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## Equitable, Affordable and Climate-Cognizant Housing Construction

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# EQUITABLE, AFFORDABLE AND CLIMATE- COGNIZANT HOUSING CONSTRUCTION

Shelby D. Green\*

## I. THE OMENS FROM CLIMATE CHANGE

The almost universal sentiment by a growing body of physical and social scientists is that climate change—with its floods, drought, heat, and cold—portend losses of life, communities, property, and the rhythms of living.<sup>1</sup> Some are more vulnerable to these impacts than others: individuals and the poor, who through official government policy and self-interest in the housing markets, have been relegated to live in poorly-constructed and poorly-placed structures—in the wake of ocean surges; in the path of strong winds; near hazardous and noxious facilities; stranded in urban heat islands.<sup>2</sup> Failing to heed climate change omens will lead to a world fundamentally different and unsustainable for basic human values, for basic physical needs, for how we stay warm, how we obtain food and water, how and where we live, travel, and interact.

Our current land use policy and patterns are precariously out of sync with the ecological trends of the natural world and the evolving notions of equity and fairness. Wisely, we are reassessing the effects of historic discriminatory land use policy and embracing a new urban design concept—“one that if not

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1. *World Faces 'Climate Apartheid' Risk, 120 More Million in Poverty: UN Expert*, UN NEWS (June 25, 2019), [<https://perma.cc/W78Y-HPJF>].

2. Urban heat islands arise from urban micro-climates, when naturally vegetated surfaces are replaced with impervious surfaces that absorb, retain, and reradiate energy, sickening those trapped in their small living spaces. See EVYATAR ERELL ET AL., URBAN MICROCLIMATE: DESIGNING THE SPACES BETWEEN BUILDINGS 67-68, 72-74 (2011); *Reduce Urban Heat Island Effect*, EPA, [<https://perma.cc/5NAN-JMV8>] (last visited Mar. 18, 2022).

*climate-determinist, is climate-cognizant.*<sup>3</sup> We are seeing that safe and inviting communities are the claim of all, and land use policy should not by intention or effect operate to exclude on account of race, ethnicity, or socio-economic status. We are seeing that the impacts from the built environment and the natural environment can be reconciled in a way that shows regard for climate and social equity.

In this Article, I recount some of the history of unwise and improvident land use policy and practices that have led to gross inequities and to the climate-exposed state, not only in terms of where people were assigned spaces to live, but how. I go on to suggest that communities should be designed with intent, with regard for the threats of climate change as well as accessibility to those historically excluded.

## II. DISPARITIES IN ACCESS TO AND QUALITY OF HOUSING

### A. The State of Housing

Housing is not just a physical thing, but significantly, a social, economic, and political construct. Good and ample housing is essential to individual thriving and enrichment, family cohesion, autonomy, and economic security. Poor and inaccessible housing means demoralization, bad health, wealth barriers, and family dysfunction. The disparities between those with good and ample housing and those who face poor or inaccessible housing is quite stark. Society's poorly housed have been relegated, physically and metaphorically, to the bottom strata of the socio-economic ladder. While the rates of homeownership have been rising in recent years, the disparity in rates between whites and people of color remains substantial, by nearly 30%.<sup>4</sup> The disparities in housing opportunities stem from cost, supply, quality, and location of housing.

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3. Shelby D. Green, *Zoning Neighborhoods for Resilience: Drivers, Tools and Impacts*, 28 *FORDHAM ENV'T. L. REV.* 41, 43 (2016).

4. JOINT CTR. FOR HOUS. STUD. HARV. UNIV., *THE STATE OF THE NATION'S HOUSING* 3 (2021).

### 1. Cost and Supply

Over 36 million households are housing-cost-burdened, that is, paying more than 30% of income on shelter.<sup>5</sup> The median price of a home in the country is nearly \$350,000, and mortgage interest rates are rising, now just under 4%.<sup>6</sup> There is a shortage in the number of available housing units ranging from 2.5 to 3.3 million, and this shortage is persistent.<sup>7</sup> This leaves a significant cohort of households vulnerable to the impacts of economic conditions and climate change.

### 2. Quality and Location

The housing shortage exists not only in terms of the number of units relative to the number of households seeking housing but also in terms of quality.<sup>8</sup> By official government policy and private practices, certain populations were relegated to the most undesirable parts of communities. After Hurricane Sandy, it was determined that many of the homes ravaged by the storm were poorly constructed public housing units built on the cheapest land and in the path of ocean surges.<sup>9</sup> In New Orleans, during Hurricane Katrina, those homes overwhelmed by the flooding from the lake were those in the “bottoms,” an area below sea level; they were built there because the land was cheap and the area was segregated.<sup>10</sup>

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5. 2020 *State of the Nation's Housing Report*, HABITAT FOR HUMAN., [<https://perma.cc/F7LG-BVZL>] (last visited Mar. 17, 2022); JOINT CTR. FOR HOUS. STUD. HARV. UNIV., *supra* note 4, at 4.

6. Ann Carrns, *Rising Mortgage Rates Add to the Challenge of Buying a House*, N.Y. TIMES (Feb. 18, 2022), [<https://perma.cc/4TKP-X3VT>].

7. SAM KHATER ET AL., FREDDIE MAC, THE MAJOR CHALLENGE OF INADEQUATE U.S. HOUSING SUPPLY 6 (2018), [<https://perma.cc/2MAE-KTYF>].

8. *Id.* at 7-8.

9. Shelby D. Green, *Building Resilient Communities in the Wake of Climate Change While Keeping Affordable Housing Safe from Sea Changes in Nature and Policy*, 54 WASHBURN L.J. 527, 539 (2015); FURMAN CTR. & MOELIS INST., SANDY'S EFFECTS ON HOUSING IN NEW YORK CITY 4-5 (2013), [<https://perma.cc/62TT-NBPR>]; HURRICANE SANDY REBUILDING TASK FORCE, HURRICANE SANDY REBUILDING STRATEGY 89 (2013), [<https://perma.cc/YS3G-ZS4B>].

10. See Green, *supra* note 9, at 533, 540; Juliette Landphair, “*The Forgotten People of New Orleans*”: Community, Vulnerability, and the Lower Ninth Ward, 94 J. AM. HISTORY

Low-income and minority populations are more likely to live in deteriorating and unhealthy tumble-down housing,<sup>11</sup> with lead paint, asbestos, mold, and mildew.<sup>12</sup> Poorer communities are disproportionately located near industrial and waste-disposal sites<sup>13</sup> and disproportionately exposed to indirect contamination risks from noxious air emissions, residual contaminated sediments, and debris disposal, which is often associated with flooding caused by extreme precipitation.<sup>14</sup>

Additionally, poorer communities are less likely to have access to parks and green spaces.<sup>15</sup> They have fewer trees than wealthier communities,<sup>16</sup> and they have more highways running through them.<sup>17</sup> As the poor more often live in housing without

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837, 838-39 (2007); Emily Eisenhauer, *Socio-ecological Vulnerability to Climate Change in South Florida* (Mar. 26, 2014) (Dissertation, Florida International University) (available at [https://perma.cc/VFL4-VEJV]). Even as laudable philanthropic efforts emerged to right the historic wrongs, residents of the Lower Ninth Ward were yet victims of their poverty when new green housing was poorly constructed. See Judith Keller, *How Brad Pitt's Green Housing Dream Became a Nightmare*, GREEN BLDG. ADVISOR (Feb. 15, 2022), [https://perma.cc/YG8Z-SCZU].

11. See *S. Burlington Cnty. NAACP v. Mt. Laurel Twp.*, 336 A.2d 713, 727-28 (N.J. 1975) (discussing the lack of affordable housing for low-income families in New Jersey).

12. See James Krieger & Donna Higgins, *Housing and Health: Time Again for Public Health Action*, 92:5 AM. J. PUB. HEALTH 758-68 (2002), [https://perma.cc/8VZY-JGL7].

13. ROBERT BULLARD ET AL., *UNITED CHURCH OF CHRIST, TOXIC WASTES AND RACE AT TWENTY: 1987-2007* 52-53 (2007); JAMES P. LESTER ET AL., *ENVIRONMENTAL INJUSTICE IN THE UNITED STATES: MYTHS AND REALITIES* 57-60 (2001) (finding that exposure to environmental risk is correlated with race and class); NAT'L ACAD. OF PUB. ADMIN., *ADDRESSING COMMUNITY CONCERNS: HOW ENVIRONMENTAL JUSTICE RELATES TO LAND USE PLANNING AND ZONING* 31-32 (2003) (concluding that undesirable land uses are disproportionately located in minority neighborhoods); Jim Erickson, *Targeting Minority, Low-income Neighborhoods for Hazardous Waste Sites*, MICH. NEWS: UNIV. OF MICH. (Jan. 19, 2017), [https://perma.cc/4PSF-FSMA].

14. See U.S. GLOBAL CHANGE RSCH PROGRAM, *IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES: FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II* 451 (David Reidmiller et al. eds., 2018).

15. See Emma Zehner, *A Sustainable Recovery: How Green Strategies Can Help Small Cities Confront Climate Change, COVID-19, and Systemic Racism*, LAND LINES, Oct. 2021, at 34, 35.

16. Ian Leahy & Yaryna Serkez, *Since When Have Trees Existed Only for Rich Americans?*, N.Y. TIMES, [https://perma.cc/LS7Q-TF6M] (last visited Mar. 18, 2022).

17. See Kathleen McCormick, *How Urban Highway Removal is Changing Our Cities*, LAND LINES, April 2020, at 22, 24.

modern systems for heating and cooling, they suffer disproportionately from the urban-heat-island effect.<sup>18</sup>

## B. Creating and Destroying Communities by Design

Desolate, dangerous, and dilapidated housing did not just happen. This design was created by government policy, racial zoning, and private discriminatory practices.

### 1. Federal Roads That Severed Communities

In the middle of the last century, the federal government began pouring billions of dollars into highway construction.<sup>19</sup> Multi-lane highways ran through city neighborhoods, uprooted thousands of individuals, and obliterated entire communities, destroying much scenic beauty along the way, sometimes just to save an extra five miles per hour of speed on a curve or smooth the way for truck traffic.<sup>20</sup> Only the Transportation Act of 1966<sup>21</sup> slowed, but could not halt, the steam rollers. There, Congress declared as national policy “that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites,”<sup>22</sup> and no funds for building roads could be appropriated until their impacts had been evaluated. Despite the directive, governments still tried to build highways in the most inconceivable places, like right through the middle of urban parks.<sup>23</sup>

### 2. Government Help for Homeowners, but not Renters

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18. Michael Waters, *Heat Waves Hurt Communities of Color the Most*, OUTLINE (July 11, 2018, 3:30 PM), [<https://perma.cc/F3W7-A3UY>].

19. See Bruce Seely, *A Republic Bound Together*, WILSON Q., Winter 1993, at 19, 32-35.

20. See *id.* at 37.

21. Department of Transportation Act, Pub. L. No. 89-670, § 4(f), 80 Stat. 931, 934 (1966) (current version at 49 U.S.C. § 303).

22. 49 U.S.C. § 303.

23. See, e.g., *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 406 (1971).

Tax policies—the deduction of mortgage interest from gross income and the exclusion of up to \$500,000 in gains on the sale of a home—have made it cheaper to buy a house in the suburbs than to rent in a walk-up in the city.<sup>24</sup> The federal government spends more than \$450 billion annually on tax expenditures and loan commitments to subsidize single-family homeownership, an achievement largely denied to people of color.<sup>25</sup>

### *3. Renewing by Removal*

The Urban Renewal program promised to “renew” urban communities by clearing blighted areas and building new housing.<sup>26</sup> But the erstwhile slums became luxury apartment houses, government buildings, and office towers. In the end, the poor lost more housing than they gained.<sup>27</sup> Before the dust settled, more than 700,000 families, primarily low-income and minority, were displaced by urban renewal and highways.<sup>28</sup> The removal only stopped with the Housing and Community Development Act of 1974, which substituted block grants to cities to build communities other than by slum clearance.<sup>29</sup> The areas cleared, although cast as “blighted,” were home to many.

### *4. Discriminatory Lending Policy*

Until it was outlawed by the Fair Housing Act of 1968,<sup>30</sup> government-regulated lenders openly engaged in the practice of “redlining”—actually drawing red lines around neighborhoods on a map, beyond which they would not lend on account of the race of the inhabitants, no matter how creditworthy the prospective

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24. *Key Elements of the U.S. Tax System: What are the Tax Benefits of Homeownership?*, TAX POL’Y CTR. (May 2020), [<https://perma.cc/5WY4-96PR>].

25. See SMART GROWTH AM., FEDERAL INVOLVEMENT IN REAL ESTATE: A CALL FOR EXAMINATION, iii (2013), [<https://perma.cc/2WCE-LE2Q>].

26. See JOHN R. LOGAN & HARVEY L. MOLOTCH, URBAN FORTUNES: THE POLITICAL ECONOMY OF PLACE 167 (1987).

27. See *id.* at 167-69.

28. BERNARD J. FRIEDEN & LYNNE B. SAGALYN, DOWNTOWN, INC.: HOW AMERICA REBUILDS CITIES 29 (rev. ed. 1991).

29. See 42 U.S.C. § 5301.

30. See 42 U.S.C. § 3605.

borrowers.<sup>31</sup> These same banks took deposits from the community outside their lending circle.<sup>32</sup> It was a vicious cycle—banks refusing to lend on the asserted ground that in default, the collateral would be insufficient, the inability of homeowners to obtain loans leading to deferred upkeep and repair, leading to lower property values, and back to insufficient value to collateralize a loan.

Private lenders were not the only ones mapping out the races. In fact, the federal government, under the Home Owners Loan Corporation (“HOLC”), a depression era agency created to rescue defaulting property owners from default, drew its own race maps.<sup>33</sup> HOLC determined eligibility for government loans based on what zone the prospective borrower lived in.<sup>34</sup> Red zones indicated “hazardous” neighborhoods where lending was discouraged because the area had been “infiltrated” by black people.<sup>35</sup> At the other end of the spectrum were the green zones, deemed the “best” places, because they were entirely segregated.<sup>36</sup> Yellow and blue were in between with varying threats of “infiltration.”<sup>37</sup> Tying property worth to the racial composition of the neighborhood denied the wealth-generating power of homeownership and would dictate health and economic outcomes for decades. The Federal Housing Administration (“FHA”), created to provide mortgage insurance for borrowers of modest income, based official lending policy on HOLC maps and required race-restrictive covenants in property it insured to keep communities segregated.<sup>38</sup>

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31. Raymond H. Brescia, *Subprime Communities: Reverse Redlining, the Fair Housing Act and Emerging Issues in Litigation Regarding the Subprime Mortgage Crisis*, 2 ALB. GOV'T L. REV. 164, 179 (2009).

32. See 12 U.S.C. § 2901.

33. Amy E. Hillier, *Redlining and the Homeowners' Loan Corporation*, 29 J. URB. HIST. 394, 394-95 (2003).

34. See Sarah L. Swan, *Discriminatory Dualism*, 54 GA. L. REV. 869, 879 (2020).

35. *Id.* at 880.

36. See *id.* at 879-80.

37. See *id.* at 880.

38. See Hillier, *supra* note 33, at 414; FED. HOUS. ADMIN., UNDERWRITING MANUAL para. 980(3)(g) (1938) (stating that restrictive covenants should prohibit “the occupancy of properties except by the race for which they are intended”); Shelby D. Green, *The Search for a National Land Use Policy: For the Cities Sake*, 26 FORDHAM URBAN L.J. 69, 78, 85-86 (1998).



### 5. *Bleak Houses in the Projects*

Federal government housing programs were not administered in ways that were supportive of community and thriving. So as not to compete with private developers, public housing could not be elaborate,<sup>39</sup> but just a basic structure—some said they were designed to look like prisons.<sup>40</sup> Originally, the structures were three and four-story brick buildings with grassy courts, then row houses during the war, then the monolithic high-rise towers. High-rises were less expensive, and proponents claimed they left more room on the ground for children to play.<sup>41</sup> Poor construction and poor maintenance led to infamous “projects” like Cabrini-Green Chicago.<sup>42</sup>

Public housing policy has undergone many permutations in the last half century—from direct support for construction, to destruction of high rises, to direct payments to would-be tenants.<sup>43</sup> Now, housing-choice vouchers are given to renters of moderate income to enable them to go into the market to find housing.<sup>44</sup> There are persistent shortfalls in these budgets and the holders are often met with anti-voucher policies.<sup>45</sup>

## III. MOATS AND WALLS BY LOCAL ZONING

While now subject to challenge under the Fair Housing Act of 1968,<sup>46</sup> under both intentional discrimination and impact theories,<sup>47</sup> discriminatory government policies and exclusionary

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39. Low Rent Housing Program, 42 U.S.C. § 1437(a).

40. Gordon Cavanaugh, *Public Housing: From Archaic to Dynamic to Endangered*, 14 J. AFFORDABLE HOUS. & COMMUNITY DEV. L. 228, 228 (2005); see also OSCAR NEWMAN, U.S. DEP'T OF HOUS. & URBAN DEV., CREATING DEFENSIBLE SPACE 20 (1996) (criticizing the “highrise superblock” housing as not conducive to healthy living).

41. See OSCAR NEWMAN, DEFENSIBLE SPACE 4 (1973).

42. See generally Emily Magnusen, *The Fight to Stay at Cabrini-Green*, 16 PUB. INT. L. REP. 176, 177 (2011).

43. See Newman, *supra* note 40, at 9-12.

44. See Cavanaugh, *supra* note 40, at 233.

45. See Teresa Wiltz, *Getting a Section 8 Voucher Is Hard. Finding a Landlord Willing to Accept It Is Harder*, STATELINE (Aug. 31, 2018), [<https://perma.cc/9H9T-EZFT>].

46. 42 U.S.C. § 3603.

47. Texas Dep't of Housing & Cmty. Affs. v. Inclusive Comtys., Inc., 576 U.S. 519, 545-46 (2015).

zoning ordinances continue to determine where and how the poor and vulnerable live. Before enactment of the Standard State Zoning Enabling Act in 1922, a few states had enacted some limits on land use, such as on height, but most governments relied upon common law nuisance to address noxious and incompatible uses in proximity of each other.<sup>48</sup> But nuisance law, by definition, was a reactive measure. The adoption of zoning ordinances allowed local governments to proactively avoid land use harms and create communities thought to be desirable.

In *Village of Euclid v. Ambler Realty Co.*, the Supreme Court affirmed the general validity of zoning ordinances aimed at segregating various land uses in a town plan.<sup>49</sup> The result was “Euclidean” zoning, under which local governments could permissibly separate single-family and duplex developments from multifamily apartment buildings.<sup>50</sup> In hailing the high social value in single-family homes, the Court also branded other forms of housing—particularly, the apartment building and its residents, as “parasite[s]” to be controlled.<sup>51</sup> Chillingly, the Court accused apartment houses of:

Sometimes . . . destroying the entire section for private house purposes . . . monopolizing the rays of the sun which otherwise would fall upon the smaller homes . . . . [T]he apartment house is a mere parasite, constructed in order to take advantage of the open spaces and attractive surroundings created by the residential character of the district.<sup>52</sup>

The Court went on to recount the many evils of multi-unit developments—they brought noise and traffic; they destroyed open space; they threatened the safety of children.<sup>53</sup> Under this conception, apartment living took on the character of a nuisance.

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48. See Andrew Auchincloss Lundgren, *Beyond Zoning: Dynamic Land Use Planning in the Age of Sprawl*, 11 BUFF. ENV'T. L.J. 101, 125 (2004).

49. *Village of Euclid v. Amber Realty Co.*, 272 U.S. 365, 375 (1926).

50. See *id.* at 394-95.

51. *Id.* at 394.

52. *Id.*

53. See *id.*

## A. The Forms of Local Land Use Controls

Even as apartment dwellers desired sun for their children too, Euclidean zoning has kept a strong hold on access to that sun. The control mechanisms are as varied and preclusive as the Great Wall. They relegate those on the other side to blight and darkness.

### 1. Zoning Harms

#### a. Supply

Regulations that set minimum lot sizes, sometimes as much as ten-acres, and floor area ratio limits, determine the volume of housing construction that occurs.<sup>54</sup> While few now would complain about setting aside areas for forests or open-space, at the same time, residential density caps, height restrictions, and the relative allocation of developable space for single-family detached homes relative to that for these and for other forms of housing—including apartment buildings, and mobile and manufactured homes—decrease housing supply, even in times of great need.<sup>55</sup> Minimum frontage setbacks, minimum street widths, sidewalk requirements, and curb and gutter requirements mean less land available for construction. With the requirements of new infrastructure (roads, mass transit, minimum parking, water supply and wastewater treatment facilities, schools, and libraries), housing development can become all but impossible.<sup>56</sup>

Growth controls,<sup>57</sup> which variously establish “urban districts,” “growth-management” areas, and “urban growth boundaries,”<sup>58</sup> control housing supply by limiting the number of

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54. Robert C. Ellickson, *Zoning and the Cost of Housing: Evidence from Silicon Valley, Greater New Haven, and Greater Austin*, 42 *CARDOZO L. REV.* 1611, 1623-24 (2021).

55. The Mount Laurel saga best illustrates this. *See id.* at 1627 n.61.

56. *Id.* at 1614-17.

57. Green, *supra* note 3, at 80, 82.

58. *See generally* Gabor Zovanyi, *The Role of Initial Smart Growth Legislation in Advancing the Tenets of Smart Growth*, 39 *URB. LAW.* 371, 372-73, 389 (2007) (discussing the emergence of growth management laws to confront some of the pernicious effects of

building permits that are issued over a particular period, although they may also limit the extension of urban services and facilities (roads, sewers, and water supply) outside of the boundaries.<sup>59</sup> While smart growth is an effective technique for sustainability—directing the rate, direction and location of development, controlling sprawl, and protecting open and green spaces<sup>60</sup>—it might be exposed as a pretext for excluding undesirable populations.<sup>61</sup>

#### b. Cost

Not all land use control measures are required for health and safety, but all result in higher housing costs.<sup>62</sup> Some of the costs are obvious—large lots and large homes cost more than smaller ones. The imposition of street-width minima requirements for more setbacks cause prices to increase by nearly 8%.<sup>63</sup> Limits on building height will increase the marginal cost of construction, driving some builders out of the market.<sup>64</sup> Some costs are more hidden, but nonetheless impactful—prohibitions on types of housing deemed inferior, however well-crafted or aesthetically designed, such as mobile and manufactured homes and tiny houses,<sup>65</sup> eliminate these forms as affordable choices.

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unconstrained growth, the environmental degradation of sprawl, and loss of community character).

59. See Robert L. Liberty, *Rising to the Land Use Challenge: How Planners and Regulators Can Help Sustain Our Civilization*, 38 VT. L. REV. 251, 261 (2013).

60. *Id.* at 269-70. See also *Associated Home Builders v. Livermore*, 557 P.2d 473, 489 (Cal. 1976) (upholding a growth control ordinance that contained specific milestones for relief from the controls, rejecting assertions that growth control exceeded police powers); *Golden v. Planning Bd.*, 285 N.E.2d 291, 304-305 (Cal. 1972) (upholding phased growth as a valid zoning purpose).

61. See *S. Burlington Cnty. NAACP v. Twp. of Mount Laurel*, 456 A.2d 390, 410, 413, 418-19, 490 (N.J. 1983).

62. Ellickson, *supra* note 54, at 1614-15.

63. John M. Quigley & Larry A. Rosenthal, *The Effects of Land Use Regulation on the Price of Housing: What Do We Know? What Can We Learn?*, 8 CITYSCAPE: J. POL'Y DEV. & RSCH. 69, 88 (2005).

64. *Id.* at 89.

65. Lisa T. Alexander, *Community in Property: Lessons from Tiny Home Villages*, 104 MINN. L. REV. 385, 452-454 (2019).

## c. Community

Zoning ordinances operate as monopoly power over local development and local governments acting strategically. They operate perniciously by excluding large sectors of the population from the human and political amenities of society. That is to say that town residents, through zoning legislation, exercise total control over growth and reject projects they fear will bring losses in utility, financial, or quality of life. By the seemingly absolute preference for property values over inclusion,<sup>66</sup> housing developers and local government leaders create communities that are segregated by race and income.<sup>67</sup>

#### IV. PROPOSALS FOR EQUITY AND EFFICIENCY IN HOUSING CONSTRUCTION

The twin imperatives of climate change and social justice are driving new initiatives for community design. Building communities that are inclusive must be premised upon equitable development, of which housing construction is at the center. Efficient and equitable communities, along with the houses that define them, can be imagined and should be constructed. Builders, planners, and residents must align to achieve desirable quantity, quality, and affordability to meet the variety of housing needs and support for all categories of people.

##### A. “The first thing we do, let’s kill all the [exclusionary zoning].”<sup>68</sup>

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66. See JESSICA TROUNSTINE, *SEGREGATION BY DESIGN: LOCAL POLITICS AND INEQUALITY IN AMERICAN CITIES* 19, 34-36 (2018) (arguing that “white property owners turned to suburbanization as their primary mechanism for protecting property values”).

67. See, e.g., *Mhany Mgmt., Inc. v. Cnty. of Nassau*, 819 F.3d 581, 588-90 (2d Cir. 2016); *Huntington Branch, NAACP v. Town of Huntington*, 844 F.2d 926, 935, 937 (2d Cir. 1988) (“[Facially neutral] rules bear no relation to discrimination upon passage, but develop into powerful discriminatory mechanisms when applied . . . . The discriminatory effect of a rule arises in two contexts: adverse impact on a particular minority group and harm to the community generally by the perpetuation of segregation.”).

68. WILLIAM SHAKESPEARE, *HENRY VI* part 2, act 4, sc. 2, l. 77.

A few jurisdictions, namely California, Oregon and the city of Minneapolis, have already made the giant step of outlawing single-family zoning.<sup>69</sup> These moves must be supplemented by improved inclusionary zoning, both with incentives (density bonuses, variances, fee reductions, or waivers) and mandatory requirements. Rather than the typical 10% set asides for new developments,<sup>70</sup> there should be one for affordability. A range of housing styles, including tiny homes, and mobile and manufactured homes, must be allowed for people of all income levels, household sizes, and mobility constraints. Allowable density must be increased through use of accessory dwelling units, so long as there is minimum area, and infill development.

### B. Building by Design

Housing construction now encompasses so much more than the physical integrity of structures. Homes must be smart and frugal. They must be oriented toward the sun, away from flooding. They must be designed to resist the strongest of Mother Nature's ravages. They must be resilient. They must not cause harm to the inhabitants or the environment.<sup>71</sup> They are "robust homes." All manner of regulations and initiatives are being adopted to create these "robust homes," from greenhouse gas ("GHG") reduction targets to water conservation measures.<sup>72</sup> Energy targets will hopefully be met through decreased reliance on fossil fuels, greater exploitation of clean energy, and energy

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69. Henry Graber, *You Can Kill Single-Family Zoning, but You Can't Kill the Suburbs*, SLATE (Sept. 17, 2021), [<https://perma.cc/CJW5-4R5N>]. California also now allows up to ten dwelling units per parcel, provided the parcel is located in either a transit rich area or an urban infill site. CAL. GOV'T CODE § 65913.5 (West 2022). The ordinance, however, must set a height limit. *Id.*

70. David L. Callies, *Mandatory Set-Asides as Land Development Conditions*, 43 URB. LAW. 307, 320 (2011).

71. See Candace Jackson, *Lessons from Ultimate Safe Houses*, WASH. POST (Nov. 1, 2012), [<https://perma.cc/CG9U-ZERQ>].

72. See *U.S. State Greenhouse Gas Emissions Targets*, CTR. FOR CLIMATE & ENERGY SOLS. (Mar. 2021), [<https://perma.cc/BM9Y-6XH3>]. See generally KARL S. COPLAN ET AL., CLIMATE CHANGE LAW (2021).

conservation.<sup>73</sup> Solar energy is supported through zoning measures that allow the placement of solar panels in places heretofore off-limits.<sup>74</sup> Geothermal energy, which harnesses heat from the ground to both heat and cool homes, is being urged.<sup>75</sup>

### *1. The Interplay Between Robustness, Affordability, and Equity*

Not all types of structures are suitable for all areas, and not all building inventions are essential for sustainability. Accessible and affordable communities can be built to be green and aesthetically eye-catching, to have low carbon impacts, and to be productive. Constructing this “robust home” will come with costs—costs of the design, its features, materials, mechanics, new infrastructure, and new administrative teams. While I have previously written about the direct and indirect costs of the efficiency and resiliency inventions being employed by cities,<sup>76</sup> building the “robust home” is not entirely antithetical to the “affordable” home. Efficiency and resiliency inventions can be incorporated within housing that is accessible. Existing structures can be retrofitted to be energy passive and strong. The cost of a high-performance home<sup>77</sup> is estimated to be 3 to 20% higher than the cost to build according to code,<sup>78</sup> but the annual and lifetime

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73. See generally Kelly Trumbull, et al., *Progress Toward 100% Clean Energy: In Cities & States Across the U.S.*, UCLA LUSKIN CTR. FOR INNOVATION (Nov. 2019), [<https://perma.cc/U47Q-PGJ8>].

74. For example, the city of Hartford, Connecticut allows free-standing solar panels on historic properties. *City of Hartford: Guidelines for Solar on Historic Properties*, WORDPRESS (2017), [<https://perma.cc/G74Z-ZMSB>].

75. See *Geothermal Energy Factsheet*, CTR. FOR SUSTAINABLE SYSTEMS UNIV. OF MICHIGAN (Sept. 2021), [<https://perma.cc/8C8W-9ZRJ>]. For some resources on alternative energy, see the Center for Sustainable Systems. *U.S. Renewable Energy Factsheet*, CTR. FOR SUSTAINABLE SYSTEMS UNIV. OF MICHIGAN (Sept. 2021), [<https://perma.cc/XL3N-SPL6>].

76. Green, *supra* note 9, at 554-56; Green, *supra* note 3, at 96-97.

77. The High-Performance Building Council adopted the following definition: “High-performance buildings, which address human, environmental, economic and total societal impact, are the result of the application of the highest level design, construction, operation and maintenance principles—a paradigm change for the built environment.” NAT’L INST. OF BLDG. SCIS., ASSESSMENT TO THE U.S. CONGRESS AND U.S. DEPARTMENT OF ENERGY ON HIGH PERFORMANCE BUILDINGS 5 (2008), [<https://perma.cc/L9JS-96UY>].

78. Mike Beirne, *Jim Nostedt on How High Performance Can Beat Code-Built Homes on Price*, PRO BUILDER (Jan. 7, 2021), [<https://perma.cc/2JGM-69JV>]. Yet, the Total Cost

energy savings are enormous.<sup>79</sup> The passive home may cost 5 to 10% more to build than the equivalent sized code-built home,<sup>80</sup> but it can produce over 80% reduction in energy costs.<sup>81</sup> Structural additions, such as green or cool roofs, can reduce stormwater runoff by 50 to 90%<sup>82</sup> while also reducing air conditioning needs from 10 to 30%.<sup>83</sup> However, they can add to the cost of new construction, and adding them to existing buildings may require fortifications.<sup>84</sup> Solar rooftop installations may result in an average annual savings of \$1,000 in energy costs.<sup>85</sup>

In addition, non-structural techniques can be employed to keep the costs of construction down, including optimizing the use of the building site to maximize solar gains in winter months—with careful design, this could produce up to 50% savings in energy costs, enabling the reduction in the thickness of insulation, and thus reducing construction costs.<sup>86</sup> Compact buildings reduce the ratio of the exterior surface area to the floor area, thus reducing energy consumption.<sup>87</sup>

## 2. Intentional Communities

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of Building Ownership (“TCBO”) is estimated at 30 to 40% lower. *Id.* TCBO is an “analysis builders and architects can use during the design phase of new construction or remodeling projects to help clients compare the up-front cost of a high-performance home, and the operating cash savings they can realize over the long term, with a minimum code-compliant building.” *Id.* (emphasis omitted).

79. *The ROI of a High-Performance Home*, CLARUM HOMES (Apr. 1, 2019), [<https://perma.cc/H2Q5-C9NU>].

80. Mike Beirne, *Tessa Smith on Accessible Career Paths and Passive Home Building*, PRO BUILDER (Feb. 8, 2018), [<https://perma.cc/BD4M-22ZW>].

81. Beirne, *supra* note 78.

82. Urban Green Council & The Nature Conservancy, *NYC’s Sustainable Roof Laws*, URBAN GREEN COUNCIL 1, 3 (Dec. 2019), [<https://perma.cc/BW2Y-KEAD>] [hereinafter UGC Policy Brief].

83. *Id.*

84. Green, *supra* note 9, at 554-55.

85. UGC Policy Brief, *supra* note 82, at 3. *See generally Multifamily Green Financing*, FANNIE MAE, [<https://perma.cc/K24T-WEND>] (last visited Mar. 31, 2022) (providing lower interest rate, additional loan proceeds, and a free energy and water audit).

86. Natalie Leonard, *Can Building a Passive House Cost the Same as a Code-Built Home?*, PRO BUILDER (Feb. 24, 2020), [<https://perma.cc/624N-YGU3>].

87. *Id.*



Historically, builders have played an enormous role in creating communities—from Levittown<sup>88</sup> to the Tejon Ranch.<sup>89</sup> The impetus for these communities is mixed, perhaps to meet a perceived societal need (GI's returning from the war in the case of Levittown), or pursuant to some master plan of social engineering—keeping the classes separate (the racial covenants also in the case of Levittown). Whatever the reason, the result was a state of affairs that had little regard for social and economic equity or the environment.<sup>90</sup>

Green and affordable construction requires an integrated design process, with a consideration of not only the structural components, but also the social impacts. Builders of structures and builders of society must embrace a shared vision about common ends. Homebuilders create *structures* for living and city administrators and planners build *communities* for living. Housing and all kinds of developments must be preceded by community health and well-being assessments. There must be regard for displacement and gentrification. Physical orientation of the community should encourage personal interaction between neighbors, walks, and child play in open spaces.<sup>91</sup>

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88. Witold Rybczynski, *Why Can't We Build an Affordable House?*, WILSON Q., Summer 2008, at 16, [<https://perma.cc/T7CZ-H5ZX>].

89. Nina Agrawal, *Supervisors OK 19,000-home development at Tejon Ranch*, L.A. TIMES (Dec. 11, 2018), [<https://perma.cc/597J-2C2D>]; see also KENNETH T. JACKSON, CRABGRASS FRONTIER: THE SUBURBANIZATION OF THE UNITED STATES 135 (Oxford U. Press, 1985) (“[R]eal-estate specialists were more active in the city building process than anyone else. The theory that early suburbs just grew, with owners ‘turning cowpaths and natural avenues of traffic into streets,’ is erroneous. Subdividers lobbied with municipal governments to extend city services, they pressured streetcar companies to send tracks into developing sections, and they set the property lines for the individual homes.”).

90. See Erin Blakemore, *How the GI Bill's Promise was Denied to a Million Black WWII Veterans*, HISTORY (Apr. 20, 2021), [<https://perma.cc/Z49T-RTQ9>]; JACKSON, *supra* note 89, at 208. As developers created subdivisions, they made them exclusive by racial covenants. See Catherine Silva, *Racial Restrictive Covenants History: Enforcing Neighborhood Segregation in Seattle*, SEATTLE CIVIL RTS. & LAB. HIST. PROJECT (2009), [<https://perma.cc/9457-FQHK>].

91. “Green Beyond the Building, incorporates good neighborhood development principles using LEED ND, Earth Craft Communities, [and] other community certification programs . . . .” Carl Seville, “*Blueprint for Greening Affordable Housing*”, GREEN BLDG. ADVISOR (Aug. 4, 2020) (citing WALKER WELLS & KIMBERLY VERMEER, BLUEPRINT FOR GREENING AFFORDABLE HOUSING, REVISED EDITION (Island Press, 2020), [<https://perma.cc/U9BC-334Q>]).

### a. Tools for the Conceived Community

Compact building design uses less land and resources and is more efficient. It preserves open space and trees for their beauty and carbon-absorbing effects. Infill development raises density by using existing infrastructure and reduces construction costs. Reductions in paved areas for streets, alleys, and parking (by for example, 50%, with 15% of the land being developed as opposed to the standard 22 to 27%)<sup>92</sup> and using pervious materials will save costs and reduce the heat-island effect. Narrower streets and wider sidewalks on only one side of the street will be conducive to walking and community interaction.

The orientation of homes should be calibrated to the environment—views, the presence of mountains, the prevailing direction of snowfall and drifts, the direction of wind in winter and cooling breezes in summer, and the direction of water drainage. During construction, builders should have in place effective waste management programs—to guide the selection of materials and for disposing of waste—both of which can result in savings on the costs of homes.<sup>93</sup>

### b. Adaptive Reuse

Adaptive reuse of abandoned industrial buildings is a good prospect for resilient and affordable housing. Industrial buildings have strong infrastructure and repurposing them saves the cost of excavation and installing a new foundation.<sup>94</sup> Retooling old

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92. *Community and Site Planning for Green Residential Design*, WHOLE BLDG. DESIGN GUIDE (Oct. 10, 2016) (citing SUSTAINABLE BLDGS. INDUS. COUNCIL, BEYOND GREEN GUIDELINES FOR HIGH-PERFORMANCE HOMES (Ryan Colker ed., 6th ed. 2013), [<https://perma.cc/K6CT-D6DE>]).

93. See Tom Napier, *Construction Waste Management*, WHOLE BLDG. DESIGN GUIDE (Oct. 2016), [<https://perma.cc/VA7P-YHYC>].

94. Sophie Francesca Cantell, *The Adaptive Reuse of Historic Industrial Buildings: Regulation Barriers, Best Practices and Case Studies 18* (May 2005) (Master's thesis, Virginia Polytechnic Institute and State University). Tax benefits include a 20% federal tax credit taken over five years, along with comparable state credits. 26 I.R.C. § 47; see, e.g., ARK. CODE ANN. § 26-51-2204 (2021); LA. STAT. ANN. § 47:6019 (2020); N.D. CENT. CODE ANN. § 40-63-06 (2020). This form of community building also generates economic benefits as the rehabilitation of historic structures has created millions of jobs and generated billions in private investment. *The Greenest Building: Quantifying the Environmental Value*

structures opens the opportunity to bring a building up to current code and to install efficient systems. Otherwise, building codes should be revised so as not to trigger full code compliance with every rehabilitation, so long as life safety is not at risk. Adaptive reuse can incorporate universal design. Parking minimums should be context-sensitive. By preserving facades and the footprint, adaptive reuse preserves heritage and historic character.

## V. CONCLUSION

Equitable development will require many components and initiatives. It starts with integrating smart growth, environmental justice, and equity in community design to build healthy, sustainable, and inclusive neighborhoods. It requires regional and local planners to engage low-income residents and communities of color in decision-making to produce enduring development that is better for people and the environment, toward the common end of an inclusive community.

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*of Building Reuse*, NAT'L TR. FOR HISTORIC PRES. (Mar. 10, 2016), [<https://perma.cc/XK9H-WMTJ>]. "Studies show residential rehabilitation creates 50% more jobs than new construction." *Id.* (emphasis omitted).