CLIMATE RESILIENCE AS REPARATIONS

*Danielle Stokes**

The Tulsa Race Massacre. The Love Canal Tragedy. The Mashpee Wampanoag Tribe Exploitation. Each of these events exemplifies the destructive consequences of systemic marginalization and environmental injustice faced by vulnerable communities in the United States. Each underscores a disregard for the rights and well-being of marginalized groups often exacerbated by government indifference or complicity. This Article argues for climate resilience as reparations to rectify historic injustices and to address ongoing marginalization. It calls for a place-based reparations framework that centers principles of sustainability—environment, social equity, and economy—not only to remediate harm but also to reconceptualize the notion of place and to take a more holistic approach to defining value.

Table of Contents

---

* Associate Professor, University of Richmond School of Law. Many thanks to the commenters and participants of the 2024 ALPS Conference, the Berkeley Environmental Law Colloquium, and the Richmond Law Junior Faculty Forum for their thoughtful comments on various iterations of this project. I am grateful to Lisa Benjamin, Robin Malloy, Tammi Etheridge, and my colleagues at the University of Richmond, especially Corinna Lain, Noah Sachs, Jim Gibson, Rebecca Crootof, Luke Norris, and Danielle Wingfield for their insightful feedback and engagement at various stages. Special thanks are due to my research assistants Emma Wilson and Caroline McBride for their tireless efforts.

Introduction

The Tulsa Race Massacre. The Love Canal Tragedy. The Mashpee Wampanoag Tribe Exploitation. Each of these events exemplifies the destructive consequences of systemic marginalization and environmental injustice faced by vulnerable communities in the United States. Each underscores a disregard for the rights and well-being of marginalized groups often exacerbated by government indifference or complicity. The Tulsa Race Massacre was incited by white mobs that violently attacked a prosperous Black community, resulting in death and property destruction.[1] The Love Canal crisis exposed the severe health risks posed by industrial pollution that disproportionately impacted low-income neighborhoods, particularly the largely working-class community in Niagara Falls, New York.[2] The Mashpee Wampanoag tribe's historical land dispossession and contemporary struggles for recognition and sovereignty underscore the persistent challenges of being secure in one's place.[3] These events are not anomalies but rather a representative sample of stories that could be told across time

1. In 1921, a mob that included members of the Tulsa Police Department and National Guard vandalized an African American community under the guise of searching for a wanted criminal. Hundreds of African Americans were killed and numerous businesses destroyed within a thirty-five-square block area. Residents and descendants of the area brought an action for public nuisance in 2020 in an effort to recover for unjust enrichment. The plaintiffs cited to discriminatory zoning as a subsequent means of dispossession following the massacre. Randle v. City of Tulsa, 556 P.3d 612, 614 (2024).
2. An area previously known as Model City was developed in the 1890s in the hopes of being an industrial community that would be able to utilize hydroelectricity as an efficient source of power. *See* Off. of Pub. Health, N.Y. Dep't of Health, Love Canal: Public Health Time Bomb 2–4 (1978) [hereinafter Love Canal Report], https://perma.cc/V7ET-37HD. The community plan subsequently lost investors and became a chemical disposal site in the 1920s and a residential area in the late 1950s. *See id.* at 3. The environmental degradation was evident by 1978, and the State Department of Health and Environmental Conservation conducted air, soil, and groundwater sampling. *See id.* at 3–8, 9, tbl. 1. Approximately 200 families were relocated due to their exposure to toxic substances. *Id.* at 3–5.
3. The Wampanoag tribe resided in the Cape Cod area and were connected to the Pilgrims settlement story. *See, e.g.*, Dana Hedgpeth, *Wampanoag, Who Helped Pilgrims Survive, Win Rights to Tribal Lands*, Wash. Post (Dec. 31, 2021), https://perma.cc/429T-LU94. They were displaced from their land and spent hundreds of years attempting to regain their rights. *See id.* Upon obtaining recognized tribal status, the Department of Interior granted them control of approximately 320 acres of land. *See id.* This Article does not comprehensively address the dispossession of native population but appreciates the harmful legacy of displacement.

and space. Each story challenges the current narrative that place is valued by aesthetics and market forces alone.

When viewed in proper historical context, a new story emerges—a story of intersecting forces of social inequality, economic exploitation, and environmental hazards, leading to the marginalization of places that bear the brunt of historical injustices and contemporary inequities.[4] These events also tell the story of how wealth, power, and innovation disproportionately harmed marginalized community members. The complexities of land acquisition and property development extend across a long time horizon, but along the way, real property became the pinnacle of wealth and power. [5]

In the United States, these power dynamics yielded a system that delineated people into winners and losers based upon immutable characteristics and socioeconomic factors.[6] As I have shown elsewhere, this designation was initially person-centered, and transitioned into place-based marginalization.[7] Power and privilege were so inextricably interwoven into the fabric of places such that some areas were sustainable and appreciated in value, while others depreciated and were susceptible to deterioration.[8] The property valuation origin story has had lasting impacts on people, but what is often underappreciated is its cumulative impact on *places*. Valued places continue to benefit from the sociopolitical choices made over a century ago, while marginalized communities continue to bear the burden of places deemed undesirable. One especially overlooked area in which that burden persists is the disproportionate burden of climate change.

Although climate scholars have considered some connections between land use and environmental regulations, the social and legal underpinnings of

---

4. *See*, *e.g.*, Jessica A. Shoemaker, *Re-Placing Property*, 91 U. Chi. L. Rev. 811, 823–27, 892–93 (2024) (describing three distinct concepts: land as the physical elements of earth's surface, property as the legal system by which we allocate and enforce who has access to what valuable resources and on what terms, and place as the human layers of meaning that become lived experiences embedded in a physical space).
5. *See id*. at 826–27; *see* Sacha Dray et al., *Wealth and Property Taxation in the United States* 2–6, 27–29, 45–46, fig. 15 (Nat'l Bureau of Econ. Rsch., Working Paper No. 31080, 2023) (analyzing data regarding the accumulation of wealth in the U.S. in relation to property—concluding that spatial inequality remains high and persistent and that the "blight of enslavement" contributes to this inequality); *cf.* Shalanda Baker, Revolutionary Power: An Activist's Guide to the Energy Transition 66–68 (2021) (detailing how wealthy families and corporations—such as the Cooke family and American Sugar Company—acquired large plots of land in Hawaii, dispossessing Native Hawaiians and substantially altering the economic landscape).
6. *See* Richard Rothstein, The Color of Law 42–46 (2017) [hereinafter Rothstein, Color of Law] (detailing "racial zoning" in the U.S. from the beginning to mid-20th century).
7. Danielle Stokes, *From Redlining to Greenlining*, 71 UCLA L. Rev. 628, 632 (2024) ("Over time, redlining has turned communities inhabited by marginalized people into marginalized places.").
8. *Id*. at 644.

places and how they took shape remain vastly underappreciated.[9] Specifically, the adaptation and resilience literature does not fully engage with the sociocultural implications of climate-centric laws and policies.[10] Yet to be explored is the interconnection of place, property, and value. This Article does just that.

Each place has an origin story. Each origin story is complicated by regulatory actions that created various overlays onto places. Land use and zoning established an initial layer that would ultimately demarcate places of value and marginalization.[11] Public amenities subsequently developed in places deemed valuable, while undesirable land uses were sited in marginalized places.[12] Environmental injustice was an outgrowth of the land use and zoning process,

9. *See* 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, 8–10 (2009) [hereinafter Nolon, *Land Use Stabilization*] (examining "existing land use techniques" as potential options for local governments to mitigate climate change); *see generally* John R. Nolon, Choosing to Succeed: Land Use Law & Climate Control (2021); *see generally* Sarah J. Adams-Schoen, *Beyond Localism: Harnessing State Adaptation Lawmaking to Facilitate Local Climate Resilience,* 8 Mich. J. Env't L & Admin. L. 185 (2018) (addressing local government's failure to properly utilize "land-use planning" to mitigate climate change). *Compare* Patricia E. Salkin, *Sustainability and Land Use Planning: Greening State and Local Land Use Plans and Regulations to Address Climate Change Challenges and Preserve Resources for Future Generations*, 34 Wm. & Mary Env't. L. & Pol'y Rev. 121, 125 (2009) (advocating for "comprehensive plans" at the state and local level to combat climate change), *and* A. Dan Tarlock, *Land Use Regulation: The Weak Link in Environmental Protection*, 82 Wash. L. Rev. 651, 652 (2007) (approaching the climate change problem from a public policy angle), *with* Maxine Burkett, *Just Solutions to Climate Change: A Climate Justice Proposal for a Domestic Clean Development Mechanism*, 56 Buff. L. Rev. 169, 170, 192–93 (2008) [hereinafter Burkett, *Just Solutions to Climate Change*] (asserting the importance of "climate justice"—*i.e.*, recognizing and addressing the intersection of race, poverty, and climate change—in the fight against environmental disaster), *and* Maxine Burkett, *Behind the Veil: Climate Migration, Regime Shift, a New Theory of Justice*, 53 Harv. C.R.-C.L. L. Rev. 445 (2018) [hereinafter Burkett, *Behind the Veil*] (explaining the disproportionate impact of climate change on the poor and those living in island states). *See* Robin M. Collin & Robert Collin, *Environmental Reparations*, *in* The Quest for Environmental Justice: Human Rights and the Politics of Pollution 209, 211 (Robert D. Bullard ed., 2005) (discussing how "[r]acism is real and has consequences for the environment").

10. *See, e.g.*, Sarah Fox, *Environmental Gentrification*, 90 U. Colo. L. Rev. 803 (2019) (detailing the community shifts that result from environmental improvements); *see also* J.B. Ruhl, *The Co-Evolution of Sustainable Development and Environmental Justice: Cooperation, Then Competition, Then Conflict*, 9 Duke Env't L. & Pol'y F. 161, 161–64 (1999) (describing the distinct ways in which sustainable development and environmental justice conceive of equity, finding that there will be inherent conflict between the two); *cf.* Shalanda Baker, *Anti-Resilience: A Roadmap for Transformational Justice within the Energy System,* 54 Harv. C.R.-C.L. L. Rev. 1, 1 (2019) (finding that resilience frameworks fall short in addressing inequitable and unjust policies).

11. *See infra* Part I.

12. *See id*.

creating a second overlay. These layered challenges have created multidimensional harms and places that are desperately in need of repair.[13]

It is well past time for a comprehensive, place-based theory of reparations. This Article undertakes that endeavor by disentangling the practical and theoretical conceptions of place and value, taking inventory of pivotal inflection points—the redlining era and the climate crisis—to underscore how the value ascribed to a place impacts sustainability and climate resilience. In a prior work, I began this framework with a concept I called greenlining.[14] Greenlining is a comprehensive planning mechanism that integrates sustainability principles into land use decisions, using development standards and other incentives to ameliorate longstanding injustices.[15] Here, I use greenlining to identify the areas where place-based reparations are warranted by exploring the basis of property valuation methods and how reparative efforts can support climate resiliency in marginalized places.[16]

The proposal introduced here is not a traditional reparations framework that calls for direct payments or land reconveyances. Rather, this place-based reparations project incorporates a sustainability framework that contemplates environmentalism, social equity, and economics, in that order. This approach avoids notions that reparations are merely a race-based, zero-sum game. Instead, it offers place-based reparations as a means of remediating longstanding historical harms by shifting values from wealth and power to wellness and security. This shift reinforces the notion of climate resilience, including investing in clean technology, food security, and other means of sustainable development. Climate resilience as reparations reorients the land use and planning development system such that places exposed to disproportionate harm—whether by virtue of discriminatory zoning practices or environmental injustice—are fortified to withstand the ills of the climate crisis. Climate resilience as reparations is not merely a way for place-based reparations to be implemented, but also the way to deconstruct the placemaking scheme of the past.

To make the case for climate resilience as reparations, this Article proceeds in three Parts. Part I sets the stage for place-based reparations, providing the historical context of property valuation by detailing the conceptual and regulatory origin stories. It also explains how the federal government became involved

---

13. *See* Audrey G. McFarlane, *Race, Space, and Place: The Geography of Economic Development*, 36 San Diego L. Rev. 295, 326–27 (1999) (describing the need to understand legal structures from a geographic perspective); *see generally* Palma Joy Strand, *The Invisible Hands of Structural Racism in Housing: Our Hands, Our Responsibility*, 96 U. Det. Mercy L. Rev. 155 (2019) (discussing the connection between redlining, segregation, and access to community benefits such as quality schools and employment); *see* Yael Cannon, *Injustice Is an Underlying Condition*, 6 U. Pa. J.L. & Pub. Affs. 201, 223–25 (2020) (assessing the connections between redlining, substandard housing, and social determinants of health).

14. Stokes, *supra* note 7, at 663–65.

15. *Id*. at 664.

16. *See infra* Parts II.B. and III.B.

in placemaking and value-setting through its mortgage lending practices. Part II explains how the climate crisis is an invitation to reimagine land use and zoning more broadly and to integrate understandings of sustainability into future development schemes. It also underscores the need to expand the concept of reparations to build out sustainability principles and incorporate them into legal frameworks, and describes the tenets of a place-based reparations framework. Finally, Part III describes methods of intervention relevant to the development and cultivation of resilient places, and identifies the role that various levels of government can play in providing the intervention.

It is said that the past is prologue. That is certainly true of inequitable placemaking. Failing to acknowledge these inequities will simply perpetuate them. A commitment to place-based reparations recalibrates place-based value, replacing the placemaking scheme of the past to realize a more equitable and resilient future.

I. The (Inequitable) Property Value Origin Story

Property is a legal construct. Place is a social construct. Yet, place and property are inextricably linked. The case for place-based reparations is rooted in an understanding of how places took shape, including the intersecting policies and competing policy interests that helped to create them. In the discussion below, I build the foundation for place-based reparations by first detailing the conceptual story which sheds light on how the vestiges of race, class, and gender-based marginalization are interwoven into the existing legal structures that define property values. Then, I explore two aspects of place's regulatory story: the zoning and environmental overlays. Finally, I assess the government's complicity in perpetuating discriminatory place-making through the federal mortgage lending process. The layering of environmental benefits and burdens on top of discriminatory property regulations established the places of today and identify the areas most vulnerable to climate change.[17]

17. Climate vulnerability has often been assessed at the international scale as between developed and developing countries. *See, e.g.,* Atieno Mboya, *Vulnerability and the Climate Change Regime*, 36 UCLA J. of Env't L. & Pol'y 79 (2018). Yet, climate vulnerability is assessed globally by considering impacts at the local scale, which is contemplated here. *See* IPCC, Climate Change 2022: Impacts, Adaptation and Vulnerability 907–1003 (2022). Vulnerability as considered in this Article is relative to places within a similar locality. Both vulnerability and resilience are a function of geography and resources. *See* Mboya, *supra* note 17, at 93.

A. How Places Took Shape

1. The Conceptual Story

Before regulation there was place. Place produced tangible resources, fostered belonging, and held intrinsic value. Within the property value origin story, place often emerges as a secondary character, if at all, when in fact, the conceptual story offers insight into the social and theoretical underpinnings of the regulatory story. Here, I set forth that story defining place in relation to property as a means of expanding what is and what could be valued when placemaking is prioritized. The conceptual story also reveals the interconnection between environmentalism, social equity, and economic well-being within the valuation process.

a. Defining Place and Value

Each year, *U.S. News and World Report* creates a listing of "Best Places to Live."[18] Its methodology is based upon four indices: quality of life, desirability, job market, and value.[19] More specifically, these indices include an assessment of features such as health care, education, air quality, housing affordability, weather, and employment rates.[20] While the methodology does not include the term 'sustainability,' it effectively incorporates the principles of sustainability into the rankings and serves as a model for characteristics of equitable and resilient places. The *best* places have moderate climates, geographic insulation from particular climate threats, skilled workforces, and residents that are satisfied with life.[21] In other words, these places are attuned to the necessary environmental, social equity, and economic elements of sustainability and resilience. These elements are critical to viability and equitably navigating the climate crisis.

For purposes of this Article, place represents physical location as well as the social, cultural, and relational aspects of one's being and sense of belonging.[22] Placemaking, then, is the act of creating a space that incorporates these aspects. Places are not only valuable because of the surrounding natural and built environment, but because they also offer an intrinsic richness that contributes to well-being. Conceptions of place are the bedrock of communities and influence

---

18. *How We Rank the Best Places to Live & Retire*, U.S. News & World Rep. (Nov. 4, 2025), https://perma.cc/A3Q8-DPNB.
19. *Id*.
20. *Id*.
21. *Id*.
22. *See* McFarlane, *supra* note 13, at 338 (suggesting that an "analysis of space . . . enables us to see more clearly the long-hidden instrumentality of human geographies . . . [the] encaging spatializations of social life") (citation modified); *see generally* Jacob W. Faber, *We Built This: Consequences of New Deal Era Intervention in America's Racial Geography*, 85 Am. Socio. Rev. 739, 739–41 (2020) (arguing that geography is a strong predictor of opportunity).

the ways in which community values are derived.[23] Community values in turn shape societal, legal, and political structures.[24]

The values that emerged in many places were initially rooted in discriminatory perspectives and practices, creating structures that failed to account for the robust sociocultural values that are inherent to heterogeneity.[25] Thus, a shift toward creating equitable and resilient places means appreciating the intersections of location, being, and belonging for all community members while also acknowledging that a society rooted in capitalism calls for a monetization of placemaking and a valuation of property rights.

Value is a term that describes worth as both a quality and a quantity. Depending on the context, value describes utility, significance, importance, or market price.[26] In the United States, our understandings of value are heavily influenced by the ethos of capitalism, or the quantitative aspect of worth. In the private sector, fair market value is the most common measure of value. Fair market value ("FMV") is defined as the price that a seller is willing to accept and a buyer is willing to pay.[27] Yet, there are underlying social values, the qualitative aspect of worth, that inform both parties' willingness to pay.[28] Governments, on the other hand, often utilize an assessed value that can be synonymous to fair market value, but also considers surrounding property values, costs of updating materials, and potential rental earnings.[29]

Defining value within the sustainability and climate resilience context shifts the focus from a purely economic lens to one that appreciates the intrinsic, qualitative aspects of value as well. At present, the property regime primarily conceives of value from a fiscal standpoint.[30] At the intersection of property and environmental law, policymakers have even quantified ecosystem services and various environmental benefits in order to comply with regulatory structures

23. *See* Deborah N. Archer & Joseph R. Schottenfeld, *Defending Home: Toward a Theory of Community Equity*, 92 U. Chi. L. Rev. 2199, 2210 (2025) (defining place as "the cultural, economic, and social interactions that give a space identity and meaning.").

24. *See id.*; McFarlane, *supra* note 13, at 302 n.26, 325.

25. *See infra* Part I.B.

26. *See*, *e.g.*, *Value*, Merriam-Webster Dictionary (June 9, 2025), https://perma.cc/7276-PQ6E.

27. *Value*, Black's Law Dictionary (12th ed. 2024) (defining FMV); *see also* Tlingit & Haida Indians of Alaska v. United States, 177 F. Supp. 452, 468 (Ct. Cl. 1959) (interpreting FMV for the valuation of Native American land appropriated by the United States government).

28. *See, e.g.*, Saul Levmore, *Self-Assessed Valuation Systems for Tort and Other Law*, 68 Va. L. Rev. 771, 774–75, 781–85, 848 n.190 (1982).

29. *See*, *e.g.*, *Real Estate Assessments: Assessment Process*, Arlington Cnty. Va., https://perma.cc/5KE2-EU6N; *see* Levmore, *supra* note 28, at 772–73.

30. *See, e.g.*, Va. Code Ann. § 58.1-3201 (2025) (prescribing taxation for real estate based on fair market value in Virginia); Cal. Code Regs. tit. 18, § 3 (West 2025) (same in California); Tex. Tax Code Ann. § 23.01 (West 2025) (same in Texas).

that require cost benefit analyses.[31] These assessments have been marked by ascribing value to biodiversity.[32] Scholars and practitioners have also attempted to quantify the value of social equity by affixing a monetary value to diversity and inclusion in an effort to validate their worth and substantiate investments in targeted programs.[33] Such attempts are delusive and fail to acknowledge the qualitative value of equity, particularly within a legal system that has often conflated equality and equity.[34] Within the current political climate, the executive branch has prohibited any references to equity, further devaluing places and reinforcing government complicity in establishing inequities.[35]

When considering the value of social equity, climate resilience and security are critical aspects of the calculation. Places with greater access to resources, whether economic, environmental, or social, are less vulnerable to climate change.[36] Further, equitable places are valuable because they encourage autonomy, innovation, investment, and development within the space.[37] Such places allow community members to form positive attachments with, and a sense of responsibility over, the area. When places are valued by individual community members, their investments are often translated as value in the marketplace provided that the values are supported by the relevant power brokers, including regulators, assessors, and financiers.[38]

Community value can be advanced or thwarted by public and private structures' assessment of value within particular places. Valuation measures

31. *See* J.B. Ruhl, *Beyond Green Infrastructure—Integrating the Ecosystem Services Framework into Urban Planning Law and Policy*, 4 J. Compar. Urb. L. & Pol'y. 218, 224 (2020).
32. *See id.*; *see also* Nat'l Rsch. Council, Perspectives on Biodiversity: Valuing Its Role in an Everchanging World 72–115 (1999) (defining the value of biodiversity in various ways, including economic, utilitarian, and ethical).
33. *See, e.g.*, Jeremiah Green & John R. M. Hand, *McKinsey's Diversity Matters/Delivers/Wins Results Revisited*, 21 Econ. J. Watch 5, 5–6 fig. 1, 14 tbl. 4, 15–17 (Mar. 2024), https://perma.cc/M2SZ-7DL7; Gabrielle Novacek et al., *Inclusion Isn't Just Nice. It's Necessary.*, Bos. Consulting Grp. (February 2023), https://perma.cc/5YLU-H7WY; James Mackintosh, *Diversity Was Supposed to Make Us Rich. Not So Much*, Wall St. J. (June 28, 2024), https://perma.cc/SL5W-P87Y.
34. *Cf.* Plessy v. Ferguson, 163 U.S. 537, 543–51 (1896) (upholding the "separate but equal" doctrine under the Fourteenth Amendment to the U.S. Constitution), *overruled by* Brown v. Bd. of Educ., 347 U.S. 483 (1954).
35. *See, e.g.,* Exec. Order No. 14151, 90 Fed. Reg. 8339 (Jan. 20, 2025) (titled "Ending Radical and Wasteful Government DEI Programs and Preferencing").
36. IPCC, *supra* note 17, at 928–930.
37. *See* McFarlane, *supra* note 13, at 311 (describing community-based solutions to addressing property rights limitations).
38. *See, e.g.*, Marion McFadden & Rachel Kyes, *Community-Led, Government Funded: Federal, State, and Local Policies for Resilience*, *in* What's Possible: Investing Now for Prosperous, Sustainable Neighborhoods 240, 240–60 (Krista Egger et al. eds., 2024) (describing how a catastrophic storm shifted the investment strategies in Grand Forks, North Dakota and advocating for investments in resiliency, migration planning, sound land use policies, and collaboration among stakeholders).

have been shaped over time by sociopolitical forces that initially excluded people from acquiring property, and in essence wealth, because of their race, gender, and socioeconomic status. Further, the monetary value of places has often been prioritized at the expense of their intrinsic value.

b. Valuing Place over Property

Disentangling the relationship between property and place is the crux of elevating equity within the sustainability framework and investing in climate resilience. For example, all real property is assessed based upon a variety of place-based characteristics and particular neighborhood features.[39] Scholars have illuminated the ways in which traditional understandings of place and property often converge even though the concepts are vastly different. Most recently, Jessica Shoemaker contextualized the distinctions between land,[40] property,[41] and place[42] to explain the role of placemaking in allocating property values in favor of more equitable wealth distributions.[43] In contrast, the traditional designation of property as the most significant of these three distinct concepts reinforces the idea that legal rights and the associated valuation method supersede place.

Real property has always been a critical asset to power and wealth generation for individuals and governments alike. Individuals who own real property are able to build equity, take advantage of tax benefits, and assert significant control over their domain, while local governments are able to obtain revenue to fund education, public safety, and public works via real property taxes.[44] In each instance, government affixed a monetary value to real property, establishing a

39. *See, e.g.*, Appraisal Found., *APB Valuation Advisory 4: Identifying Comparable Properties*, 4, 9–11 (2013), https://perma.cc/ZP2R-EGWU.

40. Land is defined as "the physical elements of the Earth's surface, including fields, forests, soils, waters, plants, and animals." Shoemaker, *supra* note 4, at 823.

41. Property is defined as the "legal system by which we allocate and enforce who has access to what valuable resources and on what terms." *Id*. at 824 (citing Nicole Graham, Lawscape: Property, Environment, Law 134–59 (2011)). It is also a "system of human-created legal lines that sit on top of a physical landscape and govern human relations in and around that space, subject to state enforcement and sanction." Shoemaker, *supra* note 4, at 825.

42. Place is defined as "human layers of meaning that become, over time and lived experience, embedded in a physical space" that is "geographically tethered [to a] sense of understanding and connection derived from direct knowledge." *Id*. at 827.

43. *Id*. at 875–79.

44. Real property taxes have been vital to revenue generation in the United States. *See* Dray et al., *supra* note 5, at 8–11. Prior to the Great Depression, the federal government included real property taxes in its general property tax along with personal and income taxes. *See id*. Subsequently, real property taxation shifted exclusively to state and local governments with localities serving as the primary assessors. *See id*.

mutually beneficial relationship between the quantitative and qualitative value of property.[45]

The social values that are embedded within the property assessment and valuation system were informed by people and their lived experiences.[46] Not only does this include certain technological innovations, but also the ignorance and prejudices of those who established the system. During its first century, the United States was primarily an agrarian society whereby white males were the exclusive property holders and wealth was ascertained by how many acres of land one owned.[47] Further, one's property value and tax assessment rate was determined by a fixed, per acre rate.[48] As the country's economy shifted toward industrialization, wealth determination and value assessment expanded to incorporate additional structures.[49]

During this period, wealth distinctions were primarily geography-based as between the urban north and rural south.[50] The economic systems initially favored significant land ownership and expanded to include diverse, new fixtures.[51] From a sustainability perspective, this valuation system incorporated elements of environmentalism and economics with a total disregard to social equity. Social equity as understood today would not have been fathomable in the nineteenth or twentieth centuries given the race, class, and gender distinctions constructed by those in power. These constructions, however, are encompassed within the valuation structure. This inequitable foundation established the value system that persists today. Land use and zoning is an area of law that concretizes the interconnection between place and property. The following section analyzes the ways in which social values were contrived to establish the legal and regulatory regime that undergirds our understandings of place and property today.

2. The Regulatory Story

The manner in which places have evolved can be understood via the overlay concept in zoning. Places in their original state were undeveloped, providing sufficient resources to the various ecosystems that were present.[52] This initial

---

45. *See* Glenn W. Fisher, *History of Property Taxes in the United States*, Econ. Hist. Ass'n Encyc. (Robert Whaples ed., 2002), https://perma.cc/U345-QX29.
46. *See infra* Part I.B.
47. *See, e.g.*, Edward L. Ayers, The Promise of the New South: Life after Reconstruction 24–39 (2007) (describing the transition of a farm-centered life cultivating cotton to industrialization, including cotton processing factories).
48. Dray et al., *supra* note 5, at 12.
49. *Id.* at 9–10.
50. *Id.* at 25–31.
51. *Id.* at 27–33.
52. *See* Aldo Leopold, *The Land Ethic*, *in* A Sand County Almanac: And Sketches Here and There 201, 203–20 (reprt. 1987) (1969); *see also* Gregory S. Alexander, *The Complexities of Land Reparations*, 39 Law & Soc. Inquiry 874, 878–80 (2014).

layer is the foundational element of place. Over time, as humans settled in particular locations, the natural habitats and ecosystems changed to varying degrees, transitioning from subsistence living to industrialization, innovation, and commercialization.[53] Prescribed moral and philosophical perspectives informed how and the extent to which places developed. Philosophies related to eliminating chaos within the state of nature and contributing labor to improve places took precedence, resulting in a land regulation system that assigns rights on the basis of one's physical and financial investment.[54] By the early twentieth century, these philosophies were formalized into zoning and land use planning practices.

Zoning, land use planning, and environmental regulation are critical when considering sustainability and climate resilience. The impact of land use and zoning laws cannot be overstated. As it relates to the environment, social equity, and the economy, these regulations have benefited and burdened both people and places. Zoning emerged as the premier local development tool and, subsequently, land use planning cast the vision for the future of development.[55]

Places with pristine natural landscapes were typically zoned single-family residential with large lot sizes and elegant homes.[56] Commercial and industrial uses were zoned at a distance from such residences and often prohibited in these areas by restrictive covenants.[57] Accordingly, the places with pristine environmental conditions would also have higher property values.[58] Even in the pre-zoning landscape, development was established along racial and socioeconomic lines, resulting in disparities that were cemented by zoning regulations. Thus, marginalized community members often resided in places adjacent to industrial and commercial zones.[59] These places received minimal government investment and experienced significant environmental degradation. The regulatory story details the zoning and environmental overlays on property.[60]

---

53. *See* Alexander, *supra* note 52, at 884–86.
54. *See generally* John Locke, Two Treatises of Government (Peter Laslett ed., Cambridge Univ. Press rev. 2d ed. 1988) (1689); Thomas Hobbes, Leviathan (Edwin Curley ed., Hackett Pub. Co. ed. 1994) (1668).
55. *See infra* Part I.B.
56. *See, e.g.*, Stokes, *supra* note 7, at 650–52.
57. *Id.*
58. *Id.* at 652–53.
59. *See* Rothstein, Color of Law, *supra* note 6, at 42–43; Collin & Collin, *supra* note 9, at 209–14.
60. One way to concretize these layered impacts is by visual representation. Maps are used extensively in the land use and zoning context to show where one boundary begins and where another ends. They also depict policy goals that have been overlayed onto a particular area. Common overlays include special use districts that prioritize walkability, transit-oriented development, conservation, and investment opportunity zones. *See* Stokes, *supra* note 7, at 679–80.

a. The Zoning Overlay

Zoning is a dynamic policy tool that encapsulates the principles of sustainability, in that it includes environmental, economic, and social equity components. Zoning is praised for establishing development standards for buffers, lot sizes, floodplain management, centralizing commercial hubs, and delineating permitted uses such that residents know what to expect in their communities.[61] Conversely, zoning has also harmed places in a similar fashion by concentrating industry in particular areas, resulting in increased pollution emissions and contamination in those places.[62] The trade-offs inherent to zoning and land use planning are simply an aspect of the placemaking origin story rather than an indictment of zoning's utility. Historically, economic centers were bisected by highways, which destroyed property tax bases within minority and low-income neighborhoods.[63] Such practices created concentrated areas of wealth and poverty by virtue of adjacency to a particular use zone.[64] This furthered the segregation of people and uses to maintain the goal of homogeneity under the guise of furthering health, safety, morals, and the general welfare.[65]

Zoning's history has received significant attention in legal scholarship and a review of this history is necessary to contextualize the call for place-based reparations.[66] In 1910, Baltimore became the first jurisdiction to impose zoning restrictions on the basis of race.[67] These zoning ordinances sought to "compel by law the separation of the white and black races in their places of

---

61. *See generally* John J. Infranca & Ronnie M. Farr, *Variances: A Canary in the Coal Mine for Zoning Reform?*, 50 Pepp. L. Rev. 443 (2023) (describing zoning's goal of uniformity and the relationship between the theoretical and practical aspects of variances).
62. *See* Robert D. Bullard, *Neighborhoods "Zoned" for Garbage*, *in* The Quest for Environmental Justice 43, 54–61 (Robert D. Bullard ed., 2005) [hereinafter *"Zoned" for Garbage*].
63. One of the described functions of expressways was to stabilize and enhance the value of adjacent property and providing greater community accessibility by reducing obstacles to the free flow of traffic. Non-vehicular economic values included the ability to create new industrial sites, increase retail business volume, increase accessibility to residential areas, and increase land development generally. *See* David R. Levin, *Federal Aspects of the Interstate Highway Program*, 38 Neb. L. Rev. 377, 399 (1959); *see generally* Angela E. Addae, *The Perils of Urban Redevelopment for Black Business Districts*, 57 Tulsa L. Rev. 171 (2021).
64. *See* Rothstein, Color of Law, *supra* note 6, at 42–45.
65. *See id*.
66. *See generally* Erin Ryan, *Zoning, Taking, and Dealing: The Problems and Promise of Bargaining in Land Use Planning Conflicts*, 7 Harv. Negot. L. Rev. 337 (2002) (detailing negotiated decision-making as a means of pursuing just ends within land use planning); Ashira Ostrow, *Land Law Federalism*, 61 Emory L.J. 1397 (2012) (making the case for federal land use law to address the vast and interconnected networks of ecosystems and infrastructure); Audrey G. McFarlane & Randall K. Johnson, *Cities, Inclusion and Exactions*, 102 Iowa L. Rev. 2145 (2017) (describing the regulatory landscape that necessitated inclusionary zoning and exactions).
67. Rothstein, Color of Law, *supra* note 6, at 44.

residence."[68] Within the decade, race-based zoning restrictions were challenged in *Buchanan v. Warley*.[69] Here, the Supreme Court deemed Louisville's racially restricted zoning ordinance unconstitutional as a violation of the Fourteenth Amendment.[70] *Buchanan* invalidated the use of explicitly racist land use and zoning regulations,[71] which (at least in the places where this ruling was not totally disregarded) shifted the discrimination into private land use controls. At its inception, zoning contributed to placemaking fiscally and socially by allocating the distribution of benefits and burdens.

On the heels of *Buchanan*, the U.S. Department of Commerce began promoting the benefits of zoning nationally, making a subtle shift from person-centered to place-based marginalization. In 1921, Herbert Hoover, Secretary of Commerce, established an advisory committee comprised of real estate professionals, including the president of the National Association of Real Estate Boards ("NAREB").[72] The Association was established "to unite the real estate men of America for the purpose of effectively exerting a combined influence upon matters affecting real estate interests."[73] Both the Zoning Advisory Committee and the National Association of Real Estate Boards played a key role in placemaking as evidenced by their activities, recommendations, and professional standards.[74] Together, these groups shaped laws and policies. For example, the *National Real Estate Journal* provided an overview of the NAREB's annual convention.[75] During the convention, an attendee inquired whether it was possible

68. *Baltimore Tries Drastic Plan of Race Segregation*, N.Y. Times (Dec. 25, 1910), https://perma.cc/NTK8-P6LK.
69. 245 U.S. 60 (1917).
70. *Id.* at 74–81. The Court determined that the Due Process Clause affords one the right to dispose of property to a "constitutionally qualified purchaser." *Id.* at 60.
71. The Court determined that segregation may "promote the public peace", but the ordinance could not deny "the alienation of the property in question to a person of color" as the prohibition denied the property owner of his fundamental right of disposing property as he saw fit. *Id.* at 81.
72. Advisory Comm. on Zoning, Dep't of Com., A Zoning Primer (1922) [hereinafter Zoning Primer] https://perma.cc/33KL-LQ94.
73. *History*, Nat'l Ass'n Realtors, https://perma.cc/872S-8RYN. The organization was founded as the National Association of Real Estate Exchanges and exists today as the National Association of Realtors.
74. *E.g.*, Richard Rothstein, *Suppressed History: The Intentional Segregation of America's Cities*, 45 Am. Educator 32, 34 (2021) (quoting the NAREB's 1924 Code of Ethics recommendation that, "[a] realtor should never be instrumental in introducing into a neighborhood . . . members of any race or nationality . . . whose presence will clearly be detrimental to property values in that neighborhood"); *accord* Rothstein, Color of Law, *supra* note 6, at 52.
75. *See Official Program: Fourteenth Annual Convention National Association of Real Estate Boards*, Nat'l Real Estate J., July 4, 1921, at 16, 16–17; *4,373 Attend Greatest Realtor Convention*, Nat'l Real Estate J., July 18, 1921, at 13, 13–15.

to "eliminate colored people in [a] zoning plan."[76] The Director of City Planning for New York City replied:

> I wish we could. But every decision of the courts has been invariably unfavorable to the use of the police power of the state to designate districts in which the colored people could be put . . . . We find, however, in certain cases that the fact that we have created certain kinds of residence districts eliminates most of the colored people, due to the fact that they cannot afford to pay the prices necessary to come into a highly restricted district.[77]

Consequently, increased lot size requirements would become the newest method by which many jurisdictions would maintain racially segregated communities[78] and circumvent the *Buchanan* decision.[79] Both race and socioeconomic status would be qualifiers in determining who lived where and the value of each place.[80] The committee was tasked with investigating and subsequently championing zoning as a best practice. The group published several guidance documents, including *A Standard State Zoning Enabling Act*, which was adopted in at least nineteen states within three years.[81]

While the Federal Zoning Advisory Committee did not explicitly suggest eliminating specific populations from particular areas, there was a keen awareness of judicial decisions like *Buchanan* and encouragement to follow the model zoning ordinance to a tee. It asserted that the model statute had been thoroughly reviewed to ensure that invalidation was unlikely. For example, the statute was enacted for purpose of "promoting health, safety, morals, or the general welfare of the community" by regulating lot size, population density, and the

---

76. George B. Ford, *Zoning Is So Logical and Reasonable That It Must Come Sooner or Later—It Is Inevitable*, 22 Nat'l Real Estate. J., no. 20, Sept. 26, 1921, at 41, 44.
77. *Id.* at 44.
78. Not only did the increased lot size requirements price out many people of color, but they also eliminated low-income persons from certain neighborhoods given the increased costs of development.
79. Certain southern jurisdictions such as Atlanta would continue to utilize "race zoning" by explicitly indicating the zones within which "white," "colored," and "undetermined" races could reside. Robert H. Whitten, Atlanta City Plan. Comm'n, The Atlanta Zone Plan: Report Outlining a Tentative Zone Plan for Atlanta 10 (1922). The city also designated lot size requirements and determined that a 5,000 square foot lot was most appropriate for single family homes. *Id.* at 12–13.
80. Rothstein, Color of Law, *supra* note 6, at 52 (describing the need for race-based planning to maintain existing housing norms following *Buchannan*); Bethany R. Berger, *Race to Property: Racial Distortions of Property Law, 1634 to Today*, 64 Ariz. L. Rev. 619, 649–56 (2022) (describing the changing demographics of communities following *Buchanan* and other landmark Supreme Court cases).
81. U.S. Dep't of Com., A Standard State Zoning Enabling Act: Under Which Municipalities May Adopt Zoning Regulations (rev. ed. 1926) III [hereinafter Standard Zoning Act].

location of prescribed uses.[82] The committee's first report, *A Zoning Primer*,[83] set out two primary benefits of zoning: (i) protecting property and health; and (ii) reducing the cost of living by eliminating blighted districts.[84] The Supreme Court reinforced the protection of a public welfare rationale in *Village of Euclid v. Ambler Realty Co.*[85] It held that zoning regulations would generally be upheld provided that there is some connection to public welfare.[86] In this era protecting the general welfare included the preservation of morals and racial harmony: *i.e.*, segregation.

Within the professional sphere, the NAREB developed standards that codified these social values, influencing the quantitative value of places. The Realtor's *Code of Ethics* (the "Code" or "Code of Ethics") offers insights into the ever-changing economic and sociopolitical landscape within the property regime and how particular qualities of places have been valued over time. The Code's preamble and references to specific property characteristics are especially illustrative. Beginning in 1915, the "Golden Rule" is touted as the fundamental principle of the real estate profession—doing unto others that which you would have them do unto you.[87] By 1928, realtors were deemed patriots with grave social responsibility to ensure that land resources reach the highest use and land ownership has its highest distribution.[88]

However, in the earliest editions, the Code of Ethics stated that a realtor "should never be instrumental in introducing into a neighborhood a character of property or occupancy, members of any race or nationality, or any individuals whose presence will clearly be detrimental to the property values in that neighborhood."[89] This provision remained in the Code for approximately twenty-five years.[90] From a broader sustainability perspective, the Code initially provided

82. *Id.* at 4–5. Specific recommendations were also made regarding word choices such as the use of "or" in the grant of power to permit any purpose, such as solely promoting morals, was a sufficient use of authority. *Id.* at 4 n.2. Additionally, the committee recommended exclusively using the terms "regulate and restrict" rather than "exclude" and "segregate." *Id.* at 4 n.6.

83. Zoning Primer, *supra* note 72.

84. *Id.* at 2–3. Blight was thought to be caused by "the improper location of an industry, business, or other use" which led to economic waste, impaired health, and depreciated property values. *See* Bureau of Standards, U.S. Dep't of Com., BH16, The Preparation of Zoning Ordinances 3 (1931).

85. 272 U.S. 365 (1926).

86. *Id.* at 394–97.

87. Nat'l Ass'n of Real Est. Bds., Code of Ethics § 1, ¶ 1 (1915), https://perma.cc/6SZX-D2RD.

88. Nat'l Ass'n of Real Est. Bds., Code of Ethics pmbl. (rev. ed. 1928), https://perma.cc/K7W3-49U9.

89. Nat'l Ass'n of Real Est. Bds., Code of Ethics art. 34 (rev. ed. 1924) [hereinafter 1924 Code of Ethics], https://perma.cc/F5MP-3H93.

90. The reference to race, nationality, and other individuals who may impact property values was removed beginning in 1950. *Compare* Nat'l Ass'n of Real Est. Bds., Code of Ethics art. 34 (rev. ed. 1950) [hereinafter 1950 Code of Ethics] (removing any reference to race and

that realtors are charged with creating adequate housing, building cities, and developing industries and productive farms.[91] The scope of duties was finally updated in 1974 to include preserving a healthful environment.[92] This same year, the Code was updated to include an express prohibition against discrimination on the basis of race, creed, sex, or country of national origin.[93]

When zoning ordinances and land use plans were drafted, policymakers were men of their time. Not only did they recognize the challenges that a community might face in the absence of regulation, but they also understood that intentional planning and zoning would create ideal communities. Specifically, such planning and zoning would maintain a system of "morality" and "general welfare" free of uses and occupants who would decrease property values.[94] These early decisions—rooted in discrimination and ignorance alike—laid the foundation for the marginalized geographies that exist today and underscore the need for reparative policies.

Localities were designed in ways that isolated people and uses homogenously. Zoning processes affixed rigid boundaries around places that would be the site for prime real estate suitable for living and the location of undesirable land uses such as landfills, incinerators, and polluting industries.[95] By the end of the twentieth century, the unequal distribution of uses meant that places zoned industrial or adjacent to industries were subjected to environmental harms, while others were insulated from such exposure. Soil contamination, air pollution, and limited greenspace harmed residents, but also depreciated the value of natural resources in these areas.[96] But the zoning process was just one piece of the puzzle. It set the table for the cumulative environmental impacts that were inequitably distributed across places, as discussed next.

---

nationality from Article 34), *reprinted in* Cal. Real Est. Mag., June 1951, at 208, 208–09, https://perma.cc/YPT3-5KCT, *with* 924 Code of Ethics, *supra* note 89, art. 34 (using the words "race" and "nationality" in Article 34).

91. *See* 1950 Code of Ethics, *supra* note 90, at pmbl.

92. Nat'l Ass'n of Realtors, Code of Ethics pmbl. (rev. ed. 1974), https://perma.cc/7F2E-3LW5.

93. *Id*. at art. 10. In 2000, the Code was updated to mandate that realtors report "knowledge of conduct that may violate the Code of Ethics involving misappropriation of client or customer funds or property, willful discrimination, or fraud." Nat'l Ass'n of Realtors, Code of Ethics and Standards of Practice of the National Association of Realtors pmbl. (rev. ed. 2000), https://perma.cc/34SB-V4CE.

94. Zoning Primer, *supra* note 72, at 2–4; *see generally* Standard Zoning Act, *supra* note 81.

95. *See* Robert D. Bullard, *Environmental Justice in the Twenty-First Century*, *in* The Quest for Environmental Justice 19, 32–34 (Robert D. Bullard ed., 2005).

96. *See generally* Alice Kaswan, *Distributive Justice and the Environment*, 81 N.C. L. Rev. 1031 (2003); *see also* Mary Ann Manhan et al., *Unmasking Green Colonialism Behind the "Decarbonization Consensus*,*"* 15 Right Food & Nutrition Watch 1, 8–9 (2023) (describing how inequitable siting practices take shape on an international scale between the Global Northa and South, perpetuating "extractivist capitalism").

b. The Environmental Overlay

The distribution of environmental benefits and burdens serves as the second overlay on property that has shaped places. Traditionally, environmental regulation is considered from a federal or state-level permitting perspective.[97] However, facility siting and environmental impacts are interconnected with local land use and thus with placemaking.[98] High-intensity land uses, such as manufacturing centers and oil refineries, for example, are generally only permitted within a prescribed zone. As described above, these zones were established to secure homogeneity of uses and residents. Consequently, places were either shielded from environmental degradation or exposed to environmental harm.

Prior to the rise of environmentalism on the national scale in the 1970s, many environmental harms were addressed through the nuisance framework. Adjacent landowners would bring claims against their industrial neighbors for harms such as noxious odors and poor air quality that caused an unreasonable interference with their use and enjoyment of their property.[99] When one "comes to the nuisance" or locates in a place that is adjacent to harm, one assumes the risk of exposure and typically benefits from a price reduction in the property value.[100] Yet, this principle fails to take into account systems that fixed particular harms in particular areas. It also does not account for zoning practices that situated cost-effective residences in the least desirable areas.

For example, in *Boomer v. Atlantic Cement Co.*, residents brought a nuisance claim against a cement plant for the dust and debris by-products of the manufacturing process and damage to their property resulting from quarry blasts.[101] Specifically, the plaintiffs who owned a neighboring used car shop sought an injunction to cease the plant's operations in an effort to preserve their health and business.[102] While the court found Atlantic Cement liable, the major question was whether an injunction or money damages were most appropriate.[103]

97. *See, e.g.*, Stokes, *supra* note 7, at 666 n.207. For example, clean water, clean air, hazardous waste, and solid waste. *E.g.*, Robert Fischman, *Cooperative Federalism and Natural Resources Law*, 14 N.Y.U. Env't L.J. 179, 188–204 (2005); *Cooperative System Governance*, Sustainability Directory (Apr. 1, 2025), https://perma.cc/E84L-F4SJ.

98. *See* Stokes, *supra* note 7, at 632, 636, 644–49; *see generally* Kaswan, *supra* note 96; *see also* Nolon, *Land Use Stabilization*, *supra* note 9, at 8—9 (arguing that local governments can utilize land use techniques to mitigate climate change).

99. *See generally* Vicki Been & Francis Gupta, *Coming to the Nuisance or Going to the Barrios? A Longitudinal Analysis of Environmental Justice Claims*, 24 Ecology L.Q. 1 (1997) (analyzing and comparing waste facility host sites).

100. *See id.* at 6–7, 7 n.17.

101. 257 N.E.2d 870, 871 (N.Y. 1970). Notably, the area was not zoned when construction began. *See* Daniel A. Farber, *The Story of* Boomer*: Pollution and the Common Law*, 32 Ecology L.Q. 113, 115 n.5, 10 (2005). The company located in a neighborhood with modest homes and small businesses. *Id.* at 115.

102. *Boomer*, 257 N.E.2d at 871–72; *accord* Farber, *supra* note 101, at 115–17.

103. *Boomer*, 257 N.E.2d at 872–75.

To make its determination, the Appellate Division in *Boomer* took into account the "zoning of the area, the large number of persons employed by [Atlantic], its extensive business operations and substantial investment in plant and equipment, its use of the most modern and efficient devices to prevent offensive emissions and discharges, and its payment of substantial sums of real property and schools taxes."[104] Notably, Atlantic Cement was located in a relatively under-resourced area in upstate New York, where residents had limited political capital.[105] The Court of Appeals ultimately held that an injunction be imposed only until such time that the lower court could determine the amount of permanent damages owed to the plaintiffs.[106]

Similarly, in *Bean v. Southwestern Waste Management Corp.*,[107] plaintiffs sought an injunction against siting a solid waste facility within a predominantly African American neighborhood in Houston, Texas.[108] They argued that the decision to locate in their community was partially motivated by racial discrimination in violation of 42 U.S.C. § 1983.[109] This was the first case to raise a claim of environmental discrimination in waste disposal siting.[110] The injunction was denied because the plaintiffs were unable to establish a likelihood of success on the merits.[111] Sociologist Dr. Robert Bullard conducted extensive research of the spatial location of municipal solid waste disposal sites in Houston, finding that twelve of the city's thirteen solid waste disposal sites were located in minority communities.[112] Despite evidence of environmental harm, the judge deferred to

---

104. Farber, *supra* note 101, at 120 (quoting Boomer v. Atlantic Cement Co., 294 N.Y.S.2d 452, 453 (1968)).
105. *Id*. at 115.
106. *Boomer*, 257 N.E.2d at 875.
107. 482 F. Supp. 673 (S.D. Tex. 1979).
108. *Id*. at 674–75. Houston does not have comprehensive zoning and only has minimal land use planning requirements. This fact does not negate the need for a comprehensive analysis of development practices, but it calls for greater care in contextualizing permitting and siting practices within a historical context. *See Planning & Development*, City of Houston, Tx, https://perma.cc/ZQN6-258Q.
109. *See* 42 U.S.C. § 1983. The case also implicated a permit under Texas's Solid Waste Disposal Act (the "Act"). *See Bean*, 482 F. Supp. at 675; Tex. Health & Safety Code Ann. §§ 361.001–992 (West 2025). Under the Act, a permit could only be revoked for "reasons pertaining to public health, air or water pollution, or land use," or violation of the Act or any other applicable laws. Health & Safety § 361.089(a); *see* Tex. Water Code Ann. § 5.753 (West 2025). Because the plaintiff's claim was based on racial discrimination in site selection, the Texas Department of Health would not hear the matter even if it was petitioned. *Bean*, 482 F. Supp. at 675.
110. *See "Zoned" for Garbage*, *supra* note 62, at 55.
111. *Bean*, 482 F. Supp. at 677. The court identified discrepancies in the plaintiffs' data ranging from varied spatial areas of assessment to statistical inaccuracies. *Id*. at 677–79.
112. *"Zoned" for Garbage*, *supra* note 62, at 46–47. In 1983, the U.S. General Accounting Office conducted a study within EPA Region 4 that determined that African Americans made up the majority of the population in three of four communities where hazardous waste landfills are located. Siting of Hazardous Waste Landfills and Their Correlation With

the Texas Department of Health's site assessment and was unable to conclude that the site approval was motivated by "purposeful racial discrimination."[113]

As with other social movements, protesting environmental inequities does not always begin on the judicial stage, but often at the community organizing level. For instance, Love Canal was slated to be a planned community that would support manufacturing plants that were planning to locate in the area.[114] However, due to failure to secure financial backing, the plans were thwarted and by 1920 the canal became the dumping site for various municipal and industrial chemicals.[115] After decades of dumping, the Hooker Chemical Company sold the property to the locality.[116] The property was subsequently developed as a working-class residential community.[117] By 1978, it was clear that the hazardous waste had contaminated soil and groundwater, causing long-term health effects for residents, including reproductive issues and other chronic illnesses.[118] The public outcry that resulted from this decades-long issue led Congress to pass the Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as Superfund.[119]

During this same time period, residents in Warren County, North Carolina, a predominantly African American neighborhood, protested the siting of a toxic waste dumping site in their community. Polychlorinated biphenyls ("PCBs") were known to be extremely hazardous as the Environmental Protection Agency ("EPA") began phasing out their use in 1979.[120] The EPA noted that "PCBs have caused birth defects and cancer in laboratory animals, and they are a suspected cause of cancer and adverse skin and liver effects in humans."[121] In 1982, contaminated soil arrived at the Warren County site.[122] The protests that ensued mark what is now considered the beginning of the environmental justice movement.

Racial and Economic Status of Surrounding Communities, Gov. Acct. Off. (1983); *see also "Zoned" for Garbage, supra* note 62, at 55–61; *accord* Rothstein, Color of Law, *supra* note 6, at 54. This was the first study to research this issue. It was prompted by the litigation in Bean v. Southwestern Waste Management Corp. *See "Zoned" for Garbage*, *supra* note 62, at 55.

113. *Bean*, 482 F. Supp. at 678, 79–80.
114. Eckardt C. Beck, *The Love Canal Tragedy*, 5 EPA J. 16, 17 (1979).
115. *See, e.g.*, Elizabeth D. Blum, Love Canal Revisited: Race, Class, and Gender in Environmental Activism 20–22 (2008).
116. *See, e.g.*, *id.* at 22–23.
117. Beck, *supra* note 114, at 17.
118. *See* Blum, *supra* note 115, at 25–30.
119. Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9601–9675.
120. *EPA Bans PCB Manufacture; Phases Out Uses*, EPA (EPA Press Release, Apr. 19, 1979), https://perma.cc/MZ3E-XDB2.
121. *Id.*
122. Bullard, *supra* note 9, at 38.

While limited in scope, these examples are not idiosyncratic. They are among the long list of events that shed light on the ways in which the story of environmental injustice is much less formalistic than that of zoning. Undesirable land uses are concentrated in particular areas for a host of reasons, including zoning, land costs, and access to political capital.[123] Such uses do not result in environmental harm by default, but they do increase the exposure to environmental risks in the areas that are least equipped to address them.

These siting decisions also evidence how economics has been prioritized over environmental protection and human exposure to environmental harms. Externalities are an inevitable result of development; however, certain places such as marginalized communities consistently bear the environmental burden.[124] When environmental justice emerged as a policy goal, cumulative impacts became a common method of assessing harms. Cumulative impacts are "the totality of exposures to combinations of chemical and nonchemical stressors" as well as the stressors' effects on health, well-being, and quality of life.[125]

Assessing cumulative impacts is one instance when history is considered within the land use context.[126] Social scientists have both studied and illustrated the ways in which discriminatory zoning of the past is correlated to increased temperatures and air pollution of the present.[127] These findings underscore the significance of cumulative impacts. The concept of cumulative impacts is an amalgamation of the zoning and environmental overlays as well as the principles underlying them. Understanding cumulative impacts is a prime area of opportunity as historical context must be considered if places are to become more sustainable and climate resilient.

Developing climate resilient places means chiseling through the regulatory layers and conceptual frameworks of the property value origin story to re-engage with the fundamentals of place. The federal mortgage lending process exemplifies the ways in which regulatory layers shaped places. It also illuminates why the government is the appropriate repairman to repair the value of places and improve its valuation scheme. The following section sets out how the federal government's poor assessments of property values established marginalized places that experience the climate crisis more intensely today.

---

123. *See, e.g.*, Vicki Been, *Locally Undesirable Land Uses in Minority Neighborhoods: Disproportionate Siting or Market Dynamics?*, 103 Yale L.J. 1383, 1396, 1398–1401 (1994).

124. With the exception of New Jersey, cumulative impacts currently have little to no legitimate bearing on present project approvals and are of minimal influence in planning for future development. *E.g.*, S. 232, 219th Leg., Reg. Sess. (N.J. 2020) (concerning "disproportionate environmental and public health impacts of pollution on overburdened communities").

125. *Cumulative Impacts Explained*, EPA (Nov. 21, 2024), https://perma.cc/ND94-L5DX.

126. *E.g.*, EPA, Interim Framework for Advancing Consideration of Cumulative Impacts 13–16 (2024), https://perma.cc/X98W-4P68.

127. *See* Stokes, *supra* note 7, at 649 ("Scholars have started exploring the connections between redlining, air quality, and extreme heat.").

B. Government (Mis)Assessment of Value

When Franklin Roosevelt took office in 1933, his New Deal promised to provide relief to millions of borrowers and financial institutions on the verge of default. Within the First Hundred Days, Roosevelt signed the Home Owners' Loan Act, which established the Home Owners' Loan Corporation ("HOLC").[128] HOLC was tasked with assisting borrowers with refinancing and establishing a uniform appraisal system.[129] The following year, Congress passed the National Housing Act which established the Federal Housing Administration.[130] The Housing Administration drafted an Underwriting Manual pursuant to the Act, creating a system to ensure that mortgages were eligible for credit insurance.[131] This led to two distinct assessments of a given property's value: one for borrower eligibility and another for financial institutions. As detailed below, the quantitative and qualitative evaluation of place was a critical component of each. The zoning and environmental overlays became outcome determinative for loan eligibility. In other words, the valuation of property determined economic worth and sense of belonging to a place.

1. Foundations of Federal Lending

Mortgage risk assessment and valuation were the primary metrics used in underwriting. These processes solidified places considered valuable and those that were marginalized. First, risk ratings analyzed all risks associated with approving loan transactions and issuing mortgage insurance.[132] The risk rating contemplated the probability of default by ranking characteristics of properties,[133] locations,[134] and borrowers. The relationship between the physical property and its location was also of particular interest as it directly affected marketability of the property.[135] Relatedly, valuation required the analysis of building quality, construction costs, stability of environments, and the "extent to which desirable or undesirable relationships exist[ed] between individual properties and their surroundings."[136] Valuation was used by the Housing

---

128. Home Owners' Loan Act of 1933, Pub. L. No. 73-43, § 4, 48 Stat. 128, 129 (creating the HOLC).
129. *Id.* §§ 4–6, 48 Stat. at 129–35.
130. National Housing Act, Pub. L. No. 73-479, § 1, 48 Stat. 1246, 1246 (1934).
131. Fed. Hous. Admin., Underwriting Manual: Underwriting and Valuation Procedure Under Title II of the National Housing Act (1938) [hereinafter FHA Underwriting Manual].
132. *Id.* ¶ 601.
133. This refers to the structural features and characteristics of the lot. *See id.* ¶¶ 310, 801–804.
134. Location is the "actual site of a property viewed in terms of relationship with its immediate neighborhood and general economic background." *Id.* ¶ 903.
135. *Id.* ¶ 604.
136. *Id.* ¶ 616.

Administration to adequately assess loans while the risk rating was designed to guide staff's judgment in an effort to ensure some degree of accuracy and uniformity of outcomes.[137] While the valuation process was defined as a property-based system it actually implicated numerous characteristics of place.

The risk rating process hearkens to the legal analytical tools employed in the torts regime when considering the proximate cause factors: foreseeability and reasonableness.[138] It was imperative that staff develop sufficient skill to forecast characteristics of borrowers and properties, guided by trends of the past.[139] Administrators proclaimed that reasonableness was held as the primary objective that would become more accurate over time as the weight ascribed to each risk continued to be developed by "experienced mortgage men."[140] The sexist, classist, and racist language used throughout the manual is a testament to the discriminatory foundations upon which places were built, particularly when government actions were the proximate cause for many place-based harms. As such, this process evidences how government played a significant role in establishing a property regime riddled with the harms now in need of repair. A review of the mortgage risk rating criteria elucidates how place and value were and continue to be misaligned.

2. *Defining Place and Property Value through Risk Assessment*

First, when assessing borrowers, critical factors in the mortgage risk rating criteria included earning power, attitude toward obligations, ability to pay, and prospects for the future.[141] Staff were then required to rank specific categories: social and economic characteristics, motivation in relation to transaction, employability and earning stability, among other features. Each feature was graded on a scale of one to five and was assigned a corresponding point value. There were a total of 100 points available. Figure 1 is a replication of the grading chart for reference.[142] Within the borrower category, several factors were expressly related to place. For example, social and economic characteristics included an assessment of one's mental and moral being, reputation, and habits,[143] whether one had a harmonious home life,[144] and whether one's associates had similar interests, habits, and ethical codes.[145]

Additionally, in the 'relation of income to the transaction' category, the assessment of a borrower's willingness to pay was contingent on whether the

137. *Id.* ¶¶ 616–617.
138. *See id.* ¶ 606.
139. *Id.* ¶ 909.
140. *Id.* ¶ 612.
141. *Id.* ¶ 606.
142. *See infra* Figure 1.
143. FHA Underwriting Manual, *supra* note 131, ¶ 1012.
144. *Id.* ¶ 1013.
145. *Id.* ¶ 1014.

property was acquired in a location "inhabited by a class or race of people that may impair his interest in the property—and thereby affect his motivation."[146] From the assessor's perspective, place served as an indicator of fiscal and moral value. While the manual does not expressly mandate a particular rating if a borrower was in community with marginalized people, it encouraged valuators to weigh such factors less favorably.[147] These factors went to the essence of establishing a sense of place and indicated the priorities of greatest value.

Rating of Borrower

	FEATURE	REJECT	1	2	3	4	5	RATING
Attitudes	Social and Economic Characteristics		3	6	9	12	15	
	Motivation in Relation to Transaction		5	10	15	20	25	
Ability to pay	Employability and Earning Stability		4	8	12	16	20	
	Relation of Obligations to Transaction		3	6	9	12	15	
	Relation of Income to Transaction		5	10	15	20	25	
	TOTAL RATING OF BORROWER							

Figure 1[148]

Second, the property rating was divided into two primary categories: durability and function.[149] Durability assessed features such as structural soundness, resistance to elements, and resistance to use, while function assessed livability, equipment, natural light, and ventilation.[150] The physical security ranking system is included as Figure 2 below for reference.[151] Within the context of place, these features were most closely related to aspects of the natural environment, considering characteristics such as soil quality in securing foundations,[152] the ability to withstand weather events and other hazards,[153] and suitability of the lot's topography for supporting residential uses.[154] Additionally, the quality of infrastructure and convenience equipment contributed to the ascribed value and overall functionality of the property. For example, the Housing Administration

146. *Id.* ¶ 1032.
147. *See id.* ¶¶ 1008, 1032.
148. *Id.* ¶ 626 fig.
149. This rating also included architectural attractiveness or "lasting appeal" and adjustments for nonconformity or a style that is so different from the surrounding environment that it increases mortgage risk. *Id.* ¶¶ 804-805; 857.
150. FHA Underwriting Manual, *supra* note 131, ¶ 805.
151. *See infra* Figure 2.
152. FHA Underwriting Manual, *supra* note 131, ¶ 814.
153. *Id.* ¶¶ 819, 826–828.
154. *Id.* ¶ 838.

expressed preferences for public utility supply systems and municipal sewage systems rather than private infrastructure.[155] Not only did these rating distinctions incentivize particular types of residences, but also specific goods and services.[156]

Rating of Property

	PHYSICAL SECURITY FEATURES	REJECT	1	2	3	4	5	RATING
Durability	Structural Soundness		5	10	15	20	25	
	Resistance to Elements		2	4	6	8	10	
	Resistance to Use		1	2	3	4	5	
Function	Livability and Functional Plan		4	8	12	16	20	
	Mechanical and Convenience Equipment		2	4	6	8	10	
	Natural Light and Ventilation		2	4	6	8	10	
Architectural Attractiveness			4	8	12	16	20	
Total Rating of Physical Security								
Adjustment for Nonconformity			12	9	6	3	0	
TOTAL RATING OF PROPERTY								

Figure 2[157]

Finally, and most intuitively, the risk rating of locations was directly aligned with conceptions of place. The location rating assessed the following features: Relative Economic Stability, Protection from Adverse Influences, Freedom from Special Hazards, Adequacy of Civic, Social, and Commercial Centers, Adequacy of Transportation, Sufficiency of Utilities and Conveniences, Level of Taxes and Special Assessments, and Appeal.[158] Relative Economic Stability and Protection from Adverse Influences were assigned the greatest values at forty and twenty points, respectively. The additional values are indicated in Figure 3.[159] The location rating contributed to the greatest place-based disparities. Namely, it incentivized homogeneity of uses and people within particular places[160] as a means of protecting marketability.[161]

The Housing Administration's guidance was riddled with preferential cultural and social values that were dictated by those in power without care or consideration of marginalized groups. When assessing economic background, the

155. *Id.* ¶ 842–844.

156. For example, assessors included a preference for electricity from public utilities and plumbing fixtures with "proper design, material, and workmanship." *Id.* ¶¶ 847–849.

157. FHA Underwriting Manual, *supra* note 131, ¶ 801 fig.

158. *Id.* ¶ 902.

159. *See infra* Figure 3.

160. FHA Underwriting Manual, *supra* note 131, ¶¶ 903, 909.

161. *Id.* ¶¶ 904, 909.

Administration deemed family income and social characteristics of the neighborhood as outcome determinative.[162] Specifically, it noted that the aggregate of family incomes in the neighborhood was significant but not the only qualifier. Further analysis was necessary to ascertain "the group attitude toward obligations and living standards."[163] It defined social characteristics as "the moral qualities, the habits, the abilities and the social, educational and cultural backgrounds of the people residing in the immediate neighborhood."[164] Valuators determined the people and places worthy of support and resources through the lens of power and privilege.

Rating of Location

FEATURE	REJECT	1	2	3	4	5	RATING
Relative Economic Stability							
Protection from Adverse Influences		4	8	12	16	20	
Freedom from Special Hazards		1	2	3	4	5	
Adequacy of Civic, Social, and Commercial Centers		1	2	3	4	5	
Adequacy of Transportation		2	4	[illegible]	8	10	
Sufficiency of Utilities and Conveniences		1	2	3	4	5	
Level of Taxes and Special Assessments		1	2	3	4	5	
Appeal		2	4	6	8	10	
						TOTAL RATING OF LOCATION	

Figure 3[165]

This is not to say that valuators' location assessment metrics were all illegitimate. For example, the Housing Administration encouraged zoning ordinances as a means of regulating growth and development,[166] highly enforced restrictive covenants to ensure protection from adverse influences or business encroachment,[167] and natural physical protection to provide a buffer from inharmonious uses.[168] On its face, this seems wholly appropriate. However, it

162. *Id.* ¶¶ 927, 929.
163. *Id.* ¶ 929.
164. *Id.*
165. *Id.* ¶ 901 fig.
166. *Id.* ¶ 933.
167. *Id.* ¶ 934.
168. *Id.* ¶ 935. Similarly, Administrators were cognizant of topographical issues that were hazardous as well as risks of fire and flood. *See id.* ¶¶ 941–948.

is the reference to protecting against adverse influences that was detrimental to placemaking. While not expressly defined, adverse influences were thought to include "the infiltration of business and industrial uses, lower class occupancy, and inharmonious racial groups."[169] As described in Section I.A, zoning was used as a means to keep specific people and uses in their place.[170]

Consider again the case of nuisances. The Housing Administration noted:

> If a nuisance has already had its effect, that is, if the class of occupancy has already changed and no further change appears probable because of the nuisance[s], the rating of [the] Protection from Adverse Influences is not affected. On the other hand, if the nuisance is likely to make the occupants dissatisfied with the location, the rating of this feature will reflect the condition.[171]

While not explicit, the rationale suggested that certain people should bear the burden of a nuisance and thereby receive unfavorable ratings. It also suggested that the places in proximity to those people were also not worthy of protection and that areas zoned for industry have little to no value. Similarly, school quality and exposure to other forms of recreation were generally thought to be beneficial to places.[172] Yet, there were a few conditions. If a school's population included those of a "far lower level of society or an incompatible racial element," the neighborhood was considered less stable and undesirable.[173] Not only did these assessments impact the borrower's outcomes, but community resources as well.[174]

For underwriting purposes, each feature—borrower, property, and location—was assessed out of 100 points.[175] The characteristics of each feature incorporated the societal values of the time. For example, placemaking as defined in this Article contributed to anywhere from ten to forty points within each section.[176] Further, the Housing Administration noted that the "present city pattern is the product of the action, in the past, of the competition of uses for sites and the historical succession of those uses."[177] It acknowledged that favorable market attitudes were related to particular social, cultural, and natural facilities and the exclusion of "infiltration by lower class occupancy."[178] While these statements are true and continue to signal growth today, these metrics must be contextualized within the time period.

---

169. *Id.* ¶ 935.
170. *See supra* Part I.A.
171. FHA Underwriting Manual, *supra* note 131, ¶ 940.
172. *See id.* ¶¶ 949–953.
173. *Id.* ¶ 951.
174. *See* Rothstein, *supra* note 74, at 35–36.
175. FHA Underwriting Manual, *supra* note 131, ¶¶ 801, 901, 1002.
176. *Id.* ¶¶ 804, 902, 1009.
177. *Id.* ¶ 909(c).
178. *Id.*

When the Underwriting Manual was drafted, discriminatory spatial boundaries had already been cemented for over a decade beginning with the zoning guidance articulated by the Department of Commerce and the NAREB.[179] Zoning ordinances identifying the location of commercial and industrial uses were in full effect, making the adjacent neighborhoods the least desirable and often ineligible for financing.[180] HOLC also graded locations by utilizing similar methodologies for assessing risk of default and ultimately loan eligibility.[181]

These practices manifested as what is commonly referred to as redlining. HOLC developed maps of cities with a population in excess of 40,000 between 1935 and 1940, which graded communities with letters A through D and corresponding colors from green to red.[182] Scholars and policymakers have questioned the reach and impact of redlining maps, but the data supporting the neighborhood grading process was also built into the underwriting methodology.[183] Even if the maps were not widely circulated, the assessment process ensured that places of wealth and prosperity were separated from those of subsistence.

The purpose of the rating location was to determine mortgage risk. The rating was based on a prediction of the risks likely to be experienced in the area within twenty to twenty-five years.[184] Thus in 1938, valuators were determining neighborhood worth and value through 1963. These discriminatory metrics were legal until the Fair Housing Act ("Housing Act") was passed in 1968.[185] By this point in time, decisions had been made that would have projected the value of communities through the 1990s. Zoning, redlining, and inequitable access to home financing established and reinforced the character of communities, ranging from investment in education and civic activities to accessing recreation and commercial opportunities.[186] There is no denying that the Housing Act was monumental. It sought to protect people from discrimination in buying or renting a home and in obtaining a mortgage.

The Housing Act, however, did not address the discriminatory metrics that resulted in an inequitable property-valuation system or the ensuing cumulative harms. Ultimately, the Housing Act offered an opportunity to remedy many of the person-centered harms associated with property valuation but failed

179. *See supra* Part I.A.2.

180. *See* FHA Underwriting Manual, *supra* note 131, ¶¶ 909–911, 1379(6).

181. Rothstein, Color of Law, *supra* note 6, at 63–65.

182. Daniel Aaronson, Daniel Hartley & Bhashkar Mazumder, Fed. Rsrv. Bank of Chi, *The Effects of the 1930s HOLC "Redlining"* Maps 4, 6–7 (2020).

183. *See* Andre M. Perry & David Harshbarger, *America's Formerly Redlined Neighborhoods Have Changed, and so Must Solutions to Rectify Them*, Brookings Inst. (Oct. 14, 2019), https://perma.cc/9337-63X8.

184. FHA Underwriting Manual, *supra* note 131, ¶ 906.

185. Fair Housing Act of 1968, Pub. L. No. 90-284, 82 Stat. 73; *see* Equal Credit Opportunity Act, Pub. L. No. 94-239, 90 Stat. 251 (1976).

186. Rothstein, *Suppressed History, supra* note 74, at 33–37.

to address the harm done to places. Further, when the Community Reinvestment Act was passed in 1977, it was also person-centered within particular communities.[187] These legislative efforts were impactful first steps in remedying past economic harms, but they did not fully address the environmental and social equity challenges borne out of the property regime. These challenges continue to manifest in the 21st century as evidenced by the housing instability of marginalized community members during the Great Recession of 2008 and public health outcomes of the Covid-19 pandemic.[188] Aside from these inflection points, the various overlays have created places that are more susceptible to climate risks.[189] The proximity to industrial facilities and hazardous waste sites exacerbates vulnerabilities such as flooding, heat waves, and air quality deterioration, making these communities more susceptible to climate-related harms.[190] Further, prolonged community disinvestment limits the economic and social resources that are accessible.[191]

The land use, zoning, and siting system in conjunction with the property valuation process is one facet of the cumulative impacts that plague marginalized places. These structural and systemic harms are in desperate need of repair. How to repair them is next. The climate crisis both invites and prompts the development of more resilient structures allowing for reparative efforts that will remediate harms of the past and provide for an equitable, resilient future.

187. Community Reinvestment Act of 1977, Pub. L. No. 95-128, §§ 802–806, 91 Stat. 1111, 1147–48. The Community Reinvestment Act encouraged financial institutions to serve the communities in which they are chartered and required federal agencies to assess how each institution fulfills its obligations.

188. Michelle D. Layser et al., *Mitigating Housing Instability During a Pandemic*, 99 Or. L. Rev. 445, 450 (2021) (describing interventions during the recession, their varying levels of effectiveness, and future-oriented priorities); Cary Martin Shelby, *Racism as a Threat to Financial Stability*, 118 Nw. U. L. Rev. 755, 799–810 (2023) (making the case for acknowledging racism as a threat to financial stability by analogizing to the Financial Stability Oversight Council's *Report on Climate Change*).

189. *See infra* Part II.B.

190. *See* Jeremy S. Hoffman et al., *The Effects of Historical Housing Policies on Resident Exposure to Intra-Urban Heat: A Study of 108 US Urban Areas*, Climate, January 2020, at 1, 6 (finding that areas rated D by the HOLC are on average 2.6 degrees Celsius warmer than those with an A rating); Laura J. Cushing et al., *Sea level rise and flooding of hazardous sites in marginalized communities across the United States*, 16 Nature Commc'ns (2025) (detailing the increased risks of flood event in areas where coastal power plants, sewage treatment facilities, fossil fuel infrastructure, and industrial facilities are sited).

191. *See* U.S. Dept. of Health and Human Services, Healthy People 2030, https://perma.cc/LZQ3-PZCJ; *see also* Keith H. Hirokawa & Cinnamon P. Carlarne, *The Climate Moratorium,* 11 Tex. A&M L. Rev. 365 (2024) (discussing the need for vulnerability assessments and climate equity planning that considers moratoria to avoid further climate harms).

II. Repairing the Value of Places

In grappling with the complexities of the climate crisis, scholars and policymakers alike have proposed various frameworks, goals, and targets to reduce the impacts of global warming. Despite the need for meaningful action, calls to hold temperature increases to at least 1.5 degrees Celsius above pre-industrial levels[192] and encourage managed retreat[193] have not yet penetrated society's mainstream. Even smaller goals such as incentivizing renewable energy sources and sustainable development practices have not fully been realized.[194] Whether taking a climate resilience, mitigation, or adaptation approach, there have been resounding calls for governments, businesses, and individuals to change their behaviors in order to save us all from an impending threat. Yet, making a shift toward a more resilient future also means contending with systems of the past.

The property valuation structure is rife with potential for restructuring amidst the climate crisis. The existing valuation scheme and regulatory harm to places warrant remediation prior to such restructuring. Many legal regimes exist to restore one's property or repair the damage resulting from dispossession, theft, depreciation, or other harm. This Part examines the possibilities, then describes the methods by which the law has sought to take reparative steps to restore property value. I then offer place-based reparations as the appropriate land use and development framework to mitigate historic harms through an investment in climate resilience.

A. Revising the Story

There is a particular taxonomy associated with reparations—an oscillation between various theoretical principles. There is also connectivity between repairing place-based harms and governing in the midst of a climate crisis. Making the case for place-based reparations is bolstered by exploring the related concept of restitution to fully appreciate the existing legal means of protecting property value and how it can be extended to places. These principles are also an appropriate lens through which the regulatory and conceptual stories can be revised to comport with the changing landscapes (natural, physical, and regulatory) onset by climate change. It is not happenstance that these related terms begin with the prefix "*re*," which, depending on context, can mean again, anew, back, or backward.[195] While it may not be explicitly stated, an underlying principle of restoration and repair is to consider the past while looking toward

---

192. *E.g.*, Advisory Opinion, 31 ITLOS Rep. 37, ¶ 72 (2024).

193. Mark Nevitt, *Destroy, Rebuild, Repeat: How to Break the Climate Disaster Cycle*, 78 Vand. L. Rev. 493, 528–36 (2025).

194. Karrigan Bork et al., *Living the Good Life in the Anthropocene*, 54 Env't L. Rep. 10857, 10864–10868 (2024).

195. *Re*, Merriam-Webster Dictionary, https://perma.cc/4V3Z-CKSW.

the future. Each of these concepts incorporates an element of remediation that is grounded in forgiveness, reconciliation, and recompense for unjust enrichment. These concepts exemplify instances when law takes an equity-centered approach to remediation. They also provide existing frameworks through which the rationale for place-based repair can be explored.

1. *Restitution*

Restitution is a body of law that is connected to both civil and criminal practice, serving as a type of remedy and source of liability. This area of law is grounded in the principle of unjust enrichment—obtaining a benefit from another that is not intended as a gift and is not legally justifiable.[196] As a remedy, restitution is often measured in monetary value, and courts determine the value of harm by assessing the defendant's gain rather than the plaintiff's loss.[197] If a defendant's tort, breach of contract, or violation of property rights results in unjust enrichment, a plaintiff may often choose between compensatory damages (focus on plaintiff's loss) and restitution (focus on defendant's gain).[198] Depending on the particular situation, restitution may exceed a plaintiff's loss or may be easier to prove.[199] And in instances of specific restitution,[200] there is an element of direct restoration, a disgorgement of property that has been misappropriated.[201] Courts have found a duty to make restitution where one confers an advantage upon another and the "retention of the benefit without compensating the one who conferred it is unjustified."[202] This duty includes failure to pay a finder's fee or even a bank mistakenly depositing money into an incorrect account.[203] Restitution as a remedy offers courts a level of flexibility to attempt to restore

---

196. *See Unjust Enrichment*, Black's Law Dictionary (12th ed. 2024).
197. *Id.*; *see* Douglas Laycock, *The Scope and Significance of Restitution*, 67 Tex. L. Rev. 1277, 1284–86 (1989).
198. Doug Rendleman, *Measurement of Restitution: Coordinating Restitution with Compensatory Damages and Punitive Damages,* 68 Wash. & Lee L. Rev. 973, 985 (2011).
199. Rendleman referred to other scholars to explain the prerequisites for restitution as a distinction between "giving back" and "giving up." *Id.* at 981. A defendant will be required to "give back" any gains that they have mistakenly gained as in the case where a bank inadvertently deposits money in the wrong account. *Id.* at 981–82. Conversely, a defendant will be required to "give up" gains in excess of a plaintiff's loss where the defendant acted "wrongfully," and/or committed some other misconduct. *Id.*
200. Specific resitituion is an asset-based remedy that confers the particular or a substitute asset back to the plaintiff. *See generally* Colleen P. Murphy, *What is Specific About "Specific Restitution,"* 60 Hastings L.J. 853 (2009). Specific restitution is most closely related to Rendleman's description of "giving back" or returning gains from property transmitted or conveyed inadvertently.
201. Laycock, *supra* note 194, at 1290; Rendleman, *supra* note 195, at 985–86.
202. Bloomgarden v. Coyer, 479 F.2d 201, 211 (D.C. Cir. 1973).
203. *See id*. at 210; Andrew Kull, *Rationalizing Restitution*, 83 Cal. L. Rev. 1191, 1192 (1995).

the person who was harmed and potentially place them in a more advantageous position than they were in previously.

Within the criminal law context, restitution can include reimbursement for direct financial losses as well as "compensation for abstract emotional and psychological injuries," such as payment for mental health treatment.[204] In recent years, there has also been a shift in criminal law with the victims' rights movement, encouraging courts to acknowledge victims' losses even where the defendant did not directly receive a benefit.[205] This expansion of the type of harms for which a court will provide recovery suggests that some harms to plaintiffs require an offender to provide redress for a broader scope of issues than the direct harm that was inflicted.[206]

Restitution can also be a source of liability where a person has been unjustly deprived of property, its value, or the value of their labor.[207] Scholars have described this area of law as a relatively abstruse gap-filler for causes of action that do not fit squarely within the confines of tort and contract law.[181] In essence, restitution provides an opportunity for resolve in situations where there is a quasi-contract, or a benefit is conferred intentionally, by mistake, or during an emergency.

Within the historical context described in this Article, certain places were enriched by virtue of both governmental action and inaction. There may not be a one-to-one comparison as it relates to a traditional plaintiff and defendant, but there are certainly similar analytical comparisons that can be drawn between people being unjustly enriched and places benefiting from preferential treatment. In this example, marginalized places are in a similar position as

204. Cortney E. Lollar, *What Is Criminal Restitution?*, 100 Iowa L. Rev. 93, 100 (2014).

205. *Id*. at 101.

206. The theory of restorative justice is also relevant to this discussion as it incorporates principles that are critical to a place-based value assessment. Restorative justice is a multifaceted theory within criminal law that challenges traditional dispute resolution by focusing on repairing relationships and prioritizing rehabilitation over punishment. It encompasses three key conceptions—encounter, reparative, and transformative—each promoting dialogue and non-adversarial engagement among affected parties. The encounter conception encourages active participation from the offended party in determining resolutions, while the reparative conception emphasizes correcting injustices to repair harm. The transformative conception advocates for a shift toward collectivism, recognizing interconnectedness among individuals and the environment, and ensuring equitable resource allocation. Although restorative justice is often critiqued for its reliance on psychological and sociological principles rather than strict legal frameworks, it offers valuable insights for fostering accountability, inclusivity, and a holistic understanding of human relationships in the context of sustainability and placemaking. *See* Aparna Polavarapu, *Myth-Busting Restorative Justice: Uncovering the Past and Finding Lessons in Community*, 13 U.C. Irvine L. Rev. 949, 949 (2023); Christian B.N. Gade, *"Restorative Justice": History of the Term's International and Danish Use*, *in* Nordic Mediation Research 27, 27–40 (Anna Nylund et al. eds., 2018); Gerry Johnstone & Daniel W. Van Ness, *The Meaning of Restorative Justice*, *in* Handbook of Restorative Justice 1, 1–19 (Gerry Johnstone & Daniel W. Van Ness eds., 2007).

207. Restatement (First) of Restitution §§ 4–5 (Am. L. Inst. 1937).

plaintiffs and valued places are in a similar position as defendants. For instance, the differential in land value, tax assessment, home ownership, and other metrics are indicators that reflect how marginalized communities compare to those valued places that received government benefits and other preferential treatment unjustly and unjustifiably.

More generally, restitution as a body of law exists to ensure that a person is not enriched by frivolous means. The same should be true for places. The denial of benefits and disinvestment does not produce a particular cause of action in the traditional sense, but assessing the appropriate remedy from the perspective of places where government created and protected value arguably warrants restitution for the places that were denied such enrichment. The lack of investment, approval of locally undesirable land uses, and a desire to maintain homogeneity resulted in certain places being unjustly or unjustifiably enriched in resources such as increased home values, access to amenities, and a better quality of life.

Restitution as a concept, as well as other equitable principles, suggests that the law and legal structures is inclined to provide recourse when a person has received an unjustifiable benefit. The same logic could, and should, extend to places. Direct restoration is impossible, but repair and remediation are in fact possible. Reparative steps can be taken in an attempt to cure the unjust enrichment problem that continues to persist in places that have been marginalized since zoning, land use planning, and home financing were implemented over 100 years ago.

2. *Reparations*

Unlike restitution, reparations have not been a prominent remedy within the American legal system.[208] As such, many perspectives on reparations have been shaped by media and popular culture. At a baseline, the dictionary defines reparations as "repairing or keeping in repair; the act of making amends, offering expiation, or giving satisfaction for a wrong or injury."[209] By these terms, fixing a cracked cell-phone screen, apologizing for an ignorant comment, and reimbursing someone for damaging their property each constitutes a reparation. Within a legal context, reparations are the remedy owed to an injured party by virtue of another's transgression.[210] Reparations can include restitution,

---

208. The most prominent example within the United States is reparations for Japanese-Americans who were interned during World War II. *See* Adjoa Aiyetoro, *Achieving Reparations While Respecting Our Differences: A Model for Black Reparations*, 63 How. L.J. 329, 330 (2020).

209. *Reparation*, Merriam-Webster Dictionary, https://perma.cc/C5YG-E5ZM.

210. The *Black's Law Dictionary* definition is similar: "1. The act of making amends for a wrong. 2. (*usu. pl.*) Compensation for an injury or wrong, esp. for wartime damages or breach of an international obligation. 3. *Criminal law.* Recompense for out-of-pocket losses caused by an offense, but not including pain and suffering." *Reparation*, Black's Law Dictionary (12th ed. 2024).

compensation, public investments, satisfaction, or a guarantee of non-repetition.[211] Beyond this denotation, the word reparation connotes polarization and invokes extreme sentiments because the term is most often associated with compensation for a race-based harm.[212]

Scholars have debated the legitimacy and utility of reparations theories for generations.[213] The most prominent reparations narrative in the United States was introduced in Sherman's Order 15 at the end of the Civil War. The proposed reallocation of 400,000 acres of land in forty-acre parcels became the posterchild for demanding the famed "forty acres and a mule" that was contemplated as a post-war remedy.[214] General Sherman and members of Congress recognized the significance of place and understood the value of land in securing one's position within American society. Whether the impetus for the proposal was to actually support refugees and formerly enslaved persons or to curtail southern power, the Act sought to afford men of all backgrounds the opportunity to exercise autonomy over land—in other words, it served as a means of repair for the harms they had endured.[215] While well-intentioned, the land allocation was rescinded within six months and the promise of redress was broken.[216]

Today, scholars continue to engage in the reparations debate from the purview of aboriginal rights, slavery, climate, and environmental justice, among others.[217] For decades, some scholars have asserted that much of legal scholarship

211. *See* Luke Moffett, *Reparations As Balance*, 55 J. Soc. Phil. 624, 624–25 (2023).
212. *See* Carrie Blazina & Kiana Cox, *Black and White Americans Are Far Apart in Their Views of Reparations for Slavery*, Pew Rsch. Ctr. (Nov. 28, 2022), https://perma.cc/PP5Q-C6Z4.
213. *E.g.*, Adjoa A. Aiyetoro & Adrienne D. Davis, *Historic and Modern Social Movements for Reparations: The National Coalition of Blacks for Reparations in America (N'COBRA) and Its Antecedents*, 16 Tex. Wesleyan L. Rev. 687, 687 (2010).
214. *See* Barton Myers, *Sherman's Field Order No. 15*, New Ga. Encycl. (Sept. 30, 2020), https://perma.cc/X2SF-W22S. General William T. Sherman proposed reallocating 400,000 acres of land between South Carolina and Florida in 40-acre parcels. *See id.* Abraham Lincoln was in support of the plan and its recommendations as described in the Freedmen's Bureau Act, which established the Bureau of Refugees, Freedmen, and Abandoned Lands (the "Bureau") in March 1865. *See The Freedmen's Bureau: New Beginnings for Recently Freed African Americans*, Nat'l Museum Afr. Am. Hist. & Culture, https://perma.cc/M4TW-L44P; Freedmen's Bureau Act, 13 Stat. 507 (1865). *But cf.* Ira C. Colby, *The Freedmen's Bureau: From Social Welfare to Segregation*, 46 Phylon 219, 220–21 (1985) (arguing that Lincoln was not that supportive nor motivated as to the passage of the Freedmen's Bureau Act). The Act authorized the Bureau's commissioner to designate tracts of land for the use of loyal refugees and freedmen within insurrectionary states that had been abandoned by the United States for a term of three years at a limited rate. Congress attempted to amend the Act in 1866 to extend the provisions beyond one year and expand the reach to include all states. However, President Andrew Johnson vetoed it finding the law to be a federal infringement of states' rights that discriminated against the southern states which had been fully restored as members of the Union.
215. *See* Colby, *supra* note 210, at 221–25.
216. *See id.* at 222.
217. *E.g.*, Caleb Harrison, *Supersession, Reparations, and Restitution*, 19 J. Ethics & Soc. Phil. 148 (2021); Burkett, *supra* note 9, at 446–47.

on reparations had been "dramatically undertheorized" and was lacking in firm analysis.[218] It was their position that sophisticated scholarship was limited and should be categorized as positive and explanatory rather than normative.[219] They sought to provide a map of the "intellectual terrain" in an effort to deescalate the contention within the scholarly debate (which has arguably increased since that time).[220] In making their claims, they described the analytic conditions applicable to the reparations schemes within the scope of their review: (i) relaxation of one or both of the requirements of ordinary legal remedies which requires transfer from an identified wrongdoer to an identified victim and (ii) justification on the basis of backward-looking rather than future-oriented reasons.[221] They also explored common hurdles within reparations schemes, including violations of the equal protection doctrine and the inability to accurately identify an injured party and/or the party responsible for redress.[222] Yet, they acknowledged the major reparations projects within the United States and abroad, categorizing them as compensation for a political or moral purpose instead of payment to avoid violence and destruction.[223]

Traditional reparations theories are relationship-driven as between one group that was harmed by the wrongdoings of another. Such focus on the persons involved in the relationship is a primary issue that is ripe for constitutional challenge.[224] Unsurprisingly, the analytic conditions that Posner and Vermeule described have been the subject of much critique within the scholarly debate with some suggesting that their definition of reparations was conceptually flawed[225] while others argue that they presented an incomplete model of reparations.[226]

When considering land reparations as restitution in-kind, Gregory Alexander described three categories of complexities that must be considered: time, people, and land.[227] As to the complexity of time, there is a past, present, and future temporal component. Historical injustices often led to dispossession of land at a particular time and place. Understanding the historical context provides insight into the reverberations of the injustice in the present, which often manifests as socioeconomic disadvantages. Where the injustice is not addressed or reconciled, these issues are constantly perpetuated in the future.[228]

218. Eric A. Posner & Adrian Vermeule, *Reparations for Slavery and Other Historical Injustices*, 103 Colum. L. Rev. 689, 690 (2003).
219. *Id*. at 689–90, 747.
220. *Id*. at 747.
221. *Id*. at 691.
222. *Id*. at 747.
223. *Id*. at 694.
224. Posner & Vermeule, *supra* note 218, at 711.
225. *See* Roy L. Brooks, *Getting Reparations for Slavery Right—Response to Posner and Vermeule*, 80 Notre Dame L. Rev. 251, 255–60 (2004).
226. Alfred L. Brophy, *Reconsidering Reparations*, 81 Ind. L.J. 811, 815–16 (2006).
227. Alexander, *supra* note 52, at 874–901.
228. *Id*. at 879–82.

Alexander notes that some prioritize the restoration of land rights, while others may advocate for structural changes in law and policy to address the historical grievances.[229] He argues that supporting direct land restoration is most compelling in instances when the present circumstances closely mirror those at the time of dispossession, *i.e.*, when the past manifests again in the present.

People are a complexity in the reparations scheme because everyone has differing perspectives about how to identify who is eligible to receive reparations and the appropriate means of repair.[230] Even within similar cultural groups, there is disagreement as to the purpose and function of reparations. Some take the "ethical individualism" approach, believing that only actual victims or those having a "proper relationship" with victims have cognizable claims.[231] Others, however, take the "ethical collectivism" approach, recognizing that reparative efforts can involve large groups and cultures. Per Alexander, the distinction between these approaches lies in whether one believes that moral values, rights, and obligations are only held by an individual or that loosely defined groups—collectives—are entities that are capable of bearing moral rights and responsibilities.[232] The adage 'it takes a village' suggests that very few things are exclusively individualized experiences.[233] Most often, benefits and burdens alike have a ripple effect in the larger group.

Finally, the land complexity centers the metaphysical aspects of a geographic location, including three primary dimensions: physical, psychological, and social. First, the physical component considers the land's natural state as well as the changes made by humans. These changes fundamentally alter the location and remain in place unless and until they are affirmatively removed.[234] This dimension does not ascribe a value judgment to change itself but acknowledges that development of any kind changes a place. Many changes can be remediated, but they require affirmative actions. Second is the psychological component, which can be characterized by an inherent reliance interest as between a person and a place. This is exemplified most notably by indigenous communities' interconnection with land.[235] This reliance can manifest as utilizing land-based resources both for sustenance and one's general welfare.

229. *Id.*

230. *Id.*

231. *Id.* at 886.

232. *Id.*

233. Leopold, *supra* note 52, at 203 (describing the community concept which suggests that individuals are members of communities of interdependent parts).

234. Alexander, *supra* note 52, at 880.

235. Jacinta Ruru, *Indigenous Restitution in Settling Water Claims: The Developing Cultural and Commercial Redress Opportunities in Aotearoa, New Zealand*, 22 Pac. Rim L. & Pol'y J. 311, 330 (2013); Rebecca Tsosie, *Land, Culture, and Community: Reflections on Native Sovereignty and Property in America*, 34 Ind. L. Rev. 1291 (2001); Dian Million, "*We Are the Land and the Land is Us*," *in* Racial Ecologies 19, 19–33 (Leilani Nishime & Kim D. Hester Williams eds., 2018).

Finally, the social dimension is related to land's network of interdependent uses and relationships.[236] From a land use context, this can be understood from the regulatory perspective of planning and zoning, but also the dynamism of placemaking. Relationally, the social dimension can also be understood as spaces of dependence and spaces of engagement.[237] Alexander suggests that recognizing land's memory is crucial in discussing reparations as it highlights the deep connections that people have to place.[238]

The physical, psychological, and social dimensions of land's memory are directly aligned with placemaking and how people experience places. Over time, new owners take possession of a place and imprint their own values. These subsequent acts of placemaking do not erase all prior memories of the land.[239] These complexities underscore the need for careful consideration and deliberation in the reparations dialogue, reflecting the historical realities while addressing contemporary inequities. For instance, prior to industrialization, the predominate land ethic was one that valued greenspace and an agrarian lifestyle. Innovation and technological advancement have changed the value system. Despite the changes, land's memory persists. The impacts of marginalization persist. The siting of undesirable land uses persist. And if the governance structures do not expand to incorporate sustainability principles, the effects of the climate crisis will intensify and persist.

* * *

Reparations theories offer a compelling model for remedying place-based harms, as they provide a comprehensive approach that addresses historical injustices tied to land and community displacement. Reparations theories emphasize the need for acknowledgment, restitution, and healing over time, ensuring that collective memory and identity are honored. As compared to restitution, which often limits recompense to the unjustly conferred benefit, reparations theories take a broader approach, offering a more holistic understanding of justice. This includes environmental, social, and economic recognition, potentially fostering repair at both individual and community levels. By integrating these dimensions, reparations not only aim to remedy past wrongs but also strive to create a more equitable future for marginalized places. The climate crisis both invites and mandates the development of more resilient structures and systems, allowing for reparative efforts that will remediate harms of the past and provide for an equitable future.

236. Alexander, *supra* note 52, at 882.
237. *See* Danielle Stokes, *Renewable Energy Federalism*, 106 Minn. L. Rev. 1757, 1789 (2022).
238. Alexander, *supra* note 52, at 882–85.
239. *Id*.

B. Repairing Value: A Climate Resilient, Place-Based Framework

Most discussions around existential aspects of the climate crisis typically do not address the lingering effects of the property value origin story, which is rooted in colonialism and extraction.[240] The layering of discriminatory policies has resulted in harmful, cumulative impacts that disrupt places environmentally, socially, and economically. In planning for the future, one key question is how can the value of places be repaired such that the effects of climate change do not follow a similar trajectory of the past. The conceptual and regulatory stories provide context for how and why places are valued, and the future that is possible when the valuation process is grounded in principles of sustainability.

The sustainability framework offers a lens through which place-based climate governance can be effectuated. As with reparative efforts and making restitution, this is the goal of place-based reparations: to put two things together again,[241] to bring back to a former place, condition, or position,[242] while also transitioning to something new. Even EPA acknowledges that "everything that we need for our survival and well-being depends either directly or indirectly on our natural environment."[243] The natural environment has the greatest impact on humans' well-being and the vitality of all other life forces. As such, EPA believes that "pursu[ing] sustainability is to create and maintain conditions under which humans and nature can exist in productive harmony to support present and future generations."[244] This invitation to create and maintain harmonious conditions as between animate and inanimate species requires that many of the relational aspects of place be reconceptualized. Doing so means upending existing structures and valuation systems that have traditionally promoted dissonance and instead transitioning to a system that assesses value more comprehensively.

Sustainability generally means "meeting the needs of the present without compromising the ability of future generations to meet their own needs."[245] Within the corporate context, sustainability has been described as the triple bottom line: people, planet, profit.[246] This tripartite assessment guides companies'

240. Olúfẹ́mi O. Táíwò, Reconsidering Reparations 18–41 (2022).

241. *See Repair*, Merriam-Webster Dictionary, https://perma.cc/V5NM-A962; *cf. Repair*, Black's Law Dictionary (12th ed. 2024).

242. *See Restore*, Merriam-Webster Dictionary, https://perma.cc/4SBV-Q2P8.

243. *Learn About Sustainability*, EPA (Oct. 1, 2024), https://perma.cc/44LE-2VGY.

244. *Id.*

245. *Sustainability*, United Nations Academic Impact, https://perma.cc/D2E9-HS7G; *see also* Wayne M. Feiden & Elisabeth Hamin, Am. Plan. Ass'n, Assessing Sustainability: A Guide for Local Governments 3 (2011), https://perma.cc/ZW8N-2YQ9.

246. Kelsey Miller, *The Triple Bottom Line: What It Is & Why It's Important*, Harv. Bus. Sch. Online (Dec. 8, 2020), https://perma.cc/9JSJ-79PS.

decision-making processes in an effort to evaluate value more holistically.[247] Graphics are often utilized to depict the elements of sustainability visually to make abstract relationships more concrete. In the corporate sphere, sustainability has been depicted as a Venn diagram with sustainability achieved at the point at which the three concepts overlap as shown in Figure 4.[248] This model seems to suggest that each element is equally significant and that sustainability is achieved when the concepts converge.

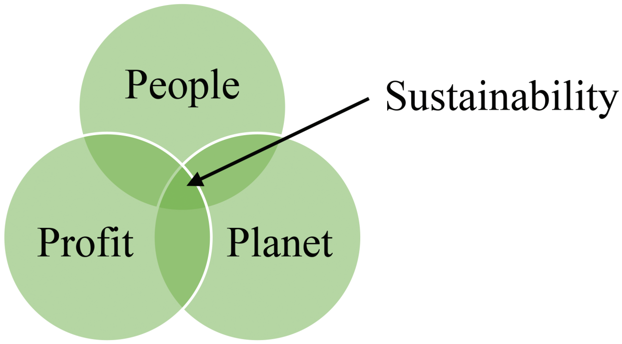

Figure 4

Within environmental science on the other hand, sustainability is depicted as nested concentric rings, and is often defined with three "E"s—environment, (social) equity, and economy.[249] This model illustrates the notion that well-being is contingent upon the condition of the environment as seen in Figure 5. In general, nested systems are configured such that smaller order systems are embedded into larger order systems.[250] In the nested system of sustainability, the environment is the outermost ring indicating its significance as related to social equity and economics. These smaller order elements are more likely to thrive when the larger order element thrives. Within the land development and the regulatory sphere more broadly, the order of significance is inverted and there can be variation between the placement of the equity and economic rings as seen in Figures 5 and 6.[251] This discrepancy is indicative of the weight placed

247. *See* Danielle Stokes, *Renewable Energy Federalism 2.0*, 109 Minn. L. Rev. 3017, 3028 (2025) [hereinafter Stokes, *REF 2.0*].

248. *See infra* Figure 4.

249. Kylie Korsnack & Daniel Emmett Hart, *Climate Fiction and Social Change*, 3 Contingencies 1, 1 (2025).

250. *See* Jesko Schulte & Sören Knuts, *Sustainability Impact and Effects Analysis – A Risk Management Tool for Sustainable Product Development*, 30 Sustainable Prod. & Consumption 737, 738 (2022); Katarina Bajc & Antje Stokman, *Design for Resilience: Re-Connecting Communities and Environments*, 6 Landscape Architecture Frontiers 14, 18 (2018).

251. *See infra* Figures 5, 6.

on the economy as compared to social equity depending upon the interests being served.

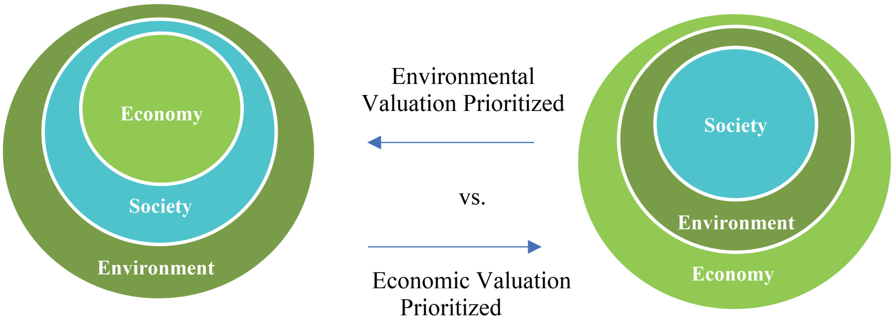

Figure 5 *Figure 6*

This ordering is necessary to influence policy goals and the ways in which they are incentivized. Where economics are prioritized at the expense of social equity, places and their value are defined primarily from a quantitative perspective which often disincentivizes a more holistic, qualitative valuation process. While place-based reparations are designed to make this shift within previously harmed places, there is also an opportunity to allow for a broader recalibration from economic-centric policies to those that are environment- and equity-centric.[252] Such recalibration also encourages sustainable development and climate resilience.[253]

As the climate crisis has become more mainstream, scholars, practitioners, and community members have challenged the notion that the environment is simply a commodity. Many have explicitly acknowledged its inherent value to human well-being and to the general welfare. Whether advocating for a global land ethic or environmental, social, and governance frameworks within the corporate sphere, sustainability has been a linchpin in the public and private sector.[254] Sustainability frameworks have also been rife with critiques related to greenwashing and value maximization schemes and to consumer misinformation more broadly.[255] This does not, however, negate the utility of the sustainability framework, but rather illustrates the need for additional safeguards.

---

252. *See* Karrigan Börk et al., *Adapting to a 4 Degree Celsius World*, 52 Env't L. Rep. 10211, 10228 (2022) (discussing the hyper-focus on economic analysis and the need to take a more holistic approach to sustainability).

253. There will necessarily be trade-offs as related to benefits and burdens, but the goal is to distribute them more equitably. *See, e.g.*, Kaswan, *supra* note 96, at 1031–32 and Shoemaker, *supra* note 4, at 820.

254. *See* Leopold, *supra* note 52, at 203–20; Andrew Johnston et al., *Corporate Governance for Sustainability* (Univ. of Columbia, Working Paper, 2019) at 1.

255. *See* Mary Wood, *Could ESG Investing Be At a Turning Point? Professors Weigh in on "Common Law,"* Univ. of Va. (Mar. 12, 2024), https://perma.cc/YM77-3RC6; Jeannie Naujeck, *How the Environmental, Social, and Governance Movement is Gaining Ground in Boardrooms,*

Frequently, the social equity component of the sustainability calculus is deprioritized or disregarded, resulting in co-opted policies that are ineffective.[256] Within the ever-changing political landscape, equity has become a divisive term that incites contentious debates. Yet, a focus on people and social equity is at the heart of environmental justice, particularly when considering procedural and distributive justice.[257] Making a decision to reengage with and prioritize equitable principles—in both the procedural and distributive contexts—means contending with the regulatory and conceptual stories of place, how these stories relate to sustainability, and the role of these stories in developing places that are climate resilient.

Traditionally, sustainability and climate resilience have been isolated concepts within legal academia. Sustainability is the lens through which goals are articulated for purposes of natural resource consumption, infrastructure development, and economic growth.[258] These goals are measured temporally, considering the present and the future. Climate resilience, on the other hand, is the ability to plan for, absorb, and recover from a disruption onset by climate change.[259] Most often, climate resilience literature considers disaster management, ecological system viability, and vulnerability.[260] Scholars such as Shalanda Baker suggest that both sustainability and climate resilience are buzzwords that do not engage with larger socio-political elements of holistic policymaking,[261] but these frameworks are malleable enough to do so if operationalized with the *Three E's* as a foundation.

Developing and implementing a place-based reparations theory that is grounded in principles of sustainability is one method of securing a climate resilient future. Place-based reparations are a means of addressing socio-spatial harms established and perpetuated by government action and inaction, by incorporating a sustainability-driven valuation process in decision-making to

Law Firms, and Legal Scholarship, Duke L. Mag. (2021), https://perma.cc/8SZC-MEPW (discussing the complexities and limitations of ESG goals).

256. *Cf.* Douglas A. Kysar, *Sustainability, Distribution, and the Macroeconomic Analysis of Law*, 43 B.C. L. Rev. 1 (2001).

257. *See, e.g.*, Paolo Tomassetti, *Labor Law and Environmental Sustainability*, 40 Comp. Lab. L. & Pol'y J. 61 (2018); *see generally* Mary E. Guy & Sean A. McCandless, *Social Equity: Its Legacy, Its Promise*, 72 Pub. Admin. Rev. S5 (2012).

258. *See generally* Robin Kundis Craig & Melinda Harm Benson, *Replacing Sustainability*, 46 Akron L. Rev. 841 (2013) [hereinafter *Replacing Sustainability*]; Robin Kundis Craig & Melinda Harm Benson, The End of Sustainability: Resilience and the Future of Environmental Governance in the Anthropocene (2017) [hereinafter The End of Sustainability]; Ruhl, *supra* note 10.

259. *E.g.*, Donald T. Hornstein, *Public Investment in Climate Resiliency: Lessons from the Law and Economics of Natural Disasters*, 49 Ecology L.Q. 137, 139–42 (2022).

260. *See id.* at 140–42; *see generally* Craig & Benson, The End of Sustainability, *supra* note 254.

261. Shalanda H. Baker, *Anti-Resilience: A Roadmap for Transformational Justice within the Energy System*, 54 Harv. C.R.-C.L. L. Rev. 1, 7–8 (2019).

ensure that benefits and burdens are allocated equitably.[262] Place-based reparations allows for holistic assessment and siting standards that acknowledge how policies of the past shaped the present and how actions of the present shape the needs of the future. This theory is best understood as a reconceptualization of how place is both understood and valued. It allows for reparative efforts to be implemented and assessed with an eye toward sustainability and climate resilience.

My earlier article, *From Redlining to Greenlining*, was an initial foray into exploring place-based harms induced by discriminatory zoning ordinances, deed restrictions, and home financing.[263] It considered how redlining and siting locally undesirable land uses in the past established marginalized places that continue to experience environmental harms in the present. Greenlining was offered as a reparative means of addressing the past harms by investing in and revitalizing these historically marginalized places.

From Redlining to Greenlining presented three cities as case studies: Houston, Texas; Los Angeles, California; and Richmond, Virginia. Each city was redlined during the HOLC era and experiences unique environmental challenges today. In Houston, hazardous waste facilities are more prevalent in areas formerly graded C or D.[264] Between 2021 and 2022, state and local public health agencies found dioxin and other toxic substances during soil and groundwater testing in these areas.[265] In Los Angeles, areas formerly graded D have higher concentrations of PM2.5 as compared to the prior A-grade areas.[266] Further, in Richmond, places formerly graded D are deemed urban heat islands with a summer temperature differential in excess of two degrees Fahrenheit.[267] Historically, these formerly redlined areas were undervalued financially. Because of discriminatory zoning regulations, this harm continues. In its 2024 economic

262. Socio-spatial theory provides that geography is constituted by and is constitutive of social relations. *See* Peter Jakobsen et al., *Geographies and Theories of Geography: An Introduction*, *in* Socio-Spatial Theory in Nordic Geography 1, 2–14 (Peter Jakobsen et al. eds., 2022). Scholars have determined that socio-spatial theory is "most powerful when it (a) refers to historically specific geographies of social relations; and (b) explores contextual and historical variation in the structural coupling, strategic coordination, and forms of interconnection" among different dimensions. Bob Jessup et al., *Theorizing Socio-Spatial Relations*, 26 Env't & Plan. D: Soc'y & Space 389, 392 (2008). Socio-spatial relations have been thought to include territory, place, scale, and networks. Further, within the context of socio-spatial integration, proximity, functional relationships, respectful coexistence, identification with common symbols, and multidimensional relationships were critical to establishing community and establishing non-hierarchical relationships. *See generally* Javier Ruiz-Tagle, *A Theory of Socio-Spatial Integration: Problems, Policies and Concepts from a US Perspective*, 37 Int'l J. Urb. & Reg'l Rsch. 388 (2013).

263. Stokes, *supra* note 7, at 636–44.

264. *Id.* at 660–61.

265. *Id.*

266. *Id.* at 658–60.

267. *Id.* at 650–56.

brief, the Federal Reserve Bank of Richmond reported that mortgage rates and fees are higher in previously redlined areas and that mortgage rejection rates are higher for borrowers in areas previously graded C or D.[268] These same places are riddled with environmental harms, substandard infrastructure, and inadequate community resources, evidencing the fact that the intensity of harm is far more acute in marginalized places.[269] These cumulative impacts also do not convey the full scope of the lasting issues and the continued degradation of place.

Greenlining is place-based reparations in action. It is a means by which reparative justice can be achieved through targeted investments and policy changes aimed at correcting historical injustices associated with discriminatory place-based harms. Place-based reparations address the specific needs of affected neighborhoods through initiatives that promote environmentalism, social equity, and economic development. Place-based reparations are not only about correcting past injustices but also about creating equitable opportunities for current and future residents within marginalized places. This involves investments in both infrastructure and community resources in an effort to foster community empowerment and climate resilience more broadly.

Achieving these goals for the future means making changes across scales and sectors. It means advocating for structural changes that address the long-term impacts of place-based harms and establishing policies that will build a more just and equitable society. Sustainability as envisioned within place-based reparations also takes the sustainable collaborative governance model and applies it to repairing marginalized places.[270] This model incorporates robust governance networks that include formal and informal governing bodies. The formal bodies include federal, state, tribal, and local government, while the informal bodies include business, industry, and community.[271] For example, land use planners gather quantitative and qualitative data from various stakeholders to develop community goals and the necessary outputs. These plans contemplate the future of transportation, housing, economic growth, and environmental stewardship, each of which plays a critical role in establishing resilient places.[272]

Yet, these plans have limitations. They do not necessarily consider the origin story of the particular place or the resulting cumulative impacts. There is, however, an opportunity to utilize the land use planning and zoning processes more strategically. Formal and informal governing bodies can utilize collective decision-making processes to not only achieve long-term sustainability

268. Andrew Ellul et al., Fed. Rsrv. Bank of Rich., No. 24-21, Redlining and U.S. Residential Mortgage Market Pricing (2024).

269. *See* Carolyn B. Swope et al., *The Relationship of Historical Redlining with Present-Day Neighborhood Environmental and Health Outcomes: A Scoping Review and Conceptual Model*, 99 J. Urb. Health 959 (2022); *see also Social Determinants of Health (SDOH)*, CDC (Jan. 17, 2024), https://perma.cc/7HRS-KBRV.

270. *See* Stokes, *REF 2.0*, *supra* note 243, at 3026–30, 3043–47.

271. *See id.*

272. *Id.*

outcomes but also address past harms as well. By prioritizing community member expertise and incorporating the best practices, guidance, and resources of business and industry, formal governing bodies could take on regulating place with meaningful reparative efforts.

One of the major advantages of place-based reparations is circumventing claims that the injured parties cannot be ascertained or reducing the possibility that the equal protection doctrine will be violated.[273] Further, place-based reparations melds together many of the goals of traditional reparations theories by encouraging reconciliation and investment.[274] It is also important to note that place-based reparations do not attempt to reallocate land or employ a new system of preferential treatment. The aim is to assess knowledge of the past, which created the cumulative impact of the present, in order to plan for and invest in the resiliency infrastructure and resources necessary for the future. Place-based reparations represent a holistic approach to addressing socio-spatial harms that have arisen through both governmental action and inaction, emphasizing a sustainability-driven valuation process to ensure equitable distribution of benefits and burdens.

The place-based reparations framework incorporates four tenets: acknowledgement, assessment, engagement, and commitment. This approach begins with the acknowledgment and recognition of harm inflicted upon communities, followed by a thorough historical investigation to assess the scope of these harms and their lasting impacts.[275] Central to this process is the commitment to community partnership and engagement, ensuring that those most affected have a voice in shaping the reparative measures. Drawing from the sustainability framework and incorporating community preferences, place-based reparations aim not only to remedy past injustices but also to foster resilient, thriving communities that are empowered to shape their own futures. In this way, the principles of acknowledgment, assessment, engagement, and commitment come together to create a place-based reparations theory that seeks to revitalize and repair the value of places.

Place-based reparations are offered as one way to address historical injustices and their contemporary consequences through targeted investments and climate resilient policies in designated places that have been historically marginalized. Community perspective is a critical component of assessing the appropriate reparative efforts that should be made. Whether the reparations take shape as infrastructure improvements or affordable housing developments, these places deserve valuable investments designed to meet the challenges of the climate crisis and rectify past harms.

---

273. *See supra* Part II.A.

274. *See id*.

275. *See* Brophy, *supra* note 222, at 835 (describing the role of reparations in changing public understanding about the present impacts of past injustice).

III. Developing Equitable Places

Part of repairing value and developing equitable places is engaging government action. Each level of government has been complicit in establishing inequitable places and has a responsibility to right its wrongs. The inherent duties to provide for the public's health, safety, and general welfare were breached at various points in time. These breaches were imprinted upon and have left a lasting impact on the land's memory and the property regulation system. At the outset, the federal government proposed zoning and land use planning as the premier development tool. Its guidance allowed places to develop along inequitable lines. States authorized local governments to exercise zoning authority and developed the parameters of land use plans.[276] Localities subsequently created land use plans and enforced zoning ordinances.

Each regulatory body assisted in isolating the haves from the have-nots both spatially and socially. The impact? Certain places that were eligible for home financing, which yielded wealth, power, and social status, juxtaposed with places that experience the environmental harms of poor air quality, increased heat exposure, and groundwater contamination. These places that bear the burden of environmental harm are also places that do not have the appropriate resources or infrastructure to remediate the harms. They are the places without access to quality healthcare, fresh produce, or energy-efficient equipment. These are the places that need investment in order to become more resilient if they are to withstand the climate crisis. The following sections provide possible methods through which place-based reparations can be operationalized. It then offers procedural and distributive policy considerations for establishing more resilient places.

A. The Value of Climate Resilience

Important theoretical work related to person-centered reparations schemes has helped to lay the groundwork for a place-based theory. For example, identifying the historic harm in need of repair and the appropriate party to provide the remedy is a similar structure utilized in the place-based context.[277] However, place-based reparations are distinct in that they use prescribed criteria—similar to the characteristics within the *U.S. News and World Report* methodology—to establish the metrics by which a place is valued. These metrics

---

276. *See* Erin Ryan, *Zoning, Taking, and Dealing: The Problems and Promise of Bargaining in Land Use Planning Conflicts*, 7 Harv. Negot. L. Rev. 337, 340–41 (2002) (defining land use regulation as a police power employed by local governments); *see, e.g.*, Travis Moore, Neb. Legis. Rsch. Off., Dillon Rule and Home Rule: Principles of Local Governance 1–2 (2020), https://perma.cc/UG3Y-LJHJ (defining how police powers are delegated to localities via states).

277. *See supra* Part II.A.

take the Department of Commerce's historic goal of executing proper zoning that could be undertaken "without injustice and without violating property rights"[278] and help to make it a reality. Value was previously assessed by whether a property was in a homogeneous area with access to green spaces and public amenities or a marginalized place that experienced environmental, social, and economic injustices. In the past, homogeneity was most valuable. Property rights were also limited in marginalized areas, given the limited access to home financing. The property regulation regime effectively deconstructed place into various fragments, ascribing the greatest value to the locational elements, or land uses, deemed worthy of protection (*i.e.*, single-family residential uses), and discounting value associated with anything else (*i.e.*, multifamily residential, commercial, and industrial uses). Doing so removed any credence that was once inherent to the metaphysical elements of place (*i.e.*, social connection and sense of belonging). These inequitable systemic foundations are only exacerbated by climate change.[279] Today, elements such as affordability, health care quality, well-being, and weather temperateness are key metrics in identifying areas in need of repair and determining the appropriate resiliency mechanisms.[280]

Sustainability as the foundation for place-based reparations infuses the values inherent to sustainability and translates the nested systems ordering into analytical tools for land use planning and development schemes within designated places. The existing paradigm assesses the elements of sustainability as independent fragments rather than parts of a whole. For example, formerly redlined areas are often also the places in proximity to hazardous waste sites and are more susceptible to pollutant exposure, increased temperatures, and food insecurity.[281] New development and/or investments within previously redlined places should contend with the environmental, social equity, and economic impacts of how land is used within the area. If these places are to be resilient in the face of the climate crisis, future land use decisions and community development efforts must contend with the present character of places that have resulted from past harms. To do so requires engagement with public and private

278. *See* Standard Zoning Act, *supra* note 81, at III.

279. *Cf.* Sherri Goodman & Pauline Baudu, Ctr. Climate & Sec., Climate Change As a "Threat Multiplier": History, Uses and Future of the Concept 3–6 (Erin Sikorsky & Francesco Femia eds., 2023) (discussing how climate change directly relates to "political and economic instability"—and more) (citation modified).

280. *See generally* Swope et al., *supra* note 265, at 977–81.

281. *See* Jeremy S. Hoffman et al., *The Effects of Historical Housing Policies on Resident Exposure to Intra-Urban Heat: A Study of 108 US Urban Areas*, 8 Climate (Special Issue) 1 (2020) (finding that areas rated D by the HOLC are on average 2.6 degrees Celsius warmer than those with an A rating); Claire Conzelmann et al., *Long-Term Effects of Redlining on Environmental Risk Exposure* 13 (Fed. Rsrv. Bank of Rich., Working Paper No. 22-09R, 2023) (finding that "properties . . . on the lower-graded side of a HOLC border . . . have significantly higher flood factor and heat exposure"); Yasamin Shaker et al., *Redlining, Racism and Food Access in US Urban Cores*, 40 Agric. & Hum. Values 101 (2023) (finding that disinvestment in historically redlined areas has resulted in injustices they deem food apartheid).

stakeholders across scales and developing a set standard for valuation that considers the nuances of each place and the various elements of land's memory.

Mitigation, adaptation, and decarbonization take center stage when considering climate governance. Yet the zoning, land use, and planning processes require a paradigm shift in order to facilitate these goals. Climate resilience is a critical component of this shift as it is a key metric in valuing places.[282] Historically, zoning laws were introduced to promote community health, safety, morality, and general welfare in a nondiscriminatory manner. However, these zoning ordinances formalized discriminatory spatial preferences, leading to segregated communities with varying degrees of access to resources and amenities. This codification of inequity was the catalyst for systemic issues such as decreased property values, increased pollutant exposure, and limited access to public amenities in certain areas.

A contemporary approach to zoning and land use planning must embrace the lessons from the past, specifically the impact of the industrial revolution's siting decisions, redlining's discriminatory home financing allocations, and the disproportionate distribution of undesirable land uses in marginalized places. Structural and systemic transformation is necessary to remedy these historical harms and develop climate-resilient communities for the future. The integration of sustainability as a guiding framework is essential in cultivating resilient places where climate resilience becomes the desired outcome, and reparations serve as the bridge from the detrimental cumulative impacts of the past to a sustainable future.

Governments at all levels have a crucial role to play in this transformation, utilizing a collaborative governance approach that includes a diverse set of stakeholders.[283] The multi-layered regulatory processes that once entrenched systemic inequalities must now be leveraged to facilitate reparative policies that confront both historical and current challenges. Federal, state, and local governments, for instance, have previously engaged in place-based policymaking with an economic focus, such as opportunity zones. In 2017, Congress passed the Tax Cuts and Jobs Act, which established the framework for Opportunity Zones.[284] Opportunity Zones target economic revitalization in under-resourced areas across the United States. This initiative aimed to spark local development by designating specific areas where investors could receive tax incentives for investing in projects through Qualified Opportunity Funds.[285] The designation of these

282. Danielle Stokes, *Climate-Conscious Land Use Planning*, *in* A Research Agenda for US Land Use and Planning Law 187, 189–90 (John J. Infranca & Sarah Schindler eds., 2023) [hereinafter Stokes, *Land Use Planning*].

283. *See* Catherine Millas Kaiman, *Environmental Justice and Community-Based Reparations*, 39 Seattle U. L. Rev. 1327, 1329 (2016); *see also* Brian Kennedy et al., Pew Rsch. Ctr., Americans Divided Over Direction of Biden's Climate Change Policies (2022), https://perma.cc/8BVB-AD8L.

284. Tax Cuts and Jobs Act, Pub. L. No. 115-97, 131 Stat. 2054 (2017).

285. *Id.* § 13823(a), 131 Stat. at 2185.

zones involved a seemingly collaborative effort, with governors setting specific criteria to guide local governments in identifying eligible areas.[286] Although this legislation targeted economic investment, it underscores the importance of incorporating a variety of governance stakeholders. The program is limited in that it fails to provide a holistic set of policy goals, beyond just economic factors.[287] Place-based reparations could operate similarly, while providing incentives associated with the environmental and social equity investments that more comprehensively assess and address the past, present, and future needs of places.

Local governments have also taken on reparative policymaking more expressly in recent years. Notable examples include Evanston, Illinois, and St. Paul, Minnesota. Evanston launched a reparations program in 2019, marking the city as the first municipality in the United States to allocate public funds to address the city's role in perpetuating housing discrimination through zoning ordinances in effect between 1919 and 1969.[288] The ordinances disproportionately affected Black residents, and thus identified these residents as eligible for receiving funds. In 2024, the program faced legal challenges when a conservative legal group filed a lawsuit claiming that the reparations program violates the Equal Protection Clause by discriminating based on race.[289] While the reparations payments continue, the city must expend additional resources to defend the program because of the program's person-centered design.[290]

---

286. *See* Edward W. De Barbieri, *Opportunism Zones*, 39 Yale L. & Pol'y Rev. 82, 134–35 (2020).

287. Scholars have also found that the opportunity zone tax incentive is poorly designed with limited details regarding how the property must be used, who can participate in the investment process, and which properties are eligible for designation as an eligible zone. *See id.* at 125–27. Relatedly, the One Big, Beautiful Bill clarified the definition of "rural area[s]" and the improvement threshold for rural places. Internal Revenue Serv., *Treasury, IRS provide guidance for Opportunity Zone investments in rural areas under the One, Big Beautiful Bill* (Sep. 30, 2025), https://perma.cc/SSA5-6RKC. The opportunity zone program was slated to end December 31, 2026, but the Bill provides for permanent renewal and expansion. Venable LLP, *The One Big Beautiful Bill Act – Impact on the Opportunity Zone Program* (Sep. 18, 2025), https://perma.cc/DDP6-FCBL.

288. *See, e.g.*, Maggie Birkmeyer, *The Nation's First Municipal Reparations Program, Grounded in Black History*, Mellon Found. (June 11, 2024), https://perma.cc/3NU9-BMD6; Memorandum on the Case for Reparations from Evanston City Clerk Devon Reid to Alderwoman Robin Rue Simmons (Apr. 18, 2019), https://perma.cc/CH2S-B5HA; Morris Robinson Jr. & Jenny Thompson, Evanston Policies and Practices Directly Affecting the African American Communities (2021), https://perma.cc/G2WP-WSYY.

289. *See* Complaint, Flinn v. City of Evanston, No. 1:24-cv-04269 (E.D. Ill. May 23, 2024), Dkt. No. 1.

290. *See* Robinson, Jr. & Thompson, *supra* note 288, at 30–40. Here, the city may have circumvented litigation had it focused on investing in the particular places subject to the zoning regulations or those areas where residents were displaced by virtue of zoning restrictions rather than the residents themselves. *See id.* (discussing the relocation patterns once residents were displaced following a rezoning of an African American neighborhood from residential to commercial use).

Additionally, St. Paul, Minnesota, established a fund with the aim of providing down payment assistance to descendants of property owners whose properties were seized by the Minnesota State Department of Transportation during the construction of the Interstate 94 highway project.[291] St. Paul has acknowledged its role in displacing residents and has taken steps toward reparative justice by increasing access to homeownership for those affected.[292] While this initiative does not fully address the wide-ranging harms imposed on the community, it takes an important step in the type of place-based policymaking required to begin the process of repair. These local efforts serve as examples of place-based, reparative policymaking that seeks to remediate government-imposed harms of the past in an effort to create a more equitable future.

Sustainable practices, such as tax stabilization policies and value reassessment within historically marginalized neighborhoods, can have significant reparative functions.[293] These initiatives could be targeted at areas significantly impacted by redlining, displacement due to infrastructure projects like highways, or pollution-emitting facilities. Such efforts would weave climate resilience into the fabric of land use planning, shifting value assessments to include environmental quality, renewable energy generation, and access to green spaces as key metrics.

Implementation requires engagement with formal and informal governance bodies. The federal government could continue implementing community benefit plans and climate resilience grants,[294] while state governments can engage various agencies to provide planning and zoning guidance.[295] Local governments are pivotal in executing programs, offering community training, and addressing stakeholder concerns on the ground. Resource allocation is critical,

291. *Rondo Inheritance Fund Downpayment Assistance Program*, Saint Paul, MN. (Sep. 8, 2025), https://perma.cc/CM8P-H7LP.

292. *See Saint Paul Recovery Act Community Reparations Commission*, Saint Paul, MN. (Jan. 22, 2026), https://perma.cc/5WDW-JFSR.

293. For example, jurisdictions have utilized tax circuit breakers for owners and renters alike to limit one's property tax burden to a proportion of their income. *See* Steven V. Melnik & David S. Cenedella, *Real Property Taxation and Assessment Processes: A Case for a Better Model*, 12 N.Y.U. J. Legis. & Pub. Pol'y 259, 282 (2009); Francine J. Lipman, *How to Design an Antiracist State and Local Tax System*, 52 Seton Hall L. Rev. 1531, 1558 (2022).

294. For example, in 2014, the EPA worked with community members in Saginaw, MI to identify options for developing a land use and infrastructure strategy that stabilizes neighborhoods through the sustainable reuse of abandoned properties, supports redevelopment of abandoned properties as green infrastructure, and creates opportunities for long-term economic growth. Through its collaboration, the EPA was able to provide guidance to any community seeking to return vacant and abandoned properties to productive use in a sustainable and economically resilient way. EPA, Managing Vacant and Abandoned Property in the Green Zone of Saginaw, Michigan (2014), https://perma.cc/9WS2-XT5R; *cf.* Vicki Been, *Community Benefits: A New Local Government Tool or Another Variation on the Exactions Theme*, 77 U. Chi. L. Rev. 5, 6 (2010).

295. *See, e.g.*, *Governor's Office of Land Use and Climate Innovation*, Cal. Off. of the Gov. (July 1, 2024), https://perma.cc/DV5F-USGM.

and governments may need to strategize funding through existing tax revenue or new financial mechanisms, potentially offering incentives such as tax benefits to encourage participation.

This level of revenue generation was previously accomplished via the federal government's Justice40 program, whereby forty percent of funding from climate and clean infrastructure investments was earmarked for disadvantaged communities.[296] By linking funding allocation to community designation, Justice40 also served as a means of place-based repair that would not implicate strict scrutiny and violations of the equal protection doctrine.[297] Prior to its repeal, Justice40 funded numerous programs, including climate change trainings, ecosystem restoration projects, energy efficiency initiatives, and housing grants.[298] Further, states have sought to employ similar strategies, such as a tax on carbon capture and storage, that would allocate a percentage of funds to the locality within which the project is located.[299] Governments are given the latitude to determine how the revenue is allocated. Those with a commitment to sustainability and place-based reparations could earmark funds accordingly.

Ultimately, governments can help to develop and sustain climate resilient places by taking steps to remediate harms of the past and investing in sustainable development practices for the future. This shift toward resilience-based valuation not only addresses past injustices but also equips places to thrive amidst the challenges posed by climate change.

B. Advancing Climate Resilience

Similar to the property value origin story, the case for place-based reparations includes both a regulatory and conceptual story. The regulatory story incorporates collaborative governance between formal and informal structures, and can be operationalized via the land use planning, community investment, and development approval processes. Conceptually, place-based reparations re-engage with the metaphysical aspects of place by embedding sustainability

---

296. Disadvantaged communities were categorized based upon economic (such as a minimum income threshold) and environmental factors (including proximity to hazardous waste facilities and energy burden. Agencies were required to identify such communities for purposes of investment in programs related to climate change, the energy transition, clean transportation, and sustainable housing. *See, e.g.*, Council Env't Quality, *Climate and Economic Justice Screening Tool*, Exec. Off. of the Pres. (Sep. 10, 2023), https://perma.cc/6CN8-SM7P; *see also Home*, Justice40, https://perma.cc/6MVE-SDE9.

297. *See, e.g.*, *The White House Excluded Race from Its Environmental Justice Tool. We Put It Back in.*, Grist (Feb. 24, 2022), https://perma.cc/LN7X-VH9B.

298. *See generally* Exec. Off. of the Pres., Justice40 Initiative Covered Programs List (2023), https://perma.cc/7SGW-UYWK.

299. The Louisiana legislature attempted to impose a tax that would distribute thirty percent of tax revenue received by the state for the storage of carbon to the parishes involved in the capture and storage process with the remaining balance of funds being distributed to the Wildlife and Fisheries Conservation Fund. *See* H.B. 934, 2024 Leg. Reg. Sess. (La. 2024).

principles and striving toward climate resilience, rather than exclusively relying on the limited framework of property valuation and traditional assessment schemes. By infusing more expansive concepts into a dynamic regulatory regime, marginalized places can be remediated to address several of the harmful cumulative impacts of the past.

Land development is a critical component of reparative and future-oriented climate governance. Many local governments engage in robust land use, sustainability, and climate resilience planning. These plans establish a vision for the place, but often lack the breadth of authority to ensure the plan is implemented.[300] Greenlining is offered as one land use planning and zoning tool to identify areas that are eligible for repair. As to the particulars of the social equity investments, relevant stakeholders, those who know and understand the place, are the preferred decision-makers. There are both procedural and distributive policy considerations that may assist decision-makers in promoting environmental stewardship and social equity.

First, when considering procedural considerations, stakeholder engagement is necessary when determining which areas will qualify for place-based reparations via greenlining or other sustainability and climate resilience-centered policy or tool. It is imperative to determine relevant harms to be addressed, whether it be discriminatory zoning, redlining, or displacement due to highway development. Each is correlated to increased exposure to environmental harms.[301] Thus, places subjected to these harms may need additional fortification to withstand the climate crisis. To facilitate this process in a manner that is truly place-based means taking inventory of stakeholders' connection to place and understanding the needs of the place in order to determine the harms in need of repair.[302]

Second, rezonings or developments of a particular size would arguably benefit from undergoing a sustainability assessment prior to being approved. The assessment could evaluate how the development impacts the area environmentally, economically, and the social equity implications. Jurisdictions must often determine whether new developments are within the purview of a comprehensive plan, but are often not required to consider sustainability elements in a meaningful way.[303] Undertaking this type of assessment allows decision-makers to take inventory of how new developments would change the character of a place. Further, it could help to build a record of development impacts in

300. The City of Phoenix explicitly stated it cannot implement its sustainability plan, because it needs to work with partners across multiple sectors, and it lacks the legal and institutional authority to completely implement all of the actions necessary on its own. *See* City of Phx., Climate Action Plan: 2021 Edition (2021), https://perma.cc/KB83-5WG3.

301. *See* Swope et al., *supra* note 265, at 976–80, 977 fig. 4; Hoffman et al., *supra* note 187, at 5–11.

302. *See* Kaiman, *supra* note 279, at 1329.

303. *See, e.g.*, City of Hou., *Houston Climate Action Plan* (Apr. 2020), https://perma.cc/74PC-PWA6.

particular places to allow for a more equitable distribution of benefits and burdens when making subsequent decisions.

Finally, the climate crisis can also be an impetus for governing bodies to explore impact fees, proffers, and other exactions through a sustainability lens. Exactions are government conditions that a government imposes on a property owner or developer in accordance with a permitting process to offset the public costs of the development.[304] Degraded environmental resources, increased exposure to pollutants, and economic value depreciation could all be considered public costs that a governing body seeks to offset a portion of the expense onto the developer. Projects may impose disproportionate burdens in either the environmental, social equity, or economic categories. When considering development outcomes, it is important to establish a holistic vision and execute upon that vision, incentivizing development that can remediate or offset harms of the past.

Turning to distributive considerations, sustainable infrastructure is one means of limiting new greenhouse gas emissions within a designated area.[305] In the United States, the commercial and residential sectors account for approximately thirty-one percent of greenhouse gas emissions.[306] As such, incentivizing sustainable development practices is one means of limiting additional cumulative harms in marginalized places. Practically, this can mean setting efficiency standards within the permitting process or revising building code requirements to include efficiency measures via LEED[307] or living building certifications. The LEED rating system has developed standards in an effort to "reduce carbon emissions, energy and waste, conserve water, prioritize safer materials, and lower our exposure to toxins."[308] It includes variations in stringency (*i.e.*, certified, silver, gold, platinum), which allow for jurisdictional discretion in the level of climate resilience that a place seeks to achieve. Living buildings have a comparatively more rigorous certification process that takes a more holistic approach to design.[309] The living building challenge is both a philosophical shift in development standards and a self-proclaimed advocacy tool with a goal of

304. These developments have been scrutinized over time as in infringing upon landowners' constitutional rights related to takings and due process. Through a series of cases, the Supreme Court articulated essential nexus and rough proportionality tests to ensure that an exaction is valid. *See* Nollan v. Cal. Coastal Comm'n, 483 U.S. 825 (1987); Dolan v. City of Tigard, 512 U.S. 374 (1994).

305. Stokes, *Land Use Planning*, *supra* note 278, at 197–99.

306. *See Sources of Greenhouse Gas Emissions*, EPA (Mar. 31, 2025), https://perma.cc/MJ7Q-RZEM. This percentage is as of 2022 and includes electricity end-use indirect emissions.

307. Leadership in Energy and Environmental Design ("LEED") is an international rating system that takes inventory of a building's sustainability metrics. *LEED Rating System*, U.S. Green Bldg. Council, Inc., https://perma.cc/F5NX-8RXJ.

308. *Id*.

309. *See Living Building Challenge*, Int'l Living Fut. Inst., https://perma.cc/XEN6-E7AX.

emphasizing regeneration and self-sufficiency.[310] Buildings are assessed based upon seven performance areas, or petals, including: place, water, energy, health and happiness, materials, equity, and beauty.[311]

Further, investing in innovative land use and development schemes such as agrihoods helps to prioritize green spaces, social connections, and sustainable living.[312] Agrihoods are mixed-use developments that integrate agricultural, residential, and commercial uses in one area.[313] They help redefine the concept of place and provide a platform for involving various stakeholders, including community members, in the development process. Depending on the location, these projects may require rezoning and can be designed to address issues related to housing, infrastructure, and food access.[314]

Each of the interventions described above requires varying levels of resources and political capital, which differ from place to place. These considerations are not meant to be comprehensive, but rather to concretize possible place-based reparative efforts that center sustainability and climate resilience. Decision-makers investing in these initiatives should also consider the long-term implications to ensure that improvements do not inadvertently displace existing residents.[315] Thorough policy analysis is warranted to assess what is feasible in a specific place.

The overarching goal of any place-based reparations policy is to prioritize marginalized places when new resources are available, when new developments are proposed, and when there are planned land use changes. Doing so helps to restore value to places that need it most, enforcing climate resilience and serving as reparations.

Conclusion

The story of place, property, and value in the United States offers insight into the marginalization and environmental injustices prevalent in places across the country—places that have been disproportionately overburdened, places that are now in need of support to withstand the climate crisis. Advancing a comprehensive, place-based reparations theory provides a pathway for addressing these systemic harms and reshaping the existing paradigm of place-value assessment.

---

310. *See id.*

311. *See id.*

312. *See, e.g.*, Rachael Romsa et al., *A Land Use Law Analysis to Empower Small-Scale Agriculture in Teton County, Wyoming*, 25 Vt. J. Env't L. 104, 119 (2024) (discussing the Madison Comprehensive Plan which emphasized the importance of "agrihoods").

313. *E.g.*, *id.*

314. *See, e.g.*, Shaker et al., *supra* note 277, at 102–10.

315. *Cf.* Robert D. Bullard et al., *Addressing Global Poverty, Pollution, and Human Rights*, *in* The Quest for Environmental Justice 279, 293–97 (Robert D. Bullard ed., 2005) (describing various considerations that decisionmakers should make as related to climate and economic justice).

There is value in a nested sustainability framework that respects the environment, prioritizes social equity, and safeguards economic interests. There is value in remediating past harms. There is value in creating safe, secure, resilient places.

The present is a precarious moment in time riddled with uncertainty and a resounding plea for urgent action. True sustainability—considering the past, in the present, to plan for the future—is the type of reparative action that just may yield places that are not only rooted in equity but are climate resilient.