

Pepperdine Law Review

Volume 50 Issue 3 Symposium: A Faster Way Home -Removing Barriers to Increase America's Housing Supply

Article 3

3-15-2023

Growth ≠ Density: Zoning Deregulation and the Enduring Problem of Sprawl

Christopher Serkin

Kelsea Best

Follow this and additional works at: https://digitalcommons.pepperdine.edu/plr



Part of the Housing Law Commons, and the Property Law and Real Estate Commons

Recommended Citation

Christopher Serkin and Kelsea Best Growth ≠ Density: Zoning Deregulation and the Enduring Problem of Sprawl, 50 Pepp. L. Rev. 557 (2023)

Available at: https://digitalcommons.pepperdine.edu/plr/vol50/iss3/3

This Article is brought to you for free and open access by the Caruso School of Law at Pepperdine Digital Commons. It has been accepted for inclusion in Pepperdine Law Review by an authorized editor of Pepperdine Digital Commons. For more information, please contact bailey.berry@pepperdine.edu.

Growth ≠ Density: Zoning Deregulation and the Enduring Problem of Sprawl

Christopher Serkin* & Kelsea Best**

Abstract

According to its many critics, zoning bears significant responsibility for the housing crisis in America and for promoting unsustainable development patterns. Reformers argue that zoning reduces the supply of new housing and therefore drives up prices in thriving communities. Zoning also increases carbon emissions by restricting density in the urban core and promoting carbon-intensive, landconsuming, automobile-dependent sprawl in single-family suburbs. A growing chorus calls for relaxing zoning limits in order to promote growth in the urban core as a response to the twin crises of housing costs and climate change. Relaxing zoning limits will almost certainly promote growth but may not promote density. Some of the most loosely zoned cities in America are also the least dense. This symposium contribution examines the relationship between density and zoning intensity and finds that density is loosely correlated with more intensive zoning, not less. This is not a causal claim but nevertheless raises questions whether zoning deregulation will necessarily produce both growth and density.

^{*} Elizabeth H. & Granville S. Ridley, Jr. Chair in Law, Vanderbilt Law School.

^{**} Postdoctoral Research Assistant, University of Maryland Department of Civil & Environmental Engineering. We would like to thank Nestor Davidson, John Infranca, and Richard Schragger for helpful comments on an earlier draft.

TABLE OF CONTENTS

I.	INTRO	DUCTION	559
II.	THE PROBLEM(S) WITH ZONING		561
III.	A.	Housing Costs and Carbon Emissions	561
	B.	Reform Efforts	565
	GROWTH ≠ DENSITY		
	A.	Data on Growth and Density	567
	B.	Why Does Growth ≠ Density?	572

I. Introduction

Two crises facing policymakers in the United States are climate change and housing prices.¹ They appear to be unrelated, but connections between them are emerging in research and policy discussions.² While mechanisms connecting the two are complex, they appear to share at least one underlying cause: zoning.³ According to its many critics, zoning bears significant if not primary responsibility for reducing the supply of new housing and therefore driving up prices in thriving communities around the country.⁴ But zoning also increases carbon emissions by restricting density in the urban core and limiting large swaths of land to single-family residential use—often on large lots.⁵ Zoning has promoted carbon-intensive, land-consuming, automobile-dependent sprawl.⁶

For many advocates, the policy response is straightforward: we should reduce or even eliminate zoning density limits to allow the market to produce

^{1.} See generally INT'L PANEL OF CLIMATE CHANGE, CLIMATE CHANGE SIXTH ASSESSMENT REPORT (2022) (describing the impacts of climate change); Emily Badger & Eve Washington, The Housing Shortage Isn't Just a Coastal Crisis Anymore, N.Y. TIMES (July 14, 2022), https://www.nytimes.com/2022/07/14/upshot/housing-shortage-us.html (explaining how rising home prices have affected more than just the East and West Coasts); Nicole Friedman, U.S. Housing Affordability in June Was the Worst Since 1989, WALL ST. J. (Aug. 12, 2022, 10:00 AM), https://www.wsj.com/articles/u-s-housing-affordability-in-june-was-the-worst-since-1989-11660312801 (describing the challenges the housing market presented throughout 2021 and 2022, especially for first time buyers).

^{2.} See, e.g., Jesse M. Keenan et al., Climate Gentrification: From Theory to Empiricism in Miami-Dade County, Florida, 13 ENV'T RSCH. LETTERS 1, 1 (Apr. 23, 2018), https://doi.org/10.1088/1748-9326/aabb32; see also Kelsea Best & Zeynab Jouzi, Climate Gentrification: Methods, Gaps, and Framework for Future Research, FRONTIERS IN CLIMATE (Mar. 1, 2022), https://www.frontiersin.org/articles/10.3389/fclim.2022.828067/full.

³. See generally Vanessa Brown Calder, Zoning, Land-Use Planning, and Housing Affordability, CATO INST. (Oct. 18, 2017), https://www.cato.org/policy-analysis/zoning-land-use-planning-housing-affordability (explaining the link between zoning laws, housing prices, and environmental laws).

^{4.} See, e.g., id.; Ganesh Sitaraman et al., Regulation and the Geography of Inequality, 70 DUKE L.J. 1763, 1812–14 (2021) (summarizing the argument).

^{5.} See, e.g., Lauren Sommer, Why Sprawl Could Be the Next Big Carbon Battle, NPR (Aug. 6, 2020, 9:00 AM), https://www.npr.org/2020/08/06/812199726/why-sprawl-could-be-the-next-big-climate-change-battle.

^{6.} See, e.g., Jay Wickersham, Jane Jacobs's Critique of Zoning: From Euclid to Portland and Beyond, 28 B.C. ENV'T AFFS. L. REV. 547, 557 (2001) ("By fostering or requiring low density development with a high separation of uses, Euclidean zoning is one of the great generators of suburban sprawl, with all of its environmental, economic, and social costs."); see also Alain Bertaud & Jan K. Brueckner, Analyzing Building-Height Restrictions: Predicted Impacts and Welfare Costs, 35 REG'L SCI. & URB. ECON. 109, 123–24 (2005).

compact urban development.⁷ More permissive zoning will allow developers to create taller buildings with more housing per acre.⁸ More people will therefore be able to live in the dense urban core, reducing vehicle miles traveled and promoting smaller housing units, which in turn reduces energy consumption.⁹ Liberalizing zoning holds the promise to reduce housing prices and carbon emissions in one fell swoop, and reform efforts have gained steam on one or both of these grounds.¹⁰

The problem, however, is that liberalizing zoning will not necessarily produce greater density.¹¹ Indeed, some of the most lightly zoned places are also the *least* dense.¹² From Houston and Phoenix, to smaller municipalities around the country, less restrictive zoning does not necessarily mean greater

- 7. See, e.g., John R. Nolon, The Land Use Stabilization Wedge Strategy: Shifting Ground to Mitigate Climate Change, 34 Wm. & MARY ENV'T L. & POL'Y REV. 1, 5–6 (2009) ("By shifting ground from predominately single-family to predominately urban settlements, which fosters more energy efficient buildings and transportation systems, we can lower per capita CO₂ emissions significantly." (footnote omitted)); see also Richard Florida, The Flip Side of NIMBY Zoning, BLOOMBERG CITYLAB (Oct. 26, 2017, 6:45 AM), https://www.citylab.com/equity/2017/10/the-flip-side-of-nimby-zoning/543930/ ("It's become perhaps the most widely accepted truism in urban development and economic policy circles: NIMBY zoning and overly restrictive land-use policies and building codes keep housing prices high, making superstar cities like New York and San Francisco less affordable. . . . Remedying this has won wide support from urban economists and city builders on both sides of the political aisle.").
- 8. See generally Bertaud & Brueckner, supra note 6, at 123 (noting the severe economic and welfare impact resulting from lower density cities shaped by height restrictions).
- 9. Devin Edwards, *Green Houses and Greenhouse Gases: Why Exclusionary Zoning is a Climate Catastrophe*, GEO. PUB. POL'Y REV. (Nov. 5, 2019), http://gppreview.com/2019/11/05/green-houses-greenhouse-gases-exclusionary-zoning-climate-catastrophe/ (summarizing arguments).
- 10. See, e.g., Adam Millsap et al., Assessing the Effects of Local Impact Fees and Land-Use Regulations on Workforce Housing in Florida, James Madison Inst. 17 (Jan. 3, 2019), https://www.james-madison.org/wp-content/uploads/2019/01/Backgrounder_WorkforceHousing_12.11.18_v04_web_pdf ("Land-use regulations such as minimum lot sizes, density limits, minimum parking requirements, height limits, and single-use zoning artificially restrict the amount of land available for new housing, which means less new housing and higher prices for the housing that is built."); Edwards, supra note 9 ("The key is examining the difference between the average carbon dioxide emissions of single-family houses and denser kinds of housing—a Sasquatch-sized contrast in carbon footprints. . . .").
- 11. See infra Section III.A (presenting data from cities with minimal zoning restrictions but low density).
- 12. See Moira O'Neill et al., Developing Policy from the Ground Up: Examining Entitlement in the Bay Area to Inform California's Housing Policy Debates, 25 HASTING ENV'T L.J. 1, 36 (2019). A separate but related problem is that density also does not necessarily correlate with affordability. See id. (problematizing the claim that density is a proxy for affordability and pointing out that "zoning for density does not necessarily result in opening up access to cities, as there are likely non-zoning barriers to development within exclusionary central cities").

density.¹³ Indeed, mapping the Wharton Residential Land Use Regulation Index of zoning restrictiveness against census data on population density shows an inverse relationship between looser zoning and density, and this holds by region and by metro size.¹⁴ Where growth and density do not go hand in hand, liberalizing zoning may help to increase supply but might also exacerbate carbon emissions if it produces more sprawl.¹⁵

This Symposium Contribution examines the ways in which zoning contributes to the dual problems of housing costs and carbon emissions. ¹⁶ It looks at some of the reform efforts seeking to relax density limits and otherwise encourage growth. ¹⁷ It then analyzes the relationship between zoning stringency and housing density, showing that liberal zoning regimes are not correlated to greater density. ¹⁸ The piece concludes by identifying some avenues for further work. ¹⁹

II. THE PROBLEM(S) WITH ZONING

A. Housing Costs and Carbon Emissions

Zoning has shaped the American landscape for the better part of a century.²⁰ Originally justified as a way of preventing incompatible uses of property in industrializing places, it now proscribes many development decisions, often with great detail.²¹ But zoning has become increasingly controversial

- 13. See infra Section II.A (presenting data).
- 14. See infra Section II.A.
- 15. See Calder, supra note 3 (explaining how zoning restrictions stifle supply); infra Section II.A (discussing the environmental issues that may arise with the liberalization of zoning).
- 16. See infra Section II.A (discussing the relationship between zoning, the cost of housing, and climate change).
- 17. See infra Section II.B (exploring the various types of reform efforts such as allowances for ADUs and prohibition of single-family residences).
 - 18. See infra Part III.
- 19. See infra Section III.B (discussing specific ways that reform might take shape such as changing HOA, private land use, and anti-sprawl regulations).
- 20. Sonia Hirt, *Mixed Use by Default: How the Europeans (Don't) Zone*, 27 J. PLAN. LIT. 375, 375 (2012) ("For the American urban professional, the term zoning has such a familiar ring that it may be hard to imagine a planning world in which zoning, as it developed in the United States over the last hundred years, is absent.").
- 21. Hannah Wiseman, *Public Communities, Private Rules*, 98 GEO. L.J. 697, 719 (2010) (offering examples). Land use regulations go beyond zoning and include regimes like historic preservation. *See generally J. Peter Byrne, Historic Preservation and its Cultured Despisers: Reflections on the Contemporary Role of Preservation Law in Urban Development, 19 GEO. MASON L. REV. 665 (2012)*

because of its impact on the supply of new housing, which in turn affects both affordability and carbon emissions.²²

There is a housing crisis in the United States, and it seems to keep getting worse.²³ More and more Americans are housing "cost burdened", generally defined as spending thirty percent or more of their income on housing.²⁴ According to a growing consensus of academics and policymakers, zoning bears much of the blame.²⁵ By imposing density restrictions, zoning limits the number of new housing units that developers can build.²⁶

Minimum lot sizes, height limits, and floor area ratio limits cap the

(discussing the role of historic preservation). The focus here is on zoning, but insights extend to land use regulation more generally. *See infra* Parts II–III.

- 22. Edward L. Glaeser et al., Why is Manhattan so Expensive? Regulation and the Rise in Housing Prices, 48 J.L. & ECON. 331, 331–33 (2005). The pressure on affordability also affects racial segregation. See, e.g., Jonathan Rothwell & Douglas S. Massey, The Effect of Density Zoning on Racial Segregation in U.S. Urban Areas, 44 URB. AFFS. REV. 779, 801 (2009).
- 23. See, e.g., Richard McGahey, Inflation, Soaring Rents, and the Housing Crisis, FORBES (Mar. 25, 2022, 6:30AM) https://www.forbes.com/sites/richardmcgahey/2022/03/25/inflation-soaring-rents-and-the-housing-crisis/?sh=6fe9481916f5 ("The data are grim. . . . January's average asking rents for housing [are] up 15.2% from last year. Rents have moved up in parallel with rising home prices, and as more people are priced out of home buying, they've increased upward pressure on rents."); Katherine Schaeffer, Key Facts About Housing Affordability in the U.S., PEW RSCH. CTR. (Mar. 23, 2022), https://www.pewresearch.org/fact-tank/2022/03/23/key-facts-about-housing-affordability-in-the-u-s/ ("[T]he national median sale price for a single-family home jumped 25% from \$327,100 in the fourth quarter of 2019 (the last full quarter unaffected by the COVID-19 recession) to \$408,100 in the fourth quarter of 2021, the most recent data available.").
- 24. See Schaeffer, supra note 24 ("In 2020, 46% of American renters spent 30% or more of their income on housing, including 23% who spent at least 50% of their income this way....").
- 25. See, e.g., Edward L. Glaeser et al., Why Have Housing Prices Gone Up?, 95 AM. ECON. REV. 329, 329 (2005); Vicki Been et al., Supply Skepticism: Housing Supply and Affordability, 29 HOUS. POL'Y DEBATE 25, 27 (2019) (summarizing arguments); see also Christopher Serkin, A Case for Zoning, 96 NOTRE DAME L. REV. 749, 751 (2020) ("A consensus is therefore building, at least among academics and elite activists, that zoning is a problem to be overcome."). Other factors driving housing prices include historically low interest rates, a wait-and-see approach by some home builders, and supply and labor shortages that have constrained development activity. See, e.g., Schaeffer, supra note 24 ("A variety of factors have set the stage for the financial challenges American homeowners are renters have been facing in the housing market, including incomes that haven't kept pace with housing cost increases and a housing construction slowdown."); Supply Chain Issues Continue to Slow Housing, NAT'L ASS'N OF HOME BUILDERS (Feb. 17, 2022), https://www.nahb.org/blog/2022/02/sup-ply-chain-issues-continue-to-slow-housing/ ("With builders continuing to report supply chain problems that are causing construction delays, overall housing starts decreased 4.1% to a seasonally adjusted annual rate of 1.64 million units...").
- 26. Jenny Schuetz, *Is Zoning a Useful Tool or a Regulatory Barrier*, BROOKINGS (Oct. 31, 2019), https://www.brookings.edu/research/is-zoning-a-useful-tool-or-a-regulatory-barrier/#cancel ("Research shows that overly restrictive zoning makes it hard for developers to build new housing, driving up rents and prices.").

number of units that can be built per acre, creating regulatory scarcity.²⁷ Simultaneously, zoning and other land use regulations—like impact fees, set-asides, and others—drive up the costs of development, costs that may then be passed on to housing consumers in the form of higher prices.²⁸ This relationship between zoning and housing affordability is now ubiquitous and entirely mainstream in the academic literature.²⁹

Development also has a significant impact on carbon emissions.³⁰ According to the International Panel on Climate Change (IPCC), "19% of all global 2010 GHG [greenhouse gas] emissions" are attributable to the building sector.³¹ Carbon emissions vary with the size and density of buildings.³² Smaller buildings require less energy to build and to operate.³³ "[D]enser urban populations tend to be more efficient in the sense of generating less carbon footprint per user."³⁴ The IPCC summarizes the data: "More compact *urban*

^{27.} See, e.g., Millsap et al., supra note 10, at 17.

^{28.} See also Vicki Been, "Exit" as a Constraint on Land Use Exactions: Rethinking the Unconstitutional Conditions Doctrine, 91 COLUM. L. REV. 473, 521–22 (1991) (evaluating the ability of developers to pass higher costs on to housing consumers).

^{29.} See generally, e.g., Robert C. Ellickson, Zoning and the Cost of Housing: Evidence from Silicon Valley, Greater New Haven, and Greater Austin, 42 CARDOZO L. REV. 1611 (2021) (analyzing the relationship between zoning and housing affordability); see also Glaeser et al., supra note 22, at 361–66.

^{30.} See Thin Lei Win, We Can't Tackle the Climate Change Crisis Without Changing Construction. Here's Why, WORLD ECON. F. (Jan. 4, 2021), https://www.weforum.org/agenda/2021/01/planetwarming-emissions-buildings-construction-climate-goals-risk/ (noting the slow pace of energy preservation initiative developments).

^{31.} Oswaldo Lucon et al., *Buildings, in* Climate Change 2014: Mitigation of Climate Change: Working Group III Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change 671, 678 (Marilyn Brown & Tamás Pálvölgyi eds., 2014). This may actually be too low. *See* Thin Lei Win, *supra* note 31 ("[B]uilding operations and construction now account for nearly 40% of global energy-related CO₂ emissions); Na Wang, et al., *Past Visions, Current Trends, and Future Context: A Review of Building Energy, Carbon and Sustainability*, 82 Renewable & Sustainable Energy Rev. 976, 978 (2018) ("[B]uildings are responsible for about one-third of global primary energy consumption and about one-third of total direct and indirect energy-related greenhouse gas emissions.").

^{32.} Benjamin Goldstein et al., *The Carbon Footprint of Household Energy Use in the United States*, 117 PROCEEDINGS OF THE NAT'L ACAD. OF SCI. 19112, 19124 (Aug. 11, 2020), www.pnas.org/cgi/doi/10.1073/pnas.1922205117 ("For all ZIP codes and in most states, increasing population density associates with decreased FAC [floor area per capita] and GHG [greenhouse gas] intensity." (citations omitted)).

^{33.} Id. at 19128.

^{34.} Kyle Mangum, *The Role of Housing in Carbon Emissions* 2 (Andrew Young Sch. of Pol'y Studies Rsch. Paper Series, Working Paper No. 17-05, 2017), https://scholarworks.gsu.edu/uwrg_workingpapers/97; *see also* Timothy M. Carlin, *Tiny Homes: Improving Carbon Footprint and the American Lifestyle on a Large Scale*, 35 CELEBRATING SCHOLARSHIP & CREATIVITY DAY 1, 9

form tends to reduce consumption due to lower per capita floor areas, reduced building surface to volume ratio, increased shading, and more opportunities for district heating and cooling systems."³⁵ Unfortunately, with respect to carbon emissions, the "average size of a single-family home [in the United States] increased by 62% between 1973 and 2013, with fewer people living in each house."³⁶

Development also impacts carbon because it influences the amount that people drive.³⁷ As the IPCC again summarizes, "[t]ransport demand and land use are closely inter-linked. In low-density developments with extensive road infrastructure, [light duty vehicles] will likely dominate modal choice for most types of trips."³⁸ The inverse relationship between density and per capita vehicle miles traveled (VMT) is significant.³⁹ There is some complexity because dense places also have more congestion, which can lead to increased carbon emissions.⁴⁰ Nevertheless, controlling for many variables, "the difference between low- and high-density metropolitan areas is more than 10 VMT per capita per day, or 40 percent."⁴¹ As one article summarized studies, "differences in emissions are in part explained by population density. Population-dense municipalities tend to be urban centers with employment, housing, and services closely collocated, reducing travel distances, increasing demand for public transit, and with less space for larger homes."⁴²

(2014), https://digitalcommons.csbsju.edu/elce_cscday/35("[R]educing home size by 50% results in a 36% decrease in lifecycle greenhouse gas emissions from materials on the house and the emissions produced by actions of the inhabitants.").

- 35. Lucon et al., supra note 33, at 696 (citation omitted).
- 36. Wang, supra note 32, at 978 (citation omitted).
- 37. Ralph Sims et al., *Transport*, *in* Climate Change 2014: Mitigation of Climate Change: Working Group III Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change 599, 619 (Elizabeth Deakin & Suzana Kahn Ribeiro eds., 2014).
 - 38. See id.
- 39. See, e.g., REID EWING ET AL., GROWING COOLER: THE EVIDENCE ON URBAN DEVELOPMENT AND CLIMATE CHANGE 61 (2008) ("The more compact an area . . . the lower the VMT per capita.").
- 40. See, e.g., Robert Cervero & Jin Murakami, Effects of Built Environments on Vehicle Miles Traveled: Evidence from 370 US Urbanized Areas, 42 ENV'T & PLAN. 400, 416 (2010) ("The city of Los Angeles averages the highest overall population density in the USA, matched by a thicket of crisscrossing freeways and major arteries that form a dense road network. The city also averages the highest level of vehicular travel per capita, and the worst traffic congestion in the USA....").
 - 41. EWING ET AL., supra note 41, at 62.
- 42. Christopher Jones & Daniel M. Kammen, Spatial Distribution of U.S. Household Carbon Footprints Reveals Suburbanization Undermines Greenhouse Gas Benefits of Urban Population Density, 48 ENV'T. SCI. TECH. 895, 895 (2014); see also Cervero, supra note 42, at 416 ("[T]he largest VMT reductions would come from creating compact communities which have below-average roadway

Combining the information from both buildings and transportation, dense urban development with smaller units near commerce and jobs will reduce carbon emissions.⁴³ Therefore, the policy goal should be to promote greater density and to avoid sprawling suburban single-family zones.⁴⁴ Because zoning constrains density—including urban density—and often prohibits colocating housing with shopping and jobs, it can prevent the kind of development that we need to reduce carbon emissions.⁴⁵

B. Reform Efforts

Producing more housing, and producing it compactly, is important for addressing both housing costs and carbon emissions.⁴⁶ Zoning, with its development limits, appears to stand in the way of both growth and density.⁴⁷ This, at least, is the growing "liberaltarian" consensus.⁴⁸ Advocates are therefore calling for zoning reforms—some of them seismic.⁴⁹

A number of states and municipalities have taken aim squarely at single-family residential zoning.⁵⁰ The most common and most visible approach

provisions, more pedestrian/cycling infrastructure, and in-neighborhood retail activities which invite nonmotorized travel.").

- 43. See Lucon et al., supra note 33; Sims et al., supra note 39.
- 44. See Lucon et al., supra note 33; Sims et al., supra note 39.
- 45. Christopher Serkin & Leslie Wellington, *Putting Exclusionary Zoning in its Place: Affordable Housing and Geographical Scale*, 40 FORDHAM URB. L.J. 1667, 1682 (2016); Vicki Been, *City NIMBYS*, 33 J. LAND USE & ENV'T L. 217, 219–23 (2018) (discussing the dynamics entailed in urban exclusionary zoning).
- 46. Roger Valdez, We Don't Need More Affordable Housing, We Need More Housing So It Will Be Affordable, FORBES (July 16, 2018, 9:30 AM), https://www.forbes.com/sites/rogervaldez/2018/07/16/we-dont-need-more-affordable-housing-we-need-more-housing-so-it-will-be-affordable/?sh=4a4e9c8815aa.
- 47. See Sitaraman et al., supra note 4, at 1811 (illustrating support for zoning deregulation and urban development promotion).
- 48. See id.; see also Valdez, supra note 48; Moira O'Neill et al., Sustainable Communities or the Next Urban Renewal, 47 ECOLOGY L.Q. 1061, 1065 (2020) ("Addressing the housing crisis and statewide goals to reduce GHG suggests the state should invest heavily in dense residential infill TOD in metro areas.").
- 49. See, e.g., Make Housing Legal, PAC. LEGAL FOUND., https://pacificlegal.org/make-housing-legal/ (last visited May 5, 2022) (describing a range of initiatives to reform zoning); Chang-Tai Hsieh & Enrico Moretti, How Local Housing Regulations Smother the U.S. Economy, N.Y. TIMES (Sept. 6, 2017), https://www.nytimes.com/2017/09/06/opinion/housing-regulations-us-eco-omy.html#:~:text=Because%20of%20the%20prohibitive%20cost,lower%20wages%20across%20the%20nation.
- 50. See, e.g., Assemb. B. 881, 2019-2020 Reg. Sess. (Cal. 2019) (allowing accessory dwelling units as of right); S.B. 13, 2019-2020 Reg. Sess. (Cal. 2019) (conferring the same right); Laurel Wamsley, Oregon Legislature Votes To Essentially Ban Single-Family Zoning, NPR (July 1, 2019,

along these lines has been to allow accessory dwelling units as of right, functionally doubling the number of permissible housing units in any single-family zone.⁵¹ Other jurisdictions have also loosened subdivision rules, essentially allowing more units per acre, to a similar effect.⁵²

Minimum lot sizes and prohibitions on accessory dwelling units (ADUs) are not the only impediment to density, however, and reformers look to a number of other zoning changes to unlock development.⁵³ Off-street parking requirements, for example, significantly constrain density by imposing a kind of spatial tax on each unit in the form of a parking space, which dramatically increases the amount of land needed per person.⁵⁴ And others have proposed more sweeping changes, including, at the most extreme end, eliminating zoning limits altogether.⁵⁵

Reformers also focus on other regulations that go beyond zoning.⁵⁶ Historic preservation has become a target of reformers who argue that it is used increasingly to prevent development and not, in fact, to protect meaningful

- 51. See, e.g., Carl Smith, Ending Single-Family Zoning Is Not a Stand-Alone Solution, GOVERNING (Jan. 21, 2022), https://www.governing.com/community/ending-single-family-zoning-is-not-a-stand-alone-solution (summarizing legislative efforts).
 - 52. See id.
- 53. See, e.g., Sara C. Bronin, Land Use and Transportation Policies Addressing Climate Change, in GLOBAL CLIMATE CHANGE AND U.S. LAW 1, 7 (Michael B. Gerrard et al. eds., 3d ed. 2022) (forthcoming).
 - 54. *Id*.
- 55. See, e.g., Walter Block & Sarah Huddell, The Case Against Zoning, 37 INT'L J. ETHICS & SYS. 618, 625 (2021) ("The market is a tremendously powerful force that acts directly in line with human desires and tendencies. Therefore, the most effective way to plan, develop and design communities is to let the invisible hand guide us." (citation omitted)); Roger Valdez, Zoning Is a 20th Century Solution to a 19th Century Problem, Let's End It, FORBES (May 16, 2019, 9:30 AM), https://www.forbes.com/sites/rogervaldez/2019/05/16/zoning-is-a-20th-century-solution-to-a-19th-century-problem-lets-end-it/?sh=53534c329dfa; see also Serkin, supra note 26, at 770 n.129.
- 56. See Dan Bertolet, When Historic Preservation Clashes with Housing Affordability, SIGHTLINE INST. (Dec. 19, 2017, 6:30 AM), https://www.sightline.org/2017/12/19/when-historic-preservation-clashes-with-housing-affordability/ (noting that design regulations, environmental review, and historic preservation efforts often curtail development).

^{7:03} PM), https://www.npr.org/2019/07/01/737798440/oregon-legislature-votes-to-essentially-ban-single-family-zoning (surveying changes in Oregon); see also Solomon Greene & Jorge Gonzalez-Hermoso, How Communities are Rethinking Zoning to Improve Housing Affordability and Access to Opportunity, URB. INST. (June 12, 2019), https://www.urban.org/urban-wire/how-communities-are-rethinking-zoning-improve-housing-affordability-and-access-opportunity (briefly surveying legislative efforts). For trenchant scholarly critiques of single-family residential zoning, see, e.g., John Infranca, Singling Out Single-Family Zoning, 111 GEO. L.J. (forthcoming 2023) (on file with author), and see generally SONIA HIRT, ZONED IN THE USA: THE ORIGINS AND IMPLICATIONS OF AMERICAN LAND-USE REGULATION (2014).

historic resources.⁵⁷ Similarly, environmental laws are used to slow or stop development even in places where increasing density would minimize overall carbon emissions and allow greater preservation of exurban habitats.⁵⁸ That is, if environmental laws prevent development of dense, urban apartment buildings, then development may be pushed into the suburbs instead.⁵⁹ That tradeoff is too seldom part of the regulatory calculus.⁶⁰

III. GROWTH ≠ DENSITY

A. Data on Growth and Density

The promise of regulatory reform is that it will promote both growth to increase housing supply and moderate costs and density to minimize vehicle miles traveled and curb other costs of sprawl.⁶¹ The implicit and sometimes explicit assumption is that looser zoning regulations can achieve both.⁶² Perhaps it can, at least in some contexts, but the connection between zoning intensity and density is less clear-cut than reformers suggest.⁶³

In fact, there are many places in the country that already have relatively lax zoning and yet are not dense at all.⁶⁴ The most famous example is, of course, Houston, Texas, which has no citywide zoning.⁶⁵ It is also among the least dense cities in America.⁶⁶ But this is not limited to the extreme case of

^{57.} See id.

^{58.} See Dan Bertolet, Washington's State Environmental Policy Act Has Become a Bane to Sustainable Urban Development, SIGHTLINE INST. (November 7, 2017, 11:00 AM), https://www.sightline.org/2017/11/07/washingtons-state-environmental-policy-act-has-become-a-bane-to-sustainable-urban-development/ (explaining how environmental laws serve as vectors to impede development).

^{59.} See id. (demonstrating how some anti-growth activists can challenge development near them through environmental regulations).

^{60.} See id. (listing housing development efforts curtailed in Seattle due to opposition efforts underpinned by environmental policy).

^{61.} Robert H. Freilich & Bruce G. Peshoff, *The Social Costs of Sprawl*, 29 URB. LAW. 183, 184 (1997) (discussing the costs of sprawl).

^{62.} See, e.g., Mackenzie Born, What Eliminating Single-Family Zoning Laws Means for the Rental Market, AVAIL (Feb. 7, 2022), https://www.avail.co/education/articles/what-eliminating-single-family-zoning-laws-means-for-the-rental-market (arguing that eliminating single-family zoning will produce both density and growth).

^{63.} See infra Figure 1.

^{64.} See infra Figure 1.

^{65.} See James D. Saltzman, Houston Says No to Zoning, FOUND. FOR ECON. EDUC. (Aug. 1, 1994), https://fee.org/articles/houston-says-no-to-zoning/.

^{66.} See id.; infra Figure 1.

Houston.⁶⁷ Other cities, from Phoenix and Flagstaff in Arizona, to Bozeman, Montana have permissive zoning regimes but are not dense either.⁶⁸ Nationwide, permissive zoning does not necessarily produce greater density, but rather is correlated loosely with increased sprawl.⁶⁹

To see this relationship, we plotted 2018 zoning intensity by metropolitan statistical area (MSA) as measured by the Wharton Residential Land Use Regulatory Index (WRLURI)⁷⁰ against 2019 population density by MSA as reported in the United States Census.⁷¹ The results are plotted in Figure 1.⁷²

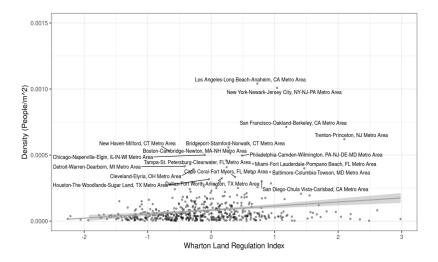


Figure 1

- 67. See infra Figure 1.
- 68. See infra Figure 1.
- 69. See infra Figure 1.

^{70.} See generally Joseph Gyourko et al., The Local Residential Land Use Regulatory Environment Across U.S. Housing Markets: Evidence From a New Wharton Index (Nat'l Bureau of Econ. Rsch., Working Paper No. 26573, 2019), https://www.nber.org/papers/w26573 (discussing 2018 zoning intensity).

^{71.} See Metropolitan and Micropolitan Statistical Areas Population Totals and Components of Change: 2010–2019, U.S. CENSUS BUREAU, https://www.census.gov/data/tables/time-series/demo/popest/2010s-total-metro-and-micro-statistical-areas.html#par_textimage_1139876276 (last visited Oct. 9, 2022) (showing 2019 population data).

^{72.} See infra Figure 1.

As the scatterplot depicts, zoning restrictiveness is *positively* correlated with density.⁷³ This is not a strong correlation, but it nevertheless indicates that places with more restrictive zoning are actually more dense, not less.⁷⁴ Figure 2 demonstrates that the relationship persists after removing the densest cities to ensure that cities like New York, which are both extremely dense and heavily regulated, are not having an outsized impact on the results.⁷⁵



Figure 2

The relationship holds when segregated by region and by city size. That is, more restrictive zoning is correlated with greater density in the South, Northeast, Midwest, and out West, and also for MSAs with populations over 250,000, between 100,000 and 250,000, and below 100,000. The authors of the WRLURI also note this relationship in passing, recognizing that the more tightly regulated places "are larger in terms of population and land area, as well as in terms of population density."

- 73. See supra Figure 1.
- 74. See supra Figure 1.
- 75. See infra Figure 2.
- 76. See supra Figure 2.
- 77. See supra Figure 2.
- 78. Joseph Gyourko et al., supra note 73, at 22.

Sprawl can mean something more sophisticated than an absence of population density and there are different approaches to measuring sprawl. We therefore also plotted 2018 WRLURI zoning intensity data against 2019 population density on developed land for each MSA. To do this, we obtained land coverage data from the National Land Cover Database (NLCD) for 2019. We then calculated the percent of each MSA that was classified as developed (developed, open space; developed, low intensity; developed, medium intensity; or developed, high intensity). With this new measure of population density, our findings still hold in that zoning restrictiveness is still *positively* correlated with density, even when only considering developed land, as the scatterplot in Figure 3 demonstrates.



Figure 3

Admittedly, the WRLURI is an imperfect measure of zoning restrictiveness.⁸⁰ The WRLURI was assembled from 2,450 surveyed community planning directors or chief administration officers in 2006 and 2,472 in 2018, who

^{79.} See John D. Landis, The End of Sprawl? Not So Fast, 27 HOUS. POL'Y DEBATE 659, 662–66 (2017) (summarizing studies).

^{80.} See Joseph Gyourko et al., supra note 73, at at 3 (explaining how the data does not measure regulations actually in place).

were asked fifteen questions in three different categories about zoning in their jurisdictions.⁸¹ It is not an objective measure of zoning restrictiveness.⁸² Indeed, the authors who assembled in the WRLURI acknowledge its limitations, writing "our index methodology provides a convenient way to rank individual communities and markets in terms of their regulatory restrictiveness. . . . However, it does not reveal what regulation actually exists in places with different index value ranks."⁸³ Despite these limitations, there really is no better instrument to measure zoning restrictiveness nationwide.⁸⁴ Professor Sara Bronin has undertaken a more detailed and objective measure of residential zoning restrictiveness, but it is still only available in very limited places and does not yet provide nationwide coverage.⁸⁵

In addition to the data limitations, it is important to recognize that this analysis is also quite modest in what it can demonstrate.⁸⁶ The argument here is not causal.⁸⁷ Nothing in the data is intended to argue that more restrictive zoning leads to greater density or that loosening zoning will produce more sprawl instead of density.⁸⁸ It may well be that the causation runs in the opposite direction and that more dense places tend to adopt more restrictive zoning after they become dense, or that there is an undisclosed variable, like the politics of an MSA, that drives both density and zoning regulations.⁸⁹ It may

^{81.} Joseph Gyourko et al., A New Measure of the Local Regulatory Environment for Housing Markets: The Wharton Residential Land Use Regulatory Index, 45 URB. STUD. 693, 696 (2008); see Gyourko et al., supra note 73, at 17 (evaluating 2018 data).

^{82.} See Gyourko et al., supra note 73, at 3 (using survey results data).

⁸³ *Id*

^{84.} See Schuetz, supra note 27 (summarizing available zoning data). Other scholars have also relied on the WLRURI data. See, e.g., Matthew Mleczko & Matthew Desmond, Using Natural Language Processing to Construct a National Zoning and Land Use Database, ASS'N FOR PUB. POL'Y & MGMT. 1, 11 (2020) ("When compared to the index in the WRLURI data, the index in our source data demonstrates a similar mean value, but slightly less variance.").

^{85.} See About the National Zoning Atlas, NAT'L ZONING ATLAS, https://www.zoningatlas.org/about (last visited Oct. 5, 2022); Atlas Zoning Projects, NAT'L ZONING ATLAS, https://www.zoningatlas.org/projects (last visited Oct. 5, 2022).

^{86.} Gyourko et al., *supra* note 73, at 3 ("Our index methodology provides a convenient way to rank individual communities and markets in terms of their regulatory restrictiveness. . . . However, it does not reveal what regulation actually exists in places with different index value ranks.").

^{87.} See id. at 22 ("[N]o causal relation between regulation and any of these variables is implied, of course.").

^{88.} See id. at 39 (concluding that the data raise questions about "how impactful local housing development regulation is on prices and quantities in different markets.").

^{89.} See id. at 16 ("Note that the Court Involvement Index, State Political Involvement Index, and Local Political Involvement Index have . . . the same strong correlation with the aggregate index").

also be that the timing of the regime matters in ways this data will not capture. For example, cities that experienced significant growth before zoning was implemented may have meaningfully different development patterns than cities that zoned aggressively ahead of growth. These possible dynamics raise questions for future work. 2

Nevertheless, to the extent zoning reform is premised in part on the idea that looser zoning will generate density, this analysis poses a challenge. There are already places with more and less restrictive zoning, and looser zoning does not correlate to density. Presumably, there are places like New York and San Francisco where loosening zoning will have the effect reformers claim, but the data here suggest that it is important to answer when and under what conditions that is likely to be true.

B. Why Does Growth \neq Density?

There are several reasons why loosening zoning restrictions will not necessarily produce both growth and density. ⁹⁶ One is the prevalence of homeowner associations (HOAs) in an area. ⁹⁷ Where HOAs proliferate, zoning reform may have less of an impact because the principal density restriction comes from the private land use controls of HOA master deeds. ⁹⁸ California

^{90.} See, e.g., John R. Nolon, Golden and Its Emanations: The Surprising Origins of Smart Growth, 23 PACE ENV'T L. REV. 757, 757 (2006) (describing how the town of Ramapo, New York, engaged in zoning ahead of population growth); Scott Beyer, Modern Zoning Would Have Killed Off America's Dense Cities, FORBES (May 25, 2016, 4:05 PM), https://www.forbes.com/sites/scottbeyer/2016/05/25/modern-zoning-would-have-killed-off-americas-dense-cities/?sh=325ddd919005 (discussing "legacy cities" that underwent development before strict zoning regulations took effect).

^{91.} See, e.g., Nolon, supra note 93 (illustrating this phenomenon using the example of Ramapo, New York).

^{92.} See, e.g., Gyourko et al., supra note 73, at 39 (concluding that recent data only raise additional questions about the impact of regulation on the housing market).

^{93.} See supra Figure 1 (showing that zoning restrictiveness is positively correlated with density).

^{94.} See supra Figure 1.

^{95.} See, e.g., Gyourko et al., supra note 73, at 22 (noting that San Francisco and New York are regulated at index levels more than one standard deviation above the sample mean).

^{96.} See infra notes 100–129 and accompanying text (listing numerous reasons for this unexpected correlation).

^{97.} See Serkin, supra note 26, at 754 ("Walking back this protection for property and property values in cities may tilt the balance back to the suburbs and simply reinvigorate even more pernicious land use regulations in the form of hyperrestrictive private covenants in suburban homeowners' associations.").

^{98.} See id. ("If housing consumers demand some control over neighborhood land uses and public regulation cannot provide it, then they may rely more on HOAs, whose covenants are usually more

is at the forefront of efforts to address this competition between public and private land use regulation, preempting private covenants as well as liberalizing zoning in an effort to increase housing supply.⁹⁹ In most states, however, zoning reforms may simply steer developers and housing consumers to more restrictive HOAs if zoning does not satisfy their regulatory preferences.¹⁰⁰

Of course, elasticity in local housing markets and the extent of locational advantages may also drive density. For example, there really is no ready suburban substitute for living in Manhattan the way there is in many smaller cities. The co-locational advantages of being in the densest parts of New York City mean that people are not realistically choosing between the urban core and suburban HOAs. That is much less true in places like Nashville, Phoenix, or Dallas, and so there is a lower ceiling on the amount of dense multi-family housing that the market is likely to bear, at least in the foreseeable future, regardless of zoning limits. The same places are not realistically to bear, at least in the foreseeable future, regardless of zoning limits.

Market forces also determine the effect of zoning reforms. Developers focus on absorption rates—the rate at which new units are bought or leased—and make projections about demand in the future when deciding when and where to develop. Dense multi-family housing takes longer and costs more

restrictive and less amenable to change than zoning. This outcome would undermine the goals of zoning reforms and would exacerbate all of zoning's worst effects.").

^{99.} See, e.g., CAL. CIV. CODE § 714.3(a) (West 2022) (voiding any private covenant that "either effectively prohibits or unreasonably restricts the construction or use of an accessory dwelling unit . . on a lot zoned for single-family residential use").

^{100.} See Serkin, supra note 26, at 754, 798 (describing how relaxing zoning protections will lead to "even more pernicious" HOA restrictions).

^{101.} *Id.* at 753 (describing how elasticity in local housing markets affects the degree to which developers can pass the costs of zoning on to consumers).

^{102.} See, e.g., id. at 786 (explaining that the average house price per square foot in Manhattan is double the cost per square foot of construction).

^{103.} *But see id.* at 794 ("If local governments—and particularly cities—cannot satisfy property owners' desire for community stability, then homeownership may increasingly retreat to private suburban enclaves.").

^{104.} *Cf.*, *e.g.*, Blake Hudson, *Curbing Dense Sprawl*, 32 NAT. RES. & ENV'T 18, 18 (2018) ("Southern state and local governments maintain some of the laxest land-use regulations in the nation. Dense sprawl results—that is, high-density development abutting high-density development.").

^{105.} See Cameron K. Murray, A Housing Supply Absorption Rate Equation, 64 J. REAL EST. FIN. & ECON. 228, 229 (noting various market forces that determine the development of a various piece of land include the housing demand growth rate, the prevailing interest rate, the rate of land value tax, and the market depth of the housing market).

^{106.} See, e.g., id.

to build per square foot than single-family homes. 107 Capital intensive projects like apartment buildings and larger-scale urban infill therefore present greater financial risks. 108

Constraints on the construction industry can exacerbate these dynamics. ¹⁰⁹ In recent years, labor shortages among skilled tradespeople have had a much greater impact on multi-family housing projects than on single-family construction. ¹¹⁰ In smaller markets, labor constraints impose a significant limit on the amount of new multi-family development that can be under construction at one time. ¹¹¹ As a result of these dynamics, developers in some markets respond to market pressures by producing more single-family residential housing in the suburbs than dense multi-family housing, decreasing the overall density of the MSA, even with permissive zoning regimes. ¹¹²

In a very recent study, researchers examined the effect of zoning changes on density in and around Boston.¹¹³ They determined that relaxing certain density restrictions did, in fact, produce more multi-family housing, but that it had a greater impact on gentle-density (two- or three-unit multi-family housing), than on larger apartments (four units or more).¹¹⁴ They did not measure

^{107.} See, e.g., Na Zhao, How Long Does It Take to Build an Apartment Building?, NAT'L ASS'N HOME BUILDERS (Aug. 26, 2015), https://eyeonhousing.org/2015/08/how-long-does-it-take-to-build-an-apartment-building/.

^{108.} *But see* Serkin, *supra* note 26, at 776 ("By protecting property values, zoning can promote community stability and help to prevent the most destructive death spirals that can develop if mobile capital starts to leave a place.").

^{109.} See generally id. at 768–69 ("High housing costs can mean that workers do not move, that jobs go unfilled, and that productivity declines as a result.").

^{110.} See, e.g., Chris Wood, Skilled Labor Shortages, Rising Costs Threaten Multifamily Deals, MULTIFAMILY EXEC. (July 9, 2019), https://www.multifamilyexecutive.com/business-finance/skilled-labor-shortages-rising-costs-threaten-multifamily-deals_o (describing how one Atlanta development firm solves this problem by maintaining an in-house construction group).

^{111.} Cf. id. ("It could be that the smaller markets with smaller labor pools are hardest hit from a worker availability and cost standpoint.").

^{112.} See Christopher Serkin, Creating Density: The Limits of Zoning Reform, 11 BRIGHAM-KANNER PROP. RTS. J. 183, 184; see also Robert Liberty, Stopping Low-Density Rural Residential Sprawl, 15 VT. J. ENV'T L. 124, 125 (2013) ("[E]xpansion of exurban development far exceeded the rate of urban and suburban development and . . . in the 1990s 'exurbia [dominated] American growth.").

^{113.} See Amrita Kulka et al., How to Increase Housing Affordability? Understanding Local Deterrents to Building Multifamily Housing 1 (Fed. Rsrv. Bank Bos., Working Paper No. 22-10, 2022), https://www.bostonfed.org/publications/research-department-working-paper/2022/how-to-increase-housing-affordability-understanding-local-deterrents-to-building-multifamily-housing.aspx.

^{114.} *Id.* at 2 ("[T]he supply effects are more substantial for smaller multifamily buildings (two or three units) than larger apartments (four or more units).").

the net impact on overall density within the Boston MSA, but at the very least, the dynamics are anything but straightforward.¹¹⁵ Importantly, the researchers did find that loosening zoning requirements had a greater impact on development on the inner core, mature suburbs, and regional centers than on developing suburbs, implying that loosening zoning may have a net positive impact on density.¹¹⁶ But from this study alone, it is hard to know whether the findings would extend beyond Boston to cities in other regions, and, indeed, what the overall net impact on density might be.¹¹⁷

Ultimately, the substance of zoning reform will also determine whether its impact will be to increase or decrease overall density.¹¹⁸ For example, rules that make it easier to build duplexes or ADUs, or that reduce minimum lot sizes, may significantly increase the number of people living in suburbs, but have comparatively less of an effect on the urban core.¹¹⁹ In Boston, loosening density regulations appeared to have a more significant impact on housing production than loosening restrictions on height or multi-family housing.¹²⁰

Promoting density in addition to growth means prioritizing development in the urban core and focusing explicitly on the spatial impact of zoning reform instead of simply loosening zoning restrictions across the board. According to one trade group, over 30% of the costs of multi-family development are attributable to regulations. This is in contrast to single-family development, where regulatory costs are estimated by the same industry group at

^{115.} See also id. at 2–5 (discussing the different factors studied, which did not include the net impact on overall density within the Boston MSA).

¹¹⁶ Id at 23

^{117.} See, e.g., id. at 35 (explaining the impact of the study with respect to the Boston inner core and suburbs).

^{118.} See, e.g., id. at 1 (finding that relaxing density restrictions results in more improvement than both increasing multifamily zoning and reducing height restrictions).

^{119.} See, e.g., id. at 38 ("[W]e find that making small changes to zoning regulations . . . could reduce monthly house costs and rents . . . [while] decreases in the suburbs of Boston would be larger than those in the inner core.").

^{120.} *Id.* at 2 ("After examining the effects of (interactions of) regulations on housing supply, we find that housing units increase between 27% and 92% at boundaries at which density regulations are relaxed alone or combined with relaxing height regulations or allowing multifamily housing.").

^{121.} Compare S. Burlington Cnty. NAACP v. Township of Mount Laurel, 336 A.2d 713, 731 (N.J. 1975) (prohibiting local governments from using zoning for purely fiscal purposes), with S. Burlington Cnty. NAACP v. Township of Mount Laurel, 456 A.2d 390, 490 (N.J. 1983) (requiring local governments to take affirmative steps to encourage affordable housing).

^{122.} See Paul Emrath & Caitlin Walter, Regulation: Over 30 Percent of the Cost of a Multifamily Development 3 (2018), https://www.nmhc.org/contentassets/60365effa073432a8a 168619e0f30895/nmhc-nahb-cost-of-regulations.pdf.

23.8% of development costs.¹²³ These are obviously large numbers for both segments.¹²⁴ They include typical (and often appropriate) targets of zoning reformers, such as the costs of obtaining zoning approvals, design standards like open-space requirements and landscaping that exceeds developers' preferred designs, as well as less controversial regulations like building codes, inspection fees, and basic safety and soundness requirements.¹²⁵ Other costs are associated with new energy efficiency requirements and impact fees, but of course their value implicates contested normative questions.¹²⁶

Streamlining the regulatory process therefore might not produce density if it applies equally to single-family as well as multi-family development, because single-family development will retain its competitive advantage and remain cheaper and easier to build, to say nothing of the implicit government subsidies for traditional suburban development. The challenge is to reform zoning in ways that do not abdicate a role for planning and regulation of urban form to promote density. Unregulated growth might help respond to the affordability crisis, but this growth would potentially exacerbate sprawl with its concomitant costs, including carbon emissions. A full menu of regulatory responses should consider the problem of HOAs and private land use regulation, as well as more conventional anti-sprawl regulation that has largely fallen out of public discourse with the run up in housing prices.

^{123.} PAUL EMRATH, GOVERNMENT REGULATION IN THE PRICE OF A NEW HOME: 2021 2 (2021), https://www.nahb.org/-/media/NAHB/news-and-economics/docs/housing-economics-plus/special-studies/2021/special-study-government-regulation-in-the-price-of-a-new-home-may-2021.pdf.

^{124.} See id. at 9 ("[T]he average new home price attributable to regulation remains noteworthy and economically important.").

^{125.} See id. at 4 (presenting data); see also id. at 2 ("This study is not arguing that all regulation is bad or should be eliminated. Nor is it trying to estimate a share of regulation that may be excessive.").

^{126.} See, e.g., Serkin, supra note 26, at 753 (discussing the role of impact fees in allocating costs between insiders and newcomers); see also Jim Rossi & Christopher Serkin, Energy Exactions, 104 CORNELL L. REV. 643, 712 (2019) (proposing impact fees instead of regulatory requirements to encourage energy efficient development).

^{127.} See, e.g., Robert D. Bullard, Addressing Urban Transportation Equity in the United States, 31 FORDHAM URB. L.J. 1183, 1205 (2004). The most familiar is the public investment in roads that subsidize commuting by car. *Id.*

^{128.} See Eric Biber & Moira O'Neill, Building to Burn? Permitting Exurban Housing Development in High Fire Hazard Zones, 48 ECOLOGY L.Q. 943, 977, https://www.ecologylawquarterly.org/wpcontent/uploads/2022/06/48.4 Biber-Oneill Internet.pdf.

^{129.} *Cf. id.* at 976 ("Restricting construction in high fire hazard areas may reduce the potential harms from fire, but at the possible expense of constraining housing construction in a state that is facing a dire housing crisis.").

^{130.} See, e.g., Liberty, supra note 115, at 150 (2013). But see Landis, supra note 82, at 685

There is no question that booming places need to grow, but meaningful regulatory reform—that is not simply anti-regulatory neoliberalism—should address the twin challenges of growth and density simultaneously. Recognizing that the two do not always move in tandem means investigating honestly how to tackle both at the same time. At the very least, deregulation is not a complete answer. At the very least, deregulation is not a

The point here is not to resolve these difficult issues but instead to point out the importance of raising them.¹³⁴ There is no question that reforms are needed to address the urgent problems of housing costs and climate change.¹³⁵ At least in some places, loosening zoning will produce more housing but will also decrease density in the process.¹³⁶ It may well be that in some housing markets, costs are so out of hand that we should be willing to sacrifice density for growth.¹³⁷ But in other places, that sprawl creates ecological and other harms that we should not be willing to bear.¹³⁸ We cannot even begin to evaluate these tradeoffs, however, until we have thought more carefully about the complicated relationship between density and growth.¹³⁹

("[F]ormal antisprawl policies, as enshrined in state and local annexation and zoning regimes, or as adopted through state-level growth management programs, do not seem to have had any consistent effect on limiting sprawl or encouraging compact growth.").

- 131. See, e.g., Liberty, supra note 115, at 148–50 (discussing a hybrid approach to reform that takes into account multiple approaches).
- 132. See id. at 150 ("State and local governments can now benefit from this experience to craft and implement hybrid programs that combine the strengths of these approaches.").
- 133. See Serkin, supra note 26, at 751, 798 (noting that there is currently a "deregulatory project with respect to zoning" but concluding that zoning is necessary to achieve "more complex goals that require a more nuanced assessment of the competing pressures of stability and dynamism in our communities").
- 134. See also Gyourko et al., supra note 73, at 39 (similarly concluding that difficult issues remain with respect to the impact of regulation on the housing market).
- 135. See Gabi Velasco & Oriya Cohen, Three Ways Zoning Can Advance Housing and Climate Justice, HOUS. MATTERS (Mar. 2, 2022), https://housingmatters.urban.org/articles/three-ways-zoning-can-advance-housing-and-climate-justice.
- 136. See Serkin, supra note 26, at 786 ("Current efforts to loosen density restrictions in order to satisfy housing demand in the urban core should therefore be greeted with some caution because land use regulation has, in part, created that strong demand.").
- 137. See, e.g., Biber & O'Neill, supra note 131, at 948 (noting that California faces "tremendous pressure to increase housing supply" despite the risk of wildfires).
- 138. See id. at 946 (acknowledging the difficult trade-off between development pressures to address housing costs, and prohibiting development in fire-prone parts of California).
- 139. See Serkin, supra note 26, at 786 ("Current efforts to loosen density restrictions in order to satisfy housing demand in the urban core should therefore be greeted with some caution because land use regulation has, in part, created that strong demand.").
