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Planning Milagros: Environmental Justice and Land Use Regulation

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PLANNING MILAGROS: ENVIRONMENTAL JUSTICE AND LAND USE REGULATION

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I. INTRODUCTION

The inequitable distribution of environmental hazards and locally unwanted land uses (LULUs) by race and class in the United States has received much study, reaction, and opposition. Varying, and sometimes competing, conceptions of environmental justice as an empirical, political, legal, environmental, and economic issue have emerged. However, little attention has been devoted to the use of local land use planning and regulation as an environmental justice strategy.[1] This lack of attention ignores the inequitable distribution of land use regulatory patterns according to the racial and socioeconomic composition of neighborhoods. This article documents the disproportionately higher amount of industrial and other non-residential land uses in census tracts where low-income people of color live, based on a study of thirty-one census tracts in seven cities nationwide. In addition, empirical evidence shows that environmental justice advocates are beginning to move from reactive strategies—essentially an "opposition" model of environmental justice—to proactive planning and participation in policymaking. In this new land use planning model of environmental justice, residents of minority and low-income neighborhoods identify not only the activities they wish to exclude from their neighborhoods, but also their visions for what they wish to include in their neighborhoods; in other words, their visions of the public good. A variety of land use regulatory tools implement the land use goals of low-income and minority communities. The tools include changes to comprehensive plans, amendments to zoning codes and maps, and the use of sophisticated, specialized, and flexible zoning tech-

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1. Only five scholars have devoted any attention to land use planning or regulation as an environmental justice strategy. *See* Robert W. Collin, *Environmental Equity: A Law and Planning Approach to Environmental Racism*, 11 VA. ENVTL. L.J. 495, 537–38 (1992) (calling for community-based environmental planning); Jon C. Dubin, *From Junkyards to Gentrification: Explicating a Right to Protective Zoning in Low-Income Communities of Color*, 77 MINN. L. REV. 739, 740–44 (1993) (articulating a theory of a litigation-enforced constitutional and statutory right to protective zoning for low-income communities of color); Yale Rabin, *Expulsive Zoning: The Inequitable Legacy of Euclid*, *in* ZONING AND THE AMERICAN DREAM 101 (Charles M. Haar & Jerold S. Kayden eds., 1990) (using case studies to show that cities zone low-income communities of color for intensive land uses, i.e., expulsive zoning); Jim Schwab, *Land-Use Planning and Environmental Justice*, ENV'T & DEV. (Am. Planning Ass'n, Chicago, Ill.), July 1995, at 1 (describing environmental justice issues and merely identifying the need for local environmental and land use planning); Robert Sitkowski, *Commercial Hazardous Waste Projects in Indian Country: An Opportunity for Tribal Economic Development Through Land Use Planning*, 10 J. LAND USE & ENVTL. L. 239, 242–70 (1995) (describing models of land use planning to address hazardous waste projects in Indian country). No one, however, has done a systematic quantitative comparison between zoning patterns in low-income, high-minority neighborhoods and zoning patterns in high-income, low-minority neighborhoods. In addition, authors have failed to define either specifics of a land use planning model that will promote environmental justice or concrete and comprehensive land use regulatory mechanisms that low-income and minority communities can use to seek their goals. For a well-described, proactive planning approach to environmental permitting and administrative decision making at the federal level, see Gerald Torres, *Environmental Burdens and Democratic Justice*, 21 FORDHAM URB. L.J. 431, 456–59 (1994).

niques like performance zoning, overlay zoning, conditional use permits, special districts, negotiated zoning, and exactions.

The land use planning model of environmental justice is represented by a movie: *The Milagro Beanfield War*.[2] Directed and produced by Robert Redford and starring Sonia Braga, Chick Vennera, and Panamanian singer and politician Ruben Blades, *The Milagro Beanfield War* is the story of a small, dying, Hispanic town in New Mexico. The movie's connection to environmental justice is often ignored. The town stops a major resort development—an unwanted land use that will harm the local community and environment—when Joe Mondragon plants a beanfield and diverts water from the development to the beanfield. As Joe's beanfield comes to life, so does the local community. Only with alternative plans for the use of the land and local natural resources does the town of Milagro prevent the developer's LULU.

The Milagro Beanfield War explores many classic themes of environmental justice. Powerful outside interests control and finance the large development, which is supported by politicians from the Governor to the Mayor. The proposed project not only threatens the environment by using scarce water and destroying trees and natural landscape, but also threatens to destroy the local community. The promise of jobs is unmasked; instead of prospering, local residents would wait tables, clean rooms, repair cars, and perform other low-wage service jobs for the wealthy outside vacationers. The developer would buy the local property at cheap prices. So-called economic vitality would bring death to the town of Milagro and its way of life. Racism among the developers, politicians, and federal and state law enforcement officials runs rampant. Some local Hispanics have been co-opted with economic and political incentives. There are two armed stand-offs, one between the locals and the U.S. Forest Service officials; the other between the locals and the state police. The heroes are an unemployed rebel (Joe Mondragon, who plants the beanfield), a Latina community activist and car mechanic, a local Anglo progressive lawyer who is enticed to abandon his self-serving cynicism, a sheriff, and a crazy old man (or is he really that crazy after all?) who talks with saints and a dead friend. Longstanding personal conflicts and local quirks are initial obstacles to united community organizing. Milagro's victory comes not from litigation to stop the development, but from community activism led by members of the community. Magic abounds, and miracles occur.

Environmental justice is about the growing awareness of, and response to, the distributional inequities of environmental and land use policy in the United States. In the 1980s and 1990s, grassroots commu-

2. THE MILAGRO BEANFIELD WAR (Universal City Studios, Inc. 1988) (adapted from JOHN TREADWELL NICHOLS, THE MILAGRO BEANFIELD WAR (1985)). *Milagro* means "miracle."

nity organizers and civil rights activists,[3] civil rights lawyers,[4] government agencies,[5] legal scholars,[6] and other academics[7] began to study and

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3. *See generally* CONFRONTING ENVIRONMENTAL RACISM: VOICES FROM THE GRASSROOTS 9 (Robert D. Bullard ed., 1993) [hereinafter CONFRONTING ENVIRONMENTAL RACISM] (addressing aspects of environmental racism and racial prejudice); UNEQUAL PROTECTION: ENVIRONMENTAL JUSTICE AND COMMUNITIES OF COLOR at xvii–xix (Robert D. Bullard ed., 1994) [hereinafter UNEQUAL PROTECTION] (analyzing history of environmental racism and grassroots coalitions); UNITED CHURCH OF CHRIST COMMISSION FOR RACIAL JUSTICE, TOXIC WASTES AND RACE: A NATIONAL REPORT ON THE RACIAL AND SOCIO-ECONOMIC CHARACTERISTICS OF COMMUNITIES WITH HAZARDOUS WASTE SITES at xv (1987) [hereinafter UNITED CHURCH OF CHRIST REPORT] (concluding that race was a factor in location of hazardous waste facilities in the United States).

4. *See generally* Luke W. Cole, *Empowerment As the Key to Environmental Protection: The Need for Environmental Poverty Law*, 19 ECOLOGY L.Q. 619, 621 (1992) [hereinafter Cole, *Empowerment*] (examining "'environmental poverty law' in the context of lawyering for social change and social justice"); Luke W. Cole, *Environmental Justice Litigation: Another Stone in David's Sling*, 21 FORDHAM URB. L.J. 523 (1994) [hereinafter Cole, *Litigation*] (proposing litigation strategies for environmental justice cases).

5. *See generally* FLORIDA ENVIRONMENTAL EQUITY AND JUSTICE COMMISSION, FINAL REPORT (1997) [hereinafter FLORIDA REPORT] (studying and compiling information implicating environmental justice concerns in Florida); U.S. ENVTL. PROTECTION AGENCY, ENVIRONMENTAL EQUITY: REDUCING RISKS FOR ALL COMMUNITIES (1992) [hereinafter EPA, ENVIRONMENTAL EQUITY] (reviewing data on distribution of environmental exposures and risk across population groups); U.S. GENERAL ACCOUNTING OFFICE, SITING OF HAZARDOUS WASTE LANDFILLS AND THEIR CORRELATION WITH RACIAL AND ECONOMIC STATUS OF SURROUNDING COMMUNITIES (1983) [hereinafter GAO REPORT] (describing racial and economic characteristics of communities near hazardous waste landfills in southeastern states); Rodger C. Field, *Siting Justice and the Environmental Laws*, 16 N. ILL. U. L. REV. 639 (1996) (considering the effects of environmental justice on industrial development); *Historic Environmental Racism Task Force Submits Recommendations*, TEX. NAT. RESOURCES REP., Aug. 25, 1993, at 7.

6. *See generally* KENNETH A. MANASTER, ENVIRONMENTAL PROTECTION AND JUSTICE: READINGS AND COMMENTARY ON ENVIRONMENTAL LAW AND PRACTICE (1995) (asserting that an environmental lawyer's role is to guard the environment and to serve justice); Regina Austin & Michael Schill, *Black, Brown, Poor & Poisoned: Minority Grassroots Environmentalism and the Quest for Eco-Justice*, 1 KAN. J.L. & PUB. POL'Y 69 (1991) (addressing aspects of the environmental justice problem); Vicki Been, *Analyzing Evidence of Environmental Justice*, 11 J. LAND USE & ENVTL. L. 1 (1995) [hereinafter Been, *Analyzing Evidence*] (highlighting methodological issues researchers need to address); 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) [hereinafter Been & Gupta, *Coming to the Nuisance*] (studying demographics of host communities); Vicki Been, *Locally Undesirable Land Uses in Minority Neighborhoods: Disproportionate Siting or Market Dynamics?*, 103 YALE L.J. 1383 (1994) [hereinafter Been, *LULUs*] (examining gaps in research of how sites affect socioeconomic characteristics of communities); Vicki Been, *What's Fairness Got to Do With It? Environmental Justice and the Siting of Locally Undesirable Land Uses*, 78 CORNELL L. REV. 1001 (1993) [hereinafter Been, *Fairness*] (discussing difficulties in concept of fair siting programs); Denis Binder, *Index of Environmental Justice Cases*, 27 URB. LAW. 163 (1995) (providing an index of environmental justice cases); Robert W. Collin, *Review of the Legal Literature on Environmental Racism, Environmental Equity, and Environmental Justice*, 9 J. ENVTL. L. & LITIG. 121 (1994) (providing overview of legal literature); James H. Colopy, *The Road Less Traveled: Pursuing Environmental Justice Through Title VI of the Civil Rights Act of 1964*, 13 STAN. ENVTL. L.J. 125 (1994) (exploring use of Title VI of the Civil Rights Act to protect communities from environmental racism); Dubin, *supra* note 1 (articulating a theory of a litigation enforced, constitutional and statutory right to protective zoning for low-income communities of color); Pamela Duncan, *Environmental Racism: Recognition, Litigation, and Alleviation*, 6 TUL. ENVTL. L.J. 317 (1993) (suggesting means for abolishing environmental racism); Sheila Foster, *Race(ial) Matters: The Quest for Environmental Justice*, 20 ECOLOGY L.Q. 721 (1993) (arguing that civil rights propo-

nents should utilize environmental law framework to combat environmental racism); Eileen Gauna, *Federal Environmental Citizen Provisions: Obstacles and Incentives on the Road to Environmental Justice*, 22 ECOLOGY L.Q. 1 (1995) (examining problems faced by low-income and minority communities when bringing citizen suits under complex environmental statutes); Stephen M. Johnson, *The Brownfields Action Agenda: A Model for Future Federal/State Cooperation in the Quest for Environmental Justice?*, 37 SANTA CLARA L. REV. 85 (1996) (addressing whether the problem of environmental justice should be addressed by federal or state government); Richard J. Lazarus, *Pursuing "Environmental Justice": The Distributional Effects of Environmental Protection*, 87 NW. U. L. REV. 787 (1994) (offering a distributional perspective on environmental protection laws and policies); Charles P. Lord & William A. Shutkin, *Environmental Justice and the Use of History*, 22 B.C. ENVTL. AFF. L. REV. 1 (1994) (using historical analysis to explore two recent environmental justice cases that perpetuated the problem); Bradford C. Mank, *Environmental Justice and Discriminatory Siting: Risk-Based Representation and Equitable Compensation*, 56 OHIO ST. L.J. 329 (1995) (disagreeing with the assertion that disparate impact is necessarily attributable to discrimination); Olga L. Moya, *Adopting an Environmental Justice Ethic*, 5 DICK. J. ENVTL. L. & POL'Y 215 (1996) (examining moral and ethical responsibility of environmental lawyers); Peter K. Reich, *Greening the Ghetto: A Theory of Environmental Race Discrimination*, 41 U. KAN. L. REV. 271 (1992) (stating that theories of equality, access to decision making, and community preservation offer recourse for harm to racial minorities); Heidi Gorovitz Robertson, *If Your Grandfather Could Pollute, So Can You: Environmental "Grandfather Clauses" and Their Role in Environmental Inequity*, 45 CATH. U. L. REV. 131 (1995) (arguing that environmental advocates should seek to minimize protections given to facilities by grandfather clauses); Symposium, *Environmental Justice: A Growing Union*, 96 W. VA. L. REV. 1015 (1994) (commenting that law professors play an important role by teaching about environmental racism); Symposium, *Race, Class, and Environmental Regulation*, 63 U. COLO. L. REV. 839 (1992) (identifying and discussing causes of environmental injustice); Symposium, *Urban Environmental Justice*, 21 FORDHAM L. J. 425 (1994) (identifying and discussing causes of environmental injustice); Rachel D. Godsil, Note, *Remedying Environmental Racism*, 90 MICH. L. REV. 394 (1991) (noting that racial minorities bear unequal burden of hazardous waste disposal).

7. *See generally* BRETT BADEN & DON COURSEY, THE LOCALITY OF WASTE SITES WITHIN THE CITY OF CHICAGO: A DEMOGRAPHIC, SOCIAL, AND ECONOMIC ANALYSIS (Irving B. Harris Graduate School of Pub. Policy Studies, Univ. of Chicago Working Paper Series 97-2, 1997) (exploring factors that explain the location of environmental waste sites in Chicago); ROBERT D. BULLARD, DUMPING IN DIXIE: RACE, CLASS, AND ENVIRONMENTAL QUALITY (1990) [hereinafter BULLARD, DUMPING IN DIXIE] (positing that black communities are targeted for sites due to economic and political vulnerability); CONFRONTING ENVIRONMENTAL RACISM, *supra* note 3 (addressing environmental racism and racial prejudice); ENVIRONMENTAL JUSTICE: ISSUES, POLICIES, AND SOLUTIONS (Bunyan Bryant ed., 1995) (describing issues and policies of environmental justice); RACE AND THE INCIDENCE OF ENVIRONMENTAL HAZARDS: A TIME FOR DISCOURSE (Bunyan Bryant & Paul Mohai eds., 1992) [hereinafter RACE AND INCIDENCE] (describing changes in community resistance since the *United Church of Christ Report*); ANDREW SZASZ, ECOPOPULISM: TOXIC WASTE AND THE MOVEMENT FOR ENVIRONMENTAL JUSTICE (1994) (addressing the history of toxic waste); Robert D. Bullard, *Environmental Equity: Examining the Evidence of Environmental Racism*, 2 LAND USE FORUM 6 (1993) [hereinafter Bullard, *Environmental Equity*] (examining patterns of discrimination in siting decisions); Robert D. Bullard, *Race and Environmental Justice in the United States*, 18 YALE J. INT'L L. 319 (1993) [hereinafter Bullard, *Race and Environmental Justice*] (focusing on connection between institutional racism and ecological disparities); Robert D. Bullard, *Solid Waste Sites and the Black Houston Community*, 53 SOC. INQUIRY 273 (1983) [hereinafter Bullard, *Solid Waste*]; Terence J. Centner et al., *Environmental Justice and Toxic Releases: Establishing Evidence of Discriminatory Effect Based on Race and Not Income*, 3 WIS. ENVTL. L.J. 119 (1996) (revealing confusion about environmental problems faced by minorities); Thomas Lambert & Christopher Boemer, *Environmental Inequity: Economic Causes, Economic Solutions*, 14 YALE J. ON REG. 195 (1997) (noting that environmental justice studies have not taken housing markets into account); Kathryn R. Mahaffey et al., *National Estimates of Blood Lead Levels, United States, 1976–1980*, 307 NEW ENG. J. MED. 573, 578 (1982) (finding that black children are exposed to higher levels of lead than white children or adults); Paul Mohai & Bunyan Bryant, *Environmental*

demonstrate that low-income people and people of color bear a disproportionately high burden of exposure to environmental hazards or unwanted land uses, particularly in the neighborhoods in which they live and the environments in which they work.[8] Much of the attention has focused on "environmental racism"—the discriminatory impact, and arguably intentional discrimination, of environmental policy decisions on people of color.[9] The term "environmental justice," however, is used to encompass class discrimination as well as racial discrimination,[10] and soften the divisive, emotionally charged connotation of the term "racism."[11] The term "environmental justice" also suggests actions that respond to injustice, not merely identification of injustice.[12] The response to environmental justice has varied as widely as the range of conceptions that underlie the term.[13] These responses have included litigation using civil rights law and/or environmental law, opposition to administrative permits, political protests, community organizing, legislative proposals,

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Injustice: Weighing Race and Class As Factors in the Distribution of Environmental Hazards, 63 U. COLO. L. REV. 921 (1992) [hereinafter Mohai & Bryant, *Weighing Race & Class*] (discussing recent studies addressing the problem of race and class features in the distribution of environmental hazards); Paul Mohai & Bunyan Bryant, *Race, Poverty & the Distribution of Environmental Hazards: Reviewing the Evidence*, 2 RACE, POVERTY & ENV'T 3 (1991/1992) [hereinafter Mohai & Bryant, *Race, Poverty & Distribution*] (discussing the results of studies addressing racially disproportionate environmental hazard sitings).

8. *See* Carita Shanklin, Comment, *Pathfinder: Environmental Justice*, 24 ECOLOGY L.Q. 333 (1997) (exploring the breadth and depth of materials on environmental justice).

9. *See* Austin & Schill, *supra* note 6, at 73; Robert D. Bullard, *Anatomy of Environmental Racism and the Environmental Justice Movement*, *in* CONFRONTING ENVIRONMENTAL RACISM, *supra* note 3, at 15, 15–22 [hereinafter Bullard, *Anatomy*]; Karl Grossman, *The People of Color Environmental Summit*, *in* UNEQUAL PROTECTION, *supra* note 3, at 272, 283–92. Civil rights leader Benjamin Chavis coined the term "environmental racism." Foster, *supra* note 6, at 732; Grossman, *supra*, at 278. *See generally* Edward Patrick Boyle, Note, *It's Not Easy Bein' Green: The Psychology of Racism, Environmental Discrimination, and the Argument for Modernizing Equal Protection Analysis*, 46 VAND. L. REV. 937 (1993) (examining whether new understandings about racism require a modification of equal protection analysis).

10. *Cf.* Been, *LULUs*, *supra* note 6, at 1383; Cole, *Empowerment*, *supra* note 4, at 621 (examining disproportionate burdens of pollution on low-income communities and poor people); Seth D. Jaffe, *The Market's Response to Environmental Inequity: We Have the Solution, What's the Problem*, 14 VA. ENVTL. L.J. 655, 658–59 (1995) (addressing how economic efficiency affects environmental racism); Mohai & Bryant, *Weighing Race & Class*, *supra* note 7, at 921 (examining race and class in addressing environmental justice problems associated with environmental hazard siting).

11. *See* Lazarus, *supra* note 6, at 790; Gerald Torres, *Race, Class, and Environmental Regulation*, 63 U. COLO. L. REV. 839, 839–40 (1992) (calling for sensitivity to the needs of disparate cultural groups in environmental regulations).

12. *See* MANASTER, *supra* note 6, at 155. The term "environmental racism" labels the actions, motives, and/or institutional biases of polluters and decision makers. The term "environmental justice" focuses on the goals of low-income and minority communities and activists, even if it does not describe the specific content of those goals. *See* Been, *Fairness*, *supra* note 6; *see also* Gauna, *supra* note 6, at 7–8.

13. For a discussion of the terms "environmental racism," "environmental equity," and "environmental justice," see MANASTER, *supra* note 6, at 155; Major Willie A. Gunn, *From the Landfill to the Other Side of the Tracks: Developing Empowerment Strategies to Alleviate Environmental Injustice*, 22 OHIO N.U. L. REV. 1227, 1227–28 (1996).

an Executive Order, empirical studies, and scholarly writings.[14] Minority and low-income communities, like the fictional town of Milagro, N.M., are fighting back.

On the whole, though, the environmental justice movement and the environmental justice literature have been reactive and remedial. It is hardly surprising that neighborhood groups, civil rights activists, progressive lawyers, and grassroots environmentalists have responded to decades of dumping hazards and LULUs in minority and low-income communities with demands to stop and remedy the existing situations. There is a continuing and pressing need to oppose current practices and siting proposals that threaten these communities. Scholars have also largely remained focused on environmental justice as a response to power inequities, race and class discrimination, economic factors, and inadequate environmental protections.

The next frontier for both the movement and the focus of environmental justice scholarship, however, is land use planning by communities of color and low-income communities. Local neighborhoods can use land use planning to articulate visions for what they want their communities to be, and negotiate land use regulations to implement these visions. In other words, they would not be merely late participants in using existing rules to stop (or attempt to stop) current proposals for unwanted land uses, but also pre-siting participants in developing the rules that will determine what will and will not go in their neighborhoods. Land use planning is prospective and proactive. It creates opportunities for residents, workers, and other members of local communities to decide and seek what they want, not merely oppose what they do not want. The land use planning and regulatory model, now emerging among a number of low-income and minority communities, contributes to scholars' understanding of environmental justice problems. It also reflects the reality that the law is about more than litigation, rights, courts, and jurisprudence. The law is about problem-solving, policy making, participation, and regulation, all of which are part of the land use regulatory model.[15]

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14. *See* discussion *infra* Part II.

15. *Compare* Dubin, *supra* note 1, at 779–800 (identifying statutory and constitutional rights to protective zoning), *with* Torres, *supra* note 1, at 453–56 (recommending increased participation in federal and state environmental regulation). For discussions of proactive, preventive approaches to law, see Robert Blomquist, *Government's Role Regarding Industrial Pollution Prevention in the United States*, 29 GA. L. REV. 349 (1995) (discussing preventionism as a cultural and policy idea and the paradigm of pollution prevention, instead of pollution control); John J. Copelan, Jr. & Barbara S. Monahan, *Preventive Law: A Strategy for Local Governments in the Nineties*, 44 SYRACUSE L. REV. 957, 957 (1993) (contrasting preventive law as a proactive approach with litigation as a reactive approach); Stephen M. Johnson, *From Reaction to Proaction: The 1990 Pollution Prevention Act*, 17 COLUM. J. ENVTL. L. 153 (1992) (discussing the proactive approach to pollution prevention facilitated in part by the Pollution Prevention Act of 1990); Thomas R. Mounteer, *The Inherent Worthiness of the Struggle: The Emergence of Mandatory Pollution Prevention Planning As*

Part II of this article describes five different conceptions of environmental justice that pervade the actions of activists and the writings of observers:[16] (A) evidentiary, (B) power, (C) legal, (D) environmental, and (E) economic.[17] Part II demonstrates how each of these conceptions is largely reactive and remedial. Each is part of an opposition model of environmental justice, i.e., focused on opposition to specific LULUs.

Part III turns attention from the distribution of specific LULUs to the distribution of land use regulatory patterns. It contains the results of an empirical study of zoning in thirty-one census tracts in seven cities: Anaheim, CA; Costa Mesa, CA; Orange, CA; Pittsburgh, PA; San Antonio, TX; Santa Ana, CA; and Wichita, KS. These results show that low-income, high-minority neighborhoods contain a greater percentage of industrial and other intensive use zones than do high-income, low-minority neighborhoods. This new evidence, not previously documented in the literature, suggests the need for attention to land use planning and regulation in low-income neighborhoods of color and for additional research.

Part IV introduces an alternative model of environmental justice, a planning model built on the idea that land use plans and regulations are needed as emerging strategies for achieving environmental justice.[18] Part IV describes the nature of land use planning and regulation, and how the planning model differs from the opposition model that currently dominates the environmental justice movement and literature. Case studies

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an Environmental Regulatory Ethic, 19 COLUM. J. ENVTL. L. 251 (1994) (advocating morality-based pollution prevention planning).

16. The "divide" between actions and writings is ambiguous and subtle, at best, and illusory, at worst. Writing about environmental justice could be an action responding to the problem of environmental injustice (however the writer conceives of it), a description of others' actions and reactions, or both.

17. A conception of environmental justice is a way that someone thinks about—or mentally constructs and interprets—the problem of LULUs and pollution among low-income and minority people. *See, e.g.*, Been, *Fairness*, *supra* note 6, at 1001–06 (describing environmental justice as an equality movement resulting from the disproportionate siting of LULUs in low-income and minority neighborhoods). The way that one conceives of the problem tends to influence one's response. If for example, a scholar finds the issue to be largely a puzzle about distributional patterns, the scholar is likely to respond by studying the patterns. *Id.* at 1028–40. If a community activist thinks about environmental justice as primarily an issue of power, as opposed to an issue of legal rights or environmental protection, the activist is likely to respond with political, as opposed to legal or regulatory, activity. *See, e.g.*, Austin & Schill, *supra* note 6, at 74–75 (describing grassroots organizations and their efforts to combat environmental racism through political tactics based on cultural identity). Thus, conceptions of environmental justice influence responses to environmental justice.

The five conceptions discussed here are reflected in scholarship, grassroots activity, legal developments, public interest lawyering, and the like in varying degrees. Uneven treatment of the five conceptions in this article merely reflects different amounts of breadth and depth needed to describe them adequately. There is no attempt to proportionately describe which type of people embrace the different conceptions.

18. There is no *single* correct way of thinking about environmental justice and no *single* effective strategy for seeking it. For expansion of this concept, see *infra* note 533.

provide qualitative empirical evidence[19] that grassroots environmental justice advocates and low-income and minority neighborhoods are beginning to develop land use plans and regulations to address the over-concentration of intensive land use designations in their communities and to define how they would like to see land used. The planning model, with its opportunities and challenges, is emerging at the local level.

Part V explores the various land use regulatory mechanisms that environmental justice advocates can use to implement their visions and plans. These mechanisms include comprehensive planning; zoning amendments (both text amendments and map amendments, but primarily down-zoning); flexible zoning techniques, including conditional uses, overlay zones and special districts, performance zoning, buffer zones, and floating zones; and exactions. Judicial protections of private property interests, state laws that preempt local rejection of LULUs, and the realities of local land use politics limit these tools. Nonetheless, they can be effective when used by a politically active and "negotiation-savvy" neighborhood group with a vision for the local community.

Although this article represents a different way of thinking about environmental justice than the current literature and many activists describe, it does not offer any panaceas or comprehensive answers to environmental injustice. Many communities are looking for *milagros* (miracles). Much of the current literature about environmental justice demonstrates that no single legal or political strategy will solve the underlying problems. Similarly, land use planning and regulation will not solve the multiple, complex problems behind environmental justice concerns: racism; class inequities; land market dynamics; limited natural, human, and financial resources; the failure of humans to be good environmental stewards; the limits of our legal and political systems; greed; envy; and malice. Land use planning and regulation should be one of several mechanisms we can use as we struggle to learn and embrace what is good and right.

II. ENVIRONMENTAL JUSTICE AS A REACTION TO ENVIRONMENTAL INJUSTICE

The range of responses to environmental injustice in the United States[20] reflects the variety of conceptions of environmental justice, as

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19. Qualitative evidence consists of facts and data that are not quantitative. This evidence may include histories (or narratives) of specific communities' problems or legal and political struggles, the results of in-depth interviews, and descriptions of people, groups, events, and the like. *See* discussion *infra* Parts IV.C.1–5.

20. Although environmental injustice and justice have important international dimensions, this article concentrates solely on environmental injustice and justice in the United States. The impact of U.S. laws and policies on U.S. communities receives more in-depth treatment here than would be possible if the article had included the global perspective. For discussions of international environmental justice issues, see Dana Alston & Nicole Brown, *Global Threats to People of Color, in*

well as the complexity of the issues. This article is about the siting of LULUs, which is a major issue in low-income and minority communities, a core focus of the environmental justice movement, and is ripe for new ideas about harm prevention, especially through land use planning and regulation. However, an initial background about environmental justice, in its wide diversity and complexity, aids understanding of the relevant land use issues.

There is confusion about the exact nature of environmental harms or burdens that are distributed inequitably. Exposure to toxic or hazardous substances has received the greatest attention among scholars and activists.[21] This exposure not only comes from neighborhood facilities, like hazardous waste incinerators, petrochemical refineries, lead smelters, solid waste landfills, and radioactive waste disposal sites, but also from lead in home pipes and paint, pesticides in fields where farmworkers work, urban automobile and stationary source emissions that pollute inner city air, and fish from local waters that contain toxic pollutants.[22]

Others have focused on the siting of locally unwanted land uses in low-income and minority neighborhoods.[23] The environmental justice scholar or activist who focuses on LULUs is less concerned with evidence of actual health effects or exposure to known harmful substances than with the actual siting of land uses that pose risks either to the health

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CONFRONTING ENVIRONMENTAL RACISM, *supra* note 3, at 179, 179–94; Harvey Alter, *Halting the Trade in Recyclable Wastes Will Hurt Developing Countries*, *in* AT ISSUE: ENVIRONMENTAL JUSTICE 108 (Jonathan Petrikin ed., 1995); John Bellamy Foster, *The Global Policies of the United States Are Environmentally Unjust*, *in* AT ISSUE: ENVIRONMENTAL JUSTICE, *supra*, at 100; Richard D. Glick, *Environmental Justice in the United States: Implications of the International Covenant on Civil and Political Rights*, 19 HARV. ENVTL. L. REV. 69 (1995).

21. *See, e.g.*, BULLARD, DUMPING IN DIXIE, *supra* note 7, at 1–21; Austin & Schill, *supra* note 6, at 69; Bullard, *Anatomy*, *supra* note 9, at 15, 26–29 & tbl.1 (focusing on industrial toxins, air pollution, and water pollution as byproducts of landfills, pollution by industry, and hazardous waste treatment); Cole, *Empowerment*, *supra* note 4, at 621–31; George Friedman-Jiminez, M.D., *Achieving Environmental Justice: The Role of Occupational Health*, 21 FORDHAM URB. L.J. 605 (1994); Marion Moses, *Farmworkers and Pesticides*, *in* CONFRONTING ENVIRONMENTAL RACISM, *supra* note 3, at 161.

Hazardous substances are materials that present a threat to human health or the environment. *See* 42 U.S.C. § 6903(B)(5) (1994). They are often ignitable, corrosive, chemically reactive, toxic, or explosive. *See* 40 C.F.R. §§ 261.20–.24 (1997) (providing the regulatory definition of the characteristics of hazardous waste). Substances are toxic if low levels of exposure to them cause adverse human health or environmental effects, including cancer, damage to the cardiovascular and respiratory systems, neurological disorders, and reproductive damage. *See* ROBERT V. PERCIVAL ET AL., ENVIRONMENTAL REGULATION: LAW, SCIENCE, AND POLICY 463–64 (2d ed. 1996).

22. *See* sources cite *supra* note 21.

23. *See, e.g.*, MANASTER, *supra* note 6, at 153–239; Been, *LULUs*, *supra* note 6; Bullard, *Environmental Equity*, *supra* note 7, at 6; Robert D. Bullard, *Residential Segregation and Urban Quality of Life*, *in* ENVIRONMENTAL JUSTICE: ISSUES, POLICIES, AND SOLUTIONS 76–77, *supra* note 7 [hereinafter Bullard, *Residential Segregation*]; Centner et al., *supra* note 7, at 128–30. *But see* Robertson, *supra* note 6, at 139 (arguing that, compared to existing sources of pollution and environmental harm, very few new polluting facilities are sited in minority and low-income neighborhoods).

and safety of the residents or to the quality of neighborhood life.[24] Thus, while hazardous waste incinerators and toxic dumps are both LULUs and sources of exposure to hazardous substances, an emphasis on the distribution of LULUs would not include workplace exposures to toxins but would include the siting of prisons, group homes, non-toxic but noisy or unsightly industrial facilities, freeways, and other land uses unwanted by the surrounding neighbors.[25]

Some environmental justice activists and scholars look at the environmental harm as the degradation or exploitation of natural resources, such as the impact of industrial mining and timbering on Hispanic farmers and ranchers in southern Colorado,[26] the impact of water policy on people of color,[27] and the limited access of low-income and minority people to public beaches.[28] Others believe that any exposure to risk of environmental harm is itself a type of harm. They reject risk management and distribution, and instead call for the elimination of pollution altogether.[29] The final "environmental harm" that receives attention is process-oriented: the real harm is the lack of full participation, information, and self-determination for low-income and minority communities in environmental decision making.[30]

To some degree, these various ideas about environmental harm are not mutually exclusive. In fact, the First Annual People of Color Environmental Leadership Summit's *Principles of Environmental Justice*

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24. *See, e.g.*, Bullard, *Residential Segregation*, *supra* note 23, at 76–85.

25. *See* Been, *Fairness*, *supra* note 6, at 1001–06.

26. *See, e.g.*, Devon Peña & Joseph Gallegos, *Nature and Chicanos in Southern Colorado*, *in* CONFRONTING ENVIRONMENTAL RACISM, *supra* note 3, at 141 (examining the environmental, economic, and sociological impact of strip-mining in Colorado's San Luis Valley); James Brooke, *In a Colorado Valley, Hispanic Farmers Try to Stop a Timber Baron*, N.Y. TIMES, Mar. 24, 1997, at A10 (describing the protest of a group of Hispanic Colorado residents to a proposed logging operation which potentially threatens area farmers' access to water through increased soil erosion and earlier snow melt).

27. *See, e.g.*, SANTOS V. GOMEZ & ARLENE K. WONG, PACIFIC INST. FOR STUDIES IN DEV., ENV'T, & SEC., OUR WATER, OUR FUTURE: THE NEED FOR NEW VOICES IN CALIFORNIA WATER POLICY 1 (Working Paper No. 97-02, 1997) (commissioned by EDGE: The Alliance of Ethnic and Environmental Organizations) (discussing concerns of people of color with respect to California water rights).

28. *See, e.g.*, Marc R. Poirier, *Environmental Justice and the Beach Access Movement of the 1970s in Connecticut and New Jersey: Stories of Property and Civil Rights*, 28 CONN. L. REV. 719, 745–47, 811–12 (1996).

29. *See, e.g.*, SZASZ, *supra* note 7, at 137; Cole, *Empowerment*, *supra* note 4, at 644; First Nat'l People of Color Envtl. Justice Leadership Summit, *Principles of Environmental Justice*, RACE, POVERTY, & ENV'T, Fall 1991, at 31–32 [hereinafter People of Color, *Principles of Environmental Justice*]; Gauna, *supra* note 6, at 27.

30. *See* Bullard, *Anatomy*, *supra* note 9, at 18–19, Cole, *Empowerment*, *supra* note 4, at 628, 646, 674–79; Gauna, *supra* note 6, at 27–29; People of Color, *Principles of Environmental Justice*, *supra* note 29, at 31; Reich, *supra* note 6, at 277. *But see* Naikang Tsao, *Ameliorating Racism: A Citizen's Guide to Combating the Discriminatory Siting of Toxic Waste Dumps*, 67 N.Y.U. L. REV. 366, 368–78 (criticizing process-oriented approaches to addressing environmental injustice).

contains all of them.[31] However, those who speak and write about environmental justice should be scrupulously clear about what problems they are discussing. Indiscriminate inclusiveness tends to confuse the discourse, with different people talking about different problems under the overly-broad truism that societal racism and classism result in many harms to minorities and the poor. More importantly, the same response may not be appropriate for different types of harms. For example, changes in landfill siting processes to involve potentially affected neighborhoods will do little to affect the impact of existing landfills on the neighborhoods in which they exist.[32] Pollution prevention strategies will not necessarily resolve over-exploitation of natural resources harming low-income communities or communities of color. Therefore, although many types of environmental harms deserve attention, this article focuses on the siting of LULUs. Many of the controversies receiving the most attention from activists, media, government, and scholars concern proposed new or modified toxic land uses in close proximity to the homes of people of color and low-income people.

There is also confusion about what the environmental justice movement is trying to achieve. Environmental justice has elements of both environmentalism and civil rights.[33] Merely labeling the environmental justice movement as the juncture of grassroots environmentalism and the civil rights movement, however, reveals very little about the goals and strategies of environmental justice advocates. With respect to the definition of goals, noted environmental justice scholar Vicki Been has pointed out that valence terms like "fairness" are vague and general.[34] Behind calls for "fairness," "justice," and "equity" are divergent conceptions about what is fair, just, and equitable.[35] Furthermore, some in the environmental justice movement have argued not for fairness in the distribution of environmental harms, but for the elimination of the risk of environmental harm for all people—a universal human right to live, work, and play in communities without exposure to environmental

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31. People of Color, *Principles of Environmental Justice*, *supra* note 29, at 32; *see* Omar Saleem, *Overcoming Environmental Discrimination: The Need for a Disparate Impact Test and Improved Notice Requirements in Facility Siting Decisions*, 19 COLUM. J. ENVTL. L. 211, 216–17 (1994) (discussing the First National People of Color Environmental Leadership Summit).

32. *See, e.g.*, Robertson, *supra* note 6, at 158 (arguing that existing sources of pollution are often exempted from tougher new environmental laws).

33. Binder, *supra* note 6, at 163, 163 (recognizing "the coalescence of the environmental and civil rights movements in the overlapping area of environmental justice"); Cole, *Litigation*, *supra* note 4, at 523–26; Steven Paul McSloy, *Closing Remarks, Breaking the Power of the Power Brokers*, 9 ST. JOHN'S J. LEGAL COMMENT. 669, 670 (1994). However, for an argument that the environmental justice movement, while drawing on both environmental and civil rights movements, must necessarily emerge as a distinctly different movement, see Poirier, *supra* note 28, at 800–02. For an argument that the environmental justice movement and the mainstream environmental movement must integrate, see A. Dan Tarlock, *City Versus Countryside: Environmental Equity in Context*, 21 FORDHAM URB. L.J. 461 (1994).

34. Been, *Fairness*, *supra* note 6, at 1007.

35. *Id.*

risks.[36] Thus, thinking of environmental justice as environmentalist civil rights does not identify whether the goal is to prevent identifiable racism or classism in environmental decision making, or to correct past racism or classism, or to prevent or correct disparate impacts across race or class, or to ensure full access of minorities and the poor to decision making, or to prevent or eliminate pollution, or any number of other possible goals. For example, Richard Lazarus states the environmental justice problem as one of unequal distribution of the burdens and benefits of environmental protection policy.[37] In contrast, Been focuses on seven different, and likely competing, theories about the fairness of the substantive inputs, substantive outputs (i.e., results), and process of LULU siting decisions.[38] Peter Reich urges three principles to eliminate environmental racism: (1) "the equality principle," which would protect minorities from disproportionate exposure to environmental hazards; (2) "the access principle," which would remove or minimize barriers to public participation in environmental decision making; and (3) "the community preservation principle," which would recognize and avoid the disruption and psychological stress of minority neighborhoods stemming from proximity to environmental hazards.[39] Many different goals and theories exist.

With respect to the identification of strategies, the term "civil rights" is equally unhelpful. The civil rights movement historically has organized communities, engaged in political protest and civil disobedience, lobbied for public benefits, participated in policy formulation, implementation and enforcement, educated the public, and pressured private economic actors.[40] Civil rights strategies are litigated under a wide

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36. *See* Cole, *Empowerment*, *supra* note 4, at 644–45; People of Color, *Principles of Environmental Justice*, *supra* note 29, at 31–2.

37. Lazarus, *supra* note 6, at 793.

38. Been identifies seven different possible theories about fairness in the siting of LULUs:
> First, fair siting could mean that LULUs are evenly apportioned among all neighborhoods. Second, fair siting might mean that neighborhoods in which a LULU is not sited must compensate the host community for its damages. Third, fairness could require "progressive siting," in which wealthier neighborhoods receive a greater number of LULUs, or pay a greater share of a host community's damages, than poor or minority neighborhoods. Fourth, fairness could demand that all communities receive an equal number of vetoes that they could use to bid against other communities for the privilege of excluding a LULU. Fifth, fair siting might require that those who benefit from a LULU bear its cost. Sixth, fairness could simply require that the siting process involve no intentional discrimination against people of color. Seventh, fair siting could require a process that shows equal concern and respect for all neighborhoods.

Been, *Fairness*, *supra* note 6, at 1008 (footnotes omitted).

39. Reich, *supra* note 6, at 287–90.

40. *See generally* THOMAS R. BROOKS, WALLS COME TUMBLING DOWN: A HISTORY OF THE CIVIL RIGHTS MOVEMENT 1940–1970 (1974) (describing events in the history of the African American civil rights movement); THE EYES ON THE PRIZE: CIVIL RIGHTS READER (Clayborne Carson et al. eds., 1991) (compiling original materials and personal narratives from participants of the black freedom struggle).

range of theories—federal and state, constitutional and statutory.[41] Just as there is no single civil rights strategy, there is no single environmental justice strategy.

What, then, are the primary conceptions of environmental justice? This article groups the conceptions generally into five categories: (A) evidentiary, (B) power, (C) legal, (D) environmental, and (E) economic. Despite the differences among the categories, all constitute ways of thinking about environmental justice as a response or reaction to existing or imminent injustice. These responses are, respectively, (A) to study the distribution and causes of environmental injustices, (B) to engage in political activism, (C) to use the law to protect the rights of the subordinated, (D) to increase or improve enforcement of environmental laws, and (E) to use market mechanisms to correct market inequities.

A. *Study Responses (Evidentiary Conceptions)*

Some view the problem of environmental injustice as an evidentiary question.[42] Under this conception, the first steps to addressing environmental justice are to identify and document its existence and its causes. What reliable evidence do we have that environmental benefits and burdens are distributed inequitably according to race and class in the United States? Are the inequities greater according to race or to class or to some combination of the two? What are the causes of these inequitable distributions? When do the injustices arise? Are the causes contextual, varying from case to case, hazard to hazard, or neighborhood to neighborhood?

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41. *See generally* ROY L. BROOKS ET AL., CIVIL RIGHTS LITIGATION: CASES AND PERSPECTIVES (1995) (documenting issues from several sociological perspectives on civil rights litigation).

42. *See, e.g.*, GAO REPORT, *supra* note 5 (presenting data on the correlation between race, income and the location of hazardous waste landfills in the EPA's Region IV); RACE AND INCIDENCE, *supra* note 7 (compiling fourteen articles assessing statistical data regarding race, poverty and the occurrence of environmental hazards); UNITED CHURCH OF CHRIST REPORT, *supra* note 3, at xii–xiv (presenting findings from two studies on the correlation between demographic patterns and commercial and non-commercial waste sites); Been, *LULUs*, *supra* note 6, at 1384–86 (asserting that research showing a correlation between hazardous waste site selection based on race and/or class discrimination fails to consider evidence relating to market dynamics affecting communities hosting locally undesirable land uses); Been & Gupta, *Coming to the Nuisance*, *supra* note 6, at 9 (analyzing evidence of race and class composition in areas where locally undesirable land use sites are located); Bullard, *Environmental Equity*, *supra* note 7, at 324–27 (arguing that empirical evidence establishes a relationship between environmental inequity and race); Bullard, *Race and Environmental Justice*, *supra* note 7, at 319–27 (expanding on the argument presented in Bullard, *Environmental Equity*, *supra* note 7, that communities with large minority populations are victimized by environmental racism); Mohai & Bryant, *Race, Poverty & Distribution*, *supra* note 7, at 3, 24–27; Mohai & Bryant, *Weighing Race & Class*, *supra* note 7, at 921–32 (assessing data relating to hazardous waste siting as it correlates to race and/or income). Those who think of environmental injustice as something to study could include scholars whose livelihoods depend on studying social phenomena, the curious, those who delay action by appointing committees and commissioning studies, believers in the power of information and education to achieve social change, and instrumentalists who seek to use the data in responsive actions. Nonetheless, study is a response to environmental injustice as much as litigation, lobbying, protesting, or negotiating.

Those who ask these questions typically have three purposes in mind. First, well-documented evidence of inequitable distribution of environmental harms is useful in responding to and resisting these problems. For example, studies may be used as evidence of disparate impact in civil rights litigation, support for legislation or regulatory policies, documentation of reasons for denying a permit, indication of a need for tougher enforcement of existing regulations, or information for members of a community about the problems and risks they face. Second, precise identification of the cause(s) of environmental injustice will inherently suggest which strategies might be the most effective in remedying and preventing the injustices. Third, study of environmental injustice adds much to our understanding of the rather murky juncture of the streams of environmental regulation, market dynamics, and racism and civil rights.

1. Early Studies

One of the most significant early distributional studies arose after civil rights protests against a decision to locate a polychlorinated byphenyl (PCB) landfill in mostly African American Warren County, North Carolina.[43] The U.S. General Accounting Office (GAO) undertook an investigation of the distribution of the four major hazardous waste landfills in the Southeast.[44] The GAO found that of the four offsite hazardous waste landfills[45] in the Environmental Protection Agency's (EPA's) eight-state Region IV,[46] three were in communities in which African Americans were a majority of the population.[47] At the time, only about one-fifth of the population of Region IV was African American.[48] In addition, the percentage of people below the poverty level in these four communities ranged from twenty-six percent to forty-two percent.[49]

The GAO study, although the first of its kind, was quite limited in both geography and type of environmental hazard: four major hazardous waste landfills in eight states. In 1986, the United Church of Christ's Commission for Racial Justice undertook a significant, agenda-setting national study of demographic patterns associated with commercial haz-

43. GAO REPORT, *supra* note 5, at 2.

44. *Id.* The landfills addressed in the *GAO Report* consist of the following sites: Chemical Waste Management, Sumter County, Alabama; Industrial Chemical Company, Chester County, South Carolina; SCA Services, Sumter County, South Carolina; and Warren County PCB Landfill, North Carolina. *Id.*

45. Offsite landfills are those that are not part of or contiguous to an industrial facility. *See id.* at 1.

46. Region IV encompasses Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.

47. *Id.* The percentages of African Americans in the census-identified townships or subdivisions where the landfills were located were 90% (Sumter County, Ala.), 66% (Chester County, S.C.), 52% (Sumter County, S.C.), and 38% (Warren County, N.C.). *Id.* at 4.

48. Bullard, *Environmental Equity*, *supra* note 7, at 8.

49. GAO REPORT, *supra* note 5, at 4.

ardous waste facilities and uncontrolled toxic waste sites.[50] The study, issued in 1987, found that three out of every five African Americans and Hispanic Americans nationwide were living in communities with uncontrolled toxic waste sites.[51] Race was the most significant variable in the distribution of commercial hazardous waste facilities, more important than home ownership rates, income, and property values:

> Communities with the greatest number of commercial hazardous waste facilities had the highest composition of racial and ethnic residents. In communities with two or more facilities or one of the nation's five largest landfills, the average minority percentage of the population was more than three times that of communities without facilities (38 percent vs. 12 percent).[52]

Predominantly African American or Hispanic communities contained three out of the five largest commercial hazardous waste landfills in the United States, accounting for an estimated forty percent of the total commercial landfill capacity nationwide.[53]

2. Additional Studies

The *United Church of Christ Report* called for more epidemiological and demographic research on the distribution of environmental hazards,[54] and many have responded.[55] Several significant law review articles have listed and summarized the large number of studies documenting the racial and class distribution of environmental hazards and/or LULUs.[56] The studies cover hazards such as air pollution, lead poisoning, noise pollution, pesticide exposure, rat bites, solid waste landfills, toxic and hazardous waste sites (including landfills; treatment, storage, and disposal facilities; and incinerators), toxic fish consumption, workplace hazards, and occupational disease.[57] Some studies analyze national or

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50. UNITED CHURCH OF CHRIST REPORT, *supra* note 3, at xiii.

51. *Id.* at xiv.

52. *Id.* at xiii (footnote omitted). Even in communities with one commercial hazardous waste facility, there were, on average, twice as many minority people as in communities that did not have any such facility. *Id.*

53. *Id.* at xiv.

54. *Id.* at xvi.

55. *See infra* Part IV.C.1–5. In addition, the United Church of Christ Commission for Racial Justice revisited its report in 1994, using data updated to 1993 from the 1990 census, and found essentially the same disproportionately high percentages of minorities in areas with hazardous waste facilities. *See* BENJAMIN A. GOLDMAN & LAURA FITTON, TOXIC WASTES AND RACE REVISITED: AN UPDATE OF THE 1987 REPORT ON RACIAL AND SOCIOECONOMIC CHARACTERISTICS OF COMMUNITIES WITH HAZARDOUS WASTE SITES at i (1994).

56. *See* Been & Gupta, *Coming to the Nuisance*, *supra* note 6, at 4–5 & n.14; Cole, *Empowerment*, *supra* note 4, at 622–30 & nn.8–18, 27; Mohai & Bryant, *Weighing Race & Class*, *supra* note 7, at 926 & tbl.1 (listing studies).

57. *See* Cole, *Empowerment*, *supra* note 4, at 622–24; Mohai & Bryant, *Weighing Race & Class*, *supra* note 7, at 926 & tbl.1 (listing studies analyzing types of environmental hazards and their correlation to race and class). Bunyan Bryant also argues that communities of color and low-income communities get less than their fair share of (research) money, and that the working poor

multi-city data,[58] others analyze distributional data for particular metropolitan areas,[59] and still others provide detail-rich, contextual case studies of particular communities that face high burdens of environmental harms or LULUs.[60]

Among the national studies, the *United Church of Christ Report* documented the location of commercial hazardous waste sites and uncontrolled toxic waste sites, which pose both a risk of exposure to hazardous or toxic substances and a risk of actual harm to health.[61] In contrast, other national studies have documented actual exposure to health-related environmental harm. For example, data from the National Health and Nutrition Examination Survey showed that the percentage of African American children, six months to five years old, with elevated blood lead levels was six times higher than that of white children of the same ages.[62] The percentage of children whose families' annual incomes were under $6,000 and who had elevated blood lead levels was between two and

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have less health care insurance protection proportionate to the amount of toxic-induced or aggravated health problems they suffer. Bunyan Bryant, *Issues and Potential Policies and Solutions for Environmental Justice: An Overview*, *in* ENVIRONMENTAL JUSTICE: ISSUES, POLICIES, AND SOLUTIONS, *supra* note 7, at 8, 8.

58. *See, e.g.*, UNITED CHURCH OF CHRIST REPORT, *supra* note 3, at 18–21 & fig.A-1 & tbl.B-8 (analyzing data from several cities around the United States); Marianne Lavelle & Marcia Coyle, *Unequal Protection: The Racial Divide in Environmental Law, A Special Investigation*, NAT'L. L.J., Sept. 21, 1992, at S1 (examining how federal environmental law has reacted to polluters in predominantly minority and/or low-income communities throughout the United States); Mahaffey et al., *supra* note 7, at 573 (reporting findings of blood lead levels in children relative to race and family income from sixty-four sampling areas across the United States).

59. *See, e.g.*, ERIC MANN, L.A.'S LETHAL AIR: NEW STRATEGIES FOR POLICY, ORGANIZING, AND ACTION (1991) (focusing on environmental hazards in Los Angeles, California); Bullard, *Solid Waste*, *supra* note 7; Paul Mohai & Bunyan Bryant, *Environmental Racism: Reviewing the Evidence*, *in* RACE AND INCIDENCE *supra* note 7, at 163, 169–74 (presenting evidence from a Detroit area case study on environmental racism); Patrick C. West, *Invitation to Poison? Detroit Minorities and Toxic Fish Consumption from the Detroit River*, *in* RACE AND INCIDENCE, *supra* note 7, at 96–97 (assessing environmental hazards in Detroit potentially caused by "greening" the Detroit River waterfront); Patrick C. West et al., *Minority Anglers and Toxic Fish Consumption: Evidence from a Statewide Survey of Michigan*, *in* RACE AND INCIDENCE, *supra* note 7, at 100–12 (discussing minority exposure to contaminated fish in the Detroit River).

60. *See, e.g.*, BULLARD, DUMPING IN DIXIE, *supra* note 7, at 45–78 (presenting case studies assessing environmental disputes and resolution methods in five predominantly black communities); Bullard, *Race and Environmental Justice*, *supra* note 7, at 329–33 (discussing an incinerator in Los Angeles and a lead smelter in Dallas); Marcia Coyle, *Say "No" to Cancer Alley*, NAT'L. L.J., Sept. 21, 1992, at S5 (examining environmental hazards in Wallace, Louisiana, a poor community of 750 residents, 98% of which are African American); Seth Mydans, *Tribe Smells Sludge and Bureaucrats*, N.Y. TIMES, Oct. 20, 1994, at A8 (reporting on a sewage sludge dump on the Torres Martinez Desert Cahuilla Indian Reservation). *See generally* UNEQUAL PROTECTION, *supra* note 3 (compiling articles examining race, income and the distribution of environmental hazards); Moya, *supra* note 6, at 221–26 (identifying and examining environmental injustices in eleven communities across the United States).

61. UNITED CHURCH OF CHRIST REPORT, *supra* note 3, at xii.

62. Mahaffey, *supra* note 7, at 573, 578.

four times higher than for children of the same race whose families' annual incomes were over $6,000.[63]

A further contrasting nationwide study, the *National Law Journal* study,[64] focused not on exposure to pollutants or siting of hazards, but on government enforcement of environmental laws designed to reduce risk of exposure and risk of harm among already-sited facilities that contain or emit pollutants. The study found, among other facts:

> Penalties under hazardous waste laws at sites having the greatest white population were 500 percent higher than penalties at sites with the greatest minority population. . . . For all the federal laws aimed at protecting citizens from air, water, and waste pollution, penalties in white communities were 46 percent higher than in minority communities. . . . Under the giant Superfund cleanup program, abandoned hazardous waste sites in minority areas take 20 percent longer to be placed on the national priority action list than those in white areas.[65]

A representative local study, Robert Bullard's study of solid waste disposal facilities in Houston from the late 1920s to the mid-1970s, found that African American neighborhoods housed more than seventy-five percent of the city's solid waste disposal facilities.[66] In a case study, Marcia Coyle described Formosa Plastics Corporation's attempt to locate a rayon pulp processing plant, in Wallace, Louisiana, that had the capacity to expand to a polyvinyl chloride plant.[67] Wallace is part of the area known as "Cancer Alley"—for the large number of polluting chemical and oil facilities along a 100-mile stretch from New Orleans to Baton Rouge.[68] This case study is one example of many that identifies the environmental hazards which have been or are being sited in specific low-income and minority communities.[69]

3. Race and Income

One of the most important issues arising in many of the studies is whether race or income is more significant in the distribution of environmental injustice.[70] Race often is the more important factor.[71] Mohai and Bryant have compared twenty-two studies of environmental injustice

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63. *Id.*

64. Lavelle & Coyle, *supra* note 58, at S1.

65. *Id.* at S2.

66. ROBERT D. BULLARD, INVISIBLE HOUSTON: THE BLACK EXPERIENCE IN BOOM AND BUST 71–73 (1987) [hereinafter BULLARD, INVISIBLE HOUSTON].

67. Lavelle & Coyle, *supra* note 58, at S5.

68. *See id.*

69. *See* sources cited *supra* note 58 (referring to case studies focusing on environmental hazards, and race and socioeconomic dynamics within select communities).

70. *See* sources cited *supra* note 58 (referring to articles comparing race and income as the two factors influencing the sitings of environmental hazards).

71. Cole, *Empowerment*, *supra* note 4, at 625; *see* BULLARD, DUMPING IN DIXIE, *supra* note 7; Grossman, *supra* note 9, at 283–92. *See generally* Foster, *supra* note 6, at 731–32 (providing a conceptual background of environmental racism).

across race and/or income.[72] Of sixteen studies that examined both race and class as factors in the distribution of environmental hazards, inequitable distribution by race was present in fifteen studies and inequitable distribution by income was present in thirteen studies.[73] Only ten studies analyzed which of the two was more important: race was more important in seven, while income was more important in three.[74] Six studies analyzed only one of the factors. Five of these six did not analyze race, of which four showed inequitable distribution by income. One of the six studies analyzing only one factor did not analyze income but showed racial inequities.[75]

Some have mistakenly treated the question of whether race or income is more important in patterns of environmental injustice as a question of causation.[76] It is a question of distribution, more precisely the nature of the distribution, not a question of what causes the distribution. In other words, just because LULUs are distributed inequitably by race does not necessarily mean that racism is the cause.

To be sure, inequitable distribution by race tends to support a causal theory of racism. On the other hand, some might think that inequitable distribution by class suggests that market dynamics cause environmental injustice. However, mere correlation of hazards to a particular factor does not prove that discrimination on the basis of that factor in siting those hazards caused the inequitable distribution. For example, even if income were the more important factor, decision makers might be motivated by racism, and may merely use income as a surrogate for race, either out of a desire to avoid liability for more overt racism or out of a vague perception that lower income levels often correlate to racial minority status. Siting by income levels also might reflect class prejudices, not market dynamics. Even if race were demonstrably more important than class, environmental injustice might be the result of a subtle mixing of both racism and classism. Also, inequitable distribution of environmental hazards by race might not be due to racist siting decisions, but instead the result of segregation and discrimination in housing markets,

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72. Mohai & Bryant, *Weighing Race & Class*, *supra* note 7, at 926 & tbl.1. Mohai and Bryant compared only 17 separate studies, but one of these studies covered five separate hazards, each analyzed for inequitable distribution by race and class and each reported in Mohai & Bryant's table. *Id.* Thus, I treat their comparison as covering essentially 22 studies.

73. *Id.*

74. *Id.*

75. *Id.*

76. *See, e.g.*, Bullard, *Anatomy*, *supra* note 9, at 21–22 (arguing that racism has created disparate living conditions); Centner et al., *supra* note 7, at 125 (asserting that discriminatory siting of hazardous waste sites is not supported by statistics, and that other factors such as transportation, housing, jobs and general market dynamics influence siting decisions); Foster, *supra* note 6, at 728 (arguing that the "Not In My Backyard" syndrome, or public opposition to the siting of locally unwanted land use sites, has led to a disproportionate number of sitings in predominantly minority communities).

existing zoning laws, the combination of lack of mobility (due to housing discrimination and income levels) and the decline of neighborhoods (due to discrimination in zoning, municipal services, and lending practices), past siting decisions which create presumptions that additional hazards are compatible land uses, lack of political power and voice among certain racial or ethnic groups, failure or inability of neighborhoods to organize politically, lack of access to information about environmental or land use decisions, or the need to be close to work environments (i.e., race differentials in location of employment or transportation alternatives or both).

Even if racial discrimination pervades siting decisions, who is discriminating? Is it the establisher or operator of the facility—perhaps a private entity? Or the local land use authority? Or perhaps it is the state environmental regulatory authority? Or the federal environmental regulatory authority? What about our political, economic, and social systems, which are embedded with institutional racism? Maybe it is some combination of these sources? The distributional studies, while supporting assumptions and fears that environmental racism and classism exist, simply do not offer concrete, generalizable proof of the causes for the inequitable distribution of environmental harms and LULUs.[77] This observation does not mean that the racism haunting so many other aspects of our society is not also present in environmental issues. However, if we are to remedy and prevent racism, or possibly classism, in environmental decision making, we need to understand not only its ultimate manifestations but also its root sources.

4. Methodologies and Controversy

Recent studies, using increasingly sophisticated means of identifying communities and changes in those communities over time, have called into question some of the more significant distributional studies on which the environmental justice movement has relied. One of the most important developments in distributional studies has been to use census

77. We are likely to understand the causes of environmental injustice only by engaging in context-specific, detail-rich, longitudinal (i.e., historical, over time) case studies that document all the factors that have gone into the existence of environmental hazards and LULUs in particular neighborhoods. The causes are more complex, interrelated, and perhaps insidious than aggregate data studies can show. For an excellent argument for the need to synthesize generalizable theories about the impact of law with detailed contextual case studies, see ROBERT C. ELLICKSON, ORDER WITHOUT LAW 1–11, 137–55 (1991). Ellickson's book is a particularly illuminating example of this synthesis. Another good example is Nancy Obermeyer's study of the siting of a nuclear power generating facility adjacent to the Indiana Dunes National Lakeshore. NANCY J. OBERMEYER, BUREAUCRATS, CLIENTS, AND GEOGRAPHY: THE BAILLY NUCLEAR POWER PLANT BATTLE IN NORTHERN INDIANA (1989). She related empirical case study research to organizational theory, Max Weber's theory of bureaucracy, to show how a regulatory agency is often captured by a powerful client to ensure the agency's organizational survival but occasionally reacts to an organized public group to reestablish the agency's public legitimacy. *Id.*; *see also* Lord & Shutkin, *supra* note 6, at 1 (urging the use of historical study in examining environmental justice burdens and benefits).

tracts as the unit of analysis, instead of zip codes or concentric circles around selected sites.[78]

> Census tracts are preferable to zip codes . . . . Census tracts are drawn up by local committees, and are intended to reflect the community's view of where one neighborhood ends and another begins. Zip codes are drawn to enhance the efficiency of mail delivery; they are not intended to reflect neighborhoods. Concentric circles are unlikely to bear much relationship to the community's views of its borders, which are often linked to natural or physical boundaries such as waterways, highways, or major roads.[79]

Researchers who have used census tracts as the unit of analysis have raised questions about the *United Church of Christ Report*. Researchers at the Social and Demographic Research Institute (SADRI) of the University of Massachusetts examined the racial and socioeconomic characteristics of communities containing commercial hazardous waste facilities, just as the United Church of Christ study did. However, they used the more community-based census tracts as the unit of analysis, instead of zip codes, which the United Church of Christ study had used.[80] The SADRI study showed that the differences between percentages of African Americans in host tracts and percentages of African Americans in non-host tracts were not higher with any statistical significance.[81] The percentage of Hispanics was important, although employment in industry was the most significant predictor of whether a tract contained a waste site.[82] Thus, the SADRI analysis contradicts the United Church of Christ analysis.[83] Vicki Been, however, examined both studies, and using logistical analysis of census tracts and controlling for population density, found that the percentages of minorities, employment in manufacturing, and unemployment percentages were each significant factors in predicting the presence of a waste site.[84] The Been study, therefore, reached different results than the SADRI study.

Researchers at the University of Chicago's Irving B. Harris Graduate School of Public Policy Studies have also discovered that studies of

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78. *See* Been, *Analyzing Evidence*, *supra* note 6, at 4–5; Been & Gupta, *Coming to the Nuisance*, *supra* note 6, at 10–13; Paul Mohai, *The Demographics of Dumping Revisited: Examining the Impact of Alternate Methodologies in Environmental Justice Research*, 14 VA. ENVTL. L.J. 615, 618–19 (1995); Rae Zimmerman, *Issues of Classification in Environmental Equity: How We Manage Is How We Measure*, 21 FORDHAM URB. L.J. 633, 652 (1994); John Fahsbender, Note, *An Analytical Approach to Defining the Affected Neighborhood in the Environmental Justice Context*, 5 N.Y.U. ENVTL. L.J. 120–121, 131, 138 (1996).

79. Been & Gupta, *Coming to the Nuisance*, *supra* note 6, at 11–12.

80. Andy B. Anderson et al., *Environmental Equity: Evaluating TSDF Siting over the Past Two Decades*, WASTE AGE, July 1994, at 84.

81. *Id.* at 88.

82. *Id.* at 88–90.

83. *But see* Been, *Analyzing Evidence*, *supra* note 6, at 4 & n.18 (noting criticisms of SADRI research).

84. *Id.* at 5–6.

Chicago census tracts with Superfund list sites (CERCLIS[85] sites), RCRA[86] treatment, storage and disposal (TSD) facility sites, RCRA hazardous waste generators, and historical hazardous waste sites did not confirm traditional assumptions about the location of environmental hazards in African American neighborhoods.[87] Although historical solid waste sites, primarily historical landfills, tended to exist in African American neighborhoods in 1990, hazardous sites (CERCLIS and RCRA) were not located in predominantly African American areas.[88] In 1990, all waste sites, including hazardous sites were in areas with higher percentages of Hispanics, lower population densities, and proximity to highways and waterways.[89] According to the authors, most of the Hispanic neighborhoods with waste sites had increases in Hispanic population after the sites were already located in those neighborhoods.[90] Also significantly contrary to traditional assumptions, most of the waste sites in 1990 were located in higher income, not lower income, areas.[91] The authors attributed this fact to recent redevelopment of warehouse areas for loft apartments and condominiums for affluent professionals wishing to live near the river.[92] In fact, the Chicago study also examined the characteristics of neighborhoods with waste sites in 1960, and found that waste sites, particularly hazardous waste sites, were located at that time in census tracts with lower median household income, low population density, and proximity to commercial waterways.[93] The sites in 1960 affected African American communities only to the extent that they were lower-income neighborhoods.[94] "Environmental injustice in 1960 predominantly took the form of locating industrial areas in poorer communities."[95] However, those areas have become gentrified, resulting in the counter-intuitive correlation of higher income status and waste sites in 1990.

One of the significant aspects of the Chicago study, other than its use of census tracts, was its analysis of site location and demographic data from the past (1960) and comparison of that information to the then present situation (1990). Vicki Been has contended that one of the weaknesses of earlier environmental justice studies was that they did not "establish that the host communities were disproportionately minority or

85. Comprehensive Environmental Response, Compensation, and Liability Information System. *See* Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9601–9675 (1994 & Supp. II 1996).

86. Resource Conservation and Recovery Act of 1976, 42 U.S.C. §§ 6901–6992 (1994 & Supp. II 1996).

87. Baden & Coursey, *supra* note 7, at 39–40.

88. *Id.* at 40.

89. *Id.*

90. *Id.*

91. *Id.*

92. *Id.* at 38.

93. *Id.* at 25.

94. *Id.*

95. *Id.*

poor at the time the sites were selected."[96] Without longitudinal studies—studies of the demographics of, and LULU sitings in, particular neighborhoods *over time*—researchers cannot prove that inequitable distributions of hazards and LULUs result from racial or class discrimination in the siting process itself.[97] Even for studies that prove a correlation between race or income and the distribution of LULUs, market dynamics might play a role either instead of or in addition to discriminatory siting practices.[98] In other words, people of color and low-income people might move to neighborhoods with LULUs *after* they are sited there, because of the availability of cheap housing in those neighborhoods, racial discrimination in housing markets, residential segregation patterns, and other market forces.[99] In addition, neighborhoods over time might increase in concentrations of minorities or poor people due to the departure of the most market-mobile residents—"the least poor and those least subject to discrimination"[100]—as the neighborhood declines in environmental quality, zoning, municipal services, and mortgage and investment lending availability.[101] Therefore, according to Been, studies must focus on demographic characteristics of areas at the time that siting decisions are made, and how those demographic characteristics change after siting.[102]

Been reexamined the GAO study[103] and the Bullard study[104] by analyzing demographic data of the LULU-host neighborhoods prior to the LULU siting, to the extent that such data was available, and recent demographic data of those same neighborhoods.[105] She found that LULUs were sited in communities that were disproportionately minority and low-income at the time of the siting.[106] In the extension of Bullard's study, Been discovered that the community became even more minority and low-income over time, suggesting a significant exacerbation of the siting injustices by market forces.[107] The extension of the GAO study, however, showed no effect of market forces on the distribution of environmental harms and LULUs.[108] Thus, longitudinal analysis confirmed the burden of the actual siting decisions, not just the LULUs themselves, on people of color and low-income people.

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96. Been, *LULUs*, *supra* note 6, at 1384.
97. *See id.* at 1384–85.
98. *Id.* at 1385–86, 1388–92.
99. *Id.* at 1388–89.
100. *Id.* at 1390.
101. *Id.* at 1389–90.
102. *Id.* at 1384–87.
103. GAO REPORT, *supra* note 5.
104. Bullard, *Solid Waste*, *supra* note 7.
105. Been, *LULU*, *supra* note 6, at 1386–87, 1398–1406.
106. *Id.* at 1387.
107. *Id.* at 1386–87.
108. *Id.* at 1398–1406.

James T. Hamilton of Duke University also evaluated demographics at the time of hazardous waste processing facility sitings, expansion plans, and reduction plans in the 1970s and early 1980s.[109] He found: (1) both race and median household income were statistically significant in predicting sitings of hazardous waste processing facilities; (2) race and income were not statistically significant in predicting expansion of existing facilities; (3) facilities were less likely to plan to reduce their capacity as their counties' minority population increased; and (4) percentage of registered voters (a measure of political efficacy) was statistically significant in predicting expansion and reduction plans.[110]

Perhaps the most significant recent study, Vicki Been and Francis Gupta's *Coming to the Nuisance or Going to the Barrios? A Longitudinal Analysis of Environmental Justice Claims*,[111] used census tracts as the unit of analysis in longitudinal analysis to isolate siting decisions from market dynamics. Been and Gupta performed "a nationwide study of the demographics of the 544 communities that in 1994 hosted active commercial hazardous waste treatment storage and disposal facilities [TSDFs]."[112] Although the areas hosting TSDFs were disproportionately African American and Hispanic, facilities that began operating between 1970 and 1990 were not disproportionately sited in African American areas.[113] Thus, while disproportionate siting of TSDFs in African American areas *may* have happened before 1970, it had not occurred in the twenty-seven years preceding the Been and Gupta study.[114] The Hispanic population of an area was statistically significant, however, in predicting siting from 1970 to 1990.[115] Furthermore, "the analysis shows that the very poor are not hosting a disproportionate share of facilities, and indeed, that neighborhoods with high levels of poverty appear to repel, rather than attract, facilities. Instead, it is working class or lower middle class neighborhoods that bear a disproportionate share of facilities."[116] Finally, the results of the study did not support a market dynamic theory, instead showing that communities did not significantly increase their percentages of minority or low-income residents after siting.[117] Thus, Hispanics, but not African Americans or the poor, bore the burdens of TSDF sitings in the twenty-seven years preceding the study; African Americans bore the burdens of living near pre-1970 TSDFs, whether due to siting or market dynamics; and in the twenty-seven years preceding

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109. James T. Hamilton, *Politics and Social Costs: Estimating the Impact of Collective Action on Hazardous Waste Facilities*, 24 RAND. J. ECON. 101, 101 (1993). Hamilton used both 1970 and 1980 census data for counties. *Id.* at 111.

110. *Id.* at 106–20.

111. Been & Gupta, *Coming to the Nuisance*, *supra* note 6.

112. *Id.* at 9.

113. *Id.* at 9, 30–31.

114. *Id.* at 32–33.

115. *Id.* at 9, 30–34.

116. *Id.*

117. *Id.* at 9, 34.

the study, market dynamics did not play a significant role in the racial or socioeconomic demographics of communities hosting TSDFs.

5. The Need for More Study

The evidentiary conception, as reflected mostly in distributional studies, contributes much to both the pursuit and understanding of environmental justice. Nonetheless, it is marked by varying results, controversies over methodologies, and inadequate proof of the causes of the inequities. Much additional study remains to be done.

In addition, many of the studies are reactions either to communities' complaints about existing hazards and LULUs or to previous studies. Of course, researchers have every reason to examine claims of inequitable distributions of waste sites, toxic substances, air pollutants, lead, and the like. Initial research naturally leads to further research. However, most of the studies reflect only a single perspective: identification of a particular hazard or LULU, followed by analysis of the racial and socioeconomic characteristics of the communities encumbered with that hazard or LULU. Alternative perspectives would include: (1) identification of particular neighborhoods by racial and socioeconomic characteristics, followed by analysis of all the land use patterns and health risks within those neighborhoods;[118] (2) qualitative studies of specific siting processes; (3) historical studies of changes within particular neighborhoods, perhaps in light of demographic, economic, and political trends;[119] and (4) qualitative studies of minority and low-income neighborhoods' efforts to define their communities and the results of those efforts.[120] In other words, studies that use the communities, instead of the hazards or LULUs, as the independent variable would supplement existing studies and may help us understand better the nature, dimensions, and causes of environmental injustice. They may also help communities identify methods of achieving long-range land use goals, and not just prevent or remedy specific projects.

B. *Political Activism (Power Conceptions)*

1. Environmental Injustice As a Lack of Power

Although distributional studies have not identified the causes of environmental injustice, many people argue that such injustice is the result of a lack of power among people of color, low-income people, and

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118. *See generally* discussion *infra* Part III.C (detailing such racial and socioeconomic characteristics). For an excellent empirical study of land use patterns in El Paso County colonias along the Texas-Mexico border, see Jane E. Larson, *Free Markets Deep in the Heart of Texas*, 84 GEO. L.J. 179 (1995).

119. *See* Lord & Shutkin, *supra* note 6, at 1.

120. *See infra* notes 150, 287, 565 and accompanying text.

their respective communities.[121] This lack of power—a result of racism and classism, lack of financial resources, language barriers, residential and workplace segregation, and lack of political mobilization—contributes to environmental injustice in three ways. First, environmental justice advocates contend that the powerful often exploit the powerlessness of poor and minority communities by making them the targets of LULUs.[122] Government and industry decision makers conclude that they will receive less opposition if they put the LULUs in poor and minority neighborhoods than if they put them in more politically active and economically powerful higher-income, white neighborhoods.[123]

Second, according to political conception, low-income people and people of color did not play a part in designing the environmental regulatory system, which institutionally discriminates against them.[124] Luke Cole has identified several features of this system that keep low-income and minority communities powerless.[125] The mainstream environmental movement, composed primarily of lawyers and scientists and overwhelmingly white and middle-class, emerged as a powerful force in the late 1960s and early 1970s.[126] It was responsible for an extensive array of environmental legislation[127] that created a complex regulatory process emphasizing legal and technical expertise.[128] In fact, Cole calls the main-

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121. *See* Conner Bailey et al., *Environmental Justice and the Professional*, *in* ENVIRONMENTAL JUSTICE: ISSUES, POLICIES, AND SOLUTIONS, *supra* note 7, at 35, 35; Bullard, *Anatomy*, *supra* note 9, at 23–24; Cole, *Empowerment*, *supra* note 4, at 642–52.

122. CERRELL ASSOCS., CAL. WASTE MANAGEMENT BD., POLITICAL DIFFICULTIES FACING WASTE-TO-ENERGY CONVERSION PLANT SITING 17–30 (1984) (identifying types of communities that are less likely to oppose siting of waste incinerators and recommending selection of sites in these areas); SZASZ, *supra* note 7, at 75 ("As facility siting became more difficult in the 1980s, some policy analysts began to advocate a strategy of siting in communities that are least capable of politically resisting or most amenable to accepting some form of financial compensation in exchange for accepting the facility."); Cole, *Empowerment*, *supra* note 4, at 628; Rabin, *supra* note 1 (documenting the expulsive zoning practice of allowing and encouraging nonresidential uses in minority neighborhoods); Tsao, *supra* note 30, at 366–68; Godsil, *supra* note 6, at 399.

123. The "Not in My Backyard" ("NIMBY") tactics of low-minority, high-income neighborhoods in opposing LULUs may be a significant contribution to placement of LULUs in high-minority, low-income neighborhoods. *See* Gauna, *supra* note 6, at 32–33; Robert Mata, *Hazardous Waste Facilities and Environmental Equity: A Proposed Siting Model*, 4 FORDHAM URB. L.J. 375, 391 (1994).

124. *See* Bullard, *Residential Segregation*, *supra* note 23, at 78; Cole, *Empowerment*, *supra* note 4, at 636–39.

125. Cole, *Empowerment*, *supra* note 4, at 639–41.

126. *See* Bullard, *Anatomy*, *supra* note 9, at 22; Cole, *Empowerment*, *supra* note 4, at 635–36, 640; Deeohn Ferris & David Hahn-Baker, *Environmentalists and Environmental Justice Policy*, *in* ENVIRONMENTAL JUSTICE: ISSUES, POLICIES, AND SOLUTIONS, *supra* note 7, at 66, 69–72.

127. *See generally* JOHN P. DWYER & MARIKA F. BERGSUND, FEDERAL ENVIRONMENTAL LAWS ANNOTATED (1994) (illustrating the large amount of environmental legislation enacted in the last three decades).

128. Emphasis on legal and technical issues can hide the political nature of the issues and discourage participation from those with very real personal and political stakes but little legal or technical expertise. Bailey et al., *supra* note 121, at 44. "Legal and technical debates are the forte of the professional, but are of secondary importance to strengthening the voice of affected communities." *Id.*; *see* Bullard, *Anatomy*, *supra* note 9, at 22; Cole, *Empowerment*, *supra* note 4, at 635–36.

stream environmental movement the "legal-scientific movement."[129] He argues that not only did the major environmental law groups ignore and exclude members of grassroots communities, but they also launched a system that was highly inaccessible to the non-lawyer and non-scientist.[130]

The environmental regulatory system has institutionalized the power of the mainstream national environmental groups, such as the Natural Resources Defense Council, Earthjustice Legal Defense Fund (formerly known as the Sierra Club Legal Defense Fund), and the Environmental Defense Fund.[131] These groups are major power brokers in negotiations with government and industry over environmental legislation, regulations, and permits. They have also shaped environmental law through litigation.[132] As Cole writes: "Lawsuits are now the primary, and sometimes only, strategy employed by mainstream groups."[133]

According to critics of the mainstream environmental groups, these groups have exercised their power without representing or including the perspectives of grassroots activists in poor and minority communities. The legal-scientific movement has emphasized protecting nature with its aesthetic, recreational, and biological values, whereas people at the grassroots want to emphasize protecting humans and human communities.[134] The legal-scientific movement has also remained narrowly focused on environmental matters, whereas low-income people and people of color see environmental problems as part of a larger social justice agenda.[135] The resulting regulatory system attempts to control pollution

129. Cole, *Empowerment*, *supra* note 4, at 635, 642.

130. Bullard, *Anatomy*, *supra* note 9, at 22; *see* Cole, *Empowerment*, *supra* note 4, at 636–38.

131. *See* Cole, *Empowerment*, *supra* note 4, at 634–36.

132. *Id.* at 636.

133. *Id.* Nonetheless, some groups like Greenpeace or the Nature Conservancy could be considered "mainstream" environmental groups, but do not rely heavily on litigation to achieve their goals.

134. *Id.* at 639–40; *see also* Bullard, *Anatomy*, *supra* note 9, at 22. The conflict between traditional environmental goals and social justice goals was highlighted by California Supreme Court Justice Tobriner when he referred to "the conflict between the environmental protectionists and the egalitarian humanists; a collision between the forces that would save the benefits of nature and those that would preserve the opportunity of people in general to settle." Associated Home Builders v. City of Livermore, 557 P.2d 473, 488 (Cal. 1976) (reviewing validity of a no-growth voter initiative).

135. *See* Bullard, *Anatomy*, *supra* note 9, at 23–24; Cole, *Empowerment*, *supra* note 4, at 640–41; Gauna, *supra* note 6, at 27–29. One powerful example is the BFI recycling plant in the primarily Hispanic Gardens neighborhood on the Eastside of Austin. Not only does a neighborhood of color disproportionately bear the cost of recycling (including rats, roaches, blowing paper, noise, traffic, and a plant fire), but it bears the costs of environmental degradation as well. In Eastside, community groups strongly supported environmentalists' initiatives to protect water quality. Later, however, the environmentalists did not come to the support of the Eastside residents. Kayte VanScoy, *Residents Say Recycling Plants Constitute Enviro-racism: Eastsiders Decry BFI* (visited Nov. 10, 1998) <http://www.auschron.com/issues/vol16/issue39/pols.council.html>. Furthermore, some environmental groups have blamed immigrant groups for U.S. environmental problems, exploiting legitimate concerns about environmental protection to spread racist and xenophobic fears. *Immigration and Envi-*

through technology and risk assessment: polluting facilities use technologies to reduce emissions of harmful pollutants to levels that scientific experts and political policy makers decide pose a sufficiently low risk to human health.[136] In contrast, environmental justice advocates, skeptical of decisions about how much pollution is "safe," seek pollution prevention: elimination or prohibition of pollution so that there is no risk to human health.[137] The environmental regulatory system attempts to control polluters through law: regulation and litigation.[138] However, many low-income and minority people distrust the law, have very little access to the legal system, and do not have the special expertise that environmental law emphasizes.[139] Reliance on legal solutions tends to disempower subordinated communities and people, who may come to depend on lawyers, let lawyers control their struggle, and ignore needed community organizing by relying on litigation.[140] Reliance on legal solutions also tends to ignore the larger power dimensions of the problem: "Using a legal strategy, rather than a political one, would likely fail these communities: a legal victory does not change the political and economic power relations in the community that led to the environmental threat in the first place."[141]

Environmental justice advocates perceive that the traditional environmental regulatory system has worked all too well.[142] The system views the cause of pollution as a "single bad actor," whose pollution exceeds socially acceptable levels and therefore must be controlled through regulation and civil and criminal enforcement.[143] However, environmental justice advocates believe that the normal operation of U.S. political, social, and economic systems produces pollution.[144] They point to the legality of pollution that does not exceed legislated (or regulated) levels, the lack of effective civil rights tools to challenge institutional biases,

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ronment Campaign Factsheet #4, E-mail from Political Ecology Group to Conference "env.justice" (Jan. 7, 1997) (on file with author).

136. Cole, *Empowerment*, *supra* note 4, at 644. Science and technology are heavily value-laden. Bunyan Bryant argues that scientific research is often determined by a political economy in which governments and corporations, but not local communities, set the agendas. Bryant, *supra* note 57, at 11–13. Professional and technical people have a vested interest in pollution control strategies that emphasize risk management and risk assessment. *Id.* at 15–23. He also notes that the government often will not regulate a substance at a particular level unless it has scientific proof that the substance causes harm to human health. *Id.* at 9–10. Scientific certainty and proof of causality are policy requirements that are used to rationalize government inaction, but people of color and low-income people are "the recipients of uncertainty." *Id.* at 9–11.

137. Cole, *Empowerment*, *supra* note 4, at 644–45; *see also* SZASZ, *supra* note 7, at 137; Bryant, *supra* note 57, at 9–12 (urging a more precautionary principle of protecting health even in the absence of scientific certainty and proof that substances harm health).

138. Cole, *Empowerment*, *supra* note 4, at 635–36.

139. *Id.* at 635–36, 647–48, 650–51.

140. *Id.* at 649–54.

141. *Id.* at 648–49.

142. *See id.* at 643.

143. *Id.* at 642.

144. *Id.* at 642–43; *see also* Bryant, *supra* note 57, at 15–23.

and the effectiveness of many high- and middle-income, white neighborhoods in using environmental laws to keep out LULUs, which then are located in low-income, minority neighborhoods.[145] Thus, Cole argues, the environmental regulatory system perpetuates political inequity and causes environmental injustice.[146]

Third, low-income people and people of color historically have had very few real options to prevent exposure to environmental harms and LULUs. According to noted economist Albert Hirschman, the two ways that people express dissent in social organizations, including political society, is to exercise voice by expressing their dissatisfaction or protesting to those with authority, or to exit by leaving the environment or situation, often physically.[147] Low-income and minority communities have often been excluded from participating in decisions about the presence of LULUs and environmental hazards in their neighborhoods, either by decision makers or by lack of political organization and involvement.[148] Thus, they have not had an effective voice in the environmental and land use decision making process. People of color and low-income people have also not been able to "vote with their feet" by moving to other neighborhoods or communities because housing discrimination, exclusionary zoning patterns, redlining, and other market forces limit their residential mobility.[149] Their lack of power has kept them subjected to unwanted hazards and facilities. Furthermore, some

145. Cole, *Empowerment*, *supra* note 4, at 643–44, 646–47. The use of NIMBY (Not In My Back Yard) strategies by those with power arguably hurts those without power, turning into a PIBBY (Place In Blacks' Back Yard) situation. *Id.* at 646–47. The environmental laws provide tools that can perpetuate existing power inequities. *Id.*

146. *Id.* at 643.

147. *See generally* ALBERT O. HIRSCHMAN, EXIT, VOICE, AND LOYALTY: RESPONSES TO DECLINE IN FIRMS, ORGANIZATIONS, AND STATES (1970).

148. *See* Torres, *supra* note 1, at 450 ("It is lack of informed participation and legal or regulatory experience that leaves many communities helpless against an agency's decision to locate a solid waste facility in their community."); *see also* Bullard, *Anatomy*, *supra* note 9, at 18–19 (suggesting systematic exclusion of people of color from governmental boards, commissions, and agencies that make siting and zoning decisions); Cole, *Empowerment*, *supra* note 4, at 628, 646, 674–79 (arguing that poor people remain grossly underrepresented in the political processes of siting polluting facilities and documenting the refusal of the Kings County Planning Department, California, to translate into Spanish a 1,000-page Environmental Impact Report on toxic waste incinerators even though 70% of local residents spoke Spanish); James S. Freeman & Rachel D. Godsil, *The Question of Risk: Incorporating Community Perceptions into Environmental Risk Assessments*, 21 FORDHAM URB. L.J. 547, 553 (1994); Reich, *supra* note 6, at 277; Saleem, *supra* note 31, at 236–45 (positing that federal notice requirements regarding waste facilities are ineffective and undermine participation in the siting process); Eleanor N. Metzger, Comment, *Driving the Environmental Justice Movement Forward: The Need for a Paternalistic Approach*, 45 CASE W. RES. L. REV. 379, 385–88 (1994).

149. Bullard, *Anatomy*, *supra* note 9, at 21–22; Bullard, *Residential Segregation*, *supra* note 23, at 78–81; Gauna, *supra* note 6, at 32–33. For evidence of the persistence of racial segregation, see DOUGLAS S. MASSEY & NANCY A. DENTON, AMERICAN APARTHEID: SEGREGATION AND THE MAKING OF THE UNDERCLASS (1993) (describing practices of redlining, racial steering, and failure of institutions to support recently integrated neighborhoods with credit); RESIDENTIAL APARTHEID: THE AMERICAN LEGACY (Robert D. Bullard et al. eds., 1994) (describing the lack of access to financial institutions for people of color and the direct relationship of redlining to neighborhood decline).

argue that the lack of power and resources will often lead people of color and low-income people to embrace industrial and toxic activities and land uses that they believe will provide much-needed jobs and tax revenues.[150] This economic vulnerability invites "environmental job blackmail,"[151] by which impoverished communities trade health and environmental harms for employment and economic growth.[152] However, the promised economic benefits may not materialize or may be less than imagined.[153]

The political conception of environmental justice insightfully names power as a key element to overcoming injustice and boldly critiques traditional ways of approaching both environmental and civil rights problems. However, the political conception is itself subject to critique. For example, mainstream environmentalism and grassroots social justice activism arguably are not nearly so much at odds as some argue.[154] Furthermore, a merger of environmental and civil rights agendas could be far more effective at achieving the goals of both camps than emphasizing conflicts and differences.[155] Environmental litigation can be an effective political tool, despite its limitations.[156] Professional community organizing has the potential to be as paternalistic and controlling of the struggles of people affected by environmental injustice as does environmental or civil rights lawyering. In addition, environmental justice activists tend to reject that a low-income or minority community could reasonably choose to accept LULUs rather than fight the existing power distribution. This assumption is reductionist. It moves the environmental justice movement away from the empowerment of self-determination and towards an instrumentality of radical pollution prevention politics. The result could be that residents of neighborhoods have no effective voice for their own goals but instead have a voice directed and developed by professional activists or a limited cadre of grassroots leaders. The political conception of environmental justice has both potential and limits.

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150. Even when people of color gain political power, as manifested in holding elected local office, economic empowerment eludes them. *See generally* IN SEARCH OF THE NEW SOUTH: THE BLACK URBAN EXPERIENCE IN THE 1970S AND 1980S (Robert D. Bullard ed., 1989) (describing case studies of several major Southern cities showing the persistence of residential segregation, redlining, declining infrastructure, unemployment, inadequate public transportation, discriminatory real estate practices, and social and physical deterioration of central city ghettos); SZASZ, *supra* note 7, at 109 (addressing how the poor have less economic power to prevent facilities from siting in their communities).

151. *See* Guana, *supra* note 6, at 32–33 (discussing "environmental jobmail" as a form of environmental blackmail).

152. *See* Austin & Schill, *supra* note 6, at 70; Bullard, *Anatomy*, *supra* note 9, at 18–19; Gauna, *supra* note 6, at 38–39; Boyle, *supra* note 9, at 974–77.

153. Austin & Schill, *supra* note 6, at 70.

154. *See infra* notes 226–27 and accompanying text.

155. *See infra* notes 439–53 and accompanying text.

156. *See infra* notes 194–222 and accompanying text.

2. Activism and Empowerment

For those who see power inequities as the core of environmental injustice, the necessary response is political activism or community empowerment.[157] Instead of top-down approaches that perpetuate existing power relationships, environmental justice advocates seek to change power relationships by using grassroots ("bottom-up") political tools.[158] The number of grassroots groups throughout the United States that are combining civil rights and environmental goals in the quest for environmental justice is large and growing.[159] Circumstances that threaten family, home, and community thrust the typical organizer of an environmental justice group into leadership. Many of these organizers are women. The groups often have multi-issue agendas. The movement as a whole is ra-

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157. *See* Bullard, *Anatomy*, *supra* note 9, at 33–39; Cole, *Empowerment*, *supra* note 4, at 661–73. *But see* Metzger, *supra* note 148, at 389–96 (arguing for short-term paternalistic government policies because affected communities lack the information, education, and ability to organize quickly).

158. Cole, *Empowerment*, *supra* note 4, at 648–49. Terms like "grassroots" and "politically active" can have more than one meaning. Grassroots environmental justice groups are generally local not only in membership but also in leadership and activity. They differ from other interest groups that political scientists describe as engaging in grassroots lobbying, which involves national professional staff of the interest groups mobilizing their members (i.e., local citizens) to contact public officials—a top-down, centralized approach. *See* Burdett A. Loomis, *A New Era: Groups and the Grass Roots*, *in* INTEREST GROUP POLITICS 169, 169 (Allan J. Cigler & Burdett A. Loomis eds., 1983). Although environmental justice groups have formed national networks, lobbied for national environmental justice policy, and brought environmental justice issues to the attention of the national media, the American public, and the federal government, their actions are primarily focused on the welfare of specific communities (e.g., particular neighborhoods or work environments), and are led by members of those communities. *See* Robert D. Bullard, *Environmental Justice for All*, *in* UNEQUAL PROTECTION, *supra* note 3, at 3, 7 [hereinafter Bullard, *Environmental Justice for All*] (describing the First National People of Color Environmental Leadership Summit, a national movement for environmental justice); Cole, *Empowerment*, *supra* note 4, at 639–40 (positing that third wave environmentalists have an immediate and material stake in environmental problems). In fact, even at a purely neighborhood-based level, some environmental justice groups have rejected hierarchical group decision making structures. Instead these groups selected either consensus-based, leaderless forms (often impractical) or a committee-based structure in which all members have input at the committee level, but overall group leadership comes from an executive committee of elected representatives from the committees. Collette, *supra* note 3, at 3, 5. In addition, most of the political participation by local communities on environmental justice issues is community initiated, not government sponsored and government managed. *See* Lynn W. Bachelor & Bryan D. Jones, *Managed Participation: Detroit's Neighborhood Opportunity Fund*, 17 J. APPLIED BEHAV. SCI. 518, 519 (1981) (analyzing government-sponsored participatory structures designed to elicit neighborhood input into city policy but often limiting such input to "safe" issues, and contrasting these structures with "authentic grass-roots organizations").

159. Bullard, *Anatomy*, *supra* note 9, at 24; Ken Geiser & Gerry Waneck, *PCBs and Warren County*, *in* UNEQUAL PROTECTION, *supra* note 3, at 43, 48–49. In 1993, the Citizens Clearinghouse for Hazardous Wastes estimated the number of grassroots environmental justice groups at 7,000 nationwide. Dorceta E. Taylor, *Environmentalism and the Politics of Inclusion*, *in* CONFRONTING ENVIRONMENTAL RACISM, *supra* note 3, at 53, 53–54. In October 1991, representatives of more than 300 environmental groups of color attended the First National People of Color Environmental Leadership Summit in Washington, D.C. *See* Bullard, *Environmental Justice for All*, *supra* note 158, at 59.

cially diverse.[160] Many of these groups use "confrontational direct action strategies similar to those used in earlier civil rights conflicts."[161] In fact, some authors trace the origins of the environmental justice movement to a specific political protest response.[162] In 1982, both African American and white protesters organized a campaign to stop the location of a PCB landfill in predominantly African American Warren County, Pennsylvania.[163] Although the campaign ultimately failed to stop the siting of the disposal facility, it resulted in the arrest of more than 500 civil rights protesters, drew national attention to environmental injustice, and inspired the first studies of racial inequities in the distribution of environmental hazards.

3. Types of Activism

The use of terms like "political activism" and "community empowerment" begs two questions. First, what actions qualify as political activism or community empowerment?[164] Second, for what purposes are people of color and low-income people active or empowered?[165]

A wide range of strategies or actions may be relevant here. One significant, common response to environmental injustice is community organizing.[166] Community organizing is the process of informing affected

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160. Bullard, *Anatomy*, *supra* note 9, at 30; Cole, *Empowerment*, *supra* note 4, at 636–37; Taylor, *supra* note 159, at 56–57. For a discussion of the role of women of color and feminist perspectives in grassroots environmental justice activism, see Celene Krauss, *Women of Color on the Front Line*, *in* UNEQUAL PROTECTION, *supra* note 3, at 256, 256; Cynthia Hamilton, *Concerned Citizens of South Central Los Angeles*, *in* UNEQUAL PROTECTION, *supra* note 3, at 209, 216. As Hamilton notes: "Minority women . . . are responding not to 'nature' in the abstract but to their homes and the health of their children." *Id.* at 210.

161. Bullard, *Anatomy*, *supra* note 9, at 24.

162. *See* Torres, *supra* note 1, at 434–35; Godsil *supra* note 6, at 394. *But see* Bullard, *Environmental Justice for All*, *supra* note 158, at 3–4 (suggesting that the environmental justice movement began in late 1960s when predominantly African American Texas Southern University students rioted over the drowning of an eight-year-old African American girl at a garbage dump in the middle of African American neighborhood, and when the Reverend Martin Luther King, Jr. was murdered after going to Memphis to seek better working conditions for African American garbage workers); Cole, *Litigation*, *supra* note 4, at 523 (tracing environmental justice movement to a Texas civil rights case challenging the siting of a solid waste facility in a mostly African American Houston neighborhood); Ferris & Hahn-Baker, *supra* note 126, at 67–68 (stating that environmental justice visibly emerged in the late 1970s when civil rights leaders began discussing environmental concerns with environmental leaders).

163. *See* Geiser & Waneck, *supra* note 159, at 43 (analyzing the relationship of PCBs and the Warren County controversy); Torres, *supra* note 1, at 434–35; Godsil, *supra* note 6, at 394.

164. Luke Cole defines "empowerment" as "a process which enables individuals to participate effectively in collective efforts to solve common problems." Cole, *Empowerment*, *supra* note 4, at 661.

165. *See infra* notes 239–80 and accompanying text (discussing the goals of empowerment).

166. *See* Citizens' Clearinghouse for Hazardous Waste, *Six Steps to Action*, J. PESTICIDE REFORM, Fall 1989, at 13 ("History shows us that the only effective way to resolve a toxic problem is for citizens to join together. By doing so, they create enough pressure on government and corporations to ensure that the needs and concerns of people are addressed."); *see also* Bullard, *Anatomy*, *supra* note 9, at 33; Will Collette, *What Works and What Doesn't*, *in* THE BEST OF ORGANIZING

people (e.g., neighborhood residents), organizing them into a group to identify goals and responses, and mobilizing them to act.[167] For example, Mothers of East Los Angeles (MELA) began because California Assemblywoman Gloria Molina told Juana Beatriz Gutiérrez about a plan by the California Department of Corrections to build a state prison in East Los Angeles.[168] Gutiérrez, who was a homemaker, mother of nine, and Neighborhood Watch Program organizer, held a meeting of other Neighborhood Watch block captains and neighborhood religious leaders in her home. At this meeting, the participants formed an organization to oppose the prison. The group began to grow through word of mouth, contacts between Assemblywoman Molina's office and community and business leaders, petitions circulated among neighborhood church parishioners, weekly candlelight vigils, well-organized and well-prepared lobbying campaigns, the framing of the issue as protection of children's safety, and a priest's suggestion of the organization's name: "Mothers of East Los Angeles."[169]

TOOLBOX (1993) at 2, 3 [hereinafter Collette, *What Works and What Doesn't*]; Hamilton, *supra* note 160, at 207–08.

167. *See* Collette, *What Works and What Doesn't*, *supra* note 166, at 2 ("Organizing is bringing people together for a common purpose and for mutual support to get the power they need to take control of their lives."); *see also* Cole, *Empowerment*, *supra* note 4, at 669; Will Collette, *Making That First Contact*, *in* THE BEST OF ORGANIZING TOOLBOX, *supra* note 166, at 4, 4. For recruitment of members, the Citizens' Clearinghouse for Hazardous Waste suggests developing a simple fact sheet for potential members, selecting a name with which people can identify, going door-to-door to talk with people one-on-one, and informing the public at large. The development of goals and action plans should focus on three questions: (1) What do the group members want? (2) Who can give it? (3) How can the group make them do it? *Id.*

168. Gabriel Gutiérrez, *Mothers of East Los Angeles Strike Back*, *in* UNEQUAL PROTECTION, *supra* note 3, at 220, 220.

169. *Id.* In the last two decades, many residents of low-income and minority communities have engaged in grassroots community organizing to respond to environmental injustices. *See* Bullard, *Anatomy*, *supra* note 9, at 24. For example, African American citizens of Richmond, California, formed the West County Toxics Coalition to address toxic emissions from a cluster of 350 facilities that handle hazardous waste. *Id.* at 29. In response to a Greenpeace organizer's tip about a Chemical Waste Management proposal to build a toxic waste incinerator at a Class I toxic landfill in 95% Hispanic Kettleman City, California, local residents formed a community group, El Pueblo para el Aire y Agua Limpio (People for Clean Air and Water). Cole, *Empowerment*, *supra* note 4, at 674. Residents, mostly women, of an almost exclusively minority South Central Los Angeles neighborhood founded Concerned Citizens of South Central Los Angeles to oppose a municipal solid waste incinerator slated for their neighborhood. *See* Bullard, *Anatomy*, *supra* note 9, at 28; Hamilton, *supra* note 160, at 207–19. Members of the Rosebud Reservation in South Dakota organized the Good Road Coalition to fight a proposed 6,000-acre municipal landfill on Sioux lands. Bullard, *Anatomy*, *supra* note 9, at 29. An example of a group that began with professional public interest organizers who mobilized a local community is People United for a Better Oakland (PUEBLO), which initially was a project of the Oakland-based Center for Third World Organizing (CTWO). *See* Francis Calpotura & Rinku Sen, *PUEBLO Fights Lead Poisoning*, *in* UNEQUAL PROTECTION, *supra* note 3, at 234 (describing PUEBLO's organizing strategy and efforts to combat lead poisoning). However, failure to address the economic concerns of low-income people of color can prevent their mobilization against environmental hazards, especially when neither civil rights leaders nor environmental leaders make the connections between the two movements clear, tangible, and immediate. *See* Con-

Education is another type of response.[170] It involves the relationship between information and power.[171] Environmental justice advocates typically both educate the affected community and involve the affected community in fact-gathering. They use the information to build the movement (i.e., gather members and outside supporters), understand the risks and harms the community faces, make decisions about strategies, educate and persuade the public and decision makers (e.g., government policy makers), and support their cases against the LULUs. When community residents are the experts, both telling their experiences and information in their own words and engaging in problem-solving research, they are empowered.[172] This empowerment comes from the validation of their experiences, their participation in public debate and policy making, and the impact of their perspectives on others.

In MELA's battle against the proposed prison in East Los Angeles, the group members educated themselves about the political and legal processes involved in prison siting and impressed state legislators with their knowledge. They not only educated themselves, but also persistently educated state officials, the media, and the public about their struggle.[173] Members of Kettleman City's El Pueblo para el Aire y Agua Limpio (People for Clean Air and Water) wrote letters, almost all in Spanish, to the Kings County Planning Department about a proposed toxic waste incinerator. These letters expressed the local residents' concerns and their own stories of health symptoms they experienced in connection with an existing toxic waste dump operated by the incinerator proponent. The letters also questioned the Environmental Impact Report (EIR) process and the Planning Department's refusal to translate the documents into Spanish, even though seventy percent of the local residents spoke Spanish in the home. This strategy of community residents educating the decision makers affirmed the power of the community's

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ner Bailey et al., *Environmental Politics in Alabama's Blackbelt*, *in* CONFRONTING ENVIRONMENTAL RACISM, *supra* note 3, at 107, 107.

170. Bullard, *Anatomy*, *supra* note 9, at 33; Hamilton, *supra* note 160, at 213.

171. Cole, *Empowerment*, *supra* note 4, at 668–69 As noted by Cole: "By increasing the community's knowledge, and others' knowledge of the community's problems, the community's persuasive power is necessarily strengthened." *Id.* at 668.

172. Luke Cole persuasively argues for the value of community residents telling their experiences and knowledge in their own words, a strength that can be threatened by reliance on legal and scientific "expertise" that either conflicts with their perspectives or shifts their struggle to arenas where they have little power or input. Cole, *Empowerment*, *supra* note 4, at 649–52, 662–63, 668–69, 675–79. Bunyan Bryant also persuasively argues that community residents can and should participate in scientific research, thus demystifying expertise for them, using their intelligence and concern, and shifting environmental problems from technical or academic matters to political concerns. *See* Bryant, *supra* note 57, at 13 (describing several examples of trained community residents engaging in studies of the health impacts of toxic substances); *see also* Geiser & Waneck, *supra* note 159, at 49 (discussing citizen groups using power to advocate progressive solutions to toxic chemical contamination).

173. Gutiérrez, *supra* note 168, at 224–27.

own expertise and its own voice.[174] A different type of community education is occurring among the Environmental Health Coalition and local grassroots groups in San Diego, CA. They are using community right-to-know laws to inform themselves about toxic air emissions from industries and military installations, which could pose high risks of cancer. They have settled a lawsuit that forces the San Diego County Air Pollution Control District to notify them about emissions.[175] This example highlights the importance of using open records and community right-to-know laws[176] to obtain information about pollution and of strengthening and enforcing those laws.[177]

Another method of political activism is to use institutional political processes to influence and persuade policy makers.[178] Environmental justice activists have lobbied public officials individually, spoken at public hearings, participated in joint conferences with environmental agencies, circulated petitions, and worked at election campaigning to defeat opponents of their cause and elect sympathizers. They have sought to influence specific siting or permitting decisions, enforcement of environmental laws, and general policies that would better protect low-income and minority communities. They have directed their activity at local, state, and federal officials of all types, and have often also tried to influence corporate decision makers to agree voluntarily to stricter environmental standards.

A few of the many successes of political activism by environmental justice advocates illustrate the variety of activities. Houston's Northeast Community Action Group brought intense political pressure to bear on local and state government bodies that were responsible for permitting a proposed solid waste facility in an African American neighborhood.[179] As a result, the city council voted to prohibit city-owned garbage trucks from dumping at the landfill and to restrict the construction of solid-waste sites near public facilities like schools and parks.[180] Furthermore, the Texas Department of Health revised its landfill permit application requirements to include detailed land use, economic impact, and soci-

174. Cole, *Empowerment*, *supra* note 4, at 674–79. In addition, the educational methods employed by El Pueblo reached a wide public audience and pushed the dispute onto prime-time newscasts. *See* Bullard, *Anatomy*, *supra* note 9, at 32.

175. *Working Group on Community Right-to-Know*, WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW (U.S. Pub. Interest Research Group Educ. Fund, Wash., D.C.), Mar.–Apr. 1997, at 1.

176. *E.g.*, Emergency Planning and Community Right to Know Act, 42 U.S.C. §§ 11001–11050 (1994); California Public Records Act, CAL. GOVT. CODE §§ 6250–6270 (1982 & Supp. 1997).

177. *See* Geiser & Waneck, *supra* note 159, at 49; *Outlook for 1997: A Full Year*, WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW (U.S. Pub. Interest Research Group Educ. Fund, Wash., D.C.), Jan.–Feb. 1997, at 1, 1, 3.

178. *See* Bullard, *Anatomy*, *supra* note 9, at 33; Hamilton, *supra* note 160, at 213.

179. Bullard, *Anatomy*, *supra* note 9, at 33.

180. *Id.*

odemographic information for proposed sites.[181] MELA, in its opposition to a prison in its community, lobbied state legislators and circulated anti-prison petitions, gathering as many as 900 signatures on one Sunday alone.[182] Concerned Citizens of South Central Los Angeles made an issue of a proposed solid waste incinerator in a low-income neighborhood of color in local elections. The group contributed to the defeat of pro-incinerator city council president Pat Russell and the election of environmental advocate Ruth Galanter.[183] The Southwest Organizing Project (SWOP), a community-based social justice organization in Albuquerque, sent a letter to the EPA Administrator about the EPA's role in environmental injustice, gave the Administrator tours of polluted low-income and minority communities, lobbied federal officials for regulations to protect those communities, and lobbied national environmental groups to share power over the environmental agenda.[184] When a multi-racial coalition, a local chapter of Citizens for a Better America, organized a grassroots effort to oppose the federal siting of a nuclear waste depository in an African American area of Halifax County, Virginia, more than 1,400 residents attended a public meeting to express their opposition. In the face of organized opposition, the Department of Energy decided to remove Halifax County from its list of potential nuclear waste sites.[185] The Good Road Coalition of the Rosebud Reservation convinced a majority of residents to defeat both a landfill proposal and candidates who supported the proposal in a tribal election.[186]

Despite the success of many environmental justice groups in the political arena, decision makers do not always listen to conventional political messages from low-income people and people of color.[187] Those who typically have had little influence through traditional political means often use extra-institutional responses, like lawful public protest and

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181. *Id.* at 33–34.

182. Gutiérrez, *supra* note 168, at 223–26. After seven years of conflict between California Governor Pete Wilson and MELA, Governor Wilson signed a bill in 1992 that killed the prison proposal. *Id.* at 233.

183. Hamilton, *supra* note 160, at 213.

184. Richard Moore & Louis Head, *Building a Net That Works: SWOP, in* UNEQUAL PROTECTION, *supra* note 3, at 191, 200–02.

185. Robert W. Collin & William Harris, Sr., *Race and Waste in Two Virginia Communities, in* CONFRONTING ENVIRONMENTAL RACISM, *supra* note 3, at 93, 98–100. However, Residents Involved in Saving the Environment (RISE) used similar tactics—225 citizens attended a public hearing and 947 citizens signed a petition opposing a landfill in a predominantly African American neighborhood—but were unable to persuade the King and Queen County, Virginia, Board of Supervisors to reject the facility. *Id.* at 95–96.

186. Bullard, *Anatomy*, *supra* note 9, at 37–38.

187. *See, e.g.*, Collin & Harris, *supra* note 185, at 95–96 (describing unsuccessful opposition to a landfill siting through traditional hearing system); Grossman, *supra* note 9, at 287–88 (describing unsupportive atmosphere of Washington, D.C. in the 1980s and early 1990s); Mydans, *supra* note 60, at A8 (describing unsuccessful attempts by Native Americans to use agency channels to protest a human waste dump).

demonstrations, civil disobedience, and violent protest.[188] MELA held weekly candlelight vigils, which included marches on the Olympic Boulevard bridge that attracted more than 3,000 participants.[189] Protestors against dumping PCBs at a landfill in predominantly African American Warren County, North Carolina, blocked roads with their bodies to prevent trucks from carrying PCB-laden soil to the site, and over 500 protestors were arrested.[190] Similarly, members of the Torres Martinez Desert Cahuilla Indian Tribe created a blockade on the edge of a sewage sludge disposal site on their California desert reservation to prevent as much as 1,000 tons of sewage sludge per day from reaching the site, having received little help from officials at the Bureau of Indian Affairs.[191]

Perhaps one of the most extreme power-based responses to environmental justice is rioting, such as the riots by Texas Southern University students in the late 1960s over the drowning of an eight-year-old African American girl at a garbage dump in the middle of an African American neighborhood.[192] Protests not only challenge the existing power structure and pressure decision makers, but also educate the public about environmental justice issues, as illustrated by the national attention received by the Gulf Coast Tenants Organization's Great Louisiana Toxics March through the Cancer Alley area of Louisiana.[193]

4. Litigation As a Political Tool

Litigation also has the potential to be a political tool. Many environmental justice groups have brought lawsuits. Robert Bullard's study of nine grassroots environmental groups showed that six groups used litigation as a reform tactic.[194] What is unclear, though, is whether environmental justice groups are using litigation for empowerment or merely as a legal answer to a political problem.

Luke Cole, one of the nation's leading public interest environmental justice lawyers,[195] has analyzed the strategic and tactical problems of liti-

188. *See* Bullard, *Anatomy*, *supra* note 9, at 33; Hamilton, *supra* note 160, at 213. "In the 1990s, activists of color continue to campaign, march, and protest against environmental racism." Ferris & Hahn-Baker, *supra* note 122, at 68.

189. Gutiérrez, *supra* note 168, at 224.

190. Geiser & Waneck, *supra* note 159, at 43–44.

191. Mydans, *supra* note 60, at A8.

192. *See* Bullard, *supra* note 158, at 3. *See generally* JOE R. FEAGIN & HARLAN HAHN, GHETTO REVOLTS: THE POLITICS OF VIOLENCE IN AMERICAN CITIES (1973) (discussing riots as modes of political influence, aimed not only at gathering attention to a problem but also at challenging existing institutional power structures). Nonetheless, violent responses to environmental injustice are fighting one wrong with another. Fortunately, nearly all documented protests by environmental justice activists have been non-violent.

193. *See* Ferris & Hahn-Baker, *supra* note 126, at 69.

194. Bullard, *Anatomy*, *supra* note 9, at 35.

195. Cole is General Counsel of the Center on Race, Poverty & the Environment, and a staff attorney with the California Rural Legal Assistance. He represented El Pueblo para el Aire y Agua Limpio in the Kettleman incinerator dispute. *See supra* note 169.

gation from a community empowerment, or environmental poverty lawyering, perspective.[196] He argues that a victory in a lawsuit will not change the political and economic relationships that created the environmental injustice, and therefore a legal response to environmental injustice may be inappropriate for a political problem.[197] In Cole's view, the use of litigation tends to disempower low-income people and people of color. It moves the struggle from the streets, where people have power, to the courts, where polluters can afford the best legal and scientific expertise and where historically minorities and the poor have experienced oppression, intimidation, and distrust.[198] It also takes the struggle away from the people and gives it to the lawyer who may paternalistically impose on the people ideas and actions that come from the lawyer's perspective.[199] According to Cole, litigation tends to focus on serving individual clients, rather than building, educating, and empowering groups.[200] If victims of environmental injustice win a lawsuit, they may not be organized to take advantage of it or may not have any lasting political struggle around which to build a long-term community power base.[201] Finally, use of the law tends to legitimize existing power relationships and institutional structures and may deter low-income and minority people from exploring actions that challenge the current social structure.[202]

There is, however, a tension between Cole's critique of litigation as an environmental justice strategy and the empirical reality that many environmental justice groups choose to bring lawsuits.[203] Cole recognizes that litigation may be a legitimate choice if part of a general empowerment strategy. He proposes a model of environmental justice lawyering that is community-based, builds the victims' control over their struggle and capacity to solve their own problems, favors group representation (as opposed to individual representation), treats legal tactics as means for empowerment (not as ends in themselves), and uses non-legal tactics.[204] Legal tactics are acceptable only if they educate people, build

196. *See* Cole, *Empowerment*, *supra* note 4, at 661–73 (analyzing the impact of pollution on underrepresented communities and positive effect that legal community can have); *see also* Cole, *Litigation*, *supra* note 4, at 524 (weighing costs and benefits of litigation). For an example of environmental poverty lawyering with an emphasis on community empowerment, see Dale H. Seamans, *A Unique Community Law Partnership: Environmental "Network" Lends Voice to Neighborhood Concerns*, MASS. L. WKLY., Jan. 29, 1996, at B1.

197. Cole, *Empowerment*, *supra* note 4, at 648–49.

198. *Id.* at 647–48, 650.

199. *Id.* at 649–50.

200. *Id.* at 651–52, 663–67. *But see* Moya, *supra* note 6 (urging lawyers to adopt an environmental justice ethic as part of a larger plan to achieve environmental justice).

201. Cole, *Empowerment*, *supra* note 4, at 651.

202. *Id.* at 652.

203. *See* Cole, *Litigation*, *supra* note 4, at 524.

204. Cole, *Empowerment*, *supra* note 4, at 652, 654–68. Nonetheless, many grassroots groups, people of color, and low-income people are highly skeptical of lawyers, fear or resent the control that lawyers exercise, and believe that legal tactics should be avoided or carefully controlled. *See* SOUTHWEST NETWORK FOR ENVTL. & ECON. JUSTICE & ENVTL. LAW INST., WORKING WITH LAWYERS: A GUIDE FOR COMMUNITY RESIDENTS AND ENVIRONMENTAL JUSTICE ACTIVISTS

the environmental justice movement and community groups, and address the root of the problem, rather than merely a symptom.[205] Cole's model reflects the most compelling and influential current theories of public interest lawyering.[206]

Litigation can serve several political functions.[207] First, some low-income people and people of color may feel more empowered by appropriating some of the social system's power, particularly through the law and the courts, and working within the system, than by fighting the entire power structure.[208] Second, a lawsuit may be a visible manifestation of a community's struggle around which community organizing activities may take place.[209] Although some community members may view litigation as an opportunity or necessity to turn over responsibility for their problems to a lawyer,[210] others may be attracted to a group that is boldly fighting for the community's rights in the courts, especially if the entire group is actively involved in directing and participating in the

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(1997); CITIZEN'S CLEARINGHOUSE FOR HAZARDOUS WASTES, A USER'S GUIDE TO LAWYERS (1985); Marcia Coyle & Claudia MacLachlan, *Getting Victimized by the Legal System*, NAT'L. L.J., Sept. 21, 1992, at S8. Environmental justice advocates have expressed the same concerns to law schools that have begun environmental justice clinics. *See* Open Letter from Bay Area Environmental Justice Activists to Environmental Law Clinic Proponents at Boalt Hall Law School, Golden Gate Law School & Stanford Law School (Dec. 20, 1993) (on file with author) [hereinafter Open Letter to Environmental Clinics].

205. Cole, *Empowerment*, *supra* note 4, at 668–70.

206. For further information on approaches to public interest lawyering, see GERALD P. LÓPEZ, REBELLIOUS LAWYERING: ONE CHICANO'S VISION OF PROGRESSIVE LAW PRACTICE (1993); Derrick A. Bell, Jr., *Serving Two Masters: Integration Ideals and Client Interests in School Desegregation Litigation*, 85 YALE L.J. 470 (1976); Joel F. Handler, *Community Care for the Frail Elderly: A Theory of Empowerment*, 50 OHIO ST. L.J. 541 (1989); Gerald P. López, *The Work We Know So Little About*, 42 STAN. L. REV. 1 (1989); Stephen Wexler, *Practicing Law for Poor People*, 79 YALE L.J. 1049 (1970); Lucie E. White, *To Learn and Teach: Lessons from Driefontein on Lawyering and Power*, 1988 WIS. L. REV. 699.

207. Bell, *supra* note 206, at 513.

208. People of color have relied heavily on legal rights to fight oppression. *See* PATRICIA J. WILLIAMS, THE ALCHEMY OF RACE AND RIGHTS 163–64 (1991) (expressing the growth of rights for African Americans as a process of empowerment). Legal representation can empower people without power. *See* Austin Sarat, *". . . The Law Is All Over": Power, Resistance and the Legal Consciousness of the Welfare Poor*, 2 YALE J.L. & HUMAN. 343, 363–64 (1990). For a view that those who challenge the conventional power structure (i.e., reform movements) either are integrated into that structure as it changes incrementally or are suppressed, see JEFFREY BURTON RUSSELL, DISSENT AND ORDER IN THE MIDDLE AGES: THE SEARCH FOR LEGITIMATE AUTHORITY 101–02 (1992). Dissent and order, acceptable reform and unacceptable reform, are the same evolving movement in healthy tension. *Id.*

209. Cole, *Litigation*, *supra* note 4, at 542 (describing publicity benefits of lawsuits generally and the local and national attention that the Kettleman City incinerator struggle received after the filing of a civil rights and environmental suit). In addition, a publicity-generated lawsuit may inspire other similar communities. *Id.* A client may identify similarly situated people, such as neighbors, and meet with them about the problem, thereby building a group. Cole, *Empowerment*, *supra* note 4, at 666.

210. Cole, *Empowerment*, *supra* note 4, at 650 n.116, 661–66 & n.182. In addition, there may be a similar temptation to allow the movement to be shaped and directed by professional community activists or organizers.

litigation.[211] Third, a lawsuit, if conducted according to Cole's public interest lawyering model, could involve affected people in the solution of their problem by relying on them to make decisions about litigation strategy and tactics, share their expertise on the environmental injustices they experience, gather facts, develop contingency plans for various outcomes, and do a variety of other tasks like media work and community education.[212] Fourth, litigation can educate the community, policy makers, and the public about environmental injustices and the rights of those affected.[213] Fifth, publicity surrounding litigation not only educates people about the particular conflict and encourages others to fight against environmental injustice, but it also puts pressure on corporate and government decision makers.[214] Sixth, litigation may be a rallying point for attracting other groups' support, such as the assistance of civil rights groups for an environmental justice civil rights case.[215] Seventh, litigation may educate the courts about environmental injustices and facilitate changes in legal doctrine that are more favorable to the environmental justice movement.[216] Eighth, environmental justice groups bring lawsuits so that they can participate in government decisions or have access to information about the impacts or potential impacts of various projects; they often base these suits on statutes that require public participation, environmental impact study, or information disclosure.[217] Ninth, both the credible ability to threaten litigation and the development of legal doctrine that favors environmental justice claims enhance the bargaining power of grassroots community groups in non-judicial, political arenas.[218] Similarly, lawsuits may bring the polluter and/or government agency to the bargaining table with the affected community residents.[219] Tenth, "[b]ringing a civil rights suit against local government officials can be very satisfying for the community group involved, because it calls the problem what it is: a violation of civil rights. It is one high-profile way of saying that the official being sued is engaging in racist practices."[220] Finally, despite Cole's concerns that lawsuit victories may derail organizing and empowerment efforts,[221] some groups may be energized and em-

211. *Id.* at 661–68.

212. *See id.* at 661–63, 665.

213. *Id.* at 664, 668–69; Cole, *Litigation*, *supra* note 4, at 542–43.

214. Cole, *Litigation*, *supra* note 4, at 542.

215. *Id.* at 543.

216. *Id.* at 543–44.

217. *Id.* at 528–30.

218. This is known as "bargaining in the shadow of the law." Robert Cooter et al., *Bargaining in the Shadow of the Law: A Testable Model of Strategic Behavior*, 11 J. LEGAL STUD. 225, 225–26 (1982); Robert H. Mnookin & Lewis Kornhauser, *Bargaining in the Shadow of the Law: The Case of Divorce*, 88 YALE L.J. 950, 968–69 (1979).

219. The Coalition for Community Action in Alsen, Louisiana (part of Cancer Alley) brought a lawsuit against Rollins Environmental Services incinerators, which was settled out-of-court for an average of $3,000 per resident and reduced emissions from the Rollins facilities. Bullard, *Anatomy*, *supra* note 9, at 27–28, 37.

220. Cole, *Litigation*, *supra* note 4, at 541–42.

221. Cole, *Empowerment*, *supra* note 4, at 651.

powered by a victory and especially by the prevention or elimination of the environmentally harmful LULU.[222] Thus, litigation is sometimes a powerful political response to environmental injustice.

5. Networks and Coalitions

Environmental justice advocates typically enhance their political responses by developing networks and coalitions among environmental and social justice groups, as well as with political, business, and civic leaders.[223] Coalitions involve separate groups that cooperate and support one another on specific issues or conflicts, often in a particular community (even if not all the groups in the coalition exist in that community).[224] Networks, on the other hand, are multi-issue, regional or national associations of grassroots groups, united to share information, advance the environmental justice movement generally, and seek a range of government policies and processes.[225] An example of coalition building is the work of Concerned Citizens of South Central Los Angeles in obtaining the support and cooperation of various groups in opposing a solid waste incinerator. The group of mainly women of color maintained control of their struggle while forging alliances with Greenpeace, Citizens for a Better Environment, the National Health Law Program, the Center for Law in the Public Interest, and two white Westside "slow growth" groups.[226] Historically, environmental justice groups were more likely to receive support from social justice groups than from mainstream environmental groups. However, increasingly groups in the affected neighborhood lead environmental justice struggles, while a diverse range of groups—social justice and environmental, minority and white, low-income and high-income, grassroots and professional, local and national—support and assist in the struggle.[227] The support of these groups can be quite valuable. For example, MELA relied on the technical ad-

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222. *See, e.g.*, National Oil Refinery ACTION! Network/Communities for a Better Environment, *Sun Oil Reaches Good Neighbor Agreement with Neighbors/Workers 12-30-97* (visited Nov. 11, 1998) <http://www.igc.org/cbesf/flash.html> [hereinafter NORAN/CBE, *Sun Oil*]; Chester Residents Concerned for Quality Living, *Federal Court Gives Green Light to Environmental Racism Suit Against PA DEP* (visited Nov. 11, 1998) <http://www.enviroweb.org/pen/crcql/lawsuit_victory1.html>.

223. *See* SZASZ, *supra* note 7, at 70–71, 74–76; Gauna, *supra* note 6, at 11.

224. *See* SZASZ, *supra* note 7, at 74–76.

225. *Id.*

226. Hamilton, *supra* note 160, at 212–13. For an example of a grassroots group that gathered the support of state and local politicians, business leaders, community leaders, and religious leaders, see Collin & Harris, *supra* note 185, at 100 (describing organizational efforts of Citizens for a Better Environment against proposed waste dump).

227. *See* Bullard, *Anatomy*, *supra* note 9, at 24, 30–33; Gauna, *supra* note 6, at 78–79. Environmental justice groups also work collaboratively with university centers, such as the Deep South Center for Environmental Justice at Xavier University in New Orleans, and law school clinics, such as those at Boalt Hall, Golden Gate, and Stanford Law Schools. *See* Beverly Wright, *Environmental Equity Justice Centers: A Response to Inequity*, *in* ENVIRONMENTAL JUSTICE: ISSUES, POLICIES, AND SOLUTIONS, *supra* note 7, at 57, 63–65; Open Letter to Environmental Clinics, *supra* note 204.

vice, expert testimony, lobbying, research, and legal assistance of groups like Greenpeace, the Natural Resources Defense Council, the Citizens' Clearinghouse on Hazardous Waste, and the Western Center on Law and Poverty.[228]

Networks can be equally valuable. 1990 and 1991 were especially important years for building networks among environmental justice advocates. In 1990, the University of Michigan School of Natural Resources held a nationally important conference of leading scholars, activists, and government officials concerned with environmental justice issues, resulting in the establishment of an environmental justice working group within the U.S. Environmental Protection Agency.[229] Also in 1990, the Southwest Organizing Project (SWOP) sponsored the People of Color Regional Activist Dialogue for Environmental Justice (RAD), attended by one hundred activists from eight Southwestern states.[230] Out of RAD came the Southwest Network for Environmental and Economic Justice (SNEEJ), and the Southwest Training and Action Institute.[231] SNEEJ consists of grassroots groups from throughout eight Southwestern states; it facilitates the exchange of ideas and experiences among activists, and provides for mutual support and consideration of regional perspectives on local struggles.[232] With the strength of numbers greater than any individual group, SNEEJ also lobbies for national policies, both legislative and regulatory, that will promote environmental justice.[233] The Institute studies environmental justice issues, gathers and disseminates technical information, and trains leaders of grassroots groups.[234] In addition to SNEEJ, other regional networks include the Indigenous Environmental Network and the Southern Community Labor Conference for Environmental Justice.[235]

At a more national level, the First National People of Color Environmental Leadership Summit was held in Washington, DC in October 1991.[236] More than 600 people of color, representing more than 300 groups, attended the conference and labeled the impact of environmental racism on people of color as "environmental genocide."[237] The participants issued a set of seventeen principles of environmental justice, fo-

228. Bullard, *Anatomy*, *supra* note 9, at 32.

229. Ferris & Hahn-Baker, *supra* note 126, at 69; *see also* Maria Ramirez Fisher, Comment, *On the Road from Environmental Racism to Environmental Justice*, 5 VILL. ENVTL. L.J. 449, 467–74 (1994) (urging the formation of coalitions between grassroots groups and mainstream environmental organizations).

230. Moore & Head, *supra* note 184, at 191.

231. *Id.* at 192.

232. *Id.* at 192–94.

233. *Id.* at 200–02.

234. *Id.* at 194. Leadership development includes training on the history and culture of the Southwest and the interrelationship between economic and environmental issues. *Id.*

235. *See* Ferris & Hahn-Baker, *supra* note 126, at 69.

236. Grossman, *supra* note 9, at 272.

237. *Id.* at 272–73; *see* Bullard, *Environmental Justice for All*, *supra* note 158, at 7.

cusing on both environmental and social justice goals for government policy, economic markets, and societal attitudes and actions.[238] By organizing into networks, grassroots groups are enhancing their empowerment strategies so that they influence the national agenda.

6. Goals of Empowerment

The second question concerning the meaning of "community empowerment" and "political activism" asks: For what purposes are people of color and low-income people active or empowered? Is their only goal to remedy or prevent environmental injustices, or do they have broader, more visionary goals? In other words, are they empowered only to keep out of their neighborhoods, workplaces, and other common areas what they do *not* want, or are they empowered to define and achieve what they *do* want in their communities?

By and large, grassroots environmental justice activists' political responses have been reactions to proposed or existing environmental hazards, usually LULUs.[239] Bullard's case studies of nine grassroots environmental justice groups show that all were formed in response to community disputes over either existing or proposed facilities in low-income or minority neighborhoods.[240] In many ways, suggestions that these communities should think more broadly or in more visionary terms are unfair and unrealistic. These people are fighting for their lives, families, homes, and neighborhoods against existing or impending environmental harms; they are reacting to crisis situations.[241] Furthermore, community organizing and political activity may be easier when the community has a concrete and immediate danger to fight or conflict to address.[242]

Nevertheless, environmental injustice is a political problem in part because people of color and low-income people have not played a role in developing the general policies that govern the siting of LULUs, pollution standards, community participation, and neighborhood land use patterns.[243] One type of political response to environmental injustice is to lobby for generally applicable and prospective rules and policies to protect all minority and low-income communities from pollution and LU-

238. Grossman, *supra* note 9, at 272–75.

239. *See* Poirier, *supra* note 28, at 798 ("These movements typically originate in issues specific to a particular geographic location or a particular land use controversy."); *see also* Bullard, *Anatomy*, *supra* note 9, at 27–28, 37 (Coalition for Community Action response to existing incinerators in Alsen, Louisiana); Collin & Harris, *supra* note 185, at 95–96 (citizen group petitioned Board of Supervisors to reject proposed landfill); Gutiérrez, *supra* note 168, at 220, 221–25 (MELA reaction to proposed state prison).

240. Bullard, *Anatomy*, *supra* note 9, at 24–39 & tbl.1.

241. *See* Cole, *Empowerment*, *supra* note 4, at 639–40 (comparing the motivations of the "mainstream environmentalists," mainly lawyers, responding to the social ferment of the sixties, with the motivations of non-lawyers directly affected by environmental problems in their communities).

242. *Id.*

243. *Id.* at 647–49.

LUs. Environmental justice groups are increasingly engaged in this type of lobbying—especially as they become better organized, more established, more vocal, and better connected to one another in regional and national networks.[244]

For example, environmental justice activists in Florida sought legislation to create the Florida Environmental Equity and Justice Commission, which studied whether minority communities bear a greater concentration of environmental hazards than the general population. The Commission proposed changes in statewide policies to address environmental justice needs.[245] Other states have acted as well, enacting statutes that prohibit over-concentration of LULUs in any host communities (i.e., geographic dispersion requirements),[246] statutes that require agencies to consider the impacts of their environmental decisions on host communities and on the input of those communities,[247] and joint resolutions that call for environmental justice.[248] Many other state legislatures have considered environmental justice bills.[249]

Legislation has also been introduced in Congress. These bills include the Environmental Justice Act of 1992,[250] the Environmental Justice

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244. It is unclear whether political leaders will believe their self-interest will be served by supporting the environmental justice movement. *Compare* Gutiérrez, *supra* note 169, at 222–25 (detailing the assistance given to California Assemblywoman Gloria Molina by the Mothers of East Los Angeles), *with* Randy Lee Loftis, *Controversy in the Air: Civil Rights Act Invoked in Protest over Chemical Plant Plan*, DALLAS MORNING NEWS, Sept. 9, 1997, at 24A (reporting the hostility of Louisiana Governor Mike Foster to the environmental justice movement's opposition to a Shintech polyvinyl chloride plant in an African American area already hosting several chemical plants). For an argument that politicians may support social justice causes, despite political costs, because of personal moral views about the public good, see Craig Anthony (Tony) Arnold, *Beyond Self-Interest: Policy Entrepreneurs and Aid to the Homeless*, 18 POL'Y STUD. J. 47, 48 (1989).

245. *See* 1994 Fla. Laws ch. 94-219; FLORIDA REPORT, *supra* note 5; *Environmental Equity & Justice Commission*, ENVTL. JUSTICE WATCH! (Legal Envtl. Assistance Found. (LEAF), Tallahassee, Fla.), Feb. 28, 1995, at 2 (LEAF wrote the Model Legislation Environmental Equity and Justice Act, which formed the basis for the Florida statute).

246. *See, e.g.*, 1993 Ark. Act 1263; *see also* Mary Lou Gallagher, *New York City Fair Share Process*, 58 PLANNING 13 (1992) (discussing New York City's charter provision for the equitable siting of public facilities).

247. *See* 1993 La. Act § 767; 1997 Md. Laws ch. 741.

248. *See, e.g.*, H.R. Res. 662, 1994 Reg. Sess. (Mich. 1994); H.R.J. Res. 146, 1993 Reg. Sess. (Tenn. 1993); H.R.J Res. 529, 1993 Reg. Sess. (Va. 1993).

249. *See, e.g.*, S. 713, 1997 Reg. Sess. (Ala. 1997); H.R. 2572, 43d Leg., 1st Reg. Sess. (Ariz. 1997); S. 451, 1997–98 Reg. Sess. (Cal. 1997); S. 1348, 1997 Reg. Sess. (Fla. 1997); S. 1354, 1997 Reg. Sess. (Fla. 1997); H.R. 945, 1997 Reg. Sess. (Fla. 1997); H.B. 518, 1997–98 Reg. Sess. (Ill. 1997); H.B. 447, 1997 Reg. Sess. (Miss. 1997); H.R. 238, 98th Gen. Assembly, 1st Reg. Sess. (Mo. 1997); S. 2096, 220th Ann. Legis. Sess. (N.Y. 1997); S. 5594, 220th Ann. Legis. Sess. (N.Y. 1997); H.R. 726, 100th Gen. Assembly, (Tenn. 1997); S. 1049, 75th Reg. Sess. (Tex. 1997); S.B. 7576, 219th Gen. Assembly, 2d Reg. Sess. (N.Y. 1996); S.B. 6583, 219th Gen. Assembly, 2d Reg. Sess. (N.Y. 1996); H.R. 2321, 1995–96 Reg. Sess. (Pa. 1996); H.R. 3224, 1995–96 Reg. Sess. (Ill. 1995); H.R. 1049, 1995 Reg. Sess. (N.C. 1995); S. 3393, 219th Gen. Assembly, 2d Reg. Sess. (N.Y. 1995); S. 2252, 219th Gen. Assembly, 2d Reg. Sess. (N.Y. 1995); S.B. 434, 1995–96 Reg. Sess. (Wisc. 1995); *see also* KATHLYN GAY, POLLUTION AND THE POWERLESS 108–09 (1994).

250. H.R. 2105, 103d Cong. (1993).

Act of 1993,[251] the Environmental Health Equity Information Act of 1993,[252] the Department of the Environment Act of 1993,[253] the Department of Environmental Protection Act,[254] the Public Health Equity Act,[255] and the Environmental Risk Evaluation Act of 1995.[256] These bills have simultaneously received praise as national attempts to address environmental injustice, and criticism as being largely procedural and symbolic without effective and timely implementation mechanisms or reform of state and local siting policies.[257] Congress has not yet passed a comprehensive environmental justice act.[258]

Environmental justice advocates have had more success in lobbying the Executive Branch than achieving federal legislation. In response to the rising environmental justice movement, the EPA formed the Environmental Equity Workgroup in the early 1990s.[259] In 1992, the Workgroup issued a report assessing the evidence that poor and minority communities are at greater risk of exposure to environmental hazards than more affluent white neighborhoods.[260] The report received widespread criticism from environmental justice advocates, who contend that the EPA views environmental justice as primarily a public relations problem for government officials to manipulate and favors mere redistribution of risk (environmental equity), instead of pollution reduction (environmental justice).[261] The EPA has created several agency offices to address environmental justice concerns: the EPA Office of Environmental Equity, the National Environmental Justice Advisory Council, and the Office of Solid Waste and the Emergency Response Environmental Justice Task Force.[262] On February 11, 1994, President Clinton issued Executive Order 12,898, creating an Interagency Working Group on Environmental Justice to coordinate environmental justice policy

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251. S. 1161, 103d Cong. (1993).

252. H.R. 1925, 103d Cong. (1993).

253. S. 171, 103d Cong. (1993).

254. H.R. 3425, 103d Cong. (1993).

255. S. 1841, 103d Cong. (1994).

256. S. 123, 104th Cong. (1995).

257. *See* Linda D. Blank, Comment, *Seeking Solutions to Environmental Inequity: The Environmental Justice Act*, 24 ENVTL. L. 1109, 1120–21 (1994) (commending the aims of the EJA of 1992, but arguing that it fails to effectively address the real problems associated with environmental justice); Claire L. Hasler, Comment, *The Proposed Environmental Justice Act: "I Have a (Green) Dream,"* 17 U. PUGET SOUND L. REV. 417, 451–57 (1994) (arguing the EJA of 1992 avoids many of the issues associated with environmental justice concerns).

258. Public interest groups are also lobbying Congress for legislation to expand the public's right to information about toxic substances and products. *See Outlook for 1997: A Full Year*, *supra* note 177, at 1–3.

259. Carol E. Dinkins, *Impact of the Environmental Justice Movement on American Industry and Local Government*, 47 ADMIN. L. REV. 337, 338 (1995).

260. EPA, ENVIRONMENTAL EQUITY, *supra* note 5, at 11–24.

261. *See* Robert D. Bullard, *Conclusion: Environmentalism with Justice*, *in* CONFRONTING ENVIRONMENTAL RACISM, *supra* note 3, at 195, 195; Gauna, *supra* note 6, at 27–29.

262. Dinkins, *supra* note 259, at 339–40.

among federal agencies. The Order required every federal agency to develop an agency-wide environmental justice strategy within ten months and to report periodically to the Working Group on its implementation of the strategy.[263] The Order further directed agencies to gather data on disparate environmental risks and health effects, assess programs for impact on minority and low-income populations, and improve public participation and access to information related to federal programs and policies.[264]

It is unclear whether the Executive Order achieved its intended effect on substantive policy decisions. The fate of the proposed Louisiana Energy Services (LES) uranium enrichment plant near Homer, Louisiana, illustrates the ambiguity. On May 1, 1997, the Nuclear Regulatory Commission's (NRC) Atomic Safety and Licensing Board (ALSB) denied a license for the LES plant. The denial was partly because both the license application and the NRC staff's review of the application did not comply with Executive Order 12,898.[265] The ALSB mandated that NRC staff re-investigate the impact of the project on African American residents surrounding the proposed plant, and examine whether racial discrimination played a role in the selection of the site.[266] The NRC, however, reversed the ALSB on the environmental justice issue, on the basis that the only applicable law in the case was the National Environmental Policy Act of 1969 (NEPA),[267] which the NRC held could not be used as a tool for inquiry into racial discrimination.[268] The NRC stated that the Executive Order created no new rights or remedies and therefore could not form the basis of a "non-discriminatory directive" on which the ALSB could require inquiry into whether LES officials intended to discriminate on the basis of race.[269] According to the NRC, the ALSB had "no clear legal basis or clearly discernible objective"[270] in reviewing siting decisions for racial discrimination, but upheld the ALSB's requirement that the NRC staff consider the social impacts of the proposed plant on the surrounding neighborhood, particularly pedestrian traffic and property values.[271] The NRC decision was a stunning blow to the meaningful implementation of the Executive Order and to the local community's attempt to have input into the placement of a uranium enrichment plant in their midst. The NRC's insistence that NEPA was the only applicable law ignored the applicability of federal civil rights statutes, such as Title VI of the Civil Rights Act of 1964,[272] which prohibits

263. Exec. Order No. 12,898, 3 C.F.R. 859 (1995), *reprinted in* 42 U.S.C. § 4321 (1994).
264. *Id.*
265. *In re* Louisiana Energy Servs., L.P., 45 N.R.C. 367, 367 (1997) (final initial decision).
266. *Id.* at 390–97.
267. Pub. L. No. 91-190, 83 Stat. 852 (1970) (codified at 42 U.S.C. §§ 4321–4370e (1994)).
268. *In re* Louisiana Energy Servs., L.P., 47 N.R.C. 77, 100–06 (1998).
269. *Id.* at 102.
270. *Id.* at 101.
271. *Id.*
272. Pub. L. 88-352, § 601, 78 Stat. 241, 252 (1964) (codified at 42 U.S.C. § 2000d (1994)).

racial discrimination in federal programs and funding.[273] In addition, if the decision to site the LES plant near Homer, Louisiana, were based on intentional racism, the federal approval of the siting decision could be a violation of the Equal Protection Clause of the Fourteenth Amendment.[274] Ultimately, though, LES withdrew its application for a permit and license for the uranium enrichment plant, bowing to local opposition and charges of environmental injustice.[275] The NRC refused to reconsider its far-reaching statements about the Executive Order and dismissed the case as moot.[276] Thus, the opponents of the plant defeated it, but the long-term impact of the Executive Order is in question.[277]

Environmental justice activists are also increasingly participating in administrative rulemaking on environmental matters. The New York City Environmental Justice Alliance, supported by forty other civil rights and environmental groups from New York City, submitted comments favoring the EPA's proposal for stricter air pollution standards governing ozone and particulate matter, and pointing to the higher incidence of asthma in inner cities due to ambient air pollution.[278] Communities for a Better Environment have petitioned the EPA to list dioxin on the Toxics Release Inventory (TRI), and various groups regularly comment on the EPA proposed rules and programs that relate to the availability of information about toxic pollution.[279]

Finally, as demonstrated later in this article, environmental justice advocates are also beginning to seek land use regulations that will protect low-income and minority neighborhoods against LULUs and other environmental harms.[280] However, the political conception of environmental justice remains largely focused on preventing harms. More often than not, what a community is seeking is defined in the negative—no dumps, no more group homes, no dirty air, no racism in enforcement practices—instead of in the positive—zoning and financing for small business development, more parks, clean air, or neighborhood participation in enforcement decisions. Communities "fight back," instead of "fight for." Of course, the distinction between the two is sometimes not so clear,

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273. *See infra* notes 299–338 and accompanying text.

274. U.S. CONST. amend. XIV, § 1; *see infra* notes 288–98 and accompanying text (discussing constitutional protections against environmental racism); *see also* Shelley v. Kraemer, 334 U.S. 1, 16 (1948) (holding government enforcement of private discrimination is state action in violation of the Equal Protection Clause).

275. *In re* Louisiana Energy Servs., L.P., 47 N.R.C. 113, 114 (1998) (order).

276. *In re Louisiana Energy Servs.*, 47 N.R.C. at 114.

277. However, responding to the Executive Order, the EPA has successfully put pressure on the New Jersey Department of Environmental Protection to deny a permit for a sewage sludge treatment works in a Newark neighborhood of color. *See* Michael B. Gerrard & Monica Jahan Bose, *The Emerging Arena of "Justice,"* N.Y. L.J., July 25, 1997, at 3.

278. *Justice in the Air?*, 120 MOBILIZING THE REGION 1 (Apr. 4, 1997) (visited Oct. 21, 1998) <http://www.tstc.org/bulletin/1997040/mtr12005.htm>.

279. *See Working Group on Community Right-to-Know*, *supra* note 175, at 1, 3.

280. *See infra* Part V.

occasionally even merely semantical. For example, community organizing to stop air pollution and community organizing to achieve clean air may be quite similar, although the latter would likely be far more creative and have a far broader agenda than the former. The former, fighting against a public "bad," would rightly target polluters and government agencies that permit pollution, whereas the latter, fighting for a public "good," would do the same but also seek non-polluting technologies, push for cleanup of the local air basin, and consider what the local neighborhood could do to contribute to improved air quality. A community that is under siege from pollution and LULUs will naturally react, but long-term empowerment will come from participating in, and influencing, generally applicable policy that will shape all sorts of future actions and conflicts that could affect that community.

C. *Rights Protection Responses (Legal Conceptions)*

Environmental justice activists have not confined themselves to political strategies but have also used the law both to protect the rights of those harmed by environmental injustices and to remedy those harms.[281] Environmental justice scholars have also devoted much attention to judicial remedies.[282] As Denis Binder has written, the amount of initial environmental justice literature seemed to exceed greatly the number of published court opinions on the issue.[283] However, "[e]nvironmental justice issues often lurk in the background of cases, but are not necessarily present on the surface,"[284] and the amount of environmental justice litigation has grown significantly in the last few years. In addition, legal strategies often overlap with political and enforcement strategies, such as when grassroots groups lobby for legislation or regulations (i.e., laws of general applicability) or push for enforcement of existing laws to a particular proposal or facility.[285]

The legal theories behind environmental justice litigation reflect the convergence of environmental law and civil rights law.[286] Under this con-

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281. Cole, *Litigation*, *supra* note 4, at 523–26.

282. Collin, *supra* note 6, at 134. *See generally* Binder, *supra* note 6 (providing a list of environmental justice cases); Cole, *Litigation*, *supra* note 4 (discussing judicial remedies for siting disputes); Colopy, *supra* note 6 (discussing Title VI of the Civil Rights Act of 1964 as a judicial remedy); Michael Fisher, *Environmental Racism Claims Brought Under Title VI of the Civil Rights Act*, 25 ENVTL. L. 285 (1995) (opining that Title VI of the Civil Rights Act of 1964 is a viable judicial remedy); Gauna, *supra* note 6 (analyzing citizen suits under environmental statutes); Stephen M. Johnson, *NEPA and SEPA's in the Quest for Environmental Justice*, 30 LOY. L.A. L. REV. 565 (1997) (discussing NEPA and SEPAs as judicial remedies); Lazarus, *supra* note 6, at 827–42 (outlining various judicial remedies); Reich, *supra* note 6 (concluding federal law offers inadequate remedies); Godsil, *supra* note 6, at 408–27 (exploring the Civil Rights Act and the Equal Protection Clause as judicial remedies).

283. Binder, *supra* note 6, at 163.

284. *Id.* at 164.

285. *See supra* Part II.B (discussing political activism); *infra* Part II.C.3 (discussing statutory rights to enforcement of environmental laws); *see also* Cole, *Litigation*, *supra* note 4, at 524–25.

286. Cole, *Litigation*, *supra* note 4, at 530.

ception, environmental injustice violates the rights of minorities and the poor. The causes of action are based on five different types of rights: (1) the constitutional right against intentional racial discrimination; (2) the statutory and regulatory right against racial discrimination, whether by intentional action or unjustifiable and measurable impact; (3) the statutory right to have the substantive environmental law applied and enforced; (4) the statutory right to certain procedures, participation, and information in environmental decision making; and (5) the right to compensation for harms caused by others. Each type of right and applicable causes of action will be described. There are far too many cases, however, to describe all of them, and thorough analyses of individual cases exist elsewhere in the literature.[287]

1. Constitutional Rights

An obvious source of legal relief for claims of environmental racism is the Equal Protection Clause of the Fourteenth Amendment.[288] Community groups and individuals have brought numerous suits against government decision makers for decisions to approve the siting of LULUs in minority areas, arguing that these racially discriminatory decisions violated the plaintiffs' equal protection rights.[289] Government actions based on race, a suspect classification, are subject to strict scrutiny under the Equal Protection Clause, requiring the government to prove that its actions were "narrowly tailored" to meet a "compelling governmental purpose[]."[290] However, to establish a successful equal protection claim that triggers strict scrutiny, a plaintiff must prove that the government decision makers intentionally discriminated on the basis of race, not merely

287. *See id.* at 527 & n.16; Collin, *supra* note 6, at 134–41; Colopy, *supra* note 6, at 145–50. Binder compiled an excellent index of environmental justice cases from 1886 to 1992. Binder, *supra* note 6, at 165–67. By cases, I do not mean exclusively published opinions, which far too often are the primary or sole focus of law review articles. Sometimes the mere filing of a lawsuit or the settlement of a pending suit may protect the rights of the plaintiffs, especially if it is part of an overall grassroots organizing and empowerment plan. *See, e.g.*, Vernice D. Miller, *Planning, Power and Politics: A Case Study of the Land Use and Siting History of the North River Water Pollution Control Plant*, 21 FORDHAM URB. L.J. 707, 721 (1994); NORAN/CBE, *Sun Oil*, *supra* note 222.

288. U.S. CONST. amend. XIV, § 1. Equal protection claims may be brought under 42 U.S.C. § 1983 (1994), which provides a federal cause of action for deprivation of federal constitutional rights under color of state law.

289. *See, e.g.*, Lake Lucerne Civic Ass'n. v. Dolphin Stadium Corp., 801 F. Supp. 684, 699, 701 (S.D. Fla. 1992); R.I.S.E., Inc. v. Kay, 768 F. Supp. 1144, 1149 (E.D. Va. 1991); East Bibb Twiggs Neighborhood Ass'n. v. Macon-Bibb County Planning & Zoning Comm'n, 706 F. Supp. 880, 881 (M.D. Ga.), *aff'd*, 888 F.2d 1573, *op. amended & superseded on denial of reh'g*, 896 F.2d 1264 (11th Cir. 1989); Coalition of Bedford-Stuyvesant Block Ass'n. v. Cuomo, 651 F. Supp. 1202, 1208 (E.D.N.Y. 1987); Bean v. Southwestern Waste Management Corp., 482 F. Supp. 673, 675 (S.D. Tex. 1979); Harrisburg Coalition Against Ruining the Env't v. Volpe, 330 F. Supp. 918, 926–27 (M.D. Pa. 1971).

290. *E.g.*, Adarand Constructors, Inc. v. Pena, 515 U.S. 200, 227 (1995).

show the discriminatory impact of their decision.[291] Virtually no plaintiff in any of the many different environmental justice civil rights cases nationwide has prevailed on an equal protection claim; none has been able to meet the Supreme Court's intent requirement.[292] Legal scholars agree that absent the overruling of *Washington v. Davis* and *Arlington Heights*, which established the intent requirement, or a rare case in which a plaintiff can uncover evidence of discriminatory intent in government decision making, the Equal Protection Clause offers little promise of success for environmental justice claims.[293] Federal legislation to replace the discriminatory intent standard with a disparate impact test for environmental permitting decisions is not politically viable.[294] Even if such legislation were passed, it could be subject to protracted litigation over its constitutionality as an exercise of congressional power to implement the Fourteenth Amendment pursuant to Section Five of the Amendment.[295]

In some jurisdictions, a more viable alternative to a federal equal protection claim is an equal protection claim under the state constitution. Peter Reich has demonstrated that several states use a disparate impact analysis for their more broadly-interpreted equal protection guarantees.[296] He speculates that many environmental justice suits, based on well-established evidence of "actionable disparate impact,"[297] could be successful if they included state constitutional equal protection claims and were brought in states with "expansive judicial interpretations of equal protection."[298]

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291. *E.g.*, Village of Arlington Heights v. Metropolitan Hous. Dev. Corp., 429 U.S. 252, 264–65 (1977); Washington v. Davis, 426 U.S. 229, 239 (1976).

292. Cole, *Litigation*, *supra* note 4, at 538–39. However, if denial of municipal services or provision of substandard municipal services to minority neighborhoods based on intentional racial discrimination is considered an environmental justice issue, some equal protection claims have been successful. *See, e.g.*, Ammons v. Dade City, 783 F.2d 982, 987–88 (11th Cir. 1986); Dowdell v. City of Apopka, 698 F.2d 1181, 1185–86 (11th Cir. 1983); Baker v. City of Kissimmee, 645 F. Supp. 571, 579 (M.D. Fla. 1986). *But see* Wilkerson v. City of Coralville, 478 F.2d 709, 711 (8th Cir. 1973) (viewing city's refusal to annex an impoverished area as not violating the Equal Protection Clause).

293. *See* Cole, *Litigation*, *supra* note 4, at 538–41 & nn.87–88; Colopy, *supra* note 6, at 151–52; Pamela Duncan, *Environmental Racism: Recognition, Litigation, and Alleviation*, 6 TUL. ENVTL. L.J. 317, 341–53 (1993); Lazarus, *supra* note 6, at 829–34; Reich, *supra* note 6, at 290–97; *see also* Been, *Fairness*, *supra* note 6, at 1004. However, filing equal protection claims may have political value to emphasize that the particular government action is a violation of minorities' civil rights. Cole, *Litigation*, *supra* note 4, at 540–44; Godsil, *supra* note 6, at 420–21.

294. *See* Reich, *supra* note 6, at 294–97. For criticisms of existing equal protection analysis, see Boyle, *supra* note 9, at 950–67; Leslie Ann Coleman, Comment, *It's the Thought That Counts: The Intent Requirement in Environmental Racism Claims*, 25 ST. MARY'S L.J. 447, 471–75 (1993).

295. *See* Boerne v. Flores, 117 S. Ct. 2157, 2171–72 (1997) (invalidating the Religious Freedom Restoration Act as beyond congressional Section Five power to implement the Fourteenth Amendment); *see also* U.S. CONST. amend. XIV, § 5 ("The Congress shall have power to enforce, by appropriate legislation, the provisions of this article.").

296. *See* Reich, *supra* note 6, at 301–05 & n.181 (citing cases from Arkansas, California, Connecticut, West Virginia, and Wyoming).

297. *Id.* at 304.

298. *Id.* at 305.

2. Statutory Civil Rights

Environmental justice plaintiffs can also bring civil rights claims under Title VI of the Civil Rights Act of 1964;[299] Title VIII of the Civil Rights Act of 1968;[300] and 42 U.S.C. § 1982.[301] For a variety of reasons discussed below, federal civil rights statutes and the regulations that implement them offer greater legal protections against racial disparities in environmental burdens and harms than does the federal Equal Protection Clause.[302]

Title VI provides: "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."[303] It is essentially a prohibition on federal funding of programs that discriminate on the basis of race. As with the Equal Protection Clause, litigants suing under Title VI itself must prove intentional racial discrimination.[304] Many federal agencies, however, have adopted implementing regulations that prohibit funding of programs with racially discriminatory effects or impacts.[305] The U.S. Supreme Court has suggested that litigants suing under Title VI regulations need only show unjustified disparate impact[306] but the availability of a disparate impact private cause of action under Title VI regulations remains uncertain.[307] To establish a prima facie case that a federally funded program or activity violates Title VI regulations, the plaintiff must provide evidence of definite and measurable disparity in

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299. Pub. L. 88-352, § 601, 78 Stat. 241, 252 (1964) (codified at 42 U.S.C. § 2000d (1994)). *See generally* Steven A. Light & Kathryn R.L. Rand, *Is Title VI a Magic Bullet? Environmental Racism in the Context of Political-Economic Processes and Imperatives*, 2 MICH. J. RACE & L. 1 (1996) (discussing the effectiveness of Title VI as a litigation strategy to fight environmental racism).

300. Pub. L. 90-284, § 801, 82 Stat. 73, 81 (1968) (codified at 42 U.S.C. §§ 3601–3619, 3631 (1994 & Supp. II 1996)).

301. 42 U.S.C. § 1982 (1994).

302. *See* Cole, *Litigation*, *supra* note 4, at 530–31; Colopy, *supra* note 6, at 152.

303. 42 U.S.C. § 2000d.

304. *See* Alexander v. Choate, 469 U.S. 287, 293–94 (1985).

305. *E.g.*, 7 C.F.R. § 15.3(b)(2) (1998) (Department of Agriculture); 10 C.F.R. § 1040.13(c)–(d) (1998) (Department of Energy); 24 C.F.R. § 1.4(b)(2)(i), (3) (1998) (Department of Housing and Urban Development); 32 C.F.R. § 195.4(2) (1997) (Department of Defense); 40 C.F.R. § 7.35(b) (1997) (Environmental Protection Agency); 43 C.F.R. § 17.3(b)(2)–(3) (1997) (Department of Interior); 45 C.F.R. § 80.3(b)(2)–(3) (1997) (Department of Health and Human Services); 49 C.F.R. § 21.5(b)(2)–(3) (1997) (Department of Transportation).

306. *See Choate*, 469 U.S. at 293–94.

307. *See* Chester Residents Concerned for Quality Living v. Seif, 132 F.3d 925, 927 (3d Cir. 1997) (holding that plaintiff's argument that disproportionate siting according to racial composition of the neighborhood violates Title VI regulations could maintain a private cause of action, and that plaintiffs need only prove disparate impact, not discriminatory intent), *vacated and remanded with instructions to dismiss*, 119 S. Ct. 22 (1998); *see also* South Bronx Coalition for Clean Air, Inc. v. Conroy, 20 F. Supp.2d 565, 572 (recognizing lingering questions about Title VI disparate impact private causes of action).

the program's impact, sufficiently substantial to raise an inference that the impact is the result of racial discrimination.[308] The defendant then may rebut the prima facie case by showing that its program has a legitimate, nondiscriminatory purpose.[309] The plaintiff has the ultimate burden of proving illegal discrimination and must show that there is a less discriminatory alternative that adequately serves the defendant's legitimate interests.[310]

In addition to the disparate impact standard, Title VI offers several advantages to environmental justice plaintiffs. The courts recognize an implied private cause of action for individuals who have suffered discriminatory impact that violates Title VI regulations.[311] Plaintiffs can sue either the federal funding agency, which has provided federal financial assistance to a discriminatory program, or the fund recipient itself, which has discriminated through the impact of its program.[312] Aggrieved persons can seek redress through federal litigation, an administrative complaint process, or both.[313] However, there is generally no requirement that a plaintiff exhaust his or her administrative remedies before filing a suit under Title VI regulations.[314]

Nonetheless, Title VI plaintiffs encounter some hurdles. Those who choose to file administrative complaints, in contrast to (or in addition to) litigating, are not entitled to any particular formal means of participating in the administrative process.[315] Particularly relevant to those who raise environmental justice claims, the EPA has not given Title VI enforcement a high priority, although the EPA under the Clinton administration is devoting more attention to Title VI environmental justice concerns than it has historically.[316] Those who sue must establish a sufficient nexus between the environmental injustice and federal funding.[317] To have standing, they might also have to show that they were the intended beneficiaries of the federal funds.[318] Plaintiffs also must prove the disparate

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308. *See* NAACP v. Medical Ctr., Inc., 657 F.2d 1322, 1332–34 (3d Cir. 1981); Scelsa v. City Univ. of N.Y., 806 F. Supp. 1126, 1141 (S.D.N.Y. 1992).

309. *Medical Ctr.*, 657 F.2d at 1333.

310. *Id.* at 1336 n.17.

311. *Seif*, 132 F.3d at 937; *see* Colopy, *supra* note 6, at 156; Lazarus, *supra* note 6, at 835. The U.S. Supreme Court, however, has not squarely resolved the issue, and uncertainty persists. *See* cases cited *supra* note 307.

312. *See* Colopy, *supra* note 6, at 157; Fisher, *supra* note 282, at 317.

313. *See* Colopy, *supra* note 6, at 168–80; Fisher, *supra* note 282, at 313.

314. *See* Colopy, *supra* note 6, at 156–57 (citing Cannon v. University of Chicago, 441 U.S. 677, 707 n.41 (1979)); *see also* Fisher, *supra* note 282, at 313 & n.137 (citing Guardians Ass'n v. Civil Serv. Comm'n, 463 U.S. 582, 593–95 (1983)).

315. *See* Fisher, *supra* note 282, at 316 & n.154 (citing *Cannon*, 441 U.S. at 706 n.41).

316. *See* Colopy, *supra* note 6, at 180–88; Fisher, *supra* note 282, at 313–16.

317. *See* Lazarus, *supra* note 6, at 835. Most state environmental programs receive federal funding, thereby providing the required nexus. *Id.* at 836.

318. *See* Colopy, *supra* note 6, at 166–67; Fisher, *supra* note 282, at 317–19. The standing requirements in suits against federal funding recipients remain unclear, but environmental justice

impact[319] and that it was unjustified.[320] They may also encounter difficulties proving causation. For example, in a recent celebrated environmental justice case, a Michigan state judge rejected the disparate impact challenge to a state agency's pattern of granting permits to polluting facilities in minority areas of Genesee County.[321] The theory failed because the plaintiffs did not prove that the state permitting process, which failed to consider the race of the siting community, caused either the concentration of pollution in the area or the location of African Americans near the polluting facilities.[322] Most of the polluters were located in those areas before they developed significant African American populations, and most of the pollution in the area was due to sources other than the permitted polluting facilities.[323] Finally, unless the violation is intentional thereby allowing damages recovery, plaintiffs successful under Title VI are entitled only to declaratory and injunctive relief.[324] Despite these hurdles, though, Title VI holds much promise as an effective civil rights tool against environmental injustice, even if initially actual cases and beneficial results have been slow in coming.[325]

Title VIII prohibits racial discrimination "against any person in the . . . sale or rental of a dwelling or in the provision of services or facilities in connection therewith,"[326] and the refusal "to sell or rent . . . or otherwise make unavailable, or deny, a dwelling to any person because of race."[327] In addition, 42 U.S.C. § 1982 states that all U.S. citizens

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plaintiffs should not have difficulty with the intended beneficiary doctrine because all local residents are beneficiaries of federal funds to their state's and locality's environmental programs. *Id.*

319. Fisher, *supra* note 282, at 322–28. Proving disparate impact involves questions concerning (1) the units of measure and comparison for establishing the disparity, (2) how tangible the impact must be (Mere proximity to a polluting facility? Decline in the enjoyment or value of property? Measurable physical harm?), and (3) the availability of nondiscriminatory alternatives that adequately meet the program's legitimate objectives. *Id.*

320. *See* Colopy, *supra* note 6, at 160; Fisher, *supra* note 282, at 321; *see also* Coalition of Concerned Citizens v. Damian, 608 F. Supp. 110, 127 (S.D. Ohio 1984) (holding that although plaintiffs established prima facie case of disparate impact, the government officials successfully responded with legitimate reasons for location).

321. NAACP-Flint Chapter v. Engler, No. 95-38228-CV, at 35–36 (Mich. Cir. Ct. 1997) (transcript of decision read from the bench), *rev'd on other grounds*, NAACP-Flint Chapter v. Governor, No. 205264 (Mich. Ct. App. Nov. 24, 1998) (unpublished opinion).

322. *Engler*, No. 95-38228-CV at 35–36. However, the trial judge *sua sponte* held for the plaintiffs on substantive and procedural environmental claims under state constitutional and statutory law. *Id.* at 17, 39–45. The Michigan Court of Appeals reversed, holding that the trial judge lacked the authority to consider the issues *sua sponte*. *Governor*, No. 205264, at 1–2, 4.

323. *Engler*, No. 95-38228-CV at 35–36.

324. *See* Colopy, *supra* note 6, at 165; Fisher, *supra* note 282, at 328–31.

325. *See* Cole, *Litigation*, *supra* note 4, at 531–34; Lazarus, *supra* note 6, at 836–39. *But see* Light & Rand, *supra* note 299, at 5 (expressing caution about the effectiveness of Title VI suits and arguing in support of the need for political and economic strategies). *See generally* Colopy, *supra* note 6, at 158–181 (exploring ways in which Title VI can be used to protect minority communities from environmental racism); Fisher, *supra* note 282, at 311–12 (arguing that it is possible to use Title VI to solve the problem of environmental discrimination).

326. 42 U.S.C. § 3604(a) (1994).

327. *Id.* § 3604(b).

"shall have the same right . . . to inherit, purchase, lease, sell, hold, and convey real and personal property."[328] A Title VIII claim does not require proof of intentional discrimination; disparate impact is sufficient.[329] A Title VIII claim thus follows the same general pattern as a Title VI claim: a plaintiff establishes a prima facie case of disparate impact, the defendant rebuts with nondiscriminatory justification(s), and the plaintiff responds with evidence of less discriminatory means that adequately satisfy the legitimate reason(s) for the defendant's action.[330] Although Title VIII, unlike Title VI, does not require a federal funding nexus, it does require that the impact relate to fair housing opportunities.[331] However, Luke Cole has suggested that building on Title VIII's application to local government zoning, environmental justice advocates could use Title VIII to attack land use decisions, such as the siting of LULUs in minority neighborhoods, that have the effect of increasing segregation by triggering "white flight."[332] Title VIII has rarely been used in environmental justice cases so far.[333] Section 1982 has also not been widely used in environmental justice suits, but Richard Lazarus suggests that environmental justice advocates could use it to challenge government actions that depreciate the value of property owned by African American citizens.[334] However, Lazarus believes that the courts are likely to resolve uncertainties about whether disparate impact is enough under section 1982 in favor of requiring proof of intentional discrimination.[335]

Use of civil rights statutes to pursue environmental justice claims reflects a theory that the unequal distribution of environmental burdens violates minorities' civil rights.[336] However, this strategy, unlike the use of the Equal Protection Clause, also reflects the view that not only bad motives by government decision makers, but also official actions that have racially differential effects violate minorities' civil rights.[337] This theory addresses, at least partly, institutional discrimination which may persist despite the motives and behavior of individual actors.[338]

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328. 42 U.S.C. § 1982 (1994).

329. *See* Cole, *Litigation*, *supra* note 4, at 534–35; *see also* Lazarus, *supra* note 6, at 839–40.

330. Cole, *Litigation*, *supra* note 4, at 534–35.

331. *See id.* at 535; Lazarus, *supra* note 6, at 840.

332. Cole, *Litigation*, *supra* note 4, at 535–37. In the context of this discussion, "white flight" refers to the departure of whites from the neighborhood.

333. *Id.* at 534.

334. Lazarus, *supra* note 6, at 842.

335. *Id.* at 842–43.

336. *See* Cole, *Litigation*, *supra* note 4, at 530–31.

337. *Id.*

338. *See* Colopy, *supra* note 6, at 188–89.

3. Statutory Rights to Enforcement of Environmental Laws

Statutory substantive environmental law rights[339] are rights embedded in federal and state environmental statutes that allow citizens to sue to enforce those statutes.[340] Olga Moya and Andrew Fono succinctly describe citizen suits:

> There are two types of citizen suits. First is the "enforcing" citizen suit. Here, a citizen files suit against a party who is alleged to have violated environmental laws or regulations. The second type is an "agency-forcing" citizen suit. Here, an individual sues a government agency that is alleged to have failed to aggressively pursue its non-discretionary duties.[341]

Private citizens essentially act as "private attorneys general,"[342] compensating for government underenforcement of environmental laws by pursuing civil actions against alleged polluters and suing government officials to compel them to perform non-discretionary duties.[343] Courts may compel polluters to comply with the statutory or regulatory requirements (e.g., an air emission limit or a standard for storage of wastes), force polluters to clean up contaminated areas (e.g., remediation of soil and groundwater contaminated with hazardous wastes), impose administrative, civil, and criminal sanctions on polluters, direct government agencies to act, and award attorneys' fees to successful litigants.[344]

Most major federal environmental statutes contain citizen suit provisions.[345] Generally, a plaintiff who wants to bring an environmental citizen suit must give at least sixty days notice of intent to bring the suit

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339. Here, "substantive" means rights under environmental statutes to pollution control (i.e., by enforcement of environmental statutes and regulations against polluters or by challenges to agencies for failure to implement environmental statutes properly), in contrast with private citizens' rights to participate in or receive information about environmental decision making (i.e., strictly procedural rights). *See* Fisher, *supra* note 282, at 306–09 (discussing how lawsuits under environmental statutes are allowing communities to compel compliance with the law, and how NEPA's procedural remedies offer only a reprieve, rather than a remedy). *But see* Cole, *Litigation*, *supra* note 4, at 527–28 (arguing that environmental statutes and rights are procedural in focus).

340. *E.g.*, Clean Water Act § 505, 33 U.S.C. § 1365 (1994); Resource Conservation and Recovery Act § 7002, 42 U.S.C. § 6972 (1994); Clean Air Act § 304, 42 U.S.C. § 7604 (1994); Comprehensive Environmental Response, Compensation and Liability Act § 310, 42 U.S.C. § 9659 (1994).

341. OLGA L. MOYA & ANDREW L. FONO, FEDERAL ENVIRONMENTAL LAW: THE USER'S GUIDE 27 (1997).

342. *See* Sierra Club v. Morton, 405 U.S. 727, 737–38 (1972) (discussing standing and the ability of the Sierra Club to act as a "private attorney general").

343. Gauna, *supra* note 6, at 4; *see also Sierra Club*, 405 U.S. at 737–38.

344. *See* MOYA & FONO, *supra* note 341, at 26–28.

345. *E.g.*, Toxic Substances Control Act § 20, 15 U.S.C. § 2619 (1994); Clean Water Act § 505, 33 U.S.C. § 1365 (1994); Safe Drinking Water Act § 1449, 42 U.S.C. § 300j-8 (1994 & Supp. II. 1996); Noise Control Act of 1972, 42 U.S.C. §§ 4911, 6972, 7604, 9659 (1994); Emergency Planning and Community Right-to-Know Act of 1986, 42 U.S.C. § 11046 (1994).

to the alleged violator, the state, and the EPA.[346] In addition, citizen suits often are barred if the EPA or the state has commenced and is diligently prosecuting enforcement against the alleged violators.[347] Although environmental groups' use of citizen suits historically has not benefited low-income and minority communities,[348] the environmental justice movement increasingly uses environmental law citizen suits to combat environmental injustice.[349] In fact, Cole places suits under environmental statutes at the top of his hierarchy of environmental justice litigation strategies.[350]

However, Eileen Gauna has identified several obstacles to the effective use of citizen suits by grassroots environmental justice groups. First, a group with limited resources and technical and legal knowledge may have difficulty detecting and proving industry noncompliance with applicable environmental laws, which may be embedded in statutes, regulations, permits, administrative or court orders, or even state and local implementing plans.[351] The group would need reliable data about industry activity sufficient to prove a violation, and information about applicable legal requirements, which may be far from clear.[352] Second, citizen suits are expensive and require mobilization of resources and participation.[353] Third, fee-shifting provisions which provide for the award of attorneys' fees to the prevailing party may provide an incentive to bring citizen suits in general, but not enough of an incentive in the typical environmental justice context. Recovery of fees occurs at the end of a successful enforcement action, and cannot be adjusted for the contingency nature of environmental civil suits, thus deterring both private attorneys and legal services groups from fronting the high litigation costs of citizen suits.[354] Fourth, successful groups generally cannot receive damages. Although some environmental groups receive the benefit of civil penalties by developing environmental mitigation projects that can be funded with penalties collected from citizen suits, low-income and minority communities have limited capacity to develop these projects.[355] Fifth, the ability to bring a suit may be limited until, or if, the government takes action,

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346. Gauna, *supra* note 6, at 44 & n.153. The courts strictly interpret the notice provisions of environmental statutes. *See* Hallstrom v. Tillamook County, 493 U.S. 20, 32–33 (1989).

347. Gauna, *supra* note 6, at 44 n.154.

348. Fisher, *supra* note 282, at 302–03; Gauna, *supra* note 6, at 5.

349. Cole, *Litigation*, *supra* note 4, at 526–28 (suggesting a litigation hierarchy for use in environmental siting cases); Fisher, *supra* note 282, at 306–07. One example of a promising success is *NAACP-Flint Chapter v. Engler*, holding that the Michigan Constitution requires the state environmental agency to conduct risk assessments that consider cumulative impacts on the health of local residents when permitting facilities. NAACP-Flint Chapter v. Engler, No. 95-38228-CV, at 39–43 (Mich. Cir. Ct. 1997).

350. Cole, *Litigation*, *supra* note 4, at 526.

351. Gauna, *supra* note 6, at 43–46, 50–57, 63–64.

352. *Id.* at 45–47, 50–56, 63–64.

353. *Id.* at 44–46, 73–74.

354. *Id.* at 76–79.

355. *Id.* at 47–48.

thus making the environmental justice group dependent on government enforcement decisions.[356] Sixth, the standards that regulated entities must meet may not adequately protect low-income or minority communities.[357] Seventh, the government often has discretion about the application of environmental laws and the content of environmental standards and regulations. Agency-forcing suits apply only to non-discretionary duties and as a practical matter, often involve efforts to force the agency to set standards when it has failed to do so at all.[358] In fact, decisions about whether to consider environmental justice and equity factors in environmental decisions is discretionary and generally cannot be forced directly through citizen suits.[359] Finally, the technical complexity of citizen suits has the potential to derail political goals and activities of grassroots groups.[360] Nevertheless, Gauna, while urging reforms, also urges environmental justice advocates to use citizen suits to vindicate the rights of low-income and minority people to have the environmental laws enforced.[361]

4. Participatory Rights Under Environmental Statutes

Federal and state environmental statutes have not only substantive pollution control and cleanup standards that may be enforced by private citizens, but also procedural requirements. These procedures ensure that government agencies consider the environmental consequences of their activities and that the public can participate in environmental decision making and have access to information.[362]

The National Environmental Policy Act (NEPA)[363] and state environmental policy acts (SEPAs)[364] lie at the core of the public's right to

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356. *Id.* at 61–62, 64, 74–75 (examining CERCLA, which prevents an enforcement action until the EPA has issued an order that is not complied with, and RCRA, in which a citizen suit is barred if the EPA or State initiates proceedings).

357. *Id.* at 48–50.

358. *Id.* at 70–76.

359. *Id.*

360. *Id.* at 39–40 (noting that environmental justice suits typically begin as political and economic struggles, not legal ones).

361. *Id.* at 86–87.

362. *See generally* Reich, *supra* note 6, at 297–98, 305–11 (addressing the avenues of access for minorities through federal translation requirements and the broad scope of SEPA access mandates).

363. National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321–4370 (1994 & Supp. II. 1996).

364. NEPA and SEPAs provide the public with access to information and analysis of the environmental impacts of the government's decisions. For examples of SEPAs, see CAL. PUB. RES. CODE §§ 21000–21177 (West 1996 & Supp. 1998); CONN. GEN. STAT. ANN. §§ 22a-1 to -1h (West 1995 & Supp. 1998); D.C. CODE ANN. §§ 6-981 to -990 (1995 & Supp. 1998); HAW. REV. STAT. §§ 343-1 to -8 (1993 & Supp. 1997); IND. CODE ANN. §§ 13-11-1-1 to 13-15-10-6 (Michie 1996); MD. CODE ANN., NAT. RES. I §§ 1-301 to -305 (Michie 1997 & Supp. 1997); MASS. GEN. LAWS ANN. ch. 30, §§ 61–62H (West 1992 & Supp. 1998); MINN. STAT. ANN. §§ 116D.01–.07 (West 1997); MONT. CODE ANN. §§ 75-1-101 to -324 (1997); N.Y. ENVTL. CONSERV. LAW §§ 8-0101 to -0117 (McKinney 1997 & Supp. 1998); N.C. GEN. STAT. §§ 113A-1 to -10 (1997); P.R. LAWS ANN. tit.

governmental study and consideration of the environmental impacts of its decisions, participation in the study and consideration process, and access to the resulting information and analysis. Under NEPA, a federal agency must prepare an Environmental Impact Statement (EIS) for "major Federal actions significantly affecting the quality of the human environment."[365] The agency prepares an Environmental Assessment (EA) to determine if the proposed action is a major federal action and has a significant impact on the environment.[366] The EA, which is a less detailed document than the EIS, includes a brief discussion of the need for the proposed action, any alternatives to the action, and environmental impacts of both the action and its alternatives.[367] If an EIS is not required, the agency issues a Finding of No Significant Impact (FONSI).[368] If an agency must prepare an EIS, however, it must issue public notice in the Federal Register that it intends to prepare an EIS, and solicit public input concerning the scope of the study.[369] The EIS is a detailed study of the direct, indirect, and cumulative impacts of the proposed action on the environment, unavoidable adverse effects of the proposed action, and possible alternatives to the proposal, including mitigation measures and the alternative of "no action."[370] Public hearings are not required unless the agency's regulations so provide, but the agency must publish notice of the draft EIS and circulate it to any interested person, as well as government agencies that have jurisdiction or expertise over the subject.[371] After receiving comments, the agency prepares, circulates, and gives public notice of the final EIS, which must include responses to all of the comments the agency received.[372]

SEPAs provide a similar process for state and local government actions, but often are more stringent and guarantee greater public participatory rights than NEPA.[373] SEPAs often apply to a wider range of private activities than does NEPA, because of the wide range of private activities subject to state and local permitting requirements, including

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12, §§ 1121–1142 (1997); S.D. CODIFIED LAWS §§ 34A-9-1 to -13 (Michie 1992 & Supp. 1998); WASH. REV. CODE ANN. §§ 43.21C.010–.914 (West 1998); WIS. STAT. ANN. § 1.11 (West 1996).

365. 42 U.S.C. § 4332(2)(C). Major federal actions include federally funded projects and decisions by federal agencies to grant permits to regulated private activities. 40 C.F.R. § 1508.18 (1997).

366. 40 C.F.R. § 1501.4(b).

367. *Id.* § 1508.9 (establishing the requirements for an environmental assessment (EA)).

368. *Id.* § 1501.4(e) (setting forth that a FONSI is issued when the agency decides not to prepare a statement based on the environmental assessment).

369. *Id.* §§ 1501.7, 1503.1(a)(4).

370. *See* 42 U.S.C. § 4332(2)(C) (listing congressionally mandated components of an EIS); 40 C.F.R. §§ 1508.8, 1508.25 (expanding on which *effects* the EIS should address and the *scope* of the coverage of the EIS).

371. 40 C.F.R. §§ 1501.7(a)(1), 1502.9(a), 1502.19, 1506.6, 1503.1.

372. *Id.* §§ 1502.9, 1502.19, 1503.4(a), 1506.6(b), 1506.9, 1506.10.

373. Johnson, *supra* note 282, at 566–67; Reich, *supra* note 6, at 305–07.

land use permits.[374] State and local agencies often must consider a broader scope of impacts than the federal government, including health, economic, social, and cultural impacts.[375] SEPAs "require a more thorough review process with additional opportunities for participation" than does NEPA.[376] These requirements include more circulation of draft studies, more public notices, more hearings, and greater public and government review opportunities.[377] SEPAs are broadly interpreted to encourage and facilitate public participation.[378] For example, in one instance a particular SEPA was interpreted as including the requirement that environmental impact documents be translated into Spanish for the siting of a toxic waste incinerator in a community that was almost forty percent monolingual Spanish-speaking.[379] Although some federal agencies provide non-English translations of environmental studies and documents, NEPA does not require it.[380] Finally, some SEPAs are not only procedural but also substantive: agencies are required to avoid negative environmental impacts.[381] In contrast, NEPA is solely a procedural statute; once a federal agency studies and considers environmental impacts, it is not prohibited from proceeding with its proposed action even if it will greatly harm the environment.[382]

NEPA and SEPAs provide valuable means of seeking environmental justice goals through the participation of low-income and minority people in governmental decisions and by attacks on the environmental decision making process.[383] Stephen Johnson has summarized the advan-

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374. *Cf.* Johnson, *supra* note 282, at 567, 595 (describing Congress's initial vision that NEPA serve as a model for state environmental review laws, and the current situation where state laws can be used as a model for NEPA).

375. *Id.* at 566–67; *see* Reich, *supra* note 6, at 311–13 (arguing that these factors allow for consideration of the action's impact on community preservation).

376. Reich, *supra* note 6, at 307.

377. *Id.*

378. *Id.* at 307–11.

379. El Pueblo Para el Aire y Agua Limpio v. County of Kings, [1992] 22 ENVTL. L. REP. (Envtl. L. Inst.) 20357, 20358 (Cal. Super. Ct., Dec. 30, 1991) ("[The residents of Kettleman City's] meaningful involvement in the CEQA review process was effectively precluded by the absence of the Spanish translation"). This environmental justice case involved a significant victory for the residents of Kettleman City to participate meaningfully in the environmental study process and local decision making about the incinerator, as well as a strategic advance for the rights of low-income and minority people to participate in environmental decision making generally. *See* Cole, *Litigation*, *supra* note 4, at 528–30; Reich, *supra* note 6, at 308–11. However, the court held that the EIR, although written in technical language, was understandable by interested laypersons. *El Pueblo*, [1992] 22 ENVTL. L. REP. (Envtl. L. Inst.) at 20358.

380. Johnson, *supra* note 282, at 602.

381. *Id.* at 597–99; *see, e.g.*, California Environmental Quality Act (CEQA), CAL. PUB. RES. CODE § 21002.1(b) (West 1996).

382. Strycker's Bay Neighborhood Council v. Karlen, 444 U.S. 223, 227–28 (1980) (emphasizing the procedural nature of duties imposed on agencies by NEPA, and the discretion agencies must have in the face of judicial scrutiny).

383. Cole, *Litigation*, *supra* note 4, at 528 (placing use of participatory and procedural rights in environmental law—"environmental law, with a twist"—high in the hierarchy of environmental

tages of NEPA (and implicitly the similarly structured SEPAs) to the environmental justice movement:

> NEPA's public participation provisions empower communities by enabling them to provide input into the federal government's decision-making process and to educate the government about the disparate impacts proposed actions may have on communities. . . . [T]hey also give the communities valuable information about public health and safety and the government's decision-making process. If the government decides to take an action that disparately impacts a minority or low-income community, community leaders can use the information they receive through the NEPA review process to organize the community against the government action.
>
> The NEPA review process can also advance environmental justice by delaying the federal government in taking actions that could disparately impact communities. The delay provides communities more time to organize their opposition to the government actions. The cost of the environmental review process might also derail government projects, including those which could have a disparate impact on communities.
>
> Finally, in many cases, NEPA requires the federal government to consider certain health and socioeconomic impacts of proposed actions before taking the actions. Through this process, the government should be able to identify whether proposed actions will have a disparate impact on minority or low-income communities. The government can then avoid taking those actions.[384]

Beyond NEPA and SEPAs, environmental justice advocates might seek to enforce environmental participatory, procedural, and informational rights through open meetings laws that require government meetings to be open to the public, open records laws that give private citizens access to government documents, and procedural requirements of specific environmental statutes that either require or allow public participation and input in decisions made under those statutes.[385] In addition, the

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justice litigation strategies). Peter Reich believes that SEPAs are superior to NEPA for addressing environmental injustice because of the limited scope of NEPA as a guarantor of access; however, Stephen Johnson's concern that SEPAs do not apply to federal action leads Johnson to encourage the use of NEPA as it exists now, and advocate reforms of NEPA to make it more like progressive SEPAs. *Compare* Reich, *supra* note 6, at 306–07, *with* Johnson, *supra* note 282, at 566–69. However, a recent Nuclear Regulatory Commission finding asserts that NEPA does not authorize inquiry into whether racial animus motivated a siting decision. *In re* Louisiana Energy Servs., L.P., 47 N.R.C. 77, *dismissed as moot*, 47 N.R.C. 113 (1998).

384. Johnson, *supra* note 282, at 571 (footnotes omitted).

385. MANASTER, *supra* note 6, at 133–52 (discussing access to environmental decisions and data); *see* Coalition of Concerned Citizens Against I-670 v. Damian, 608 F. Supp. 110 (S.D. Ohio 1984) (involving a community group's challenge via Federal-Aid Highway Act public involvement requirements); NAACP-Flint Chapter v. Engler, No. 95-38228-CV, at 43–45 (Mich Cir. Ct. 1997) (holding that governments and residents of localities adjoining the jurisdiction in which polluting facility is to be sited have state constitutional and statutory right to participate in decisions about siting), *rev'd on other grounds*, NAACP-Flint Chapter v. Governor, No. 205364, at 1–2, 4 (Mich. Ct.

Emergency Planning and Community Right-to-Know Act (EPCRA)[386] and similar state and local laws[387] require that facilities with hazardous or toxic substances notify local communities of the presence of those substances and promptly report any releases, such as spills or emissions, of those substances into the environment. These laws are designed to inform local residents of toxics in their neighborhoods, help prepare them to respond to accidents, and immediately notify them of any potentially harmful accidents. One recent environmental justice litigation success involved a suit by low-income residents of north central Denver neighborhoods against the Vulcan Chemical Company for failure to notify local authorities after a rail car spill of muriatic and hydrochloric acid.[388] A federal judge ruled that EPCRA allows citizens to sue a company for its failure to notify and to obtain civil penalties of up to $25,000 per day.[389] According to a lawyer for the grassroots groups involved in the action against Vulcan Chemical, the lawsuit sent a message to hazardous materials handlers that neighbors have a right to the reporting of spills and will demand it.[390] The lawyer also stated that it possibly could deter companies from storing or transporting as many toxic chemicals in neighborhoods.[391] Similarly, grassroots groups in San Diego, by bringing litigation that was ultimately settled, forced the San Diego County Air Pollution Control District to publish multilingual notices in fourteen community newspapers about toxic air emissions from area industries and military installations.[392] The District also had to mail additional information to residents living in the zones of highest cancer risk.[393] The plaintiffs brought this suit under the California Toxics Hotspots Act.[394] Through enforcement of community right-to-know laws, environmental justice groups act on procedural rights that enable them to monitor envi-

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App. 1998) (holding that trial court lacked the authority to consider the issues *sua sponte* when plaintiffs failed to plead the claims).

386. 42 U.S.C. §§ 11001–11050 (1994).

387. *See* Alan E. Seneczko, *The Right-to-Know and the Trucking Industry: Regulating Regulations*, 14 TRANSP. L.J. 347, 359–61 & nn.39 & 48 (1986).

388. Neighbors for a Toxic Free Community v. Vulcan Materials Co., 964 F. Supp. 1448, 1448 (D. Colo. 1997). The U.S. Supreme Court has recently cast doubt on the long-term impact of this Colorado case and grassroots groups' ability to recover damages for past violations of EPCRA. In *Steel Co. v. Citizens for a Better Environment*, the court held that Citizens for a Better Environment, an environmental justice group, lacked standing to sue under EPCRA for "historical" violations of the Act because none of the possible relief would remedy the harm of late reporting of spills. 118 S. Ct. 1003, 1020 (1998).

389. *Neighbors for a Toxic Free Community*, 964 F. Supp. at 1449–54.

390. *Federal Judge Gives Residents of Poor Neighborhoods the Right to Sue Company for Failing to Report Chemical Spill*, NEWS RELEASE (Ecological Consultants for the Pub. Interest), Apr. 30, 1997.

391. *Id.*

392. *See News & Notes*, WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW, *supra* note 175, at 1.

393. *Id.*

394. CAL. WATER CODE §§ 13390–13396 (West 1992 & Supp. 1998).

ronmental harms in their neighborhoods, holding both the government and possible polluters accountable.

5. Common Law Rights

Finally, seekers of environmental justice rights use common law remedies to seek redress for harms to people and property caused by another private person or entity.[395] The legal theories of liability for environmental harms, on which environmental-justice toxic tort claims are based, are strict liability, negligence, negligence per se, trespass, battery, and nuisance.[396]

Deriving from the English case of *Rylands v. Fletcher*,[397] the Restatement (Second) of Torts section 519 recognizes strict liability for harm to other people or their property from abnormally dangerous (ultrahazardous) activities.[398] In determining what activities are abnormally dangerous or ultrahazardous, courts balance six factors related to the utility of the activity and the risk and degree of harm: (1) the existence of a high degree of risk of some harm to the person, land, or chattels of another; (2) the likelihood that the harm that results from it will be great; (3) an inability to eliminate the risk by the exercise of reasonable care; (4) the extent to which the activity is not a matter of common usage; (5) the inappropriateness of the activity to the place where it is carried on; and (6) the extent to which its value to the community is outweighed by its dangerous attributes.[399] Some courts have found the storage, disposal, and even use of hazardous and toxic substances to be abnormally dangerous and thus a basis for strict liability,[400] while other courts have re-

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395. *See* Duncan, *supra* note 6, at 355–57; Melissa Thorme, *Local to Global: Citizen's Legal Rights and Remedies Relating to Toxic Waste Dumps*, 5 TUL. ENVTL. L.J. 101, 115–21 (1991). *See generally* Troyen A. Brennan, *Environmental Torts*, 46 VAND. L. REV. 1 (1993) (examining environmental tort litigation and its social utility).

396. *See* Werlein v. United States, 746 F. Supp. 887, 907 (D. Minn. 1990) (recognizing battery claims), *vacated in part*, 793 F. Supp. 898 (D. Minn. 1992) (vacating ruling to certify class action claims involving distinct and completed phases); Sterling v. Velsicol Chem. Corp., 647 F. Supp. 303, 308 (W.D. Tenn. 1986) (predicating right to recover damages on common law tort claims), *aff'd in part, rev'd in part*, 855 F.2d 1188 (6th Cir. 1988) (overturning issues relating to jurisdiction, class action, causation, and damages); Bagley v. Controlled Env't Corp., 503 A.2d 823, 826–27 (N.H. 1986) (analyzing negligence per se); Duncan, *supra* note 6, at 355 (giving an overview of toxic tort claims based on nuisance, trespass, negligence, and strict liability); Thorme, *supra* note 395, at 115–21 (discussing common law tort claims).

397. 3 L.R.-E. & I. App. 330, 342 (1868).

398. RESTATEMENT (SECOND) OF TORTS § 519 (1965).

399. *Id.* § 520.

400. *Sterling*, 647 F. Supp. at 311–16 (finding strict liability for contamination of neighboring wells due to operation of a 242-acre burial site for chemical wastes from manufacturing plant); Luthringer v. Moore, 190 P.2d 1, 8 (Cal. 1948) (finding strict liability for harm from fumigating a small shop with hydrocyanic acid gas, a deadly chemical); New Jersey v. Ventron Corp., 468 A.2d 150, 157–60 (N.J. 1983) (finding strict liability exists for pollution of creek from mercury processing operations of chemical corporation). As stated by the New Jersey court: "[I]t is time to recognize expressly that the law of liability has evolved so that a landowner is strictly liable to others for harm

jected this proposition.[401] The idea that low-income and minority plaintiffs harmed by toxic uses of nearby property are entitled per se to recover on an ultrahazardous activity theory is complicated by some courts' acceptance of hazardous substances and waste as normal in an industrial society and particularly in neighborhoods that contain several intensive uses.

Negligence and negligence per se are alternative general toxic tort causes of action. For example, one court held a chemical corporation liable on a negligence theory for contaminating neighboring property owners' home wells with migrating chemicals from a 242-acre burial site.[402] The court held that the corporation owed a duty "to protect others from unreasonable harm arising from the dumping of . . . chemicals"[403] and breached its duty by its failure to investigate the conditions of the site selected, install proper monitoring mechanisms, use state-of-the-art methods of operation, and respond to leaks adequately.[404] In another case, the owner and developer of a planned residential community, which dumped oil, grease, and other waste materials onto its property, was held liable for soil and groundwater contamination on adjoining property.[405] The actions constituted negligence per se because the defendant failed to obtain a permit for hazardous waste disposal, a violation of state law.[406]

When a defendant intentionally pollutes and that pollution comes into contact with a plaintiff's property or person, the plaintiff may have a cause of action in trespass or battery, respectively.

> To recover in trespass, a plaintiff must show: (1) An invasion affecting an interest in the exclusive possession of the property, (2) an intentional doing of the act which results in the invasion, (3) reasonable foreseeability that the act done could result in an invasion of plaintiff's possessory interest, and (4) substantial damage to the *res*, or property.[407]

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caused by toxic wastes that are stored on his property and flow onto the property of others." *Ventron*, 468 A.2d at 157.

401. Avemco Ins. Co. v. Rooto Corp., 967 F.2d 1105, 1109 (6th Cir. 1992) (holding storage of hydrochloric and sulfuric acid not ultrahazardous, even though disgruntled former employee illegally spilled 6,000 gallons of acid); Arawana Mills Co. v. United Tech. Corp., 795 F. Supp. 1238, 1251–52 (D. Conn. 1992) (holding neither operation of metal finishing business nor storage and use of hazardous materials is abnormally dangerous per se); Fritz v. E.I. DuPont De Nemours & Co., 75 A.2d 256, 261 (Del. 1950) (finding use of chlorine gas at manufacturing facility not abnormally dangerous in light of the well-recognized industrial use of the property).

402. *Sterling*, 647 F. Supp. at 306, 316–17.

403. *Id.* at 316.

404. *Id.* at 316–17.

405. Bagley v. Controlled Env't Corp., 503 A.2d 823, 824 (N.H. 1986).

406. *Bagley*, 503 A.2d at 827.

407. Thorne, *supra* note 395, at 118 & n.104 (citing Borland v. Sanders Lead Co., 369 So. 2d 523, 523–24 (Ala. 1979)).

In *Bradley v. American Smelting & Refining Co.*,[408] a copper smelter's emission of particulate matter, including arsenic and cadmium, into the air and onto the plaintiff's property was actionable trespass, as well as nuisance.[409] In *Martin v. Reynolds Metals Co.*,[410] trespass occurred when an aluminum reduction and manufacturing plant emitted invisible fluoride gases and particulates into the air and onto neighboring property, making it unfit for raising livestock.[411] Thus, an actionable trespass may be a direct or indirect invasion of property by substances which, although concrete, may be microscopic. A court, however, may require a showing of actual damages,[412] and there are many recognized defenses to trespass claims.[413]

A defendant may be liable for battery if the defendant disposes of a toxic material with the intent to cause an offensive or harmful contact with the plaintiff or knows that the contact is substantially certain to occur.[414] Neighbors of an Army ammunition plant defeated summary judgment on a battery claim against a tenant who disposed of highly toxic substances directly above a regional aquifer.[415] The claim was not dismissed because there was evidence that the tenant "knew that its conduct was substantially certain to cause an offensive or harmful contact."[416]

Nuisance law is a frequently discussed basis for remedying environmental wrongs.[417] Two types of nuisance actions exist: private and public.[418] A private nuisance is an unreasonable interference with a plaintiff's right to the use and enjoyment of his or her property.[419] A public

408. 709 P.2d 782 (Wash. 1985).

409. *Bradley*, 709 P.2d at 788.

410. 342 P.2d 790 (Or. 1959).

411. *Martin*, 342 P.2d at 791–92.

412. *Bradley*, 709 P.2d at 791–92. *But see* Sterling v. Velsicol Chem. Corp., 647 F. Supp. 303, 317–19 (W.D. Tenn. 1986) (allowing in a trespass action, not only actual damages to real property, but also consequential and special damages related to emotional distress, fear of falling property values, and fear of potential health hazards), *aff'd in part, rev'd in part*, 855 F.2d 1188 (6th Cir. 1988) (overturning issues relating to jurisdiction, class action, causation, and damages).

413. *See* RESTATEMENT (SECOND) OF TORTS §§ 167–213 (1965).

414. *See* Werlein v. United States, 746 F. Supp. 887, 907 (D. Minn. 1990), *vacated in part*, 793 F. Supp. 898 (D. Minn. 1992) (vacating ruling to certify class action claims involving distinct and completed phases).

415. *Werlein*, 746 F. Supp. at 907.

416. *Id.* at 907.

417. *See* Duncan, *supra* note 6, at 355–56. *See generally* Andrew Jackson Heimert, *Keeping Pigs Out of the Parlor: Using Nuisance Law to Affect the Location of Pollution*, 27 ENVTL. L. 403 (1997) (discussing the origins of nuisance law and its use against pollution); Ronald Rychlak, *Common-Law Remedies for Environmental Wrongs: The Role of Private Nuisance*, 59 MISS. L.J. 657 (1989) (focusing on the attractive features of nuisance law as a remedy for environmental wrongs); Thorme, *supra* note 395, at 115–18. Nuisance law was the basis of a lawsuit challenging the siting of a PCB landfill in Warren County, North Carolina, an issue that played a formative role in the development of the environmental justice movement. *See* Warren County v. North Carolina, 528 F. Supp. 276, 280 (E.D.N.C. 1981).

418. Thorme, *supra* note 395, at 115.

419. Sterling v. Velsicol Chem. Corp., 647 F. Supp. 303, 319 (W.D. Tenn. 1986), *aff'd in part, rev'd in part*, 855 F.2d 1188 (6th Cir. 1988).

nuisance is an "unreasonable interference with a right common to the general public."[420] Among the activities found to interfere with private property rights, thereby constituting private nuisances, have been the operation of a chemical waste burial site that contaminated plaintiffs' home water wells,[421] the maintenance of a hazardous waste dump site that exploded into an unquenchable blaze,[422] and the operation of a large cement plant that emitted dirt, smoke, and vibrations.[423] Fear of future injury alone, however, cannot support a private nuisance action.[424] Nonetheless, a plaintiff who can prove that a LULU or environmentally harmful activity actually interferes with his or her use or enjoyment of his or her property can recover damages for emotional distress, inconvenience and disruption of daily life, and the enhanced risk of disease.[425]

To establish a public nuisance claim, a private plaintiff must demonstrate a special injury that is different in kind, not just degree, from that suffered by other members of the public.[426] For example, evidence that plaintiffs suffered leukemia and other illness from exposure to water contaminated by defendants was sufficiently distinct from general public harm to support a public nuisance claim.[427] However, claims of aggravated allergies and respiratory disorders from air pollution emitted by a fiberglass manufacturing plant were insufficient because plaintiffs alleged injury to the air quality and health of citizens of the entire county.[428]

Toxic tort claims might effectively remedy the physical and property harms caused by environmental injustice.[429] The common law rights protected here, however, are largely rights to compensation for the harm, and typically not rights to prevent the harm. Preliminary injunctions to prevent a polluting facility from starting its operations and purportedly committing toxic harms are not generally available because of the difficulty in establishing imminent irreparable harm.[430] Thus, common law rights do little directly to keep LULUs out of minority and low-income neighborhoods initially. Plaintiffs might be able to obtain an injunction to prevent future harm from an existing activity that they have proved

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420. RESTATEMENT (SECOND) TORTS § 821B (1979).

421. *Sterling*, 647 F. Supp. at 319–23.

422. Wood v. Picillo, 443 A.2d 1244, 1245 (R.I. 1982).

423. Boomer v. Atlantic Cement Co., 257 N.E.2d 870, 871 (N.Y. 1970).

424. Koll-Irvine Ctr. Property Owners Ass'n v. County of Orange, 29 Cal. Rptr. 2d 664, 667–68 (Ct. App. 1994) (discussing the operation of jet fuel storage tanks at airport).

425. *Sterling*, 647 F. Supp. at 320–23.

426. *Koll-Irvine*, 29 Cal. Rptr. 2d. at 666.

427. Anderson v. W.R. Grace & Co., 628 F. Supp. 1219, 1232–34 (D. Mass. 1986).

428. Venuto v. Owens-Corning Fiberglass Corp., 99 Cal. Rptr. 350, 358 (Ct. App. 1971).

429. Thorne, *supra* note 395, at 115.

430. *Id.* at 152 n.94; *see also Koll-Irvine*, 29 Cal. Rptr. 2d at 667–68 (holding the fear of future injury not actionable); Nicholson v. Connecticut Half-way House, Inc., 218 A.2d 383, 386 (Conn. 1966) (noting that fear of future criminal activity from proposed halfway house for prison parolees could not justify granting an injunction). *But see* Freedman v. Briarcroft Property Owners, Inc., 776 S.W.2d 212, 216 (Tex. Ct. App. 1989) (allowing an injunction to prevent a threatened injury).

harms them.[431] Courts, however, are increasingly willing to allow economically beneficial but environmentally harmful activity to continue and instead require operators of these nuisances to compensate surrounding property owners.[432] Furthermore, even toxic tort plaintiffs who seek compensatory damages, instead of abatement of the tortious activity, often encounter difficulties proving causation, i.e., linking evidence of health effects to the specific pollutant or industrial activity.[433] Even if compensatory and punitive liability for toxic wastes and hazardous land uses at common law indirectly discourage would-be polluters, this method of controlling or preventing environmental injustices is inefficient and uncertain.[434] Plaintiffs must have the resources to litigate these claims; even if an attorney will take a toxic tort case on a contingency fee basis, the costs of gathering and presenting evidence of the harm and its cause can be great.[435] Court decisions about which activities are actionable torts are ad hoc, fact specific, and unpredictable.[436] Judicial standards to protect low-income and minority neighborhoods from toxic torts could take decades to develop case-by-case. Courts will likely be reluctant to declare a LULU a nuisance if it has received approvals from federal or state environmental agencies under applicable laws.[437] Finally, victims of environmental injustice may receive very little actual compensation. Toxic tort suits "have disempowered and disillusioned many low-income communities and communities of color. While some community mem-

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431. *See* Illinois v. City of Milwaukee, 599 F.2d 151, 166 (7th Cir. 1979).

432. *E.g.*, Baldwin v. McClendon, 288 So. 2d 761, 767 (Ala. 1974); Boomer v. Atlantic Cement Co., 257 N.E.2d 870, 872–74 (N.Y. 1970); Jost v. Dairyland Power Coop., 172 N.W.2d 647, 653–54 (Wis. 1969). If the court decides that the challenged activity has greater social utility than the court's perception of the harm, it may determine that the activity is not a nuisance. Thorne, *supra* note 395, at 118.

433. Thorne, *supra* note 395, at 115 n.89.

434. Brennan, supra note 395, at 6–7. As stated by Brennan: "Empirical evidence suggests that environmental torts suits . . . send a weak deterrent signal." *Id.* at 6. For skepticism about the impact of common law rules on human behavior, see ELLICKSON, *supra* note 77 (discussing alternative, informal norms to dispute resolution); Richard A. Epstein, *The Social Consequences of Common-Law Rules*, 95 HARV. L. REV. 1717 (1982) (discussing the need to be cautious when assigning social and economic consequences to common law rules because of institutional and intellectual restraints); John Griffiths, *Is Law Important?*, 54 N.Y.U. L. REV. 339, 343–54 (stating that direct effects of legal rules on human behavior is empirically questionable at best, and indirect effects are difficult to ascertain). For discussion of the limits of the adjudicative process, see James A. Henderson, Jr., *Expanding the Negligence Concept: Retreat from the Rule of Law*, 51 IND. L.J. 467, 495–501 (1976).

435. Vincent Robert Johnson, *Ethical Limitations on Creative Financing of Mass Tort Class Actions*, 54 BROOK. L. REV. 539, 545–48 (1988).

436. *See* Elinor P. Schroeder, *Legislative and Judicial Responses to the Inadequacy of Compensation for Occupational Disease*, 49 LAW & CONTEMP. PROBS. 151, 162 (1986) ("[T]he very nature of the common law dictates that tort rules will change slowly, sporadically, and inconsistently."); *see also* Henderson, *supra* note 434, at 468; Thorne, *supra* note 395, at 118. *Compare* State Dep't of Envtl. Protection v. Ventron Corp., 468 A.2d 150, 160–64 (N.J. 1983) (holding the storage of toxic wastes is an abnormally dangerous activity for which storage facility is strictly liable), *with* Arawana Mills Co. v. United Tech. Corp., 795 F. Supp. 1238, 1252 (D. Conn. 1992) (storage of hazardous materials is not an abnormally dangerous for strict liability purposes).

437. *See* Warren County v. North Carolina, 528 F. Supp. 276, 285 (E.D.N.C. 1981).

bers may in the long run receive compensation for their injuries, many plaintiffs in such suits see little money, if any at all, in these suits, which often last for years."[438] Therefore, common law rights have limited utility for the environmental justice movement.

6. The Reactive Nature of Rights

Legal conceptions of environmental justice—whether grounded in constitutional law, statutes, or common law, and whether concerning civil rights, environmental rights, or tort rights—are essentially reactive.[439] Legal rights depend considerably on judicial enforcement.[440] Joel Handler has written:

> Our legal system is not proactive. In order for the system to work there must be a *complaining client.* People have to know that they have suffered a harm, they have to blame someone rather than themselves for that harm, they have to know how to pursue the remedy, they have to have resources to pursue the remedy, and the potential benefits of winning have to outweigh the potential costs. All of these conditions are essential; if there is a failure to satisfy any one condition, then the remedy will fail.[441]

Legal actions develop in response to violations of those rights, or at least in response to threats to those rights. There must be a claimant who is willing and able to bring a lawsuit, and the court's action is limited to responding to the particulars of the claims presented.[442] Litigation, in contrast to proactive zoning regulation, results in fewer restraints on harmful land uses and is rarely an early preventive strategy.[443] Through litigation, the law develops incrementally, based on case-by-case, fact-specific decisions.[444] Court orders are poor tools to develop policy, as courts are ill-equipped to balance competing policy goals, consider political factors, and control the unintended consequences of litigation out-

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438. Cole, *Litigation*, *supra* note 4, at 545 n.5.

439. *See* William A. Shutkin & Charles P. Lord, *Environmental Law, Environmental Justice and Democracy*, 96 W. VA. L. REV. 1117, 1119 (1994) (positing that citizen suits are ex post facto remedies).

440. *See* S. Mark White, *State and Federal Planning Legislation and Manufactured Housing: New Opportunities for Affordable, Single-Family Shelter*, 28 URB. LAW. 263, 271–72 (1996) (characterizing litigation over exclusionary zoning as reactive, adversarial, and supervised by courts, in contrast with proactive planning and policy development by local governments).

441. Joel F. Handler, *Dependent People, the State, and the Modern/Postmodern Search for the Dialogic Community*, 35 UCLA L. REV. 999, 1019 (1988).

442. MELVIN ARON EISENBERG, THE NATURE OF THE COMMON LAW 4 (1988).

443. *See* Shelley Ross Saxer, *When Religion Becomes a Nuisance: Balancing Land Use and Religious Freedom When Activities of Religious Institutions Bring Outsiders into the Neighborhood*, 84 KY. L.J. 507, 512 (1995–96); Torres, *supra* note 1, at 451 ("[B]y the time a lawsuit is filed, it is often too late for the minority community to participate in the political process in any meaningful way. Political choices have already been made; bargains struck.").

444. *See* Schroeder, *supra* note 436, at 162 (cautioning that changes are slow in developing and sporadic in nature).

comes.[445] Lawsuits to enforce rights, even if successful, do not necessarily result in improved conditions, justice, or empowerment of the subordinated.[446] In fact, litigation may take the struggle away from the people involved and move it to the disempowering forum of legal expertise.[447] Finally, research suggests that litigation is a poor agent of social change.[448]

D. *Heightened Enforcement Responses (Environmental Conceptions)*

Although the vast majority of environmental justice writing reflects a social justice conception of the topic,[449] some authors view the problem as primarily an environmental problem, requiring either more careful regulation or greater enforcement of existing regulation.[450] This view takes several different forms.

Some suggest that federal laws designed to control and prevent hazardous and toxic pollution have been regulatory failures, never having been implemented effectively or enforced thoroughly.[451] Thus, more stringent and consistent enforcement of existing laws would reduce the environmental burdens that low-income and minority communities experience. A closely related perspective maintains that environmental justice groups should use citizen suits to compel implementation and enforcement of existing environmental laws and regulations.[452] While the former perspective urges the agencies to enhance enforcement, the latter calls for grassroots litigation to force agencies to implement the laws fully. However, both reflect some degree of faith in existing environmental laws as a means of securing healthy and safe environments for low-income people and people of color.

Others believe that increased participation by low-income people and minorities in government environmental decision making will ad-

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445. Susan V. Demers, *The Failures of Litigation As a Tool for the Development of Social Welfare Policy*, 22 FORDHAM URB. L.J. 1009, 1010 (1995).

446. Cole, *Empowerment*, *supra* note 4, at 648–49; Torres, *supra* note 1, at 450–51.

447. Cole, *Empowerment*, *supra* note 4, at 647–52. Nonetheless, litigation may be a useful political tool, if properly constrained. *Id.* at 654, 667–68.

448. *See generally* JOEL F. HANDLER, SOCIAL MOVEMENTS AND THE LEGAL SYSTEM: A THEORY OF LAW REFORM AND SOCIAL CHANGE (1978) (examining the attempts of social movements to use court action to achieve concrete changes); GERALD N. ROSENBERG, THE HOLLOW HOPE: CAN COURTS BRING ABOUT SOCIAL CHANGE? (1991) (arguing that courts are not effective tools for social change).

449. *See, e.g.*, Bullard, *Anatomy*, *supra* note 9, at 23–24; Cole, *Empowerment*, *supra* note 4, at 640–41; Gauna, *supra* note 6, at 27–29.

450. Despite the importance of the environmental conception of environmental justice as a distinct way of thinking about the issue, very little has been written about environmental justice from this point of view.

451. *See* SZASZ, *supra* note 7, at 137–38; Colin Crawford, *Strategies for Environmental Justice: Rethinking CERCLA Medical Monitoring Lawsuits*, 74 B.U. L. REV. 267, 276–77 (1994) (discussing problematic, costly, and inefficient CERCLA litigation); Lazarus, *supra* note 6, at 816–19; Robertson, *supra* note 6, at 134–40.

452. *See supra* notes 339–60 and accompanying text.

dress and prevent environmental injustices.[453] This perspective closely relates to political conceptions of environmental justice,[454] but it also has faith in the system of federal and state environmental regulation, if properly informed and influenced by the historically excluded, to achieve environmental justice.

Others have faith in the role of lawyers in achieving both environmental protection and environmental justice goals. They argue that attorneys have a duty to advise and assist their clients to pursue environmentally sound actions.[455] The wise and ethical attorney will "inform clients that environmental justice changes are forthcoming . . . [and] assist the client in seeking site or operational alternatives with results that fall within the bounds of environmental justice."[456]

Some believe that grassroots activists' critiques of traditional environmental law[457] are misplaced: greater efforts to achieve "consistent, equal enforcement of existing laws and regulations . . . regardless of the racial, ethnic, or socioeconomic status of a community"[458] should be favored over attempts to protect low-income and minority communities, and additional scientific research assessing human health risks of exposure to pollutants should be favored over rejection of science-based risk assessment and precautionary protective measures.[459] Similarly, Dan Tarlock calls for integration of the environmental justice movement into the mainstream environmental movement in the pursuit of sustainable development, and in particular, sustainable cities.[460] He argues that the environmental justice movement's civil rights orientation and suspicion of regulatory power and methods—including risk assessment and management, cost-benefit analysis, and market incentives—are too narrow and ineffective, as is the cautious rejection of all LULUs.[461] Instead, environmental law, currently moving in the direction of sustainable develop-

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453. *See* Rodolfo Mata, *Environmental Equity: The Next Generation of Facility Siting Programs*, 16 CHICANO-LATINO L. REV. 1, 37 (1995); Torres, *supra* note 1, at 453–54; Heather E. Ross, Note, *Using NEPA in the Fight for Environmental Justice*, 18 WM. & MARY J. ENVTL. L. 353, 373–74 (1994).

454. *See supra* notes 98–241 and accompanying text.

455. *See generally* MANASTER, *supra* note 6 (addressing the lawyer's role in balancing client needs and environmental justice); Moya, *supra* note 6, at 217–18, 263–66 (calling on attorneys to perform pro bono environmental work and the ABA to adopt the Environmental Bill of Rights).

456. Moya, *supra* note 6, at 263.

457. *See supra* notes 102–24.

458. John R. Kyte, Comment, *Environmental Justice: The Need for Equal Enforcement and Sound Science*, 11 J. CONTEMP. HEALTH L. & POL'Y 253, 279 (1994).

459. *Id.* at 257, 272–73, 276–79 (1994); *see also* Gauna, *supra* note 6, at 18 (reporting EPA's response to environmental justice criticisms of its enforcement patterns).

460. Tarlock, *supra* note 33, at 464–66, 469; *see also* Collin, *supra* note 1, at 544–46 (urging merger of environmentalism and concepts of equity as represented by environmental justice).

461. Tarlock, *supra* note 33, at 463–66.

ment theory and practice, has the capacity to reconcile protection of the natural environment with human needs and interests, including fairness.[462]

Tarlock's vision, like many others in the environmental concept of environmental justice, offers the advantage of seeking reconciliation of traditional environmental goals with the distributive concerns of environmental justice advocates. Although some have argued that the mainstream environmental movement historically ignored the concerns of low-income and minority communities,[463] perpetual conflict between the two may limit the effectiveness of both.[464] Protection of ecosystems and biodiversity is not necessarily in conflict with protection of human health, even though reconciliation of ecological needs and human needs may require careful and sometimes difficult balancing of competing values.[465] In addition, observations that residents of low-income and minority neighborhoods are more concerned about immediate health hazards than biological, recreational, or aesthetic goals[466] risk becoming reductionist assumptions that low-income people or people of color possess only anthropocentric values and cannot possess ecocentric or biocentric values. Instead, environmentalism is alive and well within low-income and minority communities.[467]

The environmental model of environmental justice ignores several important factors, though, that limit its effectiveness. First, scarce government agency resources, political pressures, scientific and legal uncertainty, and the problem of agency capture result in limited implementation of environmental policy, at best, and implementation failure in some cases.[468] Reliance on agency enforcement of environmental laws may not

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462. *Id.* at 491–92; *see also* THE ECOLOGICAL CITY: PRESERVING AND RESTORING URBAN BIODIVERSITY 10–14 (Rutherford H. Platt et al. eds., 1994).

463. *See supra* notes 113–20.

464. Poirier, *supra* note 28, at 800–02; Tarlock, *supra* note 33, at 465–66.

465. Craig Anthony (Tony) Arnold, *Conserving Habitats and Building Habitats: The Emerging Impact of the Endangered Species Act on Land Use Development*, 10 STAN. ENVTL. L.J. 1, 4 (1991); Tarlock, *supra* note 33, at 486.

466. *See* Bullard, *Anatomy*, *supra* note 9, at 22; Cole, *Empowerment*, *supra* note 4, at 639–40.

467. Carl Anthony, *Why African Americans Should Be Environmentalists*, RACE, POVERTY & THE ENVT., April 1990, at 5, 5–6; Karl Linn, *Inner Cities to Join Ecology Debate*, RACE, POVERTY & THE ENV'T, July 1990, at 1, 11; Stephen J. Newell & Corliss L. Green, *Racial Differences in Consumer Environmental Concern*, 31 J. CONSUMER AFF. 53 (1997) (noting no significant differences in environmental attitudes based solely on income or race, but lower levels of concern among African Americans with lower levels of education and income and significant differences in environmental attitudes based on education level generally); Julie Anderson, *Environmental Coalition Picks Board Members, Group Aims to Improve Inner City*, OMAHA WORLD-HERALD, June 21, 1996, at 13SF; Caroline Keough, *Seniors Find Home in Barrio Chicano Federation, Others Contribute to Make Villas*, SAN DIEGO UNION-TRIBUNE, Aug. 8, 1996, at B6; *Teaching Inner-City Kids About the Environment*, INDIANAPOLIS STAR, Sept. 24, 1992, at B05; Melinda Voss, *Beauty Spots Transform a Neighborhood*, DES MOINES REG., Oct. 4, 1996, at 1.

468. *See* Barry Boyer & Errol Meidinger, *Privatizing Regulatory Enforcement: A Preliminary Assessment of Citizen Suits Under Federal Environmental Laws*, 34 BUFF. L. REV. 833, 837 (1985); Howard Latin, *Regulatory Failure, Administrative Incentives and the New Clean Air Act*, 21 ENVTL.

always protect against environmental harm.[469] Second, initial empirical evidence suggests that the EPA enforces environmental laws less rigorously and quickly in communities of color than in white communities.[470] In the absence of concrete proposals about how to make enforcement and implementation fairer, criticisms that the environmental regulatory system is inherently biased remain unanswered. Third, to the extent that the environmental concept of environmental justice depends on existing regulatory standards and processes to prevent or remedy injustice, it is reactive in the administrative arena, much in the same way that the rights concept is reactive in the judicial arena or the power concept is reactive in the political arena. The local community waits for either a proposed LULU siting to evaluate its environmental impact through the permitting process, or evidence that an existing LULU is violating regulatory standards, such as compliance monitoring and administrative, civil, and criminal enforcement. If, on the other hand, the environmental concept calls for redefinition of regulatory standards and processes to reflect environmental justice concerns—such as levels of acceptable risk, local participation, and sustainable development goals[471]—it is a proactive approach.

E. *Market Responses (Economic Conceptions)*

One of the most controversial views of environmental injustice asserts that it is an economic, or market, problem.[472] Several significant variations on the market theory exist. One perspective posits that LULUs are distributed inequitably by income, not by race.[473] Another perspective holds that minority and low-income people voluntarily move to neighborhoods already containing LULUs because property and rents are cheaper—an action called "coming to the nuisance."[474] A third perspective states that racial disparities in LULU locations derive from discrimination in the operation of the private market, not in government decision making.[475] A fourth perspective finds that regardless of the causes of en-

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L. 1647, 1666–77 (1991); Richard J. Lazarus, *The Tragedy of Distrust in the Implementation of Federal Environmental Law*, 54 LAW & CONTEMP. PROBS. 311, 314 (1991).

469. Reliance on agencies may be more effective than reliance on the courts. *See* Tarlock, *supra* note 33, at 465, 469; Torres, *supra* note 1, at 450–53, 456.

470. Lavelle & Coyle, *supra* note 58, at S1.

471. Mata, *supra* note 123, at 447–65; *see* Torres, *supra* note 1, at 453–61.

472. *See, e.g.*, Been, *LULUs*, *supra* note 6, at 1384–93; Lambert & Boerner, *supra* note 7, at 197. Even more controversial is a perception that there is no injustice in the distribution of LULUs. This theory is built on the idea that LULUs are necessary, they are distributed efficiently according to land costs, and economic efficiency is the proper determinant of distributive justice.

473. *See* Jaffe, *supra* note 10, at 658–59.

474. *See* Been, *LULUs*, *supra* note 6, at 1385; Lambert & Boerner, *supra* note 7, at 197.

475. *See* Been, *LULUs*, *supra* note 6, at 1390–92 (explaining that the market disfavors the poor by favoring existing distribution of economic resources, and disfavors people of color through racial discrimination in residential markets); *see also* Ian Ayres, *Fair Driving: Gender and Race Discrimination in Retail Car Negotiations*, 104 HARV. L. REV. 817, 818–20 (1991). *See generally* MASSEY & DENTON, *supra* note 149 (arguing that racial residential segregation is the principal structural

vironmental injustice, the means for compensating host neighborhoods exist and offer an equitable and efficient solution to distributional inequities.[476] A final market perspective contends that prospective landowners and developers, who themselves may not have been involved in the initial siting of LULUs, lack the economic incentives to clean up and revitalize industrial and contaminated sites in low-income and minority neighborhoods.[477]

Environmental justice advocates criticize the economic approach as both immoral and a disregard for the racial and power aspects of environmental injustice.[478] However, if market dynamics or economic factors are important to the distribution of LULUs, policies that ignore these factors will fail.[479] More importantly, the supposed tension between economics and race as the explanation for environmental injustice may be a false dichotomy. Either multiple factors, such as racism, classism, market dynamics, and/or political inefficacy, may be interrelated causes, or markets themselves may contain institutional or subconscious racism, in which case market discrimination would be the cause.[480] In any event, not all economic responses to environmental injustice simply call for paying poor people to endure exposure to toxic land uses.

One proposed type of response to market forces in LULU siting is government regulation. This response is built on either the idea that the market, although efficient, is not fair (market injustice),[481] or the idea that the market is not efficient because bargaining inequities prevent local communities from forcing LULU owners to internalize the social costs of their facilities (market inefficiency).[482] The market injustice view emphasizes discrimination in housing, lending, and other markets; lack of equitable distribution of resources with which to participate in the market; and limited access to economic opportunity.[483] Because the market will not produce fair outcomes, the government must regulate private behavior to prevent discriminatory market outcomes, such as private actors

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feature of American society responsible for the perpetuation of urban poverty and represents a primary cause of racial inequality in the United States).

476. *See* Vicki Been, *Compensated Siting Proposals: Is It Time to Pay Attention?*, 21 FORDHAM URB. L.J. 787, 788 (1994) [hereinafter Been, *Compensated Siting Proposals*].

477. *See* Joel B. Eisen, *"Brownfields of Dreams"? Challenges and Limits of Voluntary Cleanup Programs and Incentives*, 1996 U. ILL. L. REV. 883, 914.

478. *See* BULLARD, DUMPING IN DIXIE, *supra* note 7, at 91 (stating that advancing the economic approach without thought to racial and power aspects may lead to discrimination); Lambert & Boerner, *supra* note 7, at 200–01 (reporting criticisms of authors' market studies of environmental justice).

479. Been, *LULUs*, *supra* note 6, at 1385–86.

480. *Id.* at 1384.

481. Jaffe, *supra* note 10, at 655–56, 659–60.

482. *Id.* at 656.

483. *See supra* notes 121–25; *see also* Been, *LULUs*, *supra* note 6, at 1388–92 (maintaining that racial discrimination in the sale and rental of property can place people of color in less desirable areas and this, in turn, can lead to discrimination in development and enforcement of zoning and environmental laws).

favoring low-income or minority neighborhoods for LULU sites, or the market funneling of poor people and people of color to areas around LULUs.[484]

The market inefficiency argument maintains that low-income and minority host communities do not have the bargaining power to force proponents of LULUs to internalize the social costs associated with the resulting pollution and other impacts on the neighborhood and property values.[485] Responsive policies would boost the bargaining power of host communities either by providing information, access to the regulatory process, and legal and technical assistance, or by giving them legal and regulatory tools with which to prevent sitings, thus bringing the developers to the community's bargaining table.[486] These tools might include command-and-control regulation of LULU sitings,[487] common law remedies for harms suffered,[488] statutorily mandated negotiations, or compensation with participation by the host community or those who would be exposed to risk.[489] Much of the economics-oriented discussion about market inefficiency focuses on compensation of affected people and communities as a way of addressing the problem of externalities, which are costs imposed by the LULU on others—for example, neighbors.[490] Externalities may be both inefficient and inequitable.[491] The market efficiency theory rests on the assumption that some people or communities, if adequately compensated,[492] will rationally choose to accept LULUs.[493] That choice, however, may be rational only in the sense that the recipients so lack economic resources and power that they are willing to expose themselves to harm for money, which implicates the market justice problem and the specter of "environmental job blackmail."[494] Vicki Been

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484. *See* Lambert & Boerner, *supra* note 7, at 212–13.

485. Jaffe, *supra* note 10, at 656, 660.

486. *Id.* at 660.

487. Lambert & Boerner, *supra* note 7, at 224–25.

488. *Id.* at 223–24.

489. *Id.* at 226–27; *see also* Mank, *supra* note 6, at 424 (stating that legislatures should adopt proposals to allow the communities in the affected areas to select representatives to negotiation and compensation committees rather than expand the ability of minority groups to bring suits claiming substantive fairness).

490. *See generally* Been, *Compensated Siting Proposals*, *supra* note 476 (analyzing whether the difficulties of siting LULUs efficiently and fairly can be resolved by adequately compensating individuals for the burdens the LULU imposes); Lambert & Boerner, *supra* note 7 (discussing the need to develop policies that compensate individuals living near industrial sites as a way to secure environmental justice); Mank, *supra* note 6 (proposing a risk-based way to represent and compensate those affected by a siting decision). Compensation can take different forms: direct money payments, mitigation of the LULU's effects, or community services and infrastructure. SZASZ, *supra* note 7, at 108–09.

491. Been, *Compensated Siting Proposals*, *supra* note 476, at 791.

492. The compensation may take the form of "a remedy, a preventative measure, or a reward." *Id.* at 792.

493. *See id.* at 790; Jaffe, *supra* note 10, at 659–60.

494. Gauna, *supra* note 6, at 38–39; *see* Boyle *supra* note 9, at 975–76; *see also* SZASZ, *supra* note 7, at 109–10 (criticizing distributional implications of compensation proposals).

has noted that compensated siting programs are, as a matter of practical reality, well established but could be objectionable if they (1) violate social norms against the commodification of exposure to health risks; (2) exploit general distributional inequities in society; (3) fail to adequately protect future generations; and (4) result in agreements that are far from truly informed and voluntary.[495] In addition, compensated siting programs have failed to be successful in siting LULUs.[496]

However, market-oriented responses to environmental injustice also include policies to foster economic empowerment in low-income and minority communities. One theory finds that improvements in employment, residential and economic mobility, local infrastructure and public services, and economic growth will either enhance the ability of poor and minority communities to fight environmental injustices or decrease the likelihood that their neighborhoods will be chosen for LULUs.[497] Rachel Godsil and James Freeman have proposed a model of community-based economic development to promote the overall health and sustainability of low-income communities of color, including job creation, wise land use patterns, community empowerment, and economic self-sufficiency.[498]

Another theory asserts that existing toxic and industrial sites will be cleaned up and redeveloped into economically productive, clean uses only if developers have economic incentives to do so.[499] This theory finds its outlet in the current fascination among policy makers, the private sector, lawyers, and scholars with "brownfields redevelopment."[500] "A brownfield is best defined as abandoned or underutilized urban land and/or infrastructure where expansion or redevelopment is complicated, in part, because of known or potential contamination."[501] State brown-

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495. Been, *Compensated Siting Proposals*, *supra* note 476, at 824–25.

496. *Id.* at 824; *see also* Eisen, *supra* note 477, at 997 (stating that negotiated compensation statutes have been generally unsuccessful in attempting to facilitate the siting of hazardous waste plants and facilities).

497. Rachel D. Godsil & James S. Freeman, *Jobs, Trees and Autonomy: The Convergence of the Environmental Justice Movement and Community Economic Development*, 5 MD. J. CONTEMP. LEGAL ISSUES 25, 28 (1993–94); *see* Been, *LULUs*, *supra* note 6, at 1392; *see also* Bailey et al., *supra* note 121, at 117 (concluding that the black population does not fight environmental injustices because many rank issues of education, race relations and unemployment of higher priority than issues of hazardous waste); Roger H. Bezdek, *The Net Impact of Environmental Protection on Jobs and the Economy*, *in* ENVIRONMENTAL JUSTICE: ISSUES, POLICIES AND SOLUTIONS 86 (Bunyan Bryant ed., 1995) (arguing that environmental protection has positive economic and job impacts but in the absence of intentional efforts to capture these benefits for the poor and minorities, these economic benefits will largely flow to higher income whites). *See generally* Gunn, *supra* note 13, at 1267–71 (discussing ideas for training and employment of low-income, minority community residents in environmental remediation).

498. Godsil & Freeman, *supra* note 497, at 28.

499. Douglas A. McWilliams, *Environmental Justice and Industrial Redevelopment: Economics and Equality in Urban Revitalization*, 21 ECOLOGY L.Q. 705, 752 (1994); *see* Johnson, *supra* note 6, at 99 (stating that private and public institutions are reluctant to attempt redevelopment because of the associated high costs).

500. Eisen, *supra* note 477, at 890–93.

501. *Id.* at 890 (internal quotation marks omitted).

fields cleanup programs offer land owners "relaxed cleanup standards, streamlined administrative procedures, and releases from future liability to spur developers to clean up and reuse brownfield sites."[502] However, Joel Eisen has shown that these programs often trade increased health risks to low-income and minority communities with little local participation and only questionable actual job creation and urban revitalization.[503]

III. EMPIRICAL EVIDENCE OF INEQUITABLE DISTRIBUTION OF LAND USE REGULATORY PATTERNS

A. *Land Use Regulatory Patterns: The Ignored Environmental Justice Issue*

The five dominant conceptions of environmental justice—evidentiary, power, legal, environmental, and economic—have insufficiently considered land use planning and regulation. In addition to sparse attention to planning concepts and no attention to the strategic use of regulatory tools,[504] very little systematic documentation of the unequal distribution of land use regulation on the basis of race and class exists.[505]

The use of zoning and other land use regulatory mechanisms—requirements of large lots, minimum floor space, and significant setbacks; low-density zoning; and restrictions on multi-family housing—to exclude low-income people who cannot afford large single-family homes on large lots (exclusionary zoning) has been well documented.[506] Exclusionary zoning has had the effect of contributing to and perpetuating residential segregation not only by class but also by race.[507] In addition, Yale Rabin has focused scholarly attention on expulsive zoning, the practice of local governments rezoning neighborhoods of color to allow incompatible and noxious land uses, thereby displacing ("expelling") some residents and replacing them with new industrial and commercial activities that threaten the health, safety, quality, and character of the

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502. *Id.* at 886–87.

503. *Id.* at 886–88. *But see* Johnson, *supra* note 6 (finding that federal/state cooperation on brownfields can serve as model for future federal/state environmental justice initiatives).

504. *See* discussion *infra* Parts IV and V.

505. *But see, e.g.*, City of Austin Planning, Envtl. & Conservation Servs. Dep't, Plan. Div., *East Austin Land Use/Zoning Report* (last modified Mar. 6, 1997) <http://www.ci.austin.tx.us/landuse/ea_text.htm> (releasing study showing that the largely-minority populated East Austin has a significantly higher percentage of industrial zoning than other areas of city). The zoning report complements an earlier study showing higher usage of hazardous substances in East Austin than in other areas of Austin. Ralph K.M. Haurwitz et al., *An Industrial Chokehold: Toxic Hazards Abound in East Austin, and It's No Coincidence*, AUSTIN AM.-STATESMAN, July 20, 1997, at A1.

506. *See* PATRICK J. ROHAN, ZONING AND LAND USE CONTROLS §§ 3.01–.02 (Eric Damian Kelly ed., 1998); KENNETH H. YOUNG, ANDERSON'S AMERICAN LAW OF ZONING §§ 8.01–.03 (4th ed. 1996); *see also* Dubin, *supra* note 1, at 741 & n.8 (stating that racially-segregated residential patterns remain as a result of discriminatory zoning and land use planning).

507. ROHAN, *supra* note 506, § 2.01[1], at 2–6; Dubin, *supra* note 1, at 740–41 (discussing Yale Rabin's observation that residents who are not protected against expulsive zoning are often victims of reduced safety and quality of their neighborhoods).

neighborhood.[508] Rabin documented his analysis of expulsive zoning with twelve case studies of zoning changes in different cities nationwide that had the effect of displacing minority residents.[509] However, Rabin's study did not attempt to quantify the distribution of zoning patterns in low-income neighborhoods of color and compare those distributions with zoning patterns of high-income white neighborhoods in the same cities. The distributional studies that have emerged in the environmental justice literature have focused on specific LULUs, not on land use regulatory patterns.[510] This article documents land use regulatory patterns—the percentages of area designated for different land uses—in thirty-one census tracts in seven cities nationwide. Low-income, minority communities have a greater share not only of LULUs, but also of industrial and commercial zoning, than do high-income white communities.

B. *Methodology*

The study measures the percentages of area in census tracts that local zoning ordinances have designated for each type of land use. It contains data from thirty-one census tracts in seven cities: Anaheim, California; Costa Mesa, California; Orange, California; Pittsburgh, Pennsylvania; San Antonio, Texas; Santa Ana, California; and Wichita, Kansas.[511]

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508. Rabin, *supra* note 1; *see* Dubin, *supra* note 1, at 742.

509. Rabin, *supra* note 1, at 108–18.

510. *See, e.g.*, BULLARD, INVISIBLE HOUSTON, *supra* note 66, at 71–72 (addressing garbage incinerators and landfills in Houston); GAO REPORT, *supra* note 5 (addressing major hazardous waste landfills in Southeastern United States); ANN MAXWELL & DANIEL IMMERGLUCK, LIQUORLINING: LIQUOR STORE CONCENTRATION AND COMMUNITY DEVELOPMENT IN LOWER-INCOME COOK COUNTY NEIGHBORHOODS (1997) (addressing liquor stores in Chicago); UNITED CHURCH OF CHRIST REPORT, *supra* note 3 (addressing commercial hazardous waste facilities and uncontrolled toxic waste sites); Anderson et al., *supra* note 80, at 83 (addressing commercial hazardous waste facilities and uncontrolled toxic waste sites); Baden & Coursey, *supra* note 7 (addressing Superfund, TSD, hazardous waste generating, and historical hazardous waste sites in Chicago); Been & Gupta, *Coming to the Nuisance*, *supra* note 6, at 9 (addressing commercial hazardous waste treatment storage and disposal facilities nationwide).

511. *See* appendix *infra* p. 140. Unless expressly noted, information from this study and addressed in the following text is presented in the appendix to this article. All data in this section comes from the 1990 U.S. Census. Two census tracts analyzed fall outside the political jurisdiction of the applicable named cities but are completely surrounded by the cities: Terrell Hills, which is a separately incorporated city surrounded by the City of San Antonio, Texas, and is census tract #1204; and Eastborough, which is a separately incorporated borough surrounded by the City of Wichita, Kansas, and is census tract #74. For purposes of this study, these two "pocket" cities are treated as part of their respective ambient cities. For all practical purposes, these "pocket" cities are not suburban fringe cities, but instead are predominantly white, upper-income neighborhoods within the ambient city's geographic and psychological boundaries. Because these neighborhoods are separately incorporated, their residents do not have to pay taxes to fund the ambient cities' urban programs and are not controlled by the land use and other municipal decisions of the ambient cities' governing bodies. However, these "pocket" city residents participate in the political, economic, and civic life of the larger ambient city. For a discussion of local political boundaries and race, see Richard Thompson Ford, *The Boundaries of Race: Political Geography in Legal Analysis*, 107 HARV. L. REV. 1843 (1994).

The cities were selected on the basis of several criteria:

1. *Geographic diversity.* Pittsburgh is in the Northeast; Wichita is in the Midwest; San Antonio is in the South/Southwest; and Anaheim, Costa Mesa, Orange, and Santa Ana are on the West Coast.

2. *Population diversity.*[512] San Antonio, with a population of 935,933, is the tenth largest city in the United States. However, it is part of the thirtieth largest standard metropolitan statistical area, which has a population of 1,302,099. Thus, most of the population in the San Antonio metropolitan area is within the City of San Antonio itself. Pittsburgh, on the other hand, is the fortieth largest city with a population of 369,879. Yet, it is within the nineteenth largest metropolitan area, containing a population of 2,242,798. A small percentage of the total Pittsburgh metropolitan area population resides within the City of Pittsburgh. Wichita is a medium-size city, ranking fifty-first in city population (304,011) and seventy-fifth in metropolitan area population (485,270). The four remaining cities—Santa Ana (population of 293,742), Anaheim (population of 266,406), Orange (population of 110,658), and Costa Mesa (population of 96,357)—are part of the second largest metropolitan area in the United States, covering more than 14.5 million people who live in Los Angeles, Orange, Riverside, San Bernadino, and Ventura counties. All four cities are in Orange County, which has a population of more than 2.4 million people. Thus, they are medium to small cities in a large metropolitan area.

3. *Racial diversity.* Two cities have very high percentages of people of color: Santa Ana has 76.6% people of color, predominantly Hispanic and Asian, and San Antonio has 63.6% people of color, predominantly Hispanic. Anaheim has 43.4% people of color, and Orange has 31.9% people of color. Both of these cities have significant Hispanic and Asian populations. Pittsburgh has 28.5% people of color, predominantly African American. Costa Mesa has 27.6% people of color, predominantly Hispanic. Wichita has 19.5% people of color, predominantly African American.

4. *Land use development diversity.* Pittsburgh is an old city that developed along natural features, particularly the convergence of three rivers. Wichita is a traditional Midwestern grid-pattern city. San Antonio has an old but partially redeveloped core, barrios, and new suburban and outer-ring office development, but most of the greater metropolitan area lies within the city boundaries. The four California cities are mostly

512. For rankings of cities by population, the populations of metropolitan areas, and rankings of metropolitan areas by population, see WEBSTER'S II NEW RIVERSIDE DESK REFERENCE 13–15, 77–78 (1992).

twentieth-century edge cities,[513] parts of the Orange County metropolitan area which has no central core.

5. *Spatial segregation by race and class.* Each of the cities has at least one census tract with a high (or in one case, a moderately high) percentage of minorities and a high percentage of low-income persons, and at least one census tract with a low percentage of minorities and a low percentage of low-income persons, thus allowing for measurement of whether low-income communities of color bear a higher percentage of non-residential zoning designations than white, wealthy communities.

6. *Study feasibility.* The author had means of readily obtaining the zoning maps and codes of each of these cities.

Census tracts were chosen by reviewing 1990 U.S. Census Bureau census data on the racial composition, median household income, and percentage of persons below the poverty level for all the census tracts of each city.[514] Census tracts were chosen for being either significantly above or significantly below the racial and class composition of the city. All high-income, low-minority census tracts selected for this study had less than 50% of the respective city's percentages for people below poverty and people of color, except Anaheim Tract #219.04. This tract had 22.10% people of color, which was 50.9% of Anaheim's percentage of people of color (43.4%), but less than 32% of Anaheim's high-minority census tracts (i.e., 874.02 and 874.03) that were studied. Thus, the percentage of people of color in tract 219.04 was significantly less than the percentage in Anaheim's high-minority tracts.

In absolute, as opposed to relative, measures, all high-income, low-minority tracts in all cities had less than 27% people of color, and eight out of the twelve tracts had 14% or less. The high-income, low-minority tracts had less than 8% people below poverty, and nine out of twelve tracts had 4.5% or less.

All low-income, high-minority tracts were more than 150% of their respective city's percentages of people below poverty and people of color, except for two tracts in San Antonio and three tracts in Santa Ana. These five exceptions had less than 150% of the respective city's percentages of people of color due to the high number of people of color in those cities. Each of the five tracts had more than 85% people of color, and three of the tracts had 92% or more.

In absolute measures, all low-income, high-minority tracts in all cities had more than 45% people of color, and sixteen out of the nineteen

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513. For a discussion of edge cites, see JOEL GARREAU, EDGE CITY: LIFE ON THE NEW FRONTIER (1991); JON C. TEAFORD, POST-SUBURBIA: GOVERNMENT AND POLITICS IN THE EDGE CITIES (1997).

514. Census tracts are the most appropriate unit of analysis for environmental justice distributional studies. *See supra* notes 78–79 and accompanying text.

tracts had more than 69%. All low-income, high-minority tracts had more than 15% people below poverty, and thirteen out of nineteen tracts had 33% or more.

After data on the racial composition, median household income, and percentage of persons below the poverty level were gathered from the 1990 U.S. Census data for each census tract, the census tracts were identified on U.S. Census Bureau maps. Zoning maps for the areas corresponding to the census tracts were obtained from local zoning authorities, and census tract boundaries were correlated to the zoning maps. For each census tract, the areas of zoned land on the map were measured using fine hand measurement tools according to each land use designation (e.g., R-1, R-2, C-1, LI), and the percentage of the total area within the entire census tract zoned for each separate land use designation was calculated.

C. *Data and Analysis*

The census data and percentages of each census tract designated for particular zoning are listed in the tables in the Appendix to this article. However, data for aggregated zoning designations—single-family residential, multi-family residential, commercial, industrial, planned development, and other—are provided in the tables in this section, following the textual discussion of the data.

The data shows that low-income, high-minority neighborhoods in the cities studied are subjects of more intensive zoning, on the whole, than high-income, low-minority neighborhoods. This conclusion is supported by data from across the various types of cities studied, regardless of the cites' geographic features, spatial development, population, political characteristics, and the like. With respect to industrial zoning—the most intensive land use—thirteen out of nineteen low-income, high-minority census tracts had at least some industrial zoning, and in seven of those census tracts, the city had zoned more than 20% of the tract for industrial uses. In contrast, only one of the twelve high-income, low-minority census tracts contained any industrial zoning at all, only 2.84% of the tract.

More specifically, Santa Ana tract #744.03, an area of 4,862 people, of whom 74.9% are Hispanic, is *90.54%* zoned for industrial use. Nearly 70% of Orange tract #762.04, about 50% of both Pittsburgh tract #2808 and San Antonio tract #1105, and 36.59% of San Antonio tract #1307.85 are zoned for industrial use.[515] Moreover, although the study did not include a quantified spatial distribution analysis of the industrial uses in

515. The population figures for these tracts are: Orange tract # 762.04: 3,413 people (66.7% Hispanic); Pittsburgh tract #2808: 3,072 people (87.8% African American); San Antonio tract #1105: 2,935 people (96.6% Hispanic); San Antonio tract #1307.85: 2,761 people (70.4% Hispanic and 20.0% African American).

comparison to the residential uses, a visual survey of the zoning maps reveals that industrial use designations are close to residential use designations, often either across the street or in the same block.

The zoning of low-income neighborhoods of color for industrial uses places highly intensive activities near local residents' homes, creating the very sort of incompatibility of uses that zoning is designed to prevent.[516] For example, among the "as of right" permitted uses in Pittsburgh tract #2808 are ammonia and chlorine manufacturing, automobile wrecking, blast furnace or coke oven, chemical manufacturing, iron and steel manufacturing and processing, airplane factory or hangar, brewery, poultry slaughter, and machine shop, and among the conditional uses are atomic reactors, garbage and dead animal reduction, rubbish incineration, radio and television transmission and receiving towers, and storage of explosives and inflammables.[517] The City of San Antonio allows acetylene gas manufacturing and storage, arsenals, blast furnaces, boiler works, cement or paving material mixing plants, creameries with on-premises livestock, forge plants, metal foundries, paper and pulp manufacturing, rock crushers, junk storage, tar roofing manufacturing, and yeast plants, among others, in two of the census tracts studied.[518] Although nearly two-thirds of Orange census tract #762.04 is zoned for industrial manufacturing (M2), the City requires many of the most intensive uses to obtain conditional use permits, thus at least theoretically allowing some level of monitoring and control of the impacts. Nevertheless, some of the conditionally permitted uses in Orange's M2 district are hazardous waste facilities, refuse transfer stations, blast furnaces and coke ovens, mineral extraction and production, and various types of chemical production.[519] Santa Ana has zoned nearly 90% of census tract #744.03, containing nearly 5,000 residents, for light industrial activity. Although Santa Ana's light industrial zoning designation excludes hazardous and solid waste facilities and some hazardous industrial activities like acid manufacturing, gas and acetylene manufacturing, and metal smelters, it does not exclude large-scale industrial facilities that can overwhelm nearby residential uses, the use of toxic substances in light industrial activities, unsightly storage facilities and warehouses, or a high concentration of waste-producing facilities like automotive repair and service sites.[520]

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516. *See* Village of Euclid v. Ambler Realty Co., 272 U.S. 365, 386 (1926); *Fifth Annual Report of the Council on Environmental Quality* 51–54 (1974), *reprinted in* ROBERT R. WRIGHT & MORTON GITELMAN, CASES AND MATERIALS ON LAND USE 776 (5th ed. 1997).

517. PITTSBURGH, PA., ZONING CODE §§ 967.02, 967.05, 969.02, 969.05 (1996) (uses & use exceptions for M3 and M4 districts).

518. SAN ANTONIO, TEX., UNIFIED DEV. CODE § 35-3606 (1997) (permitted uses in L district).

519. ORANGE, CAL., MUN. CODE § 17.20.030 (Nov. 1996) (permitted industrial uses).

520. SANTA ANA, CAL., MUN. CODE §§ 41-472, 41-489.5 (1997) (uses permitted and excluded in M1 district).

Commercial uses are also located in greater concentrations in low-income, high-minority neighborhoods than in high-income, low-minority neighborhoods. In ten out of the nineteen low-income, high-minority census tracts, at least 10% of the area is zoned for commercial use, and in seven of those tracts, at least 20% of the area is zoned for commercial use. In contrast, only two of the twelve high-income, low-minority census tracts had at least 10% of the area zoned for commercial use, and none had more than 20% commercial zoning.

Although the term "commercial" conjures up images of office buildings and retail stores which may create parking and scale/shadow impacts on neighboring residences but generally do not pose health hazards, the cities studied allow in their various commercial districts uses that are far more intensive than offices and stores. For example, nearly 50% of Wichita tract #41 is zoned Central Business District, in which limited and general manufacturing, vehicle storage yards, warehousing, welding and machine shops, and vehicle repair uses are allowed by right, and solid waste incinerators, mining and quarrying, rock crushing, and oil and gas drilling are conditional uses.[521] In about 30% of San Antonio tract #1307.85, permitted uses include electro-plating, brewery, chicken hatcheries, poultry slaughter and storage, machine shop, and certain kinds of manufacturing, such as ice cream, ice, brooms, mattresses, paper boxes, candy, cigars, and refrigeration.[522] Santa Ana's General Commercial (C2) districts may contain automotive garages, blueprinting and photo-engraving businesses, metal shops, automotive equipment wholesalers, research laboratories, farm products wholesalers, and tire recapping businesses, and the Central Business (C3) district may contain all of these land uses except automotive garages.[523] These "commercial" land uses may involve storage and processing of hazardous or toxic materials, generation of large amounts of waste, emission of fumes, odors, and airborne particulates, and imposition of large, unsightly structures on local neighborhoods.

Zoning codes burden low-income communities of color with intensive use designations. When one combines commercial and industrial uses and rounds the combined figure to the whole percent, at least one-quarter of the area in each of eleven census tracts—all of them low-

521. WICHITA & SEDGWICK COUNTY, KAN., UNIFIED ZONING CODE § III-B.16(b), (c) (1997) (permitted and conditional uses in CBD district).

522. SAN ANTONIO, TEX., UNIFIED DEV. CODE § 35-3605 (1997) (permitted uses in I, J, and K districts).

523. SANTA ANA, CAL., MUN. CODE §§ 41-377, 41-395 (as of right uses in C2 and C3 districts). Nearly 20% of Santa Ana census tract #750.02 is zoned either C2 or C3.

income, high-minority,[524]—is zoned for one of these two intensive uses, even though nearby parcels are zoned for residential uses.

On the other hand, high-income, low-minority neighborhoods are the beneficiaries of single-family residential zoning and open-space zoning. Over 75% of the area in each of six high-income, low-income tracts studied is zoned for single-family residences. If open space, a country club, and a private university (with significant open space) are included with single-family residential zoning, eleven of the twelve high-income, low-minority tracts have more than 75% of their respective areas zoned for these low-intensity land uses. The remaining tract, Costa Mesa #638.02, has more than 75% of the tract zoned for low-intensity land uses if the definition of low-intensity land uses includes not only single-family residences but also a private school, a post office, a fire station, and parks, all of which are highly compatible with single-family residential uses and rarely, if ever, considered LULUs. In other words, all of the high-income, low-minority tracts have at least three-quarters of the total land uses in each tract designated as non-intensive land uses.

In contrast, the only low-income, high-minority census tract with more than 75% of the area zoned for single-family residential or open space uses is Pittsburgh census tract #2609.98—one tract out of nineteen. Although zoning for single-family residences or open space may preclude affordable housing needed by low-income people, the contrast in zoning patterns highlights the disparate impact of zoning designations on low-income people of color.

524. These eleven tracts are nearly 60% of the low-income, high-minority tracts studied. No high-income, low-minority tracts had such high percentages of area devoted to commercial and industrial uses.

LEGEND FOR TABLES AND GRAPHS

Symbol	
*	High-income, low-minority census tract
#	Low-income, high-minority census tract
SFR	Single-family residential (includes low-density residential)
MFR	Multi-family residential (includes two-family residential, duplex residential, manufactured housing, mobile home residential, and medium- and high-density residential)
C	Commercial (includes business and professional)
I	Industrial
PD	Planned Development
O	Other (includes open space, park/recreation, country club, public use, government center, and special [Pittsburgh])

TABLE 1: ANAHEIM, CALIFORNIA, PERCENT OF CENSUS TRACTS BY AGGREGATED ZONING DESIGNATIONS

Tract	SFR	MFR	C	I	PD	O
219.04 *	94.98	4.84	0.17	0	0	0
874.02 #	22.74	25.42	16.99	23.74	11.12	0
874.03 #	57.94	12.50	22.59	3.34	3.63	0

TABLE 2: COSTA MESA, CALIFORNIA, PERCENT OF CENSUS TRACTS BY AGGREGATED ZONING DESIGNATIONS

Tract	SFR	MFR	C	I	PD	O
638.02 *	57.82	5.05	16.67	0	0	20.46
637 #	32.25	25.51	28.68	4.79	0	8.78

TABLE 3: ORANGE, CALIFORNIA, PERCENT OF CENSUS TRACTS BY AGGREGATED ZONING DESIGNATIONS

Tract	SFR	MFR	C	I	PD	O
219.12 *	25.89	0	0	2.84	49.83	21.44
762.04 #	0	8.08	20.46	68.84	0	2.61

TABLE 4: PITTSBURGH, PENNSYLVANIA, PERCENT OF CENSUS TRACTS BY AGGREGATED ZONING DESIGNATIONS

Tract	SFR	MFR	C	I	PD	O
1401.98 *	42.57	7.02	0	0	2.96	47.44
1404 *	66.02	23.41	0.73	0	0	9.84
1106 *	6.82	22.28	0	0	0	70.90
509 #	0	57.74	0	1.94	0	40.33
510 #	0	4.63	0	0	57.19	38.19
1016 #	0	31.71	0	0	56.71	11.58
2609.98 #	50.64	1.70	1.35	1.21	0	45.10
2808 #	5.94	13.88	0.74	50.11	12.28	17.05

TABLE 5: SAN ANTONIO, TEXAS, PERCENT OF CENSUS TRACTS BY AGGREGATED ZONING DESIGNATIONS

Tract	SFR	MFR	C	I	PD	O
1204 *	approx. 99.00	0	approx. 1.00	0	0	0
1914.02 *	95.22	1.98	2.81	0	0	0
1915.02 *	89.92	6.07	4.00	0	0	0
1105 #	9.79	34.92	6.43	48.30	0	0.56
1305 #	38.39	48.22	11.72	1.64	0	0.04
1307.85 #	14.52	15.72	33.17	36.59	0	0
1702 #	69.70	5.67	24.50	0	0	0.14

TABLE 6: SANTA ANA, CALIFORNIA, PERCENT OF CENSUS TRACTS BY AGGREGATED ZONING DESIGNATIONS

Tract	SFR	MFR	C	I	PD	O
753.03 *	81.05	1.59	16.67	0	0	0.69
744.03 #	3.43	2.82	0.65	90.54	2.56	0
749.01 #	17.88	33.46	16.77	0	18.45	13.43
750.02 #	0	12.43	48.30	0	13.20	26.07

TABLE 7: WICHITA, KANSAS, PERCENT OF CENSUS TRACTS BY AGGREGATED ZONING DESIGNATIONS

Tract	SFR	MFR	C	I	PD	O
73.01 *	67.95	5.59	9.77	0	0	16.68
74 *	100.00	0	0	0	0	0
8 #	0	94.36	5.65	0	0	0
41 #	0	6.77	70.68	22.55	0	0
78 #	68.03	19.59	5.85	6.52	0	0

TABLE 8: INDUSTRIAL ZONING BY CENSUS TRACTS

City	Census Tract	Percent of persons of color	Percent of low-income persons	Percent of tract zoned for industrial use
Anaheim	219.04	Low	Low	0
	874.02	High	High	23.74
	874.03	High	High	3.34
Costa Mesa	638.02	Low	Low	0
	637	Medium	High	4.79
Orange	219.12	Low	Low	2.84
	762.04	High	High	68.84
Pittsburgh	1401.98	Low	Medium[525]	0
	1404	Low	Low	0
	1106	Low	Low	0
	509	High	High	1.94
	510	High	High	0
	1016	High	High	0
	2609.98	High	High	1.21
	2808	High	High	50.11
San Antonio	1204	Low	Low	0
	1914.02	Low	Low	0
	1915.02	Low to Medium	Low	0
	1105	High	High	48.30
	1305	High	High	1.64
	1307.85	High	High	36.59
	1702	High	High	0
Santa Ana	753.03	Low	Medium	0
	744.03	High	High	90.54
	749.01	High	High	0
	750.02	High	High	0
Wichita	73.01	Low	Low	0
	74	Low	Low	0
	8	High	High	0
	41	High	High	22.55
	78	High	High	6.52

D. *Caveats and the Call for Further Studies*

The data presented here simply shows that land use regulatory patterns are not evenly distributed in seven cities between high-income white neighborhoods and low-income minority neighborhoods. A greater percentage of low-income high-minority neighborhoods are zoned for

525. High median household income.

commercial and industrial uses, which are more intensive than residential. Readers should take caution not to read more into the study than it provides.

The study does not address whether race or income is more important in the uneven distribution of land use regulation.[526] It does not attempt to isolate the race and income variables, and statistically correlate the results to either. Nor does it compare high-income white tracts with high-income minority tracts, low-income white tracts with low-income minority tracts, high-income minority tracts with low-income minority tracts, or high-income white tracts with low-income white tracts. And it certainly does not examine the land use patterns of middle-class tracts or moderately mixed-race tracts.

The study does not attempt to correlate zoning patterns with the presence of any particular LULUs or environmental hazards. It is possible that a census tract with significant industrial and commercial zoning could have no hazardous waste sites, for example. It is also possible that a census tract that is zoned primarily single-family residential could contain a major LULU, like a solid waste dump. These scenarios would probably be rare, and the neighborhoods with more intensive land uses would likely have more LULUs or environmental hazards.[527] However, this study does not address that issue.

This study is not a longitudinal study.[528] It does not analyze when the current zoning patterns emerged, if and how zoning patterns changed over time, and how the racial and class composition of the census tracts changed over time. In other words, we do not know if the cities engaged in expulsive zoning by changing the zoning to permit intensive uses in low-income, minority neighborhoods,[529] or if low-income, minority people moved to industrial or mixed-use neighborhoods because of cheaper housing costs, residential segregation, discrimination in private markets, proximity to work, or similar reasons.[530]

The study does not attempt to identify causes of the inequitable distributions of land use regulation. The possibilities are far-ranging: intentional discrimination by government decision makers, institutional discrimination embedded in the land use regulatory system, market forces, personal choices about priorities and values, lack of political power or

526. *See supra* notes 54–60 and accompanying text.

527. *See* Bullard, *Residential Segregation*, *supra* note 23 at 77; *cf.* Moore & Head, *supra* note 184, at 198. In addition, lack of zoning controls altogether may contribute to the presence of environmental hazards. Robert D. Bullard blames Houston's lack of zoning for the presence of environmental hazards in African American neighborhoods. *See* BULLARD, INVISIBLE HOUSTON, *supra* note 66, at 60–63; Robert D. Bullard, *Endangered Environs: The Price of Unplanned Growth in Boomtown Houston*, CAL. SOCIOLOGIST, 1984, at 85; *see also supra* note 505 (East Austin, Texas, zoning disparities mirror disparities in presence of hazardous substances).

528. *See* Been, *LULUs*, *supra* note 6, at 1384–85.

529. *See* Rabin, *supra* note 1, at 101–03.

530. *See* Been, *LULUs*, *supra* note 6, at 1385.

resources, or most likely some complex and variable combination of many or all of these. Land use patterns are built on dozens or even hundreds of decisions—both public and private—made over a long period of time as a result of the interaction of various political, social, and economic forces. The failure to isolate one or more causes does not preclude identification of a distributional problem or attempts by neighborhood groups and environmental justice activists to change existing land use patterns.

Finally, this study does not establish a national pattern. The number of cities studied, seven, is simply too small to prove that zoning in the United States is inequitable with respect to race and class. Furthermore, it is meaningless to compare zoning in a census tract in one city with zoning in a census tract in another city, because the zoning is a result of decisions made by local land use regulatory authorities, which differ from city to city. In fact, this study shows that San Antonio zoned census tract #78 primarily single-family residential with a small amount of multi-family residential and a significant amount of commercial zoning, whereas Wichita zoned census tract #8 almost entirely multi-family residential with little commercial zoning, and Orange has a large amount of industrial zoning in census tract #762.04. All of these census tracts are low-income communities of color. Therefore, land use regulation does not inevitably lead to high levels of commercial and industrial zoning in low-income and minority neighborhoods. Instead, comparisons must be between census tracts *within* each city, and a national trend would emerge only if a significant number of cities have inequitable zoning distributions. Perhaps most importantly, national trends are only marginally relevant to addressing overly intensive zoning (or expulsive zoning) of low-income communities of color. Instead, the existing patterns and the neighbors' concerns and land use goals are inherently local (indeed, specific to the neighborhood in question) and the regulatory authority is local. Changes will occur locality by locality, neighborhood by neighborhood, and not at a national level.

Study of the race and class distribution of land use regulatory patterns is only in its infancy. Research should go in two somewhat divergent directions simultaneously to fill the knowledge gap. One direction is toward more comprehensive and more rigorous statistical studies of the distribution of zoning in many different types of census tracts in many different cities. These studies would validate the findings of this study across a broader sample of cities than the seven selected for this study. These studies could also establish which variables correlate most closely to various distributional patterns. Some of the variables that should be analyzed are race, median household income, percentage of tract residents below the poverty level, the degree of political participation among census tract residents, geographic and natural characteristics of the tracts, type of land use regulatory system, historical development patterns, size

of city, whether suburban development is within the city's political boundaries or within separate political (and therefore zoning) jurisdictions, the city-wide percentage of minorities and low-income people, and the city-wide percentage of minority and low-income voters. A second direction for empirical research on zoning distribution is toward more detail-rich, longitudinal, qualitative case studies of land use histories of specific neighborhoods. These studies would identify how zoning for neighborhoods changed over time, how actual land uses and development in the neighborhoods changed over time, and what factors and forces influenced each.[531] The case study method accounts for variations in land use decisions from locality to locality, and should include a synthesis of generalizable theories and the empirical context of specific examples.[532]

Nevertheless, *this* empirical study demonstrates that inequitable land use regulatory patterns exist. The current conceptions of environmental justice do not effectively address these patterns.

IV. LAND USE PLANNING & REGULATION: ANOTHER VISION OF ENVIRONMENTAL JUSTICE

A. *Land Use Planning & Regulation*

Land use planning and regulation offer an alternative, or perhaps more accurately, an additional[533] way of thinking about environmental justice than the five conceptions described in Part II of this article. Public planning and regulation of local land uses combine study, politics, and legal mechanisms. However, planning and regulation are, by their nature,

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531. Studies of two communities of color that have been zoned for industrial uses reveal very different histories. East Austin, Texas, was planned in 1928 to be a "Negro district" and to contain most of the city of Austin's industrial zoning, which was reflected in Austin's first zoning map in 1931. Local residents now seek rezoning to eliminate the industrial uses. *See* Scott S. Greenberger, *City's First Zoning Map Plotted Neighborhood of Minorities' Hazards*, AUSTIN AM.-STATESMAN, July 20, 1997, at A1. However, the Logan neighborhood of Santa Ana, California, was settled and developed as a primarily Mexican American residential neighborhood and was zoned for residential use until 1929. When the Santa Fe Railroad was put through Santa Ana in the late 1920s, the neighborhood was mostly rezoned to heavy industrial (M-2) but remained almost exclusively residential until 1953. In 1953, the zoning code prohibited new residential development in the Logan neighborhood which led to a mixing of industrial and commercial uses among the residential uses by the late 1970s. During the 1980s, zoning was determined parcel by parcel through a conditional use permit process until local residents asked for elimination of the zoning uncertainty associated with parcel-by-parcel decisions. Now, 59% of all landowners and 49% of all residential landowners prefer their properties to be zoned industrial. CITY OF SANTA ANA, LOGAN NEIGHBORHOOD LAND USE & ZONING REPORT 1–2, 5–6 (1998).

532. *See supra* note 77.

533. No single conception of environmental justice and injustice is correct, and no single strategy will be completely effective. *See* Torres, *supra* note 11, at 847. Each different model is yet "another stone in David's sling." *Cf.* Cole, *supra* note 4. Furthermore, Szasz argues that it is rarely effective for environmental justice advocates to concentrate political activity in a single zone of politics (e.g., Congress, federal administrative official, media). SZASZ, *supra* note 7, at 164. Land use regulation is a local, prospective zone of politics for environmental justice activity.

primarily prospective, rather than remedial. Neighborhood residents that engage in land use planning and develop proposed land use regulations for their neighborhood proactively seek to prevent LULUs before the siting process ever begins. Furthermore, they define not only what they do not want in their neighborhood but also what they do want.

Planning is the process of identifying goals for the future, developing policies or plans for achieving these goals, and fashioning specific mechanisms for implementing these plans.[534] It also contains phases of pre-plan study and post-plan monitoring and feedback.[535] The American Planning Association has defined planning as "a comprehensive, coordinated and continuing process, the purpose of which is to help public and private decision makers arrive at decisions which promote the common good of society."[536] Some of the public interest goals served by planning, at least theoretically, are health, safety, convenience, efficiency, natural resource conservation, environmental quality, social equity, social choice, amenity, and morals.[537]

Planning has historically meant many different things. At one time, the emphasis was on physical planning of street layouts, building locations, the division of land for distribution, and overall city design.[538] In the latter part of the nineteenth century and the first five to seven decades of the twentieth century, public planning or urban planning essentially went in two directions. Comprehensive planning was concerned with utopian visions of how cities in general, or specific cities, should look in the long run.[539] More practical planning focused on specific problems that dominated the public agenda of the times: health and safety issues like public sanitation, tenement housing conditions, and sewage in the latter half of the 19th century;[540] aesthetic considerations of the City Beautiful movement at the turn of the century, such as parks, civic centers, streets, and transportation;[541] the economic and social problems presented by

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534. *See* THE PRACTICE OF LOCAL GOVERNMENT PLANNING 10–11 (Frank S. So & Judith Getzels eds., 2d ed. 1988).

535. *Id.*

536. American Plan. Ass'n, *Policies and Commentary*, PLANNING, July 1979, at 24B.

537. *See* F. STUART CHAPIN, JR. & EDWARD J. KAISER, URBAN LAND USE PLANNING 48 (3d ed. 1979).

538. *See* YOUNG, *supra* note 506, § 1.04, at 9–10; *see also* THE PRACTICE OF LOCAL GOVERNMENT PLANNING, *supra* note 534, at 20–26.

539. *See* ROBERT C. ELLICKSON & A. DAN TARLOCK, LAND-USE CONTROLS: CASES AND MATERIALS 362 (1981).

540. *See* YOUNG, *supra* note 506, § 1.04, at 10 (noting the reform movements centered on tenement conditions); *see also* THE PRACTICE OF LOCAL GOVERNMENT PLANNING, *supra* note 534, at 26–29 (describing the major cities' post-Civil War housing problems and related statutory responses).

541. *See* YOUNG, *supra* note 506, § 1.05, at 10–11 (explaining the aesthetic focus in urban planning from 1890–1910); *see also* THE PRACTICE OF LOCAL GOVERNMENT PLANNING, *supra* note 534, at 30–32, 61–64 (describing the creation of a park system and the emerging emphasis on aesthetics in urban planning during the turn of the century).

uncoordinated development and inadequate municipal services in the face of urbanization in the early twentieth century;[542] and the problems of poverty, slums, and housing shortages and conditions from the 1930s through the 1960s.[543] Today, however, planning generally means development of a short- or medium-range general plan for a city or region that is both comprehensive and rational, yet accounts for the reality of politics, market economics, and limited information.[544] The comprehensive plan or general plan[545] is designed to provide for orderly, efficient, and just local development and adequate services and infrastructure.[546] Far from a static utopian vision, it is flexible and evolves.

This article focuses on land use planning, one of the elements of comprehensive planning. Comprehensive plans contain many different elements related to the general physical development of the city or region. For example, California requires that every general plan contain seven elements: land use, circulation, housing, conservation, open space, noise, and safety.[547] Any general plan that does not sufficiently address each element is legally insufficient.[548] All of the elements, however, are interrelated, and land use is at the core of the planning process.[549] Local

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542. *See* YOUNG, *supra* note 506, § 1.06, at 11–12 (describing the "City Practical" movement); *see also* THE PRACTICE OF LOCAL GOVERNMENT PLANNING, *supra* note 534, at 32–38, 64–66 (discussing city planner's responses to the heavy urbanization of the early twentieth century including zoning and planning enabling acts).

543. *See* YOUNG, *supra* note 506, § 1.07, at 12–13 (discussing 1930s planning); *see also* THE PRACTICE OF LOCAL GOVERNMENT PLANNING, *supra* note 534, at 38–46, 66–67 (discussing the socioeconomic concerns of urban planning in the mid-twentieth century).

544. *See* ELLICKSON & TARLOCK, *supra* note 539, at 362–63 (recognizing the shift by the late-1970s to responsive, short- and mid-range planning); YOUNG, *supra* note 506, § 1.03, at 7 (defining "planning"). *But see* THE PRACTICE OF LOCAL GOVERNMENT PLANNING, *supra* note 534, at 13, 60 (stating that comprehensive or general plans should be long range and "slightly utopian" but acknowledging that static visions of a utopian future were not useful in describing how to reach those goals). Despite the textbook view of planning as long range and utopian, many planners are practical about the political, economic, and social environments in which they operate and adapt accordingly. *See* Anthony James Catanese, *Learning by Comparison: Lessons from Experience*, *in* PERSONALITY, POLITICS, AND PLANNING 179, 180–83 (Anthony James Catanese & W. Paul Farmer eds., 1978); William Fulton, *Visionaries, Deal Makers, Incrementalists: The Divided World of Urban Planning*, GOVERNING, June 1989, at 52.

545. Plans that are both general and comprehensive for a particular city or region, across the many elements related to physical development—land use, transportation, environment and natural resources, infrastructure, housing, historic preservation, and the like—have many different names: general plans, comprehensive plans, master plans, official plans, urban plans, city plans, development plans, growth management plans, policy plans, and many others. *See* THE PRACTICE OF LOCAL GOVERNMENT PLANNING, *supra* note 534, at 60 (discussing general development plans); Sabo v. Township of Monroe, 232 N.W.2d 584, 594 n.14 (Mich. 1975) (characterizing the terminology used to describe these documents). The term "comprehensive plan" is used in this article.

546. *See Sabo*, 232 N.W.2d at 594 & n.14; YOUNG, *supra* note 506, § 1.03, at 6–8.

547. CAL. GOV'T CODE § 65302 (West 1987 & Supp. 1997).

548. *See, e.g.*, Twain Harte Homeowners Ass'n v. County of Tuolumne, 188 Cal. Rptr. 233, 254–55 (Ct. App. 1982) (finding that county's general plan failed to meet land use element by not sufficiently stating building intensity); Save El Toro Ass'n v. Days, 141 Cal. Rptr. 282, 287–88 (Ct. App. 1977) (finding that city's zoning plan failed to contain all elements of open space requirement).

549. THE PRACTICE OF LOCAL GOVERNMENT PLANNING, *supra* note 534, at 13, 60, 72.

public authorities implement their comprehensive plans primarily through land use controls, particularly subdivision regulations and zoning.[550] Land use planning is also a central feature of district planning, which is the process of developing goals, policies, and specific plans for distinct neighborhoods or districts within a city or urban area and relating those specific plans to the larger (city, urban, or regional) comprehensive plan.[551] Furthermore, the primary concerns of grassroots advocates about the presence of LULUs in low-income neighborhoods and neighborhoods of color are land use concerns that require attention to local land use plans.[552]

This article also focuses on land use regulation. Land use planning and land use regulation are analytically distinct, yet closely related parts of the land use control process in the United States: the plan articulates the general principles and policies that will guide local development and regulations, particularly zoning ordinances (or a zoning code that organizes the ordinances), and gives effect to those principles through detailed legal controls over private and public land use activity.[553] The relationship between planning and regulation varies considerably from locality to locality. On one hand, zoning implements planning,[554] and most state zoning enabling statutes require that local zoning be in accordance with a comprehensive plan.[555] On the other hand, many plans are not reflected in zoning regulations and therefore are difficult to enforce,[556] and many

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550. Fasano v. Board of County Comm'rs, 507 P.2d 23, 27–28 (Or. 1973). *See generally* THE PRACTICE OF LOCAL GOVERNMENT PLANNING, *supra* note 534, at 198–284 (describing subdivision regulation and zoning); YOUNG, *supra* note 506, § 1.12, at 18 (explaining the rationale behind, and the necessity of implementing plans through legal controls).

551. *See* THE PRACTICE OF LOCAL GOVERNMENT PLANNING, *supra* note 534, at 95–116 (describing the practice of district planning).

552. *See generally* Been, *LULUs*, *supra* note 6 (examining locally undesirable land uses in minority neighborhoods). However, members of minority and low-income communities may also have concern about lack of input into or disparate treatment by local plans for transportation, housing, use and protection of natural resources, neighborhood infrastructure, municipal services, availability of open space, and the like. *See generally* GOMEZ & WONG, *supra* note 23 (water); CHARLES M. HAAR & DANIEL WILLIAM FESSLER, THE WRONG SIDE OF THE TRACKS (1986) (municipal services); THE ECOLOGICAL CITY, *supra* note 462 (valuable urban ecosystems in central cities); JUST TRANSPORTATION: DISMANTLING RACE AND CLASS BARRIERS TO MOBILITY (Robert D. Bullard & Glen S. Johnson eds., 1997) (transportation); MAXWELL & IMMERGLUCK, *supra* note 510 (liquor store concentration); Kenneth W. Bond, *Toward Equal Delivery of Municipal Services in the Central Cities*, 4 FORDHAM URB. L.J. 263, 265–67, 286 (1976) (municipal services and infrastructure); Emily Gurnon, *Toxic Soil Has Plans for Tiny Park on Hold*, SAN FRANCISCO EXAMINER, Sept. 28, 1997, at D1 (open space and parks, and transportation).

553. *Fasano*, 507 P.2d at 27; YOUNG, *supra* note 506, § 1.12, at 18–19.

554. YOUNG, *supra* note 506, § 1.13, at 19.

555. *Id.* § 5.03, at 360; *see* Charles M. Haar, *In Accordance with a Comprehensive Plan*, 68 HARV. L. REV. 1154, 1154–56 (1955) (discussing the interrelationship between state enabling acts and the comprehensive plan); *see also* CAL. GOVT. CODE ANN. § 65300 (West 1987).

556. *See* ELLICKSON & TARLOCK, *supra* note 539, at 362–63; YOUNG, *supra* note 506, § 1.12, at 18.

zoning regulations are adopted with very little real planning.[557] Nonetheless, land use planning and land use regulation are intertwined in an imperfect, yet persistent symbiotic relationship.

Land use regulations are legal mechanisms, often enacted by local government,[558] that restrict the use of privately owned land in the interest of the public health, safety, morals, and welfare.[559] Thus, land use regulation is an exercise of the state's delegated police power. Land use regulation has existed in the United States since the colonial period, when it was used to ensure orderly development of cities and to promote economic growth.[560] Land use regulation also, from its early history, prevented incompatible, noxious uses from interfering with the private enjoyment of property, private property values, and public health and safety.[561] In fact, the U.S. Supreme Court of the anti-regulatory *Lochner* era used common law nuisance doctrine to uphold the constitutionality of an early zoning ordinance in the landmark case, *Village of Euclid v. Ambler Realty Co.*[562] The Court analogized regulatory prohibitions of nonresidential uses in residential neighborhoods and building structures that did not conform to height limits, construction standards, and setbacks to nuisance law restraints on valuable uses in inappropriate locations and circumstances.[563] Furthermore, land use regulation embodies social values, ranging from promotion of residential enclaves "where family values, youth values, and the blessings of quiet seclusion and clean air make the area a sanctuary for people,"[564] to the similar but more sinister attempts to exclude people who are different, particularly those who are people of color, low-income people, non-traditional families, the religious faithful, the mentally disabled, the homeless, prison parolees, and the like.[565] Land use regulation also serves to protect the environment and

557. *See* YOUNG, *supra* note 506, § 1.13, at 19.

558. *But see* FRED BOSSELMAN ET AL., FEDERAL LAND USE REGULATION (1977) (depicting the increasing federalization of land use controls); Arnold, *supra* note 465, at 2–3 (noting the centralization of land use regulatory powers by state and federal governments).

559. *See* DANIEL R. MANDELKER, LAND USE LAW § 2.32, at 53 (3d ed. 1993).

560. *See* John F. Hart, *Colonial Land Use Law and Its Significance for Modern Takings Doctrine*, 109 HARV. L. REV. 1252, 1257–80 (1996) (discussing the colonial governments' many reasons for extensively regulating land use).

561. MANDELKER, *supra* note 559, § 2.05, at 22.

562. 272 U.S. 365 (1926).

563. *Euclid*, 272 U.S. at 387–90.

564. Village of Belle Terre v. Boraas, 416 U.S. 1, 9 (1974).

565. Several casebooks describe exclusionary zoning and cite numerous articles documenting the practice. *See, e.g.*, DAVID L. CALLIES ET AL., CASES AND MATERIALS ON LAND USE 431–34 (2d ed. 1994); ROHAN, *supra* note 506, § 2.01[1], at 2-3 to -6; § 3.04, at 3-171; § 3.05, at 3-221 to -320 (household membership, age, educational uses, housing for students, religious uses, and social welfare facilities, among others); Dubin, *supra* note 1, at 741 & n.8 (referencing scholarship on exclusionary zoning and racial segregation).

conserve or allocate scarce natural resources,[566] and to define the evolving boundaries of private property rights.[567]

The primary methods of land use regulation are zoning ordinances, subdivision regulations, building and design codes, and official maps.[568] Subdivision regulations apply to any division of land into parcels, lots, or other smaller units, and allow localities to control the location and design of streets, drainage and sewers, utilities, parks, common areas, and other infrastructure.[569] They also give localities leverage to require subdivision developers to pay fees or donate land or facilities for this infrastructure.[570] Building and design codes govern the construction, materials, design, architecture, signs, and other physical features of buildings.[571] Local governments adopt official maps to indicate the publicly planned locations of streets, parks, public buildings, fire and police stations, and other community facilities. Zoning, however, is the core of land use regulation.[572] Zoning divides a locality into geographic districts (zones) and imposes different land use controls on each district.[573] These controls dictate allowable uses of land and structures, building bulks, lot size and shape, placement of buildings on lots, and density and intensity of land uses and structures.[574] The traditional categories of land uses are residential, commercial, industrial, and agricultural. Modern zoning schemes, however, are quite complex with many subcategories of uses, for example: overlay zones, incentive zoning, parking and sign regulations, performance and environmental

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566. *See* Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1007–08 (1992) (holding that the South Carolina Beachfront Management Act prohibited development of oceanfront property to protect fragile ecosystem); Goddard v. Board of Appeals, 433 N.E.2d 98, 99 (Mass. App. Ct. 1982) (upholding ordinance requiring landowner to obtain special permit to develop in wetlands area); D & R Pipeline Constr. Co. v. Greene County, 630 S.W.2d 236, 237 (Mo. Ct. App. 1982) (approving of lot size requirements to prevent pollution of water reservoirs); Albano v. Mayor and Township Comm., 476 A.2d 852, 857 (N.J. Super. Ct. App. Div. 1984) ("Land use regulations should take into account ecological and environmental concerns."). *See generally* ELLICKSON & TARLOCK, *supra* note 539; LINDA MALONE, ENVIRONMENTAL REGULATION OF LAND USE (1990); A. Dan Tarlock, *Local Government Protection of Biodiversity: What Is Its Niche?*, 60 U. CHI. L. REV. 555, 574–83 (1993) (discussing environmental protection zoning); John M. Winters, *Environmentally Sensitive Land Use Regulation in California*, 10 SAN DIEGO L. REV. 693 (1973) (focusing on the environmental impact of certain California land use regulations).

567. *See Lucas*, 505 U.S. at 1033 (Kennedy, J., concurring) (finding that expectations about private property rights and government regulation evolve as conditions change, including the fragility of ecosystems); Joseph L. Sax, *Some Thoughts on the Decline of Private Property*, 58 WASH. L. REV. 481, 481–82 (1983) (positing that as land use regulation has become more restrictive, property owner's rights are being redefined and adversely affected).

568. *See* ELLICKSON & TARLOCK, *supra* note 539, at 36; YOUNG, *supra* note 506, § 1.12, at 18–19.

569. THE PRACTICE OF LOCAL GOVERNMENT PLANNING, *supra* note 534, at 198–200.

570. *Id.* at 200.

571. *See id.* at 268.

572. *Id.* at 251.

573. *Id.*

574. ELLICKSON & TARLOCK, *supra* note 539, at 36; THE PRACTICE OF LOCAL GOVERNMENT PLANNING, *supra* note 534, at 251.

standards, negotiated zoning techniques like planned-unit developments, transferable development rights, and many others.[575]

The planning and opposition models of environmental justice share some characteristics. Both are largely concerned with questions of fairness (however defined) and goals of achieving safe and healthy communities. Both involve empirical, political, legal, environmental, and economic factors. Both attempt to prevent environmental hazards and LULUs in low-income and minority neighborhoods, albeit in different ways. And both are struggles for grassroots participation in policymaking and in political, economic, and legal decisions that affect these neighborhoods.

The models also differ in some important ways. In the opposition model, grassroots activists react to existing LULUs or proposed sitings. In many cases, they may seek remedies for past or ongoing harms or government and corporate decisions that pose the risk of harm. Thus, the opposition model is largely reactive, retrospective, and remedial, although perhaps necessarily so. In the planning model, local residents develop land use plans and regulations that either address broader problems than a single LULU or reflect goals for future land use patterns in the neighborhood. To some extent, these plans and regulations capture an element of the community's self-identity—a high-density community of affordable housing; an historic neighborhood of single-family residences and small retail businesses; a neighborhood of single- and multi-family housing with many small parks and playgrounds and few through-streets; an area in which industrial activities remain on the east side of the river. These plans and regulations also are in place to govern future land use decisions, including proposals for LULU sitings. In these ways, the planning model is proactive, prospective, and visionary.

Opponents of existing or proposed LULUs often are political outsiders, entering the decision making process after relationships have been established between the facility owner or operator and government officials. Theirs is the struggle of people without power who are taking on and fighting established exercises of power. Some environmental justice activists reject governmental decision making, economic markets, and the legal system as inherently subordinating and victimizing the poor and minorities. In many ways, low-income people and people of color who seek to influence land use planning and regulation start out similarly by struggling against the powerful. Their goal, however, is to exercise power within the existing land use regulatory system. They want to participate in the process, empowered by their definition of land use goals and hopefully successful implementation of these goals through zoning and other regulations. They want to participate at the land use negotiating

575. *See* ELLICKSON & TARLOCK, *supra* note 539, at 56–57, 61; THE PRACTICE OF LOCAL GOVERNMENT PLANNING, *supra* note 534, at 251.

table in matters that concern them, along with government officials, developers, property owners, environmentalists, and other interested people and groups. They want to serve on advisory boards, zoning commissions and boards of appeal, city councils, and other decision making bodies.

Finally, the opposition model identifies and seeks to exclude harmful activities and LULUs. The planning model identifies and seeks to allow (i.e., include) desirable land uses. The contrasts between these two models are summarized below:

Characteristics of Two Models of Environmental Justice

Opposition Model	Planning Model
Reactive	Proactive
Retrospective	Prospective
Remedial	Visionary
Outsiders	Participants
Fighting power	Exercising power
Subordinated	Empowered
Victims	Decision makers
Exclusive	Inclusive

B. *Strategic Advantages, Efficacy, and the Public Good*

Land use planning and regulation offer several advantages for achieving environmental justice goals. First, an owner or operator of a prospective LULU would have much more difficulty obtaining approval for siting the LULU in a minority or low-income neighborhood, if the comprehensive plan and zoning ordinances prohibited the LULU in that neighborhood than if they allowed the LULU, either by right or conditionally. Assume that a waste company wants to locate a hazardous waste incinerator in a low-income, Hispanic neighborhood. If the city zoning code prohibits hazardous waste incinerators in every zone except I-3, and the zoning map does not designate any land in the target neighborhood as I-3, the waste company will need a zoning amendment, as well as use-specific environmental permits. If the city's comprehensive plan provides for non-industrial uses only in the neighborhood or explicitly states that waste facilities are not appropriate for that neighborhood, the waste company also will need an amendment to the comprehensive plan. The waste company nonetheless might have enough political and economic power to obtain all the needed approvals, but it will face several obstacles. The zoning code text and map and the comprehensive plan will create a presumption that the hazardous waste incinerator is not appropriate for the neighborhood. This presumption will take on a certain legal and political reality. The waste company will have to expend more political capital to overcome the presumption. The neighbors will have

more opportunities to defeat the incinerator. Not only might the federal or state environmental agencies deny the permits, but the local land use authority, perhaps more attentive to local neighborhood concerns, might deny the land use approvals. Furthermore, the neighbors will have more government approvals to challenge in litigation. If each approval is necessary to the siting of the project and a court were to hold any approval to be invalid, the project would fail. The neighbors can bring land use claims, as well as civil rights and environmental law claims, to challenge any objectionable land use approvals. For example, they can argue that rezoning to allow the incinerator is inconsistent with the comprehensive plan, irrationally allows a use that is incompatible with surrounding uses, constitutes spot zoning, and violates procedural requirements. When neighborhoods engage in land use planning and regulation, they create the rules with which prospective LULUs must comply, rather than merely reacting to specific LULU siting proposals that have already surfaced and obtained a certain amount of legitimacy before opposition can arise. These pre-established rules can make LULUs less likely to receive approval and challenges to any such approvals more likely to be successful.

Second, land use planning and regulation create greater certainty about what land uses will or will not be allowed in a neighborhood. When local land use regulations allow LULUs, either by right or conditionally, neighborhood residents face uncertainty about whether or not their neighborhood will be the object of a LULU siting proposal (or a proposal to site another LULU in their neighborhood if they already have one or more). Once a proposal has been made, neighborhood residents face the further uncertainty regarding whether or not they will be successful in defeating the proposal. Similarly, the owner or operator faces uncertainty about whether local residents will attempt to defeat the project as inappropriate for the neighborhood even though the local land use regulations permit it and the owner or operator has invested significant amounts in that specific site proposal. Both sides have significant economic costs (inefficiency), psychological costs (anxiety), and relational costs (suspicion and animosity) resulting from uncertainty about the propriety of the LULU in the neighborhood. However, if local residents have been involved in land use planning and development of regulations for their neighborhood and have carefully identified what uses are appropriate for differing areas of their neighborhood, the level of certainty increases substantially. Proponents of LULUs may nonetheless seek amendments to or relief from applicable land use prohibitions, and neighborhood residents may nonetheless oppose LULUs permitted by the regulations. But in most circumstances, the content of the land use plans and regulations, when developed with meaningful neighborhood participation, provide generally reliable information on which both sides can make decisions. This information fosters efficiency, comfort, and trust.

Third, land use planning and regulation improve the community's capacity to achieve its goals. Typically, members of neighborhoods have community goals that extend far beyond excluding a particular LULU from the neighborhood. They often have goals about parks and other recreational uses, open space, traffic patterns and safety, availability of grocery stores or medical facilities, maintenance of property and cleanup of nuisances, public infrastructure such as streets, sidewalks, and drainage, public areas or commons, social or cultural centers, historic preservation, community identity, economic development, public transportation, and many other matters. Land use plans contain these goals, and land use regulations facilitate efforts to reach the goals by defining the permissible land uses in the neighborhood.[576]

In many ways, land use planning is like preventive medicine. Eating well, exercising regularly, developing a healthy emotional outlook, and avoiding harmful activities do not guarantee that you will never be sick, nor do they mean that you should not react to the initial signs of illness or existing health problems. Nevertheless, these proactive strategies certainly reduce your chance of illness and make life healthier and more enjoyable. Similarly, land use planning and regulation will not always preclude the siting of LULUs or the need to oppose proposals or existing sites. However, communities that develop a healthy vision of their neighborhoods and enact that vision in land use regulations will more likely prevent LULUs and other environmental harms than if they had simply waited to react. The empirical evidence presented in Part III shows a wide difference in zoning patterns between low-income communities of color and high-income white communities.[577] Whether caused by intentional discrimination, institutional inequities, market forces, or some other factor(s), these disparities indicate that low-income people of color have very little effective input into the land use planning and regulatory process. They also suggest that environmental justice advocates may want to consider additional strategies that focus on community-based planning initiatives and zoning proposals.

C. *Empirical Evidence of Land Use Planning in the Environmental Justice Movement*

The land use planning model of environmental justice is increasingly developing within the environmental justice community as low-income neighborhoods of color seek to define and protect their communities through land use regulation. This section presents five brief case

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576. THE PRACTICE OF LOCAL GOVERNMENT PLANNING, *supra* note 534, at 61, 73. Although some local neighborhoods overwhelmingly may seek residential zoning, others might lack consensus or may embrace industrial zoning as consistent with their vision of the neighborhood. *See supra* note 531 (comparing East Austin in Austin, Texas, with the Logan neighborhood in Santa Ana, California). Empowerment to define and seek land use goals is the objective.

577. *See supra* Part III.C–D.

studies of grassroots environmental justice land use strategies. These examples cover a range of goals and tactics, as well as locations: (1) rezoning to limit industrial and commercial uses in East Austin neighborhoods of Austin, Texas; (2) rewriting Denver, Colorado's industrial zoning code by a North Denver community group; (3) the St. Paul, Minnesota, West Side Citizens Organization's seeking and obtaining passage of a city-wide ordinance banning metal shredders; (4) the adoption of a comprehensive land use and development code by the Confederated Tribes of the Colville Reservation in Washington; and (5) involvement of grassroots groups from San Antonio, Texas barrios in the formulation of overlay zoning to protect the Edwards Underground Aquifer.

1. East Austin Rezoning

One approach seeks change to existing zoning either through rezoning of individual parcels or application of various "flexible zoning techniques"[578] to an entire neighborhood. The East Austin area of Austin, Texas, is a good example.

The residents of East Austin are primarily African American and Hispanic.[579] Land uses are industrial, commercial, and residential, interspersed among each other.[580] The area was planned in 1928 as a "Negro district" that would host most of Austin's industrial uses next to housing for African Americans.[581] The City's first zoning map in 1931 reflected this plan. In addition, Austin had cumulative zoning in East Austin until the mid-1980s, allowing residences to be built on property designated for residential uses (i.e., allowing the less intensive land uses in zones where more intensive uses were allowed).[582] Thus, Austin engaged not in "expulsive zoning"—the assault on minority and low-income neighborhoods by zoning that allows intensive uses[583]—but in "repulsive zoning"—the intentional and simultaneous placement of people of color and intensive, even harmful land uses next to, or among, one another.[584]

Because local zoning allowed industrial uses on many parcels in East Austin, few to no obstacles existed to land uses such as a power plant, at least two trash recycling plants, a gasoline tank farm, and in-

578. *See infra* notes 626–60 and accompanying text.

579. Scott S. Greenberger, *A Legacy of Zoning Bias: East Austinites Seek to Reform Land Use Rules of 1931*, AUSTIN AM.-STATESMAN, July 21, 1997, at A1.

580. Despite the presence of industrial uses, the neighborhood retains "a distinctive residential character," and "a remarkably rich social fabric thrives." Haurwitz et al., *supra* note 505, at A1.

581. Greenberger, *supra* note 579.

582. *Id.*

583. Rabin, *supra* note 1, at 101.

584. The inspiration for the label "repulsive zoning" comes from a comment by Becky Helton, a librarian with the Austin History Center, which houses the 1928 city plan for Austin that was the genesis for East Austin's zoning injustices. *See* Greenberger, *supra* note 531, at A1 ("It's repulsive." (quoting Becky Helton)).

dustrial facilities that use and emit hazardous and toxic substances.[585] Responding to complaints by neighborhood residents about specific land uses and the overall pattern of industrial zoning, the City of Austin conducted a study in 1997 showing that the area had a significantly higher percentage of industrial zoning than other areas of the city.[586] The zoning report complemented an earlier study showing higher usage of hazardous substances in East Austin than in other areas of the city.[587]

Neighborhood residents demanded reform of the area's zoning, and the City Council responded with two types of reform. The first is the designation of a large area of East Austin as the East Austin Overlay Combining District.[588] Fourteen enumerated land uses and any land use for which a hazardous materials permit is required by the Austin Fire Department are defined as conditional uses if they are within the East Austin Overlay Combining District.[589] The ordinance does not change the underlying zoning designation of any parcel. However, new industrial or commercial uses or changes to existing industrial or commercial uses in East Austin, if falling within the list of conditional uses, would require a permit from the Planning Commission under zoning procedures designed to give local residents an opportunity to study and object to the proposed uses.[590] These procedures include notification of property owners and registered neighborhood associations living within 300 feet of a proposed site plan, and a public hearing at which concerned neighborhood residents could speak.[591] The ordinance also contains a requirement that city staff report annually to the City Council about both the impact of the ordinance on the local neighborhood—addressing such things as the number of conditional use permits approved and denied, the change in the number of residential units constructed in the area, and other factors related to quality of life and the environment—and the impact of the ordinance on the property interests of industrial and commercial landowners—the change in the total appraised value of all affected development

585. Greenberger, *supra* note 579 (discussing how industry, specifically a recycling plant, negatively affects the residents of east Austin); Haurwitz et al., *supra* note 505, at A1 (claiming that minority communities live among more toxic waste sites and other environmental hazards than other neighborhoods); Eunice Moscoso & Ralph K.M. Haurwitz, *PODER's Woes Bigger Than Springs, Birds*, AUSTIN AM.-STATESMAN, July 21, 1997, at A4 (listing old tank farm site and fuel storage terminals as areas where more toxic chemical materials exist than anywhere else in the city).

586. *See supra* note 505 (discussing a City of Austin planning study).

587. Haurwitz et al., *supra* note 505, at A1.

588. AUSTIN, TEX., ORDINANCE 970717-F, § 13-2-190 (1997).

589. *Id.* § 13-2-191(A)-(C). The fourteen enumerated land uses are agricultural sales and services (except nurseries), basic industry, construction sales and services, general warehousing and distribution, kennels, light manufacturing, limited warehousing and distribution, recycling centers, resource extraction, vehicle storage, building maintenance services, laundry services (except where the proposed use is 5,000 square feet or less), equipment sales, and equipment repair services.

590. *Id.* § 13-2-191(B).

591. *Id.* § 13-2-191(D); *see also* CITY OF AUSTIN, QUESTIONS AND ANSWERS: EAST AUSTIN OVERLAY DISTRICT (1997) (fact sheet on file with author).

and other factors related to economic development and employment opportunities.[592]

In addition to the neighborhood-wide designation of certain uses as conditional uses, the City Council rezoned individual parcels from industrial to either commercial or residential uses. For example, the City Council rezoned the site of the BFI recycling plant—which posed problems of blowing trash, rats, noise, traffic, and a five-alarm fire—from limited industrial to limited office. Similarly, the Council rezoned the site of the Balcones recycling plant, of which neighbors complained about aesthetics, noise, and traffic, from limited industrial to residential.[593] The rezoning does not automatically shut down the existing uses of these properties, but prevents expansion of their uses or any new industrial uses unless the new owner resumes the exact same land use activity within ninety days. Furthermore, the City Council rezoned a number of residential lots to residential designation eliminating the option of conversion to industrial or commercial use.[594] Local residents, although critical of the lack of support from traditional environmental groups, contend that their primary concern is not with whether their industrial and commercial neighbors are polluters but instead lies with the amount of industrial land use in their residential neighborhood.[595]

2. Revision of Denver Industrial Zoning Code

In contrast to the East Austin activists, environmental justice advocates and leaders of low-income and minority neighborhoods in Denver, Colorado, took a different approach to the saturation of neighborhoods positioned near industrial uses.[596] They sought to rewrite the city's industrial zoning code, and the changes they achieved affected the entire city.

In October 1987, a coalition of grassroots groups, mixed-race but composed primarily of Hispanic residents of three neighborhoods (Elyria, Globeville, and Fwansea), formed an organization called "Neighbors for a Toxic Free Community." The group identified the archaic content of the industrial zoning code as one reason for the existence of so many LULUs in their neighborhoods. The coalition, armed with hard data on the saturation of LULUs in low-income minority neighborhoods, successfully obtained support from the local housing authority, schools, and political leaders, including a state senator. In 1989

592. AUSTIN, TEX., ORDINANCE 970717-F, Part 2 (July 1, 1998).

593. Greenberger, *supra* note 579; *see* VanScoy, *supra* note 135.

594. Greenberger, *supra* note 579.

595. *See* VanScoy, *supra* note 135 (contending that traditional zoning which alternated between industrial and residential prompted the residents' protests); *see also* Haurwitz et al., *supra* note 505, at A1 ("East Austin residents do not want to evict all industry; that would be illegal, if not impossible. Rather, they want a more balanced land-use policy and a greater voice in decisions.").

596. Except where noted separately, all information concerning this case study is from two telephone interviews with Lorraine Granado of the Colorado People's Environmental and Economic Network (COPEEN) (July 21 and 22, 1997).

and 1990, the activists and city officials developed several amendments to the industrial zoning code, which the City Council approved unanimously. These amendments include requirements that buffers separate industrial uses from residences, that local residents be notified about and have an opportunity to comment on applications for industrial uses or hazardous materials storage, and that the Zoning Administrator have the authority to deny a permit based solely on the area's undue saturation with uses that manufacture, use, or store hazardous materials. In addition, an environmental review committee was established to review proposed land uses that involve hazardous materials and can withhold a permit if it agrees unanimously to do so.

Despite limited enforcement, these amendments made a difference in one case. The Denver Board of Adjustment for Zoning Appeals reversed the Zoning Administrator's grant of a conditional use permit for Laidlaw Environmental Services to operate a solid waste transfer station in an I-2 zone.[597] A neighborhood group, Park Hill for Safe Neighborhoods, with the help of the Sierra Club Legal Defense Fund and the Land and Water Fund, opposed the permit. The groups argued for the denial of the permit because of an undue concentration of neighborhood uses having hazardous substances, not merely releasing hazardous wastes. The Board of Adjustment agreed with their arguments,[598] and a Colorado District Court affirmed the Board's decision.[599] The court deferred to the Board's interpretation of the industrial zoning code's undue concentration provision as reasonable, within its authority, and supported by the evidence.[600]

3. St. Paul Ban on Metal Shredders

When the political and economic climate make it difficult for grassroots environmental justice groups to seek comprehensive rezoning of neighborhood parcels (East Austin rezoning), neighborhood-wide zoning text amendments (East Austin overlay zoning), or city-wide zoning text amendments (Denver revised industrial zoning code), groups may instead focus on one particularly troublesome land use. In the face of a proposed metal shredder to be located in the mixed-race, low-income West Side of St. Paul, Minnesota, local residents formed Neighbors Organized to Stop the Hazards of All Metal Shredders! (NO SHAMS!). The group proposed amendments to the city's zoning code text and comprehensive plan to prohibit large metal shredders anywhere in the city and to allow small metal shredders only at recycling processing centers. The

597. In the Bd. of Adjustment for Zoning Appeals of the City & County of Denver, Findings of Fact & Conclusions as to Law, No. 72-95 (Sept. 19, 1995).

598. *Id.* at 1–2.

599. Laidlaw Envtl. Serv., Inc. v. Board of Adjustments, No. 95-CV-4631 (Colo. Dist. Ct., July 2, 1996).

600. *Id.* at 2–3.

City Council adopted the amendments on September 24, 1997.[601] The group felt that the political climate of concern for business development and activity would not support a complete rezoning of neighborhoods affected by industrial development along the river, as well as gentrification of those areas.[602] However, the group also completed an environmental inventory of the neighborhood to be used in making its case for environmental justice, and will continue to address various environmental and land use issues facing West Side residents.[603]

4. Confederated Tribes of the Colville Reservation Land Use and Development Code

One issue receiving little attention in the literature on environmental justice or land use regulation is how low-income and minority communities that lack zoning altogether address the lack of control over LULUs.[604] The problem arises in rural areas and on Indian reservations.[605]

Some of the low-income and minority areas that have lacked land use codes and plans are establishing these plans. For example, the Confederated Tribes of the Colville Reservation adopted a comprehensive Land Use and Development Code in January 1991.[606] The Code establishes nine zoning districts, each with permitted uses, conditional uses, prohibited uses, density provisions (including setbacks), and off-street parking requirements.[607] It provides governing authorities—such as the Land Use Review Board, Planning Director, Land Use Administrator, and Colville Business Council—standards and procedures for special use and conditional use permits, major and minor subdivisions, nonconformities, appeals, variances, code interpretations, hearings, and enforcement.[608] Comprehensive land use codes like the Colville Tribe's code allow a community to identify the land uses it desires, prohibit those it does not desire, and define appropriate land uses before proposals for intensive uses ever arise. The Tribe has used its land use code to prohibit

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601. *Development of the Anti-Shredder Movement*, NO SHAMS! NEWSLETTER (Neighbors Organized to Stop the Hazards of All Metal Shredding! (NO SHAMS!), Saint Paul, MN), May 3, 1997, at 1; *Recommendations: Metal Shredder Zoning & Compreh. Plan Amends*, REPORTBRIEF (City of St. Paul Dep't. of Planning & Econ. Dev., Div. of Planning) (1997).

602. Telephone interview with Lee Olson, NO SHAMS! (Aug. 9, 1997).

603. *Id.*; Letter from Sherilyn Young, NO SHAMS!, to Craig Anthony (Tony) Arnold (Aug. 10, 1997) (on file with author).

604. *But see* Larson, *supra* note 118, at 182 (discussing the lack of zoning and land use planning in Texas-Mexico border colonias). This statement assumes that there are areas that lack land use controls of any sort, not only public controls like zoning, but also private controls like covenants and effective mechanisms for enforcing nuisance laws.

605. *See* Larson, *supra* note 118, at 182, 197–99; *Environment: A Survey of Twentieth-Century Issues*, AM. INDIAN Q., June 1, 1995, at 423; Ralph Frammolino, *Lawmakers and Indians Wage War over Dump*, L.A. TIMES, July 5, 1990, at B1.

606. CONFEDERATE TRIBES OF THE COLVILLE RESERVATION, LAND USE & DEV. CODE (Jan. 1991).

607. *Id.* ch. 50.3.

608. *Id.* ch. 50.4–50.9.

development that would interfere with tribal subsistence hunting and fishing, but has encountered disputes concerning its jurisdiction over land owned by people who are not Tribe members and over its jurisdiction to zone when the surrounding counties have no zoning.[609]

Tribal efforts increasingly focus on land use regulation to protect the environment and promote economic development. One study in particular highlights the variety of different regulatory schemes used by tribes.[610] A proposed model tribal environmental review code also contains provisions for land use planning and regulation.[611]

5. Edwards Underground Aquifer Overlay Zone

Finally, leaders of low-income and minority neighborhoods may become involved in land use regulation and planning for areas of the city other than their own neighborhoods and contribute their vision of the overall community's public interest. In particular, leaders of Citizens Organized for Public Service (COPS), and its sister organization, Metro Alliance, representing the low-income, Hispanic South and West sides of San Antonio, formed a coalition with environmentalists and neighborhood groups from the high-income, non-minority North side to achieve the passage of zoning protections for the Edwards Underground Aquifer Recharge Zone.[612] The Edwards Underground Aquifer is the ecologically sensitive source of drinking water for the San Antonio metropolitan area. The Recharge Zone is an area that allows water to seep from the surface into the underground aquifer. Contamination from run-off on the surface in the recharge zone threatened the quality of water in the aquifer.

On January 12, 1995, the San Antonio City Council approved new provisions to the Zoning Code that established an overlay zone restricting two types of development through per se prohibitions, conditional use permit requirements, and density limits: (1) general land development resulting in impervious cover (primarily buildings and paving)

609. *See* John Craig, *Non-Indian Launches Suit over Authority of Tribe*, SPOKESMAN-REV. (Spokane, Wash.), Mar. 17, 1998, at B1; John Craig, *Ferry Considers Suing Tribe over Zoning, Dispute Centers on Jurisdiction over Property Owned by Non-Indians*, SPOKESMAN-REV. (Spokane, Wash.), Dec. 20, 1997, at B3; John Craig, *Governments Try to Settle Differences with Indians, Colville Tribes' Moratorium on Development Sparks Dispute*, SPOKESMAN-REV. (Spokane, Wash.), Mar. 7, 1997, at B5; John Craig, *Couples Sue County, Tribes over Land-Use Regulations*, SPOKESMAN-REV. (Spokane, Wash.), Apr. 21, 1994, at B3.

610. Sitkowski, *supra* note 1, at 259–69.

611. *A Model Tribal Environmental Review Code* (obtained from <http://www.und.nodak.edu/telp/modelcode.html> on June 27, 1997, but subsequently removed) (on file with author).

612. *See* Tom Bower, *Aquifer Rules Approved*, SAN ANTONIO EXPRESS-NEWS, Jan. 13, 1995, at 1A; Rick Casey, *The Political Import of Aquifer Ordinance*, SAN ANTONIO EXPRESS-NEWS, Jan. 15, 1995, at 2A; Rick Casey, *"Ms. Cuss," "Mr. Cool" Forge Safe Water Pact*, SAN ANTONIO EXPRESS-NEWS, Nov. 6, 1994, at 2A; Interview with Danielle Milam & Gene Dawson, Co-Chairs, San Antonio Water Quality Task Force (Mar. 28, 1996); Interview with Ruben Solis & Chavel Lopez, Southwest Workers Union (Mar. 26, 1996). Unless specifically noted, all information concerning this case study came from these three articles and two interviews.

which contributes to run-off of chemicals and constrains the natural water filtering process of the recharge zone's soil; and (2) land uses involving hazardous or toxic substances or other potential pollutants that could contaminate the aquifer.[613] The zoning amendments resulted from a compromise between development interests and environmental interests. COPS, Metro Alliance, and other groups from low-income neighborhoods supported the amendments, even though these regulations would effectively prevent San Antonio's wealthy, non-minority Northwest side from bearing its share of industrial and some commercial uses. The new overlay zone would also tend to make the area even more exclusive by limiting housing development and requiring large lots. The grassroots social justice activists apparently believed that their constituents were unlikely to afford Northwest homes or have the political power to shift industrial uses to the Northwest, regardless of the overlay zone's additional restrictions. They instead were interested in keeping the San Antonio drinking water supply clean and plentiful, as well as forming an ongoing, but loose working relationship with environmentalists to address the environmental conditions of South Side, West Side, and East Side neighborhoods.

Even though the COPS/Metro Alliance leaders joined the policy negotiations late, they sought and obtained several important provisions. These provisions included deadlines for the agreement, the assistance of an outside environmental attorney to plan around potential legal constraints, and public input and review of development-restriction waivers that could be granted by the San Antonio Water System. With their own social justice and public participation goals, leaders of low-income Hispanic neighborhoods became significant players in San Antonio environmental and land use policy. Perhaps the best indicator of the long-term impact of this strategy was a series of neighborhood planning meetings to address the environmental conditions and land use goals surrounding watersheds in four low-income minority neighborhoods.[614] Grassroots groups are engaging in prospective, proactive policy development in San Antonio, as well as in Austin, Denver, St. Paul, and the Colville Reservation. Each community pursues a different strategy and a different configuration of goals, but all use land use planning and regulatory tools.

V. LAND USE REGULATORY MECHANISMS

The empirical evidence of low-income and minority communities' activism to change local land use policies reflects some of the range of local regulatory tools that are available for achieving environmental justice goals. Comprehensive plans, zoning ordinances and amendments to

613. San Antonio, Tex., Ordinance No. 81491 (Jan. 12, 1995).

614. Patrick Driscoll, *Ideas Floated on Water and San Antonio's Future*, SAN ANTONIO EXPRESS-NEWS, Mar. 10, 1996, at A1.

zoning ordinances, flexible zoning techniques, and exactions are legal mechanisms which can be used to implement communities' planning. Land use regulation not only concerns ethical choices made individually and socially,[615] but it is also an evolving area of law, adaptable to new social problems and shifting social, economic, and political forces.[616] To date, environmental justice scholarship has devoted little attention to exploring specific land use regulatory tools.

A. *Comprehensive Plan*

The first land use regulatory mechanism is the comprehensive plan. Zoning regulations that implement low-income and minority neighborhoods' goals may be legally ineffective if they are not preceded by amendments to the city's comprehensive plan to reflect those goals. The zoning enabling legislation of most states requires that all zoning regulations be in accordance with a comprehensive plan.[617] Although most courts do not require that a formal written plan precede zoning ordinances,[618] many state statutes require local governments to adopt written comprehensive plans and prohibit zoning regulations inconsistent with those plans.[619] More importantly, many municipalities have adopted some form of comprehensive plan.[620] To the extent that new zoning regulations reflecting low-income and minority neighborhoods' goals are inconsistent with the written comprehensive plan, a court might invalidate them as not in accordance with a comprehensive plan.[621] Moreover, courts are

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615. *See* TIMOTHY BEATLEY, ETHICAL LAND USE: PRINCIPLES OF POLICY AND PLANNING 4–5 (1994).

616. *See* WRIGHT & GITELMAN, *supra* note 516, at 1–14.

617. YOUNG, *supra* note 506, § 5.03, at 360.

618. *See e.g.*, Theobald v. Board of County Comm'rs, 644 P.2d 942, 949 (Colo. 1982); Furtney v. Simsbury Zoning Comm'n, 271 A.2d 319, 325 (Conn. 1970); Dawson Enters., Inc. v. Blaine County, 567 P.2d 1257, 1262 (Idaho 1977); Iowa Coal Mining Co. v. Monroe County, 494 N.W.2d 664, 669 (Iowa 1993); Nottingham Village, Inc. v. Baltimore County, 292 A.2d 680, 687 (Md. 1972); State *ex rel.* Chiavola v. Village of Oakwood, 886 S.W.2d 74, 78 (Mo. Ct. App. 1994); Kozesnik v. Township of Montgomery, 131 A.2d 1, 7 (N.J. 1957); Allred v. City of Raleigh, 173 S.E.2d 533, 536 (N.C. Ct. App. 1970), *rev'd on other grounds*, 178 S.E.2d 432 (N.C. 1971); Udell v. Haas, 235 N.E.2d 897, 901 (N.Y. 1968); Tulsa Rock Co. v. Board of County Comm'rs, 531 P.2d 351, 357 (Okla. Ct. App. 1974); Cleaver v. Board of Adjustment, 200 A.2d 408, 413 (Pa. 1964); Hadley v. Harold Realty Co., 198 A.2d 149, 152 (R.I. 1964); West Hill Citizens v. King County Council, 627 P.2d 1002, 1005 (Wash. Ct. App. 1981); Bell v. City of Elkhorn, 364 N.W.2d 144, 148 (Wis. 1985). *But see* Fasano v. Board of County Comm'rs, 507 P.2d 23, 28 (Or. 1973) (requiring proof that a change conforms to the comprehensive plan).

619. ARIZ. REV. STAT. § 9-462.01F (1995); CAL. GOV'T CODE § 65860 (West 1997); FLA. STAT. § 163.3194 (1990); IND. CODE. § 36-7-4-201 (1995); KY. REV. STAT. § 100.213 (Michie 1993); ME. REV. STAT. ANN. tit. 30, § 4961-A(1)(A) (West 1996); NEB. REV. STAT. § 23-114.03 (1997); N.J. STAT. ANN. § 40:55D-62 (West 1991); OR. REV. STAT. § 197.010(3) (1989).

620. For a discussion of the increasing importance of both mandatory planning and written plans, see CALLIES, ET AL., *supra* note 565, at 372–73.

621. *See, e.g.*, Parks v. Planning & Zoning Comm'n, 425 A.2d 100, 103 (Conn. 1979); Green v. County Council, 508 A.2d 882, 891 (Del. Ch. 1986); Moore v. Maloney, 321 S.E.2d 335, 338 (Ga. 1984); La Bonta v. City of Waterville, 528 A.2d 1262, 1265 (Me. 1987); *Udell*, 235 N.E.2d at 905.

more likely to uphold spot zoning—the rezoning of a small parcel of land for a use classification that differs from surrounding parcels—if the rezoning is consistent with a comprehensive plan.[622]

Comprehensive plans generally contain elements of land use, transportation, and community facilities, and may contain elements of community design, open space, noise, housing, recreation, and environmental factors.[623] Low-income and minority communities wanting to redefine land use, transportation, or recreation and open space patterns in their neighborhoods should seek to amend their cities' comprehensive plans. Failure to do so could subject more specific zoning amendments to legal challenge as inconsistent with the land use or other patterns contained in the comprehensive plan. These communities may be able to take advantage of state statutory rights to participate in local planning[624] and provisions that allow frequent amendment of plans.[625]

B. *Amendments to Zoning*

Despite the importance of comprehensive planning as a policy goal and a legal requirement, the crux of land use regulation for environmental justice will be the amendment of existing zoning codes. Most low-income and minority communities that suffer or risk exposure to environmental harms exist in areas with zoning classifications that currently permit intensive uses.[626] Because people of color and the poor live near and among a higher proportion of industrial and commercial uses than do white, high-income people,[627] an appropriate land use regulatory response for cities would be to change the permitted uses in those areas to correspond more closely to the residents' desired neighborhood environment, as well as their health and safety needs.

Cities make two types of amendments to zoning regulations: zoning text amendments and zoning map amendments. Text amendments change the text of the zoning code;[628] zoning map amendments change

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However, where courts find comprehensive plans in zoning regulations they may find that the amendment itself results in a plan that achieves the required planning goals. *See, e.g.*, 1000 Friends of Oregon v. Board of County Comm'rs, 575 P.2d 651, 656–57 (Or. Ct. App. 1978) (finding that compliance achieved where government demonstrates that the amendment results in a plan which conforms with planning goals).

622. *See, e.g.*, Holmgren v. City of Lincoln, 256 N.W.2d 686, 691 (Neb. 1977); Watson v. Town Council, 805 P.2d 641, 645 (N.M. Ct. App. 1991); *Cleaver*, 200 A.2d at 415.

623. ROHAN, *supra* note 506, § 32A.04[1][b][ii], 32A-41.

624. *E.g.*, ARIZ. REV. STAT. § 9-461.05(E) (seeking maximum public participation); CAL. GOVT. CODE § 65351 (allowing opportunities for public involvement); KY. REV. STAT. ANN. § 100.193 (consulting with public and giving notice); R.I. GEN. LAWS § 45-22.2-9(c)(2) (1991) (giving public notice and soliciting comments); UTAH CODE ANN. § 17-27-303 (1995) (holding public hearing and giving reasonable notice).

625. *See* ROHAN, *supra* note 506, § 32A.04[1][b][vii], at 32A-47.

626. *See supra* Part III.C.

627. *Id.*

628. ROHAN, *supra* note 506, § 39.01[1], at 39-3.

the zoning district designations of particular parcels or areas of the city.[629] An additional mode of amendment is a comprehensive revision of both the text and the map, covering a large part of the city or regulatory jurisdiction.[630]

Text amendments change what uses, heights, densities, and the like are permitted in particular districts, but do not change which property is in what district.[631] For example, a city council or county commission might amend the zoning code expressly to prohibit ready-mix concrete plants in I-2 (heavy industrial) districts,[632] or to change quarrying and extractive-type activities from "of right" uses in agricultural districts to conditional uses.[633] In each of these cases, the designations of districts on the map did not change, but what was allowed in those districts changed through amendments to the permitted, conditional, and excluded uses that applied to all parcels bearing those designations. In addition, text amendments might have jurisdiction-wide (i.e., multi-district) applicability, as in the case of removing recycling operations from permitted uses in solid waste floating zones,[634] or classifying all airports, both commercial and non-commercial, as conditional uses in any district.[635]

Residents of low-income neighborhoods and neighborhoods of color might use zoning text amendments to remove intensive uses from use districts in which those intensive uses are inappropriate in their view, without ever changing the district designation of any particular parcel. For example, a neighborhood with a checkerboard pattern of commercial uses might seek an amendment to the zoning code to prohibit electroplating, solid waste incinerators, and machine shops in commercial zones.[636] No parcel would lose its commercial use designation, but the range of permissible uses for commercial parcels would shrink. Similarly, the neighborhood might ask the city to change a permitted "of right" use, such as metal foundries in industrial districts, to a conditional use, so that anyone seeking the use would have to obtain a conditional use permit and submit to certain conditions designed to protect the neighborhood.

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629. *Id.*

630. *Id.*

631. *See, e.g.*, Marcus Assoc. v. Town of Huntington, 382 N.E.2d 1323, 1323 (N.Y. 1978) (upholding the validity of a text amendment to use restrictions applicable to certain districts which limited the number of occupants and uses of a building or premises); Town of Sandgate v. Colehamer, 589 A.2d 1205, 1207, 1213 (Vt. 1990) (holding that a text amendment which prohibited storage of inoperable cars after a certain period was valid).

632. *See* Rockville Fuel & Feed Co. v. City of Gaithersburg, 291 A.2d 672, 673–74 (Md. 1972).

633. *See* County Comm'rs. v. Arundel Corp., 571 A.2d 1270, 1272 (Md. 1990), *vacated*, Arundel Corp. v. County Comm'rs, 594 A.2d 95 (Md. 1991).

634. *See* Free State Recycling Sys. v. Board of County Comm'rs, 885 F. Supp. 798, 802–05 (D. Md. 1994).

635. *See* Von Lusch v. Board of County Comm'rs, 330 A.2d 738, 741 (Md. Ct. Spec. App. 1975).

636. *See supra* notes 517–20.

Zoning text amendments have some legal advantages over zoning map amendments. Because text amendments are generally applicable and thus often deemed "comprehensive" in nature, they receive greater deference as legislative acts and are presumed valid.[637] Even after a landowner receives a special exception that permits it to use its property for an intensive land use like a concrete batching plant in a heavy industrial zone, a city may prevent the use by amending the zoning code to prohibit the use altogether in heavy industrial zones. The landowner has no vested right in the continuation of any existing zoning.[638] Text amendments do not address whether particular uses are appropriate on particular parcels singled out for attention; but instead, text amendments are generally applicable determinations that certain uses are always incompatible with the other uses in a zoning classification, or always need the oversight that accompanies conditional use permits. Thus, they avoid the potential problems associated with "spot zoning" and "downzoning" that result from particularized treatment of individual parcels or small groups of parcels.[639] Local governing boards, however, must follow required procedures and give affected parties proper notice and opportunity to be heard when adopting text amendments.[640] In addition, changes to generally applicable zoning designations may arouse the opposition of many different affected landowners city-wide, thus making them difficult to achieve politically. Furthermore, a text amendment may be too blunt a tool for excising intensive uses that are interspersed throughout low-income and minority neighborhoods. For example, a solid waste incinerator might be appropriate for most, perhaps even nearly all, heavy industrial zoning designations in a city. A text amendment to make it an impermissible use in industrial zones would not directly address the underlying environmental justice problem of industrial zoning in a residential area of color.

Zoning map amendments change the zoning district designation for a particular parcel, tract of land, or set of parcels.[641] Although rezoning has been used to allow intensive uses in neighborhoods of color and low-income communities,[642] grassroots environmental justice activists might

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637. *See Von Lusch*, 330 A.2d at 742; Layne v. Zoning Bd. of Adjustment., 460 A.2d 1088, 1089 (Pa. 1983) (deferring to zoning classifications in local zoning code unless "it is *obvious* that the classification has *no* substantial relationship to public health, safety, morals or general welfare" (emphasis added)).

638. Rockville Fuel & Feed Co. v. City of Gaithersburg, 291 A.2d 672, 675–77 (Md. 1972).

639. *See infra* notes 651–63 and accompanying text.

640. Free State Recycling Sys. Corp. v. Board of County Comm'rs, 885 F. Supp. 798, 806–08 (D. Md. 1994).

641. *See, e.g.*, Orange Lake Ass'n v. Kirkpatrick, 21 F.3d 1214, 1217 (2d Cir. 1994) (rezoning several parcels totaling 150 acres from R-3 to R-2, thus changing density); Bartram v. Zoning Comm'n, 68 A.2d 308, 309–10 (Conn. 1949) (rezoning single lot from residential to business); Pierson Trapp Co. v. Peak, 340 S.W.2d 456, 457 (Ky. Ct. App. 1960) (rezoning 30-acre tract from residential to commercial); Valley View Indus. Park v. City of Redmond, 733 P.2d 182, 186–88 (Wash. 1987) (rezoning single parcel of nearly 27 acres from light industrial to agricultural).

642. Lake Lucerne Civic Ass'n v. Dolphin Stadium Corp., 801 F. Supp. 684, 688 (S.D. Fla. 1992) (rezoning land in predominantly African American neighborhood to commercial use for a

seek zoning map amendments to change more intensive use designations in their neighborhoods to less intensive use designations, a technique known as "downzoning."[643] For example, a low-income minority neighborhood might contain several parcels zoned for heavy industrial use in close proximity to residences, schools, churches, health care facilities, and the like. Residents might seek to rezone some or all of these parcels for less intensive, yet economically viable, commercial uses.

Even though downzoning may change the land use designations in low-income and minority communities to reduce threats to the residents' health, safety, quality of life, and sense of community, owners of downzoned parcels are likely to challenge the rezoning. A majority of courts will deem a rezoning a legislative act and give it a presumption of validity.[644] Thus, the landowner will have to prove that the zoning amendment was "arbitrary, capricious or unreasonable and [has] no substantial relation to the public health, safety or general welfare."[645] However, Oregon,[646] Idaho,[647] and Kansas[648] have treated rezoning as an administrative or quasi-adjudicative act, thus subject to greater judicial scrutiny. In addition, Maryland,[649] Connecticut,[650] Mississippi,[651] Virginia,[652] and New

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stadium and extensive commercial development); R.I.S.E. Inc. v. Kay, 768 F. Supp. 1144, 1148 (E.D. Va. 1991) (rezoning tract in predominantly African American area from agricultural to industrial to allow regional landfill).

643. *See e.g.*, McCuskey v. Canyon County, 851 P.2d 953, 955 (Idaho 1993) (downzoning single parcel from heavy industrial to rural residential); Palermo Land Co. v. Planning Comm'n, 550 So. 2d 316, 317 (La. Ct. App. 1989) (downzoning land from heavy industrial to light industrial to prevent expansion of solid waste landfill), *overruled by* Palermo Land Co. v. Planning Comm'n, 561 So. 2d 482 (La. 1990); City of Virginia Beach v. Virginia Land Inv. Ass'n, 389 S.E.2d 312, 312 (Va. 1990) (downzoning 403 acres from planned unit development to agricultural); Seabrooke Partners v. City of Chesapeake, 393 S.E.2d 191, 192–93 (Va. 1990) (downzoning 19 acres from multi-family residential to single-family residential); *Valley View Indus. Park*, 733 P.2d at 186–88 (downzoning single parcel of nearly 27 acres from light industrial to agricultural).

644. ROHAN, *supra* note 506, § 39.01[2], at 39-4; *see, e.g.*, Amel Dev. Co. v. City of Costa Mesa, 620 P.2d 565, 567 (Cal. 1980). *But see, e.g.*, *infra* notes 664–65 and accompanying text.

645. ROHAN, *supra* note 506, § 39.01[2], at 39-4.

646. *See, e.g.*, Neuberger v. City of Portland, 603 P.2d 771, 777 (Or. 1979) (rezoning by city counsel was quasi-judicial function subject to review by court of appeals); Fasano v. Board of County Comm'rs, 507 P.2d 23, 26–27 (Or. 1973) (rejecting the position that judicial review of a rezoning was limited to a determination of whether it was arbitrary and capricious and further noting that courts should not "rigidly" view zoning decisions as legislative acts to be accorded a presumption of validity).

647. *See, e.g.*, Cooper v. Board of County Comm'rs., 614 P.2d 947, 950–51 (Idaho 1980) (holding that the board's determination on rezoning was a quasi-judicial act).

648. *See, e.g.*, Golden v. City of Overland Park, 584 P.2d 130, 135 (Kan. 1978) (holding that a change of zoning which focused on a specific tract of land, rather than the entire city, was more quasi-judicial than legislative).

649. MD. ANN. CODE art. 66B, § 4.05[a] (1997); *see, e.g.*, Wakefield v. Kraft, 96 A.2d 27, 30 (Md. 1953) (building in reliance on original zoning was not sufficient to prevail on claim where a mistake in original zoning ordinance or change in the neighborhood's character was enough to render rezoning proper).

650. *See, e.g.*, Kimball v. Court of Common Council, 167 A.2d 706, 708 (Conn. 1961) (changing zones is improper unless new conditions or substantial changes have occurred in the area).

Mexico[653] have required that governmental bodies support rezonings with evidence of either a substantial change in the character of the neighborhood where the rezoning occurred or a mistake in the existing zoning. The "change or mistake" rule is particularly problematic for low-income and minority neighborhoods, as it creates strong inertia for existing zoning patterns, which are inequitably distributed and often harmful to low-income people and people of color. Environmental justice advocates who seek land use changes are seeking to change local conditions by first changing zoning patterns. They often will not be able to support downzoning with changed conditions towards less intensive uses in the area because the area is likely to have deteriorated as a result of the existing zoning allowing more intensive uses.[654] Instead, they will have to argue that the initial zoning was a mistake by showing the local land use authority relied on invalid, or perhaps discriminatory, assumptions about the compatibility of industrial and commercial uses with nearby residential activities.[655]

Even in the majority of states where rezoning is legally presumed valid, courts as a matter of practice scrutinize downzoning carefully.[656] A landowner may contend that the rezoning is impermissible spot zoning, or more precisely spot zoning in the reverse.[657] Spot zoning involves zoning a small area of land differently than surrounding land, while spot zoning in the reverse entails zoning a parcel more restrictively than the surrounding parcels.[658] Spot zoning in the reverse, which is more relevant to the environmental justice goal of downzoning intensive uses in mixed use areas, is often struck down as arbitrary and capricious, an unjust discrimination against the downzoned parcel while surrounding parcels are not subjected to the same treatment.[659] Environmental justice advocates

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651. *See, e.g.*, City of Biloxi v. Hilbert, 597 So. 2d 1276, 1280 (Miss. 1992) (holding that clear and convincing evidence must be given that either a mistake in the original zoning or a substantial change in the character of the neighborhood renders the rezoning justified).

652. *See, e.g.*, Seabrooke Partners v. City of Chesapeake, 393 S.E.2d 191, 193 (Va. 1990) (holding that rezoning will be sustained on the production of evidence demonstrating sufficient change in the circumstances of a parcel's neighborhood).

653. *See, e.g.*, Davis v. City of Albuquerque, 648 P.2d 777, 779 (N.M. 1982) (holding that downzoning must be based on a showing of a mistake in the original zoning or change in the neighborhood).

654. *See* Bullard, *Residential Segregation*, *supra* note 21, at 80–81; Rabin, *supra* note 1, at 111–12.

655. *See* Boyce v. Sembly, 334 A.2d 137, 142 (Md. Ct. Spec. App. 1975).

656. *See, e.g.*, Grimpel Assocs. v. Cohalan, 361 N.E.2d 1022, 1024–25 (N.Y. 1977) (holding that rezoning resulted in unconstitutional exercise of police power after considering evidence of traffic conditions and reduction in value to determine the suitability for the uses prescribed in the zoning ordinances).

657. *See* Osborne M. Reynolds, Jr., *"Spot Zoning"—A Spot That Could Be Removed from the Law*, 48 WASH. U. J. URB. & CONTEMP. L. 117, 117–19 (1995).

658. *Id.*

659. *See, e.g.*, Viso v. State, 92 Cal. Rptr. 580, 584–85 (Ct. App. 1979); City of Miami v. Schutte, 262 So. 2d 14, 17 (Fla. Dist. Ct. App. 1972).

must also take care to ensure that downzoning accords with, and does not facially conflict with, the comprehensive plan.[660]

Furthermore, owners of downzoned property who suffer economic loss to accommodate neighborhood residents' opposition to their uses of their property may claim that the local land use authority unreasonably exercised its police power and took private property without just compensation. For example, a New York village rezoning of two parcels from business to residential, resulting in at least a sixty percent loss of value, was not only in violation of a comprehensive plan but also unjustifiably discriminatory.[661] The court also noted that the downzoning occurred in the face of a specific proposal for a bowling alley and a supermarket or discount house that received neighborhood opposition rather than as the result of pre-proposal comprehensive planning.[662] Similarly, downzoning a parcel from commercial to residential use was unconstitutional when it resulted in a 92% diminution in the parcel's value and nearby residences could be protected from the impacts of the business use of the land by an existing buffer area.[663] However, when local residents and the land use planning authority can present sufficient evidence that downzoning is necessary to protect local residential neighborhoods, courts will likely uphold the downzoning.[664]

People of color and poor people are in something of a Catch-22. On one hand, zoning designations often reflect existing uses,[665] which in the case of low-income and minority neighborhoods are often a set of mixed, intrusive, intensive, and even expulsive uses. Environmental justice advocates want to change these zoning patterns. However, environmental injustice often exists in older neighborhoods, and as Ellickson and Tarlock observe, "[a]lthough all use designations are potentially amendable, those in established neighborhoods are the least likely to be open for negotiation."[666] Amendments to the zoning code and zoning map are means of redefining acceptable land uses, at least for the future, but they

660. *See supra* notes 617–21 and accompanying text.

661. Udell v. Haas, 235 N.E.2d 897, 905 (N.Y. 1968).

662. *Id.* at 903–04.

663. Grimpel Assocs. v. Cohalan, 361 N.E.2d 1022, 1024 (N.Y. 1977); *see also* Condor Corp. v. City of St. Paul, 912 F.2d 215, 223 (8th Cir. 1990) (holding that neighborhood opposition was not a sufficient basis for restricting intensive uses and that the city must establish evidence of incompatibility of uses); D'Addario v. Planning & Zoning Comm'n, 593 A.2d 511, 517 (Conn. 1991) (holding that downzoning two parcels from commercial to residential was a taking of private property for public use without just compensation when the downzoning reduced the value of both parcels by about 90% each).

664. Moviematic Indus. v. Board of County Comm'rs, 349 So. 2d 667, 669 (Fla. Dist. Ct. App. 1977) (noting the validity of downzoning from heavy industrial to single-family residential to protect ecological systems and residential, historic, and aesthetic character of neighborhoods); McGowan v. Cohalan, 361 N.E.2d 1025, 1027 (N.Y. 1977) (upholding a downzoning from industrial to residential as necessary to create buffer between residential and industrial uses).

665. ELLICKSON & TARLOCK, *supra* note 539, at 59.

666. *Id.*

will be judged by their compatibility with surrounding uses and the character of the neighborhood,[667] which often reflect the very uses that grassroots groups are trying to change. Objectionable uses may be deemed compatible with nearby uses that are similarly intensive. In addition, landowners accustomed to the intensive characterization of their parcels and the neighborhood are likely to resist change.

Low-income and minority neighborhood groups will be most successful in achieving valid rezoning of neighboring properties from more intensive to less intensive uses if they follow four guiding principles: (1) seek rezoning before controversial specific land use proposals arise; (2) carefully document the incompatibility of existing high-intensity use designations and their impact or potential impact on the health and safety of local residents, as well as community character; (3) seek rezoning for all neighboring parcels with similar use designations and similar impacts (do not leave a landowner the argument that only his or her property has been downzoned while neighboring parcels remain zoned for more intensive uses); and (4) do not downzone so greatly that the landowner suffers a substantial diminution in the property's value (leave the owner some economically viable use—for example, downzone from an industrial use to a commercial use, instead of all the way to a single-family residential use).

Perhaps the most successful strategy of all includes a comprehensive set of amendments to the zoning text, the zoning map, and the comprehensive plan. These combined text and map amendments often create new zoning designations and apply them to existing parcels, and they often receive judicial approval because of their comprehensive nature.[668] For example, if a group of neighborhood residents were concerned that interspersed light industrial zoning might permit manufacturing activity with the presence and use of toxic chemicals, the emission of noise and dust, and the like, but did not object to warehouse uses (permitted uses in light industrial zones), the group would have four options. First, they could seek a zoning text amendment to delete manufacturing as a permitted use in light industrial zones. This change, however, would seem to run contrary to the definition of light industrial activity as including at least some manufacturing and would likely develop opposition from manufacturers in other parts of the city whose property is zoned light industrial. Second, they could seek a zoning map amendment to downzone their area's light industrial property to commercial or residential. This would prevent manufacturing in the area, but it would also inefficiently and perhaps unjustly prevent owners of the downzoned parcel from using their land for warehouses even though the residents have no objection to warehouses. Third, they could seek both a map and text amendment that would downzone the land to commercial but place

667. *See* La Salle Nat'l Bank v. City of Chicago, 125 N.E.2d 609, 613 (Ill. 1955).

668. *See, e.g.*, Jafay v. Board of County Comm'rs, 848 P.2d 892, 898 (Colo. 1993).

warehouses among the permitted uses for commercial zones. However, warehouses might not be compatible with all other commercial uses, and residents and landowners in other parts of the city where there is commercial zoning might object to warehouses in their areas. Fourth, they could seek both a text amendment that creates a new "warehouse" zoning designation and a map amendment that rezones the light industrial properties to warehouse uses. The creation of new districts accommodates the particular land use compatibility needs of particular neighborhoods, such as low-income and minority communities that historically have suffered expulsive zoning and harmful land uses. It has the capacity to reflect changing social norms about what uses are deemed compatible and incompatible with other uses. It also increases the "supply" of zoning designations, perhaps avoiding inefficient and burdensome restrictions on land that result from attempts to avoid some uses in a particular classification's large number of permissible uses (which accompany a small set of use classifications). This method, however, risks proliferation of particularized use designations and piecemeal zoning. Overly specialized zoning designations could limit both the local community and the private landowner in options for the property's use if the conceived use is no longer viable or desired or the property is to be sold. Nonetheless, communities may need to experiment with new zoning classifications in an attempt to achieve environmental justice.[669]

C. *Flexible Zoning Techniques*

1. Conditional Uses

Beyond traditional zoning, localities and neighborhood groups who become involved in land use planning and regulation have a variety of more flexible techniques available to them. Perhaps the most commonly used mechanism is the conditional use or special exception.[670] Zoning classifications contain uses that are permitted by right (without having to obtain any specialized permit) and uses that are completely prohibited. However, most zoning classifications also contain uses that are permitted in the zone only if the landowner obtains a permit and meets the standards or conditions listed in the zoning code for those uses.[671] These uses are often compatible with other uses in the zone but are not necessarily compatible in every location or under every circumstance or without certain limitations and conditions.[672] The terms "special permits," "spe-

669. "Incremental planning that adapts to change in an ad hoc manner is a fact of life." ROHAN, *supra* note 506, § 32A.04[1][b][vii], at 32A-47.

670. ELLICKSON & TARLOCK, *supra* note 539, at 61.

671. ROHAN, *supra* note 506, § 44.01[1], at 44-2.

672. *Id.*; *see also* Tullo v. Township of Millburn, 149 A.2d 620, 624–25 (N.J. Super. Ct. App. Div. 1959) (holding there was sufficient evidence that the statute and ordinance had been met to justify a special exception for the construction of an outdoor pool at private club).

cial exceptions," and "conditional uses" are legally the same and are used interchangeably to refer to the same device.[673]

Conditional uses are not a means of excluding potentially harmful activities from areas zoned for them because the zoning code lists them as permissible if they meet certain conditions, thus presuming general compatibility. Instead, conditional uses are a means of imposing certain restrictions on uses that could become nuisances or unduly burdensome on the surrounding area if left unchecked.[674] They also allow for greater public scrutiny of some land use proposals.[675] Residents of low-income and minority neighborhoods cannot count on keeping out conditional uses just because the landowner has to obtain a permit. First, to even have a chance at preventing an unwanted conditional use, the local residents must watch vigilantly for conditional use permit applications that affect their neighborhoods and become actively and effectively involved in opposing the applications that would have adverse impacts on their community.[676] Second, the local land use regulatory authority might grant the permit despite neighborhood opposition. For example, the environmental justice cases of *East-Bibb Twiggs Neighborhood Association v. Macon Bibb Planning & Zoning Commission*[677] (concerning a landfill in Macon, Georgia) and *Security Environmental Systems, Inc. v. South Coast Air Quality Management District*[678] (concerning a hazardous waste incinerator capable of burning more than 450 chemicals at a rate of two tons per hour) involved local grants of conditional use permits. Third, a landowner whose conditional use permit application has been denied is likely to obtain judicial reversal if he or she can show compliance with all the conditions in the zoning code.[679]

Environmental justice groups, however, may be able to exercise more scrutiny over industrial and commercial uses that are not likely (politically or legally) to be prohibited altogether if the landowner is required to obtain a conditional use permit. In addition, they can seek to influence the conditions under which a permit may be granted, so as to reduce the negative impacts of the conditional use. Therefore, an environmental justice strategy might involve rewriting conditional use standards to require more buffers, more limits on pollution and nuisance-like activities, a smaller scale, and the like. Furthermore, one standard might require denial of the permit if there is an over-concentration of similar

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673. ROHAN, *supra* note 506, § 44.01[1], at 44-3.

674. *Id.* § 44.01[4], at 44-11.

675. *Id.*

676. *See* MAXWELL & IMMERGLUCK, *supra* note 510, at 13.

677. 888 F.2d 1573 (11th Cir.), *opinion amended and superseded on denial of reh'g*, 896 F.2d 1264 (11th Cir. 1989).

678. 229 Cal. App. 3d Supp. 110 (1991).

679. *See, e.g.*, Zylka v. City of Crystal, 167 N.W.2d 45, 49 (Minn. 1969); Bankoff v. Board of Adjustment, 875 P.2d 1138, 1142–43 (Okla. 1994).

uses in a low-income or minority neighborhood.[680] Finally, requiring conditional use permits for new industrial or commercial activity in a low-income or minority neighborhood that is disproportionately zoned for these uses might be an effective way of controlling further intrusion until comprehensive rezoning can occur.[681]

2. Overlay Zones and Special Districts

Overlay zones are another way of imposing additional requirements on existing Euclidean zoning: "An outgrowth of Euclidean zoning, overlay zones in effect circumscribe an environmental area that is already subject to Euclidean regulation, and impose additional requirements thereon."[682] The additional requirements are laid over the existing zoning, subjecting the land in the overlay district to the underlying traditional zoning requirements and the special requirements associated with the overlay district. Overlay zones have been used for a wide range of purposes, including prohibitions or limits on development where natural conditions such as seismic hazards, hillside slopes, or flood hazards make it unsuitable, where there are aesthetic or historic features to be preserved, where sensitive and valuable environmental areas exist that could be harmed by excessive development, and where certain activities in the area, like airplane flight patterns, make constraints on other activities necessary for safety or health.[683]

Overlay zones could be used to impose a variety of specific requirements on industrial and commercial land activities that occur in neighborhoods or areas inhabited by low-income people and people of color and that threaten the residents' health or the area's character and integrity. For example, environmental justice groups could seek overlays of "interface zones," which limit land uses and require certain mitigation and buffer measures to create buffers where higher intensity zoning borders upon lighter intensity zoning.[684] They could also seek neighborhood conservation districts, designed to protect older neighborhoods from the harmful or expulsive effects of mixed zoning, and then impose on all neighborhood conservation districts certain land use limits designed to

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680. The Denver Board of Adjustment reversed a grant of a conditional use permit for a solid waste transfer facility in an industrial (I-2) zone in a low-income neighborhood of color, in part because "[t]he area in which the station is to be located has an undue concentration of uses which manufacture, use, or store materials which create environmental hazards." Board of Adjustment for Zoning Appeals of the City and County of Denver, Findings of Fact & Conclusions of Law, Case No. 72-95, at 2.a.i (Sept. 19, 1995).

681. The East Austin Overlay District is an excellent example of this strategy. *See* Austin, Texas Ordinance No. 970717-F (July 1, 1997); CITY OF AUSTIN, QUESTIONS AND ANSWERS: EAST AUSTIN OVERLAY DISTRICT, *supra* note 591.

682. Robert J. Blackwell, Comment, *Overlay Zoning, Performance Standards, and Environmental Protection After* Nollan, 16 B.C. ENVTL. AFF. L. REV. 615, 616 (1989).

683. *Id.* at 632–34; *see* CALLIES ET AL., *supra* note 565, at 61–62.

684. Blackwell, *supra* note 682, at 619 n.135.

prevent those impacts.[685] For example, the City of Waco, Texas, enacted an ordinance prohibiting the sale of automobiles on certain commercial property in neighborhood conservation districts, thus protecting these sensitive older areas from an arguably disruptive land use.[686] Finally, environmental justice advocates might follow the lead of residents of East Austin and the Austin, Texas planning staff and city council in developing an overlay zone for a low-income neighborhood of color that suffered a disproportionate amount of industrial and commercial uses and zoning designations.[687] The East Austin overlay zone requires conditional use permits for any new industrial or commercial activity in the district.[688] The specific additional requirements imposed on the overlay zone will vary from locality to locality, depending on the concerns identified by local residents. The concept of the overlay zone, however, allows imposition of these additional requirements only where they will help to protect and promote the health of the neighborhoods and the residents, not in other parts of the city where overlay zones might have no or little impact on residential areas. This narrow geographic tailoring of additional land use regulations reinforces legal arguments that the regulations are designed to protect only those neighborhoods at risk of deterioration or environmental hazards without unnecessarily burdening land use in other areas. It also decreases the number of landowners citywide who might be affected and therefore might be opponents.

3. Performance Zoning

Performance zoning is a deceptively attractive option for residents of mixed use neighborhoods wanting to protect against environmental harms, but it contains the same limits inherent in federal and state environmental regulations. Performance zoning does not regulate land uses, but instead regulates the impacts of activities that occur on land.[689] A performance zoning ordinance establishes certain performance standards for possible negative impacts on neighboring property, such as dust, smoke, noise, odor, vibration, toxic pollutants, runoff, glare, heat, and other nuisances (negative externalities).[690] It prohibits any land use with impacts

685. "[A] neighborhood conservation district is an overlay district 'intended to encourage the continued vitality of older residential areas of the city, to promote the development of a variety of new housing of contemporary standards in existing neighborhoods, and to maintain a desirable residential environment and scale.'" Bell v. City of Waco, 835 S.W.2d 211, 214 (Tex. Ct. App. 1992) (quoting WACO, TEX., CODE § 4.2303(a) (1987)).

686. *Id.* at 213.

687. *See supra* Part IV.C.1.

688. *See supra* note 505; *see also East Austin Due Rezoning*, AUSTIN AMERICAN-STATESMAN, July 1, 1997, at A18 (discussing proposed changes to zoning policies in East Austin); Haurwitz et al., *supra* note 505, at A1 (describing the effects of the proposed changes to remedy the incompatibility of zoning and actual use of East Austin).

689. ROHAN, *supra* note 506, § 40.01[7], at 40-6.

690. *Id.*

that exceed levels predetermined to be tolerable.[691] Two ways of classifying performance standards exist. One is to distinguish between standards related to development density, design, and preservation of natural resources—often associated with areas of new development—and standards related to the nuisance-like impacts of industrial activity, such as air, water, and soil pollution; noise; vibration; and odors—often in established industrial areas.[692] Another classification distinguishes between what are known as "primitive" standards, which have only general definitions stemming from common law nuisance concepts (e.g., prohibitions on emission of "any offensive odor, dust, noxious gas, noise, vibration, smoke, heat or glare beyond the boundaries of the lot"[693]) and "precision" standards, which are developed from scientific data and reflected in quantifiable measurements (e.g., limits on permissible decibel levels in designated octave bands per second or designated center frequency-cycles per second).[694] Nevertheless, all types of performance zoning ordinances supplement, as opposed to replace, traditional, use-based Euclidean zoning.[695] And courts have largely upheld the validity of performance zoning standards both as reasonable means of protecting the public from nuisances and as sufficiently measurable according to a "reasonable person" nuisance standard.[696]

Performance zoning is essentially local environmental law. Except for the performance standards that prohibit all emissions,[697] the standards permit some level of impact. The permissible level, then, is based either on what is generally defined as "objectionable," which is vague and difficult to enforce, or on scientific calculations of risk. In either event, the standards require legal or scientific expertise, regulatory oversight, and control of pollution through risk assessment, rather than pollution prevention—all characteristics of environmental law criticized by environmental justice activists and scholars, and distrusted by low-income people and minorities.[698] If low-income and minority communities must endure industrial and intensive commercial uses, performance standards offer a locally available tool for prohibiting those activities from polluting and disrupting the neighborhood. Performance standards, however,

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691. LANE KENDIG, PERFORMANCE ZONING (1980); ROHAN, *supra* note 506, § 40.01[1][c], at 40-6; CALLIES ET AL., *supra* note 565, at 63; Frederick W. Acker, Note, *Performance Zoning*, 67 NOTRE DAME L. REV. 363, 364 (1991); Blackwell, *supra* note 682, at 616.

692. *See generally* KENDIG, *supra* note 691 (addressing performance zoning).

693. State v. Zack, 674 P.2d 329, 331 (Ariz. 1983) (quoting city ordinance).

694. Blackwell, *supra* note 682, at 638–39.

695. *Id.* at 616, 637. *But see* Acker, *supra* note 691, at 364 (urging performance zoning as a superior alternative to Euclidean zoning).

696. *Zack*, 674 P.2d at 332; Dube v. City of Chicago, 131 N.E.2d 9, 16 (Ill. 1955); DeCoals, Inc. v. Board of Zoning Appeals, 284 S.E.2d 856, 859 (W. Va. 1981).

697. *E.g.*, *DeCoals*, 284 S.E.2d at 858 (stating that the text of the ordinance indicated that "[n]o dust of any kind produced by the industrial operations shall be permitted to escape beyond the limits of the property being used.").

698. *See supra* notes 111–12, 119–24.

do not address the problem of disproportionate industrial and commercial zoning in low-income and minority neighborhoods. Nor are they as certain to keep pollution out, given slippages in enforcement and the potential for either careless or inadvertent emissions from heavy industrial activities, as prohibitions on industrial uses in these neighborhoods are. Thus, at best, performance standards might be a fallback negotiating position for communities that, because of private property rights, economic and political forces, or other practical limits, cannot completely undo the legacy of intensive zoning.

4. Buffer Zones

Buffer zones, like performance zoning, both help and hurt low-income people and people of color. Buffer zones are use designations that create a buffer or transition between a less intensive use, such as single-family residential, and a nearby more intensive use, such as commercial or industrial.[699] The buffer zone exists between the two areas to minimize the impact of the more intensive use on the less intensive, more sensitive use.[700]

The most frequent type of buffer between single-family residential areas and industrial or commercial areas is medium- or high-density residential uses.[701] In fact, in the famous case of *Village of Arlington Heights v. Metropolitan Housing Development Corp.*,[702] in which the Supreme Court upheld the Village's refusal to rezone land for low-income housing in an all-white Chicago suburb, the Village's avowed purpose for its multi-family zoning designation was to serve as a buffer between single-family homes and commercial activities.[703] Buffer zones are perhaps one of the major reasons why low-income and minority neighborhoods have so much industrial and commercial zoning: the multi-family housing, where many low-income and minority people live, is purposefully placed near the industrial and commercial uses to create a buffer that protects high-income, white, single-family neighborhoods. Zoning practices place large numbers of poor and minority people near intensive uses because traditional zoning and planning theory values most the single-family residence, instead of the integrity and quality of all residential areas.[704]

However, low-income and minority neighborhoods need buffers to protect them from intensive industrial and commercial activity. Buffer zones can also include physical screening, landscaping, significant set-

699. ROHAN, *supra* note 506, § 40.01[7], at 40-38.

700. *Id.*

701. *Id.*

702. 429 U.S. 252 (1977).

703. *Arlington Heights*, 429 U.S. at 556.

704. The practice of buffer zoning "presents the anomalous situation of putting more people next to commercial uses rather than fewer, [but] it is consistent with traditional theory which places the single-family use at the apex of the zoning pyramid. The courts have generally sustained the practice." ROHAN, *supra* note 506, § 40.01[7], at 40-38.

backs, open space, and even low-intensity commercial uses like offices, shops, churches, and medical care facilities.[705] Environmental justice advocates can use the concept of buffer zoning but redefine it to protect low-income and minority residences. Although neighborhood groups might want to avoid buffering against industrial activities with open space uses that have recreational value and could attract children and others to play close to heavy industry, they could seek non-residential buffer zones to separate themselves from potentially harmful or disruptive uses. This would be most successful in situations in which industrial or commercial zoning borders low-income or minority neighborhoods, instead of being interspersed throughout them.

5. Floating Zones

Floating zones are flexible zoning techniques that require particular scrutiny and monitoring by environmental justice groups to ensure that low-income communities and neighborhoods of color are not assigned harmful or burdensome floating uses. A floating zone is a land use district created in the zoning code text but not yet designated on the zoning map.[706] The zoning authority identifies a need for a particular type of use but may not be able to identify where in the locality that use should be placed or zoned. Rather than be limited by the rigidity of traditional Euclidean zoning, the authority creates a district without any specific location(s) on the map, but with a set of standards for determining appropriate locations. The zone "floats" until a landowner seeks to have it applied to his or her property via a rezoning of the property. Thus, there is a bifurcation of the creation of the zone and the application of the zone to any specific area. It gives the local authority flexibility in responding to local land use needs. By and large, courts have upheld floating zones.[707]

Floating zones pose an uncertain threat to local residents and landowners, who do not know whether a neighboring property will be chosen for a floating zone use.[708] If it is chosen for this designation, they may face (in some cases, literally!) an unexpected new use. Furthermore, floating zones appear to be used most often for either industrial uses or

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705. *Id.*

706. For discussions of floating zones and how they work, see CALLIES ET AL., *supra* note 565, at 69; WRIGHT & GITELMAN, *supra* note 516, at 855; Comment, *Zoning—The Floating Zone: A Potential Instrument of Versatile Zoning*, 16 CATH. U. L. REV. 85 (1966).

707. *See, e.g.*, Lurie v. Planning & Zoning Comm'n., 278 A.2d 799, 811 (Conn. 1971); McQuail v. Shell Oil Co., 183 A.2d 572, 580 (Del. 1962); Beall v. Montgomery County Council, 212 A.2d 751, 762 (Md. Ct. Spec. App. 1965); Rodgers v. Village of Tarrytown, 96 N.E.2d 731, 733 (N.Y. 1951). *But see* Eves v. Zoning Bd. of Adjustment, 164 A.2d 7, 12 (Pa. 1960) (invalidating use of floating zone as antithetical to concept of zoning).

708. Herbert Goldman, Comment, *Zoning Change: Flexibility vs. Stability*, 26 MD. L. REV. 48, 51–52 (1966).

high-density residential uses.[709] For example, in *McQuail v. Shell Oil Co.*,[710] New Castle County, Delaware, applied an industrial floating zone to an undeveloped parcel previously zoned residential, so that Shell Oil Co. could build a refinery. Residents of low-income and minority neighborhoods may find that property zoned for non-intensive uses, for example residential, may be rezoned for industrial uses through the application of a floating zone at the request of the landowner. In fact, parcels in these neighborhoods might be particularly attractive to industrial companies wanting to take advantage of floating zones for their activities: the land may be cheaper; local residents might not have the political power, information, or resources to oppose the rezoning; there would likely be other nearby industrial uses or industrially zoned property; and there might be proximity to transportation facilities like railroads, interstate freeways, waterways, and airports. In addition, the decision about whether or not to apply a floating zone to a particular parcel or tract will be made on the basis of criteria already established at the creation of the use initially. Therefore, grassroots environmental groups should pay particular attention to the existence of unmapped floating zones in local zoning codes and any possible requests to apply those zones in their neighborhoods. They will need to be politically active in opposing any unwanted floating zones, both in the text (the existence of the unmapped district altogether) and on the map (the application of the zone to land in their neighborhoods). Opposition to particular applications of floating zones will be most successful when based on the articulated criteria, as well as political activity.

D. *Exactions*

A possibly not-so-obvious tool that could be part of a land use planning model of environmental justice is the local government imposition of exactions (i.e., conditions) on approvals of industrial and commercial development near residential areas. Exactions require the developer to provide the public either real property (land, facilities, or both) or monetary fees as a condition for permission to use land in ways subject to government regulation.[711] These dedications and fees provide the public facilities necessitated by new development, including schools, parks, open space, roads, sidewalks, public utilities, fire and police stations,

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709. *See McQuail*, 183 A.2d at 574 (heavy industrial floating zone); *Beall*, 212 A.2d at 751 (multi-family high-rise residential floating zone); Costello v. Sieling, 161 A.2d 824 (Md. 1960) (tourist accommodation floating zones); Huff v. Board of Zoning Appeals, 133 A.2d 83, 84–85 (Md. 1957) (restricted manufacturing floating zone); *Rodgers*, 96 N.E.2d at 732 (multi-family residential floating zone); *Eves*, 164 A.2d at 8 (limited industrial floating zone); *see also* CALLIES, ET AL., *supra* note 565, at 69 (using light industrial and multi-family housing uses for hypothetical about floating zones).

710. 183 A.2d 572, 574 (1962).

711. Vicki Been, *"Exit" As a Constraint on Land Use Exactions: Rethinking the Unconstitutional Conditions Doctrine*, 91 COLUM. L. REV. 473, 478–79 (1991).

low-income housing, mass transit, day care services, and job training programs.[712]

There are five basic types of commonly imposed exactions: (1) on-site dedications, which consist of land and facilities within the developer's subdivision that the developer dedicates to the public; (2) off-site dedications, which consist of land and facilities outside the subdivision, yet dedicated by the developer; (3) fees-in-lieu-of-dedication, which are money contributions for the public provision of facilities that the developer otherwise would be required to dedicate; (4) impact fees, which capture from the private developer the public's costs of local capital-infrastructure and public-services needs caused by the development's impacts; and (5) linkages, which are facilities and/or fees provided by central-city commercial and industrial developers for the services necessitated by their specific development activities.[713] Cities and counties use exactions extensively, determining the amount demanded "either according to a nondiscretionary, predetermined schedule, or through case-by-case negotiations."[714] They usually impose exactions during the subdivision map approval process, because new subdivisions are significant sources of population growth that create the demand for additional public facilities and services.[715] However, other zoning approvals, such as rezoning or conditional use permits, may trigger the expectation of exactions.[716]

Exactions potentially benefit low-income and minority neighborhood residents in two ways. First, if a city or county requires a developer of a new residential subdivision to provide or pay for streets, parks, schools, public utilities infrastructure, and the like, the costs are borne ultimately by the residents (the new homeowner) of the subdivision, not the general tax base. Therefore, residents of existing low-income or minority neighborhoods are not contributing taxes to infrastructure frequently enjoyed by upper-income whites in new suburban subdivisions. Furthermore, local tax revenues are not diverted from services and facilities that support inner city neighborhoods.

Second, government agencies can use exactions to mitigate the environmental impacts of new or expanding development in low-income

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712. *See* CALLIES ET AL., *supra* note 565, at 182; ROHAN, *supra* note 506, § 9.01, at 9-4 to -5; Been, *supra* note 711, at 480.

713. Been, *supra* note 711, at 479–81. Been also includes "set-asides or inclusionary zoning programs"; she notes, however, that these programs are not universally regarded as exactions, but could be considered substantive zoning requirements. *Id.* at 481 & n.41.

714. *Id.* at 481 & nn.42 & 43.

715. ELLICKSON & TARLOCK, *supra* note 539, at 738; ROHAN, *supra* note 506, § 9.01, at 9-4; *cf.* Been, *supra* note 711, at 481 ("The practice of imposing exactions is fairly widespread, although exactions are most common in communities of growth areas.").

716. ELLICKSON & TARLOCK, *supra* note 539, at 738; David A. Dana, *Land Use Regulation in an Age of Heightened Scrutiny*, 75 N.C. L. REV. 1243, 1251 (1997).

and minority areas. Already, various federal, state, and local environmental regulatory programs require developers to dedicate land or pay fees to mitigate the environmental impacts of development in ecologically sensitive areas.[717] A comprehensive environmental justice land use program, though, might include environmental impact fees and dedications for inner-city industrial and commercial development. The exactions would be based on the various environmental and social impacts of intensive uses and LULUs on the surrounding neighborhood(s), not just the publicly funded local infrastructure, and would be earmarked for ameliorating amenities in the affected neighborhood(s). For example, an unsightly industrial facility might have to dedicate land for parks and open space, or to pay fees for these features. Similarly, an operator of a proposed waste facility might be required to contribute to a fund to be used for monitoring pollution levels and resident health status, as well as future cleanups of contamination related to the facility. An exactions program would be most attractive to environmental justice advocates when either, (1) the local residents would not oppose the proposed land use if its adverse impacts were mitigated, or (2) complete prohibition of the proposed land use is politically or legally infeasible. The program, though, could apply only to new development or new activities, such as changes in existing uses, requiring development permits. In addition, it could not be used "to remedy existing infrastructure deficiencies, or to provide for operation and maintenance of facilities."[718]

Finally, the exactions program must be tailored to the impacts of the proposed developments. To survive a challenge under the Takings Clause of the U.S. Constitution,[719] an exaction must bear an "essential nexus" to the legitimate government interest that forms the basis for regulating the development.[720] It must also be roughly proportional in nature and extent to the impact of the proposed development.[721] This two-part test applies to all land or facility dedication requirements and those impact fees imposed on an individualized, or ad hoc, basis.[722] Lingering uncertainty exists over whether the *Nollan* "essential nexus" and *Dolan* "rough proportionality" requirements apply to legislatively-adopted,

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717. *See* COLLABORATIVE PLANNING FOR WETLANDS AND WILDLIFE: ISSUES AND EXAMPLES (Douglas R. Porter & David A. Salvesen eds., 1995); Thomas W. Ledman, Note, *Local Government Environmental Mitigation Fees: Development Exactions, the Next Generation*, 45 FLA. L. REV. 835, 836 (1993).

718. ROHAN, *supra* note 506, § 9.01, at 9-5.

719. U.S. CONST. amend. V.

720. Nollan v. California Coastal Comm'n., 483 U.S. 825, 837 (1987).

721. Dolan v. City of Tigard, 512 U.S. 374, 391 (1994).

722. Ehrlich v. Culver City, 911 P.2d 429, 438–39 (Cal. 1996). *But see* Sintra, Inc. v. City of Seattle, 829 P.2d 765, 773 n.7 (Wash. 1992) (distinguishing *Nollan* as applicable only to physical exactions, not fees); Frank Michelman, *The Jurisprudence of Takings*, 88 COLUM. L. REV. 1600, 1608–09 (1988) (arguing that *Nollan* is concerned primarily with permanent physical occupation of land).

formula-driven impact fees.[723] The *Nollan* and *Dolan* standards appear to meet or exceed separate state constitutional tests requiring either a "reasonable relationship" or "rational nexus" between the exaction and the state interest in regulating the impacts of the development.[724] A few state courts, however, require exactions to be tailored to impacts that are "specifically and uniquely attributable" to the proposed development, which is a higher standard than those found in *Nollan* and *Dolan*.[725] In any event, neighborhood groups urging local land use agencies to impose exactions on industrial and commercial development and LULUs should do studies on the impacts of these developments or otherwise attempt to specify, preferably in quantitative terms, the development's direct and indirect impacts on the neighborhood. These studies would support arguments that the conditions are properly tailored to the government interest in regulating adverse impacts of development. In addition, neighborhood groups would need to avoid using exactions to remedy existing or past development impacts.

E. *Limits to Land Use Regulations As Environmental Justice Tools*

1. Judicial Protections of Private Property Rights

The land use regulatory model of environmental justice, while promising for many low-income communities of color, contains inherent limits. Among these limits are legal constraints on land use regulation that are largely designed to protect the private property rights of landowners. Courts, increasingly protective of private property rights and skeptical of local political processes, have eroded the well-established judicial presumption that zoning decisions are valid[726] by imposing greater scrutiny on decisions about land use regulation.[727] Even if the ero-

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723. *Compare Ehrlich*, 911 P.2d at 438–39 ("A court must determine whether the factual findings made by the permitting body support the condition as one that is more or less proportional, in both nature and scope, to the public impact"), *with* Amoco Oil Co. v. Village of Schaumberg, 661 N.E.2d 380, 390 (Ill. App. Ct. 1995) (in making a legislative determination, "the city demonstrated a rough proportionality between the requirements and objectives" (internal quotation marks omitted)).

724. *See* Dana, *supra* note 716, at 1252–53; *see, e.g.*, Ayres v. City Council, 207 P.2d 1, 8 (Cal. 1949); Wald Corp. v. Metropolitan Dade County, 338 So. 2d 863, 866 (Fla. Dist. Ct. App. 1976).

725. *See* Dana, *supra* note 716, at 1252–53; *see, e.g.*, Pioneer Trust & Sav. Bank v. Village of Mount Prospect, 176 N.E.2d 799, 802–03 (Ill. 1961).

726. ROHAN, *supra* note 506, § 35.04(1)(c), at 37–38 ("It is well-settled in the law that a zoning ordinance, like other legislative acts, is entitled to a strong presumption of validity unless it is arbitrary or unreasonable on its face."); Daniel R. Mandelker & A. Dan Tarlock, *Shifting the Presumption of Constitutionality in Land-Use Law*, 24 URB. LAW. 1, 1–3 & n.1 (1992) (showing that often the presumption is extended to zoning bodies' administrative functions, as well as legislative functions).

727. *See* Mandelker & Tarlock, *supra* note 726, at 50 (supporting the proposition that zoning ordinances will be presumed to be constitutional); Michael Allan Wolf, *Fruits of the "Impenetrable Jungle": Navigating the Boundary Between Land-Use Planning and Environmental Law*, 50 WASH. U. J. URB. & CONTEMP. L. 5, 6–9 (1996) (addressing the current judicial extension of the Fifth Amendment's Takings Clause, U.S. CONST. amend V).

sion of the presumption itself is more perceived than real, the courts are playing a greater role in reviewing land use controls.[728]

There are four primary areas of constraints relevant to achievement of low-income and minority neighborhoods' land use goals: (1) the reasonableness of the zoning decisions; (2) the impact on the property owner's economically beneficial use of the property; (3) a developer's expectations that zoning laws will not change once he or she has relied on initial approvals and begun the development; and (4) rights to continue a previously permissible land use once it has been prohibited.[729] First, the constitutional doctrine of substantive due process requires that zoning bear a real and substantial relationship to the public health, safety, morals, or welfare—the traditional police power justifications for regulation.[730] The courts will strike down land use controls or decisions that are arbitrary, capricious, or unreasonable.[731] As discussed above, substantive due process claims often arise in situations of downzoning; the owner of the downzoned property will argue that the downzoning is arbitrary and capricious in its application to his or her property.[732] The most important factors to courts in determining the validity of downzoning are

728. Jerold S. Kayden, *Judges As Planners: Limited or General Partners?*, *in* ZONING AND THE AMERICAN DREAM, *supra* note 1, at 223, 223. Nonetheless, potential land use conflicts still overwhelmingly tend to be negotiated, rather than litigated. However, the nature, and perhaps outcomes, of these negotiations may reflect perceptions about whether the courts will favor regulators or property owners or interested neighbors or groups if agreement cannot be reached and the litigation option is exercised. *See, e.g.*, Mnookin & Kornhauser, *supra* note 218, at 950–51.

729. *See generally* Goldblatt v. Town of Hempstead, 369 U.S. 590, 591–92 (1962) (explaining the Court's interpretation of "reasonableness" regarding these elements).

730. *See Goldblatt*, 369 U.S. at 593 ("A prohibition simply upon the use of property for purposes that are declared, by valid legislation, to be injurious to the health, morals, or safety of the community, cannot, in any just sense, be deemed a taking or an appropriation of property for the public benefit."); Village of Euclid v. Ambler Realty Co., 272 U.S. 365, 395 (1926) (declaring that before an ordinance can be declared unconstitutional, such provisions must be shown to be clearly arbitrary and unreasonable, having no substantial relation to the public health, safety, morals, or general welfare); F.H. Uelner Precision Tools & Dies, Inc. v. City of Dubuque, 190 N.W.2d 465, 469 (Iowa 1971) ("In principle, zoning of land for the public good is a proper exercise of the police power even though it works some onerous consequences on landowners."). Land use controls that do not substantially advance legitimate state interests may also be regulatory takings. *See* Nollan v. California Coastal Comm'n, 483 U.S. 825, 834–35 (1987) (reiterating that a restriction may constitute a taking if not reasonably necessary to effectuate a substantial government purpose); Agins v. City of Tiburon, 447 U.S. 255, 260 (1980) (stating that "an application of a general zoning law to a particular property effects a taking if the ordinance does not substantially advance state interests").

731. *Euclid*, 272 U.S. at 395 (declaring that before an ordinance can be declared unconstitutional, such provisions must be shown to be clearly arbitrary and unreasonable); Nectow v. City of Cambridge, 277 U.S. 183, 187–88 (1928) (stating that the determination of public officers should not be set aside unless the action is an arbitrary or irrational exercise of power); Marks v. City of Chesapeake, 883 F.2d 308, 311–12 & n.4 (4th Cir. 1989) (emphasizing that the dispositive question is whether a local government's land use decision is arbitrary and capricious, and thus a deprivation of property without due process); Katobimar Realty Co. v. Webster, 118 A.2d 824, 829, 831 (N.J. 1955) (deviating from the rules of the constitutional and statutory zoning process in an arbitrary fashion is prohibited).

732. *See supra* notes 644–64 and accompanying text.

the reasons for the zoning change;[733] whether it appears to be designed to stop a specific land use proposal, instead of resulting from pre-proposal comprehensive planning;[734] whether surrounding parcels are treated similarly;[735] and the degree to which the downzoning decreases the property's value and interferes with reasonable expectations about the use of the property.[736]

Second, the Takings Clause of the Fifth Amendment[737] limits the government's regulation of land use. The U.S. Supreme Court has developed several different tests depending on the governmental action respecting private property. The *Nollan* "essential nexus" and *Dolan* "rough proportionality" tests for the imposition of exactions are discussed above.[738] Physical occupation of private property would rarely be relevant to the land use regulation model of environmental justice, and will not be discussed here.[739] However, Supreme Court jurisprudence on regulatory takings is highly relevant. If a land use regulation denies a property owner all of the economically viable use of his or her property, a taking occurs and compensation is due, unless the property owner's rights never included the right to the regulated activity, such as a public nuisance.[740] If the landowner suffers a diminution in value less than one hundred percent of the economically viable use of his or her property,

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733. *See* Moviematic Indus. Corp. v. Board of County Comm'rs., 349 So. 2d 667, 669 (Fla. Dist. Ct. App. 1977) (allowing zoning regulations that preserve ecological systems, residential or historical character of a neighborhood, or aesthetic appeal of a community); McGowan v. Cohalan, 361 N.E.2d 1025, 1027 (N.Y. 1977) (establishing the need for an adequate separation between areas of residential and industrial use).

734. *See Nectow*, 277 U.S. at 188 (recognizing that the unconstitutional zoning of the locus in question was not indispensable to the general plan); *Katobimar*, 118 A.2d at 829 (insisting that all property in like circumstances be treated alike).

735. *See* Viso v. California, 92 Cal. Rptr. 580, 584–85 (Ct. App. 1979) (defining spot zoning); Miami v. Schutte, 262 So. 2d 14, 16–17 (Fla. Dist. Ct. App. 1972) (recognizing the insensibility of allowing spot zoning in reverse by permitting apartment houses on land surrounding a parcel but denying apartments on that parcel).

736. *See supra* note 663 and accompanying text; *see also Nectow*, 277 U.S. at 187 (providing an example of loss of a sales contract due to changed expectations regarding the use of the property).

737. U.S. CONST. amend. V ("[N]or shall private property be taken for public use, without just compensation").

738. *See supra* notes 719–25 and accompanying text.

739. *See generally* Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 421–23 (1982) (addressing permanent physical occupation as a per se taking); Kaiser Aetna v. United States, 444 U.S. 164, 172 (1979) (addressing governmental occupation of navigable waters in a private marina as a physical invasion short of permanent and a taking); Hendler v. United States, 952 F.2d 1364, 1375 (Fed. Cir. 1991) (stating that a permanent physical occupation of private property by the government constitutes a taking).

740. Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1004 (1992) (holding that a regulation which denies a private property owner of all economically viable use of the property is a per se taking unless the use was never part of the owner's rights under background principles of state property law).

courts will apply an ad hoc balancing test "that considers the economic effects of the regulation and the government's purpose."[741]

Courts uphold zoning regulations that greatly restrict the use of private property far more than they declare such regulations to be takings.[742] Many of the cases in which government agencies must compensate landowners involve total bans on development.[743] Some takings cases, however, involve downzoning that both limits the use and diminishes the value of the property. Where the property still has some significant value for the rezoned use, courts will find no taking, even with a substantial diminution in value.[744] Where the rezoned use is deemed economically unfeasible because the property is inappropriate for that use, though, a taking occurs. Often, an important factor will be whether surrounding more intensive uses, such as industrial or commercial uses or major roads or freeways, make a less intensive zoning designation, like a single-family residential, unreasonable, therefore rendering the property relatively useless.[745] Therefore, as low-income and minority neighborhood residents seek zoning changes in their communities, they should (1) avoid using designations for private property that completely prevent development, such as open space designations;[746] (2) seek compatible uses for contiguous parcels so that a single piece of land does not become a low-intensity island or peninsula in the midst of a sea of high-

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741. Kavanau v. Santa Monica Rent Control Bd., 941 P.2d 851, 860 (Cal. 1997) (identifying ten non-exclusive, ad hoc factors that courts have found relevant in evaluating non-categorical (i.e., non-*Lucas*) regulatory takings claims); *see also* Penn Cent. Transp. Co. v. City of New York, 438 U.S. 104, 124 (1978) (identifying three factors: (1) "The economic impact of the regulation on the claimant"; (2) "the extent to which the regulation has interfered with distinct investment-backed expectations"; and (3) "the character of the governmental action").

742. *See, e.g.*, Wolf, *supra* note 727, at n.366.

743. *See, e.g.*, Suitum v. Tahoe Reg'l Planning Agency, 117 S. Ct. 1659, 1665 (1997) (leaving no productive or financially feasible use of the land constitutes a taking); *Lucas*, 505 U.S. at 1004 (showing that a denial of all economically feasible use of the land requires compensation without the usual inquiry as to the public interest being advanced); Loveladies Harbor, Inc. v. United States, 28 F.3d 1171, 1180–81 (Fed. Cir. 1994) (maintaining that all economic use must be destroyed before there is a taking).

744. *See* Elias v. Town of Brookhaven, 783 F. Supp. 758, 761–62 (E.D.N.Y. 1992) (downzoning from commercial to residential); HFH Ltd. v. Superior Court, 542 P.2d 237, 242 (Cal. 1975) (downzoning that reduced value of property by 80%); Turner v. City of Atlanta, 357 S.E.2d 802, 802–03 (Ga. 1987) (downzoning from commercial to office use, resulting in 67% reduction in property value); Marshall v. Town of Topsfield, 433 N.E.2d 1244, 1246 (Mass. App. Ct. 1982) (downzoning from retail to residential or community facilities); Ketchel v. Bainbridge Township, 607 N.E.2d 22, 26–27 (Ohio Ct. App. 1992) (restricting density that reduced value of property).

745. *See* Cardon Oil Co. v. City of Phoenix, 593 P.2d 656, 658–59 (Ariz. 1979) (recognizing that merely decreasing property value does not constitute a taking); Grimpel Assocs. v. Cohalan, 361 N.E.2d 1022, 1023–24 (N.Y. 1977) (holding that depriving owner of all reasonable use of the land is necessary for a taking); Central Motors Corp. v. City of Pepper Pike, 409 N.E.2d 258, 276–77 (Ohio Ct. App. 1980) (recognizing that zoning of a property for an impossible use is unconstitutional).

746. *See Lucas*, 505 U.S. at 1029 (holding that the government cannot enact new legislation that deprives an owner of all economically viable use of a property without compensation for that property).

intensity uses;[747] (3) explicitly connect any zoning changes to traditional state nuisance law to the extent possible;[748] and (4) identify economically viable permissible uses for property subject to new zoning schemes.[749] In fact, the land use model of environmental justice envisions local communities identifying productive, yet healthy, safe, and compatible uses for land, not merely prohibiting unwanted land uses.

Third, the doctrine of vested rights and equitable estoppel may prevent local governments from stopping a development proposal once the developer obtains some approvals and relies on them in proceeding with the project.[750] The issue might arise, for example, when a grassroots group learns of a proposed chemical recycling plant in the neighborhood and influences the city either to rezone the property in question from light industrial use (which permits "recycling facilities") to commercial use or to amend the zoning code text to prohibit chemical recycling plants in light industrial districts. If the developer has already received some city approvals (e.g., a site plan approval, a conditional use permit, or a building permit), at what point does he or she have a vested right in the zoning that existed at the time he or she obtained the initial approvals?

The area of vested rights and equitable estoppel has been termed "hopelessly muddled."[751] The doctrine of vested rights, grounded in constitutional protections of private property rights against government interference, and the doctrine of equitable estoppel, or perhaps more precisely equitable zoning estoppel, grounded in equitable protections against unfair exercises of government zoning power, are distinct from each other only in theory. In practice, the concepts are treated interchangeably.[752] In addition, the rules governing when a landowner has vested rights to proceed with development (or when a government regulator is estopped from preventing the development) vary considerably from state to state in ways that defy precise categorization.[753] Conceptually, states can be divided into early vesting jurisdictions, which give the developer early certainty that zoning controls will not change in the midst of the multi-permit approval process, and late vesting jurisdictions, which require the developer to have obtained one of the later permits given just before the final building phase takes place, such as a building

747. *See supra* notes 663–64 and accompanying text.

748. *Lucas*, 505 U.S. at 1004 (restricting use according to state's property and nuisance laws does not require just compensation).

749. *See Elias*, 783 F. Supp. at 761–62 (holding that leaving a property with a viable economic use does not constitute a taking, even when the use is different from that allowed under prior zoning).

750. Robert M. Rhodes & Cathy M. Sellers, *Vested Rights: Establishing Predictability in a Changing Regulatory System*, 20 STETSON L. REV. 475, 478 (1991).

751. Grayson P. Hanes & J. Randall Minchew, *On Vested Rights to Land Use and Development*, 46 WASH. & LEE L. REV. 373, 377, 383 (1989).

752. *Id.* at 382–83; Rhodes & Sellers, *supra* note 750, at 476.

753. Hanes & Minchew, *supra* note 751, at 379–80.

permit.[754] However, cases vary so much, not only from state to state, but even within states, that the conceptual distinctions do not closely match actual case outcomes in any predictable way.[755]

A developer claiming vested rights or equitable zoning estoppel must establish three elements: (1) an official government act or omission that would suggest approval of the project; (2) good faith reliance on the government action; and (3) substantial change in position or incurrence of extensive obligations and expenses toward developing the property.[756] Depending on the jurisdiction and the facts of the case, some of the following government approvals might result in vested rights: approval of a site plan or planned unit development (PUD) when accompanied by a rezoning (e.g., to reflect the approved PUD use); approval of a plat or subdivision site plan; a conditional use (or special use) permit; a preliminary permit like a rough grading, clearing, paving, foundation, or public improvement permit; informal assurances and representations by local government officials; and arguably, conditional zoning by which the developer commits to certain conditions in exchange for a specific zoning designation.[757] If the developer, in good faith, relies on the requisite approvals by expending substantial amounts of money or making significant physical changes to the land, any subsequent zoning changes that are inconsistent with the earlier approvals will be invalid.[758] Therefore, environmental justice advocates seeking zoning changes in their neighborhood might not be able to stop developments and land uses for which the developer has already received some initial approval(s). Grassroots groups will need to monitor closely the approvals that local officials are considering before such approvals are made and the developer obtains vested rights. Neighborhood groups can avoid many of the problems with vested rights, though, by formally putting a developer on notice that they intend to seek a zoning change or other land use controls to prevent the development, and by giving the notice before the developer spends substantial sums on the project post-approval.

Fourth, the doctrine of nonconforming uses prevents a local government, when it makes a zoning change, from demanding the immediate discontinuance of a use that was lawful at the time of the zoning change, unless the use is a public nuisance.[759] The government, however, may

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754. *Id.* at 379–80 & n.19.

755. *Id.* at 379–80 & n.18.

756. *Id.* at 388, 398, 400; Rhodes & Sellers, *supra* note 750, at 478.

757. *See* Hanes & Minchew, *supra* note 751, at 388–98; Rhodes & Seller, *supra* note 750, at 482–84.

758. Hanes & Minchew, *supra* note 751, at 398–400; Rhodes & Seller, *supra* note 750, at 478–82, 486–89.

759. *See* Livingston Rock & Gravel Co. v. County of Los Angeles, 272 P.2d 4, 7 (Cal. 1954) (approving revocation of a prior permit when the use was deemed to be detrimental to public health and safety or a nuisance); Dugas v. Town of Conway, 480 A.2d 71, 76 (N.H. 1984) (invalidating new zoning regulations that extinguished existing nonconforming uses as unconstitutional deprivation of vested property rights); Oswalt v. County of Ramsey, 371 N.W.2d 241, 246 (Minn. Ct. App.

require that the nonconforming use cease after a reasonable "amortization" period. This is designed to balance the public interest in landowner conformance with the zoning laws against private property rights, particularly in the opportunity to obtain a reasonable return on the landowner's investment.[760] However, an owner of a nonconforming use can generally be prohibited from changing, extending, enlarging, or structurally altering the use, and will lose the right to the nonconformity if he or she abandons or discontinues the use or upon total destruction of the structures.[761] Therefore, environmental justice land use strategies might not effectively force changes in current actual land use patterns, but instead would do so over time, as nonconforming uses cease to exist or are required to terminate at the end of an amortization period.

2. State Preemption of Local NIMBYism

Another set of legal limits to land use regulation as an environmental justice tool is state preemption of local land use regulations and decisions that attempt to keep out LULUs. These laws are a response to the NIMBY ("Not In My Backyard") phenomenon, in which local residents mount powerful and effective campaigns to prevent the location of LULUs near them.[762] Environmental justice advocates have argued that NIMBYism by white and upper-income communities has contributed to the siting of noxious uses in less politically and economically powerful neighborhoods inhabited by low-income people and minorities.[763] However, just at the time when low-income and minority communities are trying to prevent LULUs and environmental hazards in their neighborhoods, state preemption laws designed to combat NIMBYism may hurt these environmental justice efforts.

1985) (maintaining that existing nonconforming uses must be either permitted to remain or eliminated by the use of eminent domain); Bachman v. Zoning Hearing Bd., 494 A.2d 1102, 1105 (Pa. 1985) (vesting property rights in lawful nonconforming uses unless they are a nuisance, abandoned, or extinguished by eminent domain).

760. Standard Oil Co. v. City of Tallahassee, 183 F.2d 410, 412 (5th Cir. 1950) (giving power to a municipality to extinguish an existing use by ordinance); City of Los Angeles v. Gage, 274 P.2d 34, 44–45 (Cal. Dist. Ct. App. 1954) (insisting that a nonconforming use be relocated or extinguished within five years); Harbison v. City of Buffalo, 152 N.E.2d 42, 45 (N.Y. 1958) (requiring the termination of nonconforming uses over a given period of time).

761. ROHAN, *supra* note 506, § 41.03(1), at 41–59.

762. *See* Michael Dear, *Understanding and Overcoming the NIMBY Syndrome*, 58 APA J. 288 (1992); Orlando E. Delogu, *"NIMBY" Is a National Environmental Problem*, 35 S.D. L. REV. 198, 198 (1990); Michael B. Gerrard, *The Victims of NIMBY*, 21 FORDHAM URB. L.J. 495, 495 (1994); Michael Heiman, *From "Not in My Backyard" to "Not in Anyone's Backyard!": Grassroots Challenge to Hazardous Waste Facility Siting*, 56 APA J. 359 (1990). For a view that the NIMBY movement represents a valuable perspective on the public interest and that LULUs have uninternalized social costs, see Denis J. Brion, *An Essay on LULU, NIMBY, and the Problem of Distributive Justice*, 15 B.C. ENVTL. AFF. L. REV. 437 (1988).

763. BULLARD, DUMPING IN DIXIE, *supra* note 7, at 46, 108; Gauna, *supra* note 6, at 32–33.

There are two basic types of LULUs subject to preemption in order to overcome local opposition to their siting. The first is hazardous waste management facilities, of which there are three approaches.[764] One approach, "super review," occurs when the private developer of a hazardous waste facility chooses a potential site and applies for a permit from a state agency. The agency then reviews the environmental impacts and presents all applications that meet state environmental criteria to a special siting board that gathers public input, but is primarily designed to neutralize public opposition and fear. A second approach is "site designation," in which the state agency—not the private developer—formulates a list of possible sites that are candidates for hazardous waste facilities. In addition to the "super review" or "site designation" approaches, some states expressly prohibit localities from using land use requirements to burden the operation of hazardous waste facilities. This third approach, followed only in California and Florida, is known as "local control." Under this last approach, state law does not preempt local regulation of hazardous waste facility siting, and localities are free to enact strict land use regulations to keep out all hazardous waste sites. The other type of LULU siting that is protected from local opposition by state statutory or judicial exemption is the siting of certain residential facilities, such as group homes for the mentally disabled,[765] halfway houses,[766] and low-income housing.[767] State preemption laws of both types create some very real political and legal difficulties for grassroots environmental justice groups.

Even though state laws might override zoning controls that prevent hazardous waste facilities or other LULUs in low-income or minority neighborhoods, there are several important reasons to seek these zoning controls nonetheless. Zoning that does not permit a specified LULU (e.g., a hazardous waste facility) suggests to state regulators that the use

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764. The three major approaches are uniformly summarized in several law review articles, and the discussion here is a synthesis of these summaries. *See* Hasler, *supra* note 257, at 456–57; Mank, *supra* note 6, at 348–51; Audrey Wright, *Unequal Protection Under the Environmental Laws: Reviewing the Evidence on Environmental Racism and the Inequities of Environmental Legislation*, 39 WAYNE L. REV. 1725, 1731–35 (1993); Godsil, *supra* note 6, at 402–07. For an example of federal preemption of a local attempt to ban PCB disposal in a predominantly African American area, see Warren County v. North Carolina, 528 F. Supp. 276, 289–90 (D. N.C. 1981).

765. *See* City of Cleburne v. Cleburne Living Ctr., 473 U.S. 432, 450 (1985) (holding the denial of conditional use permit for mentally disabled to be a violation of Equal Protection Clause founded on "irrational prejudice"); *see, e.g.*, Lanterman-Petris-Short Act, CAL. WELF. & INST. CODE § 5116 (Deering 1982) (designating a group home of six or fewer mentally disabled adults as residential use for zoning purposes).

766. *E.g.*, Nicholson v. Connecticut Half-way House, 218 A.2d 383, 384–86 (Conn. 1966) (finding a halfway house for prison parolees a residential use).

767. *See* MASS. GEN. LAWS ANN. Ch. 40B, §§ 20–23 (1973) (authorizing the state to preempt local exclusionary zoning); *see also* Southern Burlington County NAACP v. Township of Mount Laurel (Mount Laurel II), 456 A.2d 390, 410 (N.J. 1983) (holding that a county's zoning laws could not absolutely ban mobile homes); Southern Burlington County NAACP v. Township of Mount Laurel (Mount Laurel I), 336 A.2d 713, 713 (N.J. 1975) (holding that zoning laws must allow for low and moderate income housing).

is incompatible with surrounding land uses—a type of presumption in effect—whereas if the property is zoned to allow the LULU, the state regulators are more likely to believe that it is compatible with the neighboring land uses. If the local zoning allows the LULU, there may never be close scrutiny of its siting by any level of government agency, while an attempt by the locality to exclude it could put pressure on state regulators to find reasons to deny state permits. The zoning might also discourage potential developers or operators of LULUs from attempting to site the LULUs in that area. They might perceive that the neighborhood is politically active and opposed to such LULUs, which could lead to a costly and time-consuming approval process. They also might want to avoid a legal dispute to enforce the preemption.

Furthermore, the very process of developing land use plans and regulations that reflect neighborhood goals and obtaining their enactment by local officials will tend to promote a more politically active and aware grassroots group. The group can mobilize more quickly and effectively to oppose a LULU proposal, even if decided at the state level, than if the community forms a group for the first time upon learning of the specific proposal. In addition, there are many LULUs that local residents might want to exclude and many beneficial land uses that they might want to include, beyond the few land uses that are the subject of state control. In other words, there are many LULUs that are not subject to state preemption and can be effectively precluded by local zoning. Even if a land use plan will not effectively protect against every LULU, it should address some of the inequities in the distribution of land use patterns, such as the high concentration of industrial and commercial uses in many low-income communities of color. Therefore, despite the obstacles presented by state preemption laws, local land use regulation can be an effective environmental justice tool.

3. Politics

The final limits to land use regulation as an environmental justice strategy are political and economic. How successful, as a practical matter, will grassroots neighborhood groups be in changing land use patterns in low-income communities and communities of color? There is reason for a mix of sober realism and thoughtful optimism.

At the most practical level, residents of some, or perhaps many, low-income and minority neighborhoods will encounter apathy, antipathy, or paternalistic co-optation by local planning staff and elected officials. Local government is likely to regard changes to existing industrial or commercial zoning as politically or fiscally inconvenient, especially when these uses cannot be relocated to higher-income, lower-minority areas without political conflict. Indeed, many local governments engage in "fiscal zoning," favoring industrial and commercial uses because these uses generate tax revenues without creating expensive demands for local

services in the way that single-family residences do, particularly through public school costs.[768] However, single-family residential neighborhoods, particularly if occupied by upper income people, are desirable for reasons other than a pure analysis of marginal costs and revenues would indicate. But cities and counties might offset the costs of these neighborhoods by reducing expenditures on older neighborhoods where industrial and commercial uses have intruded: generally low-income and minority neighborhoods.[769] Therefore, fiscal zoning practices can have a double negative effect on low-income communities of color: (1) the attraction of industrial and commercial uses to those areas, and (2) pressures on local governments to decrease public spending on physical infrastructure, schools, and other public services in those areas.

In addition, owners of industrially or commercially zoned property will often oppose downzoning of those parcels, the imposition of additional controls via overlay districts or performance zoning, and demands of exactions. These landowners are likely to have financial and political capital to spend in seeking to defeat an environmental justice land use plan. The local community may not be united in its goals, and disagreement within the area could undermine strategies to allow only safe and healthy land uses compatible with local residences. In other words, some or all of a low-income minority neighborhood might embrace one or more LULUs or other intensive land uses, and this fact may be a political reality for opponents.[770] Furthermore, development of a land use regulatory plan for a low-income neighborhood of color is likely to involve financial costs and volunteer effort, as well as sustained political activity in the form of organization, publicity, education, study, lobbying, electoral campaigning and voting, and perhaps even protest. Finally, the nature of the land use planning and regulatory model requires continual involvement in, and monitoring of, implementation. Developers, landowners, and LULU operators may seek conditional use permits, variances, and rezonings, among other changes or exceptions to whatever regulations the local residents have helped to shape. Failure of grassroots environmental justice groups to participate effectively in these subsequent government decisions could undo all that the initial land use strategy had achieved.

These practical concerns raise questions about the extent to which land use controls are inherently flawed. Some scholars imply that the combination of zoning's exclusionary nature and society's racism leads

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768. ELLICKSON & TARLOCK, *supra* note 539, at 738–39.

769. *Id.* at 740.

770. *See, e.g.*, Kevin Gover & Jana L. Walker, *Escaping Environmental Paternalism: One Tribe's Approach to Developing a Commercial Waste Disposal Project in Indian Country*, 63 U. COLO. L. REV. 933, 936–42 (1992) (discussing a California Indian tribe's acceptance of the development of a solid waste facility on their land); Jeff Kass, *Homes and Shops at Odds*, L.A. TIMES, Sept. 4, 1997, at B3 (noting that some residents support business development in their communities to increase property values).

to segregation of races, exclusion of people of color from desirable areas, and placement of unwanted land uses in neighborhoods of color (i.e., expulsive zoning).[771] Other scholars argue that zoning promotes balkanization by socioeconomic class and geography, resulting in suburban sprawl and protection of the economic interests of the development community (i.e., business interests, land developers, financial institutions, and the like) and/or suburban homeowners.[772] Zoning can also be seen as a tool of parochial local interests that want to keep socially necessary land uses (LULUs) out of their communities, in other words, a tool of NIMBYism—the worst of localism and pluralism, an impediment to the larger public good.[773] According to some, land use controls inappropriately interfere with, or even supplant, the efficient workings of private markets and privately developed norms and agreements about land use.[774] Others would argue that land use regulations are a means for government capture of public benefits or power at the expense of private property or liberty.[775]

These critiques, in turn, raise questions about how local land use decisions are made. In other words, will low-income and minority neighborhoods have a fair and effective opportunity to influence the land use policies that affect them? The difficulty in answering this question stems from the lack of a single, coherent, comprehensive theory of local policymaking.[776]

If land use decisions are controlled primarily by local elites, who serve the private economic interests of either the development and business community or upper- and middle-income homeowners in areas zoned primarily single-family residential (i.e., suburban and suburban-like communities),[777] low-income and minority people will likely remain

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771. Dubin, *supra* note 1, at 741–44; Rabin, *supra* note 1, at 101.

772. MIKE DAVIS, CITY OF QUARTZ: EXCAVATING THE FUTURE IN LOS ANGELES 151–219 (1992); Richard Briffault, *Our Localism: Part I—The Structure of Local Government Law*, 90 COLUM. L. REV. 1, 3–5 (1990); Jerry Frug, *The Geography of Community*, 48 STAN. L. REV. 1047, 1047–48 (1996).

773. Orlando E. Delogu, *The Dilemma of Local Land Use Control: Power Without Responsibility*, 33 MAINE L. REV. 15, 16–20 (1981); Delogu, *supra* note 762, at 198.

774. Robert C. Ellickson, *Alternatives to Zoning: Covenants, Nuisance Rules, and Fines As Land Use Controls*, 40 U. CHI. L. REV. 681, 682–87 (1973); Douglas W. Kmiec, *Deregulating Land Use: An Alternative Free Enterprise Development System*, 130 U. PA. L. REV. 28, 30–31 (1981).

775. RICHARD A. EPSTEIN, TAKINGS 263–73 (1985); ROBIN PAUL MALLOY, PLANNING FOR SERFDOM: LEGAL ECONOMIC DISCOURSE AND DOWNTOWN DEVELOPMENT 140 (1991); BERNARD H. SIEGAN, PROPERTY AND FREEDOM: THE CONSTITUTION, THE COURTS, AND LAND-USE REGULATION 179–201 (1997).

776. For a discussion of three different theories of environmental policy making and their failure to encompass an environmental justice theory of political participation in environmental decisions, see Eileen Gauna, *The Environmental Justice Misfit: Public Participation and the Paradigm Paradox*, 17 STAN. ENVTL. L.J. 3 (1998) (discussing regulatory expertise, pluralism, and civic republican models).

777. *See* JOE R. FEAGIN & ROBERT PARKER, BUILDING AMERICAN CITIES: THE URBAN REAL ESTATE GAME 2 (1990); DENNIS R. JUDD, THE POLITICS OF AMERICAN CITIES: PRIVATE POWER

"outsiders" with very little real influence over land use decisions. These decisions will continue to protect high-income, low-minority neighborhoods from non-residential uses, while catering to industrial and commercial interests by placing those activities in the "subordinated" low-income and minority neighborhoods. Similarly, if local land use decisions typically reflect persistent societal racism,[778] minority neighborhoods will continue to suffer a higher proportion of LULUs and intensive zoning patterns. According to this theory, local officials intentionally or subconsciously select these communities for greater burdens or tolerate private and institutional forces that exacerbate inequalities.

If the primary model of land use decision making is interest group pluralism,[779] grassroots groups from low-income and minority communities will fare much better than if only elite interests have captured the decision making process. Grassroots success will depend on their ability to organize, identify goals and strategies, exert pressure, persist in participating in land use decisions, and bargain effectively with other interest groups and government officials to obtain political benefits. There are, however, two normative sides to interest group pluralism. One view celebrates the diversity of interests represented in a blatantly political process of "demanding, wrangling, and influencing," and asserts that the roar of many groups seeking policies which benefit their members' interests reflects overall citizen preferences and prevents any single group from obtaining too much power.[780] The other view is aghast at the "capture" of public policy making and policy implementing bodies by well-organized special interest groups.[781] It observes the vast differences in power and effectiveness among groups and the tendency for policy outcomes that serve private interests to the detriment of the collective good, whether that collective good is defined in terms of equity or efficiency or both.[782] Although low-income and minority neighborhood groups seeking their visions of good land use policy will certainly add to the range of interests represented, they could find themselves outmatched in political and economic power by well-organized industrial and commercial interests. Furthermore, to the extent that they buy into pluralism as a dominant model, they may lose their "moral voice": their claims that changes in zoning patterns in their

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AND PUBLIC POLICY 1–9 (1984); Davis, *supra* note 772, at 151–219; Joe R. Feagin, *Arenas of Conflict: Zoning and Land Use Reform in Critical Political-Economic Perspective*, *in* ZONING AND THE AMERICAN DREAM, *supra* note 1, at 73, 84.

778. Dubin, *supra* note 1, at 741–44; Rabin, *supra* note 1, at 101; *see also* Ford, *supra* note 511, at 1843.

779. *See, e.g.*, EDMUND M. BURKE, A PARTICIPATORY APPROACH TO URBAN PLANNING 29–32, 41 (1979) (contending that zoning furthers a social hierarchy); Mandelker & Tarlock, *supra* note 726, at 36 (reconstructing the role of democratic pluralism in land use litigation).

780. BURKE, *supra* note 779, at 27.

781. *See* Mandelker & Tarlock, *supra* note 726, at 36.

782. *Id.* at 37.

neighborhoods reflect just policy (i.e., are the "right" result), instead of merely the preferences of yet another group.

Civic republican theory suggests that local policymaking is or should be a deliberative public discourse about the common good and a participatory process of developing civic virtue.[783] Alternatively, local land use policies could be seen as the result of a negotiation "game," either between the developer and government officials, or among a range of interested parties, including the developer, the property owner(s) and possessor(s) (if different from the developer), neighbors of various types, environmental groups, various government agencies perhaps with competing or coextensive jurisdiction, and even scientific and legal professionals.[784]

One possible reason for competing theories about land use politics and decision making is that each explains some portion of a complex and variable reality. The process of land use regulation inevitably involves some type(s) of negotiation. But the identity and number of participants, their relative bargaining strength, their actual influence, whether the negotiation focuses more on positions or interests or principles, the role of external factors, the economic efficiency of the process (transaction costs) and outcomes (Pareto optimality), the fairness of the process (procedural justice) and outcomes (distributive justice), the impact on civic virtue, and other factors will likely vary widely from locality to locality and from decision to decision. Thus, it seems doubtful that the land use regulatory process inherently or inevitably excludes low-income and minority communities from effective participation.

Despite the critiques of land use regulation, the land use model of environmental justice remains a useful approach to addressing environmental injustice and the goals of low-income and minority communities. First, land use controls—even if they could be characterized as flawed—are here to stay. Zoning and similar regulatory controls over land use are widely used in the United States, and there is little evidence that local governments pay much attention to academic criticisms of the institution of land use regulation.[785] As this article demonstrates, however, low-income neighborhoods of color by and large do not enjoy

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783. *See* STEPHEN L. ELKIN, CITY AND REGIME IN THE AMERICAN REPUBLIC 150–51 (1987); Frank Michelman, *Law's Republic*, 97 YALE L.J. 1493, 1503–05 (1988); Joseph P. Viterritti, *Choosing Equality: Religious Freedom and Educational Opportunity Under Constitutional Federalism*, 15 YALE L. & POL'Y REV. 113, 124 (1996). For general discussions of civic republican theory, see BRUCE A. WILLIAMS & ALBERT R. MATHENY, DEMOCRACY, DIALOGUE, AND ENVIRONMENTAL DISPUTES: THE CONTESTED LANGUAGES OF SOCIAL REGULATION (1995); GORDON S. WOOD, THE CREATION OF THE AMERICAN REPUBLIC (1969).

784. *See* Dana, *supra* note 716, at 1288, 1294; Bradley C. Karkkainen, *Zoning: A Reply to the Critics*, 10 J. LAND USE & ENVTL. L. 45, 81 (1994).

785. Karkkainen, *supra* note 784, at 46; Andrew J. Cappel, Note, *A Walk Along Willows: Patterns of Land Use Coordination in Pre-Zoning New Haven (1870–1926)*, 101 YALE L.J. 617, 618 (1991).

the same zoning protections and benefits that high-income, non-minority neighborhoods enjoy. Unless courts correct these inequities,[786] which seems highly unlikely,[787] the primary means of change will be political activity in attempting to influence land use decisions and zoning patterns.

Second, land use regulation serves several important functions, including protection of neighbors against harmful or noxious activities on nearby land; comprehensive, area-wide, coordinated planning of land uses and development patterns; protection of private property values from the impact of neighboring uses; prevention of development from placing greater burdens on public funds for infrastructure and services than the development generates in tax revenues; and protection of collective rights and interests in the character of the neighborhood.[788] In addition, political pressures and the options of voice (participation) or exit (relocating to another jurisdiction) are effective constraints on the potential for abuse in the arena of land use regulation.[789] Involvement of low-income and minority neighborhood residents in developing and implementing land use policies enhances these various goals or values of the land use regulatory system.

Third, if, as Luke Cole has argued, environmental justice is an issue of power,[790] the poor and people of color should seek power wherever it is exercised, including in the land use decisions that shape both the quality of their neighborhoods and their exposure to harmful or unwanted activities and pollutants. Furthermore, they can exercise power more effectively with respect to land use decisions than with respect to environmental permitting decisions, because land use decisions are made at the local level to which grassroots groups have greater access[791] and are less scientifically and legally technical than environmental decisions. Layperson input tends to shape local land use regulation more than national environmental regulation.

Most importantly, not only does land use planning and regulation theoretically embrace neighborhood-based citizen participation,[792] but

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786. *See* Dubin, *supra* note 1, at 782–800 (urging judicial protection of zoning in minority communities).

787. *See* discussion *supra* notes 278–338 and accompanying text (discussing civil rights responses to environmental injustice).

788. WILLIAM A. FISCHEL, THE ECONOMICS OF ZONING LAWS: A PROPERTY RIGHTS APPROACH TO AMERICAN LAND USE CONTROLS 19 (1985); Karkkainen, *supra* note 784, at 47–50; Larson, *supra* note 118, at 235; Cappel, *supra* note 785, at 618–19.

789. WILLIAM A. FISCHEL, REGULATORY TAKINGS 289 (1995).

790. Cole, *Empowerment*, *supra* note 4, at 642.

791. *See* Arnold, *supra* note 465, at 35–36; Barton H. Thompson, Jr., *The Search for Regulatory Alternatives*, 15 STAN. ENVTL. L.J. viii, at x–xi (1996) (arguing that the environmental justice movement, like the private property rights movement, is about devolution of power from national and state levels to local community levels).

792. *See* EDMUND M. BURKE, A PARTICIPATORY APPROACH TO URBAN PLANNING 13 (1979); MICHAEL FAGENCE, CITIZEN PARTICIPATION IN PLANNING 1–13 (1977); NEIGHBORHOOD POLICY

empirical evidence shows that citizen participation can make a difference,[793] including in the arena of land use regulation and environmental justice. Early examples of environmental justice groups seeking local land use policies suggest that low-income and minority neighborhood residents can effectively organize, exercise power, make their voices heard, and influence policies about zoning and land use issues that affect them.[794] Despite political and legal limitations, environmental justice groups actively seek and obtain changes to zoning laws to reflect the goals of neighborhood residents and a more equitable distribution of land use patterns.

VI. CONCLUSION

Low-income communities and communities of color experience not only a higher proportion of environmental hazards and LULUs, but also a higher proportion of zoning for intensive land uses, such as industrial uses. With a growing grassroots environmental justice movement, these communities—like the fictional Milagro, New Mexico—are looking for miracles (*milagros*).[795]

However, there are not easy answers or quick fixes to environmental injustice. It is a complex problem with empirical, political, legal, environmental, and economic dimensions. One model of environmental justice features opposition to existing or proposed LULUs and environmental hazards in low-income and minority communities. Another model, presented in this article, calls for these communities to become involved in land use planning and regulation. Through comprehensive planning, rezoning of inner-city neighborhoods, use of flexible zoning techniques and exactions, and political involvement in the shaping and negotiating of local land use policies, residents of low-income neighborhoods and neighborhoods of color can proactively define their visions for healthy communities. They also can seek to prevent would-be polluters and operators of LULUs and other intensive land uses from selecting sites in their communities initially. In the event that they still have to oppose siting proposals or seek changes to existing facilities, they have a stronger case that public policy supports their position. Local residents also may choose to allow or encourage development that meets their economic, social, and environmental goals. Land

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AND PLANNING 3–5 (Phillip L. Clay & Robert M. Hollister eds., 1983); Karkkainen, *supra* note 784, at 83; Mandelker & Tarlock, *supra* note 726, at 1.

793. *See* M. MARGARET CONWAY, POLITICAL PARTICIPATION IN THE UNITED STATES 152–57 (1985); Michael Barrette, *City of Anaheim: Avon-Dakota-Eton Neighborhood Association*, PLANNING, March 1994, at 16; Mary Lou Gallagher, *Gila River Indian Community Public Participation Program*, PLANNING, March 1993, at 12; Michelle Gregory, *Champaign Neighborhood Wellness Action Plan*, PLANNING, March 1994, at 14; Scott Martelle, *Don't Tread on Us: Community Activists Show How Democracy Works Between Votes*, L.A. TIMES, May 25, 1997, at B1.

794. *See supra* notes 137–63 and accompanying text.

795. *See supra* note 2.

use planning and regulation foster choice, self-determination, and self-definition for local neighborhoods, not paternalism that insists that there is a single correct environmental justice goal.[796]

The land use planning and regulation model of environmental justice is not the miraculous cure for environmental injustice, nor is it a replacement for the opposition model. It is an additional approach that has faith in low-income people and people of color who want to build healthy, safe, moral communities. It envisions that the *milagros* are already at work in the local neighborhoods and the people who live there.

796. *Compare* Metzger, *supra* note 148 (advocating a paternalistic approach to environmental justice), *with* Gover & Walker, *supra* note 770 (discussing a California Indian Tribe's deliberations about and ultimate acceptance of the development of a solid waste facility on their land).

APPENDIX:[797]

CITY: ANAHEIM, CALIFORNIA; CENSUS TRACT # 219.04

Percent persons below poverty	2.4
Median household income (1989 U.S. $)	83,296
Percent persons by race	
White: non-Hispanic	77.9
Hispanic: white & other	5.0
Black (including Hispanic)	2.1
Asian & Pacific Islander (including Hispanic)	14.7
American Indian, Eskimo, Aleut (including Hispanic)	0.3
Other: non-Hispanic	0
Percent area in tract by zoning designation	
CL-HS, Limited Hillside Commercial	0.10
CO, Office & Professional Commercial	0.07
RM-2400, Multiple-Family Residential	0.81
RM-3000, Multiple-Family Residential	4.03
RS-5000, Single-Family Residential	0.87
RS-7200, Single-Family Residential	6.15
RS-HS-10000, Single-Family Hillside Residential	44.94
RS-HS-22000, Single-Family Hillside Residential	5.21
RS-HS-43000, Single-Family Hillside Residential	37.81

CITY: ANAHEIM, CALIFORNIA; CENSUS TRACT # 874.02

Percent persons below poverty	20.05
Median household income (1989 U.S. $)	28,097
Percent persons by race	
White: non-Hispanic	24.4
Hispanic: white & other	70.3
Black (including Hispanic)	1.6
Asian & Pacific Islander (including Hispanic)	3.2
American Indian, Eskimo, Aleut (including Hispanic)	0.4
Other: non-Hispanic	0.1
Percent area in tract by zoning designation	
CO, Office & Professional Commercial	0.89
CH, Heavy Commercial	0.11
CL, Limited Commercial	15.99
ML, Limited Industrial	23.74
RM-1200, Multiple-Family Residential	17.03
RM-2400, Multiple-Family Residential	7.87
RM-3000, Multiple-Family Residential	0.52
RS-7200, Single-Family Residential	19.99
RS-A-43000, Single-Family Residential	2.75
SP 92-2, Specific Plan-Resort	11.12

797. The information contained in this Appendix was compiled by Craig Anthony (Tony) Arnold utilizing data from the 1990 census and zoning maps. *See supra* Part III.B (describing methodology for the study).

CITY ANAHEIM, CALIFORNIA; CENSUS TRACT # 874.03

Percent persons below poverty	19.9
Median household income (1989 U.S. $)	29,010
Percent persons by race	
White: non-Hispanic	30.5
Hispanic: white & other	64.7
Black (including Hispanic)	2.8
Asian & Pacific Islander (including Hispanic)	2.1
American Indian, Eskimo, Aleut (including Hispanic)	0
Other: non-Hispanic	0
Percent area in tract by zoning designation	
CO, Office & Professional Commercial	1.75
CL, Limited Commercial	20.84
ML, Limited Industrial	3.34
RM-1200, Multiple-Family Residential	12.50
RS-7200, Single-Family Residential	34.39
RS-A-43000, Single-Family Residential	23.55
SP 92-2, Specific Plan-Resort	3.63

CITY: COSTA MESA, CALIFORNIA; CENSUS TRACT # 638.02

Percent persons below poverty	4.3
Median household income (1989 U.S. $)	64,298
Percent persons by race	
White: non-Hispanic	88.3
Hispanic: white & other	5.7
Black (including Hispanic)	0
Asian & Pacific Islander (including Hispanic)	5.8
American Indian, Eskimo, Aleut (including Hispanic)	0.2
Other: non-Hispanic	0
Percent area in tract by zoning designation	
GC, General Commercial	16.67
HDR, High Density Residential	5.05
LDR, Low Density Residential	57.82
PU, Public Use	20.46

CITY: COSTA MESA, CALIFORNIA; CENSUS TRACT # 637

Percent persons below poverty	15.6
Median household income (1989 U.S. $)	29,422
Percent persons by race	
White: non-Hispanic	54.9
Hispanic: white & other	38.6
Black (including Hispanic)	0.9
Asian & Pacific Islander (including Hispanic)	5.2
American Indian, Eskimo, Aleut (including Hispanic)	0.2
Other: non-Hispanic	0.2
Percent area in tract by zoning designation	
CC, Commercial Center	8.46
GC, General Commercial	2.32
HDR, High Density Residential	32.25
LDR, Low Density Residential	15.11
LI, Limited Industry	4.79
MDR, Medium Density Residential	10.40
PU, Public Use	8.78
UCC, Urban Center Commercial	17.90

CITY: ORANGE, CALIFORNIA; CENSUS TRACT # 219.12

Percent persons below poverty	3.7
Median household income (1989 U.S. $)	89,727
Percent persons by race	
White: non-Hispanic	86.0
Hispanic: white & other	6.0
Black (including Hispanic)	1.0
Asian & Pacific Islander (including Hispanic)	6.8
American Indian, Eskimo, Aleut (including Hispanic)	0.2
Other: non-Hispanic	0
Percent area in tract by zoning designation	
A-1, Agricultural	1.50
M1, Light Industrial	2.84
P-I, Public Institution	0.55
PC, Planned Community	49.83
R1-10, Single-Family Residential	0.75
R1-20, Single-Family Residential	1.57
R1-40, Single-Family Residential	11.87
R1-6, Single-Family Residential	0.53
R1-8, Single-Family Residential	11.17
RO, Recreation Open Space	11.33
SG, Sand & Gravel Extraction	8.06

CITY: ORANGE, CALIFORNIA; CENSUS TRACT # 762.04

Percent persons below poverty	19.4
Median household income (1989 U.S. $)	25,313
Percent persons by race	
White: non-Hispanic	23.5
Hispanic: white & other	66.7
Black (including Hispanic)	2.0
Asian & Pacific Islander (including Hispanic)	6.9
American Indian, Eskimo, Aleut (including Hispanic)	0.8
Other: non-Hispanic	0.2
Percent area in tract by zoning designation	
C1, Limited Business	0.33
C2, General Business	0.21
CR, Commercial Recreation	19.89
M1, Light Industrial	3.98
M-2, Industrial Manufacturing	64.86
MH, Mobile Home Residential	2.41
OP, Office Professional	0.03
P-I, Public Institution	2.45
RO, Recreation Open Space	0.16
R2-6, Duplex Residential	0.72
R-3, Multiple-Family Residential	4.95

CITY: PITTSBURGH, PENNSYLVANIA; CENSUS TRACT # 1401.98

Percent persons below poverty	7.3
Median household income (1989 U.S. $)	82,553
Percent persons by race	
White: non-Hispanic	86.9
Hispanic: white & other	1.6
Black (including Hispanic)	2.8
Asian & Pacific Islander (including Hispanic)	8.7
American Indian, Eskimo, Aleut (including Hispanic)	0
Other: non-Hispanic	0
Percent area in tract by zoning designation	
R1, One-Family Residential	26.39
R1-A, One-Family Residence	26.18
R2, Two-Family Residence	4.59
R3, Multiple-Family Residence	1.33
R5, Multiple-Family Residence	1.10
RP, Residential Planned Unit Development	2.96
I-C, Institutional-Civic	33.68
S, Special	13.76

CITY: PITTSBURGH, PENNSYLVANIA; CENSUS TRACT # 1404

Percent persons below poverty	3.3
Median household income (1989 U.S. $)	75,269
Percent persons by race	
White: non-Hispanic	95.4
Hispanic: white & other	0.7
Black (including Hispanic)	1.9
Asian & Pacific Islander (including Hispanic)	2.0
American Indian, Eskimo, Aleut (including Hispanic)	0
Other: non-Hispanic	0
Percent area in tract by zoning designation	
C1, Neighborhood Retail	0.73
R1, One-Family Residence	30.70
R1-A, One-Family Residence	35.32
R2, Two-Family Residence	23.41
S, Special	9.84

CITY: PITTSBURGH, PENNSYLVANIA; CENSUS TRACT # 1106

Percent persons below poverty	4.5
Median household income (1989 U.S. $)	41,439
Percent persons by race	
White: non-Hispanic	86.4
Hispanic: white & other	0.7
Black (including Hispanic)	11.2
Asian & Pacific Islander (including Hispanic)	1.5
American Indian, Eskimo, Aleut (including Hispanic)	0
Other: non-Hispanic	0.3
Percent area in tract by zoning designation	
R1, One-Family Residence	6.82
R2, Two-Family Residence	15.24
R3, Multiple-Family Residence	5.03
R4, Multiple-Family Residence	2.01
S, Special	70.90

CITY: PITTSBURGH, PENNSYLVANIA; CENSUS TRACT # 509

Percent persons below poverty	64.1
Median household income (1989 U.S. $)	6,039
Percent persons by race	
White: non-Hispanic	2.4
Hispanic: white & other	0
Black (including Hispanic)	96.2
Asian & Pacific Islander (including Hispanic)	0
American Indian, Eskimo, Aleut (including Hispanic)	1.1
Other: non-Hispanic	0.3
Percent area in tract by zoning designation	
M2, Limited Industrial	1.94
R4, Multiple-Family Residence	57.74
S, Special	40.33

CITY: PITTSBURGH, PENNSYLVANIA; CENSUS TRACT # 510

Percent persons below poverty	73.2
Median household income (1989 U.S. $)	5,770
Percent persons by race	
White: non-Hispanic	0.6
Hispanic: white & other	0
Black (including Hispanic)	98.9
Asian & Pacific Islander (including Hispanic)	0.5
American Indian, Eskimo, Aleut (including Hispanic)	0
Other: non-Hispanic	0
Percent area in tract by zoning designation	
I-C, Institutional-Civic	25.35
R2, Two-Family Residence	2.02
R4, Multiple-Family Residence	1.47
R5, Multiple-Family Residence	1.14
RP, Residential Planned Unit Development	57.19
S, Special	12.84

CITY: PITTSBURGH, PENNSYLVANIA; CENSUS TRACT # 1016

Percent persons below poverty	55.4
Median household income (1989 U.S. $)	7,732
Percent persons by race	
White: non-Hispanic	7.6
Hispanic: white & other	0
Black (including Hispanic)	91.9
Asian & Pacific Islander (including Hispanic)	0
American Indian, Eskimo, Aleut (including Hispanic)	0.5
Other: non-Hispanic	0
Percent area in tract by zoning designation	
R2, Two-Family Residence	22.61
R3, Multiple-Family Residence	9.10
RP, Residential Planned Unit Development	56.71
S, Special	11.58

CITY: PITTSBURGH, PENNSYLVANIA; CENSUS TRACT # 2609.98

Percent persons below poverty	76.4
Median household income (1989 U.S. $)	5,811
Percent persons by race	
White: non-Hispanic	2.8
Hispanic: white & other	0.2
Black (including Hispanic)	96.3
Asian & Pacific Islander (including Hispanic)	0
American Indian, Eskimo, Aleut (including Hispanic)	0.7
Other: non-Hispanic	0
Percent area in tract by zoning designation	
A1, Commercial-Residential Associated	1.35
M1, Limited Industrial	1.21
R1, One-Family Residence	50.64
R2, Two-Family Residence	1.70
S, Special	45.10

CITY: PITTSBURGH, PENNSYLVANIA; CENSUS TRACT # 2808

Percent persons below poverty	77.0
Median household income (1989 U.S. $)	5,736
Percent persons by race	
White: non-Hispanic	10.5
Hispanic: white & other	0
Black (including Hispanic)	87.8
Asian & Pacific Islander (including Hispanic)	0
American Indian, Eskimo, Aleut (including Hispanic)	1.7
Other: non-Hispanic	0
Percent area in tract by zoning designation	
C1, Neighborhood Retail	0.74
CP, Commercial Planned Unit Development	2.85
M3, Light Industrial	31.91
M4, Heavy Industrial	18.20
R1, One-Family Residence	5.94
R2, Two-Family Residence	0.31
R3, Multiple-Family Residence	13.57
RP, Residential Planned Unit Development	9.43
S, Special	17.05

CITY: SAN ANTONIO, TEXAS; CENSUS TRACT # 1204

Percent persons below poverty	6.5
Median household income (1989 U.S. $)	62,705
Percent persons by race	
White: non-Hispanic	90.5
Hispanic: white & other	8.2
Black (including Hispanic)	0.1
Asian & Pacific Islander (including Hispanic)	0.7
American Indian, Eskimo, Aleut (including Hispanic)	0
Other: non-Hispanic	0.5
Percent area in tract by zoning designation	
Single-Family Residence	99.00
Commercial	1.00

CITY: SAN ANTONIO, TEXAS; CENSUS TRACT # 1914.02

Percent persons below poverty	3.4
Median household income (1989 U.S. $)	85,099
Percent persons by race	
White: non-Hispanic	83.3
Hispanic: white & other	12.4
Black (including Hispanic)	1.3
Asian & Pacific Islander (including Hispanic)	3.0
American Indian, Eskimo, Aleut (including Hispanic)	0
Other: non-Hispanic	0
Percent area in tract by zoning designation	
B-2, Business	2.14
B-3, Business	0.66
R-1, Single-Family Residence	95.22
R-3, Multiple-Family Residence	1.98

CITY: SAN ANTONIO, TEXAS; CENSUS TRACT # 1915.02

Percent persons below poverty	4.3
Median household income (1989 U.S. $)	63,657
Percent persons by race	
White: non-Hispanic	79.6
Hispanic: white & other	16.9
Black (including Hispanic)	2.4
Asian & Pacific Islander (including Hispanic)	0.9
American Indian, Eskimo, Aleut (including Hispanic)	0.2
Other: non-Hispanic	0
Percent area in tract by zoning designation	
B-2, Business	1.44
B-3, Business	2.19
O-1, Office	0.37
R-1, Single Family Residence	85.96
R-3, Multiple Family Residence	6.07
R-7, Small Lot Home	4.23

CITY: SAN ANTONIO, TEXAS; CENSUS TRACT # 1105

Percent persons below poverty	81.8
Median household income (1989 U.S. $)	4,999
Percent persons by race	
White: non-Hispanic	1.8
Hispanic: white & other	96.6
Black (including Hispanic)	0.3
Asian & Pacific Islander (including Hispanic)	0
American Indian, Eskimo, Aleut (including Hispanic)	0.3
Other: non-Hispanic	1.1
Percent area in tract by zoning designation	
B-2, Business	0.61
B-3, Business	3.84
HISTORIC	0.56
I-1, Light Industry	14.40
K, Commercial	1.98
L, First Manufacturing	30.16
M, Second Manufacturing	3.74
R-3, Multiple Family Residence	34.92
R-7, Small Lot Home	9.79

CITY: SAN ANTONIO, TEXAS; CENSUS TRACT # 1305

Percent persons below poverty	52.0
Median household income (1989 U.S. $)	9,731
Percent persons by race	
White: non-Hispanic	6.4
Hispanic: white & other	23.6
Black (including Hispanic)	69.6
Asian & Pacific Islander (including Hispanic)	0
American Indian, Eskimo, Aleut (including Hispanic)	0.4
Other: non-Hispanic	0
Percent area in tract by zoning designation	
B, Residence	38.39
B-1, Business	1.34
B-2, Business	1.14
B-2 NA, Non-Alcohol Sales	1.35
B-3, Business	0.12
B-3 R, Restrictive Business	1.81
C, Apartment	2.16
F, Local Retail	2.68
HISTORIC	0.04
I-1, Light Industry	1.64
J, Commercial	2.62
JJ, Commercial	0.66
R-2, Two Family Residence	28.68
R-3, Multiple Family Residence	13.17
R-3 CC, Multiple Family Residence	4.21

CITY: SAN ANTONIO, TEXAS; CENSUS TRACT # 1307.85

Percent persons below poverty	64.3
Median household income (1989 U.S. $)	9, 169
Percent persons by race	
White: non-Hispanic	8.0
Hispanic: white & other	70.4
Black (including Hispanic)	20.0
Asian & Pacific Islander (including Hispanic)	0
American Indian, Eskimo, Aleut (including Hispanic)	1.6
Other: non-Hispanic	0
Percent area in tract by zoning designation	
B, Residence	0.16
B-2, Business	0.14
B-3, Business	0.36
C, Apartment	15.36
F, Local Retail	0.44
G, Local Retail	0.62
J, Commercial	30.65
JJ, Commercial	0.50
L, First Manufacturing	36.59
O-1, Office	0.46
R-1, Single Family Residence	13.48
R-2, Two Family Residence	0.06
R-2A, Three & Four Family Residence	0.30
R-5, Single Family Residence	0.88

CITY: SAN ANTONIO, TEXAS; CENSUS TRACT # 1702

Percent persons below poverty	54.4
Median household income (1989 U.S. $)	8,999
Percent persons by race	
White: non-Hispanic	2.6
Hispanic: white & other	96.8
Black (including Hispanic)	0.2
Asian & Pacific Islander (including Hispanic)	0.2
American Indian, Eskimo, Aleut (including Hispanic)	0.1
Other: non-Hispanic	0
Percent area in tract by zoning designation	
B, Residence	21.50
B-1, Business	0.04
B-2, Business	6.47
B-2 NA, Non-Alcohol Sales	0.04
B-3, Business	2.40
B-3 NA, Non-Alcohol Sales	1.75
B-3 R, Restrictive Business	1.05
F, Local Retail	7.22
G, Local Retail	1.56
H, Local Retail	2.15
HISTORIC	0.14
J, Commercial	1.74
O-1, Office	0.08
R-1, Single Family Residence	0.35
R-3, Multiple Family Residence	5.67
R-5, Single Family Residence	9.80
R-7, Small Lot Home	38.05

CITY: SANTA ANA, CALIFORNIA; CENSUS TRACT # 753.03

Percent persons below poverty	7.7
Median household income (1989 U.S. $)	54,346
Percent persons by race	
White: non-Hispanic	73.3
Hispanic: white & other	20.6
Black (including Hispanic)	1.6
Asian & Pacific Islander (including Hispanic)	3.1
American Indian, Eskimo, Aleut (including Hispanic)	0.8
Other: non-Hispanic	0.7
Percent area in tract by zoning designation	
C1, Community Commercial	4.90
C5, Arterial Commercial	2.78
O, Open Space Land	0.69
P, Professional	8.99
R1, Single-Family Residence	81.05
R3, Multiple-Family Residence	1.59

CITY: SANTA ANA, CALIFORNIA; CENSUS TRACT # 744.03

Percent persons below poverty	28.1
Median household income (1989 U.S. $)	24,408
Percent persons by race	
White: non-Hispanic	13.6
Hispanic: white & other	74.9
Black (including Hispanic)	3.9
Asian & Pacific Islander (including Hispanic)	7.6
American Indian, Eskimo, Aleut (including Hispanic)	0
Other: non-Hispanic	0
Percent area in tract by zoning designation	
C2, General Commercial	0.20
C4, Planned Shopping Center	0.45
M1, Light Industrial	88.28
M2, Heavy Industrial	2.26
R1, Single-Family Residence	3.43
R3, Multiple-Family Residence	2.07
R4, Suburban Apartment	0.75
SD-16, Specific Development	1.54
SD-56, Specific Development	1.02

CITY: SANTA ANA, CALIFORNIA; CENSUS TRACT # 749.01

Percent persons below poverty	27.5
Median household income (1989 U.S. $)	24,931
Percent persons by race	
White: non-Hispanic	4.0
Hispanic: white & other	91.6
Black (including Hispanic)	0.7
Asian & Pacific Islander (including Hispanic)	2.0
American Indian, Eskimo, Aleut (including Hispanic)	0.9
Other: non-Hispanic	0.7
Percent area in tract by zoning designation	
C1, Community Commercial	4.83
C2, General Commercial	1.72
O, Open Space Land	13.43
P, Professional	10.22
R1, Single-Family Residence	17.88
R2, Two-Family Residence	25.99
R3, Multiple-Family Residence	7.47
SD-18, Specific Development	0.77
SD-40, Specific Development	13.09
SD-55, Specific Development	1.60
SP-1, Specific Plan	2.99

CITY: SANTA ANA, CALIFORNIA; CENSUS TRACT # 750.02

Percent persons below poverty	33.6
Median household income (1989 U.S. $)	15,508
Percent persons by race	
White: non-Hispanic	12.4
Hispanic: white & other	80.4
Black (including Hispanic)	3.4
Asian & Pacific Islander (including Hispanic)	3.2
American Indian, Eskimo, Aleut (including Hispanic)	0.3
Other: non-Hispanic	0.2
Percent area in tract by zoning designation	
C2, General Commercial	13.36
C3, Central Business	15.92
C5, Arterial Commercial	3.19
GC, Government Center	16.96
O, Open Space Land	9.11
P, Professional	15.83
R2, Two-Family Residence	6.22
R3, Multiple-Family Residence	6.21
SD, Specific Development	8.78
SD-40, Specific Development	4.42

CITY: WICHITA, KANSAS; CENSUS TRACT # 73.01

Percent persons below poverty	2.6
Median household income (1989 U.S. $)	64,495
Percent persons by race	
White: non-Hispanic	95.0
Hispanic: white & other	0.3
Black (including Hispanic)	0.7
Asian & Pacific Islander (including Hispanic)	3.1
American Indian, Eskimo, Aleut (including Hispanic)	0.9
Other: non-Hispanic	0
Percent area in tract by zoning designation	
A or TF-3, Two-Family Residential	3.05
AA or SF-6, Single-Family Residential	67.95
B, Multi-Family Residential	2.48
BB or GO, General Office	3.03
Country Club	16.68
LC, Limited Commercial	6.74
MF-29, Multi-Family Residential	0.06

CITY: WICHITA (EASTBOROUGH), KANSAS; CENSUS TRACT # 74

Percent persons below poverty	2.8
Median household income (1989 U.S. $)	76,305
Percent persons by race	
White: non-Hispanic	97.1
Hispanic: white & other	0.2
Black (including Hispanic)	2.1
Asian & Pacific Islander (including Hispanic)	0.6
American Indian, Eskimo, Aleut (including Hispanic)	0
Other: non-Hispanic	0
Percent area in tract by zoning designation	
Single-Family Residential	100.00

CITY: WICHITA, KANSAS; CENSUS TRACT # 8

Percent persons below poverty	47.5
Median household income (1989 U.S. $)	9,673
Percent persons by race	
White: non-Hispanic	3.0
Hispanic: white & other	0
Black (including Hispanic)	95.7
Asian & Pacific Islander (including Hispanic)	0
American Indian, Eskimo, Aleut (including Hispanic)	1.3
Other: non-Hispanic	0
Percent area in tract by zoning designation	
B, Multi-Family Residential	15.60
GC, General Commercial	0.88
GO, General Office	0.66
LC, Limited Commercial	4.11
TF-3, Two-Family Residential	78.76

CITY: WICHITA, KANSAS; CENSUS TRACT # 41

Percent persons below poverty	66.6
Median household income (1989 U.S. $)	6,248
Percent persons by race	
White: non-Hispanic	40.9
Hispanic: white & other	9.7
Black (including Hispanic)	45.9
Asian & Pacific Islander (including Hispanic)	3.5
American Indian, Eskimo, Aleut (including Hispanic)	0
Other: non-Hispanic	0
Percent area in tract by zoning designation	
B, Multi-Family Residential	6.77
CBD, Central Business District	48.93
GC, General Commercial	18.18
GO, General Office	1.05
LC, Limited Commercial	2.52
LI, Limited Industrial	22.55

CITY: WICHITA, KANSAS; CENSUS TRACT # 78

Percent persons below poverty	41.4
Median household income (1989 U.S. $)	15,065
Percent persons by race	
White: non-Hispanic	14.1
Hispanic: white & other	3.2
Black (including Hispanic)	77.1
Asian & Pacific Islander (including Hispanic)	4.8
American Indian, Eskimo, Aleut (including Hispanic)	0.7
Other: non-Hispanic	0.1
Percent area in tract by zoning designation	
B, Multi-Family Residential	2.52
GI, General Industrial	0.94
GO, General Office	0.78
C or GC, General Commercial	5.07
LI, Limited Industrial	5.58
MF-29, Multi-Family Residential	0.37
MH, Manufactured Housing	12.87
SF-6, Single-Family Residential	68.03
TF-3, Two-Family Residential	3.83