PREVENTION
INSTITUTE

Changing the Landscape: People, Parks, and Power

www.preventioninstitute.org

ACKNOWLEDGMENTS

Prevention Institute is a national nonprofit with offices in Oakland, Los Angeles, Houston, and Washington, D.C. Our mission is to build prevention and health equity into key policies and actions at the federal, state, local, and organizational levels to ensure that the places where all people live, work, play and learn foster health, safety, and wellbeing. Since 1997, we have partnered with communities, local government entities, foundations, multiple sectors, and public health agencies to bring cutting-edge research, practice, strategy, and analysis to the pressing health and safety concerns of the day. We have applied our approach to injury and violence prevention, healthy eating and active living, land use, health systems transformation, and mental health and wellbeing, among other issues.

Dr. Alessandro Rigolon is an assistant professor in the Department of City and Metropolitan Planning at the University of Utah. He has published more than 20 peer-reviewed articles on green space equity and a book that links green space to health, and his work has appeared in the New York Times, Los Angeles Times, and NPR. The University of Utah, located in Salt Lake City, is the flagship institution of higher learning in Utah.

Cover photo by Office of Los Angeles County Supervisor Hilda Solis

Introduction

The movement for park and green space equity has the potential to make long-overdue gains in health equity and racial justice in the built environment. Parks, open spaces, recreation facilities, trails, gardens, and green stormwater infrastructure (hereafter, "green spaces") are essential community infrastructure, but not all communities have access to these resources.

While the traditional approach to addressing these inequities has focused on creating new parks or improving existing ones, an emerging park equity movement emphasizes the need to reverse the policies, systems, and norms that have led to pervasive green space inequities in African American, Latino, and low-income urban communities across the U.S. Recognizing that power drives policy and systems change, this approach prioritizes investing in the capacity of people closest to the problem as key to building an effective movement for green space equity.

This paper proposes a framework and direction to guide the park and green space equity movement's approach to changing policies and systems, with a focus on scaling up to achieve population-level impacts. It was originally developed for the Robert Wood Johnson Foundation (RWJF), to inform the foundation's new national initiative, People, Parks, and Power: A National Initiative for Green Space, Health Equity, and Racial Justice, pending approval from the foundation. Prevention Institute and the University of Utah are developing the initiative with RWJF.

The paper draws upon lessons learned from previous public health successes, interviews with subject matter experts across the U.S., and examples of policies and power building in the current social and political context. It proposes that the park and green space equity movement embrace upstream policy and system change strategies to eliminate the root causes of green space inequities. Significantly, this approach also centers proven power-building strategies honed by generations of racial, social, and environmental justice advocates in urban areas working for transformative community change.

The paper also describes a promising set of policy options that cover a range of green space equity approaches. Although the list of policy options is not exhaustive (there is currently no central repository that collects and analyzes the full range of enacted policies with green space equity provisions[i]), their enactment and encouraging

i   *Trust for Public Land's Landvote database collects and analyzes public finance measures enacted in the U.S. that focus on parks, large landscapes, and other natural resources; some of the more recent measures include equity provisions.*

Key terms

- **Health equity:** Health equity means that everyone has a fair and just opportunity to attain their full health potential and that no one is disadvantaged, excluded, or dismissed from achieving this potential. Health equity is the absence of avoidable, unfair, or remediable differences in health status among groups of people, whether those groups are defined by race/ethnicity, culture, class, national origin, or other means of stratification.

- **Parks and green spaces:** Parks are accessible to the general public and may include playgrounds, recreational facilities, sporting fields, and other features that promote physical activity, active recreation, and respite. Green spaces are also accessible to the public and can include lakes, streams, riverbanks, trails and greenways, community gardens, green alleys, and other constructed facilities that use nature-based processes to manage stormwater, flooding, and water quality and address other environmental issues such as air quality.

- **Park inequities:** The unfair and unjust distribution of parks, green spaces, and associated resources (e.g., programming, amenities, staffing, and funds for maintenance and operations) by race, place, and income, among other factors.

- **Park (and green space) equity:** The fair and just distribution of parks and green spaces, such that all communities have access to these health-promoting resources. Park equity requires closing gaps in access to parks and green spaces that disproportionately affect low-income communities and communities of color. Park equity entails multiple strategies to ensure procedural, distributional, and structural equity.

- **Power building:** Power building refers to efforts to increase the power and influence of members of underrepresented communities to set priorities and shape decision-making. Power-building approaches may include community organizing, youth and resident leadership development, strategic alliances, and narrative change, alongside more traditional capacity-building approaches like training, technical assistance, and funding.

- **Upstream:** Upstream interventions focus on addressing the underlying, systemic, or root factors that determine whether communities will be healthy, safe, and equitable. Upstream approaches may include changes to policies and environments to remove barriers to health and safety and enhance social determinants of health, like access to parks, safe drinking water, or quality affordable housing.

outcomes in jurisdictions across the U.S. reinforce the timeliness and significance of shifting to an upstream policy and systems change approach in the green space field.

The approach proposed in this paper, which is grounded in public health, health equity, and racial justice, offers a unique and necessary contribution to the current landscape of green space equity work. Uptake of the approach would signify a shift in the green space equity movement, with more advocates and jurisdictions embracing systems change to solve pervasive, systemic inequities in lieu of, or in addition to, traditional models that rely on physical projects to redress inequitable distribution of essential green space resources and opportunities.

Photo credit: The GRYD Foundation

Background

Parks and green spaces are essential community infrastructure that protect public health by providing opportunities for physical activity, time in nature, social connection, and respite.[1] Green spaces also filter air, remove pollution, buffer noise, cool temperatures, filter stormwater, and replenish groundwater.[2] Green spaces should serve every community in a fair, just, and safe manner. Yet not all communities have access to safe, well maintained, and programmed green spaces. Many studies across multiple geographic areas show that African Americans, Latinos, and people who live in low-income, urban neighborhoods have less access to green spaces than people who live in more affluent or predominantly white communities.[3] Systemic racism and longstanding imbalances in political and economic power, technical knowledge, and opportunities to affect the allocation of resources have resulted in unequal distribution of the health, social, and environmental benefits associated with equal access to green space.[4,5]
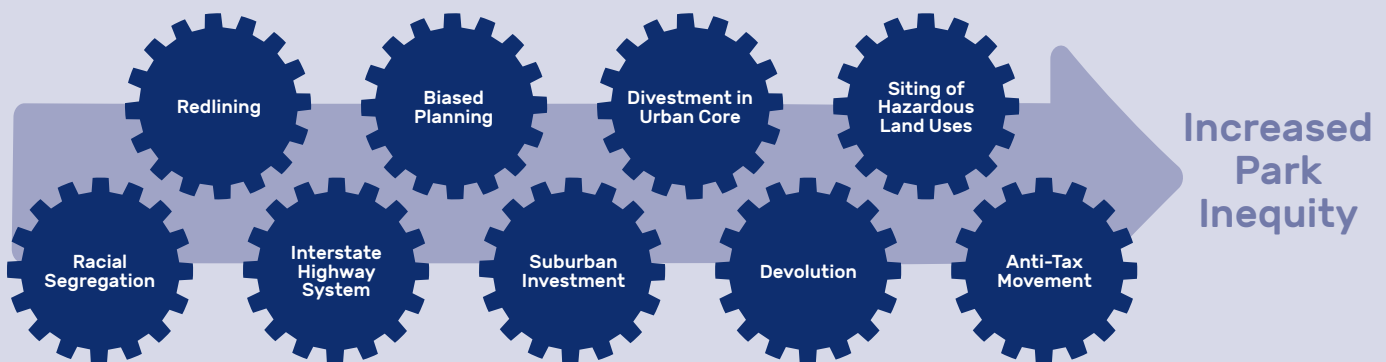
Production of Green Space Inequities

For over a century, green space inequities have unjustly affected low-income communities throughout the U.S., especially people living in predominantly African American and Latino neighborhoods.

Far from being accidental or coincidental, green space inequities reflect the systematic production of inequities owing to historical and current-day policies and practices. Like the gears of a machine, the policies and practices underlying green space inequities interact with and exacerbate each other over time to produce inequities at the community level. These drivers of inequities are often reinforced by norms and deeply held beliefs, assumptions, and ways of working that shape institutional culture and reproduce the status quo when it comes to green space inequities.[6] Green space inequities can, in turn, reinforce discriminatory views about who does or does not use green spaces, how they should be used, and how much and to what extent African Americans and Latinos, for example, care about these essential community resources.[7] The result is a self-sustaining system of green space inequities.

Briefly, as shown in Figure 1, the historical factors contributing to park inequities include racial segregation, biased planning decisions, discriminatory post-WWII home loan practices, exclusionary zoning, racial covenants, and redlining, among others.[8,9] Present-day drivers of park inequities include tax and fiscal restructuring, shifting responsibility for public services, and reduced ability of cities with limited tax-bases and large low-income populations to provide parks and recreation services.[10,11]

FIGURE 1.
Production of Park Inequities

Racial Segregation · Redlining · Interstate Highway System · Biased Planning · Suburban Investment · Divestment in Urban Core · Devolution · Siting of Hazardous Land Uses · Anti-Tax Movement → Increased Park Inequity

Selected Policies, Practices, and Procedures That Have Produced Inequities in Parks and Green Space. Adapted from: *Prevention Institute. Countering the Production of Health Inequities: An Emerging Systems Framework to Achieve an Equitable Culture of Health*

Like the gears of a machine, the policies and practices underlying green space inequities interact with and exacerbate each other over time to produce inequities at the community level.

Factors unique to a city, county, or state can also play a part in the production of green space inequities. For example, in the early 20th century, cities in the Los Angeles region historically de-emphasized park building given the region's easy access to outdoor recreation venues and the preponderance of single-family homes with yards. According to Stephanie Pincetl and Elizabeth Gearin, the City of Los Angeles became one of the most park-poor major cities, in part, from "lack of willingness on the part of city leaders to create parklands for fear of losing revenues at critical historical junctures and a suburban single-family development pattern in many parts of the city."[12]

Together, these historical and present-day factors have produced green space inequities by segregating African American, Latino, and low-income residents of urban communities, failing to invest in green space and other health-promoting infrastructure in these neighborhoods, diverting green space funding to affluent white communities, and more broadly, cutting public funding, which led to an influx of private money into green spaces, further exacerbating inequities.[13]

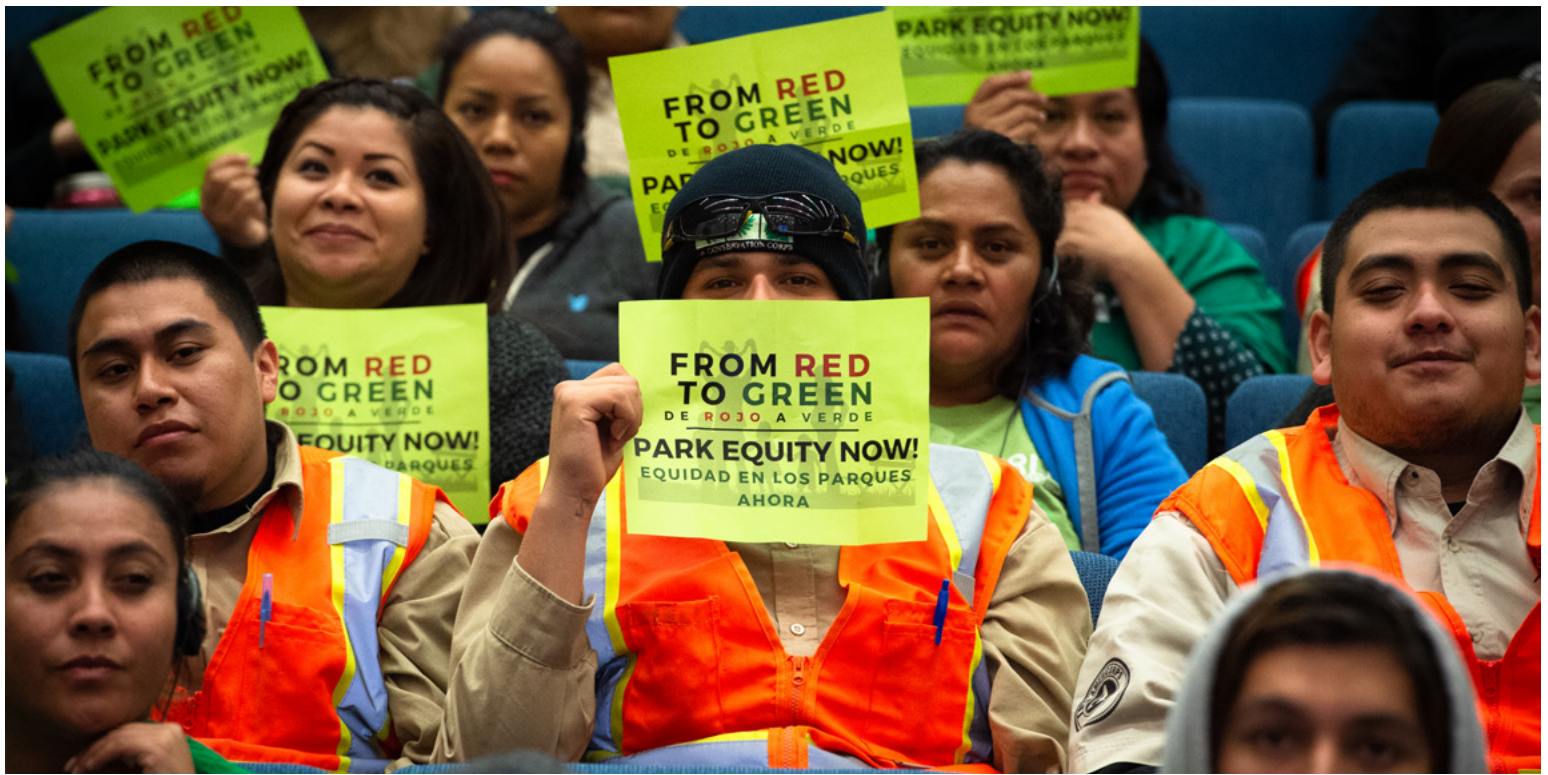Photo credit: National Health Foundation - Genesis Productions

Photo credit: Office of Los Angeles County Supervisor Hilda Solis

Pathways to Green Space Equity

Just as green space inequities have been produced, there are pathways to equity. Prevention Institute's green space equity framework is centered on three objectives—procedural, distributional, and structural equity. It encourages equity advocates to intentionally address systemic barriers with roots in government policies and practices to reverse inequitable access to quality parks and green spaces. The key is to change processes and transform systems that reproduce present-day outcomes and to hold systems—and decision-makers within those systems—accountable to closing gaps.

Reversing green space inequities requires that we go beyond making a moral argument for equity to working alongside residents, community organizations, park agencies, and other stakeholders to:

- Research current green space inequities and verify them with highly impacted residents.

- Identify and analyze the underlying policies and practices that contribute to these inequities.

- Co-develop winnable policy strategies to ameliorate these inequities.

- Wage effective policy advocacy campaigns using power-building strategies led by those most impacted.

- Monitor the implementation of such policies to ensure that their enactment results in equitable processes and outcomes.

Equity Framework: Three Equity Objectives[14]

The framework presented here draws from an equity model advanced by scholars and practitioners.[15,16,17] It has been adapted for the green space equity realm with examples that provide practitioners, advocates, funders, and other stakeholders actionable guidance to advance green space equity.[18,19]

Procedural equity involves decision-making processes that are transparent, equitable, and inclusive with regard to who participates, how they are engaged, and how their input is valued and applied. Procedural equity covers processes that support the equitable and just provision of green spaces services and relates to all aspects of green space, from placement to design, construction, and programming. Procedural equity can be assessed in relation to core functions that include but are not limited to:

- Decision-making about all aspects of green space functions

- Community engagement to secure input at each stage of green space project development

- Condition and quality of green space infrastructure, amenities, and features

- Staffing and services related to operations, maintenance, and programming

- Policies and programs to prevent and mitigate the risks associated with green space development

Distributional equity is often the first thing people think about when they consider green space equity because it is the most readily quantifiable. Distributional equity primarily covers:

- Distribution and accessibility of green spaces in communities

- Distribution of facilities, amenities, and features placed within a green space

- Fiscal allocation formulas for green space development or improvements, including general funds, expenditure plans for public finance measures, competitive grantmaking processes, etc.

- Allocation of funding and staff to conduct inclusive and relevant recreational programming and ensure maintenance of facilities
- Resources to address perceived and actual safety in and around green spaces
- Prioritization of strategic planning and innovation focused on achieving green space equity

Structural equity addresses underlying structural factors and policies that give rise to green space inequities in the first place. It makes a commitment to correct past harms and prevent future unintended consequences. While less quantifiable than the other dimensions of equity, structural equity related to green space can include:

- Improving staff representation at all agency levels among people of color and other marginalized groups
- Internalizing and operationalizing equity and racial justice across agency staff and leadership, including local knowledge of historical and present-day injustices and accountability metrics to redress spatial and operational disparities
- Elevating the critical nature of green space equity to decision-makers
- Designing and programming park facilities and green spaces to be sites of healing and resilience, and to address a holistic range of neighborhood needs, threats, assets, and opportunities
- Offering job training and workforce development programs for residents of high need communities
- Developing protections to ensure that green space development does not lead to displacement of long-term residents and businesses.

Projects vs. Policy

As the movement for park and green space equity moves forward and expands to include greater representation from marginalized groups, as well as other sectors, approaches, and methodologies, it will be important to clarify the role of project development or renovation and the organizations and agencies that do this work.

Building new or renovating existing parks, recreational facilities, and other green infrastructure is a critical component of achieving green space equity. The efforts of agencies, nonprofits, and grassroots groups to build and renovate green spaces and expand recreational programming in the most severely under-resourced communities

should be recognized and appreciated. However, project development requires a lot of time, resources, and energy; therefore, it is highly unlikely that green space equity can be achieved on a project-by-project basis. In the words of a nonprofit leader in Los Angeles, "We can be building, opening, and operating parks for 100 years, and it's not going to move the needle as much as through policy change and system change."[20] In order to achieve equity at—or even close to—scale, it is necessary to focus on the root causes of inequities and invest in community capacity and social infrastructure to catalyze policy and systems change to accelerate progress.

Emphasizing policy, systems, and norms change marks a shift in the field. While, there is no system currently in place that comprehensively tracks equity-focused green space policies at the municipal or state level, a review of academic articles, news media, websites, and social media accounts indicates that local government agencies, nonprofits, and multi-sector partnerships in jurisdictions across the U.S. are mostly undertaking *projects* (like transforming vacant land into parks) and *programs* (such as leading recreation classes) in response to green space inequities.[21,22,23] Project work is consistent with and a reflection of the business and operational models of traditional park agencies and conservation nonprofits, government funding streams, and private philanthropic investment priorities.

These sources also suggest that some nonprofits and government agencies are actively focusing on *policy advocacy and systems change* to address systemic drivers of green space inequities, but to a lesser extent than on project-oriented work. Subject-matter experts

Photo credit: Kounkuey Design Initiative

reinforced this finding, speaking about the importance of systems change to achieve equity at scale. But, when asked to identify specific park or green space equity policies, experts frequently named the same few high-profile public finance measures in places like Los Angeles or Minneapolis that include provisions for more equitable investments in underserved, park-poor neighborhoods. This finding is also consistent with coverage in park professional association publications,[24] and underscores that projects—rather than policies—are still the dominant focus of the green space field. This project-focused approach is not unique to the parks and green space arena. In other related fields—such as community development—projects are a primary focus. In these fields, too, there are opportunities to take an upstream policy and systems change approach to address the root causes of inequities in the built environment.

A project-by-project approach alone— in isolation from a policy and systems approach—is insufficient to comprehensively eliminate the root causes of inequities.

Parsing the differences between projects and policy further, while many on-the-ground green space projects do in fact require some type of policy change to become a reality, not all policy changes address procedural, distributional, or structural barriers to equity. For instance, newly acquired property slated for green space development may need to be re-zoned for a new type of land use to be allowed. While that new green space may reduce hyperlocal park deficits in a high-need community, the act of re-zoning a parcel of land to facilitate its development as a park does not fundamentally eliminate broader barriers to equity; it simply serves to facilitate the development of that individual project.

By contrast, equity-focused policies and system changes rightfully emphasize root causes, focus on population-level change, and explicitly address the factors that cause or reinforce inequities— whether they are procedural, distributional, or structural in nature. Well-structured local policy initiatives can serve to change the narrative about green space access, alter power relationships, and build momentum to rectify green space inequities in low-income communities of color.[25] Ultimately, effective policy and systems change work will incentivize individual park projects or a group of inter-connected projects in the communities hardest hit by green space inequities. But a project-by-project approach alone—in isolation from a policy and systems approach—is insufficient to comprehensively eliminate the root causes of those inequities.

Local green space policy initiatives can change the narrative about the value of parks access, alter power relationships, and ultimately build momentum to eliminate park and green space inequities in low-income communities of color.

It is also instructive to understand that the skills and knowledge needed to *develop* green space projects are distinct from those required to effectively *advocate* for policy and systems change. Green space development and renovation generally involve government agency or nonprofit managers, planners, and designers who are skilled in land use and real estate, fund development, landscape architecture, government relations, project management, and community engagement.[26,27] Building power for policy and systems change often involves advocates, resident leaders, organizers, and political strategists who have expertise in community organizing, leadership development, policy development, government relations, communications, fund development, and waging political campaigns.[28] These skills are not necessarily interchangeable.

Further, the experience of public health and health equity advocates in other policy arenas shows that it is far easier for seasoned policy advocates to apply their skills to new content issues—like green space—than for project or programmatic specialists to become effective policy advocates in their own field. Focused policy and systems change work will have the greatest chance of accelerating equity outcomes and achieving equity at scale.

Policy and systems change for park and green space equity

Leaders	Activities Required	
• Advocates	• Community Organizing	• Fund Development
• Resident Leaders	• Leadership Development	• Government Relations
• Organizers	• Policy Development	• Waging Political Campaigns
• Political Strategists	• Communications	• Coalition Building

Park and green space project development and renovation

Leaders	Activities Required	
• Planners	• Land Use	• Physical Project Management
• Designers	• Real Estate	• Government Relations
• Government Agency	• Fund Development	• Community Engagement
• Nonprofit managers	• Landscape Architecture	• Recreational Programming

Lessons from Other Public Health Movements

Shifting the Focus to Get to Scale

The movement for park and green space equity can benefit from lessons learned in other public health arenas, including the movements to limit the negative effects of tobacco, alcohol, traffic crashes, and firearms. These public health campaigns shifted their strategies over time as they learned what approaches were more effective in achieving population-level changes.

Winning strategies responded to the evolution in how practitioners, researchers, advocates, and activists understood the nature and scale of "the problem" and potential solutions. In most cases, this meant shifting from a focus on individuals, their behavior, and their need for more education to a focus on policies, systems, and the environments that shape individuals' behaviors.

Table 1 outlines how public health approaches shifted course over time to achieve population-level outcomes. These lessons are articulated in greater detail in Berkeley Media Studies Group's publication, *Policy on Nutrition: Lessons from Tobacco, Alcohol, Firearms and Traffic Safety.*[29]

TABLE 1. Shifting from the Individual to Policies that Shape Environment[30]

From	To
Focusing on individual knowledge, behavior, and attitudes, or "the individual" as the unit of change.	Acknowledging the role of policy, systems, and environmental factors in shaping the context for the individual.
Emphasis placed on health education programs and treatment services to make differences for individuals and small groups of people.	Experimentation with different policy approaches and engagement in trial-and-error to determine the most effective, evidence-based strategies for population-level impact; focused attention on policy and support for policy change.
Measuring the scope, scale, and effectiveness of education and treatment programs.	Conducting rigorous evaluation during this trial-and-error period to see what actually worked.
Advancing programs that emphasize reversing problematic health behaviors after people are sick.	Ensuring that policy change efforts focus on the root causes instead of "behavior change programs couched in policy change language."[31]
Taking generalized approaches for the entire population.	Involving communities most impacted by the problem in developing and advancing transformative policy strategies.
Focusing communications on disease rates and individual prevention and treatment options.	Conducting a framing analysis of the public health problem at hand and pointing out solutions that broaden the frame to include status-quo practices, policies, systems, and environments.
Using language that will engage a relatively small number of "actors" and those suffering from disease.	Developing language that encourages making connections across sectors and shifts the debate towards embracing policy and systems change.
Increasing the capacity of those at risk or suffering from chronic illness to understand the disease, and individual treatment options.	Investing in capacity-building of community-based groups and local government partners through technical assistance, training, and materials development to assist movement leaders and those most impacted by inequities to affect policy change.

These lessons learned inform the perspective that the time is right for the park and green space equity movement to go beyond an approach that takes on inequities primarily one park or green space project at a time. As advocates emphasize upstream approaches to achieve policy and systems changes. an upstream approach will open up more pathways to equitable access to green space in cities around the U.S.

The Importance of Local Action

These public health movements—including local smoke-free policies within tobacco control—have also demonstrated the important political opportunities associated with *local* policy action. The advantages of local smoke-free ordinances offer important parallels in the emerging green space equity movement. Specifically, Table 2 outlines how key advantages of local approaches to smoke-free policies—as opposed to state or federal policies—could translate to advantages of equity-oriented green space policies implemented at the local level (i.e., by cities, counties, or special districts).[32]

TABLE 2. Applying Key Advantages of Local Smoke-free Policies to Equity-Oriented Green Space Policies

Key Advantage	Local Smoke-free Policies	Local Green Space Policies
Ease of enactment	Local legislation is much easier to enact than state or federal legislation. Locally elected officials are generally more accessible than state or congressional representatives, and more responsive to their constituents.	Most green space equity policies have been enacted at the local level, reflecting the grassroots origins of the green space equity movement and the strength of organizations led by people of color at this level.
Higher level of public health protections	Local smoke-free policies are generally stronger and more comprehensive than statewide smoke-free legislation.	Local green space equity policies are generally reflective of local conditions, leading to legislation tailored to local needs and filling existing gaps.
Enforcement and compliance	Enforcement of local smoke-free ordinances by municipal agencies has historically been more robust and energetic than statewide smoke-free laws.	Advocates can more effectively monitor and watchdog implementation of green space equity policies at the local level.
Serves as the source of innovation and advances in policymaking	Cities and counties have traditionally been the testing grounds and source of innovation in the development of effective tobacco control policies.	Green space equity innovation has emerged at the local level driven by community-based advocates as well as activist planners and researchers in partnership with public agencies.
Community education and organizing	Local smoke-free ordinances generally involve a dynamic community education and mobilization process involving media advocacy, town hall meetings, and public hearings in addition to community organizing and engagement activities.	Local campaigns for green space equity policies that frame these deficits as health equity and racial justice issues have demonstrated the power of community organizing and education in places like Los Angeles, Minneapolis, and Seattle.

Promising Policy Options

Across the nation, there are encouraging signs of an emerging body of systems change work to advance green space equity. Table 3 describes policies that are being used to advance green space equity at scale. To identify these policies, the authors of this paper searched available databases that focus on park funding, and specifically on equitable park funding, including the City Park Alliance's Equitable Funding Hub,[33] the Trust for Public Land's LandVote Database,[34] and the Urban Institute's *Investing in Equitable Urban Park Systems* report.[35] These sources represent the latest and most comprehensive databases on park funding and related policies. Prevention Institute and the University of Utah supplemented this information by adding policies authors were aware of based on longstanding and ongoing work with community-based organizations on green space equity.

This list of policies—all of which have provisions, criteria, or programs that explicitly advance procedural, distributional, or structural equity—were used to characterize a set of policy types. The report authors drew on interviews with subject matter experts to refine the policy types and then searched for more examples of policies that fit in the typology presented on the following page.

The list of promising policy options presented in Table 3 is organized according to the following typology of local park and green space policies:

1. **Public Finance**
2. **Organizational Change**
3. **Documentation of Needs and Inequities**
4. **Joint Use**
5. **Land Use**
6. **Community Engagement**
7. **Anti-Displacement**

Table 3 organizes these policy types based on whether they seek to achieve procedural, distributional, and/or structural equity goals. Most of the policies focus on addressing distributional equity issues (i.e., developing green space in high need neighborhoods), whereas fewer are dedicated to procedural and structural equity. Further, the bulk of local policies described in Table 3 are public finance measures that address distributional equity by generating revenue for park construction, improvements, and occasionally a small percentage of revenue for operations and maintenance in high need areas. This suggests the need for philanthropic funding initiatives dedicated to boosting procedural and structural equity in the green space arena.

It is important to note that the policies enumerated below by no means encompass all local policy efforts to advance green space equity in the U.S. Still, their enactment and encouraging outcomes in jurisdictions across the U.S. reinforce the timeliness and significance of shifting the focus of the green space equity movement and validate the policy and system change rationale presented here.

Are These Policies Effective?

The policies referenced above constitute a broad menu of options for advocacy organizations, government agencies, elected officials, and funders interested in advancing systems change for park and green space equity. Yet it is important to note that currently there is limited evidence about the effectiveness of such policies in achieving equitable outcomes related to green space. As far as the authors of this report were able to determine, there are no comprehensive evaluation efforts that have rigorously examined the effectiveness of local green space policies with an equity focus or provisions.

TABLE 3. Types of Policies to Advance Green Space Equity Identified in the U.S.

Policy type	Description	Example(s)	Equity type
1. Public financing for park construction, improvement, and/or maintenance	Public finance measures (e.g., sales or parcel taxes and bonds at the local or state level) as well as developer impact fees that generate revenue specifically dedicated to reversing green space inequities. In some instances, these measures include programs to expand job training and workforce development in high need communities.	• California's Proposition 84[36] & Proposition 68[37] • Fresno's Measure P[38] • Los Angeles County's Measure A[39] & Measure W[40] • Los Angeles' developer impact fees for parks (Quimby)[41] • Milwaukee's School District's Recreation Equity Plan[42] • Minneapolis capital funding for neighborhood parks, regional parks, and trails[43] • Pittsburgh's Parks Trust Tax[44] • San Francisco's Proposition B[45]	Distributional and structural
2. Organizational change policies	Policies within green space agencies that prioritize equity in their internal processes and practices, including hiring policies to diversify the workforce; justice, equity, diversity, and inclusion (JEDI) training; and others.	• Milwaukee's School District's Recreation Equity Plan[46] • Minneapolis' racial equity initiative[47]	Structural
3. Documentation of needs and inequities	Policies or ordinances that require public agencies to conduct research and produce information and data about how access to parks/green space varies by key variables such as socioeconomic status (SES), race/ethnicity, etc. These often include periodic updates, which are important to track progress and account for potential gentrification and displacement. Some also involve participatory processes to identify park needs.	• Denver's Neighborhood Equity index[48] • Los Angeles County's Park Needs Assessment[49] • Miami-Dade's Park Access and Equity Strategy[50]	Procedural and structural

TABLE 3. CONTINUED

Policy type	Description	Example(s)	Equity type
4. Joint use policies for schoolyards	Policies that promote the joint use of (greened) schoolyards as publicly accessible community parks; some also prioritize investment in shared schoolyard greening in disinvested communities.	• Houston's School Park Program (SPARK)[51] • Merced's (partnership between city and school district)[52] • Milwaukee School District's Recreation play fields[53] • Santa Ana's (partnership between city and school district)[54]	Distributional
5. Land use policies that facilitate access to green space	Ordinances that promote reuse of alleys as green space, programs or policies that promote greening of city-owned vacant lots, and others that prioritize disinvested communities. Vacant lot greening programs include those wherein cities/counties maintain ownership and those that transfer city-owned land to private ownership (e.g., people living on the same block).	• Baltimore's Alley Gating and Greening Ordinance[55] • Chicago's Large Lot Program[56] • Detroit's Side Lots[57] • Los Angeles' Green Alleys program[58] • Milwaukee's $1 Vacant Side Lot[59]	Distributional
6. Policies and ordinances requiring community engagement for park development	Legislative or administrative policies requiring and funding community engagement in high-need communities; a structural example is the establishment of a community engagement division within park agencies.	• Los Angeles County's Measure A's Grant Administration Manual[60] • Minneapolis (community engagement department)[61]	Procedural and structural
7. Anti-displacement provisions within broader green space equity policies or public finance measures that have an equity focus	Provisions that require or incentivize anti-displacement strategies in conjunction with green space equity initiatives.	• Los Angeles County's Measure A[62] & Measure W[63] • California's Transformative Climate Communities (integrated investment in green space and affordable housing)[64] • California's Affordable Housing and Sustainable Communities (integrated affordable housing and urban greening)[65]	Distributional and structural

Based on interviews with subject matter experts, a review of the literature on the benefits of parks and green space equity policies, and a formal evaluation that was carried out on an equity-focused park funding program in California, the current available evidence is summarized below. The paucity of evaluation studies suggests that, moving forward, ongoing, rigorous research will be needed to increase understanding of the effectiveness of local green space equity policies. As in the cases of initiatives to address tobacco, alcohol, firearms, and traffic safety, any evaluation will have to consider ways to capture the collective impact of many concurrent changes across the ecosystem, not just the impacts of component parts (e.g., individual policies).

- **Public financing for park construction, improvements, and/or maintenance:** In 2006, California voters passed Proposition 84, a statewide bond measure that generated $5.4 billion for natural resources; water quality, safety, and supply; and parks. Proposition 84 prioritized funding for "disadvantaged communities" in some sections of the measure, including $400 million for municipal parks in low-income, park-poor communities. Subsequent enabling legislation, AB 31, created the Statewide Parks Development and Community Revitalization Act of 2007 that defined the criteria and process for selecting projects to be supported with this $400 million.[66] An independent evaluation of the program found that it successfully reached the targeted communities, including neighborhoods that were low-income and park-poor.[67,68] Among its findings, the evaluation indicated that it is imperative that the criteria for what "equity" means are included in policies or pieces of legislation; for example, what specific metrics need to be used to define a "low-income community" or a "park-poor community."[69] A separate study in Los Angeles shows that, thanks in part to funds from the Statewide Parks Development and Community Revitalization Act of 2007, access to parks became more equitable for low-income communities of color.[70]

- **Organizational change policies:** Accounts from our subject matter expert interviews suggest that organizational change policies such as improvements in representational hiring practices and racial equity trainings have contributed to the development and implementation of additional policies that advance equity, for example criteria for capital improvements in parks that seek to eliminate distributional inequities (Minneapolis, Milwaukee).

- **Policies requiring research into park needs and inequities:** Other accounts from our interviews suggest that analyses of park needs and inequities have often contributed to equitable park funding policies (Los Angeles County, Milwaukee). Specifically, the Los Angeles Countywide Park and Recreation Needs Assessment provided important groundwork for a park funding ballot proposition (Measure A) which subsequently led to dedicated funding for park improvements in low-income communities.[71] Policies must require that such park needs assessments and analyses are updated regularly to consider recent investments and potential gentrification processes.

- **Joint use policies for schoolyards:** Policies that facilitate and/or fund the greening and opening of schoolyards to the public have increased access to park-like spaces in high need communities. For example, Houston's SPARK program has prioritized communities that are "park deserts" and created accessible green spaces in those areas.[72]

- **Land use policies that facilitate access to green spaces:** Policies that establish and fund vacant lot greening programs bring benefits to predominantly low-income, African American neighborhoods. Specifically, such programs have been associated with reduced crime and gun violence,[73,74,75,76] improved mental health[77,78] and cardiovascular outcomes,[79] fostered sense of community,[80] and increased visual cues to care while decreasing signs of neglect.[81,82,83]

Conclusion

Today, the park and green space equity movement in the U.S. is at a turning point. Correcting inequities demands the movement's utmost attention, urgency, and action.

Park and green space inequities will persist until the systems, policies, practices, and norms that produced these inequities in the first place are redesigned to produce equitable outcomes.

Developing new parks and improving existing parks is crucial but will not on its own reverse park inequities and achieve population-level impacts. What's needed is a movement that:

• Brings focus and intentionality to health equity and racial justice in all its aspects.

• Elevates the voices, leadership, and power of those most impacted by green space inequities.

• Builds community capacity and social infrastructure to drive policy and systems change.

• Relies on best practices in communications and evaluation to support success.[84]

A new approach to achieving park equity can unlock transformation and usher in an era in which African American, Latino, and low-income urban communities are fair, just, and green.

REFERENCES

1. Wolch, J.R., Byrne, J. and Newell, J.P. (2014). Urban green space, public health, and environmental justice: The challenge of making cities 'just green enough.' *Landscape and Urban Planning*, 125, 234-244.

2. Jennings, V., et al. (2017). Emerging issues in urban ecology: Implications for research, social justice, human health and well-being. *Population and Environment,* 39 (1), 69-86.

3. Rigolon, A. (2016). A complex landscape of inequity in access to urban parks: A literature review. *Landscape and Urban Planning,* 153, 160-169.

4. Yañez, E., Aboelata, M.J., & Bains, J. (2020). Park equity, life expectancy and power building: Policy brief. Prevention Institute. https://www.preventioninstitute. org/publications/park-equity-life-expectancy-and-power-building-policy-brief

5. Rigolon, A., & Németh, J. (2018). What shapes uneven access to urban amenities? Thick injustice and the legacy of racial discrimination in Denver's parks. *Journal of Planning Education and Research*. https://doi.org/10.1177/0739456X18789251.

6. Prevention Institute. (2018). Countering the production of inequities: Ensuring the opportunity for health for all. https://www.preventioninstitute.org/node/2354

7. Byrne, J., & Wolch, J. R. (2009). Nature, race, and parks: Past research and future directions for geographic research. *Progress in Human Geography*, 33(6), 743–765.

8. Rigolon & Németh (2018)

9. Boone, C.G., Buckley, G.L., Grove, J.M. & Sister, C. (2009). Parks and people: An environmental justice inquiry in Baltimore, Maryland. *Annals of the Association of American Geographers*, 99(4), 767-787.

10. Rigolon, A., Browning, M., & Jennings, V. (2018). Inequities in the quality of park systems: An environmental justice investigation of cities in the United States. *Landscape and Urban Planning*, 178, 156-169.

11. Joassart-Marcelli, P., et al. (2011). Building the healthy city: The role of non-profits in creating active urban parks. *Urban Geography*, 32(5), 682-711.

12. Pincetl, S. & Gearin, E. (2005.) The reinvention of public green space. *Urban Geography*, 26(5), 365-384.

13. Rigolon (2016)

14. Yañez, Aboelata, & Bains (2020)

15. City of Portland. (2015). *Portland and Multnomah County 2015 climate action plan*. https://www.portland.gov/sites/default/files/2019-07/cap-2015_june30-2015_web_0.pdf

16. Yuen, T., et al. (2017). Guide to equitable, community driven climate preparedness planning. Urban Sustainability Directors Network. https://www.usdn.org/uploads/cms/documents/usdn_guide_to_equitable_community-driven_climate_preparedness-_high_res.pdf

17. Sister, C., Wolch, J., and Wilson, J. (2010). Got green? Addressing environmental justice in park provision. *GeoJournal*. 75:229-248.

18. Sister, C., Wilson, J. and Wolch, J. (2008). The Green Visions Plan for 21st century Southern California. Access to parks and park facilities in the Green Visions Plan Region. University of Southern California, GIS Research Laboratory and Center for Sustainable Cities, Los Angeles, CA, 17. http://greenvisions.usc.edu/documents/17_access_parks_and_park_facilities_in_the_green_visions_plan_region_081508.pdf

19. Boone, Buckley, Grove, & Sister (2009)

20. Rigolon, A. (2019). Nonprofits and park equity in Los Angeles: A promising way forward for environmental justice. *Urban Geography*, 40(7), 984-1009.

21. Rigolon (2019)

22. Rigolon, A., & Gibson, S. (2021). The role of non-governmental organizations in achieving environmental justice for green and blue spaces. *Landscape and Urban Planning*, 205, 103970.

23. Jennings, V., Baptiste, A. K., Osborne Jelks, N., & Skeete, R. (2017). Urban green space and the pursuit of health equity in parts of the United States. *International Journal of Environmental Research and Public Health*, 14, 1432.

24. City Parks Alliance. (2020). Investing in equitable urban park systems: Case studies and recommendations. https://cityparksalliance.org/resource/investing-equitable-urban-park-systems-case-studies-recommendations

25. California health and justice for all power-building landscape: A preliminary assessment. (2018). University of Southern California, Program for Environmental and Regional Equity. https://dornsife.usc.edu/assets/sites/242/docs/TCE_PLA_Memo2_FINAL.pdf

26. Rigolon (2019)

27. Rigolon & Gibson (2021)

28. Rigolon (2019)

29. Dorfman, L., Wilbur, P., & Lingas, E. O. (2005). Accelerating policy on nutrition: lessons from tobacco, alcohol, firearms and traffic safety. Berkeley Media Studies Group. http://www.bmsg.org/resources/publications/accelerating-policy-on-nutrition-lessons-from-tobacco-alcohol-firearms-and-traffic-safety-appendix-pdf

30. Dorfman, Wilbur & Lingas (2005)

31. Dorfman, Wilbur & Lingas (2005)

32. National Cancer Institute. (2000). *State and Local Legislative Action to Reduce Tobacco Use*. Smoking and Tobacco Control Monograph No. 11. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute, NIH Pub. No. 00-4804, August 2000. https://cancercontrol.cancer.gov/sites/default/files/2020-08/m11_complete.pdf

33. City Parks Alliance. (n.d.). Equitable park funding hub. https://cityparksalliance.org/funding-hub

34. Trust for Public Land. (n.d.). Landvote database. https://tpl.quickbase.com/db/bbqna2qct?a=dbpage&pageID=10

35. Eldridge, M., Burrowes, K., & Spauster, P. (2019). Investing in equitable urban park systems: Emerging funding strategies and tools. Urban Institute. https://www.urban.org/research/publication/investing-equitable-urban-park-systems

36. State of California (2016). *Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84)*. http://bondaccountability.resources.ca.gov/p84.aspx

37. State of California (2018). *Parks, Environment, and Water Bond Act of 2018 (Proposition 68)*. https://www.parks.ca.gov/?page_id=29906

38. City of Fresno. (2018). *Measure P: Clean and Safe Neighborhood Parks Tax*. https://fresno.legistar.com/View.ashx?M=F&ID=6417750&GUID=26B277A4-DE4F-4E1B-8F59-AB4734BA266E

39. County of Los Angeles (2016). *Safe, Clean Neighborhood Park, Open Space, Beaches, River Protection, and Water Conservation Measure of 2016 (Measure A Resolution)*. https://rposd.lacounty.gov/wp-content/uploads/2020/05/Measure-A-Resolution.pdf

40. County of Los Angeles (2018). *Safe Clean Water Program (Measure W)*. https://safecleanwaterla.org

41. City of Los Angeles (2021). Park fees. https://www.laparks.org/planning/park-fees

42. Milwaukee Public Schools Department of Recreation and Community Services. (n.d.). Ensuring equitable access to Milwaukee's playfields. https://milwaukeerecreation.net/MPS-Recreation/Resources/Playfields1/MilwaukeeRecreationPlayfieldEquity.pdf

43. Minneapolis Park and Recreation Board. (2021). Racial equity. https://www.minneapolisparks.org/about_us/racial_equity

44. City of Pittsburgh. (2019). Parks trust fund. https://apps.pittsburghpa.gov/redtail/images/8429_2020_home_rule_updated_1-31-20.pdf

45. City and County of San Francisco. (2016). *Park, Recreation, and Open Space Fund Charter Amendment, Proposition B*. https://ballotpedia.org/San_Francisco,_California,_Park,_Recreation,_and_Open_Space_Fund_Charter_Amendment,_Proposition_B_(June_2016)

46. Milwaukee Public Schools Department of Recreation and Community Services. (n.d.). Mission, vision, and values. https://milwaukeerecreation.net/rec/About/Mission-Vision--Values.htm

47. Minneapolis Park and Recreation Board (2021)

48. Eldridge, Burrowes & Spauster (2019)

49. County of Los Angeles (2016)

50. Eldridge, Burrowes & Spauster (2019)

51. SPARK School Park Program (n.d.). About. https://sparkpark.org/wordpress/about

52. Institute for Local Government. (2009). City of Merced – Partnering to provide physical activity through joint use. https://www.ca-ilg.org/sustainability-case-story/city-merced-partnering-provide-physical-activity-through-joint-use

53. Milwaukee Public Schools Department of Recreation and Community Services (n.d.)

54. Institute for Local Government (2009). Joint use agreements. https://www.ca-ilg.org/srts-toolkit/joint-use-agreements

55. City of Baltimore. (2015). Alley gating and alley greening process. https://crime.baltimorecity.gov/sites/default/files/Alley%20Gating_Greening%20Process.pdf

56. City of Chicago. (2020). Large lot program. https://largelots.org

57. Detroit Land Bank Authority. (n.d.). Site lots. https://buildingdetroit.org/sidelots

58. Trust for Public Land (n.d.). Green alleys. https://www.tpl.org/green-alleys

59. City of Milwaukee. (n.d.). $1 Vacant side lot. https://city.milwaukee.gov/DCD/CityRealEstate/VacantLotHandbook/VacantLots

60. County of Los Angeles (2018). Proceedings of the Measure A implementation steering committee. https://rposd.lacounty.gov/proceedings-of-the-measure-a-implementation-steering-committee

61. Minneapolis Park and Recreation Board (2021)

62. County of Los Angeles (2021). Grants administration manual for Measure A. https://rposd.lacounty.gov/wp-content/uploads/2021/02/March-2021-GAM-Measure-A.pdf

63. County of Los Angeles (2019). Safe, Clean Water program feasibility study guidelines, Updated 8/7/2019. https://safecleanwaterla.org/wp-content/uploads/2019/08/Feasibility-Study-Guidelines-20190807-FINAL.pdf

64. California Strategic Growth Council. (n.d.). Transformative Climate Communities. https://sgc.ca.gov/programs/tcc

65. California Strategic Growth Council. (n.d.). Affordable Housing and Sustainable Communities. https://sgc.ca.gov/programs/ahsc

66. State of California. (2008). *Statewide Park Development and Community Revitalization Act of 2008 (Assembly Bill 31)*. https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=200720080AB31

67. Christensen, J. (2016). Environmental bonds should equitably benefit all communities: Looking forward based on an analysis of Prop 84. University of California, Los Angeles, Institute of the Environment and Sustainability. http://www.environment.ucla.edu/perch/resources/images/report-on-prop-84-from-ucla-ioes-1.pdf

68. Davies, I. P., Christensen, J., & Kareiva, P. (2019). Assessing the flow to low-income urban areas of conservation and environmental funds approved by California's Proposition 84. *PLoS ONE*, 14(2), e0211925.

69. Christensen (2016)

70. Rigolon (2019)

71. Lau, C. (2018). Project highlight: Community parks and recreation plans in Los Angeles County. California Strategic Growth Council. https://www.sgc.ca.gov/resources/docs/20180208-CaseStudy_CommunityParksAndRecreactionPlansinLosAngeles.pdf

72. Houston Endowment (2021). SPARK parks increase park access in Houston. https://www.houstonendowment.org/news/spark-parks-increase-park-access-in-houston

73. Kondo, M. C., Hohl, B., Han, S., & Branas, C. (2016). Effects of greening and community reuse of vacant lots on crime. *Urban Studies*, 53(15), 3279–3295.

74. Branas, C. C., South, E., Kondo, M. C., Hohl, B. C., Bourgois, P., Wiebe, D. J., & MacDonald, J. M. (2018). Citywide cluster randomized trial to restore blighted vacant land and its effects on violence, crime, and fear. *Proceedings of the National Academy of Sciences*, 115(12), 2946–2951.

75. Branas, C. C., Kondo, M. C., Murphy, S. M., South, E. C., Polsky, D., & MacDonald, J. M. (2016). Urban blight remediation as a cost-beneficial solution to firearm violence. *American Journal of Public Health*, 106(12), 2158–2164.

76. South, E. C., Hohl, B. C., Kondo, M. C., MacDonald, J. M., & Branas, C. C. (2019). Effect of remediating blighted vacant land on shootings: A citywide cluster randomized trial. *American Journal of Public Health*, 109(1), 140–144.

77. Branas, et al. (2018)

78. South, E. C., Hohl, B. C., Kondo, M. C., MacDonald, J. M., & Branas, C. C. (2018). Effect of greening vacant land on mental health: A citywide randomized controlled trial. *JAMA Network Open*, 1(3), e180298.

79. South, E. C., Kondo, M. C., Cheney, R. A., & Branas, C. C. (2015). Neighborhood blight, stress, and health: A walking trial of urban greening and ambulatory heart rate. *American Journal of Public Health*, 105(5), 909–913.

80. Stewart, W. P., Gobster, P. H., Rigolon, A., Strauser, J., Williams, D. A., & van Riper, C. J. (2019). Resident-led beautification of vacant lots that connects place to community. *Landscape and Urban Planning*, 185, 200–209.

81. Gobster, P. H., Hadavi, S., Rigolon, A., & Stewart, W. P. (2020). Measuring landscape change, lot by lot: Greening activity in response to a vacant land reuse program. *Landscape and Urban Planning*, 196, 103729.

82. Gobster, P. H., Rigolon, A., Hadavi, S., & Stewart, W. P. (2020). Beyond proximity: Extending the "greening hypothesis" in the context of vacant lot stewardship. *Landscape and Urban Planning*, 197, 103773.

83. Gobster, P. H., Rigolon, A., Hadavi, S., & Stewart, W. P. (2020). The condition-care scale: A practical approach to monitoring progress in vacant lot stewardship programs. *Landscape and Urban Planning*, 203, 103885.

84. Prevention Institute (2018).

Promoting health, safety,
and wellbeing through thriving,
equitable communities.

preventioninstitute.org

PREVENTION
INSTITUTE