



RESEARCH REPORT

Investing in Equitable Urban Park Systems

Emerging Funding Strategies and Tools

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Contents

| | |
|--|-----------|
| Acknowledgments | iv |
| Executive Summary | v |
| Introduction | 1 |
| Reviewing the Benefits of Parks | 2 |
| Parks, Equity, and Placemaking | 4 |
| The Role of Funding for Park Equity | 6 |
| Opportunities for Increasing Park Equity through Local Approaches | 8 |
| Adopting Equity Frameworks to Guide Park Investments and Priorities | 9 |
| Using Participatory Tools to Encourage Park Equity | 10 |
| Using Impact Assessments to Estimate the Broader Benefits of Parks | 11 |
| Integrating Park Development Priorities into Master Planning Efforts | 12 |
| Launching Park Campaigns for Political and Community Buy-In | 13 |
| Applying an Equity Lens to Funding for Urban Parks | 15 |
| Equitable Allocation of Traditional Funding Models | 16 |
| Leveraging Private and Civil Society Resources | 21 |
| Capturing the Broader Benefits of Parks | 27 |
| Exploring Innovative Funding Models | 36 |
| Concluding Thoughts | 44 |
| Appendix: Funding Models Profiled in Report | 49 |
| Notes | 52 |
| References | 59 |
| About the Authors | 64 |
| Statement of Independence | 65 |

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Executive Summary

Urban parks and green space provide significant tangible and intangible benefits for cities and their residents. Quality parks support mental and physical health, serve critical green infrastructure functions, contribute to economic development, act as links in transportation networks, host cultural and social activities, and help give communities a sense of place. In short, they are treasured community assets. However, for residents and communities to take full advantage of these benefits, parks must be accessible and high quality. This means parks must be safe, well maintained, and designed and programmed to meet community needs (with community input). Historically, low-income neighborhoods and communities of color have faced barriers in accessing quality parks. To bridge these gaps and achieve “park equity” (all residents having reasonably equal access to quality parks), park leaders and their government and community partners are increasingly focused on directing park investments to communities in greatest need.

Working from the premise that all residents deserve similar levels of access to good parks—not simply as a matter of right but because of parks’ significant benefits for people’s health, the environment, and other outcomes—this report seeks to understand the multiple ways that communities are funding their park systems, paying special attention to parks serving low-income neighborhoods. In our review, we place emphasis on (1) understanding how equity is approached in raising and distributing funds and (2) elevating innovative, emerging models or approaches to funding parks, particularly those that capitalize on parks’ many benefits.

As with other investments in public infrastructure, parks can contribute to higher land values for nearby properties. This can in turn price out existing residents and businesses, particularly those renting and leasing. Gentrification is a complex issue, and this report is not intended to highlight strategies to prevent displacement. As we argue, however, park agencies and advocates have an important role to play in working with communities, government officials, and other partners to identify and mitigate the unintended consequences of park investments. Engaging communities as they plan and make decisions is particularly important for ensuring existing residents benefit from park investments. Some park systems are leading the way in equity conversations, demonstrating how cities can adopt a transparent, data-driven, community-led approach to and framework for improving equitable allocation of public resources.

Funding can be thought of in two ways: capital investments (acquiring and building new assets) and operations and maintenance (taking care of existing assets).¹ Most of the emerging, innovative funding opportunities are in the capital investment space; operations and maintenance will likely remain

primarily funded through more traditional sources (e.g., appropriations and dedicated taxes). To boost funding for operations and maintenance, parks might look to creatively manage existing funding and demonstrate their cobenefits, doing so to forge effective, ongoing partnerships with other departments and sectors and to build a coalition of community advocates in support of parks.

All funding models have equity implications: some are explicitly designed to address equity and meaningfully engage all residents, some risk deepening inequities and fueling displacement, and most depend on how they are used. This report profiles several funding models (table ES.1).

TABLE ES.1
Park Funding Models Profiled in This Report

| Model | Equity considerations |
|---|---|
| Bonds and voter referenda | Can adopt explicit equity goals and criteria and can help redistribute resources to areas in greatest need, especially when paired with equity frameworks |
| Dedicated property taxes | Raise reliable revenue for parks and help redistribute wealth but can also place burden on lower-income property owners (without policies to cushion) |
| Sales taxes | Raise reliable revenue for parks but generally viewed as regressive instrument because they place a greater proportional burden on lower-income consumers |
| Fees and earned revenue | Ration access to scarce assets and raise revenue from users with higher ability to pay but can also present barriers to lower-income residents and worsen inequities |
| Land and water conservation funds | Provide resources designed for projects in or adjacent to underserved neighborhoods and communities with lower-income residents |
| Developer fees, incentives, and concessions | If well designed and enforced, can help ensure public benefit from private development |
| Community and economic development programs | Use federal funds to incentivize projects designed to spur growth and investment in low-income neighborhoods (e.g., recreation facilities) |
| Conservancies, friends groups, and public corporations | Directly involve civic-minded citizens to advocate and fundraise for parks, and encourage good stewardship of community assets. Citywide systems can help redistribute resources. |
| Community ownership | Engages local community in the management of local park. If significant investments are needed, they may be beyond the capacity of the community to manage. |
| Philanthropic partnerships | Often have a pro-equity focus and can be used to engage community and develop accessible park assets |
| Water-quality and management through green infrastructure | Flood management and improved water quality are important goals not just from a sustainability and technical perspective but also from an equity one. Integrating green infrastructure for these objectives into parks directly benefits neighborhood properties. |
| Health care cobenefits | Parks and green space have beneficial impacts on mental health, obesity, and general physical activity for residents in surrounding communities. Health system partners can recognize and value these benefits through partnerships. |

| Model | Equity considerations |
|---|---|
| Transportation grants | Demonstrates parks' role as important parts of transportation networks, especially as links within active commuting chains |
| Climate change and disaster resiliency programs | Can mitigate the outsized negative effects of climate change and disaster recovery on low-income neighborhoods |
| Shared-use agreements with schools | Can be used to benefit resource-constrained communities by enabling efficient use or reuse of public resources |
| Land-value capture models | A way to enable land owners in a given community to pay for additional amenities in that area. May have limited application in communities without financial capacity to pay for increased services and amenities and can disenfranchise renters or commercial tenants. |
| Land trusts | Community land trusts are mostly established to protect affordable housing and conservation land trusts protect and manage neighborhood parks and green space. Advocates for each can work together to advance shared community goals. |
| Impact bonds and pay for success | Provide an opportunity to engage new funders on environmental projects and encourage governments and community members to think strategically about public investments and desired outcomes. |
| Brownfield conversions | Uses external funds to transform polluted industrial land into green community assets, potentially addressing environmental justice issues. |

Source: Authors' analysis.

Innovations this report uncovered are not individual funding sources but rather approaches, such as how communities are using an equity lens to shape funding decisions; how park systems are strategically leveraging new funding opportunities at the margins and helping to reallocate resources; and how partnerships, including those tied to the numerous social and environmental benefits of parks, are broadening parks' base of support. Although this report highlights many potentially replicable pro-equity funding models and approaches, most funding innovations are occurring on the capital expenditure side, and local economic and fiscal contexts have significant implications for accessing funding for operations and maintenance.

Our research on how equity features in funding options and decisions has led to 11 broad takeaways for park systems:

1. Cities are finding ways to quantify and demonstrate the impact and broader benefits of parks, and they are using these to inform policy and build advocate coalitions.
2. Federal funding opportunities have been an important source of funding for pro-equity projects, but some sources are shrinking. States and foundations could fill some gaps.

3. Strategic use of partnerships can help share costs, raise in-kind support, and allow governments to reallocate park resources where they are needed.
4. Blending and braiding different funding sources can help bridge capital gaps.
5. Cities with limited fiscal capacity may continue to struggle to secure sustainable funding for operations and maintenance. although adopting a strategy that embraces creativity, fosters collaboration, and creates a shared vision can help.
6. Large municipalities with rapid growth face particular challenges related to displacement and inequity but are uniquely positioned to tap private investment to fund parks and other public assets.
7. Traditional revenue streams (such as fees, dedicated property and sales taxes, and bond issuances) will likely remain an important source of funding for many park systems, especially for operations and maintenance, but new opportunities are available to build an equity focus into how these funds are raised and spent.
8. Engaging the community early and often can catalyze the community's sense of ownership, ensure parks meet their needs, and support sustainable management of park assets.
9. Citywide equity frameworks can help guide park priorities and investments in ways that engage and benefit historically neglected communities.
10. Addressing equity is complex and requires a multilayered approach, but parks can be one place where cities lead the way.
11. This is a learning journey. No community has all the answers, but practically all are eager to learn and to share with others.

The models profiled in this report and the takeaways offered are meaningless without park leaders and their partners in government and the community who are committed to addressing park equity gaps in their cities. This report is meant to be a resource in that effort and will be complemented by two forthcoming products from City Parks Alliance and Groundwork USA:

- A review of park investment strategies from several major park systems
- A toolkit for replicating approaches

These resources, along with continuous dialogue and collaboration with other communities, should help park leaders and allies learn about and test best practices and approaches to tackling equity challenges so that all residents are able to take advantage of the many benefits of urban parks.

Introduction

Parks are among the highest priorities for mayors of cities large and small (Yadavalli et al. 2019), and an increasing number of cities are acknowledging the role of their parks as critical community assets with broad benefits.² Parks provide tremendous value for individuals and communities and are common features of US cities and towns: the 100 largest US cities have a combined 2,083,608 acres of parkland spread across 24,024 parks serving almost 65 million residents.³ But not all people and communities are able to benefit equally from parks, with park quality, use, and access varying widely by geographic, racial, and socioeconomic factors. The inequities in park quality and access create barriers for some residents, including people living in low-income neighborhoods and people in communities of color (Cohen et al. 2016a). In response, park leaders; the communities they serve; and public, private, civic, and philanthropic partners are increasingly focused on strengthening park equity (box 1).

One key way to address park equity is through an inclusive approach to funding. This involves considering equity when examining the sources of park funding, how funding decisions are made, and the impacts of park investments on communities. Through an extensive literature review and interviews with 18 park leaders and partners across the US, this report provides a scan of the field and elevates examples of communities and parks that integrate a concern for equity as part of their funding strategies.

Although we aim to profile a wide range of funding models, sources, and strategies in a diverse range of cities and towns, we are unable to address all elements of park equity and do not recommend a single approach that all communities should follow. Instead, we look exclusively at funding for urban parks and green space and ask, “How can funding decisions advance or hinder park equity?”

Two forthcoming resources from City Parks Alliance and Groundwork USA will complement this report:

- A review of park investment strategies from several major park systems
- A toolkit for replicating approaches

BOX 1

Defining Equity

Three elements of equity are relevant for this report, and we define them as follows:

- **Park equity.** This considers whether all residents have reasonably equal access to quality parks. We are including both proximity (i.e., parks located close to residents) and quality (i.e., parks that are well maintained and appropriately programmed) in our definition. Quality also measures whether parks offer amenities and programming that are responsive to the needs of users (including being culturally appropriate). Park use is largely a dependent variable (i.e., if safe, quality parks are built close to residents, are located and designed with community engagement, and offer features and programming that residents want, our hypothesis is that those residents will generally use those parks).
- **Equitable park investment.** This refers to strategies that cities and communities can implement to guide capital investments and operations and maintenance expenditures to ensure the communities with the greatest need are prioritized in funding decisions.
- **Equitable development.** This refers to strategies implemented to ensure benefits from economic growth and development are realized by existing residents, particularly low-income neighborhoods and communities of color, and the negative impacts of development (e.g., displacement) are mitigated.

Reviewing the Benefits of Parks

For those who have access to quality parks, the benefits can be significant. When designed purposefully and with diverse activities, parks can yield a range of improved health outcomes for those who can access and use them (Cohen et al. 2016a). For example, a longitudinal study in Southern California found that access to parks helped reduce childhood obesity (Wolch et al. 2011). Other studies have found that parks and green spaces have a beneficial effect on mental health (Sturm and Cohen 2014), cognitive development (Dadvand et al. 2015), and positive social interactions that lead to better health and well-being (Cohen, Inagami, and Finch 2008).

In recent years, parks have been recognized for their contribution to sustainability because they can mitigate environmental challenges and build resiliency through green infrastructure. These approaches use nature-based solutions to address environmental and health challenges such as stormwater flood management, air quality improvement, and diffusion of the urban heat island effect.

Parks, including trails and green space rights of way, also serve as important community links, connecting residents with jobs, opportunities, and each other. Further, when park officials make intentional efforts to collaborate with communities in design and programming, parks can foster social cohesion and collective ownership of public space, which is essential for developing vibrant, thriving public spaces (Garrett and Stark 2017).

Yet users cannot achieve the full benefits of parks when they face barriers to access and activities.⁴ These challenges are further entrenched in communities of color and low-income neighborhoods where historic land use regulations and public investment policies limited people's access to amenities and opportunities.⁵ As a result, significant disparities persist in park size, stewardship, and programming across different communities (Wen et al. 2013; McKenzie et al. 2013). Park departments and local leaders need to actively identify where park inequity exists and take steps to address it, including as part of funding conversations.

As a determinant of access, proximity to parks is important for unlocking the potential benefits for their users. Research shows that people living farther away from parks are less likely to use them: one study found a 30 percent decline in a park's likelihood of use for users living more than three-quarters of a mile from it (Walker and Compton 2012). This is one reason many cities have embraced the goal of ensuring all residents live within a 10-minute walk from park spaces.⁶ As of 2018, approximately 70 percent of people in the 100 largest US cities live within a 10-minute walk to a park (McCabe et al. 2018). However, several perceived barriers related to quality also limit access to parks. Parks must be also be inclusive, with welcoming landscaping, programming, and features that enhance real and perceived safety (Lackey and Kaczynski 2009).

There are also important correlations between quality and access to urban parks and the income of the surrounding community. The first National Study of Neighborhood Parks found that parks in high-poverty neighborhoods were smaller (7.8 versus 10.0 acres), had less programming, and had more litter (Cohen et al. 2016a). Additional studies have revealed a range of potential explanations for barriers to park access and use in low-income neighborhoods and communities of color. Some of these include a lack of programmed activities that match the communities' interests (Cohen et al. 2016a; Cohen et al. 2016b), limited play areas for children (Cohen et al. 2016a), perceptions of crime (Committee on Environmental Health 2009),⁷ and dirtiness of the park and its surroundings (Hamilton et al. 2017). Additional factors that inhibit park access and use relate to the surrounding built environment, such as poor street connectivity and traffic (Kaczynski et al. 2014) and a suboptimal land-use mix in the surrounding areas (Frank et al. 2012).⁸

Parks, Equity, and Placemaking

Public places play an important role in shaping how individuals and families experience their communities and neighborhoods. These are the key elements of individual and social well-being that intersect with a community's collective life, highlight diverse expressions of common natural and cultural richness, and ground a sense of identity (Project for Public Spaces 2012). Communities engage with place in many ways, and this is activated through a community development tool called placemaking. Placemaking is the process of collaboratively creating public spaces that are meaningful to a community and that enhance residents' quality of life.⁹

Placemaking is the process of collaboratively creating public spaces that are meaningful to a community and that enhance residents' quality of life.

When parks are underutilized, unsafe, and poorly maintained, they can contribute to vacancy and blight in the community (Raya and Rubin 2006). These conditions negatively affect the surrounding community, creating perceived threats that discourage park use, especially for African American and Latinx residents (Cohen et al. 2016b). This is a challenge because it undermines the benefit parks bring of fostering social cohesion and collective ownership of public space (Garrett and Stark 2017).

The creation and maintenance of strong park systems can encourage economic prosperity, particularly in low-income or disinvested communities, which might have higher vacancy rates and a less-stable affordable housing stock (Sherman 2016). Infusing vibrancy back into public spaces transforms the perception of the place and can become a strategy for wealth building for existing residents and businesses. This happens when parks are built in historically blighted or neglected and vacant lots (e.g., community gardens in the Lower East Side of New York City).¹⁰ In this way, parks can help the community regain market strength and stimulate economic growth to spaces that previously received little attention and economic activity. This has happened in Baltimore, Philadelphia, and Detroit, for example.¹¹

A report on equitable development and culture from PolicyLink emphasizes, "Without equity, community redevelopment can improve a physical place but leave the people behind, stifle broad creativity, bring economic benefit only to a few, lead to a homogeneous community, or displace many" (Rose, Daniel, and Liu 2017). This is particularly concerning for low-income neighborhoods and

communities of color, where longtime residents may face the threat of being displaced or priced out as the neighborhood transforms. The challenge for governments and their community partners is how to make public investments that build wealth and position those investments as assets for existing residents while minimizing the displacement pressures that may follow the investments (box 2).

Although displacement resulting from gentrification remains a concern, particularly in large, rapidly growing cities (Richardson, Mitchell, and Franco 2019), research suggests that stagnation, disinvestment, and concentrated poverty, not gentrification, are the biggest problems confronting American cities, especially low-income neighborhoods and communities of color (Cortright and Mahmoudi 2014). Communities that have seen historic disinvestment are often the most at risk of further stagnation and lack the local fiscal capacity to adequately fund park and recreation assets (Joassart-Marcelli 2010). These are the places that are driven to creatively cobble together financing for parks and ensure investments are equitable so the risk of segregation is not perpetuated. Yet not all forms of economic development are desirable, and without strategies, policies, and the right partners in place, investment and growth can exclude existing residents, deepen inequity, and fuel displacement.

The challenge for governments and their community partners is how to make public investments in low-income neighborhoods and communities of color in ways that build wealth and position those investments as assets for existing residents while minimizing displacement pressures that may follow the investments.

Placemaking can mitigate these challenges by acknowledging the value of public space as a community asset and providing the community with an opportunity to define its identity and use. When done effectively, placemaking can help strengthen local economies, reduce crime, drive civic engagement, and improve the health and well-being of its users (Treskon et al. 2018).¹² To be inclusive and equitable, placemaking strategies need the community's active involvement and ownership.

When placemaking efforts incorporate equitable development practices, investments in community assets such as parks and green spaces enable the existing neighborhoods and cities to remain vibrant and inclusive. Moreover, across the US, local governments, nonprofits, and communities are increasingly recognizing the importance of considering park equity. However, as a staff member from one city's department of parks and recreation told us, "Equity is easier to say and harder to do."

BOX 2

Green Gentrification

Addressing inequities in public resource allocation is a worthwhile goal and focus of cities, but if policies are not in place to ensure lower-income residents (including existing residents) enjoy the benefits of those resources, public investments in these communities can inadvertently increase segregation and the deepening of racial and income inequities.

Gentrification is a complicated issue with causes and solutions that extend far beyond parks and green space and involve broader economic forces, public policies, and power dynamics. Gentrification as a term has become shorthand for the racial and economic inequities that persist in many cities and has in turn helped spur social and environmental justice efforts.

Green gentrification is the process whereby funding additional and improved greening activities can transform neighborhoods in ways that raise property values and quality-of-life measures. This in turn attracts development and wealthier residents while pricing existing residents, particularly renters, out of the area (Dooling 2009). Further, recent research finds that by potentially denying access to park amenities, green gentrification can perpetuate poverty and reduce health benefits for low-income neighborhoods and communities of color (Cole et al. 2017).

Several experts have proposed strategies for mitigating unintended consequences from green gentrification.¹³ To accomplish these, park agencies should play a key role in partnering with communities and city agencies before park investments and upgrades. This includes aligning with municipal affordable housing efforts and ensuring parks are designed and programmed in response to needs and desires of existing residents (i.e., active community involvement in the planning stage of housing development and neighborhood revitalization efforts). Some have proposed the “just green enough” strategy, which encourages investments in green infrastructure that meet community needs and sustainability objectives without becoming destinations that drive gentrification (Wolch, Byrne, and Newell 2014; Curran and Hamilton 2017).¹⁴ Proponents emphasize that this approach can and should be community led, with emphasis on community engagement to prioritize the needs of existing residents rather than appealing to prospective residents. However, by limiting investment to the minimum required, this strategy may perpetuate historic underinvestment in low-income neighborhoods while de-emphasizing the need for aligning park investments with other investments and policies that enhance neighborhood stability (e.g., comprehensive equitable development plans).

The Role of Funding for Park Equity

Parks can be catalytic for improving the health, well-being, and livelihoods of communities, but funding for them is often limited and competitive. Park departments need to secure funding for both capital projects (i.e. acquiring and developing parks and green space), and operations and maintenance

(including programming). Securing sustainable funding for the latter can be particularly challenging, and doing so is often the sole or primarily responsibility of local governments. Moreover, parks are especially vulnerable to budget cuts in lean fiscal times. For example, after the 2008–09 financial crisis, parks and recreation departments were among the first places where city leaders sought to trim budgets.¹⁵ These challenges are further exacerbated in low-income neighborhoods and communities of color, which often lack the capacity to raise additional revenue for parks or have limited fiscal buffers in times of stress—the very places that often have the greatest need for parks and green space to improve health and well-being (Joassart-Marcelli 2010).

To address persistent funding gaps and ensure investments are being made equitably, park departments need to partner with community residents and other government agencies as well as philanthropy and civic groups. In places where budget constraints are tight, perhaps as a result of economic conditions, leveraging these partnerships can help secure additional funding or maintain current funding as part of sustainability strategies. When forming these collaborations, however, park departments must monitor how and where the funding is being spent, enabling the same dollar to go farther in the communities with the greatest needs. Collecting data on equity and equity gaps is crucial to making informed decisions and persuasive arguments that rally support of the public and elected officials.

To yield the highest returns for communities, funding decisions should adopt equitable approaches that ensure investments are helping residents with poor access to quality parks. In this report, we identify funding approaches being implemented in cities and communities across the United States, looking specifically at innovative or emerging funding sources and strategies that leverage the cobenefits of parks. We pay special attention to equitable approaches in both how funds are raised (looking at how equitable different approaches are) and how funds are spent (looking at strategies and approaches that foster and support equitable park investments that benefit low-income residents and communities of color).

Opportunities for Increasing Park Equity through Local Approaches

Unlocking the value of park assets is critical for encouraging investments and can catalyze improved opportunities and quality of life for residents of low-income neighborhoods. Several promising approaches from across the country are recognizing parks’ potential to create value for the community and aim to engage communities in strategic decisionmaking on park resources (table 1). These approaches, when aligned with funding strategies either explicitly (as with equitable investment frameworks) or otherwise, can meaningfully redirect resources to bridge park equity gaps.

TABLE 1
Approaches to Bridging Park Equity

| Model | Potential champions | Placemaking considerations | Examples |
|--|---|--|--|
| Adopting equity frameworks to guide park investment and priorities | City government and agencies | Equity frameworks can also be used as instruments to measure park equity and indicate where there can be improvements | Miami-Dade County’s park access and equity strategy |
| Using participatory tools to encourage park equity | Park departments, park advocates, and community stakeholders | Drafting strategies collaboratively engages the community voice and targets community needs | Minneapolis’s community advisory committee process |
| Using economic impact assessments to value the benefits of parks | Park departments, advocates, foundations, and third party assessment partners | Identifying the economic benefits of parks can encourage community development investment in traditionally disinvested communities | Dallas’ impact assessment of the value of the park system |
| Integrating park development priorities into master planning efforts | City government, park and planning departments, community stakeholders | Coordinated city planning efforts can identify overlapping priorities and offer the opportunity to consider needs of community residents | Los Angeles’s Master Plan for Sustainable Parks and Recreation |
| Launching park campaigns for political and community buy-in | Mayors, city government, park advocates, and community stakeholders | Creates thoughtful partnerships to improve equitable access to parks across cities. Can leverage community voice for local action | Denver and the 10-Minute Walk campaign |

Source: Authors’ analysis.

Adopting Equity Frameworks to Guide Park Investments and Priorities

The beginning of the park planning process is an opportunity to assess the communities with the greatest needs for parks and green infrastructure and which communities are likely to most benefit from investment. Park agencies such as those in Minneapolis and Miami-Dade County have determined park resource distribution based on equity criteria that involve extensive stakeholder engagement and community input to ensure data on park access match the reality of the residents' needs. This information informs decisions on appropriating funding for capital expenditures and investments in programming as well as ongoing maintenance and operations.

In Minneapolis, since 2016, the Minneapolis Park and Recreation Board (MPRB) Budget has underscored racial equity planning as a key factor in funding decisions. In 2016, the city and MPRB passed a funding plan to equitably address the funding needs for parks, and the plan provided for \$11 million in funding each year for parks, totaling \$250 million over the next 20 years, to meet both urgent and ongoing needs.¹⁶ The MPRB's entire six-year Capital Improvement Plan and schedule for capital improvements across the park system is based on two MPRB ordinances that address equitable investments. These investments are determined by equity-based criteria matrix systems and accounts for over \$20 million annually in capital investments in parks and areas of the city that have the greatest needs. In addition, the MPRB's Recreation Center's discretionary funds, over \$3 million a year, are allocated across its 49 recreation centers based on an equity matrix for recreation programs and services that reach the most vulnerable. The MPRB is also carrying out the implementation of a Racial Equity Action Plan that addresses administrative policies and practices in hiring, access to vendor contracts, service delivery, and other areas of the park system.

Equity frameworks can also be used as instruments to measure the distribution of park benefits and indicate areas for improvement. The Miami-Dade County Department of Parks, Recreation & Open Space developed a park access and equity strategy that included health and public safety data to assess the cross-system benefits of parks for different groups of people. In conducting community outreach, Miami-Dade County and the city of Brownsville, Texas, have included engagement strategies in Spanish to ensure the Latinx populations were included in the process and to help determine where investments for parks were being directed. In a similar vein, in preparing their Comprehensive Plan, the City of Seattle conducted a Gap Analysis Report with sections on parks and park equity (Seattle Parks and Recreation 2017). The aim of the report was to identify the areas of need and to guide investments (both capital development and access) for future parks. These examples demonstrate how exercises that measure park and green space distribution can inform efforts aimed at bridging gaps and reducing disparities.

Using Participatory Tools to Encourage Park Equity

Engaging community leadership through community-based organizations, faith-based organizations, schools, community centers, or direct outreach can encourage a sense of ownership and stewardship of existing, redesigned, or new space. Many parks departments have developed advisory committees at the neighborhood level to facilitate these decisionmaking processes. When a community is actively involved in shaping the identity of the park space, its buy-in increases and the park is better utilized (Garrett and Stark 2017).

Participatory budgeting has been used to engage communities to ensure public funding decisions are equitable. In Minneapolis, the park system set aside money to create community advisory committees to engage residents in an ongoing and meaningful way. Park leaders drafted strategies collaboratively with the community. After securing funding, the Minneapolis Park and Recreation Board reengaged the community to determine how to spend the money. This process ensured the community's needs were included in both the planning and budgeting for parks. Other cities, including New York City, have begun exploring participatory budgeting as a broad tool for community engagement and ownership.¹⁷ Although this may require rigorous data-driven criteria, such as Minneapolis' equity metrics, as well as time and effort from the park department's staff, it can be a viable way of encouraging equitable park investments in cities with sufficient data and personnel capacity.

Although some park departments and projects may resist engaging in broader community development conversations (Rigolon and Németh 2018), others are recognizing the need to understand how their efforts can affect and be shaped by neighborhood development realities. Participatory tools can assist and help ensure equitable park investments connect closely with community-wide equitable development strategies. An exceptional example of this is the 11th Street Bridge Park project in Washington, DC, which incorporated a comprehensive equitable development approach to direct park incentives for the community's members. When complete, the park will span two divides, one physical (the Anacostia River) and one socioeconomic (the division between the predominantly white and high-income Capitol Hill communities and the predominantly black and lower-income communities around Historic Anacostia). To mitigate potential displacement, the project started work on a comprehensive equitable development plan before breaking ground. This plan, informed by many community meetings, was designed to ensure shared benefits with longtime residents (Bogle, Diby, and Burnstein 2016).

The City of Nashville created a citizen advisory board to guide the implementation of park funding. In 2002, the City Council appropriated \$35 million in capital investment for parks. The advisory board, made up of residents in the community, was actively involved in the outreach and planning processes. The board members had a voice in guiding the implementation of park investment, holding the parks department accountable by overseeing activities, and advocating for the community's greatest priorities (Raya and Rubin 2006).

Using Impact Assessments to Estimate the Broader Benefits of Parks

Parks and recreation departments as well as local park advocates have long been making the case that park assets yield broad benefits for individuals, communities, and the entire city. Bolstered by research studies, some of these stakeholders have begun building local evidence of the positive outcomes of their specific park system through impact assessments (exercises that seek to measure the cobenefits of parks across systems such as health care, the environment, economic development, and real estate). These assessments help demonstrate that parks offer a good return on public investment and can be useful tools for advocating for more funding or realigning existing funding. The National Recreation and Park Association, the Trust for Public Land, and others have conducted such studies in places such as Nassau County, New York; Des Moines, Iowa; and Philadelphia, Pennsylvania (City of Des Moines Parks and Recreation 2013; Trust for Public Land 2008, 2010). These reports have highlighted things like the measurable impact of parks on the city's property tax base, the ability of parks to provide valuable green infrastructure services, and the benefits of parks for public health.

More robust impact assessments can include equity indicators and scoring and break out the park system to look at the benefits of different types of parks (useful to prioritize investments).¹⁸ In 2016, the City of Dallas Department of Parks and Recreation partnered with HR&A Advisors, Verdunity, and the Trust for Public Land to produce an economic value and benchmarking study of the park system in Dallas. The purpose was to estimate the value of the park system, describe the rationale for future park investment, and examine best practices and opportunities to enhance the economic value of parks. This work found that Dallas parks contribute to a seven-to-one return in public investments (\$678 million annually) to the local economy. But they also found that Dallas spends around 40 percent less per resident than other cities for both park operations and capital improvements. Identifying data on investments in parks helped demonstrate where intentional equity investments could occur. To increase park equity and thus influence more equitable park investments, the report recommended that

Dallas Parks and Recreation needs to expand relationships and partner with community organizations, particularly in low-income neighborhoods, to ensure they have access to parks (HR&A Advisors 2016).

Although economic impact studies can be lengthy and resource intensive, the Dallas case demonstrates they can also be beneficial for identifying equity gaps. The more comprehensive these studies get (by including the role of community parks in building community identity, resiliency, and other less tangible but important factors), the more value they can provide, especially when making a funding case to voters and policymakers.

Integrating Park Development Priorities into Master Planning Efforts

Master plans are used by municipalities for several purposes: to identify land use and recommend land use changes, to reflect and help shape public priorities on urban space, and to support strategic planning efforts such as managing growth and realigning public services to meet changing needs. Not all master planning activities result in equitable investments, but when done thoughtfully and inclusively, they offer the opportunity to consider the needs of community residents; particularly those living in historically disinvested communities. Increasingly, parks and recreation departments are coordinating with city or county planning efforts to integrate parks in master plans, ensuring parks are considered in development decisions and public investments made through other agency budgets. Using an integrated planning approach can identify overlapping priorities of different sectors (e.g., parks and water, parks and transportation, etc.), which is helpful in making the case for more blended funding strategies.

In 2016, for example, Los Angeles County conducted the first wide-ranging evaluation of their park network as part of their master planning effort. This was the catalyst for a ballot measure on park funding, Measure A. The Master Plan for Sustainable Parks and Recreation was funded through a grant from the California Strategic Growth Council in 2012. Through a collaborative process with civic leaders, residents, business owners, and county officials, the Department of Parks and Recreation created an accompanying plan for the Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment. This acknowledged parks as critical infrastructure for the county. It focused on sustainability measures, developed metrics to identify park priorities, and examined the allocation of funding these efforts. The assessment brought attention to gaps in park distribution and prioritized planning in areas that lack parks and open space.

Miami-Dade County’s master planning process included similar activities. The Open Space Master Plan demonstrates the connectivity of different local government entities through park development and preservation (Miami-Dade Park and Recreation Department 2011). This plan, like the needs assessment in Los Angeles, creates criteria to identify the highest-need communities and works to advance park funding to improve the quality of life in these places. Being purposeful about including equitable development in master planning processes takes time (Miami-Dade’s process developed a multiyear equitable parks development strategy). In the long-term, however, matching priorities to investments can save costs (i.e., governments leverage funding for multiple priorities at once) and increase sustainability (i.e., operations and maintenance expenses could be integrated across sectors).

Launching Park Campaigns for Political and Community Buy-In

One tangible way to generate investments in parks and green space are campaigns to secure political and community support buy-in. Local campaigns, or regional or national campaigns that leverage and engage local stakeholders, can make a strong case for the value of community park assets.

To galvanize efforts on the regional scale, Kaiser Permanente and the California Wellness Foundation funded the HEAL Cities Campaign for Complete Parks Systems.¹⁹ The approach takes a health equity focus and illustrates indicators that can catalyze inclusive park access and utilization for city residents. Through the campaigns in Colton and Placentia, California, the parks departments engaged in a one-year process of engaging residents through advocacy workshops, planning meetings, and other forms of stakeholder consultation to get their input in the planning and implementation of more equitable policies. These policies primarily target strategies to improve park infrastructure and the quality of programming for park users. To ensure the process is inclusive, the HEAL Cities Campaign work is conducted in different languages and within the communities they serve. The campaign has branched out to cities in Colorado, Oregon, Maryland, and Virginia.

Efforts by national advocacy organizations to leverage networks of local champions can also help secure funding. For example, City Parks Alliance’s Mayor’s for Parks Coalition—the first national coalition focused on city parks—was launched in 2013 to galvanize support and funding for parks. Since its inception, it has helped deliver more than \$100 million in grant funding for parks and green space in low-income neighborhoods and has inspired several mayor-led efforts. The coalition has also advocated for the renewal of the Land and Water Conservation Fund and the expansion of the Outdoor

Recreation Legacy Partnership Program, a federal program that directs capital funding to projects in low-income urban communities to reduce disparities in access.²⁰

Further, the Trust for Public Land, the National Recreation and Parks Association, and the Urban Land Institute developed the 10-Minute Walk campaign. Recognizing the need for improved park access (one in three Americans do not have access to parks within a 10-minute walk, or approximately half a mile on flat land),²¹ these organizations challenged mayors to push for more and better accessible parks in their cities. Almost 200 mayors have signed onto the campaign, and many have been thoughtful about partnering with their parks departments to strategize ways to improve equitable access to parks in their cities. Although only a few mayors have been able to appropriate funds directly in support of the campaign, the mayoral support has fostered additional partnerships across government entities. In Denver, for instance, Mayor Hancock has been working with the City's Department of Parks and Recreation to promote community engagement activities to activate parks and increase programming.²²

Applying an Equity Lens to Funding for Urban Parks

Many urban park departments are already integrating approaches, such as those profiled above, to bridge park equity gaps. Although the tools and frameworks they use differ based on the context, needs, and capacities of their communities, they share a common goal of addressing inequitable barriers to accessing and using quality parks. However, equity is also an important consideration in terms of funding decisions. This section applies an equity lens to existing and emerging funding sources and strategies.

To secure resources to bridge park equity gaps, park systems may seek to increase their overall budgets, improve the equitable allocation of existing resources, or do some combination of the two. There are two distinct types of funding; each addresses separate aspects of park equity. **Capital investments** (acquiring and building new assets) helps address proximity barriers, while funds for **operations and maintenance** (taking care of existing assets) address quality. Community engagement can occur at both levels and includes active involvement in planning for new parks and ongoing engagement to ensure parks are continuing to meet neighborhood needs.

Currently, most park systems are funded through a combination of regular budget appropriations, dedicated taxes or bond revenue, and fees and service charges. These sources are frequently supplemented by state and federal grants, philanthropic donations and funding from public-private partnerships, special inter- and intragovernmental transfers, and a range of miscellaneous funding streams and arrangements (e.g., civic groups). Each of these has equity implications.

Park budgets on the whole have been growing slowly, rising to a median of \$82 in public agency spending per resident across the 100 largest cities in 2018 from \$73 in 2014.²³ But most of this increase is caused by a rise in capital investment rather than boosts for operations and maintenance. Further, despite the increase, many park systems still face persistent funding gaps including significant deferred maintenance, and they remain especially vulnerable to funding cuts (McCabe et al. 2018).

Traditional funding sources (taxes, fees, and transfers) will likely remain the primary source of funding for park systems, particularly for operations and maintenance. But innovations in blending funding and growing recognition of the broader benefits of parks present opportunities to (1) broaden the funding base for urban parks and elevate equity into funding conversations and decisions, (2)

strategically leverage limited local dollars to capture nonlocal funding, and (3) reallocate core funding toward pro-equity projects.

The appendix organizes the range of funding models and approaches profiled in a table so that they can be easily compared.

This section first considers the equity implications and opportunities of existing funding models, then looks at approaches to leveraging private and civic resources to enable reallocation of park funds toward pro-equity projects, partnerships that capture the broader benefits of parks and expand the funding base, and how emerging, innovative funding mechanisms relate to equity.

Equitable Allocation of Traditional Funding Models

For many communities, existing funding streams (such as bonds, fees, and dedicated taxes) are and will remain the primary source of funding for parks, particularly for operations and maintenance. However, as this section describes, there are a number of ways that communities can rethink these sources with a focus on equity.

Bonds and Voter Referenda

One of the most direct ways a local government can raise revenue for capital investments in parks and recreation facilities is by issuing general obligation bonds, sometimes with the explicit approval of voters through referenda. These voter-approved bonds provide an opportunity to affirm the value of parks and raise funding for special projects and initiatives (and occasionally to supplement core funding). Although bonds are valuable tools and can be structured to encourage equitable investments, they can also present sustainability challenges, particularly in the face of an economic downturn, and they generally emphasize new projects rather than addressing deferred maintenance or programming needs. Because bonds are debt instruments (governments are borrowing money), they must be repaid, and this has implications for local government debt.

Some bonds place equity front and center, adopting explicit equity goals and criteria for guiding equitable investments. In California, Proposition 68 allowed the state to raise over \$4 billion through general obligation bonds to fund parks in underserved neighborhoods and provide money for flood-prevention and clean water projects.²⁴ According to the National Recreation and Park Association, Proposition 68 “recognizes the underinvestment in parks, trails and outdoor infrastructure in

disadvantaged areas and communities; Favors disadvantaged communities for certain projects; Provides workforce education and training, contractor and job opportunities for disadvantaged communities; and Provides standards for outreach to minority, low-income and disabled populations, and tribal communities.”²⁵ It also requires public agencies that receive Proposition 68 funds to consider actions that engage diverse populations, such as creating new partnerships with state, local, tribal, private, and nonprofit organizations to expand access to green space. To counteract the effects of green displacement, Proposition 68 also prioritizes funding for projects that prevent displacement.

Dedicated Property Taxes

Property taxes are a common way for cities to fund their general budget, and special tax districts or dedicated property taxes can raise money for particular issues and departments, such as parks. Dedicated property taxes have the benefit of providing a relatively stable and reliable revenue source that is typically administered in a transparent and clear way (e.g., assessments that can be examined and appealed). Property taxes are generally considered more regressive²⁶ than income taxes but more progressive than basic sales taxes, because property tax burdens increase as the taxable value for property increases (even if the owner’s income does not). If land value in a neighborhood increases rapidly (e.g., from green gentrification), it could place severe burdens on long-time and low-income residents.²⁷ Communities can consider programs that shield low-income and older residents from significant land value and tax increases to minimize displacement.²⁸ Fees on real estate transfers enable taxation on the wealth of new homebuyers rather than burdening long-term residents. For example, a provision in Washington State allows counties to impose a real estate excise tax for the purpose of acquiring and maintaining conservation areas. So far, San Juan County is the only county in Washington that has adopted such a tax for this purpose (the buyer pays 1 percent of the property selling price).²⁹

Designating special tax districts or dedicated property tax funds for parks is a widely used strategy to generate sustainable and equitable funding for park systems. The Minneapolis Park and Recreation Board (2019), for example, derives over half of its revenue from property taxes. Property taxes can help redistribute resources to areas in greatest need. This is particularly true when they are paired with frameworks and strategies that emphasize using equity to inform funding decisions. Establishing a dedicated property tax may be preferable to advocating for an increased share of the general property tax revenue (i.e., a larger share of the general budget); the latter is a difficult endeavor that can pit parks against other critical services such as public safety and schools.

Proposition K in Los Angeles created a citywide property tax assessment district that generates \$25 million each year to fund the acquisition, improvement, construction, and maintenance of youth infrastructure (parks, recreation, and child care and community facilities).³⁰ Proposition K aimed to help mitigate inequities in access to these services: the highest-income residents in Los Angeles have, on average, 100 more park acres per 1,000 residents within a quarter-mile of their homes. Although Proposition K successfully awarded a large share of funding to neighborhoods with a high share of children in lower-income families, per capita funding was comparable between white and Latino neighborhoods, and few funding proposals were received from majority-black or –Asian-Pacific Islander neighborhoods (Wolch, Wilson, and Fehrenbach 2005).

Local governments have also used parcel taxes. Unlike property taxes, which place tax burdens based on a property's assessed value, parcel taxes put a flat tax or fee either per parcel, square foot, or acre, making the tax more regressive. For instance, there is a \$12 per parcel per year tax that helps fund the East Bay Regional Park District in California.³¹

Passing dedicated property taxes for parks carries the risk that officials will use these funds to supplant existing general fund allocations. Some jurisdictions have passed an ordinance or resolution to address this. In Ann Arbor, Michigan, guidelines stipulate that (1) if property tax revenue for the city increases, parks will receive increased general fund dollars equivalent to at least the same percentage increase as the overall increase for city departments, and (2) if property tax revenue decreases, parks will not see a greater reduction than the average department decrease.³²

Although for some communities, property taxes are a tried and tested vehicle for raising funds for local services and investments, in others, their relevance is limited because of state restrictions or an inability of the local population to shoulder an increased tax burden. Unfortunately, state restrictions on property taxes, beginning in the 1970s, have limited many cities' abilities to meet local service needs. As a result, some cities have enacted more regressive taxes, such as sales taxes and fees, that could increase racial and economic inequities by placing a higher relative burden on lower-income residents (Lav and Leachman 2018).

Sales Taxes

When cities and states are unable or unwilling to fund parks and recreation at sufficient levels from the general budget or when a more reliable funding stream is needed and property taxes are not an option, stakeholders might look to dedicated sales taxes to ensure a commitment of public funds. In Missouri,

one of many states that has limits on property tax revenue, several towns and cities have proposed or enacted general sales taxes for parks and recreation.³³

Some municipalities have implemented sales taxes on specific consumer goods to fund parks and recreation or diverted funds from existing consumer item sales taxes. For example, a \$0.03 per gallon fuel tax funds over 80 percent of Homer Glen, Illinois's Park and Recreation budget in fiscal year 2018–19.³⁴

However, sales taxes, particularly those placed on basic consumer items and “sin” goods such as alcohol, are generally viewed as regressive instruments because they place a greater proportional burden on lower-income citizens and are therefore not the most equitable way to raise public revenue. Sales taxes on luxury items would be exceptions to this, but we have found no examples yet of jurisdictions using luxury sales taxes to fund parks and green space.

Fees and Earned Revenue

One of the more contentious ways to raise revenue is instituting fees, including general use fees, to access parks and recreation facilities. Fees for accessing neighborhood parks can prevent lower-income residents from accessing amenities that could improve their health and well-being (Cohen et al. 2016a). Such access fees challenge the notion of parks as public assets, and they are subsequently rare for both practical and political reasons. Much more common, however, are fees for access to “special” recreation services, such as soccer fields, campsites, public fitness centers, pools, or indoor recreation facilities. Although common, such fees are not without controversy and have impacts on lower-income households. For example, families from cultures that use parks for social events and communal meals may be particularly affected by fees to reserve picnic shelters and food preparation areas (e.g., grills).

Although many park departments view fees as important supplements to their budget, not all fees are designed to raise significant revenue. Fees associated with reserving recreation fields, for example, may not cover the administrative costs of managing the fees; instead, they are used primarily as a way to fairly manage a scarce resource.³⁵

Fees are part of a wider basket of earned revenue sources that some park systems use. San Francisco Recreation and Parks, for example, expects to generate about a quarter of its \$231 million fiscal year 2018–19 budget from earned income. Understanding the equity implications of fees in a city with high income inequality, San Francisco offers scholarships for low-income households that cover between 50 and 100 percent of recreation program fees.³⁶ Moreover the city's parks department has

partnered with the San Francisco Human Service Agency to educate families living in public housing about the city's summer camps and enable them to register early for the very competitive summer camp program.

Fees and other revenue generated from services in parks can be part of a broader, system-wide strategy of reallocation. For example, parks in wealthier areas or in central business districts that generate revenue through unique activities (e.g., Boston's Post Office Square being built on top of a parking structure)³⁷ could earmark excess revenue (above what's required to maintain that particular park) for parks in low-income neighborhoods.

A primary purpose of community engagement is to identify how to program and design parks to ensure they meet the community's needs and interests, which in turn should lead to better-used parks and more active and empowered communities. Decisions around programming and fees should mirror the community's priorities and reflect the local culture. Fees can be a prohibitive barrier for low-income neighborhoods to access park facilities. Therefore, some parks have included free fitness classes, activities for children, musical performances, and other activities to incentivize the entire community and its visitors to participate. Some park systems need revenue from fees to provide an expected level of service while also serving populations with limited capacities to pay those fees. Solutions might include leveraging outside partnerships or sponsorships or enacting a tiered fee structure based on capacity to pay.

Land and Water Conservation Fund

Established in 1964, the Land and Water Conservation Fund (LWCF) within the National Park Service provides important resources for state and local park acquisition and improvement.³⁸ The LWCF is authorized at an annual level of \$900 million, funded by royalties from offshore oil and gas leasing, but Congress often diverts more than half of the funding for other purposes and only appropriated full funding for LWCF once in the fund's 50-year history.³⁹ The LWCF supports programs in two divisions: a federal side, which supports federal land acquisition, and a state side, which provides matching grants to create and expand parks, develop recreation facilities, and further local recreation plans. The state side has provided 42,000 grants totaling over \$4 billion, which have supported projects in 98 percent of the nation's counties to provide close-to-home recreation opportunities that are readily accessible to all residents.⁴⁰ Recently, the LWCF was permanently reauthorized,⁴¹ and there is strong bipartisan support for full and dedicated funding at \$900 million.⁴²

One program in particular provided targeted funding with an equity lens: the Outdoor Recreation Legacy Partnership Program (ORLP). Established by Congress in 2014, the ORLP is a nationally competitive grant program that delivers funding for projects in urban areas and, in particular, for projects in or adjacent to “neighborhoods or communities that are underserved in terms of parks and recreation resources and where there are significant populations of people who are economically disadvantaged.”⁴³ These awards help urban communities address outdoor recreation deficits by supporting projects that create new outdoor recreation spaces, reinvigorate existing parks, and form connections between people and the outdoors. The ORLP’s latest application period encouraged communities to think about the broader impacts of parks on adjacent neighborhoods, including the potential economic benefits of a project through job creation. Congress has funded \$70 million for ORLP thus far, leveraging an additional \$70 million in matching grants for a total of at least \$140 million to underserved communities across the country.⁴⁴

Many existing projects funded through ORLP reflect multistakeholder, community-owned efforts in low-income neighborhoods and communities of color. Johnson Oak Park in Bridgeport, Connecticut is one such project. A collaborative undertaking with support from local political leadership (including representatives of parks, schools, and economic development perspectives) and a strong community voice and engagement, this project aimed to reestablish an informal historic community focal point as a formalized community asset. The park, in a community with few park and recreation assets, established a relationship with an adjacent school as part of the planning and stewardship process. Funding from ORLP was blended with a variety of local and state government sources as well as philanthropy and another important federal program: Community Development Block Grants.

The LWCF and the programs within it, including the ORLP, provide valuable resources for communities seeking to build, expand, and maintain park assets in communities with outdoor recreation deficits.

Leveraging Private and Civil Society Resources

The ability to tap private resources can provide a potentially significant source of funding for parks and park systems. These resources generally will not replace public funding (although for some specific parks they may), but they can provide critical supplemental funding and enable strategic reallocation of park system resources toward neighborhoods with park equity gaps.

Developer Fees, Incentives, and Concessions

For some cities, particularly dense ones with significant growth, incentive zoning and density bonuses are useful tools for accomplishing a range of public priorities, including construction of affordable housing units, additional contributions to local schools or transportation assets, or creation and maintenance of public space or private space that has guaranteed public access. Indeed, this can be a cost-effective way to create and maintain assets with public benefits.

However, there are limitations on where this strategy can work, and there are concerns on the implications for equitable access. New York City's experience with privately owned public spaces offers a lesson on the benefits and limitations of this approach. A 1961 zoning revision allowed developers to add extra density to buildings in exchange for privately managed public space at the base of these buildings. This has enabled the creation of over 550 privately owned public spaces, typically in very dense areas with few public parks. However, this model only works in dense areas where developers are active (generally in existing pockets of wealth such as Midtown Manhattan), and it has drawbacks.⁴⁵ An audit by the NYC Comptroller found that many privately owned public spaces were not in compliance with city standards on access and amenities as stipulated in their agreements (New York City Comptroller 2017). Moreover, some have raised concerns over the equity implications of privately owned space designed for public use, including the prevalence of features designed to monitor and control behavior, such as surveillance (Németh and Schmidt 2009).

Models that require developers to “do their part” by contributing either directly or through a fund for the creation, preservation, and maintenance of parks is a popular mechanism for some cities, particularly those experiencing economic growth. In Houston, for example, the Parks and Open Space Ordinance requires any developer building single-family homes or apartments within city limits to dedicate land for private or public park purposes or pay a fee toward improvement of existing parks or acquisition of land for park purposes in the same area as the new development.⁴⁶ Toronto adopts a similar model whereby developers must pay development charges, which benefit parks in a variety of ways, and they must either dedicate a piece of land for park space or pay a park levy fee (City Parks Alliance and Minneapolis Park and Recreation Board 2015).

Having developers pay a fee instead of providing on-site park space in wealthy areas may allow the city to redirect those funds toward equitable investments in lower-income communities. For communities with both planned development and high community needs, community benefit agreements can secure developer commitments to affordable housing (including through contributions to community land trusts), green space, and other amenities for the community. In Detroit, an ordinance

requires that community benefits agreements are established for development projects seeking public support (e.g., subsidies, tax abatements, and enhanced public resources) above a certain threshold. This enhances equitable access to open space and housing.⁴⁷

Community and Economic Development Programs

NEW MARKETS TAX CREDITS

New Markets Tax Credits are a federal tax credit program that encourages private investment in businesses and real estate to generate economic activity and support community development in low-income neighborhoods. New Markets Tax Credits are provided to private investors through certified Community Development Entities. A few parks projects have successfully used New Markets Tax Credits for park and recreation projects:

- In the south side of Chicago, a community development entity called the National Community Investment Fund provided \$4.5 million in a New Markets Tax Credit Allocation and a \$1 million loan to help finance the Pullman Community Center, an indoor sports and community facility. Ultimately, the facility will be co-owned by the Chicago Park District and a local nonprofit.⁴⁸
- Over half of the cost for the Eastside Community Center in Tacoma, Washington, was funded by the Metro Parks District by sources other than the city's 2014 park bond, including New Markets Tax Credits as well as partnerships with City of Tacoma, Tacoma Public Schools, Tacoma Housing Authority, the Boys & Girls Clubs of South Puget Sound and the Greater Metro Parks Foundation.⁴⁹
- Rock Hill, South Carolina's, Department of Parks, Recreation and Tourism funded a \$11 million outdoor recreation center using New Markets Tax Credits and a blend of hospitality taxes, sponsorships, and other federal resources. Blending funding in this way enabled Rock Hill to add amenities to the project for minimal additional local cost.⁵⁰

Opportunity Zones,⁵¹ a new federal tax incentive, may also encourage developers to invest in recreation facilities and other park-like properties in lower-income communities, but because the program is designed to encourage investment in businesses (ideally ones that appreciate in value), it may be challenging to use them to directly improve public access to parks and green space. Given the current newness of the program, it's too early to review their use in practice.

COMMUNITY DEVELOPMENT BLOCK GRANTS

Administered by the US Department of Housing and Urban Development, Community Development Block Grants (CDBGs) provide grants for investments in urban communities that aim to increase the supply of quality affordable housing, improve community living environments, and expand economic opportunities. Although housing, economic development, and public services make up the majority of CDBG projects, CDBG funds have been tapped by several park systems. Indeed, HUD reports that in fiscal year 2018, over 323,000 people benefited from \$120.5 million in CDBG funding for parks and recreation projects.

Even as total CDBG funding has been steadily declining in recent years—from \$5.1 billion in fiscal year 2002 to \$3.4 billion in fiscal year 2018 and, accounting for inflation, dropping 80 percent from its peak in 1979 to 2016 (Theodos, Stacy, and Ho 2017)—the spending on parks and recreation projects has been slowly rising in relative and nominal terms. Although just 3.6 percent of CDBG spending in 2018 was for parks and recreations, this is still a sizeable figure: from fiscal year 2010 through fiscal year 2018, CDBGs have funded nearly \$900 million in parks and recreation projects. CDBGs have funded a range of projects across the country, including \$650,000 to acquire a neighborhood serving park in Denver, Colorado; \$60,000 to revitalize a park adjacent to an elementary school in Tucson, Arizona;⁵² and \$2.5 million for playgrounds in St. Paul, Minnesota (Harnik and Barnhart 2015; Padilla 2015).

Conservancies, Friends Groups, and Public Corporations

Civic-minded citizens with a passion for specific parks or entire park systems have long formed nonprofit associations and organizations to advocate and fundraise for parks as well as to be good stewards of these community assets, critical partners for the city, and a bridge between the government and communities. These nonprofit, community partners are important for more than just the resources they raise directly and their volunteer labor. They create a vocal constituency for increased public spending on parks and can be community-based thought partners and advocates for equitable investments in parks (including system-wide reallocations of resources to bridge equity gaps).

Although traditional park conservancies focus on a single park (e.g., Central Park Conservancy), citywide conservancies and conservancy-like organizations (e.g., park foundations) can raise significant funds for the entire park system and can be effective advocates for the equitable allocation of those funds across the system. A 2015 Trust for Public Land report found that the 41 most prominent conservancies (half of which were only launched since 2000) spent \$158.9 million in 2012 on

operations and capital construction and 50 percent more per acre than public park departments (Harnik and Martin 2015).

The Pittsburgh Park Conservancy, for example, has been an active advocate for and partner with city parks since its founding in 1996. Its relationship with the city was formalized under an official private interest partnership agreement to restore the city's parks and, to date, the Conservancy has raised over \$120 million for Pittsburgh parks, has completed 21 improvement projects, and is active in 22 parks. Interestingly, the Conservancy has adopted an important role at the intersection of public interests and the government with private and community interests, enabling the city to focus on core planning, operations, and development tasks while the Conservancy supports those efforts with fundraising, strategic partnership building, and thought leadership on initiatives like equitable funding allocation. The Conservancy has developed a locally relevant equity matrix that will be used to develop an investment strategy for park maintenance, rehabilitation and capital projects, and recreation programming.⁵³

Many cities have organizations that are similar to citywide conservancies, and they often adopt the role and language of a park foundation. Examples abound in cities large (e.g., Chicago Parks Foundation and Atlanta's Park Pride), medium (Anchorage Parks Foundation), and small. The Washington Park District Foundation in Illinois, for example, is a nonprofit affiliated with the park district that helps the park system tap private and corporate support for investments in community parks.⁵⁴

The "friends of the park" group model differs from conservancies in that they are typically all-volunteer organizations that focus on advocating for and supporting parks (such as through clean ups). Volunteer-led organizations can offer excellent returns on investments for cities that support them. Keep Brownsville Beautiful, for example (a campaign for the Texas city), leveraged \$75,000 in city general funds and \$67,000 in grants and awards to coordinate volunteer hours estimated to be worth over \$3 million.⁵⁵

Conservancies and volunteer groups that serve a single park in a relatively wealthy area risk exacerbating equity issues, particularly if they effectively advocate for public and private resources for their park to the detriment of parks in underserved communities. However, this need not be the case. As with improvement districts, these groups can enable resource-constrained city governments to reallocate some public funding from "adopted" parks to parks in greater need of investment. These groups can also serve as advocate allies on behalf of the park system as a whole and can work as collaborative partners with civic and community groups in communities of color and low-income neighborhoods to help address park equity challenges. For example, several large, well-resourced park

groups in New York City (e.g., the Central Park Conservancy and the Prospect Park Alliance) have forged financial and technical assistance partnerships with nearby parks including ones in low-income neighborhoods. A recent city program furthered these efforts, facilitating the use of labor and funds valued at \$15 million from eight well-resourced conservancies to rehabilitate parks in low-income neighborhoods.⁵⁶

Community Ownership

Most discussions of community “ownership” of public assets are meant in the figurative sense (an appreciation that a park is embedded in the community while still being managed and owned by the city) but in rare cases, local parks may be actually owned and managed by the community. Crispus Attucks Park in the Bloomingdale neighborhood of Washington, DC, for example, is run by the volunteer-run nonprofit Crispus Attucks Development Corporation, which is composed of neighborhood residents. The park is owned by the corporation on behalf of the community, and the corporation “does not pay taxes to the city, nor does it receive city funds, except through the occasional grant.”⁵⁷ The park, free and open to the public, is premised on the principle that community residents should manage and maintain this asset. This model is likely rare because of the tremendous organizational capacity and social collaboration required of the local community and the need for a public partner willing to accommodate this arrangement. The leasing or licensing of public space to communities is another option and is the approach taken by most of New York City’s more than 550 community gardens.⁵⁸

Philanthropic Partnerships

Philanthropies with place-based missions and community development objectives are increasingly interested in the role of public parks as placemaking opportunities and critical public assets. This often involves large investments in signature parks, typically in downtown areas or other centrally located places (parks that all citizens, at least in theory, can access). Philanthropies have also played an important role not just as funders of public space but as thought leaders on what public space can be and how communities can access, engage, and shape those spaces.

Significant philanthropic capital investments in individual parks and green space abound, including two investments by the George Kaiser Foundation in Tulsa, OK: the Gathering Place (box 3) and Guthrie Green, a highly programmed public park that doubled as an economic development project. The foundation oversees a community outreach process that involves residents, business owners, cultural

organizations, and city officials to suggest ideas for programming weekly. The park has helped revitalize a historic arts district, sparked renewed interest in a local arts-cultural museum complex, created a destination for local visitors, and served as a gathering place for citywide cultural events including Tulsa's annual celebration of Native American Day.⁵⁹

BOX 3

The Gathering Place in Tulsa, Oklahoma

Championed and principally funded by the Tulsa-based George Kaiser Family Foundation, the project is a large park (66.5 acres currently with a plan to expand to 100 acres) on the banks of the Arkansas River to the south of downtown. The project cost \$465 million and has been described as “one of the largest and most ambitious public parks ever created with private funds.” The park contains careful landscaping and a plethora of activities and programming for families and individuals ranging from wetland gardens and cafes to creative playgrounds and public art. The Kaiser Foundation gifted the entire project to the River Parks Authority, a public agency, but in so doing it also set up an organization (with a \$100 million endowment) to operate and maintain the park for the next 99 years.

Perhaps the most notable thing about the park, however, is not its size or cost, but rather what it aims to symbolize and do. Tulsa remains highly segregated by race and class, with poorer, black neighborhoods in the north and wealthier, white neighborhoods to the south. The park was intentionally designed to bridge that divide and provide a space where diverse communities, and particularly children, could freely interact in play and discovery. The park is situated near the center of the city (albeit on the southern edge) and is along a major arterial road that connects the north with the south. It also offers free shuttles that provide access to the park from Tulsa's far-flung neighborhoods, intentionally enabling access to nonadjacent neighborhoods, including those with low car ownership and poor transit connectivity. Bridging the segregated divide was an explicit goal and reflected in the park's aspirational name and design. Although the size, location, and context are unique, the Gathering Place could provide a template for new parks that can bridge historic divides. Whether it is successful at this goal and at serving communities of color remains to be seen.^a

Notes:

^a Patricia Leigh Brown, “Transforming Tulsa, Starting With a Park,” *New York Times*, August 10, 2018, <https://www.nytimes.com/2018/08/10/arts/design/tulsa-park-gathering-place.html>; “About,” Gathering Place, accessed March 1, 2019, <https://www.gatheringplace.org/about>.

Philanthropies have also made significant system-level commitments to parks and open space. For example, the Rosalinde and Arthur Gilbert Foundation has provided support for equity work in Los Angeles looking at access to urban parks for children of color (Garcia, Strongin, and Brakke 2011), and William Penn Foundation is committing \$100 million to support Philadelphia's Rebuild Initiative, a

citywide government and philanthropic infrastructure plan to invest and “transform city parks, libraries, recreation centers and playground to enhance community life in neighborhoods.”⁶⁰ William Penn, like many private foundations investing in urban parks, is seeking to advance equity in the allocation of funds across neighborhoods and with respect to the impacts of those investments on the current residents of those communities.

Capturing the Broader Benefits of Parks

Studies demonstrate that the benefits of parks extend beyond intangible values. Several park systems have attempted to estimate the annual value of their park and recreation systems. Philadelphia, for example, estimated in a 2008 report that its system generates nearly \$2 billion annually in public value, including \$16 million in cost savings for city government (stormwater management, air pollution mitigation, and community cohesion), and \$1.15 billion in cost savings to citizens from direct use and health value. Such estimates can serve as useful advocacy tools demonstrating the broad value of parks. As the report notes:

For the first time parks can be assigned the kind of numerical underpinning long associated with transportation, trade, housing and other sectors. Urban analysts will be able to obtain a major piece of missing information about how cities work and how parks fit into the equation. Housing proponents and other urban constituencies will potentially be able to find a new ally in city park advocates. And mayors, city councils, and chambers of commerce may uncover the solid, numerical motivation to strategically acquire parkland in balance with community development projects. (Trust for Public Land 2008, 13)

Demonstrating the benefits and shared value of parks to broaden their funding base is a relatively new but promising area of inquiry. This section looks at successful, emerging efforts to capture the benefits of parks and green space to leverage additional funds for investment in parks. Although many of these examples and funding models do not explicitly address equity in planning or execution (even if they are implemented in parks serving low-income neighborhoods and communities of color), they are profiled here because they could easily be integrated into park equity strategies and offer opportunities for securing diverse funding for bridging park equity gaps.

Water Quality and Management through Green Infrastructure

One of the most well established areas for partnerships with parks is green infrastructure for water management. According to the Environmental Protection Agency (EPA), green infrastructure for water can help mitigate drainage and flooding problems (which in turn can address public safety and mosquito

breeding nuisances) and help local municipalities meet regulatory requirements for stormwater volume and pollutants. Projects such as installing rain gardens, bioswales, retention ponds, and pervious pavers, as well as planting native vegetation and tilling and maintaining urban soil, can reap significant benefits for the watershed (US EPA 2017).

Several examples have made the financial link between green infrastructure in parks and benefits to the watershed. Funding could come from water and drinking water utilities or stormwater management agencies; from flood control districts; or from special taxes or fees, such as a water surcharge, a wetland mitigation fee, or a stormwater management fee. Olympia, Washington, for example, instituted a 3 percent increase to their tax on utilities (water, lighting, and heat) in 2004 to pay for the acquisition, construction, and maintenance of parks, open space, and sidewalks.⁶¹

Many wastewater and stormwater utilities have regulatory requirements to comply with the Clean Water Act and manage pollution, turning to green infrastructure solutions as an affordable and equally effective alternative to “gray infrastructure” (e.g., tunnels and storm drains) while providing broader community benefits.⁶² In some cities, political leaders are encouraging a preference for green infrastructure. In Seattle, for example, a City Council Resolution and Executive Order established green infrastructure as a “critical aspect of a sustainable drainage system” leading to the development and implementation of a Green Stormwater Infrastructure Implementation Strategy (City of Seattle 2015).

There are several large-scale examples of communities implementing projects that serve dual uses as water management infrastructure and public space in low-income areas:

- Enhancements to Tujunga Spreading Grounds, a flood management area in Los Angeles, will increase the reliability and sustainability of the local water supply (delivering 4 billion gallons of recharge on an annual basis), improve water quality, and provide a newly constructed passive recreation area open during normal dry-weather conditions. The project is managed by the Los Angeles Department of Water and Power and the Los Angeles Flood Control District and is funded by local resources and a \$3.2 million grant from the Integrated Regional Water Management Plan under Proposition 84 (a California State bond).⁶³
- In Brownsville, Texas, park and civic leaders are developing a “waterplein park,” a project modeled after Copenhagen’s flood-control parks. The total project (over three phases that include constructing trails, completing support work, and building the park itself) blends almost \$9.2 million in funding from sources including Community Development Block Grants, the Brownsville Community Improvement Corporation, the Public Utilities Board, Cameron County Drainage District 1, the Metropolitan Planning Organization, the Texas General Land

Office, the Texas Water Development Board, the Federal Emergency Management Agency, the Army Corps of Engineers, and the Department of Interior US Geological Survey. For Brownsville, the project represents not only an innovative use of parks as green infrastructure but also an innovative approach to leveraging and blending additional resources in the interest of an underresourced local community.⁶⁴

Some park projects have also leveraged funding from their state's Clean Water State Revolving Fund. This Environmental Protection Agency fund, managed by individual states, provides low-interest funding for stormwater management projects. The city of Camden tapped New Jersey's revolving fund to access a \$2 million grant and \$3.6 million low-interest loan to capture 100 million gallons of stormwater per year through, among other things, construction of 17 new raingardens and creation of a new 5.5-acre riverfront park (US EPA 2016). Under the programs, states can reward high-priority projects with other incentives including additional subsidization. Several states have opted to provide such targeted assistance in the form of principal forgiveness, negative interest, and grants to encourage green infrastructure projects. The EPA reported that from 2009 to 2015, states provided more than \$70 million in additional subsidization for green infrastructure projects (US EPA 2015).

Health Care Cobenefits

Academic consensus is growing that parks have large public health benefits. This is supported by significant evidence that parks and green space can positively impact mental health and well-being (South et al. 2018), obesity (Black et al. 2012), and general physical activity. Investing in parks can be a cost-effective endeavor: from a health outcomes perspective, relatively small upstream investments can avoid significant downstream health costs. The first National Study on Neighborhood Parks made the link explicit, noting that per capita spending on parks in the country's 100 largest cities is less than 1 percent of the per capita spending on health care.

Some hospitals have begun making investments in parks and green space with intended health benefits, although rarely has this been made explicit with funding linked to specific, measurable health outcomes. Nonprofit hospitals are required to make investments in "community benefits" to retain their tax status. These investments include things like charity care and research but can also include community projects such as parks and green space as well as community engagement in parks' planning, design, and programming. Organized communities that can demonstrate the health benefits of parks could potentially advocate for some of these funds from their local hospital.

Examples of hospitals that have made park and green space investments include Bon Secours Hospital's urban farming investment in west Baltimore,⁶⁵ neighborhood beautification work done by Sinai-Grace Hospital in Detroit,⁶⁶ Maine Medical Center's grant of \$300,000 to the City of Portland for community parks,⁶⁷ and the inclusion of a five-acre park and enhancements to green space in a John Hopkins Hospital-supported mixed-use project adjacent to the hospital in east Baltimore.⁶⁸ The University of Miami-Miller School of Medicine is lending its technical expertise to Miami-Dade County in support of physical and nutritional evidenced-based recreation activities for children to improve their health and fitness.⁶⁹

BOX 4

Red Rock Trail System

Recognizing that public access is a key part of its conservation mission, the Freshwater Land Trust, which serves Central Alabama, set out to help build what has become a 100-mile network of trails, bike lanes, and sidewalks known as the Red Rock Trail System. The trust partnered with the Jefferson County Department of Health to envision a park project that contributed to the health and active transportation of the communities it served. This collaboration led to a successful application of a Centers for Disease Control "Communities Putting Prevention to Work" grant that funded system planning.

The trail network has been implemented piecemeal, with the trust working with affluent communities that had the capacity to self-raise funding for segments in their community, thereby establishing a proof of concept. This enabled the trust to attract funders to expand the system to low-income neighborhoods. This expansion was enabled by federal grants (e.g., Transportation Investment Generating Economic Recovery) and local match commitments from partners, including the Jefferson Department of Health. The trail system has also been included in the Regional Planning Commission of Greater Birmingham's Long Range Transportation Improvement Program, making the trails eligible for regional transportation funding.

Once the trails are established, the trust transfers them to local jurisdictions, which are then responsible for operations and maintenance, although the trust has been exploring a maintenance endowment for communities that have limited fiscal capacity.

Source: "How 750 Miles of Trails Are Connecting Birmingham," *Birmingham Magazine*, June 11, 2018, https://www.al.com/bhammag/2018/06/how_750_miles_of_trails_are_co.html; <http://freshwaterlandtrust.org/about-red-rock-trail-system/>.

In recognition of the beneficial impact of green space as part of recovery, some hospitals have also begun integrating green space into their design for new and existing facilities. The University of

Vermont Medical Center in Burlington installed a green roof, vegetable garden, and plaza on the roof of an oncology center which, although designed for patients and staff, is open to the public.⁷⁰ The University of Vermont Medical Center also provided the city with funding to build fitness stations along the length of the eight-mile Burlington Bike Path for its rehabilitation.⁷¹ Leveraging health system funds for parks can also extend to progressive public health agencies (box 4).

Some health care system partners have made significant investments in parks and green space in numerous communities over the span of many years. Kaiser Permanente, for example, is a supporter of the Park Prescription initiative that links access to parks and nature with physical and mental health outcomes. They have also provided millions of dollars to improve park access⁷² and invest in park assets such as fitness zones⁷³ in the communities that they serve.

The challenge in the health care space is not demonstrating the benefits of parks on health (which is relatively widely accepted) but rather tapping into the complicated health care funding system to reward parks for those health benefits they contribute to. Broader efforts to realign health care spending around quality of care and enabling upstream investments in preventative care and social determinants of health are promising trends in a realignment toward investing in health outcomes rather than on outputs. In the near term, however park officials can look to health system organizations as partners on specific capital, community engagement, and programming investments and as important strategic advocates for increased park funding (rather than as sources of sustainable capital for operations and maintenance).

Transportation Grants

The US Department of Transportation offers grants to invest in transportation projects across the country. A core source of federal transportation funding is the Transportation Alternatives program which makes funds available for a range of eligible activities relevant to parks including pedestrian and bicycle facilities, community improvement activities such as historic preservation and vegetation management, and recreational trails.⁷⁴ The Transportation Alternatives program is one of the largest funding sources that can be flexibly used for these purposes and offers the opportunity to leverage a reliable stream of funding for long-term park projects.

Previously known as Transportation Investment Generating Economic Recovery (TIGER), another important grant program for states and localities is now known as Better Utilizing Investments to Leverage Development (BUILD). TIGER provided over \$7 billion for 554 projects since 2009, with \$350 million disbursed for active transportation projects (e.g. trails and areas for walking, and biking) and a

further \$1.3 billion disbursed for road and transit projects with a walking or biking element. Although trails and active transportation projects remain eligible under the new BUILD grants, recent analysis suggests that BUILD funding is being directed to road projects and rural areas more than under TIGER (Transportation for America 2019).

For communities that can demonstrate robust commuting through parks, greenspace, greenways, and bike paths, transportation dollars can help improve the quality of their trail assets. Projects located in urban areas have a required local or state match (federal funds can cover up to 80 percent of total cost), which could be an impediment to municipalities with limited local resources. Some projects have been able to strategically match transportation dollars with other nontraditional park sources, including health system funding (box 4).

The East Bay Greenway Project in Oakland, California is a half-mile bike and pedestrian path that forms the first segment of a planned 16-mile mixed-use path along the existing heavy rail alignment (BART). The project demonstrated the demand and need for bicycle and pedestrian transportation infrastructure and developed a project, with community support, that serves many purposes: connecting commuters to mass transit and opportunities, linking a series of small parks, and improving access to schools and other destination. The project was funded by two local and regional funding sources as well as TIGER funds. The Greenway serves areas that include low-income neighborhoods of color and that have high shares of youth and seniors and limited existing access to alternative transportation infrastructure (Urban Ecology 2008).⁷⁵

Climate Change and Disaster Resiliency Programs

Parks and urban forests provide significant benefits in the fight against climate change. It's estimated that trees in urban areas of the United States provide \$18.3 billion in environmental services value every year, including \$4.8 billion worth of carbon sequestration (Nowak and Greenfield 2018). Some urban forests have carbon sequestration capacities comparable to tropical and temperate forests (Wilkes et al. 2018), and the total carbon storage capacity of trees and soil in US urban parks was estimated at 177 million tons by a 2010 study (Nowak and Heisler 2010).

Many cities, states, and regions of the country are taking steps to reduce carbon emissions and raise revenue for climate change mitigation and adaptation investments. The Regional Greenhouse Gas Initiative, a collaboration of nine states in the Northeast and mid-Atlantic, has raised \$4 billion in financial benefits, with each state reinvesting revenue, primarily in energy efficiency and renewable energy investments (Hibbard et al. 2018). Investing only a fraction of these funds in urban parks would

enable significant reforestation. California's large cap-and-trade plan has devoted a portion of funding for urban and community forestry programs in disadvantaged communities (using a state-designed designation framework). In the 2018–19 budget, for example, the state allocates \$20 million for urban greening programs out of a total budget of \$1.46 billion.⁷⁶ If New York State, for example, invested just 5 percent of the revenue it generated from the Regional Greenhouse Gas Initiative in the past three years in urban parks, that would still add up to \$22.6 million.

Similarly, parks can play an important role in helping communities build resiliency to natural disasters. Evidence suggests that investing in mitigation and resilience reduces costs for disaster response and recovery: for every \$1 spent on mitigation, taxpayers save \$6 in recovery (Stauffer, Theal, and Foard 2018). A 2014 symposium hosted by the Federal Emergency Management Agency (FEMA) in the aftermath of Hurricane Sandy prominently highlighted the important role parks and open spaces can play in enhancing communities' resilience to natural disasters. The event highlighted projects such as playgrounds that capture stormwater and provide education on rain gardens, as well as coastal landscape designs that enhance resiliency and sustainability.⁷⁷

FEMA also is the primary federal provider of resources for disaster resiliency and offers three grant programs for mitigating disasters and building resilience (hazard mitigation, flood mitigation, and predisaster mitigation) that require up to a 25 percent state cost share.⁷⁸ Some of these funds have been used for projects in parks and public space. In California, FEMA provided a \$4.65 million grant to the East Bay Regional Park District, City of Oakland, and the University of California Berkeley to thin trees and brush in order to reduce fire danger and increase biodiversity.⁷⁹

Some communities have also received funding for parks through CDBG's disaster recovery program. East River Park in New York City was partially funded with CDBG disaster recovery funds after Hurricane Sandy.⁸⁰ New Orleans received millions from both CDBG and CDBG disaster recovery funds to develop and maintain parks, bike paths, and tree canopies (Harnik and Barnhart 2015). Shelby County, Tennessee, received \$60.5 million as part of the national disaster resilience competition. Shelby County will use the funds to develop floodplains and wetlands and "build a network of green infrastructure projects that will increase resilience to future flooding while increasing amenities, such as trails and recreation areas, for area residents."⁸¹

For some cities, investing in resiliency requires committing significant local funds. For example, the planned Northwest Resiliency Park in Hoboken, New Jersey, will become the city's largest park and will integrate green infrastructure and stormwater management measures to mitigate flooding. The park will be built in the middle of a FEMA-designated special flood hazard area and is designed to manage at

least 1 million gallons of stormwater, supplementing two other nearby resiliency parks with 650,000 gallons of stormwater runoff capacity between them. The park, which includes recreational fields, community space, and playgrounds, is expected to cost about \$90 million in total, with the city approving over \$50 million in funding in March 2019.⁸² The initial acquisition of the property cost \$36 million and was financed by a low-interest loan from the New Jersey Environmental Infrastructure Fund Program, which includes 19 percent principal forgiveness for the green infrastructure components, as well as money from Hoboken's Open Space Trust Fund.⁸³

Shared-Use Agreements with Schools

Parks and schools share many common goals and infrastructure needs and, as public assets embedded in their communities, make natural partners. Although they don't bring additional revenue to the table, at least not directly, shared or joint-use agreements are a partnership that enables effective use of public resources and helps boost park access at little to no cost.

These agreements between parks and schools enable schools to easily access park resources, while the public can access recreation facilities on school property outside of school hours. This approach enables both schools and parks to efficiently leverage each other's resources and collectively work on behalf of the community. Making schoolyards publicly accessible outside of school hours has been an important strategy for many cities interested in ensuring all residents have access to nearby park and recreational facilities. An added benefit of such a strategic alliance might come in the form of jointly advocating on behalf of spending that benefits both parties. ChangeLab Solutions (2009) offers a checklist for developing a joint-use agreement, and City Parks Alliance has sample joint-use agreements in its PARKXCHANGE Resource Library.⁸⁴

Fresno, California; Miami-Dade County, Florida, and New York, New York present three examples of creating joint-use agreements between parks and educational institutions:

- In Fresno, where health issues such as diabetes and heart disease are common and few park and recreation facilities exist, community leaders identified a solution to the park access gap. Working with community partners and the mayor, they created a joint-use agreement allowing weekend activity programs hosted at 16 schoolyards and open to the public.⁸⁵
- In 2018, the School Board of Miami-Dade County opted to execute a joint-use agreement with Miami-Dade County to make designated park sites and school sites available to both parties for recreational and educational purposes.⁸⁶ This built upon 20 existing smaller agreements in

Miami-Dade County as well as findings of the Florida Shared Use Task Force that recommended greater use of such agreements.⁸⁷ Although this agreement has been relatively smooth so far, environmental testing that uncovered higher-than-expected arsenic levels in the soil at a baseball field raised some concerns from school board members and underscored the need for increased testing and remediation.⁸⁸

- The Schoolyards to Playgrounds program in New York City has renovated hundreds of schoolyards and opened them to the public outside of school hours. This effort, led by the Department of Parks and Recreation in partnership with the Department of Education and the Trust for Public Land, aims to accomplish the joint goals of improving recreation facilities on school grounds, expanding recreation options available to the public, and strengthening the relationship between schools and parks.⁸⁹

Exploring Innovative Funding Models

Park leaders, like other public and community leaders, are continuously looking for creative ways to fund parks, especially models to bring additional public benefits. These innovative funding models tap new sources of resources for parks and generate other benefits in the process. Land-value capture models help ensure those benefiting from public investments are those paying, land trusts help address gaps in housing affordability, impact bonds elevate measurement of impact, and brownfield grants address legacies of pollution and environmental injustice.

Land-Value Capture Models

Land-value capture tools are premised on the idea that if property values in a given place increase because of government action or investment, the government should be able to capture some of that increased value for reinvestment there or, in some cases, for redistribution elsewhere in the city. It has been described as a policy approach “rooted in the notion that public action should generate public benefit.”⁹⁰ Although many land-value capture tools and models exist, this report will focus on two tools: tax-increment financing (TIF) and improvement districts.

TAX-INCREMENT FINANCING

TIF is a popular but contentious tool that allows governments to capture increased tax revenue (above some baseline) in a designated district and reinvest all of that “additional” revenue back into projects benefiting that district. TIF districts are often created after a formal designation process whereby an

area is found to be blighted and the government determines that development will only occur with public investment or subsidy. Once designated, investments are made in the district (often debt financed in anticipation of future tax revenue), and private investment is hoped to arrive. Should that occur, and property value in a given district increases, the government captures all of that additional tax revenue to pay off the acquired debt and to make additional investment in the area with the remainder (Dye and Merriman 2004).

Investments in TIF districts to spur and maintain private investment include basic infrastructure (roads, sewers, and schools) in anticipation of development as well as neighborhood amenities such as parks and recreation facilities. In Bloomington, Indiana, which currently has six TIF districts,⁹¹ TIF bond funds have supported improvements such as playground replacement, new lighting and amenity features at existing parks (e.g., benches), and streetscape improvements.⁹² In Chicago, where one in four properties are in TIF districts,⁹³ the city has raised at least \$37 million since 2014 in TIF funding for parks in TIF districts, including \$4.3 million approved in 2017 for multipurpose athletic fields at Whitney Young High School in the city's ethnically diverse Near West Side neighborhood.⁹⁴

In Atlanta, a special Tax Allocation District (another name for a TIF district) was created in 2005 to provide local funding for the BeltLine project, an ambitious 25-year and \$2.8-billion park and sustainable development project centered around a 22-mile trail, park, and streetcar loop around the city. Unique among Atlanta's TIF districts, all incremental tax goes to fund the infrastructure of this specific project.⁹⁵ Given the enormity of the project, city and community leaders planned to use the BeltLine as an opportunity to use public park and transportation funding to leverage private investment along the route. A primary goal was to use bonds issued by the TIF to raise \$240 million for affordable housing by 2030. Weaker-than-projected economic growth meant that the BeltLine TIF has only raised around 10 percent of that goal.⁹⁶

TIF has a mixed track record, and critics have raised a slew of concerns about its value and whether it is a good use of government funds (e.g., would that growth have occurred anyway without government subsidy? Does TIF simply move development from non-TIF districts to TIF districts?).⁹⁷ For the purposes of this report, however, the most important critiques are related to equity. For example, if a TIF decreases the funds that would otherwise be in a government's general account (either by encouraging existing businesses and residents to simply move to the TIF district or by diverting funds from development that would have happened otherwise), this is a net loss for the city, leading to reduced funding for other non-TIF parts of the city. But if a TIF district is created with clear government incentives and explicit goals to drive up land value and tax revenue in a given area, existing low-income residents in a TIF district may be at severe risk of displacement if the government does not take steps to

significantly mitigate this (e.g., rent controls or tax freezes for existing residents and businesses). TIF districts are at best an imperfect tool to fund park investment in low-income neighborhoods and communities of color and, at worst, models that undermine the goal of helping existing residents invest in a community asset.

LOCAL IMPROVEMENT DISTRICTS

Improvement districts are a model that allows property owners in an area to share the costs of infrastructure improvements in that area. Although TIFs are created by governments and do not typically require property owners to pay an increased tax rate (against the baseline), improvement districts are voluntarily created by a majority or subgroup of property owners and require additional payments by those owners on top of their tax burden. Improvement districts can pay for things like improved sidewalks and streetscapes, stormwater management, and road surfacing. Many communities have more generalized, ongoing business improvement districts, which also fund increased security, garbage collection, and programmed activities within the district.

Importantly, local improvement districts do not cover all costs related to developing, constructing, and managing a given piece of infrastructure that property owners are requesting. In practical terms, improvement districts typically focus on helping to finance capital improvements. However, many improvement districts that support park assets also include funding for ongoing operations and maintenance (often including programming).

Improvement districts have limited application in communities without financial capacity to pay for increased services and amenities and therefore, from an equity perspective, have limited application in many of the communities in greatest need of park investment. However, governments can use them to leverage private investment in central business areas, enabling public funds to be redistributed to other park projects with greater need and equity implications.

For example, Bryant Park in New York City had suffered from decades of neglect until the Bryant Park Corporation, a private nonprofit founded in 1980, launched a renovation and reopened the park to the public in 1992. By assuming responsibility for renovating and operating the park from the cash-strapped government (Bryant Park's operating budget was six times higher under the corporation's management than the city's), the Bryant Park Corporation was able to allow New York City to reallocate park funding elsewhere and allow the public to enjoy this central amenity. Today, the Bryant Park Corporation still operates the park as an agent of the city, providing sanitation, maintenance, and programming.⁹⁸

In predominantly residential communities, an alternative to the business-focused improvement districts has emerged: green benefit districts. This new model, popularized in San Francisco where more than a dozen currently exist, offers an opportunity for property owners in a defined area to voluntarily vote to increase their taxes to pay for park improvements in their district.⁹⁹ Although a precedent exists in the form of both improvement districts and special school tax districts, green benefit districts are unusual in the park space. They elevate community engagement in park planning, development, and management by putting money on the table and encouraging a sense of ownership.

As noted, although improvement districts may have limited application to low-income neighborhoods, when implemented in wealthier areas, they can help park systems redistribute resources. However, these districts also raise some concerns. They are formed through votes by property owners, which disenfranchises renters and office and retail tenants that may pay through rent increases. Although these districts can offer discounts to nonprofits or other property owners who might be struggling, there may still be concern that the districts are tools for wealthy landowners to compel renters and less wealthy landowners to pay for personal projects. When improvement districts don't simply raise funds for parks to be transferred to the government and remain in public operational control, it can raise significant concerns about accountability and transparency as well as the private management of public assets. When representatives of large businesses, rather than community residents, are those managing the asset, this concern is particularly acute and suggests the need for significant transparency and public oversight.

Land Trusts

There are two primary forms of land trusts: community land trusts, mostly established for affordable housing, and conservation land trusts for parks and green space. However, they employ similar tools and approaches, and both seek to empower communities to own and manage their neighborhood's future.

Community land trusts are nonprofit community-based organizations that seek to develop community wealth through the stewardship and development of land. Although they have been primarily used to develop commercial, retail, and especially affordable housing projects, they can also be used to acquire, preserve, and enhance green space for community use. In many cases, community land trusts will acquire land that it makes available for low-income residents to rent or buy at affordable, long-term rates.

Community land trusts can be created in anticipation of future affordability pressures, including those fueled by investment in public infrastructure such as parks. In response to gentrification and affordability concerns, residents in Houston's historically black Third Ward, for example, are turning to a city-funded community land trust to help make housing permanently affordable. A recent \$34 million renovation of the neighborhood's Emancipation Park occurred at a time when median home prices began soaring in a community where 75 percent of residents were renters.¹⁰⁰ The community land trust is designed to help cushion against these rising land values.

Conservation land trusts are nonprofit organizations, often community owned, that hold rights to land for conservation purposes within cities. They can include a range of green space including community gardens, parks, and natural areas. They protect open space in perpetuity and take the responsibilities of land ownership while handing communities responsibility for the vision and management of these assets.

The Baltimore Green Space is a land trust that preserves open space, primarily community gardens for residents in surrounding neighborhoods. They have partnered with the City of Baltimore to shape policy around open space preservation and management through three main initiatives: (1) the Community Open Space Preservation project, (2) the Dollar Lot program, and (3) a land census. These initiatives help leverage financing for the open space. For instance, the Dollar Lot program allows Baltimore Green Space to purchase property owned by city for \$1 and conserve it for community use. Baltimore Green Space operates at a small scale, so replicability and effectiveness could be challenging for other localities. This model may work better in places, like Baltimore, that have other nascent greening projects in the city and that have received government buy-in. If the conditions for a land trust exist, this can be a promising way to address equity in park management and encourage community engagement (Bird 2012).

Only a handful of projects have successfully merged the affordable housing goals of community land trusts with the green space preservation goals of conservation land trusts as part of the same project. One early example is Troy Gardens in Madison, Wisconsin. The Madison Area Community Land Trust and the Urban Open Space Foundation, a conservation land trust, partnered with other organizations to preserve a 31-acre urban site with the goal of preserving both affordable housing and open space (Campbell and Salus 2003).

Forterra, a land trust in Washington State, has made an explicit link between housing and public space, observing that the homeless crisis in Seattle has led to encampments on public green space, often in low-income neighborhoods with high park needs.¹⁰¹ This has encouraged them to advocate for

affordable housing policies and to boost supply through its Strong Communities Fund, which has raised millions from private investors to build affordable housing projects in gentrifying areas.¹⁰²

Notably, planning for the 11th Street Bridge Park project in Washington, DC led to the formation of a community land trust for affordable housing, anticipating rising land value rises in advance of the major project. The 10-year goal of the land trust is to “acquire 1,000 units of rental and homeowner housing at sustainably affordable prices for low- and moderate-income residents” of the local community. This type of strategic coordination between affordable housing advocates and park partners represents what’s possible when both groups work together to ensure that park investments become community assets rather than triggering green displacement (Bogle, Diby, and Cohen 2019).

Land trusts can offer communities a unique opportunity for empowerment, both in terms of their aspirations for themselves and their families (e.g., stable, secure, affordable housing) as well as their aspirations for their community (e.g., preserving and building a community asset).

Impact Bonds and Pay for Success

Emerging out of the social services field, impact bonds (also known as “pay for success”) are financing strategies that shift financial risk for innovative solutions from a traditional funder—usually government—to a new investor, who provides up-front capital for a project. If an independent evaluation shows that the program achieved agreed-upon outcomes, then the investment is repaid with interest by the traditional funder. If not, the investor takes the loss. Well-designed impact bonds enable communities to think broadly about how upstream interventions can lead to downstream benefits across multiple sectors.

To date there have been only a few experiments expanding this model to environmental outcomes, creating environmental impact bonds (EIB). The first successfully launched EIB project was created in Washington, DC, by DC Water with the goal of using green infrastructure to complement gray infrastructure to reduce stormwater runoff in response to a consent decree.¹⁰³ Other projects thus far have also focused on water quality and stormwater management.

The Chesapeake Bay Foundation launched an effort to support cities in the Chesapeake Bay watershed to develop EIBs that reduce runoff and contribute to other local and regional benefits.¹⁰⁴ Given the practical and political challenges related to building an EIB, only one project of this cohort, in Baltimore, Maryland, has launched, though stakeholders in Hampton, Virginia, are also exploring it with the foundation’s support.

Perhaps the most ambitious application of the EIB model has been in Atlanta, where an under-development EIB is planning to fund six projects related to the larger BeltLine initiative, including two park projects (Mozley Park and Grove Park) and a right-of-way green street project. The project as a whole aims to measure stormwater volume capture as a target measure in addition to other environmental and economic outcomes of interest.¹⁰⁵

Although EIBs have generated interest from several investors, governments, and environmental advocates, it is too soon to determine if their use will become widespread or if they will live up to their transformative potential. They do, however, provide an opportunity to engage new funders on environmental projects (including green infrastructure projects in parks) and encourage governments and their partners (including, importantly, community members) to think strategically about public investments and desired outcomes.¹⁰⁶ Other types of impact bonds and pay for success projects that could support parks could include an impact bond with health outcomes. This could make an explicit and verifiable link between park investments and community health and, if outcomes are achieved, could be used to secure longer-term health system funding.

A few enabling conditions determine the appropriateness of impact bonds. First, because impact bonds are complicated, costly models to put together, projects need to reach a sufficient scale to be worthwhile (most social impact projects are at least \$5 million). Second, there needs to be a dedicated revenue source for repaying investors (i.e., the government should annually appropriate funds into a holding account). Lastly, there should be a demonstrated funding gap or other barrier that prevents a government from funding the program directly (e.g., innovation risk or the evidence-building structure of impact bonds). This is a nontraditional source of financing for localities, and it can be particularly useful for communities that are open to innovative solutions and have resources available in the long term but that have a strong preference for a model that commits public funds only if a predefined outcome is achieved.

Given their high transaction costs and long development timelines, however, they may not be the best model for many communities, and they do not solve sustainable funding challenges because they are designed to fund programs that are only a few years long (usually three to seven). Park systems considering impact bonds should think critically about whether they're the best model to address their specific funding need.

Brownfield Conversions

Brownfields are polluted former industrial sites that some jurisdictions, including those with industrial legacies and limited green space, are looking to as potential sites for parks and green space. Given their heritage and current status, significant decontamination efforts need to be undertaken not only to ensure they are suitable for public use but also to mitigate public health risks in their current state. If the site is publicly owned, the US Environmental Protection Agency's Brownfields Program provides direct funding, awarded through a competitive process, to assist in cleaning up these spaces.¹⁰⁷

In an effort spearheaded by a small local nonprofit, Cincinnati, Ohio, saw polluted properties adjacent to Mill Creek converted over several years into the Mill Creek Greenway Trail. The project emerged from a community vision that the creek and the land around it could be transformed from a physical safety and environmental hazard into a prized community asset that provided improved connectivity and recreation opportunities. The project was built with the support of numerous local partners, including the Cincinnati Health Department, as well as financial and technical support from the EPA, National Park Service, and Groundwork Trusts (Groundwork USA 2017).

In Yonkers, New York, brownfield conversion to a park asset was seen as a catalyst for revitalizing downtown business and residential neighborhoods. This project, which included brownfield assessment and mitigation, design and construction of a new waterfront park, and river habitat enhancements, was supported by multiyear EPA funding and was approached by the city as an economic development project as well as an environmental and green space one. The Yonkers Greenway project unlocked multiple sources of funding: state Department of Transportation funding followed EPA brownfield funds and state environmental funds (Groundwork USA 2017).

Some states have their own programs to fund the cleanup of brownfield sites and conversion to productive uses, including parks. Connecticut's Department of Energy and Environmental Protection, for example, supported the conversion of a former factory site in Norwich into Riverside Park using \$2.1 million in state grants and \$200,000 in local funding.¹⁰⁸

Concluding Thoughts

Parks provide tremendous value to cities, communities, and individuals. They have profound intrinsic value and are also increasingly recognized for the quantifiable benefits they bring in the form of social, health, economic, and environmental outcomes. They serve as community gathering places, sites for recreation and exercise, green infrastructure, and places to recharge mental health. In short, they are, or can be, treasured community assets. Unlocking this value and ensuring that support for parks is sustained requires money, leadership, and stewardship.

As with other investments in public infrastructure, parks can drive or contribute to displacement through rising land values and by pricing out existing residents, particularly renters. Although this report cannot offer an easily replicable roadmap for addressing gentrification, it does emphasize how equity should be a critical factor in park funding decisions and how different instruments, models, and approaches can exacerbate or mitigate it. Understanding the importance of park equity and developing frameworks that have significant community input and that prioritize equitable park investments is a step in the right direction toward an inclusive city. Indeed, some park systems, such as those in Minneapolis and Los Angeles County, are leading the way in equity conversations, demonstrating how cities can adopt a transparent, data-driven, and community-led approach to improving equitable allocation of public resources.

Identifying funding models and approaches that support park equity is critical. This report presents a number of ways that park systems across the country are being funded and considers each with equity, sustainability, and replicability considerations in mind.

Although not every model in this report is appropriate for every city, we hope that they help inspire creativity and encourage discussion. More interesting than the funding models themselves, perhaps, are innovations in approaches: how communities are using an equity lens to shape funding decisions; how park systems are strategically leveraging new funding opportunities at the margins, helping reallocate resources; and how partnerships, including those tied to the cobenefits of parks, are broadening the base of support and funding for parks.

Parks are only one priority among many for local governments. Although for some park systems, the most appropriate course of action may be advocating for a larger share of public funds, for others a better approach may lie in leveraging new, external resources, including through grants and partnerships. For all parks, however, ensuring funds are more equitably and effectively spent is a worthwhile goal.

Our review has pointed to 11 broad takeaways for park leaders, advocates, and their partners:

1. Cities are finding ways to quantify and demonstrate the impact and broader benefits of parks and ways to use that information to inform policymaking and build advocate coalitions.

There's growing evidence and recognition that parks have significant cobenefits, including those identified in this report. However, putting actual numbers in front of voters and policymakers (e.g., Dallas' Economic Value Study) can prove extremely powerful at conveying the myriad financial benefits to the city and residents. Strides to incorporate equity into impact assessments will help ensure these studies don't simply encourage park investments that generate the highest property tax boost. These assessments, and broader ongoing conversations with other sectors (e.g., with city water utilities and local hospitals) not only tap new funding for projects but also develop a strong coalition that can advocate for parks.

2. Federal funding opportunities have been an important source of funding for pro-equity projects, and although some sources are shrinking, states and foundations are filling some gaps.

Federal funding has and will remain a significant source of grant funding for park and greenspace capital projects. Moreover, this funding is often ideally designed for projects addressing equity gaps because of funding requirements that favor or restrict eligibility to low-income neighborhoods. However, some funding sources like Community Development Block Grants have been shrinking in real and nominal terms; others, like the Department of Transportation's BUILD program, have reoriented away from active transportation projects in urban areas. In some places, state programs and foundations are offering funding along with an explicit emphasis on equity, helping to fill the gap of equitable urban park funding.

3. Strategic use of partnerships can help share costs, raise in-kind support, and allow reallocation of park resources.

Not every city has a thriving business community or group of concerned citizens with the capacity and willingness to take stewardship of a public park. But every city likely has some ability to forge partnerships with private and civic actors. These partnerships won't necessarily bring new money into the budget but, by tapping non-public resources for a portion of the park department's portfolio, that department can then focus on reallocating resources elsewhere. Partnerships as simple as granting civic groups the right to clean and manage a city-owned public plot is a very cost-effective way of activating new public space. Other partnerships, such as Fresno's shared-use agreements between parks and schools, provides a low-cost way to improve park access and also can help gain an important ally to advocate for the improvement and maintenance of parks.

4. **Blending and braiding different funding sources can help bridge capital funding gaps.**
Leveraging local funds to access matching funds from federal or state government, philanthropy, or private partners has been a strategy for improving the inventory of park assets, especially for small and medium sized cities with limited local resources. Tapping available funds for such goals as disaster resiliency, transportation connectivity, and economic development can provide critical support for capital projects, and offer the opportunity to blend different funding sources to meet the gap.
5. **Cities with limited fiscal capacity may continue to struggle to secure sustainable funding for operations and maintenance, although adopting a strategy that embraces creativity, fosters collaboration, and creates a shared vision can help.** Most of the documented funding innovations are occurring on the capital expenditure side while communities continue to rely largely on local, traditional revenue sources for operations and maintenance. For places with high park investment needs and limited fiscal capacity (e.g. economically stagnant or declining cities with weak tax bases) there are few options for raising additional local revenue. As one report summarized it: “to the extent that poor communities have less ability to generate local revenues through tax increases, solutions that rely only upon local revenues do not change the inherent inequities between rich and poor communities” (Raya and Rubin 2006). At the same time, deferring investments in maintaining and managing parks (while fiscally responsible in the short-term) can further exacerbate inequities. Solutions require creativity (e.g., rethinking the roles of parks), collaboration across different agencies and partners, and a consistent and shared vision from public and civic leaders to fuel efforts.
6. **Large municipalities with rapid growth face particular challenges related to displacement and inequity but can also tap private investment to fund parks and other public assets.** Models such as incentive zoning, density bonuses, and developer fees take advantage of economic growth and high rates of private investment by directing a portion of that investment towards developing and maintaining public assets. This funding, if managed transparently, with community engagement, and through a pro-equity framework can buffer against the negative consequences of economic growth (e.g., displacement) and help ensure all residents are able to benefit from the resources and opportunities generated through growth.
7. **Traditional revenue streams (such as fees, dedicated property and sales taxes, and bond issuances) will likely remain an important source of funding for many park systems, especially for operations and maintenance, but new opportunities are available to build an equity focus into them.** Both in terms of how local funds are traditionally raised and how they are spent,

communities are increasingly building-in an equity focus. For example, places like Washington, DC, which raise revenue through property taxes are insulating low-income and senior residents from sharp rises in land value, and cities like San Francisco are helping low-income residents access special park services that normally have fees or other financial barriers. On the allocation side, California's Proposition 68 raised \$4 billion through general obligation bonds explicitly to fund parks in underserved neighborhoods, bridging park equity gaps.

8. **Engaging the community early and often can catalyze a sense of ownership, ensure parks meet community needs, and support sustainable management of park assets.** Fostering strong community-level participation is critical for equitable and inclusive development. Even when parks are built, if they are not designed and activated with the residents' interests in mind, they will be underutilized. When the community is involved in planning and decisionmaking processes, park amenities can better mirror the community's priorities. For some stakeholders we interviewed, community engagement from pre-planning through operations was essential for ensuring the utility and sustainability of a park asset while others indicated engagement was most beneficial at select points and in a structured way. Efforts to engage specific communities (e.g. adopting both Spanish- and English-language park advisory committees) ensures a more inclusive park planning process.
9. **Citywide equity frameworks can help guide park priorities and investments in ways that engage and benefit historically neglected communities.** Applying frameworks and tools that measure park use and neighborhood inclusion can help identify gaps in park equity. These instruments are useful for generating data and matrices that help inform decisionmaking on where best to focus investments. As important as the tool itself are the conversations that these tools spark related to the (uneven) distribution of park resources, assets, and benefits and the importance of addressing gaps.
10. **Addressing equity is complex and requires a multilayered approach, but parks can be one place where cities lead the way.** Although this report focused on funding to ensure equitable access to high quality parks and green space, equity touches a wide range of topics including public hiring and contracting practices, access to economic development opportunities, and enabling and encouraging participation in civic discourse. Acknowledging both the complexity of the challenge and the urgency of addressing it, cities across the country are prioritizing conversations and actions to address equity across a range of areas, not just parks. However, because of their broad benefits and the variety of ongoing efforts by communities, government

officials, philanthropic organizations, and other partners in this space, parks have a unique opportunity to help lead the way.

11. **This is a learning journey. No community has all the answers, but practically all are willing to learn and to share with others.** In our conversations with park leaders, three things were clear: improving the role of parks and park departments in bridging equity gaps and contributing to thriving, stable communities is a critical focus; no one felt they had solved the issue; and all were willing to share their lessons and success stories and to learn from others. This quest to learn what has worked and what hasn't has also shaped our approach to this report. We hope this report becomes a resource for communities and a jumping-off point for conversations, including those facilitated by organizations like City Parks Alliance, to consider how the decisions of park agencies and their partners, particularly related to funding, can help address equity gaps.

Appendix: Funding Models Profiled in Report

TABLE A.1
Models and Sources Used to Fund Urban Parks (in Addition to General Funds)

| Model | Source of revenue or in-kind resource | Used primarily for capital projects, operations and maintenance, or both? | Equity considerations | Example |
|---|---|---|--|---|
| Bonds and voter referenda | Revenue from sale of bond | Capital projects | Can adopt explicit equity goals and criteria and can help redistribute resources to areas in greatest need, especially when paired with equity frameworks | California's Proposition 68 |
| Dedicated property taxes | Property tax revenue through special tax districts or allocated into dedicated funds | Both | Raise reliable revenue for parks and help redistribute wealth but can also place burden on lower-income property owners (without policies to cushion) | Seattle Park District and San Francisco's Open Space Fund |
| Sales taxes | General sales tax revenue or special taxes on consumer items | Operations and maintenance | Raise reliable revenue for parks but generally viewed as regressive instrument because they place a greater proportional burden on lower-income consumers | Columbia, MO's sales tax for parks |
| Fees and earned revenue | Fees for access to special park services or revenue generated from activity on park property | Operations and maintenance | Ration access to scarce assets and raise revenue from users with higher ability to pay but can also present barriers to lower-income residents and worsen inequities | Parking garage revenue underneath Boston's Post Office Square |
| Land and water conservation funds | Outdoor Recreation Legacy Partnership Program | Capital projects | Provide resources designed for projects in or adjacent to underserved neighborhoods and communities with lower-income residents | Johnson Oak Park in Bridgeport, CT |
| Developer fees, incentives, and concessions | Dedication of private land for public use, payment toward a park fund | Both | If well designed and enforced, can help ensure public benefit from private development | Houston Parks and Open Space Ordinance |
| Community and economic development | Federal and state grants and tax credits (e.g., New Markets Tax Credits and Community Development Block Grants) | Capital projects | Use federal funds to incentivize projects designed to spur growth and investment in low-income neighborhoods (e.g., recreation facilities) | Use of Community Development Block Grant funds to build playgrounds in St. Paul, MN |

| Model | Source of revenue or in-kind resource | Used primarily for capital projects, operations and maintenance, or both? | Equity considerations | Example |
|---|--|--|---|---|
| Conservancies, friends groups, and public corporations | Nonprofit organizations that contribute labor and raise private funding for parks | Both | Directly involve civic-minded citizens to advocate and fundraise for parks, and encourage good stewardship of community assets. Citywide systems can help redistribute resources. | Pittsburgh Park Conservancy |
| Community ownership | Community volunteer labor and contributions | Operations and maintenance | Engages local community in the management of local park. If significant investments are needed, they may be beyond the capacity of the community to manage. | Crispus Attucks Park in Washington, DC |
| Philanthropic partnerships | Funding from philanthropies | Capital projects | Often have a pro-equity focus and can be used to engage community and develop accessible park assets | William Penn Foundation's \$100 million grant for Philadelphia's Rebuild Initiative |
| Water-quality and management through green infrastructure | Partnering with water utilities or accessing special taxes and fees (e.g., stormwater management fees) | Both | Flood management and improved water quality are important goals not just from a sustainability and technical perspective but also from an equity one. Integrating green infrastructure for these objectives into parks directly benefits neighborhood properties. | "Water Square" in Brownsville, TX |
| Health care cobenefits | Partnering with hospitals and other health system actors | Both | Parks and green space have beneficial impacts on mental health, obesity, and general physical activity for residents in surrounding communities. Health system partners can recognize and value these benefits through partnerships. | Kaiser Permanente's support for the Park Prescription initiative and improving access to and active uses of parks |
| Transportation grants | State and federal grant funding opportunities (e.g., federal BUILD grants) | Capital projects | Demonstrates parks' role as important parts of transportation networks, especially as links within active commuting chains | Indianapolis Cultural Trail supported by a US Department of Transportation grant |
| Climate change and disaster resiliency programs | FEMA and state resiliency funds | Capital projects | Can mitigate the outsized negative effects of climate change and disaster recovery on low-income neighborhoods | Northwest Resiliency Park in Hoboken, NJ |

| Model | Source of revenue or in-kind resource | Used primarily for capital projects, operations and maintenance, or both? | Equity considerations | Example |
|------------------------------------|--|--|---|---|
| Shared-use agreements with schools | Tapping school resources to boost community access to recreation facilities | Operations and maintenance | Can be used to benefit resource-constrained communities by enabling efficient use or reuse of public resources | Partnership between school and park systems in Fresno, CA |
| Land-value capture models | Special tax districts that capture marginal tax revenue increases and funnel them back to projects in that district. Examples include tax-increment financing and local improvement districts. | Both | A way to enable land owners in a given community to pay for additional amenities in that area. May have limited application in communities without financial capacity to pay for increased services and amenities and can disenfranchise renters or commercial tenants. | San Francisco Green Benefit Districts |
| Land trusts | Community management of park assets with foundation or private donations | Operations and maintenance | Community land trusts are mostly established to protect affordable housing and conservation land trusts protect and manage neighborhood parks and green space. Advocates for each can work together to advance shared community goals. | Baltimore Green Space |
| Impact bonds and pay for success | Up-front funding from private and philanthropic investors | Capital projects | Provide an opportunity to engage new funders on environmental projects and encourage governments and community members to think strategically about public investments and desired outcomes. | Environmental Impact Bond as part of the Atlanta BeltLine |
| Brownfield conversions | Funding from the Environmental Protection Agency | Capital projects | Uses external funds to transform polluted industrial land into green community assets, potentially addressing environmental justice issues. | Mill Creek Greenway in Cincinnati, OH |

Source: Authors' analysis.

Notes

- ¹ Operations and maintenance also includes things like system-wide planning and strategy, park programming, and community engagement.
- ² We define *parks* as publicly accessible green space and facilities used for recreation and other noncommercial activities. This study considers green infrastructure when it is built in parks. We focus only on urban parks and use the US Census Bureau's definition of *urban*: "any incorporated place that contained at least 2,500 people within its boundaries." However, the examples surveyed in this report generally align with the census's definition of "densely populated urbanized areas" of 50,000 or more people.
- ³ "2019 City Park Facts," the Trust for Public Land, accessed June 25, 2019, <https://www.tpl.org/2019-city-park-facts>; "Annual Estimates of the Resident Population for Incorporated Places of 50,000 or More, Ranked by July 1, 2017 Population: April 1, 2010 to July 1, 2017," US Census Bureau American FactFinder, released May 2018.
- ⁴ Although not the primary focus of this report, addressing park access for Americans with disabilities remains a challenge and priority for many park departments. Complying with the Americans with Disabilities Act means addressing a large number of accessibility issues which, for some systems, can represent a significant undertaking. In addition to retrofitting parks to be in compliance with ADA, park departments can ensure facilities are not just accessible but welcoming to people with disabilities (e.g., through inclusive programming and activities) and work to integrate an emphasis on accessibility for people with disabilities into planning for new capital projects. See Mark Trieglaff and Larry Labiak, "Recreation and the Americans with Disabilities Act," National Recreation and Park Association, August 1, 2016, <https://www.nrpa.org/parks-recreation-magazine/2016/august/recreation-and-the-americans-with-disabilities-act/>.
- ⁵ For a comprehensive review of federal, state, and local government policies that supported residential racial segregation, see Rothstein (2017).
- ⁶ See <https://www.10minutewalk.org/>.
- ⁷ See also "Creative Placemaking and Community Safety," Urban Institute, accessed February 7, 2019, <https://www.urban.org/creative-placemaking-and-community-safety>.
- ⁸ Although these two studies did not focus explicitly on these factors as barriers for residents in low-income neighborhoods, these built environment factors are particularly relevant for many such communities.
- ⁹ "What is Placemaking," Project for Public Spaces, accessed February 10, 2019, <https://www.pps.org/article/what-is-placemaking>.
- ¹⁰ Sarah Shearman, "In New York City's Lower East Side, Gardening Is a Political Act of Resistance," *Guardian*, August 11, 2015, <https://www.theguardian.com/lifeandstyle/2015/aug/11/new-york-lower-east-side-community-gardens>.
- ¹¹ Thomas Burns, "Community Development through More Inclusive Urban Place-Making: Challenges and Opportunities for the Urban Revitalization Field," *Social Innovations Journal*, January 28, 2016, <http://www.socialinnovationsjournal.org/social-issues/100-human-services/1613-community-development-through-more-inclusive-urban-place-making-challenges-and-opportunities-for-the-urban-revitalization-field>.
- ¹² Project for Public Spaces, "10 Benefits of Creating Good Public Spaces," *Project for Public Spaces* (blog), January 1, 2009, <https://www.pps.org/article/10benefits>.
- ¹³ For example, see David Rose, "Social Equity, Parks and Gentrification," *Parks and Recreation Magazine*, July 6, 2018, <https://www.nrpa.org/parks-recreation-magazine/2018/july/social-equity-parks-and-gentrification/>; Ramya Sivasubramanian, "Green Gentrification, and How Environmentalists Can Avoid It," *NRDC Expert Blog*,

October 5, 2017, <https://www.nrdc.org/experts/ramya-sivasubramanian/green-gentrification-and-how-environmentalists-can-avoid-it>; Gould and Lewis (2017); and Ghaffari, Klein, and Baudin (2017).

- ¹⁴ Elizabeth Daigneau, “Just Green Enough,” *Governing*, February 2015, <https://www.governing.com/topics/transportation-infrastructure/gov-green-gentrification-series.html>.
- ¹⁵ Nicholas Pitas, Austin Barrett, Andrew Mowen, and Kevin Roth, “The Great Recession’s profound impact on parks and recreation,” *Parks and Recreation Magazine*, February 6, 2018, <https://www.nrpa.org/parks-recreation-magazine/2018/february/the-great-recessions-profound-impact-on-parks-and-recreation/>.
- ¹⁶ Brandt Williams, “\$800m Park Funding Plan Passes Minneapolis City Council,” *Minnesota Public Radio*, April 29, 2016, <https://www.mprnews.org/story/2016/04/29/minneapolis-park-board-funding-passes>.
- ¹⁷ See “Participatory Budgeting,” *New York City Council*, accessed January 20, 2019, <https://council.nyc.gov/pb/>.
- ¹⁸ See, for example, Izmailyan, Elissa Hoagland, “Measuring Park Equity,” *HR&A Advisors*, June 1, 2017, <https://www.hraadvisors.com/emphasizing-equity-economic-impact-analysis/>.
- ¹⁹ Dickson, Charlotte and Kanat Tibet, “The Heal Cities Campaign Helps Build Complete Park Systems,” *Western City*, April 1, 2017, <https://www.westerncity.com/article/heal-cities-campaign-helps-build-complete-parks-systems>; “Complete Parks,” *ChangeLab Solutions*, accessed February 20, 2019, <https://www.changelabsolutions.org/publications/complete-parks>.
- ²⁰ “Advocacy,” *Mayors for Parks Coalition*, accessed June 7, 2019, <http://www.mayorsforparks.org/advocacy.html>.
- ²¹ Mazur, Laurie, “Urban Parks and the 10-Minute Challenge,” *Governing*, October 31, 2017, <https://www.10minutewalk.org/>.
- ²² “Denver Wants all Residents to Live Within a 10-Minute Walk to a Public Park and Receives Funding to Advance this Goal,” *Urban Land Institute Colorado (blog)*, February 14, 2019, <https://colorado.uli.org/news/announcing-ulis-partnership-with-the-10-minute-walk-campaign/>.
- ²³ For instance, the Center for an Urban Future estimated that New York City’s “state of good repair needs” was nearly \$600 million, but the budgeted activities would meet only 15 percent of that. See Surico (2018).
- ²⁴ “Parks and Water Bond Act of 2018 (Proposition 68),” *California Department of Parks and Recreation*, accessed January 14, 2019, https://www.parks.ca.gov/?page_id=29906.
- ²⁵ Garcia, Robert, “California’s Prop 68: A Primer for Infusing Diversity and Equity into Public Policy,” *Parks and Recreation Magazine*, August 1, 2018, <https://www.nrpa.org/parks-recreation-magazine/2018/august/californias-prop-68/>. The enabling legislation defines a disadvantaged community as one with a median household income less than 80 percent of the statewide average. See “SB-5 California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018”, California Legislature, October 16, 2017, https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB5.
- ²⁶ A tax is progressive if average tax rates increase with income and is regressive if they do not.
- ²⁷ Rising land value and assessed property values place burdens both on low-income owners (through increased property taxes) and on renters (through increased rent, some of which is likely passed through from higher property taxes).
- ²⁸ For example, Washington, DC, offers senior citizen or disabled property owner tax relief and tax deferral for low-income senior property owners and low-income property owners. See “Homestead/Senior Citizen Deduction,” *District of Columbia Office of Tax and Revenue*, accessed February 10, 2019, <https://otr.cfo.dc.gov/page/homesteadsenior-citizen-deduction>.

- ²⁹ “Funding Mechanisms,” *LandScope Washington*, accessed May 4, 2019, http://www.landscape.org/washington/programs/wa_programs/local/local_gov/funding/#consfut.
- ³⁰ “Proposition K (The LA for Kids Program) Fact Sheet,” *City of Los Angeles*, accessed April 5, 2019, <http://propk.lacity.org/aboutus.htm>.
- ³¹ “Measure CC: Commitments Made, Improvements Delivered,” *East Bay Regional Park District*, accessed February 22, 2019, https://www.ebparks.org/activities/features/measure_cc_commitments_made_improvements_delivered/default.htm.
- ³² “City of Ann Arbor Park Maintenance and Capital Improvements Millage Renewal,” City of Ann Arbor Parks and Recreation, accessed February 22, 2019, https://www.a2gov.org/departments/Parks-Recreation/administrative/Documents/millage_FAQ_2018.pdf.
- ³³ For example, Columbia: “Park Sales Tax,” City of Columbia, Missouri, accessed February 22, 2019, <https://www.como.gov/parksandrec/parks-trails-facilities/park-sales-tax/#five>.
- ³⁴ Michelle Mullins, “Home Glen Imposes Gasoline Tax as of March 1,” *Chicago Tribune*, January 14, 2016, <https://www.chicagotribune.com/suburbs/daily-southtown/news/ct-sta-homer-parks-tax-sta-0115-20160114-story.html>.
- ³⁵ See the Rec and Park Commission transcript from a meeting on October 16, 2014: “Rec and Park Commission,” City and County of San Francisco, accessed July 2, 2019, http://sanfrancisco.granicus.com/TranscriptViewer.php?view_id=91&clip_id=21212.
- ³⁶ “Rec Program Scholarships,” *San Francisco Recreation and Parks*, accessed February 22, 2019, <https://sfrecpark.org/recreation-community-services/recreation-program-scholarships/>.
- ³⁷ “Post Office Square,” Project for Public Spaces, January 7, 2002, <https://www.pps.org/places/post-office-square>.
- ³⁸ “Protecting Lands and Giving Back to Communities,” National Park Service, accessed July 2, 2019, <https://www.nps.gov/subjects/lwcf/index.htm>.
- ³⁹ “Land and Water Conservation Fund Overview,” U.S. Department of the Interior, accessed July 9, 2019, <https://www.doi.gov/lwcf/about/overview>
- ⁴⁰ “State and Local Grant Funding,” National Park Service, accessed July 9, 2019, <https://www.nps.gov/subjects/lwcf/stateside.htm>
- ⁴¹ John D. Dingell, Jr. Conservation, Management, and Recreation Act, S. 47, 116th Cong. (2019). <https://www.congress.gov/bill/116th-congress/senate-bill/47>.
- ⁴² See Land and Water Conservation Fund Permanent Funding Act, H.R. 3195, 116th Cong. (2019). <https://www.congress.gov/bill/116th-congress/house-bill/3195>; and Land and Water Conservation Fund Permanent Funding Act, S. 1081, 116th Cong. (2019). <https://www.congress.gov/bill/116th-congress/senate-bill/1081>
- ⁴³ The Notice of Funding Opportunity defines “underserved” as communities “with: (1) no existing parks; (2) some parks but not enough to support the size of the population or otherwise satisfy existing recreational demand; or (3) some existing parks (potentially even an adequate number of parks) that are so deteriorated/obsolete or 5 underdeveloped that redevelopment or rehabilitation would significantly increase the number of people who could be served and/or significantly increase the types of recreational opportunities that would be provided (in a way that could be equated to the impact of a new park).” See “Outdoor Recreation Legacy Partnership Funding Opportunity,” National Park Service, issued April 13, 2018, <https://www.rco.wa.gov/documents/rcfb/lwcf/LWCF-Legacy-NOFO.pdf>.

- ⁴⁴ This figure was provided to us by City Parks Alliance, who confirmed with the National Park Service that it is correct, but it is unpublished. Official data currently show \$50 million in grants and \$50 million in matching local funds, totaling \$100 million.
- ⁴⁵ “Capital Planning Platform,” NYC Planning, accessed February 22, 2019, <https://capitalplanning.nyc.gov/map/facilities#10/40.7128/-74.0807>.
- ⁴⁶ “Parks and Open Spaces Ordinance,” *Houston Parks and Recreation Department*, accessed February 22, 2019, <http://www.houstontx.gov/council/committees/qol/20141217/OpenSpacesOrd-HPARD-Presentation.pdf>.
- ⁴⁷ “Ordinance No. 35-16, Chapter 14: Community Development, Article XII: Community Benefits,” Detroit Code of Ordinances, accessed July 2, 2019, https://library.municode.com/mi/detroit/ordinances/code_of_ordinances?nodeId=943059.
- ⁴⁸ “Pullman Community Center,” *National Community Investment Fund*, accessed March 14, 2019, <http://ncif.org/invest/new-market-tax-credits/project-archive/pullman-community-center#.XIJpCJKjIV>.
- ⁴⁹ Tim Reid, “Making the Most of Your Tax Dollars,” *Metro Parks Tacoma*, July 23, 2018, <https://www.metroparkstacoma.org/news/?id=2476>.
- ⁵⁰ Donald L. Rockey Jr., Robert Barcelona, Bob Brookover, Dustin Thorn and Dominic Saturday, “Creative Strategies for Financing Parks and Recreation,” *Parks and Recreation Magazine*, April 1, 2016, <https://www.nrpa.org/parks-recreation-magazine/2016/april/creative-strategies-for-financing-parks-and-recreation>.
- ⁵¹ See more: “Opportunity Zones,” *Urban Institute*, accessed June 3, 2019, <https://www.urban.org/policy-centers/metropolitan-housing-and-communities-policy-center/projects/opportunity-zones>.
- ⁵² “Pima County FY16-17 CDBG Funding Allocations,” Pima County, Arizona, accessed April 2, 2019, https://webcms.pima.gov/UserFiles/Servers/Server_6/File/Community/CDNC/CDBG/FY%2016-17%20CDBG%20Funding%20Allocations.pdf.
- ⁵³ “About Us,” *Pittsburgh Parks Conservancy*, accessed March 1, 2019, <https://www.pittsburghparks.org/the-conservancy>.
- ⁵⁴ “Foundation,” *Washington Park District*, accessed March 1, 2019, <https://www.washingtonparkdistrict.com/foundation>.
- ⁵⁵ “Keep Brownsville Beautiful” Presentation, KBB Youth Advisory Board, January 22, 2019.
- ⁵⁶ Lisa W. Foderaro, “New York City’s Low-Profile Parks to Get Conservancies’ Help, and Some Cash,” *New York Times*, November 13, 2015, <https://www.nytimes.com/2015/11/14/nyregion/new-york-citys-low-profile-parks-to-get-conservancies-help-and-some-cash.html>.
- ⁵⁷ Andrew Siddons, “Bloomingdale’s Secret: Crispus Attucks Park,” *UrbanTurf (blog)*, May 3, 2011, https://dc.urbanturf.com/articles/blog/bloomingdales_secret_crispus_attucks_park/3419.
- ⁵⁸ “History of the Community Garden Movement,” *New York City Parks*, accessed June 6, 2019, <https://www.nycgovparks.org/about/history/community-gardens/movement>.
- ⁵⁹ Guthrie Green, Tulsa, Oklahoma,” *American Planning Association*, accessed March 1, 2019, <https://www.planning.org/greatplaces/spaces/2016/guthriegreen/>.
- ⁶⁰ “William Penn Foundation Commits \$100 Million to Philadelphia Neighborhoods through Rebuild,” *William Penn Foundation*, November 21, 2016, <https://www.williampennfoundation.org/newsroom/william-penn-foundation-commits-100-million-philadelphia-neighborhoods-through-rebuild>.

- ⁶¹ “Olympia, Washington’s 3% Utility Tax for Parks and Sidewalks,” Prevention Institute, accessed March 2, 2019, <https://www.preventioninstitute.org/locations/olympia-washington%E2%80%99s-3-utility-tax-parks-and-sidewalks>.
- ⁶² Richard Dolesh, “Green Infrastructure Stormwater Management in Parks,” *Parks and Recreation Magazine*, April 3, 2017, <https://www.nrpa.org/parks-recreation-magazine/2017/april/green-infrastructure-stormwater-management-in-parks/>.
- ⁶³ “Tujunga Spreading Grounds Enhancement Project,” Los Angeles County Public Works, accessed March 2, 2019, <https://dpw.lacounty.gov/wrd/Projects/TujungaSG/index.cfm>.
- ⁶⁴ “Webinar: Funding Parks through Cross-Agency Partnerships,” City Parks Alliance, January 23, 2019, <https://www.cityparksalliance.org/webinar-funding-parks-cross-agency-partnerships>.
- ⁶⁵ “Cross-Sector Partnerships to Advance Health,” *Enterprise*, accessed March 4, 2019, <https://www.enterprisecommunity.org/sites/default/files/media-library/solutions-and-innovation/health-and-housing/cross-sector-partnerships-to-advance-health-bon-secours-balt.pdf>.
- ⁶⁶ “Cross-Sector Partnerships to Advance Health.”
- ⁶⁷ “Maine Med Plans to Invest \$300,000 in Neighborhood Parks,” *Mainebiz*, December 13, 2018, [http://www.mainebiz.biz/article/20181213/NEWS01/181219976/maine-med-plans-to-invest-\\$300000-in-neighborhood-parks](http://www.mainebiz.biz/article/20181213/NEWS01/181219976/maine-med-plans-to-invest-$300000-in-neighborhood-parks).
- ⁶⁸ Michael Dresser, “Opening of New Park Is a Sign of East-Side Renewal,” *Baltimore Sun*, May 6, 2017, <https://www.baltimoresun.com/news/maryland/bs-md-ci-eager-park-20170506-story.html>.
- ⁶⁹ Staff of Miami-Dade Parks, “Miami Dade,” *Parks and Recreation Magazine*, January 31, 2012, <https://www.nrpa.org/parks-recreation-magazine/2012/february/miami-dade/>.
- ⁷⁰ “UVM Medical Center Oncology Green Roof,” Wagner Hodgson Landscape Architecture, accessed March 4, 2019, <https://wagnerhodgson.com/projects/corporate/uvm-medical-center-oncology-green-roof>
- ⁷¹ “Burlington Bike Path Rehabilitation: Phase1b,” City of Burlington, accessed January 20, 2019, <https://enjoyburlington.com/outdoor-fitness/>.
- ⁷² Denice Alexander, “Kaiser Permanente Parks Investment Supports Healthy Communities,” *Look insideKP* (blog), April 21, 2016, <https://lookinside.kaiserpermanente.org/kp-parks-investment-supports-healthy-communities/>.
- ⁷³ “Kaiser Permanente Unveils ‘Fitness Zone’ in Seattle,” *Kaiser Permanente*, January 18, 2018, <https://about.kaiserpermanente.org/total-health/health-topics/kaiser-permanente-unveils-fitness-zone-georgetown-playfield>.
- ⁷⁴ “Transportation Alternatives,” US Department of Transportation Federal Highway Administration, accessed March 4, 2019, https://www.fhwa.dot.gov/environment/transportation_alternatives/.
- ⁷⁵ “East Bay Greenway: Lake Merritt BART to South Hayward BART,” Alameda County Transportation Commission, accessed March 4, 2019, https://www.alamedactc.org/wp-content/uploads/2019/02/1457001_East-Bay-Greenway_FS_20190219.pdf.
- ⁷⁶ Cara Martinson and Nick Cronenwett, “Legislature Agrees on \$1.46B Cap and Trade Plan,” *California State Association of Counties* (blog), July 5, 2018, http://www.counties.org/sites/main/files/file-attachments/aenr_bulletin_cap_trade_expenditure_plan_chart.pdf.
- ⁷⁷ “How Parks and Open Spaces Can Strengthen Resilience,” Federal Emergency Management Agency, June 17, 2014, <https://www.fema.gov/disaster/4085/updates/how-parks-and-open-spaces-can-strengthen-resilience>.

- ⁷⁸ Federal programs that also provide disaster mitigation funding include the Department of Housing and Urban Development's Community Development Block Grant Disaster Recovery Program, the Small Business Administration's Disaster Loan Program, the Department of Commerce's Coastal Zone Management Administration Awards, and the Department of Agriculture's State Fire Assistance Program. See Stauffer, Theal, and Foard (2018).
- ⁷⁹ "FEMA Grant: Frequently Asked Questions," East Bay Regional Park District, accessed March 2, 2019, https://www.ebparks.org/about/fire/fema_grant_frequently_asked_questions.htm.
- ⁸⁰ "The East Side Coastal Resiliency Project," City of New York, accessed March 3, 2019, <https://www1.nyc.gov/site/escr/index.page>.
- ⁸¹ "Shelby County Receives \$60 Million Dollar Grant," Millington Area Chamber of Commerce, February 16, 2016, <http://millingtonchamber.chambermaster.com/news/details/news-release-2-16-2016>.
- ⁸² "Northwest Resiliency Park," City of Hoboken, accessed March 22, 2019, <http://nwpark-cityofhoboken.opendata.arcgis.com/>.
- ⁸³ Marilyn Baer, "Spending Big Bucks," *Honoken Reporter*, March 14, 2019, <https://hudsonreporter.com/2019/03/14/big-bucks/>.
- ⁸⁴ "PARKXCHANGE," City Parks Alliance, accessed March 3, 2019, <https://www.cityparksalliance.org/parkxchange>.
- ⁸⁵ "In Fresno, Advocates Unlock a New Source of a Park Space," *Trust for Public Land* (blog), May 22, 2017, <https://www.tpl.org/blog/fresno-parkscore-2017#sm.000000cfqkm732e9cvmonbh9mf12y>.
- ⁸⁶ "Authorize the Superintendent to Execute a Master Joint Use Agreement between the School Board and Miami-Dade County to Make Designated Park Sites and Designated School Sites Located within Unincorporated Miami-Dade County, Available to Both Parties for Recreational and Educational Purposes," Miami-Dade County Office of the Superintendent of Schools, November 7, 2018, <http://pdf.s.dadeschools.net/Bdarch/2018/Bd112018/agenda/f1.pdf>.
- ⁸⁷ "Report of the Shared Use Task Force (2018) Pursuant to Chapter 2017-116, Laws of Florida," Florida Department of Education, accessed July 2, 2019, <http://www.fldoe.org/core/fileparse.php/7749/urlt/7069-SharedUseTF.pdf>.
- ⁸⁸ "Miami-Dade School Board and District Joint Use Agreement of Devon Aire Park," news release, Miami-Dade School Board, September 6, 2017, http://district7.dadeschools.net/Press_Releases/2017/PR-%20H-12%20-%202017.pdf.
- ⁸⁹ "Schoolyards to Playgrounds," New York City Parks, accessed March 3, 2019, <https://www.nycgovparks.org/greening/planyc/schoolyards>
- ⁹⁰ Rooted in the notion that public action should generate public benefit.
- ⁹¹ "Tax Increment Financing," City of Bloomington, accessed March 3, 2019, <https://bloomington.in.gov/business/districts/tif>.
- ⁹² "TIF Bond Projects," City of Bloomington, accessed March 3, 2019, <https://bloomington.in.gov/city/bond>.
- ⁹³ Rachel Hinton, "Cook County TIF Districts Bring in \$1 billion," *Chicago Sun Times*, July 24, 2018, <https://chicago.suntimes.com/business/cook-county-tifs-1-billion-tax-increment-financing-property-taxes/>.
- ⁹⁴ "TIF Districts and Chicago Projects," Chicago Cityscape, accessed March 3, 2019, <https://www.chicagocityscape.com/tifs.php>.

- ⁹⁵ “Atlanta BeltLine TAD,” Invest Atlanta, accessed March 3, 2019, <https://www.investatlanta.com/developers/opportunities-incentives/tax-allocation-district-financing/atlanta-beltline>.
- ⁹⁶ Emily Nonko, “Resetting the Atlanta BeltLine’s Focus on Equitable Development,” *Next City*, August 22, 2018, <https://nextcity.org/daily/entry/resetting-the-atlanta-beltlines-focus-on-equitable-development>
- ⁹⁷ For a comprehensive assessment of TIFs and recommendations on improving them, see Merriman (2018).
- ⁹⁸ “About Us,” Bryant Park Corporation, accessed March 3, 2019, <https://bryantpark.org/about-us>.
- ⁹⁹ “Green Benefit Districts,” *San Francisco Public Works*, accessed March 3, 2019, <https://sfpublicworks.org/GBD>.
- ¹⁰⁰ Brianna Williams, “Houston’s Third Ward Turns to Community Land Trust Model,” *Next City*, June 8, 2018, <https://nextcity.org/daily/entry/houstons-third-ward-exploring-a-community-land-trust>.
- ¹⁰¹ “Facing a Dilemma: Homelessness and Public Lands,” Forterra, October 14, 2016, <https://forterra.org/editorial/addressing-seattles-home-insecurity>.
- ¹⁰² Nour Malas, “Tech Wealth Turns Attention to Affordable Housing in Seattle,” February 7, 2018, <https://www.wsj.com/articles/tech-wealth-turns-attention-to-affordable-housing-in-seattle-1518015600>.
- ¹⁰³ “DC Water Environmental Impact Bond,” Urban Institute, accessed March 6, 2019, <https://pfs.urban.org/pfs-project-fact-sheets/content/dc-water-environmental-impact-bond>.
- ¹⁰⁴ “Environmental Impact Bonds,” Chesapeake Bay Foundation, accessed March 6, 2019, <https://www.cbf.org/how-we-save-the-bay/programs-initiatives/environmental-impact-bonds.html>.
- ¹⁰⁵ “Atlanta’s Department of Watershed Management Wins Environmental Impact Bond Challenge for Green Infrastructure and Resilience Projects on the City’s Westside,” Neighborly Corporation, March 26, 2018, <https://www.prnewswire.com/news-releases/atlantas-department-of-watershed-management-wins-environmental-impact-bond-challenge-for-green-infrastructure-and-resilience-projects-on-the-citys-westside-300619657.html>.
- ¹⁰⁶ Lisette Vegas, “Environmental impact bonds offer innovative approach to improve public spaces,” *PFS Perspectives (blog)*, May 31, 2018, <https://pfs.urban.org/pay-success/pfs-perspectives/environmental-impact-bonds-offer-innovative-approach-improve-public>.
- ¹⁰⁷ “Types of Brownfields Grant Funding,” *U.S. Environmental Protection Agency*, accessed March 6, 2019, <https://www.epa.gov/brownfields/types-brownfields-grant-funding>.
- ¹⁰⁸ Mark Lewis, “DEEP’s Role in Brownfields Redevelopment,” presentation Connecticut Brownfields Conference, Hartford, CT, May 17, 2016, https://www.ct.gov/deep/lib/deep/site_clean_up/brownfields/Connecticut_Brownfields_Conference_Cleanup_101_May_17_2016.pdf.

References

- Bird, Caroline. 2012. "Urban Conservation Land Trusts as an Alternative Model for Stewardship: A Case Study of Baltimore Green Space." Presentation given as part of Massachusetts Institute of Technology course "Urban Nature and City Design," MIT 4.213J/11.308J, Fall term.
http://web.mit.edu/nature/projects_12/pdf.s/LandTrustsPaper.pdf.
- Black, Heidi M., Diana Allen, Zanaaz Bashir, Nina Gordon, Alyson Goodman, De Merriam, and Candace Rutt. 2012. "Let's Go to the Park Today: The Role of Parks in Obesity Prevention and improving the Public's Health." *Child Obesity* 8 (5): 423–28. <https://www.ncbi.nlm.nih.gov/pubmed/23061497>
- Bogle, Mary, Somala Diby, and Eric Burnstein. 2016. *Early Development Planning and Urban Park Space: Early insights from DC's 11th Street Bridge Park project*. Washington, DC: Urban Institute.
<https://www.urban.org/research/publication/equitable-development-planning-and-urban-park-space-early-insights-dcs-11th-street-bridge-park-project>.
- Bogle, Mary, Somala Diby, and Mychal Cohen. 2019. *Equitable Development and Urban Park Space: Results and Insights from the First Two Years of Implementation of the Equitable Development Plan of DC's 11th Street Bridge Park Project*. Washington, DC: Urban Institute.
https://www.urban.org/sites/default/files/publication/99850/equitable_development_and_urban_park_space_1.pdf.
- Campbell, Marcia Caton, and Danielle A. Salus. 2003. "Community and Conservation Land Trusts as Unlikely Partners? The Case of Troy Gardens, Madison, Wisconsin." *Land Use Policy* 20 (2003): 169–80.
http://www.gregoryrosenberg.net/troygardens/articles/academic/index_assets/Land-Use-Policy-Article.pdf.
- ChangeLab Solutions. 2009. "Checklist for Developing a Joint Use Agreement." Oakland, CA: ChangeLab Solutions.
https://changelabsolutions.org/sites/default/files/CLS_JointUse_checklist_FINAL_20120517_1.pdf.
- City of Des Moines Parks and Recreation. 2013. *The Economic Impact of Des Moines Parks & Recreation Services*. Des Moines, IA: City of Des Moines. https://step.uni.edu/reports/economic_impacts_des_moines_parks.pdf.
- City Parks Alliance and Minneapolis Park and Recreation Board. 2015. *Closing the Gap: Public and Private Funding Strategies for Neighborhood Parks*. Minneapolis: Minneapolis Park and Recreation Board.
https://www.cityparksalliance.org/storage/documents/Closing_the_Gap_Funding_Report.pdf.
- City of Seattle. 2015. *Green Stormwater Infrastructure in Seattle Implementation Strategy 2015-2020*. Seattle: City of Seattle. https://www.seattle.gov/Documents/Departments/OSE/GSI_Strategy_Nov_2015.pdf.
- Cohen, Deborah A., Bing Han, Kathryn P. Derose, Stephanie Williamson, Terry Marsh, Laura Raaen, and Thomas L. Mackenzie. 2016b. "The Paradox of Parks in Low-Income Areas: Park Use and Perceived Threats." *Environment and Behavior* 48 (1): 230–45. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4821183/>.
- Cohen, Deborah A., Bing Han, Catherine J. Nagel, Peter Harnik, Thomas L. McKenzie, Kelly R. Evenson, Terry Marsh, Stephanie Williamson, Christine Anne Vaughan, and Sweatha Katta. 2016a. *The First National Study of Neighborhood Parks*. Los Angeles: Rand Corporation.
https://www.rand.org/pubs/external_publications/EP66493.html.
- Cohen, Deborah A., Sanae Inagami, and Brian Finch. 2008. "The Built Environment and Collective Efficacy." *Health and Place* 14 (2): 198–208. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2684872/>.
- Cole, Helen V.S., Melissa Garcia Lamarca, James J.T. Connolly, and Isabelle Anguelovski. 2017. "Are Green Cities Healthy and Equitable? Unpacking the Relationship between Health, Green Space, and Gentrification." *Journal of Epidemiology and Community Health* 71 (11): 1118–21. <https://jech.bmj.com/content/71/11/1118>.
- Committee on Environmental Health. 2009. "The Built Environment: Designing Communities to Promote Physical Activity in Children." *Pediatrics* 123: 1591–98. <https://www.ncbi.nlm.nih.gov/pubmed/19482771>.

- Cortright, Joe, and Dillon Mahmoudi. 2014. *Lost in Place: Why the Persistence and Spread of Concentrated Poverty—Not Gentrification—Is Our Biggest Urban Challenge*. Portland, OR: City Observatory. http://cityobservatory.org/wp-content/uploads/2014/12/LostinPlace_12.4.pdf.
- Curran, Winifred, and Trina Hamilton. 2017. *Just Green Enough: Urban Development and Environmental Gentrification*. New York: Routledge.
- Dadvand, Payam, Mark J. Nieuwenhuijsen, Mikel Esnaola, Joan Fornas, Xavier Basagaña, Mar Alvarez-Pedrerol, Ioar Rivas, Mónica López-Vicente, Montserrat De Castro Pascual, Jason Su, Michael Jerrett, Xavier Querol, and Jordi Sunyer. 2015. "Green Spaces and Cognitive Development in Primary Schoolchildren." *Proceedings of the National Academy of Sciences of the United States of America* 112 (26): 7937–42. <http://www.pnas.org/content/112/26/7937>.
- Dooling, Sarah. 2009. "Ecological Gentrification: A Research Agenda Exploring Justice in the City." *International Journal of Urban and Regional Research* 33 (3): 621–39. <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1468-2427.2009.00860.x>
- Dye, Richard, and David Merriman. 2004. *Tax Increment Financing: A tool for local economic development*. Cambridge, MA: Lincoln Institute of Land Policy. <https://www.lincolnst.edu/publications/articles/tax-increment-financing>
- Frank, Lawrence D., Brian E. Saelens, James Chapman, James F. Sallis, Jacqueline Kerr, Karen Glanz, Sarah C. Couch, Vincent Learnihan, Chuan Zhou, Trina Colburn, and Kelli L. Cain. 2012. "Objective Assessment of Obesogenic Environments in Youth." *American Journal of Preventative Medicine* 42 (5): 47–55. <https://www.ncbi.nlm.nih.gov/pubmed/22516503/>.
- Garcia, Robert, Seth H. Strongin, and Anahid Brakke. 2011. *Healthy Parks, Schools, and Communities: Green Access and Equity for Los Angeles County*. Los Angeles: The City Project. <http://www.mapjustice.org/images/LosAngelesENGLISH.pdf>.
- Garrett, Jake Tobin, and Adriana Stark. 2017. *Sparking Change: Catalyzing the Social Impacts of Parks in Underserved Neighborhoods*. Toronto: Park People. https://parkpeople.ca/wp-content/uploads/2017/02/Park-People_Sparking-Change-2017-1.pdf.
- Ghaffari, Leila, Juan-Luis Klein, and Wildredo Angulo Baudin. 2017. "Towards a Socially Acceptable Gentrification: A Review of Strategies and Practices against Displacement." *Geography Compass* 12 (2).
- Gould, Kenneth A., and Tammy L. Lewis. 2017. *Green Gentrification: Urban Sustainability and the Struggle for Environmental Justice*. New York: Routledge.
- Groundwork USA. 2017. *Reclaiming Brownfields: Highlights from the Groundwork USA Network*. Yonkers, NY: Groundwork USA. <https://groundworkusa.org/wp-content/uploads/2017/04/GWUSA-Brownfields-Highlights-2017.pdf>.
- Hamilton, Kerry, Andrew T. Kaczynski, Melissa L. Fair, and Lucie Levesque. 2017. *Journal of Environmental and Public Health* 2017. <https://www.hindawi.com/journals/jep/h/2017/7582402/>.
- Harnik, Peter, and Kyle Barnhart. 2015. *Parks as Community Development*. San Francisco: Trust for Public Land. https://www.tpl.org/sites/default/files/files_upload/CDBG%20White%20Paper_final_lores_0.pdf.
- Harnik, Peter, and Abby Martin. 2015. *Public Spaces/Private Money: The Triumphs and Pitfalls of Urban Park Conservancies*. San Francisco: The Trust for Public Land. https://www.tpl.org/sites/default/files/files_upload/ccpe-Parks-Conservancy-Report.pdf.
- Hibbard, Paul J., Susan F. Tierney, Pavel G. Darling, and Sarah Cullinan. 2018. *The Economic Impacts of the Regional Greenhouse Gas Initiative on Nine Northeast and Mid-Atlantic States*. Boston: Analysis Group. https://www.analysisgroup.com/globalassets/uploadedfiles/content/insights/publishing/analysis_group_rggi_report_april_2018.pdf.

- HR&A Advisors. 2016. *Economic Value and Benchmarking Study of the Dallas Park System*.
<https://www.dropbox.com/s/iherqskmmfpp9ym/HR%26A%20Economic%20Value%20of%20Dallas%20Parks%20Study%20Final.pdf?dl=0>.
- Joassart-Marcelli, Pascale. 2010. "Leveling the Playing Field? Urban Disparities in Funding for Local Parks and Recreation in the Los Angeles Region." *Environment and Planning A: Economy and Space* 42 (5): 1174–92.
<https://journals.sagepub.com/doi/10.1068/a42198#articleCitationDownloadContainer>.
- Kaczynski, Andrew T., Mohammad Javad Koohsari, Sonja A. Wilhelm Stanis, Ryan Bergstrom, and Takemi Sugiyama. 2014. "Association of Street Connectivity and Road Traffic Speed with Park Usage and Park-Based Physical Activity." *American Journal of Health Promotion* 28 (3): 197–203.
- Lackey, Kelsey J., and Andrew T. Kaczynski. 2009. "Correspondence of Perceived vs. Objective Proximity to Parks and Their Relationship to Park-Based Physical Activity." *International Journal of Behavioral Nutrition and Physical Activity* 6 (1): 1. <https://link.springer.com/article/10.1186%2F1479-5868-6-53>.
- Lav, Iris J., and Michael Leachman. 2018. *State Limits on Property Taxes Hamstring Local Services and Should be Relaxed or Replaced*. Washington, DC: Center on Budget Policy Priorities. <https://www.cbpp.org/research/state-budget-and-tax/state-limits-on-property-taxes-hamstring-local-services-and-should-be>.
- McCabe, Charlie, Alexandra Hipple, Derek Bolivar, and Erin Cameron. 2018. *2018 City Park Facts*. San Francisco: The Trust for Public Land. https://www.tpl.org/sites/default/files/CityParkFacts2018.8_13_18finLO.pdf.
- McKenzie, Thomas L., James S. Moody, Jordan A. Carlson, Nanette V. Lopez, and John P. Elder. 2013. "Neighborhood Income Matters: Disparities in Community Recreation Facilities, Amenities, and Programs." *Journal of Park and Recreation Administration* 31 (4): 12–22.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4082954/>.
- Merriman, David. 2018. *Improving Tax Increment Financing (TIF) for Economic Development*. Cambridge, MA: Lincoln Institute of Land Policy. https://www.lincolnst.edu/publications/articles/new-report?utm_source=2006-Land-Lines&utm_medium=website&utm_campaign=test.
- Miami-Dade Park and Recreation Department. 2011. *Park Access and Equity Strategy*.
<http://www.miamidade.gov/parks/library/access-equity-strategy.pdf>.
- Minneapolis Park and Recreation Board. 2019. *Superintendent's Annual Report 2018*. Minneapolis: Minneapolis Park and Recreation Board. <https://www.minneapolisparcs.org/wp-content/uploads/2019/01/MRPB-Annual-Report-2018.pdf>.
- Németh, Jeremy, and Stephen Schmidt. 2009. "The Privatization of Public Space: Modeling and Measuring Publicness." *Planning and Design* 2011 (38): 5–23.
https://static1.squarespace.com/static/5a7985fbf6576e3fcf2f590e/t/5a8974a2652deaeaabd4baa3/1518957736416/Nemeth+Schmidt_The+Privatization+of+Public+Space.pdf.
- New York City Comptroller. 2017. *Final Letter Report on the Follow-up Review of the City's Oversight over Privately Owned Public Spaces*. New York: New York City Comptroller. <https://comptroller.nyc.gov/reports/final-letter-report-on-the-follow-up-review-of-the-citys-oversight-over-privately-owned-public-spaces/>.
- Nowak, David J., and Eric J. Greenfield. 2018. "US Urban Forest Statistics, Values, and Projections." *Journal of Forestry* 116 (2): 164–77. <https://www.fs.usda.gov/treesearch/pubs/55818>.
- Nowak, David J., and Gordon M. Heisler. 2010. *Air Quality Effects of Urban Trees and Parks*. Ashburn, VA: National Recreation and Park Association. <https://www.nrpa.org/globalassets/research/nowak-heisler-research-paper.pdf>.
- Padilla, Rick. 2015. "Westwood Revitalization." Presentation given at the Conference of the National Association of Local Housing Finance Agencies, Miami, FL, April.
https://cdn.ymaws.com/www.nalhfa.org/resource/resmgr/2015_Conference_Speakers/Rick_Padilla.pdf.

- Project for Public Spaces. 2012. *Placemaking and the Future of Cities*. New York: Project for Public Spaces. https://uploads-ssl.webflow.com/5810e16f876ce6bcb86e/59f1fb530aad1d00010a6186_PPS-Placemaking-and-the-Future-of-Cities.pdf.
- Raya, Richard, and Victor Rubin. 2006. *Safety, Growth, and Equity: Parks and open space*. Oakland, CA: PolicyLink. https://www.policylink.org/sites/default/files/SafetyGrowthEquity-ParksOpenSpace_final.pdf.
- Richardson, Jason, Bruce Mitchell, and Juan Franco. 2019. *Shifting Neighborhoods: Gentrification and cultural displacement in American cities*. Washington, DC: National Community Reinvestment Coalition. <https://ncrc.org/gentrification/>
- Rigolon, Alessandro, and Jeremy Németh. 2018. "We're Not in the Business of housing: Environmental Gentrification and the Nonprofitization of Green Infrastructure." *Cities* 81: 71–80. <https://www.sciencedirect.com/science/article/pii/S0264275117314749?via%3Dihub>.
- Rose, Kalima, Milly Hawk Daniel, and Jeremy Liu. 2017. *Creating Change through Arts, Culture, and Equitable Development: A Policy and Practice Primer*. Oakland, CA: PolicyLink. http://www.policylink.org/sites/default/files/report_arts_culture_equitable-development.pdf.
- Rothstein, Richard. 2017. *The Color of Law*. New York: Liveright.
- Seattle Parks and Recreation. 2017. *2017 Parks and Open Space Plan*. Seattle: Seattle Parks and Recreation. <http://www.seattle.gov/parks/about-us/policies-and-plans/2017-parks-and-open-space-plan>.
- Sherman, Danya. 2016. *Exploring the Ways Arts and Culture Intersect with Housing: Emerging Practices and Implications for Further Action*. New York: ArtPlace America. https://www.artplaceamerica.org/view/pdf.?f=public://pictures/artplace_field_scan_housing_sherman_apr_2016.pdf.
- South, Eugenia C., Bernadette C. Hohl, Michelle C. Kondo, John M. MacDonald, and Charles C. Branas. 2018. "Effect of Greening Vacant Land on Mental Health of Community-Dwelling Adults." *Journal of American Medical Association Open Network* 1 (3). <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2688343>.
- Stauffer, Anne, Justin Theal, and Colin Foard. 2018. *Natural Disaster Mitigation Spending Not Comprehensively Tracked*. Philadelphia: Pew Charitable Trusts. https://www.pewtrusts.org/-/media/assets/2018/09/fiscal_federalism_federal_and_state_funding_issue_brief_v1.pdf.
- Sturm, Roland, and Deborah Cohen. 2014. "Proximity to Urban Parks and Mental Health." *Journal of Mental Health Policy and Economics* 17 (1): 19–24. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4049158/>.
- Surico, John. 2018. *A New Leaf: Revitalizing New York City's Aging Parks Infrastructure*. New York: Center for an Urban Future. <https://nycfuture.org/research/a-new-leaf>.
- Theodos, Brett, Christina Plerhoples Stacy, and Helen Ho. 2017. "Taking Stock of the Community Development Block Grant." Washington, DC: Urban Institute. https://www.urban.org/sites/default/files/publication/89551/cdbg_brief.pdf.
- Transportation for America. 2019. *Taming the Tiger: A comparative and constructive critique of 10 years of USDOT's BUILD program*. Washington, DC: Transportation for America. <http://t4america.org/maps-tools/taming-the-tiger/>.
- Treskon, Mark, Sino Esthappan, Cameron Okeke, and Carla Vasquez-Noriega. 2018. *Creative Placemaking and Community Safety: Synthesizing Cross-Cutting Themes*. Washington, DC: Urban Institute. <https://www.urban.org/research/publication/creative-placemaking-and-community-safety-synthesizing-cross-cutting-themes>.
- Trust for Public Land. 2008. *How Much Value Does the City of Philadelphia Receive from its Park and Recreation System?* San Francisco: Trust for Public Land. http://cloud.tpl.org/pubs/ccpe_PhilParkValueReport.pdf.

- . 2010. *The Economic Benefits and Fiscal Impact of Parks and Open Space in Nassau and Suffolk Counties, New York*. San Francisco: Trust for Public Land. <http://cloud.tpl.org/pubs/ccpe--nassau-county-park-benefits.pdf>.
- Urban Ecology. 2008. *East Bay Greenway Executive Summary*. San Francisco: Urban Ecology. <http://www.urbanecology.org/EastBayGreenwayExecutiveSummary.pdf>.
- US EPA (Environmental Protection Agency). 2015. *Financing Green Infrastructure: A best practices guide for the clean water state revolving fund*. Washington, DC: U.S. Environmental Protection Agency. https://www.epa.gov/sites/production/files/2016-01/documents/final_gi_best_practices_guide_12-9-15.pdf.
- . 2016. *Funding Stormwater Management with the Clean Water State Revolving Fund*. Washington, DC: U.S. Environmental Protection Agency. https://www.epa.gov/sites/production/files/2016-11/documents/funding_stormwater_management_with_the_clean_water_state_revolving_fund.pdf.
- . 2017. *Green Infrastructure in Parks: A Guide to Collaboration, Funding and Community Engagement*. Washington, DC: US Environmental Protection Agency. https://www.epa.gov/sites/production/files/2017-05/documents/gi_parksplaybook_2017-05-01_508.pdf.
- Walker, Jamie Rae, and John L. Compton. 2012. "The Relationship of Household Proximity to Park Use." *Journal of Park and Recreation Administration* 30 (3): 52–63. <http://agrifliefcdn.tamu.edu/cromptonrpts/files/2011/06/article19.pdf>.
- Wen, Ming, Xingyou Zhang, Carmen D. Harris, James B. Holt, and Janet B. Croft. 2013. "Spatial Disparities in the Distribution of Parks and Green Spaces in the USA." *Annals of Behavioral Medicine* 45 (Suppl 1): S18–27. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3590901/>.
- Wilkes, Phil, Mathias Disney, Matheus Boni Vicari, Kim Calders, and Andrew Burt. 2018. "Estimating Urban Above Ground Biomass with Multi-Scale LiDAR." *Carbon Balance and Management* (2018) 13: 10. <https://cbmjournal.biomedcentral.com/track/pdf/10.1186/s13021-018-0098-0>.
- Wolch, Jennifer R., Jason Byrne, and Joshua P. Newell. 2014. "Urban Green Space, Public Health, and Environmental Justice: The Challenge of Making Cities 'Just Green Enough.'" *Landscape and Urban Planning* 125 (2014): 234–44. <http://ced.berkeley.edu/downloads/research/LUP.parks.pdf>.
- Wolch, Jennifer, Michael Jerrett, Kim Reynolds, Rob McConnell, Roger Chang, Nicholas Dahmann, Kirby Brady, Frank Gilliland, Jason G. Su, and Kiros Berhane. 2011. "Childhood Obesity and Proximity to Urban Parks and Recreational Resources: A Longitudinal Cohort Study." *Health and Place* 17 (1): 207–14. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4380517/>.
- Wolch, Jennifer, John P. Wilson, and Jed Fehrenbach. 2005. "Parks and Park Funding in Los Angeles: An Equity-Mapping Analysis." *Urban Geography* 26 (1): 4–35. <https://www.tandfonline.com/doi/abs/10.2747/0272-3638.26.1.4%20>.
- Yadavalli, Anita, Rose Kim, Christiana K. McFarland, and Brooks Rainwater. 2019. *State of the Cities 2019*. Washington, DC: National League of Cities. <https://www.nlc.org/sites/default/files/2019-05/StateOfTheCities%202019.pdf>.

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