Requirements Make Housing More Expensive," *Journal of Transport and Land Use* 11:1.

Manville, M. & Pinski, M. (2020). "Parking Behavior: Bundled Parking and Travel Behavior in American Cities," *Land Use Policy* 91:103853.

Or. Dep't of Land Conservation & Dev. (2020). "Parking and Middle Housing: Analysis of Demand and Impacts –Implications for Middle Housing Rulemaking."

U.S. Dep't of Transportation, Bureau of Transportation Statistics (2011). "Household, Individual, and Vehicle Characteristics."







#### **Misconception 4 — Middle Housing Reform Is Not Climate-Responsive**

Analysis summary: Middle housing reforms that allow more lots to be developed for housing and encourage smaller housing and housing near transit are climate responsive. The EPC recommended code is more climate responsive than the state middle housing minimum standards.

Many aspects of middle housing reform help a community to reduce its per capita emissions. For example:

- Traditional single-unit zoning regulations (i.e., single-family zoning regulations) devote large areas of land to the least energy efficient form of housing. By removing regulatory prohibitions on the development of other housing forms, middle housing reforms facilitate the development of more energy-efficient forms of housing.
- By decreasing the amount of land needed to develop housing (for example, by allowing development of more than one housing unit per lot, decreasing minimum lot sizes, and decreasing the amount of land that must be devoted to parking cars), middle housing reforms help prevent urban sprawl.
  - Urban sprawl is a key driver of climate change.
  - Urban sprawl increases the distance that residents typically travel by car for work, school, and other activities. Individual vehicle usage is a major driver of climate change because of automobiles' high carbon dioxide emissions.
  - Urban sprawl also contributes to the destruction of forest, prairie and agricultural lands that, when left intact, sequester carbon.

In addition to the climate-mitigating benefits of middle housing generally, the Planning Commission recommendation includes at least three provisions that will help Eugene decrease its carbon footprint even more.

1. The EPC recommendation includes incentives to develop middle housing near frequent transit routes. These incentives promote access to and use of public transportation and reductions in individual vehicle usage. Studies show that proximity to public transit routes results in: increased use of public transit, fewer individual vehicle trips, and fewer miles traveled. Public transportation produces significantly lower gas emissions per passenger mile.
2. The EPC recommendation includes incentives to develop smaller middle housing. Smaller forms of housing typically have smaller carbon footprints in terms of per-household energy use. Additionally, by more efficiently using urban land,







communities avoid sprawl and the vehicle emissions, pollution, and loss of open space lands that accompany sprawl.

3. The EPC recommendation allows for development of middle housing with zero required off-street parking spaces if the middle housing is small, affordable or near transit routes. As discussed above, elimination of regulatory off-street parking requirements encourages development of smaller, more affordable units; aligns with many households preferences; leads to less sprawl; and incentivizes the use of less-carbon intensive modes of transportation.

### Sources

Hess, D.B. "Repealing Minimum Parking Requirements in the Green Code in Buffalo: New Directions for Land Use and Development," in *Parking and the City*, ed. Donald Shoup (New York: Routledge, 2018).

Pendall, R. (2021). "Growth + Climate Emergency: We're already too late getting ready. Exclusionary zoning makes matters worse." *Urban Affairs Rev.* 57(1):284-297.

Tian, G., et al. (2016). "Trip and Parking Generation at Transit-Oriented Developments: A Case Study of Redmond TOD, Seattle Region." *Transportation* 44(5): 1235-1254.

US EPA, "Greenhouse Gas Emissions from a Typical Passenger Vehicle", March 2018.





## Misconception 5 — Going Above and Beyond Minimum State Requirements Will Harm BIPOC Groups and Climate Justice

Analysis summary: The EPC recommended code does more than the state minimum standards to promote housing justice and climate justice.

Repeatedly throughout the history of American zoning law, courts have upheld exclusionary residential zoning laws. The courts have found that municipalities have a legitimate public welfare interest in preserving the quality of life by excluding any residential neighborhood land uses that are incompatible with the engrained pastoral ideal of the American family living in a detached home with a wide lawn on a quiet, tree-lined street. The flipside of the myth of the peaceful and ordered rural or suburban neighborhood is a loosely veiled racist trope that stigmatizes Black spaces as urban, crime-ridden, and impoverished—a powerful myth that dehumanizes those who live in dense, less restrictively zoned neighborhoods and in multifamily housing. These myths cast the residents of dense, multifamily neighborhoods—who are disproportionately lower-income people and People of Color—as an existential threat to the American family. The Supreme Court’s seminal 1926 land use decision, *Village of Euclid v. Ambler Realty Co.*, relied on this trope when it found that the multi-family residences of people who could not afford to live in a single-family detached home constituted land uses that were incompatible with residential land uses. The Court described multi-family housing, and, by default, those who lived in multi-family housing as “mere parasite[s]” that, in a residential neighborhood, “come very near to being nuisances.” On this basis, the Court found that segregating multi-family and detached single-family residences promotes the public welfare, by among other things, preserving the residential character of neighborhoods and their desirability as a place of detached residences.

For those of us who work in land use planning and zoning, real estate law, and local government law, our fields provide abundant opportunities to work to dismantle structural racism and contribute to the creation and preservation of racially just communities. Exclusionary zoning and other related local laws have been used since their inception to exclude low-income Americans, Black Americans, immigrants, and other People of Color from affluent White neighborhoods, parks and pools, schools, and from access to wealth, opportunity, and safety. Research indicates that exclusionary zoning of well-resourced neighborhoods has entrenched racial segregation by pricing low-income and BIPOC groups out of opportunities to build equity through homeownership, access to higher-paying jobs, and access to well-funded school districts.

Unfortunately, the problem goes beyond economic disadvantages and lack of opportunity. Low-income and other disadvantaged communities are particularly challenged by climate change because of pre-existing vulnerabilities, including environmental racism, systemic racism, and historical traumas. To illustrate just one example of the disregard for the health and dignity of people who live in less restrictive residential zones, an environmental justice investigation in





2011-2012 found that 99% of toxic air emissions in Eugene are released in one zip code, a zip code that was home to the Eugene area's first Black community after the city razed their Ferry Bridge neighborhood and continues to be home to a larger concentration of People of Color and low-and very-low-income households. Data showed, not surprisingly, that the people who live in this zip code suffer higher rates of respiratory illnesses, cancer, and neurological symptoms; schoolchildren were percent more likely to have asthma; families were burdened with higher medical costs; parents and children missed more work and school, and more. Moreover, the neighborhood was considered a food desert, an area with no county health care centers, an area with more brownfield sites and less vegetation, and a disproportionate lack of access to public transportation.

In short, decades of preferential treatment of single-unit housing have led to the inflation of housing prices, the hoarding of wealth and opportunity, and inequitable economic and environmental outcomes based on race and socioeconomic status. Requiring cities in Oregon to permit small-scale multi-unit and smaller, more affordable single-unit housing in all neighborhoods moves away from exclusionary zoning that has plagued American cities and offers the possibility of more diverse housing and neighborhoods.

## Sources

- Adams-Schoen, S. (2020). "Dismantling Segregationist Land Use Controls." *Zoning and Planning L. Reports* 43:8.
- Adams-Schoen, S., & Sullivan, E. (2021). "Reforming Restrictive Residential Zoning: Lessons from an Early Adopter." *J. of Affordable Housing & Comm. Dev. L.* 30:161.
- Bassett, E., *Zoning* (National Municipal League 1922).
- Euclid v. Ambler Realty Co.*, 272 U.S. 365, 47 S. Ct. 114 (1926).
- Glaeser, E. L., & Gyourko, J. (2002). "The impact of zoning on housing affordability. National Bureau of Economic Research," Working Paper 8835. <http://www.nber.org/papers/w8835>
- Glaeser, E. L., & Ward, B. A. (2009). "The causes and consequences of land use regulation: Evidence from Greater Boston." *Journal of Urban Economics*, 65(3), 265–278.
- Goetz, E. G. (2019, June 5). "Democracy, exclusion, and white supremacy: How should we think about exclusionary zoning?" *Urban Affairs Review*.
- Goetz, E. G., Williams, R. A., & Damiano, A. (2020). "Whiteness and urban planning." *Journal of the American Planning Association*, 86(2), 142–156.
- Hirt, S. (2013). "Home, Sweet Home American Residential Zoning in Comparative Perspective." *J. Plan. Educ. and Rsch.* 33:1.





- Hirt, S. (2015). "The rules of residential segregation: US housing taxonomies and their precedents." *Planning Perspectives*, 30(3), 367–395.
- Kosman, J. (1993). "Toward an Inclusionary Jurisprudence: A Reconceptualization of Zoning." *Catholic U. L. REV.* 43:59.
- Lees, M. (1994). "Preserving Property Values? Preserving Proper Homes? Preserving Privilege?: The Pre-Euclid Debate Over Zoning for Exclusively Private Residential Areas, 1916-1926." *U. Pitt. L. Rev.* 56:367.
- Or. Admin. R. 660-046-0115 (2022).
- Pendall, R. (2021). "Growth + Climate Emergency: We're already too late getting ready. Exclusionary zoning makes matters worse." *Urban Affairs Rev.* 57(1):284-297.
- Pendall, R. (2000) "Local Land Use Regulation and the Chain of Exclusion." *J. of the Am. Planning Ass'n* 66:125.
- Power, G. (1988). "The Unwisdom of Allowing City Growth to Work Out Its Own Destiny." *Md. L. Rev.* 47:626.
- Rothwell, J., Massey, D. (2009) "The Effect of Density Zoning on Racial Segregation in U.S. Urban Areas." *Urban Affairs Review* 44:6.
- Seitles, M. (1998). "The Perpetuation of Residential Racial Segregation in America: Historical Discrimination, Modern Forms of Exclusion, and Inclusionary Remedies." *J. LAND USE & ENVTL. L.* 14:89.
- Silver, C., (1997) "The Racial Origins of Zoning in American Cities," in *Urban Planning and the African American Community: In the Shadows* (June Thomas Manning & Marsha Ritzdorf, eds.).
- Trounstine, J. (2018). *Segregation by design: Local politics and inequality in American cities* (Cambridge University Press).
- Weiss, M. (1988). "The Real Estate Industry and the Politics of Zoning in San Francisco, 1914–1928." *Planning Perspectives* 3:311.
- Whittemore, A. (2021). "Exclusionary Zoning: Origins, Open Suburbs, and Contemporary Debates." *J. of the Am. Planning Ass'n* 87(2):167-180.
- Wolf, M. A. (2008). *The zoning of America: Euclid v. Ambler* (University of Kansas Press).

