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EXECUTIVE SUMMARY

*Civic Infrastructure* proposes a new, more holistic way of thinking about the challenges and opportunities of reinvesting in our cities’ shared civic places.

Most deeply, *Civic Infrastructure* calls for a change in mindset among practitioners, advocates, funders, designers, and others involved in civic asset redevelopment. Redevelopment, as the term suggests, takes advantage of already-existing places with deep histories and cultural richness, seeking to sustain and improve them. We need to stop thinking about redevelopment as only pertaining to a bounded site or a particular capital investment. Likewise, we should abandon the idea that any one factor—a great design, an infusion of funds, a new civic engagement effort—can itself create a successful project. Practitioners and decision-makers should be inspired to think about the unfolding of projects at multiple scales (site, system and policy), over a longer timeframe, through an “ecosystem” lens highlighting the importance of partnerships.
Our analysis emphasizes three distinct scales of operation in redevelopment efforts. We find they have both geographical and practical significance:

- The site scale refers to a particular, bounded project or location (a single building or park, for instance).
- The system scale refers to a collection of sites with similar functions (a park system or library system) or within a neighborhood or district (perhaps including a school, library, park, rec center, or other assets).
- The policy scale refers to municipality-wide (not place-specific) laws, regulations, and organizational strategies as well as practices, norms, political cultures that operate across an entire city. (This broad notion of “policy” will be used throughout the report.)

Varied actors, resources, ideas and partnerships operate at and across these scales—and we distinguish between the three scales in order to emphasize the relationships between them as a decisive factor in redevelopment efforts. The factors contributing to redevelopment (funding, organizations, programs, etc.) are connected like the elements of an ecosystem, in which relationships between factors are as significant as the factors themselves.

This shift toward ecosystem thinking means that a public space project is never “simply” a public space project; it always intersects with a range of social, economic, and historical factors, all of which inform decisions about investment, design, and programming. Indeed, many civic asset redevelopment projects embrace a range of community development ambitions extending beyond the site. Public space projects are part of a larger “civic infrastructure” made up of hard and soft elements, including physical buildings, natural places, and park elements, as well as the leadership and organizations to run things, funding to drive investment, traditions attached to places, and more. Understanding public spaces as part of this complex system helps us think past the initial moments of expenditure and design, and focus attention on the long term, including the difficult work of managing and maintaining the sites themselves.

For example, the projects explored in the report include New York’s High Line, where successful redevelopment of a redundant rail line led to some unanticipated consequences (rapid rise in land values, intense tourism, and change of neighborhood character), and Washington, DC’s unfolding 11th Street Bridge project, for which the surrounding social,
economic and urban effects are being carefully and proactively managed. Our framework grapples with these immediate and broader effects; practically, by looking at this work holistically, the broad range of effects can be better tracked and managed.

Based on study of recent US examples, the scope and geography of civic asset redevelopment projects emerged as an important issue. While reinvestments typically happen at the scale of a site, every successful project also operates as part of broader systems (such as a park or library system) and a web of citywide policies (by which we mean laws, regulations and other official policies as well as norms, practices and other informal ways that decisions get shaped). We think it’s essential for practitioners to think critically about the ways in which a given reinvestment operates across these scales. Considering the site, system and policy scales can help drive partnerships, identify available resources, understand and measure impacts, and anticipate problems. And the degree to which a given reinvestment works across and engages all three scales often determines whether or not it will achieve its ambitious goals.

**OUR ANALYSIS EMPHASIZES THREE DISTINCT SCALES OF OPERATION IN REDEVELOPMENT EFFORTS.**

*We find they have both geographical and practical significance.*

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**SITE**

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**POLICY**

The policy scale refers to municipality-wide (not place-specific) laws, regulations, and organizational strategies as well as practices, norms, and political cultures that operate across an entire city. (This broad notion of “policy” will be used throughout the report.)
On a longer time horizon, civic infrastructure work aspires to create more equitable and more sustainable cities. That is, civic assets like parks, libraries, and rec centers become a means for all citizens to benefit from public investment—immediately, over time, and by intention (benefitting disadvantaged neighborhoods directly, not by hoped-for, trickle-down effect).

How to make civic infrastructure span these scales and time-frames? Governance is key. And governance is not just “government.” In terms of civic asset projects, governance consists of: laws, regulations, and plans; organizations in public, NGO and private sectors; financial and human resources; leadership and citizen participation; informal cultures of using spaces and making decisions about them, bound together by ecosystem-like relationships. It is the means by which all the actors involved in civic asset redevelopment work and make decisions collaboratively, through a rich set of institutions and relationships.

The particular combination of factors, forces and resources that make up governance determines how well a civic asset reinvestment project engages across site, system, and policy-based scales. Tapping into resources and opportunities at multiple scales takes extra work—coordinating and collaborating—and is key to governance that works toward equitable and sustainable civic infrastructure. Governance is also the means by which different areas of practice like design, programming and creative placemaking; civic engagement; organizational management and public-private partnerships; monitoring and measurement of outcomes; economic development and inclusion—can be brought to bear in complementary, creative ways. For instance, in San Francisco’s Buchanan Mall project, described in the report, an early partnership between NGOs created programs that connected to local citizens, which led to engagement of additional partners from beyond the neighborhood to help design and implement physical public-space improvements with the neighborhood—a clearly more equitable and sustainable outcome than a previous era’s public-space redesign efforts directed by the city acting alone.
Governance is complex. No one set of actors has the expertise or ability to oversee a project and its impact across all scales and for the long-term. So relationships are very important. Good governance is based on collaboration not confrontation; it has to adequately address ownership in all of its senses (from legal to historical to usership); it has to ensure that local expertise is valued in broader discussions; and it has to be adaptable over time. The case studies in our report bear out these lessons of good governance in the civic asset realm.

Funding is, of course, central to governance and the ultimate success of civic asset redevelopment: it is the fuel for any good idea or collaboration. Who or what organization pays for civic asset reinvestments often has great influence over who is in charge and makes crucial decisions, which in turn affects who benefits. For this reason, it’s imperative to pay close attention to financing from the very beginning. Funding sources can preclude certain collaborations or enable them; for example, direct funding for grassroots organizations can support their participation in decision-making.

**The civic infrastructure framework is offered with the hope that it will help inspire practitioners, leaders, professionals and advocates to realize both immediate and long-term, local and citywide values through their civic asset redevelopment work.**

The concepts explored in the following report expand on the basic ideas introduced here—civic infrastructure, governance, and the importance of thinking across scales and over time. We draw on redevelopment projects, interviews and published reports from across the US (from San Francisco, Los Angeles, Chicago, Houston, Minneapolis, New York, Atlanta and Washington). The projects we highlight present notable examples of reinvestments in which the site is the starting point (a park, an underdeveloped public space); reinvestments intended from the very beginning to reshape an existing system (a city’s parks or library system); as well as redevelopments that are prompted or shaped by a policy idea (equitable development of one area of a city; environmentally restorative reuse of a river valley). Every one of the projects we researched features intersecting site, system and policy aspects, and dynamics between these scales inform how a given reinvestment will work and who it will serve.
Parks, libraries, and other public spaces have long been centers of social life in our cities and towns. They support specific functions, from recreation to education, conservation, and public gathering, and also contribute to community identity and civic pride. They are the most profoundly meaningful and complex parts of any city—the commons that enable civic life.

Creating new public spaces and civic assets in a city typically gets a lot of attention and is interpreted as a highly meaningful act of confidence; improving and caring for inherited civic assets garners less attention but contributes deeply to how a city’s system of public spaces and civic assets performs. **This is the focus of this report: the redevelopment of existing civic assets.**

These days, cities’ public spaces and civic assets are being asked to do a great deal more than originally conceived. They still provide encounters with nature, books to read, recreation, and other public benefits, but many users, officials, and advocates are
also asking that they reduce inequity, engage citizens socially and politically in their communities, provide economic opportunities, and improve the neighborhood through art and storytelling. These new expectations raise important questions: Is too much being asked of our civic assets and public realm? How does redevelopment actually work (and how should it work)? How do our communities of practice meet these higher expectations? What can we do as practitioners, advocates, and citizens—individually and collectively—to get the most out of civic assets and meet aspirations of equity and sustainability?

NEW EXPECTATIONS FOR PUBLIC SPACES AND CIVIC ASSETS RAISE IMPORTANT QUESTIONS:

Is too much being asked of our civic assets and public realm?

How does redevelopment actually work (and how should it work)?

How do our communities of practice meet these higher expectations?

What can we do as practitioners, advocates, and citizens—individually and collectively—to get the most out of civic assets and meet aspirations of equity and sustainability?

We think expectations for civic-asset redevelopment are appropriately high. The needs of urban communities are changing, and the current urban crises demand new solutions. Designers, stewards, political and community leaders, and citizens are demanding and aiming to build public spaces and civic assets that serve everyone, help advance social well-being, and are sustainable in all senses of the word, because our future requires them. We are challenged to re-envision public life and the public realm, fueled by an ethic of building on what we’ve inherited rather than creating anew. We are committed to working on both the physical places and the social, cultural, and political processes that bring civic assets to life and make them useful. We believe in aspiring to ideals while staying focused on the practical.

Our research explores how these new expectations and ambitions for civic assets are being met—by different cities, in different ways. When it works, how does it work? And when it doesn’t, what questions should practitioners, communities, public officials, funders, and other partners ask, and what next steps might they take? What are the most-important factors in successful efforts to restore and remake public spaces and other civic assets in American cities? How do we ensure that they address today’s urgent issues like equity, inclusion, engagement, and sustainability?
Addressing Historical Problems

The evolution of American cities over the 20th century resulted in the isolation of individual civic assets, neighborhoods, and urban issues from each other. The problems of a park, library, neighborhood, class of people, thorny issue, or city agency were regarded unto themselves. Typical of modernization, the tendency of planning, design, and government in most of the 20th century was to isolate problems (even make them invisible) in order to “solve” them—tearing down “blighted” neighborhoods, housing the poor in high rises on the edges of a city, burying industrial waste, warehousing the mentally ill. A divide-and-conquer mentality prevailed socially, politically, and professionally. These were failures of politics and of imagination, helping to create—and worsen—the problems that civic-asset redevelopment addresses today.

“Civic infrastructure,” the central idea in this report, is an ideal meant to repair, reinforce, and realize the value of the complexity and connectedness of cities, to improve the performance of civic assets and neighborhoods for all citizens. Civic infrastructure consists of hard and soft elements, intertwining systems of spaces, buildings, organizations, uses, and ideas that enable public life. It is created and maintained by authorities, citizens, designers, and other professionals. For instance, civic infrastructure is not just the land and buildings making up a park, but the programs, people, management, maintenance and traditions of using it. Civic infrastructure provides places and means of public exchange, economic and social well-being, and symbols of civic life; it is an index of how well our politics work and how well our economy creates and distributes wealth, as reflected in what citizens advocate for to their elected officials, volunteer for on weekends, or comment about online.

The processes of re-connecting civic assets and then sustaining them as a high-functioning “infrastructure” is painstaking; there is a lot of isolation to undo. It is common to think of a forest, a sports field, a library, a school, a
community garden and a sidewalk separately, but of course they may be clearly connected
by adjacency or folks’ use or experience of them. Managing each part of the public realm
separately makes it hard to diagnose problems accurately. It also makes coordination
among users, professionals and political actors challenging. We see this in the difficulty
of maintaining a quality everyday environment of many urban neighborhoods. The
problems of civic assets are systemic, not unique to each place or element. Our actions
to address them need to be intentional and highly coordinated, given that the forces of
inertia, isolation and apathy are great.

Governance Is Key
No single factor creates civic infrastructure or makes civic-asset redevelopment
“work”—no one particular source of money, design idea, well-located site, or charismatic
leader is decisive. Rather, it is governance—the process of establishing,
negotiating, and maintaining institutions and basic functions (design,
maintenance, staffing, funding)—that most determines whether
public spaces perform well for the greatest number of stakeholders.
Many cities have so many strong pieces in place (sites, organizations, leaders), but the key
to success, equity, and sustainability of civic infrastructure is how the pieces are stitched
together in a fabric that can be strong, inspiring, adjustable and adaptable. And it is
governance that determines whether public spaces are, or are not, inclusive and equitable
and sustainable through time.

“Governance” is not merely shorthand for elected
officials and public agencies, although they contribute
a lot. Governance includes laws, regulations and plans;
organizations and their leaders (in public and NGO
sectors); citizen participation; informal cultures of use
(like sharing a park bench, not littering, and being a
good neighbor); and ways of making decisions
(through formal processes, cultural habits, and using
expert opinions). Governance depends on networks
of institutions, resources, relationships, and respons-
ibilities, and it spans across sectors, from the desks
of individual officials to the living rooms of citizen
advocates. When governance is robust, it creates, reinvigorates, and maintains public spaces, making them work for many users and stakeholders, and adapting through time in response to internal and external factors.

The different pieces making up these networks (hard assets, actors, and relationships between them) relate in the manner of an ecosystem: as an “ecology.” Ecological dynamics and factors shape civic assets and public spaces in myriad ways. They shape the kinds of experiences available, the opportunities provided (cultural, recreational, economic); how equitably those experiences and opportunities are accessed; how they are created and maintained physically; and where the resources, expertise, and responsibilities for governance come from. The ecology of governance forms a central part—perhaps the central part—of the entire ecology of civic infrastructure, as elaborated on below.

**Making Change Happen**

The ideas at the center of this project—the ideal of civic infrastructure, the prime role of governance in creating and maintaining it, and the “ecosystem” qualities of redevelopment processes—are meant to push against forces that isolate single problems or generate single-minded solutions that flow from them:

- design determinism (the belief that reshaping physical space also does the work of reshaping human behavior);
- the tendency for governments to recede and privatize under neoliberal political pressures;
- trickle-down assumptions about how benefits flow across socioeconomic sectors (“a rising tide lifts all boats”); and
- the legacies of widespread discrimination and structural racism (in housing, education and other sectors).

And the civic infrastructure ideal is meant to advocate for:

- addressing historic imbalances of investment between white communities and communities of color;
• grassroots initiatives with potential to apply to bigger-scale issues;
• unlocking the potential of creative placemaking to fuel engagement and improve design quality;
• employing public space as a catalyst for sustained community and economic development—capturing public and private values in sync; and
• attending to the multiple scales at which reinvestments are undertaken, including sites, systems, and citywide policies.

In the last couple of decades, remarkable efforts have been made around the country to create, improve, and care for public spaces.

In cities, design of new parks, adaptive reuse of redundant infrastructure, and creative placemaking are ubiquitous, made possible by new partnerships, resources from NGO and private sectors, progressive public policy, and inventive design and planning ideas. To varying degrees, these projects also intend to advance equity, engage more citizens in stewardship, and measure their performance; this is the real work in progress.

A decade ago, one might have been aware only of New York’s High Line or Chicago’s Millennium Park. Today, a new generation of more-ambitious projects are unfolding, actively learning from earlier successes and failures. These include Minneapolis’s historic park systems, Atlanta’s BeltLine, Chicago’s 606, DC’s nascent 11th Street Bridge Project, the LA River Revitalization, Houston’s Bayou Greenways 2020, and New York’s Community Parks Initiative. The impulse to create new and improve existing public spaces touches all cities, prompted by engaged citizens and active leadership from all sectors and driven by new commitments to address legacies of disparity, disinvestment, and disadvantage. At the same time, foundations—such as Knight, Kresge, JPB, Rockefeller and William Penn—and nonprofits with national reach, like ArtPlace, The Trust for Public Land, and LISC—are investing programmatically to build the capacity of local organizations, facilitate learning, and inspire collaboration. We all are fortunate to be working
in a moment of intense focus and great creativity aimed at creating higher-value public realms.

All of these projects have their own stories of fits and starts, trial and error, partnership-building, resource-seeking, and trying to bring together the right factors at the right moment. And nearly all of them are in the process of unfolding. In this burgeoning national area of practice, questions remain about how it all works: Is this year’s park or library project anything more than a one-off? How do changes in one part of a city shape its other parts? How can improvements be sustained across decades and across neighborhoods, with either many or few resources? How can cities make the most of the resources, energy, and ideas related to civic-asset redevelopment—not only to create great public places, but also to address dimensions of inequity (like access to jobs, education, housing, and healthy environments)?

**Using the Ideas in This Report**

This report doesn’t only dwell on ideas and concepts; we offer practical guidelines to advance civic asset-redevelopment efforts of many kinds, at many scales, in any city.

If this work is to help practitioners solve problems, it must point out next steps while also keeping in mind the conceptual framework. We strive to address how one builds today towards a sustainable ideal of civic infrastructure in the future in a way that adds value to everyday work and strategizes for more sustainable projects.

Our analysis emphasizes three distinct scales of operation in redevelopment efforts. We find they have both geographical and practical significance:

- The site scale refers to a particular, bounded project or location (a single building or park, for instance).
- The system scale refers to a collection of sites with similar functions (a park system or library system) or within a neighborhood or district (perhaps including a school, library, park, rec center, or other assets).
- The policy scale refers to municipality-wide (not place-specific) laws, regulations, and organizational strategies as well as practices, norms, political cultures that operate across an entire city. (This broad notion of “policy” will be used throughout the report.)
The idea of **site-system-policy** scales is the key tool for applying the civic infrastructure concept. Every project, idea, situation, or issue related to civic-asset redevelopment is an ongoing story, and our research suggests that they each present distinct challenges and opportunities at three scales: the site, the system, and the policy. **As a practitioner or decision-maker, one has to determine what the most effective entry point to the redevelopment process will be:** at the scale of the site, through the structure of the system (e.g., a park or library system, a neighborhood), or through the leverage of policies that affect broad reaches of the city—or even the entire municipality.

Redevelopment of civic infrastructure is an ongoing process so it’s a bit misleading to think of it only in terms of individual “projects” or “assets.” One also must consider how governance connects assets—via institutions, partnerships and habits of cooperation—to turn isolated projects into systems of connected infrastructure. (In a later section, we use the concepts from this research to model scenarios for navigating typical decision-making situations.)

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### OUR ANALYSIS EMPHASIZES THREE DISTINCT SCALES OF OPERATION IN REDEVELOPMENT EFFORTS.

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Goals and Methods

We’re not trying to tell the whole story of any one project in this report. Nor do we claim to have exhaustively investigated all important civic asset-redevelopment work transpiring around the country. We aim to be representative and to report across several rich projects—which comprise different scales and spread across the country—looking inductively at the elements, conditions, challenges, and narratives of success characterizing each. We don’t pretend to have the last word on any particular project, or to identify one decisive factor in each case. Rather, our attention has constantly been drawn to the “ecology” in which these efforts thrive: the web of resources, partners, relationships, ideas, and spaces that is unique to each city. Our recommendations aim to identify how to understand and manage civic infrastructure, and the ecology of civic asset-redevelopment work that supports, enables, provokes, and inspires many actors to pursue projects of rich, equitable, and abiding public benefit.

Our research has sought to identify the most ambitious civic asset-redevelopment efforts and explore how they work. It’s a complicated question, because “work” means different things in different cities and among different stakeholders: beauty and quality of experience; sophistication of design; ecological performance; state of repair; return on investment; generation of economic opportunities; equality of access; level of citizen engagement; the novelty of the partnerships; the effectiveness and sustainability of management and control. We’ve learned that successful civic asset-redevelopment depends on a diversity of factors that combine to produce a range of benefits, and that the benefits flow from the relationships between assets as well as assets themselves (parks making up a connected system are more beneficial that isolated parks). Examples of this abound in the cases we relate in Section IV.

The data we collected enable us to look across the experiences of different cities and their varied cultures and enabling environments, exploring the mix of ingredients, initiatives, and partners in what has become a national phenomenon. As we built up a database of projects, we began organizing them accordingly to which of the spatial categories seemed to characterize the effort most clearly: single-site projects, multi-site systems, and non-spatial policies and practices related to entire cities. Building up examples in
each of these categories, we refined our concept of “civic infrastructure”—principally to emphasize the centrality and complexity of governance—and gave shape to the narrative accounts of emblematic projects around the country.

We conducted our research principally over the summer and fall of 2017. This research included: a review of the professional literature and press; in-depth interviews with scores of officials, designers, advocates, and scholars in cities around the country (a list of interviewees is included at the end of the paper); and a handful of site visits.

Nearly all the projects we examined are still evolving, which means that, by the time this paper is published, new developments will have transpired, deadlines will have been met (or missed), and new milestones will have been identified. Our goal, therefore, isn’t to define these projects prematurely, but to take a snapshot of them and use our lens of civic infrastructure to identify trends and challenges that cut across these ambitious projects in progress.

In the following sections, we relate: some historical context, explaining how American cities evolved to the point at which civic asset-redevelopment work gained such resonance; elaborate a conceptual model centered on civic infrastructure and governance; report on the stories of several cities’ sites, systemic overhauls, and policies, as well as the insights drawn from them; and end by drawing some overall conclusions.
Many of today’s discussions about civic infrastructure begin with New York City’s High Line—a 1.5-mile stretch of elevated-rail-line-turned-public-park, winding along Manhattan’s west side—largely because it has the unique status of serving both as a model of success and as a cautionary tale.

In 1999, two residents who lived near the unused rail line, Robert Hammond and Joshua David, created the Friends of the High Line, a nonprofit that continues to operate and maintain the park and raises 98 percent of its annual budget. Through this organization, Hammond and David advocated for preserving the abandoned infrastructure and transforming it into a landscaped public space. Over the following decade, the friends’ group raised funds, held a design competition, and worked with the city to
hire multiple well-known design firms, including James Corner Field Operations and Diller Scofidio + Renfro.

The first sections of the High Line opened in 2009, and it immediately began to change the neighborhood in ways that few anticipated, including catalytic economic development and rising property values. As tourists, luxury hotels, condos, and high-end stores arrived, older small businesses closed and less-wealthy residents both moved out and avoided the park, largely because they didn’t feel like it was for them. Many cities envied the economic growth on display as well as the park’s rustic beauty, but scholars and activists began to voice concerns about the growing exclusiveness of the newfangled park—which was “new” only by virtue of a certain kind of discovery; it was actually a project of adaptive reuse.

The High Line is important for many reasons: it has spurred interest in similar kinds of public spaces in cities around the world—assets found and reimagined; it has raised awareness of the challenges, and importance, of creating truly inclusive public spaces; it has highlighted the catalytic role of local activists in changing cityscapes; it has underscored the value of reusing heritage assets rather than building new; and it has revealed the difficulty of managing the externalities of redevelopment, both positive and negative.

But the reputation of the High Line has overshadowed other public spaces that were also being imagined in the late 1990s—projects vital to understanding why parks and civic infrastructure matter, and how they work. Indeed, a number of cities were simultaneously embarking on ambitious campaigns to reinvest in and reimagine long-neglected civic spaces.

Also in 1999, a graduate student at Georgia Tech, Ryan Gravel, began to imagine a singularly ambitious combination of transit, park, and trail investments around parts of downtown Atlanta called the BeltLine. That year, Gravel, a master’s student in Architecture and City Planning,
published his thesis that envisioned the transformation of a 22-mile loop of old, abandoned rail lines into a series of walking and bike trails, green spaces, and public transit—an immense project that he and his colleagues hoped would also help transform the thousands of acres of underutilized, formerly industrial land that directly adjoined the rail lines and intersected with 45 residential neighborhoods.

Because one of the project’s goals was to spur growth around the BeltLine’s neighborhoods, Gravel and his colleagues anticipated the coming rise in property values and spent the forthcoming decade incorporating into their master plan an economic-development program—one that prioritized affordable-housing development and planned for new public-transit lines. **It strived to control the economic growth spurred by the new park and direct its benefit towards the neighborhood’s existing communities.**

As the work on the BeltLine began, however, progress towards some of these objectives began to falter. As the years passed, the public-private partnership overseeing the BeltLine struggled to secure the funds necessary for its affordable-housing and transit work, while private housing development—stimulated by civic improvement—continued apace. These failures to adequately prioritize equitable outcomes were discouraging enough that Gravel resigned from the BeltLine’s board in 2016, both to pursue his own projects in equity, public space, and infrastructure, and to make a symbolic protest over some interim failures.

It’s important to note that the stories of both the High Line and the BeltLine underscore the degree to which public-space reinvestments are entangled with economic growth—anticipated or not. Parks, gardens, and cultural programming—among other components of civic-infrastructure reinvestments—tend to raise property values and redefine neighborhood identities. Both stories, and much of our research, more broadly, suggest that civic-asset reinvestments can likely never be purely “public space” projects.
Indeed, in Chicago, similar concerns over equity and public space have also shaped several marquee projects. In 2003, the city’s Department of Planning and Development held a series of public meetings to identify new opportunities for open space on the Northwest side of Chicago, a neighborhood seen as on the brink of change. The city had already invested in downtown’s Millennium Park, which was a big success, and wanted to continue expanding and revamping old infrastructure into new outdoor spaces.

In response to these public meetings, the city formed the Logan Square Open Space Plan, which called for the creation of a park on the Bloomingdale Rail Line, also called the 606, to bring greater connectivity and new recreational uses to an existing piece of physical infrastructure, threading through a few dense neighborhoods northwest of the Loop. As with the High Line in New York, neighbors created a friends group, the Friends of the Bloomingdale Trail, and in 2006, it partnered with The Trust for Public Land, adding another nonprofit partner to the mix. Soon after, the $95 million project secured a $50 million grant from the U.S. Department of Transportation. The city began to redesign the viaduct in 2011, and today it works with both the friends group, which serves as the official park advisory council for the Bloomingdale Trail, and The Trust for Public Land, which oversees land acquisition, fundraising, and community engagement.

As property values around the park started to rise, residents looked for ways to manage the unfolding changes. In the spring of 2017, three local aldermen proposed an ordinance that would charge additional fees for teardowns and expansions of existing buildings along the viaduct. The revenue from these fees would go into an affordable-housing fund overseen by a board, with local aldermen and community representatives. The ordinance was referred to committee in May 2017. The Logan Square Neighborhood Association also called for the creation of a property-tax rebate and/or the designation of a pilot district where demolition fees would be high.
These three stories are somewhat similar: residents, nonprofits, and city officials work together to invest in a vast and charismatic site—a reinvestment that spurs both economic and cultural change in the surrounding neighborhoods. However, one more project also launched in 1999. Just as New York, Atlanta, and Chicago were targeting large parks, Seattle launched a systemic renovation of its public-library system with its “Libraries for All” program.

Like most cities, Seattle had an extensive, community-facing library system, in need of substantial reinvestment. But change happened slowly. In 1994, when the local economy was struggling during the pre-dotcom era, a referendum narrowly failed to pass that would have supported a $155 million capital plan for the city’s public libraries. (In Seattle, construction bonds require 60 percent approval, and this referendum received only 57 percent.) In response, the nonprofit Library Board hired Deborah Jacobs as the new chief librarian—a move that fortuitously coincided with the election of a new mayor, a new slate of elected officials, and the start of the dotcom boom.

Jacobs’s vision encompassed the entire library system as well as the effects an improved system could have on the city’s ecosystem. She revised the proposal, which she named “Libraries for All,” to include a new or refurbished library in every neighborhood, in addition to a showpiece Central Library. In 1998, 96 percent of voters approved the bond measure, for $196.4 million. In addition to the voter-approved funds, the Seattle Public Library Foundation committed to raising $25 million from private and philanthropic donors, and an additional $15 million for collections and technology upgrades. (They eventually raised $83 million.)
Jacobs made a couple of important changes to the way the project worked. She insisted that all architecture firms involved in the construction commit to extensive civic-engagement efforts. She also insisted that the project receive priority within the firms and attention from the design principals at each one. When a certain famous architect wasn’t available to work on the redesign of the Central Library branch himself, Jacobs removed his firm from consideration. Lastly, to ensure that the project remained independent of shifting political priorities, Jacobs insisted that she and not City Council oversee the reinvestment.

Over the next decade, the Seattle Library Board reinvested in every neighborhood branch and oversaw a major renovation of its Central Branch, designed by Rem Koolhaas. When Koolhaas presented at a community event, roughly 1,000 people attended. The campaign wrapped up in 2008, although subsequent campaigns and bond measures have supported additional maintenance and upgrades. Today, the libraries provide myriad public benefits, including education and community-building, and serve as symbols of the city’s commitment to its neighborhoods.

When we examine these four projects together, a complex story comes into focus. **In New York, Atlanta, Chicago, and Seattle, some combination of residents, officials, and community advocates simultaneously prioritized existing urban public spaces and civic assets.** The source of the idea varies and the cast of characters changes, but each conceived of new ways to enliven the public realm, through investments in charismatic sites as well as reinvestments in municipal systems. New policies were needed to support the (re)investments and to extend and distribute the benefits. Meanwhile, original goals didn’t always follow a clear path to implementation. Significant challenges remain: sustaining efforts through time, as well as dealing with the changing urban context—and changes the investments themselves provoked. These changes include higher property values, more exclusive and homogeneous neighborhoods, and residents’ fears that new amenities aren’t designed for them.

To understand the present and future significance of these projects, one must remember why they emerged as compelling ideas in the first place. Before delving into more stories of civic asset-reinvestment projects, we reconstruct how things came to be “broken”: how civic assets in cities across the country declined so significantly.
The current moment of public-space redevelopment and civic-infrastructure innovation is part of a larger, longer story. To put this most recent chapter in context, this section briefly delves into 20th-century urban history. The lesson is this: the varied aspects of civic-infrastructure practice—especially the efforts to integrate and connect work across sectors—arose in direct response to a series of urban crises (and responses thereto) that dramatically shaped American cities during the second half of the 20th century.

The story most-often told about 20th-century cities is one of massive growth and prosperity: the transformation of dirty old centers into gleaming new metropolises. The other side of the story is more germane here: the degrading of the physical and social fabric of urban neighborhoods, isolating the most vulnerable people and assets from the resources they need.

The metropolitan effects of post–World War II growth are well-known; they were driven by the massive suburbanization fueled by highway building, housing policy, and racial discrimination—all strongly shaped and enabled by federal policy. Vast macroeconomic transformations shifted industries between regions and countries, creating local economic crises despite national growth overall. These forces of decentralization encouraged industrial jobs to migrate to warmer or foreign climes and left central cities in dire need of public and private development, decimating working-class neighborhoods and concentrating poverty.

Among the few government-led strategies for addressing the public plight of central cities was urban renewal, which did little to renew cities and instead further fueled decentralization, displacing more disenfranchised inner-city residents and concentrating resources in the hands of powerful institutions. Urban renewal had particularly disastrous results for the neighborhoods of the urban poor. Extensions of highways through city centers heaped wholesale destruction on neighborhoods that were least able to resist decimation. At the same time, large developers and anchor institutions leveraged massive federal grants (early forms of public-private partnerships) to build infrastructure and new
office, housing, university, and cultural districts that functioned as islands of prosperity. Simultaneously, working- and middle-class jobs were disappearing.

Urban decline was manifest not only in the kinds of disparity measured by incomes or poverty rates, but also in the fine-grained geographic, social, and economic isolation of poor and minority citizens. As years passed, de facto separation intensified of classes, races, and land uses, leading to greater reliance on car transportation, racial and class segregation, spatial mismatch of jobs and housing, and disinvestment in public-sector goods, services, and spaces. The systems on which industrial cities were built were breaking down. Cities across the country became different versions of the fragmented metropolis. And because governance structures rarely expanded to encompass the new suburban areas that were growing around cities, many regions became collections of independent and autonomous local governments surrounding a fiscally impoverished center.

**Fiscal crises left city governments with less money to invest in the schools, parks, libraries, and rec centers they so acutely needed to guarantee minimum quality of life for poorer, inner-city Americans.** Coupled with city dwellers’ waning resources, wholesale degradation of the inner-city environment ensued, from entire blocks and neighborhoods to individual homes and buildings.

Other defining features of metropolitan transformation included redundancy of industrial buildings and districts, alongside the wholesale neglect of the public realm in inner cities. Urban-renewal policies and the disinvestment coupled with industrial restructuring transformed streets, parks, and neighborhoods into fallow land or—equally catastrophically—into new, Modernist landscapes that left people feeling estranged by the monumental scale, coldness, and neglected pedestrian quality of the public realm. In both cases, streets and public spaces more often alienated citizens than connected them in webs of civic life.

As the physical conditions of inner-city neighborhoods worsened and industrial jobs disappeared, tensions around civil-rights issues reached a crescendo. Urban riots in the mid-1960s accelerated the white flight already enabled by economic policies and gave
governments further reason to disinvest in already-disadvantaged inner-city, mostly minority communities.

Efforts were made to address this alarming new geography of disadvantage. The federal Great Society programs made a dent, and the Model Cities program—part of “The War on Poverty” to bring resources to the under-resourced, predominantly African-American inner-city residents—included the creation and funding of neighborhood advocacy organizations and meaningful citizen participation. Top-down and bottom-up solutions were joined. Civil rights organizations, while addressing issues beyond urbanism, built important political capital in disadvantaged urban neighborhoods. And, as the 1970s and ’80s progressed, artists, urban homesteaders, community gardeners, and historic preservationists strived to fill in for absent government resources, staking claim to some areas and often rebuilding houses and blocks with the clear purpose of community-rebuilding. (And, not incidentally, planting the seeds of gentrification processes that remain hotly debated to this day.)

However, the scale of these interventions never matched the scope and depth of the problems these inner cities were facing, and many interventions only served to create new problems. The designs for new schools, libraries, recreation facilities, and health centers that did emerge in these years tended to be Modernist and out of step with a community’s existing identity and culture, exacerbating residents’ feelings of alienation and neglect. Meanwhile, governments addressed the fiscal crisis with top-down redevelopment: either seeking magic-bullet economic development solutions that relied on regional markets (e.g., attracting a new factory, building a new sports stadium, legalizing casinos) or creating new public-private development corporations that enabled privatization of urban spaces and government services. In terms of addressing neighborhoods and citizens who were facing acute disadvantage, these strategies offered the mostly empty promises of “trickle-down” economic benefits.
Privatization, in its many varied forms, stimulated urban economies and changed how cities were governed, in essence “doubling down” on trickle-down. Business Improvement Districts (BIDs) gained control of traditionally public functions, from street-cleaning to policing. Quasi-public development corporations redeveloped and marketed properties with an eye toward balancing public and private benefits, albeit mostly in center cities. By the 1990s, privatization had effectively created a new mosaic of public-private agencies pursuing the business of city governments, including public-development corporations (PDCs) and NGOs (such as friends groups and BIDs). These organizations eventually governed parks, libraries, and other civic assets; today, public-private partnerships are deployed in myriad ways to perform or support public functions, with varying degrees of success, efficiency, and equitability.

By the 1990s, these privatization measures had laid the groundwork for new market-led transformations of urban neighborhoods and industrial districts, many under the banner of the “creative economy.” Economic development strategies centered on adaptive reuse (market-led preservation) and public-realm improvements (including creative placemaking). Creative placemaking—a strategy of filling fallow public spaces with art and cultural programming, based on local civic engagement and mixed financing—proved persuasive (and sometimes controversial and politically charged), making large and small public spaces more dynamic and offering a mode of expression for neglected communities. Placemaking and historic preservation helped to transform inner-city real-estate markets by providing platforms for consumption by white-collar and
creative-industry workers, thereby also contributing to rising property values and provoking gentrification debates.

By the late 1990s, these successes— as well as the kind of charismatic projects described in the previous section—challenged many cities to reinvest more ambitiously in the public realm throughout their cities. New, high-quality public spaces and vibrant neighborhoods for younger, whiter newcomers—haunted by gentrification and inequity—have prompted conversations about long-standing needs for civic-asset reinvestment, driven by concerns for addressing inequity directly and from the bottom up.

Through the lens of urban history, we emphasize that the opportunities for civic infrastructure are deeply connected to the generations of uneven development, fiscal stress, and outright neglect.

As the redevelopment work proceeds today, it remains rooted, notably, in the neglect of previous generations’ legacy sites: primarily schools, parks, rec centers, and libraries. The catalysts of newly progressive redevelopment tend toward arts-and-culture organizations and other single-issue advocates (e.g., for cycling, gardening, preservation): a variety of private and NGO organizations working in partnership with government, rather than city agencies, federal policies, or government initiatives (e.g., transportation systems). All of these initiatives are striving to reconnect and mix sectors, organizations, communities, and urban spaces that had been separated and isolated during the postwar generations of urban crisis.
In an earlier white paper, we offered the concept of civic infrastructure to describe holistically the efforts to improve public space and redevelop civic assets: “Civic infrastructure encompasses the physical spaces, buildings, and assets themselves, as well as the habits, traditions, management, and other social, political, and cultural processes that bring them to life—two realms that, together, constitute a whole.”

At its heart, the concept of civic infrastructure argues that one must act with knowledge of the entire “ecosystem” of cities and urban societies. As one works to shape a particular site, larger scales and relationships of the ecosystem will come into play. Beyond a listing

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www.williampennfoundation.org/what-we-are-learning/civic-infrastructure [accessed May 5, 2018]
of its constituent parts, civic infrastructure—and its particular contributions to urban life—has a special nature manifest in the connections and processes needed to sustain it. Civic infrastructure (CI), as an ideal:

- is public in the sense that it is collectively owned, managed, and interpreted; it is a commons; everyone has access, has some agency, enjoys benefits, and subscribes to some ideal about what CI means and represents;
- thrives on the participation of many actors in using and caring for it; civic infrastructure, like other examples of a commons, operates by collective effort and some measure of mutual dependence; it doesn’t just passively connect fellow citizens, it requires their active collaboration with one another;
- integrates physical (“hard”) and social (“soft”) elements, and the connections between them, no matter how formally (laws, policies) or informally (habits, traditions) they are maintained;
- continually changes and adapts through time;
- connects clear and clever ideas about the design of particular spaces (how does it work?) to ways of measuring performance in terms of the system (does it work?)
- doesn’t rely on innovation alone for value; maintenance deserves equal weight, investment, and praise for sustaining the value of civic infrastructure.

**Civic infrastructure is best understood, by analogy, as an ecosystem—of varied elements, related to one another through a complex set of processes.** Functioning like a network, it can be modeled like a natural ecosystem to explain the roles of different elements (species), their relations in time and space (biomes, landscape ecology), and the overall performance of the system (biodiversity). To quote our previous white paper, civic infrastructure is “a resilient system of spaces and processes, rather than a collection of discrete buildings and places.” The ecosystem analogy yields some highly specific insights about the design of and investment in civic assets and public spaces; it enforces the notion that no single “species” (building or park) can truly be understood or assessed apart from its relationships to other pieces and processes of the system. Similarly, environmental conservation has successfully challenged a focus on protecting “charismatic megafauna” by demonstrating the need to restore the ecosystems.
that support them (for instance, conserving lions requires protecting the grasslands they inhabit and the species they prey on).

Talk of “infrastructure” has spiked recently, primarily in response to crises of disinvestment and maintenance backlogs (visible, e.g., in the American Society of Civil Engineers’ annual Infrastructure Report Card, or the Pew Charitable Trusts’ Fix Our Parks initiative, “raising awareness and finding lasting solutions for America’s national parks’ $11.6B repair backlog”). While infrastructure is used metaphorically to indicate a hidden support structure, it’s most often used to describe physical assets—such as the scaffolding and equipment enabling mobility, manufacturing and trade, railroads, highways, and water and sewer systems—as well as the purposeful design, engineering, and performance expectations that animate them. Drawing on the prevailing idea of physical infrastructure, vast capital expenditures are needed to create large structures, the design of which experts determine. The intention is to be efficient. Rarely do political debates about infrastructure extend to networks of civic assets like school systems or library systems, but they all rely on both “hardware” and the cultural “software” to use it.

Civic infrastructure taps into other ways of thinking, intervening, and designing. First, decisions about civic infrastructure come from many sources and have to reflect a diversity of stakeholders. Second, there is higher value in preserving and reinvesting—rather than innovating (or worse, “disruptively innovating”) for its own sake. Maintaining is progressive and even subversive—it is radically sustainable—and challenges our societal preference to value new things more than things we inherit.

This notion of pushing back on the new, hyper-visible, and innovative is among the values of civic-asset redevelopment. Maintaining and improving the places society inherits has unique value, rivaling if not superseding the value of discarding or destroying what we
The flow of benefits produced by redeveloping existing civic assets is substantial. For instance, good maintenance builds trust and pride, engages workers in the labor of sustaining existing assets (supporting local economic development and economic inclusion), reduces waste, and makes possible continuous public benefits such as educational life of libraries, encounters with nature in parks, and the freedom to gather in public spaces.

Scholars have lately used the idea of infrastructure to express and model the complexity of how physical and social systems interact in cities. The growing relevance of the concept is reflected, for instance, in the work of:

- Shannon Mattern (2014) wrote on libraries as nodes of complex social infrastructure, already part of the civic realm;
- Eric Klinenberg (2013) emphasized the social connectedness—or lack thereof—of urban societies;
- Keller Easterling (2014) explored the invisible political and policy rules behind architectural and spatial production; and
- Randall Mason (2009) modeled the production of physical and social infrastructures for collective memory as part of the core purposes of historic preservation and the heritage sector.

These theories add complexity to notions of civic infrastructure, but gaps and questions remain. Current scholarship as yet barely addresses the difficult question of measuring the outcomes of civic infrastructure’s “operations.” Some measurements or other kinds of feedback are an essential ingredient for any infrastructure project, which, like any system, should be continually monitored and evaluated to see if it’s meeting its goals.

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4 The Maintainers research network is an interesting collection of academics and practitioners rallying around maintenance as a challenge to innovation. See http://themaintainers.org [accessed May 5, 2018]

Theories of infrastructure also have not fully integrated governance. Our research shows that all civic-infrastructure projects draw to some extent on five areas of practice (which were the initial ideas our research was organized around): governance, community engagement, design, measurement, and economic inclusion. However, as our research progressed, we understood that governance—specifically, how these areas of practice are combined to finance, manage and adapt civic infrastructure—is more determinative of success. Governance is the glue—the scaffolding—that enables great design, ambitious civic engagement, and systemic policy changes, all three of which seek to increase inclusion and equitable access.

**PART B**

### How Governance Shapes Success and Failure

Civic-asset and public-space interventions must reflect the complexity of the cities’ ecosystem at multiple scales. Easily said—but this is a challenge to do in practical terms. This section looks more closely at the role of governance as the critical factor in the ecosystem of civic infrastructure and successful redevelopment.

As the previous section argues, “infrastructure” typically emphasizes the physical works and logistics of a city (dealing with streets, sewers, buildings, land). Civic infrastructure aims to bring in the soft elements (management, financing, use, meaning) to address social problems as well, building a holistic picture of infrastructure works and outcomes. Governance addresses precisely how these hard and soft elements work together. It is the keystone element of the systems enabling civic-asset redevelopment in U.S. cities.

In project after project we’ve researched, complex civic asset-redevelopment goals are met through governance arrangements, institutions, and decisions embedded in the projects. The driving forces behind projects vary widely; grassroots advocates, designers, politicians, public-sector entrepreneurs, foundation grants, and elected officials all have played this catalytic role. But the realization of sustained redevelopment work depends on robust governance, which (over time) engages institutions and leadership across sectors,
aligns policies/strategies/laws with societal goals, and secures sufficient resources to implement viable civic infrastructure.

By “governance,” we mean the collection of institutions, laws, policies, decision-makers, political and cultural traditions, and flow of resources (money, people, power, visibility)—and how they work together (or not) as a system—to provide public benefits and sustain public life. For example: a city’s park system—subset of civic infrastructure—relies on city agencies, friends’ groups, community and user groups, public policies and laws governing financing and maintenance and use, habits of shared use, community organizers, designers, and politicians. And yet this collection of resources by itself does not a park system make; what makes the parks into civic infrastructure is the organization of these elements into a complementary system, one that evolves and adapts through time. The governing resources, actors, and relationships make up one of the central dynamics—perhaps the central dynamic—in the larger ecology of public spaces and civic infrastructure. Civic infrastructure can be jump-started by a great design idea, a new source of funds, an inspirational leader, a political reform, or a reaction to the failure of some other system, but systems of governance keep it running.

We are not alone in recognizing the centrality of governance; it has lately been a hot topic among scholars, analysts, and political leaders alike. Yet each field typically places its own self-centered emphasis on what enables civic-asset redevelopment—designers emphasize design, politicians emphasize power, neighborhood activists emphasize local quality of life—and this has occluded a robust understanding of governance as an integrative concern in terms of public space and urban redevelopment. Governance isn’t the province of any one field, profession, or sector. It is not determined by any one factor, but rather by the interaction of many factors: institutions, leadership, resources, and culture. It emerges only through collaboration.
At a broad level, talk about governance these days acknowledges its centrality for achieving any solutions at all to wicked problems (for instance, global warming), approaching solutions to collective civic goals (like healthier neighborhoods or equitable access to education), or the realization of complex projects (redeveloping a waterfront district or supplying affordable housing are common urban examples). For instance, several advocacy initiatives launched by global leaders in urbanization—The Brookings Institution’s Project on 21st-Century City Governance, United Nations Development Programme’s Habitat III/Sustainable Development Goals, and UNESCO’s Historic Urban Landscape Recommendation—center on bolstering governance to achieve long-term societal goals. In these best-practice frameworks, governance is the connective tissue linking expert analyses, scientific findings, and political will (though each framework has its own starting points and biases).

Multiple academic voices across the fields of law, political science, and urban planning are likewise putting forth refined concepts of governance. These ideas respond to the new difficulties and opportunities presented by failure of past systems, or offer the promise of innovative ideas. Specific to urban governance in the U.S., salient works include Goldsmith and Kleiman’s A New City O/S; Katz and Nowak’s New Localism; Shragger’s City Power; Moore’s Creating Public Value; Foster and Iaione’s 2016 article “The City as a Commons.” These works offer ideas for strengthening local, city-scale governance as the answer to the opportunities presented by (respectively): digital technologies, the power of local jurisdictions, the structural limits imposed by state and federal governance, improving the performance and value of public agency work, and the political ideal of the commons—all of which address the absence of meaningful national or regional governance contributing to cities, and speak at least indirectly to the virtues of creating conditions for civic infrastructure thinking.

A few national foundations have also played leadership roles in articulating the value of better cooperation, engagement, and organizational learning—as ingredients to better governance—for cultivating opportunities to create better public spaces. Foundations’ efforts often strike a fine balance between investing in projects/sites directly and in organizational capacity and leaders—that is, the “hard” and “soft” aspects of civic infrastructure.
One promising effort focused on governance and civic assets is the Reimagining the Civic Commons (RCC) initiative, spearheaded by the Knight Foundation, The Kresge Foundation, JPB Foundation, and Rockefeller Foundation (the Philadelphia pilot of which is supported by the William Penn Foundation and others). Unfolding over the last several years, the initiative has four main goals: civic engagement, socioeconomic mixing, environmental sustainability, and value creation. Like the civic infrastructure strategies it means to support, RCC aims to reformulate rather than transform, remixing governance roles and responsibilities across sectors to strengthen cities’ governance ecosystem. This goal has been approached by an extended program of collaborative learning and reflecting on:

- empowering and enabling local groups to manage community-based civic assets (a mix of public- and NGO-owned);
- building leadership capacity and mixing best-practice ideas in a learning network;
- focusing intensively on a few cities and organizations within those cities (only secondarily on the entire community of practice); and
- investing in working relationships with city agencies, professionals/designers/artists/consultants, and of course foundations—with a different mix in each city.

The results of this ongoing RCC process—a sort of laboratory for building up new capacities for the governance of civic assets—include the realization of capital projects, but just as important are the processes of developing and maintaining those projects and connecting them to their communities. The real test of these exploratory programs will be how well they are sustained once foundations have completed their investments. The same can be said for the other innovative programs and investments along these lines made by The Kresge Foundation, the Surdna Foundation, ArtPlace America, National Endowment for the Arts and other funders, and those implemented by NGOs such as The Trust for Public Land, LISC, PolicyLink, and others contributing to this national dialogue. At first, most of the focus rightly centered

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6 PennPraxis has been among the consultants working on Philadelphia-based RCC projects.
on immediate issues (identifying partner organizations, articulating design ideas, starting civic engagement); now it seems to be pivoting to deeper, longer-term questions of governance to integrate and sustain these initial civic-asset efforts.

Another line of insight in recent academic and professional literature highlights the distinction between governance and power. City governance runs on city power, but they are not the same. Governance is a function and operates through complex systems; power is a resource, and can make a system go, but cannot create the system itself. Or, as described in a recent Brookings blog, governance is “the messy business of institutions, systems, laws, processes, and norms that define how decisions are made and where authority sits.”

Power obviously plays an enormous part in how this unfolds differently in various cities.

Governance of public space/“civic assets” or other public-goods initiatives would, by definition, seem to fall mostly in the public sector. And yet governance elements and processes manifestly span the three sectors of civil society: public, NGO, and private. A number of sea changes over the last few generations have reshaped urban governance, resulting in more complex partnerships able to take on more-extensive projects. The actors involved include foundations, private citizens/volunteers, grassroots groups, community development corporations, unions, consultants, and academics as well as elected officials and city agencies. Supportive, complementary connections between organizations/actors (across all three sectors) are essential to good governance and come in many forms and combinations. The “right” mix is highly situational, but some strong national trends are addressing it: privatization of public responsibilities, proliferation of “public-private partnerships,” and activist foundations.

Over the last couple decades, sea changes in governance have gone hand-in-hand with the spike in interest in civic infrastructure and have informed two dominant strategies of reinvestment in many cities:

1. creating new charismatic parks quite visibly and intentionally strengthening the city center as a public space by making spaces more attractive (to residents and tourists) and attracting private investment; and

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2. shifting investment to improve smaller civic assets (parks, libraries, schools, etc.) distributed across a city, intending to address citizens’ needs and change neighborhood ecosystems more directly.

These approaches reflect fundamentally different values about who the primary beneficiaries of capital projects should be, and the mechanics (theory of change) for how it works—a question of trickle-down or direct-intervention strategies for elevating the quality of life throughout the city. Both theories of change have their adherents—the choice between them is an essentially contested question, decided more by ideology than evidence—but the civic infrastructure ideal is premised on the need for direct, intentional intervention in less-advantaged parts of the city in order to produce and sustain more equitable benefits.

Strategies concerned specifically with reducing inequity at the neighborhood level must directly address the neighborhood scale and understand how larger scales of the ecosystem affect the local. It is possible—in the long-run, at the city-scale—that benefits do trickle-down from center-cities or from city-wide policies to the neighborhoods “naturally” (without intention), but large, centrally located capital investments can’t be relied upon to address urgent local issues and opportunities. These competing strategies aren’t reconcilable, but it is enormously important to put these differences on the table regarding theories of change for the redevelopment projects that build toward civic infrastructure.

PART C

Applying Civic Infrastructure Ideas in Practice

How does one build today towards an ideal of civic infrastructure that can be sustained in the future? If one aspect of this work is to help practitioners solve problems, it has to point out next steps while also keeping in mind the entire framework. Adding value to everyday work and strategizing for more equitable and sustainable futures should go hand in hand. The “site-system-policy” tool is key for applying civic infrastructure in practice. Our research reinforces that every civic-asset project, in one way or another, is a community
development project. Many actors are engaged, and multiple benefits are expected, from each. Thinking of reinvestments as a collection of site-system-policy–based efforts—and undertaking a process of mapping them out—helps practitioners to orient their work toward these multiple, intersecting expectations. Ultimately, the goal is improving cities and public life, not merely individual sites—which emphasizes, again, the central importance of working across scales.

**The best way to organize one’s thinking about diagnosing a redevelopment opportunity—and deciding how to contribute—relates both to scale (site, system, policy) and to governance factors that relate to each scale. We consider each of the three perspectives to understand where one might intervene:**

### SITE

*e.g., a park, library, recreation center, community garden, or school/campus*

Though the structure of land ownership (individual parcels, fee-simple ownership) often guides one to single-site solutions, important redevelopment factors lie beyond the site. Even when projects seem neatly confined to a bounded geographic site, resources, opportunities, and the fate of redevelopment greatly influence constraints beyond the site.

### SYSTEM

*e.g., a library system, park or open-space network; museums in a given jurisdiction; or a school district*

Collections of sites—joined by common function, management entity, or geographic connections—hold the promise of larger efficiencies and broader benefits for the public. Parks, libraries, rec centers, and other civic assets are points in bigger municipal or regional systems, yet redevelopment efforts often miss the benefits of systemic work by focusing on individual sites. The scale of resources and coordination required to change a system may seem daunting, but some level of systemic change is critical to enable civic-asset redevelopment benefits to “spill over” into other citywide systems—like economic inclusion, affordable housing, and more.
Policies (laws, ordinances, agency strategies, bureaucratic rules, etc.) enable and regulate flows of benefit and value—creating a map of challenges and constraints. The rules and strategies formulated to govern a city often don’t target specific sites but, by creating rules for an entire jurisdiction, shape the possibilities and constraints of every effort at every scale. Policies acting upon site- or system-scale redevelopment efforts might include: economic development or ecological protection strategies (industrial-use tax breaks or a waterfront vulnerable to storm surge), contracting rules (for hiring minority-owned enterprises), or adaptive-reuse preservation incentives (to add historic-preservation outcomes to the mix).

Regardless of which scale makes sense as the starting point for a project, governance is the connective tissue and the driving force: joining efforts across the scales, providing resources, and sustaining the effort over time.

To make this insight practical, we offer the accompanying matrix, “Matrix to Support a Civic Infrastructure Audit” as a tool for auditing or “mapping” the factors affecting a particular project as they arise in practice. The matrix is simply a way to visualize the connections between different factors of governance (the y axis) interacting at different geographic scales (the x axis). It is not merely a series of boxes to “check off” but a guide to help practitioners (citizen advocates, organizational leaders, public officials, design professionals, funders) work collaboratively to observe and take stock (at a particular moment in a project’s life) of the factors of governance relevant to the project at hand and present at different scales. Making all the factors contributing to governance visible at a glance, practitioners and partners can use the site-system-policy + governance heuristic to explore and tighten these connections and reveal opportunities to link redevelopment efforts at multiple scales—that is, combine site-based, system-wide, and policy-centered measures. The matrix exercise can help a group of partners identify “blank spots” where more resources or partners may be needed. It should be used continually to explore relationships and feedback loops between different factors and scales. We hasten to add
Matrix to Support a Civic Infrastructure Audit

This diagram can be used to map out the factors currently involved in a civic asset redevelopment effort you’re working on. It is meant to be a heuristic—a learning exercise to be used in collaboration with partners—not a finished piece of project documentation and analysis.

As the matrix is filled in, partners can analyze patterns together and discuss gaps to be addressed in future steps. As projects evolve, the matrix can be used to map progress between stages of the work. The goal is not that the matrix be completely filled in; rather, that partners are conscious of the “mix” and balance of factors involved in the project.

The factors listed on the left of the matrix are the main ingredients of governance: a variety of actors applying funding through creating and sustaining partnerships within an enabling environment of laws and strategies. The top of the matrix is organized around the three scales of operation we’ve observed as having distinctly different influences on redevelopment efforts: “site” aligns with most local and clearly bounded concerns, as with an individual park or building; “system” refers to collections of sites (parks or libraries) or to the neighborhood/district geographic scale; and “policy” relates to regulations, laws, strategies, norms, political cultures, etc., characterizing the citywide (not site- or system-specific) context for redevelopment.

The suggested use of the matrix involves iterative stages of adding and analyzing information about the effort at hand:

- Stage 1: Annotate the matrix with keywords, phrases or notes, identifying how different factors are manifest in the project.
- Stage 2: Analyze strengths and gaps—establishing and missing connections—with a graphic notation of some kind (i.e. colors, or empty, half-filled, or filled circles), indicating which factors and scales represent strengths or gaps.

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<td>OPPORTUNITIES</td>
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that the matrix simply gives one a snapshot of the governance ecosystem at a particular moment, meant to guide action in ongoing redevelopment processes. Further guidance and suggested uses are noted on the matrix itself.

Keep in mind, of course, that governance is not neutral; it works through relationships and institutions with particular interests and missions and is driven by resource and political relationships—that is, power. Awareness of the political-economic landscape is another important filter when assessing any given situation.

If the site-system-policy scales help indicate where one might intervene in a redevelopment effort, the second question is how? And with what specific kinds of ideas? The universe of possibilities is vast. In practice, every individual civic asset is expected to produce several community-developing benefits. Which combinations should one pursue for a particular site or system? As a starting point, consider the five categories of work we studied in the earlier stages of this project:

- Design, programming and maintenance
- Public-private partnerships
- Civic engagement
- Economic inclusion
- Measurement and monitoring

There has been significant innovation in all of these categories, each one worthy of in-depth research. We’ve drawn on the accumulated intelligence in each of these areas of civic asset-redevelopment practice and explored how they connect using the elements of sustainable governance. No one effort in a single category will be the magic ingredient for success. Any good idea needs governance structures, resources, and processes to implement and sustain it.

Indeed, as we offer this matrix to help guide redevelopment projects toward the civic infrastructure ideals, we also acknowledge that there is no single recipe, no simple map, for how to do equitable and sustainable civic-asset redevelopment. How redevelopment

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9 Separate research dossiers on each is available at www.design.upenn.edu/pennpraxis/work/civic-infrastructure.
gets implemented varies from city to city, and even over the life of a single project. What does seem clear is that the most robust projects:

• manage well the connections between different scales;
• draw on all areas of practice (not all at once, necessarily, but over time); and
• manage to bring the governance institutions, resources, and processes into play in complementary ways.

In addition to analyzing particular situations, one may also use the matrix (see page 41) to explore connections between scales and governance in terms of individual roles in civic asset-redevelopment efforts. Consider how different actors might use the site-system-policy + governance heuristic to navigate complex situations and diagnose how to move forward civic asset-redevelopment efforts in inclusive and sustainable ways:

• For a public agency leader trying to transform her organization and system of sites, most of her activities will likely focus on the scales of policy and system, but they will ultimately be judged by what happens at the scale of the site. The matrix helps direct questions towards filling gaps in the ecosystem, to which the leader can allocate human and financial resources, partnerships, etc. to sustain civic infrastructure across scales.

• For a design or planning consultant advising one or more community groups on a grassroots redevelopment project, the focus may be helping the community develop a site from the outside, or advising an agency on how to think differently about their system and how site innovations can be vanguards of reform. The consultant’s clearest role may be catalyzing civic-infrastructure efforts—not just thoughtfully and adventurously designing, but also identifying and examining the multiple uses and scales of operation (i.e., a park strengthens a watershed, a trail is also a health-care measure, maintenance is also an economic and engagement opportunity).
• For the **director of a site** the urgent challenge will likely consist of improving the site visibly and physically. Questions might address what additional resources can be drawn upon, but it may be important to consider other parts of the system, as well as other systems (arts and culture groups, environmental organizations, business groups): What issues about the site are most affected by citywide policies (e.g., gentrification, affordable access to mobility)? What cross-sector partnerships could help bring resources while expanding usership and connecting to new partners and their governance resources (e.g., in agriculture/food or environmental conservation/resilience)? What partners at other sites or in other areas of practice could share intelligence—and perhaps resources?

• For a **funder**, leveraging for greater impact requires not only new ideas and energy but good governance to support and sustain new resources. What are the special (or typical) characteristics of a site that would make it a valuable testing ground for larger systems? What governance structures/processes could help transmit good practice beyond the site and throughout the system? What policies are affecting the challenges and opportunities of a site or system, and which may benefit from novel partnerships (locally or sectorally) to meet redevelopment goals more effectively? How will measurement of outcomes be managed at different scales?

Our framework is meant to help organize thinking and prompt action from internal and external forces, partners (existing and new), different professions, and sectors to pursue civic infrastructure as an immediate and longer-term need.

In each case, there are catalysts—either internal or external to the community—taking the form of an idea, a partnership, or a change in policy. These catalysts often evolve
over the life of the redevelopment process, and one can search across scales and different areas of practice for ideas. And yet, because catalytic ideas or partnerships emerge in the moment, they rarely benefit from long-term governance strategy intended to sustain them.

Because all projects are in states of flux (including those we describe in Part IV below), our framework is meant to serve as a guide to assess where you are and diagnose what you might do next. Whether you’ve been active in this kind of work for a long time or have come to it recently, we think this framework can be a helpful guide to practice.

To formulate a more in-depth understanding of how civic-asset reinvestments contribute to a civic infrastructure ideal, we explore below the origins and evolution of a number of prominent projects in cities across the country. They are organized around our understanding of whether the site, system, or policy aspects of the project provide the most-illuminating entry points to understand what makes each project successful. Some are clearly site-based projects; some are aimed specifically at changing systems of civic assets; others are prompted by citywide policy objectives, made manifest in projects on the ground. All these projects, however, build upon systems and habits of governance we foreground as key strategic and practical variables.
As we conducted our research, the projects we examined tended to fall into one of three categories: a site-based investment (a large park, like the High Line in New York); a systemic overhaul (a library or park system, like Seattle’s Libraries for All); or a policy initiative (such as new transportation lines, as is part of the BeltLine’s development in Atlanta). These typologies, or scales, are useful, for they differentiate between the ways in which cities are carrying out reinvestment projects today. But these categories are also limiting, for they risk suggesting that a given project belongs only in its primary “box.”
One of our main findings is that every civic asset reinvestment operates across all three of these scales. We believe that the degree to which a project identifies, anticipates, and plans for the ways in which it will work across these scales—and aligns implementation with governance at the appropriate scales—has a significant impact on its potential for success or failure.

The following case studies examine eight projects. Some focus on sites, some on systems, and some on issues of policy and practice. However, all of these projects have important site-system-policy components. We selected these eight in part because each of them, in one way or another, foregrounds the ways in which a leading concern with one scale of intervention connects to the other scales.

One of the key factors that shapes how a project engages with these three scales is the changing composition of its governance—which, as outlined above, includes everything from government agencies, NGOs, civic engagement, leadership, laws and official policies, sources of funding, and the way these factors interact. Governance determines how a project attends to site-system-policy questions. In addition, governance often needs to adapt and change as a project becomes more complex—that is, as a project strives to engage across these scales more fully. For this reason, the following sections document the project origins, including their founding governance structures.

We start with three mid-sized parks; these are not part of a systemic overhaul and yet are somewhat larger than a neighborhood pocket park. The sites anchor a neighborhood or two (rather than an entire city) and serve as a local destination, but they are small enough to reflect the local community’s specific culture and histories.

The stories of these sites illuminate some of the complexities that residents and nonprofits face as they strive to create longer-lasting governance structures that maintain strong ties to local groups while also building necessary relationships with funders and city-level agencies. They also become part of broader systems and policies—all the while staying focused on the main goal of using the city’s existing civic assets to create more (and more equitably distributed) benefits.
San Francisco’s Buchanan Mall, an eight-block stretch of concrete in the Fillmore neighborhood, surrounded by housing complexes and community centers, has for years been a site of violence and drug dealing. In 2010, the documentary collective Citizen Film began filming the work of Green Streets, a local social-enterprise organization, to commemorate Green Streets’ one-year anniversary. Founded by neighborhood resident Tyrone Mullins, Green Streets employs local residents, including formerly incarcerated individuals, to manage recycling, composting, and waste-reduction services for a property manager of affordable-housing (McCormack Baron Management).

After filming was completed, and the two organizations hosted multiple screenings for a range of audiences, they decided to continue their collaboration, amplifying the voices of workers in Green Streets and improving the built environment of the neighborhood. For this first joint venture, they turned to Buchanan Mall. The community wanted to take back the space and reprogram it. For many residents, reclaiming the space was part of a broader project of redefining their neighborhood identity.

This informal but strong partnership quickly generated energy and activity, with Citizen Film (staffed primarily by individuals who are white with professional connections citywide) serving as an intermediary with funders and city leaders, and Green Streets
CASE STUDIES / SITES / BUCHANAN MALL, SAN FRANCISCO

(comprised of people of color with deep local connections) serving as an intermediary with neighborhood residents. Citizen Film received a grant from ArtPlace and connected with The Trust for Public Land, as well as a number of other area groups, including the Exploratorium’s Studio for Public Spaces, the Rosa Parks Senior Center, and the city’s Recreation and Park Department, which owns the Mall.

Meanwhile, Citizen Film and Green Streets began holding weekly community meetings—at the same time and location each week, with food—to discuss concerns and desires for the Mall. They also went door to door to spread the word about the project and related townhall meetings. Because of the film screenings, many neighbors knew members of both groups. Importantly, thanks to grants secured by Citizen Film, the members of Green Streets who were organizing meetings (including members of a youth staff group) received stipends for their time on the project.

These meetings continued for roughly a year before the Exploratorium began to hold participatory design workshops with scores of residents—who ranged from thirteen to ninety-four years old—educating them about park design and soliciting their ideas for the space. These workshops included frequent conversations about the area’s history, including decades of disinvestment. As the resulting vision statement states:

“Decades of redevelopment in the ‘Brutalist’ style—done to this community rather than with its participation or support—have bred mistrust of government and developers. Because of this mistrust, the City tried a deeper and more participatory process to generate real buy-in from this community for the renovation of their park.”

Residents saw remaking the park as a way to begin to reverse the area’s history of disinvestment and crime—a history that many poor neighborhoods share—as well as to honor this history rather than simply to erase or pave over it.

The community meetings included (filmed) conversations about the
history of the Fillmore neighborhood ("the Harlem of the west"), Japantown, Geary Street, World War II, housing developments, and redlining, among other topics.

According to many members of Green Streets and Citizen Film, these engagement and "visioning" phases of the Buchanan Mall revamp were overwhelming successes. Turnout at public meetings was robust; residents appreciated the presence of the filmmakers and valued having their stories and histories recorded; and designers incorporated many residents’ requests into plans for an eight-block stretch of gardens, group seating, and play areas. The tactical interventions resulting from the visioning process, in particular, emphasized community heritage and gathering: Gateway domes included audio recordings of elders telling their histories, as well as historic photographs of the neighborhood, and accompanying message boards included community news and events.

The creation of designated time and space to engage with the neighborhood’s identity, now and in the past, was central to reinvesting in the park. This time and space was founded upon the involvement of already-formed groups with existing relationships to the neighborhood. There’s a direct link between the success of these civic engagement efforts and the project’s governance structure: two organizations, known to the neighborhood, forming a partnership and drawing upon their respective strengths and links to other groups to re-imagine and redevelop the site. The intensive community engagement efforts, begun in earnest before any design decisions were made, included substantial work to inform residents about the meetings as well as a participatory design process that included ongoing exchanges between residents and designers.

The best creative-placemaking and tactical interventions are those that tap into and amplify the artistic, historical, and creative expressions of the existing community, for the existing community. Members of both Citizen Film and Green Streets talk about their work together as
a kind of tactical urbanism and placemaking, not only because some of the changes are still temporary but also because they engage with residents’ stories and heritage, and include spaces, like community boards, that can change over time as the project’s needs change.

The project is now in its implementation phase, and here it has hit some snags. As of this writing, the project awaits funding approval and bond financing from the city and the hiring of a project manager, and members of Green Street have begun to feel less included in hiring and funding decisions. Recently, the city’s Recreation and Park Department directed some initial funds to The Trust for Public Land and Citizen Film rather than to Green Streets, fueling a sense of competition for resources. Some members of Green Streets fear that they will be left out of this next stage of the project.

At Buchanan Mall, community engagement, which is a key ingredient in governance, has been a central part of the story thus far; it emerged out of a strong partnership between two cross-sector groups and was rooted well at first. Gradually, however, the governing structure became more complex as it became part of larger municipal (and national) systems and policies. The Trust for Public Land joined on alongside a number of neighborhood and citywide groups.

More groups translate into a greater diversity of voices, skill sets, experiences, funding streams, and opportunities to leverage resources and expertise. More groups may also translate into less control and oversight for some participants, including those who initiated the project.
Garfield Park, in Chicago, also provides a portrait of a complex governing structure, one at the intersection of maintenance, programming, and economic revitalization. The park, a complex of civic assets, has a long history. In the early 20th century, it became a center of year-round recreational activity, thanks to its informal gardens as well as its formal, indoor conservatory and a large, distinguished fieldhouse, built in the 1920s. But the park fell into disarray during the postwar decades, as the neighborhood suffered from extreme disinvestment and the Chicago Park District struggled to maintain the property beyond very basic capital expenditures.

In 1998, a group of residents formed the Garfield Park Conservatory Alliance (an NGO and classic “friends” group) to oversee more robust programming that engaged local residents and made more accessible to the surrounding community the conservatory’s physical and horticultural assets, the plant collections, and gardens (overseen by the Chicago Park District). The Conservatory Alliance, in other words, aspired to more explicitly connect the neighborhood to the park—to interpret the conservatory’s physical assets for neighbors. Because the Alliance is independent from the Park District, its $1.5 million annual budget comes from donations rather than from public funds.

In 2005, LISC Chicago organized a series of meetings for residents living around the Garfield Park Conservancy, resulting in a substantial Quality of Life plan that established
benchmarks and clear objectives for revitalizing the neighborhood in a way that did not displace existing residents. Over a year, LISC organized scores of well-attended meetings and solicited feedback from residents on what they wanted from the park.

Residents identified the need for a more advocacy-based organization, which tapped into the desire for neighborhood activities and related concerns. One of the results of the QOL plan, then, was the creation of the Garfield Park Community Council, another independent nonprofit. Like the Alliance, the Community Council also serves to connect the residents to the park, but with a broader mandate than programming and with an organizational focus on the community (as opposed to the park). Over the past decade, it has served as a mediator between residents, officials, and developers building in the neighborhood. When a particular development issue arises that will affect Garfield Park, the Community Council invites leaders to their events to share plans with residents. The Community Council also holds monthly meetings to discuss residents’ concerns, and it oversees a Resident Leadership Initiative, training local residents to advocate for their neighborhood as community organizers. The Community Council, in other words, acts as a broad-spectrum community development organization, using multiple programs to fulfill a governance niche.

The Garfield Park and conservatory complex serves as an example of a flexible civic infrastructure governance structure, in which three complementary organizations collaborate to oversee and program the park, connect it to local residents, ensure it reflects neighborhood concerns, and link to larger citywide organizations, like the Park District. Together, the three groups and their community-facing partners support a lot of different uses, including community gardens, Urban Roots youth programs, and music classes in the Field House, as well as regular neighborhood meetings and community organizing. All of these are contained within the “platform” of the larger, consolidated civic asset, including various park and garden spaces, the fieldhouse, conservatory, and even the El station running through the middle.
When this governance structure works best, it takes advantage of the combined strengths, flexibilities, and resources of public agencies and NGO organizations working together. One of the strengths of three different organizations overseeing different aspects of the park is that the organizations can collaborate and build upon one another’s skill sets. The Alliance shares office space with the Chicago Park District staff in the conservatory, so the two groups work together on daily programming, special events, and regular operations. (The Alliance oversees marketing and communications, social media, fundraising, education, and public programming for activities at the conservatory.) Given these intersections, the two organization share expenses for some employees—often graphic artists/designers, to ensure that signage is consistent with other programming material.

Similarly, the Community Council oversees the West Side’s community garden network, which involves connecting the community with the garden programming that the Alliance manages. The Community Council also helps include young people in the community garden network, and in recent years, the Alliance secured a grant to provide stipends to those young people to encourage their participation. That first year, the Alliance lined up the grant on their own; they introduced the Community Council to that foundation, and in subsequent years, the Community Council secured follow-up grants directly.

At times, however, this governance structure can be a little unwieldy, and it can be difficult to know which organization is responsible for which tasks. Some perceive the conservatory and park as physically isolated from the neighborhood (by train tracks and locked gates). Because the park includes a mixture of civic assets, it’s not always obvious whom to call about a broken sidewalk or window. When the governing structure succeeds, it’s because the organizations communicate, collaborate, and build off of one another’s connections and existing skill sets, like fundraising or tapping into existing neighborhood contacts.
This governance structure also succeeds when it promotes programs that are inherently city or “system”-oriented, like community organizing, or hosting events with developers and others whose work is part of broader social and economic forces (changing real-estate markets, for one). One of the surest signs of successful governance is when an organization can survive changes in leadership, as the Alliance did in 2008.

Good, thoughtful, adaptive governance is often characterized by a lot of complexity—lots of partners, with highly differentiated roles, overlapping mandates, shared resources, and more. At least some level of uncertainty or confusion seems to be a cost of rooting governance in an authentically local and collaborative manner.

In 2011, members of the nonprofit design collaborative Kounkuey Design Initiative (KDI) learned from a professor at UCLA of an underserved community, without amenities, at the St. Anthony’s Trailer Park in eastern Coachella Valley. Residents of the trailer park are primarily immigrant families, many of whom work in the upscale neighborhoods on the western side of the Valley, which includes Palm Springs. The community lacked access to parks, playgrounds, libraries and rec centers—to any community spaces of any kind.
For a year, KDI conducted intensive conversations with residents of the trailer park, including kids and their parents, about a space for the neighborhood. The kids wanted a stage on which to perform. Others wanted a garden, a playground, and a shade structure. Over a second year, KDI designed and built a performing arts/playground/garden space for the community, with local kids helping to prepare the site and build. The total project cost ($45,000) came from a grant, garnered by KDI, from California Endowment’s Building Healthy Communities initiative. As part of its work, KDI joined with Pueblo Unido, a local community development corporation, to create a governing body to maintain the space.

This project is emblematic of KDI’s work, in which designers serve as “drivers” of a network of very community-engaged park/refurbishment initiatives. KDI designs and builds small to mid-sized parks and public spaces for marginalized, underserved communities, both in the United States and abroad, around a highly developed participatory design process. At times, KDI uses language of tactical urbanism to describe its work, but the kinds of engagement these groups do is “infrastructural,” too, in that they set a foundation for long-lasting relationships as part of generating a self-sustaining governance structure.

KDI was founded in 2006 by then-graduate students at Harvard’s Design School and got its start in Nairobi, designing and building a network of public spaces, primarily around waterways in the city’s Kibera neighborhood, the largest informal settlement in Africa. In 2011, KDI began work in Eastern Coachella Valley, and today it has an equal number of projects in the U.S. and Kenya, and employs forty designers and researchers split between both offices. In Kenya, waste, sanitation, and flooding pose primary design challenges. In Southern California, the challenges revolve around water scarcity and access and transportation. But in both locales, KDI thinks of its work as building a kind of urban infrastructure in which the goal is both to build permanent public spaces and to build capacities for citizen control. Success means leaving a project in the hands of local community members and groups: in other words, civic infrastructure, both hard and soft elements.
KDI’s organizing participatory design philosophy draws upon Sherry Arnstein’s seminal 1969 article “Ladder of Citizen Participation,” which identifies three tiers of citizen participation in public life: citizen power, tokenism, and nonparticipation. KDI strives to work solely within the “citizen power” tier, which means prioritizing resident-involvement in key decision-making from a project’s outset, including how resources are allocated. All of KDI’s projects include the creation of a citizen leadership committee as well as a participatory budgeting component. In addition, they all include economic development initiatives, like help creating local small businesses, which dedicate ten percent of profits to a maintenance fund that residents oversee. At the new playground and public space at St. Anthony’s Trailer Park, a group of women own and operate a basket-making enterprise.

The creation of the citizen leadership committee is important because it means that when an opportunity or problem inevitably arises—altering the course of the project—residents have a clear mechanism to inform decision-making. Sometimes, the committee itself is the source of the new direction. On a recent project at the North Shore, the leadership group reported to KDI that the site it had selected for the park was in the wrong location and too small for residents’ planned activities. KDI paused, spent roughly three months evaluating other sites, and ultimately found a larger, five-acre site that met the committee’s standards.

In Kenya, KDI’s office has evolved to be run by Kenyans. In the Eastern Coachella Valley, KDI partners with land owners—often the city or a neighboring district—as well as with groups in the neighboring wealthy West Valley that want to support the creation of amenities for nearby underserved communities. Over the past few years, KDI has developed a reputation in Southern California as a group that will engage deeply as a community and leave projects with a strong local governing system.

As KDI has grown, it has developed its work beyond designing and building, and planning and programming, to include two addition areas of focus: what it calls “research and test” and “educate and
advocate.” In the former, partly affiliated with the Stockholm Swedish Research Council, KDI is researching models of change as well as carrying out monitoring and measuring initiatives. In California, with a grant from the James Irvine Foundation, it hired an outside researcher to design special surveys and conduct a three-year study, measuring both the impact of its participatory process on residents and communities, and the meaning of public spaces for under-resourced communities. The outside researcher helped KDI determine appropriate sample sizes and control groups (that is, residents and park users who don’t participate in a participatory design process) and designed resident and park-user surveys to capture nuances of KDI’s participatory design process.

In its “educate and advocate” work, KDI is working to share its research—both with residents and with governments and multinational stakeholders—as well as participate in policymaking and local politics around environmental-justice issues. The California state legislature is poised to consider a couple of measures that will earmark millions of dollars of investment for parks and other infrastructure for under-resourced communities across the state, and KDI is currently developing strategies on how to advise communities to access these dollars. It’s the latest example of KDI’s understanding of the ways in which its site-based design work intersects with policy-level change and initiatives—and the belief that it should help residents know about and access these new resources.

Sites: Key Takeaways

Together, these three community park projects illustrate some essential governing strategies for civic infrastructure seen through the lens of sites. They illuminate concrete ways in which even relatively small sites connect with broader city-wide systems and policies.

- One of the key and most complex issues encountered at the scale of sites is how senses of “ownership” or attachment felt by local communities relate to the larger goals of cities, and how local factors are taken into account as reinvestment is directed to larger systems or realizing the goals of citywide policies.

- Reinvesting in civic assets more equitably doesn’t necessarily bring equal benefits to every civic asset in every community, and involving citywide and other “external” partners sometimes challenges local notions of ownership and control.
• The visibility and optics of change (how it is designed, and how inclusively) matter, especially in small-scale projects. Physical improvements from the start should be a mode of engagement, hand-in-hand with quality design that can be maintained within the constraints of governance and supporting local notions of ownership.

• Funding is one of the most important links between these sites, systems, and policies. In each of these projects, financing is a major driver for partnerships. It’s also a component that adds complexity to a governance structure as a project develops (and requires continuing funding), prompting a series of questions:
  » How are different sources being used?
  » Who is contributing?
  » Is their investment a one-time contribution, or could they be a sustained funding source?
  » And, perhaps most importantly, how much oversight do they receive in return?
    This last question becomes particularly important when the funding sources are not locally based, and therefore could mandate or preclude resident control.

• The strongest partnerships rarely create grassroots support from scratch; this normally takes months and years. In these projects, groups built relationships and joined forces with activists and organizations with longstanding community roots. They honored existing roles and relationships, and did not reinvent community organizing. Instead, they worked with existing partners and joined forces, following local partners’ own engagement at the grassroots level in a way that benefits all involved.

• Because of this foundation of local, grassroots support and organization-building, residents were able to engage in direct decision-making, not necessarily on all aspects of a project but on some. This direct decision-making is important, not only because it allows residents to have greater control and input in their neighborhood spaces, but also because it is one of the ways in which citizens participate in neighborhood and citywide politics.

• This level of participation raises important questions about how, and if, one can scale-up these kinds of engagement and local governance bodies—particularly with regard to the systemic overhaul of park systems and new investments in “charismatic sites” and region-scale projects. We turn now to these types of reinvestments.
New York City and Minneapolis are in the midst of ambitious systemic overhauls of modest neighborhood spaces as part of stated efforts to improve their public realms, reinvest in long-neglected infrastructure, improve quality-of-life, and make their cities more equitable. These overhauls are very much unfolding as we write, with some neighborhood sites under construction, others just opening, while still others wait for construction to begin. This means it’s too soon to know how, or if, these reinvestments will achieve their ambitious goals.

Still, it’s valuable to examine how these programs began, the work done thus far, and the challenges they face, particularly as they compare to other site-based reinvestments. These systemic overhauls are “infrastructural” in multiple senses of the word. Reinvestments in dozens of smaller, more quotidian neighborhood parks, rec centers, and libraries aim to address and reverse past inequity and neglect by prioritizing those public spaces that have been most historically underinvested. **Because of their systemic scope, these reinvestments are organized through “top-down” governance structures, which means they face the unique challenge of finding relevance in multiple, specific neighborhood contexts simultaneously.**
The idea for New York City’s Community Parks Initiative (CPI) dates as far back as the 1970s, when disinvestment and fiscal crises degraded parks and other civic assets while opening the door to new public-private partnerships (PPPs) in the form of friends’ groups and conservancies. When Mayor Michael Bloomberg took over City Hall in 2002, the city began to make significant investments in primarily big, central parks, including Brooklyn Bridge Park, Governor’s Island, and the High Line, always with a public-private partnership of some sort at the helm.

The success of these PPPs led State Senator Daniel L. Squadron to introduce a bill in 2013 requiring wealthy conservancies—those with operating budgets of at least $5 million, like Central Park Conservancy—to dedicate 20 percent of their funds to neighborhood parks. This controversial proposal sparked a broader conversation about park equity, the defunding of New York City’s parks department, and private versus public financing for parks in the city. It also prompted then-mayoral candidate Bill De Blasio to highlight park equity in his campaign. To deal with equity at the scale of the entire parks system, and bake in fairness and transparency, the Department of Parks & Recreation turned to data. Mayor De Blasio announced the CPI in October 2014 with an initial budget of roughly $130 million from existing capital funds, to be invested in 35 parks, which all had to be “everyday community parks” that serve disadvantaged neighborhoods and were revealed by the data to have received less than $250,000 over the past 20 years.
Interestingly, when De Blasio first discussed park reinvestment during his election campaign, he proposed to fund the reinvestment initiative by redistributing up to one-fifth of the funds raised by wealthy private groups. That proposal faced significant backlash, and once he was elected, De Blasio compromised by committing public funding towards the project. In an important twist, however, the city returned to the original proposal and extracted contributions from eight conservancies citywide—the fundraising success of which had been criticized as a driver of inequity. This thereby addressed one aspect of park equity and governance: transcending the park-specific, site-based conservancy model.

Over the next four years, the city revised upwards the budget for this initiative multiple times. In 2016, the Parks Department doubled the number of parks receiving reinvestments, to 60, and promised $285 million in capital funds; in September 2017, it announced an additional increase of the budget to $318 million, for more than 70 parks. Thus far, the CPI has invested in 67 sites; another 10 are planned for 2018. Improvements include new playground and court equipment and building repairs as well as new park programming, including organized sports for kids, adult fitness classes, urban gardening, and pop-up libraries.

This initiative runs alongside the Parks Without Borders program, which has a budget of $50 million to better integrate the parks into their neighborhoods, largely by improving park entrances and boundaries along streets and sidewalks. In addition, with the Anchor Parks program, the city is spending $150 million to remake five larger parks, one in each borough.

The design work in these projects is, for the most part, tried-and-true accessibility and repair strategies. Citizen engagement—or “CPI scope meetings”—tended to follow existing channels. New York was more ambitious in its data-driven approach to determining which of the boroughs’ hundreds of parks would be among the selected sites. In addition to weighing sites’ previous funding (or lack of funding), the city factored into its prioritization public health data and poverty indicators.
All sites are in neighborhoods with higher-than-average concentrations of poverty, as measured in 2010 census data. The sites that have been most underfunded received the first infusions of capital.

The city government isn’t the only driver of neighborhood-scale civic infrastructure reinvestment. In 2015 the New York Restoration Project (NYRP)—a citywide NGO providing quality natural public spaces for the city’s communities—completed a plan for Mott Haven, a south Bronx waterfront neighborhood. In several respects this embodies a robust civic infrastructure approach, including attention to the intersection of site-system-policies.

The Haven Project marries physical improvements and quality design with a social strategy focused on reducing inequity, through access to open space and in public health outcomes. The strategy deals directly with inequality, working literally from the ground up, with the city, local partners, and external funders to make improvements and carefully measure the results. Perhaps most remarkably, it has thoroughly embedded measurement of outcomes into the fabric of the project strategies. As its mission statement notes, “The Haven Project aims to demonstrate measurable health and social outcomes resulting from an improved physical environment at the neighborhood scale.” It aims to show, through data, how site-based interventions can ultimately inform broader, systemic inequality.

With collaborators including a local hospital, designers, university-based researchers, and local residents and community groups, NYRP devised plans for improving existing parks, creating new greenways, and providing access to a long-neglected/inaccessible waterfront, as well as making larger connections beyond the neighborhood. Based on the hypothesis that expanded opportunities for exercise will improve public health and lower healthcare costs for families, the plan integrates means of testing these underlying goals. NYRP acts as the convener and developer, outside to the neighborhood but with a long track-record in many New York City communities, including the South Bronx.

The project builds on a long-term citizen engagement effort and a broad base of community support and involvement. Design quality and creative placemaking opportunities are integrated into the detailed plans, monitoring is underway, and current efforts focus on fund-raising to implement first phases of the project.
Minneapolis is consistently recognized for having a great public-parks system. In 2016 and 2017, The Trust for Public Land ranked it the nation’s best park system, according to its three-variable index, which measures:

- the percentage of residents living within a 10-minute walk of a park;
- the percentage of total city area dedicated to parks;
- and the quality of park facilities, including playgrounds, basketball courts, and rec centers.

Nonetheless, its neighborhoods have not escaped the neglect and disrepair that have plagued the country’s urban-park systems.

Indeed, since roughly 2000, the Minneapolis Park and Recreation Board, an independent public agency, began to increasingly defer park maintenance costs in neighborhood parks (as opposed to regional parks) to meet budget shortfalls. By 2015, the resulting disrepair could no longer be ignored, and the board initiated “Closing the Gap,” a study of inequities among the city’s 160 neighborhood parks. This included delayed regular upkeep past the point of repair, as well as RecQuest, a similar study of its recreation centers.

In 2016, the board instituted the 20-year Neighborhood Park Plan, delivering $11 million a year (over 20 years) to neighborhood parks, funded almost entirely by a 1 percent increase on
all property tax levies for the 20-year term. Like Seattle, Minneapolis benefits from a citizen base that is interested in funding parks and willing to pay additional property taxes to improve them. It also began to develop a series of Service Area Master Plans, for the city’s five service areas, which included an improvement plan for each neighborhood park.

As in New York City, the Minneapolis Neighborhood Park Plan adopted a highly data-driven approach to determine which sites to prioritize, employing “equity-based criteria,” including crime statistics and population density as well as measures of “racially concentrated areas of poverty” and assessments of the condition and age of park assets. Park staff surveyed all assets and assigned numerical scores to capture levels of deterioration; other data came from the U.S. Census and Minneapolis Police Department.

Minneapolis’ data-driven approach to investment and funding is still evolving. The Park Board recently added a mechanism to continue evaluating parks after the initial outlay, to adjust their status over time; for example, the board ranks “opportunity” parks as those in need of investment to reach the same numerical level as a “developed” park, which in turn requires greater investment to become a “fully funded” park. Through these continued measurements, the board hopes to maintain its equitable approach by always tending most to those in need and ultimately ensuring a higher “baseline” for all sites. This kind of ongoing assessment is critical, for it builds in adaptation and, as importantly, requires dedicated, ongoing governance.

Notably, this kind of measurement hasn’t replaced community engagement, which is one of the risks of using a data-driven process to determine which sites will receive funds. After all, it’s easy to imagine that cities could consider engagement efforts less necessary given that decisions about what and where will come through numerical measurements of neglect. As part of the research...
to complete the Service Area Master Plans, the Minneapolis Park and Recreation Board is partnering with local residents or organizations to take on roles as “community connectors.” The board issued an RFP, and then evaluated, interviewed local groups, ultimately selecting 12 from which to collect resident input on the kinds of changes and improvements they wanted to see in their specific parks.

It’s important for cities to maintain robust community engagement efforts alongside data collection—that is, for cities to appreciate the degree to which data collection isn’t an entirely sufficient tool to pursue equity goals. Community engagement is one of the primary processes through which citywide systemic overhauls connect with particular sites and the people who live and work around them; it is the process through which a system-based change becomes relevant and meaningful to residents and communities.

As our prior case studies of ‘sites’ reveal, community engagement is the creation of a locally based governance structure, in which residents organize around a shared neighborhood space, and meaningfully participate in decision-making. (This is opposed to the mere “optics” of engagement, in which citizens are more or less encouraged to agree to “top-down” decisions). Community engagement is valuable partly to get feedback on specific design issues, but also to begin to generate trust and mechanisms for discussion and park stewardship, as well as to foster and maintain broader political engagement.

In 2017, the Minneapolis Park and Recreation Board began construction and improvements on eight sites, and have slated another seven sites for reinvestment in 2018. These investments include new playground equipment, new asphalt for basketball courts, new shade structures and picnic areas, and new tree and garden plantings. It has slated another five or six sites to receive repairs over the subsequent three years, and in 2022, it plans to begin work on 11 sites. As of this writing, 43 sites will receive reinvestments.
**Systems: Key Takeaways**

Systemic overhauls of park systems can appear to be simple, in which “top-down” governance structures, channeling substantial sources of funding (either from existing capital budgets or taxes levied by an independent body) make more-efficient and -equitable decisions based on data-driven analysis. However, it is rarely that simple.

- Systemic projects are the most-straightforward lever cities have to address disparity and inequity in civic assets. And yet how these citywide efforts “land” in neighborhoods matters greatly. Do they honor local knowledge and needs? Do they build on positive senses of hyper-local “ownership”?

- Even in New York and Minneapolis, where the parks-governing bodies are notably independent, these existing governance structures tapped into and developed a greater array of private partnerships. In New York City large conservancies donated funds, and in Minneapolis locally based organization helped perform outreach and gather information.

- One of the greatest challenges facing those orchestrating systemic overhauls is forming relationships with neighborhoods and other local groups around specific sites—and engaging with the unique combination of cultural, social, economic, and political needs these sites represent. One of the reasons many cities are now carrying out these systemic projects is because of longstanding neglect and disinvestment. These memories persist. Delivering resources without making new investment in on-the-ground relationships risks isolating the act of investment from the subsequent acts of stewardship. Without commitments to building trust and mechanisms for communication, these systemic overhauls could replicate historic patterns of disregard.

- The lessons from our site-based projects are valuable here:
  - identifying and empowering existing local groups with which to partner;
  - conducting new community-engagement efforts with local groups participating in the outreach;
  - giving residents real decision-making powers over well-defined aspects of the project;
  - shifting significant responsibility and power to localities, which undeniably puts pressure on the overall efficiency and equitability of the systemic reinvestment (however, without cultivating local ownership the sustainability of reinvestment is highly questionable).
The essential work of investing in a lot of small parks that have gone without investment for a long time also runs the danger of missing opportunities to be strategic and catalytic with respect mid-sized parks, which might serve a larger, but still not city- or borough-wide population.

A number of cities are also purposefully addressing policies and practices as part of reinvestments in an existing park or waterway or the creation of a large, high-profile public space. Many of these projects are unfolding now, so while it’s not yet possible to evaluate how well they are living up to certain ideals of civic infrastructure, it is clear thus far that organizers do aspire to certain ideals:

- they aim to serve existing, local communities—to reinvest in spaces that are truly for them—while instigating changes on the municipal level that will direct wealth towards these local communities, too.
- they aim to foreground the governance elements of civic infrastructure, so that investments, improvements, and engagements are linked and leveraged from the start and not only retrofitted.

In this way, many new projects are striving to learn from and avoid the mistakes of earlier projects, like the High Line, whose organizers didn’t foresee the exclusionary levels of growth it would spur. Indeed, the High Line’s organizers are striving to learn from these unanticipated outcomes. In June 2017, they formed the new High Line Network, dedicated to core questions of equity and community life. Washington, DC’s 11th Street Bridge project, Houston’s Bayou Greenways, and the LA River restoration are all part of the High Line Network, each with a different, interesting story of negotiating toward the civic infrastructure ideal.
The 11th Street Bridge project, in the Anacostia neighborhood of Washington, DC, is particularly ambitious as it strives to include in a big, expensive, charismatic site the kind of intensive community engagement and economic development programs that flourish at smaller-scale sites. Like many such projects, it has a few “beginnings,” but its successes thus far—particularly in relation to identifying economic and policy goals—reflect some important early decisions about its governance structure.

In 2009, Scott Kratz—then a vice president at the National Building Museum—and Harriet Tregoning—DC’s planning director—talked about the possibility of turning the crumbling bridge that spanned the Anacostia River into a multi-faceted park and public space. Kratz, who lives on the west side of the Anacostia River, was taken by the idea, and two years later he decided to investigate what the largely African-American population east of the river thought about such a space. For the next two years, Kratz went door-to-door, gauging residents’ interest, and spoke at roughly 200 community meetings. The response from neighborhood residents was generally positive, and in 2013, Kratz decided to make a go of it.

Rather than create a new non-profit or integrate the park into existing city government offices, Kratz connected with an existing and well-regarded non-profit located in Anacostia called Building Bridges Across the River (BBAR), which provides a range of cultural, recreational, health, and educational services to residents who live east of the River.
Kratz cites as critical this decision to partner with an already-established group in the community, one with a strong dedication to work on equity and inclusion (in a sense, to build upon existing infrastructure).

Kratz spent the next year fundraising, collecting roughly $1 million in mostly private funds, and soon launched a seven-month community-design process to formalize the many design and programming ideas that had emerged in years of conversations, including an emphasis on economic and social inclusion. In 2014, a team of OMA and OLIN was selected to design a 1.45-mile bridge park, with a public plaza and performances spaces, among other amenities. The park will open in 2019.

Each of these steps highlights the project’s awareness of governing as the central process in effective and sustained civic infrastructure, a process that needs to evolve and be flexible to accommodate greater complexity. Residents voiced at public meetings and to Kratz on street corners a strong desire that the planning process incorporate economic-development efforts—to ensure that existing residents benefited from the wealth and capital such a park project would likely create. Accordingly, Kratz created an equitable development plan and hired an equitable development manager to oversee the plan’s deliverables.

The plan, modeled in part on the Atlanta BeltLine’s economic development initiatives, features three prongs:

- workforce development, to ensure that local residents received construction jobs generated by the park;
- small business protection/development;
- and permanently affordable housing, through the creation of a community land trust.

In 2017, the bridge park partnered with City First Enterprises, a nonprofit community development loan fund; it aims to secure $5–10 million in parcels within a one-mile radius of the park, east of the river.

To ensure that local residents receive jobs, BBAR created a Community Workforce Agreement (CWA), which comprises compacts between the city government, unions, developers, and the community regarding the explicit labor terms for public projects. For
the 11th Street Bridge, the CWA requires contractors to prioritize residents in the three surrounding wards for both construction and post-construction jobs. It also takes advantage of recent Council-passed legislation, including “Ban the Box Legislation,” which prohibits employers from inquiring into applicants’ arrests and criminal convictions, and First Source Employment Program, which ensures that city residents are prioritized for jobs created by municipally funded projects.

More recently, the group added a “cultural equity” component to its equitable development plan, focusing on ways to preserve and include residents’ histories and heritage into park programming and design. A component of this cultural equity plan includes what the 11th Street Bridge project is calling a “political equity” project, in which they’ll host eight-session community-organizing workshops for local residents. What stands out thus far with regard to the 11th Street Bridge project is how the project and its governing strategy have evolved and adapted to respond to and incorporate residents’ concerns of economic and cultural equity. More than changes in design ideas or new programming, the project has become more complex with regard to its governing committees and its policy aspirations.

This complexity includes scores of partners who have gradually joined the project, offering millions of dollars in financing. These include public agencies, such as the City’s Department of Planning and District Department of Transportation; JP Morgan, which gave $5 million to support affordable housing and neighborhood businesses; LISC DC, which is investing $50 million in affording housing in neighborhoods surrounding the park; and The Kresge Foundation, ArtPlace America, and the JPB Foundation. The 11th Street Bridge project is also working with the Urban Institute (through a grant from Kresge) to develop in-depth measurements of the reinvestment and surrounding neighborhoods before, during, after park development. These includes ongoing focus groups with residents, as well as the monitoring of demographic change and property values. Report number 1 was published last year, and researchers will be publishing at least two additional papers on the project as part of an effort to delineate best practices.
As the project has grown over the years and transformed from a grassroots engagement effort into a multi-million-dollar park, with scores of wealthy partners, news coverage tends to focus on organizations rather than residents. Part of this has to do with the media. While regular neighborhood meetings continue, multi-million-dollar partnerships make news. Nonetheless, the growing scale of the project does beg the question of what it means to “scale up”—resources, governing structures, and investments. For example: How will 11th Street Park change the neighborhood’s identity? Can it rewrite the rules of the market enough to protect existing residents from rising rents?

In Houston, Bayou Greenways 2020 builds upon longstanding work to burnish the Buffalo Bayou Park, 160 acres that winds along the waterway, within the city limits, and features an interconnected system of paths, gardens, and playgrounds. Like many Houston parks, the primary advocate for the Buffalo Bayou Park is a local nonprofit rather than the city. The Buffalo Bayou Partnership (BBP), founded in 1986, oversees fundraising, operations, and maintenance, but also receives annual funds from the city through a downtown tax-reinvestment zone.
In 2007, city officials decommissioned the vast subterranean concrete cistern underneath the park’s most-central 10 miles and made plans to demolish it. But then the BBP stepped in to advocate for its preservation as a unique visitor attraction. In 2011, the Kinder Foundation, run by one of the city’s wealthiest families, approached BBP about funding a revamp of the park. It contributed $30 million, while the Harris County Flood Control contributed $5 million. The BBP raised $23.5 million in additional donations.

In 2012, lead designer SWA Group and landscape architects Reed Hildebrand began construction, developing paths and at the cistern adding an entrance tunnel, a railed walkway along the walls, and interior lighting. The new park, which opened in 2015, was designed with resilience foremost in mind, recognizing that the bayou floods regularly, but the design has proved ineffective against the epic storms that have recently hit Houston. Hurricane Harvey swamped much (but not all) of the park within just two years of its opening, and the removal of sediment (up to six feet in some areas) will likely be one of the most-expensive projects in the park’s hurricane recovery. (BBP is leading the recovery of the park landscape.)

As the 2012 construction of the central Buffalo Bayou Park was getting underway, an even larger park revamp was getting started. The Houston Park Board, a vast umbrella friends group that frequently works in partnership with the Houston Parks and Recreation Department, conceived of Bayou Greenways 2020. Building off of the vision of the landscape architect Arthur Comey (a student of Fredrick Law Olmsted), who in 1912 imagined a winding system of parks and paths around bayou, the Park Board launched an ambitious park networking project, including the creation of 80 miles of new trails to create 150 miles of connected trails across 3,000 acres along the Bayou. The size and ambition of the park reflect the size and expanse of Houston; indeed, in a recent interview with the Houston Chronicle, Beth White, President and CEO of the Houston Parks Board, notes that Houston is so large that “Philadelphia and four other ‘big’ cities could together fit within Houston’s area.” Bayou Greenways 2020 is, in one sense, the creation of a new municipal park system.

In 2012, voters approved a bond measure for $166 million in parks funding, $100 million of which will go to Bayou Greenways 2020. The Park Board is leading private financing for an additional $120 million—$50 million was recently secured from the Kinder Foundation—and
overseeing acquisition, design, and construction of the project. Houston Parks and Recreation will continue to own the land. The project’s total cost will be $220 million, but money is not a solution—only a means. Governance must be in place.

While the most-visible question leading the design of the paths and parks is storm resilience—and how to maintain functional park spaces amidst likely constant flooding—other questions animate this project, too, around questions of equity. A stated impetus behind Bayou Greenways 2020 is to realize The Trust for Public Land’s recommendation that every resident live within a 10-minute walk of a park. Another major motivation is to link up existing paths and parks into a traversable network.

Meanwhile, Houston Parks and Rec is conducting research to gain greater insight into residents’ needs and desires for their local sites, also with equity foremost in mind. In 2016, as part of its master planning process, Parks and Rec conducted an online survey about residents’ concerns for the city’s parks. It collected 1,900 responses, but the sample was biased; most respondents were from the city’s wealthier, whiter neighborhoods. To account for this bias in the data, Parks and Recreation solicited a team from Rice University to survey underrepresented communities. With clipboards and surveys, a team of researchers surveyed 400 park users in some of the city’s poorest wards. The team found that, while the online respondents ranked park connectivity as the highest priority for the city’s parks, users in underserved communities ranked park quality and amenities as the highest priority. That is, these residents cared more about a safe and maintained park than about new trails and connectors.

This research raises important distinctions between maintenance and connectivity as distinct facets of public space–reinvestment work.

It also underscores the value of different engagement strategies to reach residents from throughout a city’s neighborhoods in determining what kinds of reinvestment strategies cities and conservancies pursue.
The earliest layers of Los Angeles formed around the 51-mile Los Angeles River, as residents gradually constructed homes along its winding banks. But over the course of the 20th century, LA turned its back on the river and, in many instances, built over it. The story of the LA River revitalization, then, is partly about a still-growing yet already-global city, rediscovering its vital waterway. And yet it is also a political story, about shifting political winds and the perceived strengths and weaknesses of a systemic, quotidian park-reinvestment project, versus an alternative, ecosystem-driven model for growing parks along the physical trace of a natural resource.

Efforts to revive the public spaces and parks along the 51-mile LA River go back decades. In 1985, the journalist, poet, and LA resident Lewis MacAdams founded Friends of the Los Angeles River (FOLAR), one of the first organizations to emphasize the need to revitalize the river banks, particularly for low-income communities that lived nearby and had no access to useable green space. Through FOLAR, MacAdams organized an annual river clean-up, which continues to mobilize a few thousand people every spring, and became an activist voice for the river and its surrounding neighborhoods.

Thanks in part to MacAdams and FOLAR, the next 30 years saw the county and city of Los Angeles create numerous plans, committees, and pieces of legislation to attend to the
In 1990, the County of Los Angeles formed the County of Los Angeles River Task Force; in 1996, it adopted the LA County and Los Angeles River Master Plan. In 2002, the City Council established The Ad Hoc Committee on the Los Angeles River, chaired by Councilmember Ed Reyes, and the following year, the city established the Los Angeles River City Department Task Force to focus on all 51 miles of river.

One of the most-significant milestones arrived in 2007, when the city created the Los Angeles River Revitalization Master Plan and redefined its focus to the 32 miles of river in the city. This master plan emerged after nearly 200 meetings among designers, engineers, and economists, as well as after scores of meetings with local residents and interest groups, including the National Audubon Society and other nature and water specialists.

These first efforts were both grassroots (and site-based) and legislative, and together they helped establish the need for the revitalization. But the project didn’t quite have full public backing yet. In 2009, then-Mayor Antonio Villaraigosa was a greater proponent of neighborhood parks than of river revitalization, and he initiated the 50 Parks and Alleyways projects, partnering with The Trust for Public Land (TPL) to transform vacant lots throughout the city into modest pocket parks. The level of investment was more modest than the systemic overhauls in New York and Minneapolis, but the project reflected a similar commitment to providing long-neglected neighborhoods with small, public spaces they could make their own. It may have been a sensible way to begin intervening in a sprawling, fragmented metropolis; after all, it’s easier to envision neighborhood-scale pieces than to reach for the synthetic, regional scale from the start (which is perhaps partially why initial efforts to rediscover the river didn’t catch on with the public).
TPL’s model and governing principle—that all families should live within ten minutes of a public green space—reflect many “infrastructural” ideals, including strong citizen engagement in each project; thoughtful design and placemaking strategies; and long-established mechanisms to partner with the city: TPL designs and builds the parks, and the city maintains them. In LA, the 50 Parks and Alleyways campaign transformed roughly 20 lots into parks before a new mayor entered in 2013, Eric Garcetti, who was less interested in small parks and more interested in the LA River.

Garcetti has overseen the jumpstarting of a new, flashier stage in the river’s revitalization. In 2013, RiverLA, a nonprofit formerly known as the LA River Revitalization Corp, announced plans to complete a continuous bike path along all 51 miles of the river by 2020. A few months later it officially became known as the Greenway 2020 plan. At the same time, the Army Corps of Engineers, prepared plans to restore a 10-mile stretch of the river through the center of the city. These plans include removing three miles of concrete and recreating hundreds of acres of wetlands to restore and “green” the stretch. The project will be funded with $380 million from the U.S. Congress and $1 billion from the city.

With all of this work, and speculation about how revitalization will raise property values, a recent article in CityLab noted that Los Angeles was in its “pre–High Line moment.” Like the High Line, it has a starchitect attached. In 2015, the City, working with RiverLA, partnered with Frank Gehry to lead the redevelopment of the river’s banks and rework the master plans, raising concerns about gentrification and inequitable development.

At the same time, California State Assembly Bill 530, introduced by Assembly Speaker Anthony Rendon, was adopted for the creation of a local “Working Group” to develop the Lower LA River Revitalization Plan in less-prosperous parts of the city. The Working
Group focused on approximately 19 miles of the Lower LA River, from the City of Vernon to the LA River outlet in the City of Long Beach. The Lower LA River passes through numerous jurisdictions, including unincorporated county communities and cities.

As of this writing, all of these plans remain somewhat murky, causing MacAdams and FOLAR to question the secrecy with which RiverLA operates and request greater transparency. Even these in-process developments illustrate the degree to which the LA River project intersects with sustained, simultaneous work at all three scales of reinvestment: specific sites along the river’s banks, systemic trails, and policy-level initiatives and change. For decades, the grassroots engagement that FOLAR initiated—and that must exist around any site for it to become important, and used, by a community—connected with legislative action. More recently, these efforts have been joined by a municipal commitment to the project as a systemic overhaul, one that will transform the entire region.

**Policies: Key Takeaways**

As cities around the country think about how to reinvest in their public realm, questions of equity—rather than, say, of superior design or programming—lie at the heart of organizers’ stated goals for the projects and the communities they will serve. A number of cities are realizing the need to include policy-level change alongside park reinvestment, including in policy areas like economic development, climate change, and environmental justice. The issue of economic inclusion is particularly significant for civic-asset redevelopment, since the structural disparities that exist in the workforce often correspond with the systemic disinvestment that has allowed a city’s parks, recreation centers, and libraries to fall into disrepair.

- As climate change continues, environmental policies will increasingly inform how and why cities reinvest in their public spaces, and necessitate municipal attention to intersections between sites, systems, and policy-level scales.
• Economic-inclusion programs increasingly include workforce-development and hiring initiatives, but also investments in job training, apprenticeships, credentialing, and other programs that help build capacity and prepare workers for higher-skilled jobs. It should also include active monitoring and measurement to determine program outcomes.

• Affordable housing programs are also increasingly part of civic asset-redevelopment work. While these initiatives include the development of permanently affordable housing (as with the Atlanta BeltLine) some cities and projects, like the 11th Street Bridge, are creating land trusts and intervening in the market more directly.

• Through the lens of civic infrastructure—and considering the interconnectedness of site-system-policy—one realizes that the fate of civic assets contributes directly to community development. This relates to a wide range of citywide policies and strategies, including in housing and education; social-service provision; economic development and inclusion; and environmental protection. More specifically:
  » Park design and maintenance can directly contribute to better environmental performance of a site (addressing climate change);
  » Library systems perform educational (and even public health) services;
  » economic inclusion and value-capture stimulated by civic-asset reinvestment can contribute directly to job creation and poverty reduction.

• One much acknowledge that issues like gentrification have made these connections unavoidable. The fraught issues around neighborhood change in most cities highlight the interplay of single-site investments (public or private) and management of systems of civic assets, planning of the public realm, and city policy. The intention behind this work is that these relationships can be managed from both the ground-up and the top-down, through more-robust channels of civic engagement and dialogue about the key role of civic assets in managing change and its benefits.
CONCLUSIONS

In the preceding pages, we have discussed essential civic-infrastructure ideals and examined practical outcomes of a handful of emerging reinvestments around the country. Our research reveals five primary conclusions:

1. Scales Matter
Every civic asset redevelopment project—no matter how large or small, economical or expensive—operates across the three scales we identified in this study: the site, the system, and policy. Measures taken to advance holistic redevelopment efforts—across scales, across sectors, and through time—contribute most directly to producing equitable and sustainable public benefits from redevelopment of inherited civic assets. The matrix, included on page 41, provides a tool for practitioners to audit the intersecting components of a particular project at a particular moment in time, and understand the challenges and opportunities one can respond to.
The need to integrate this work across multiple scales grew out of the modernization of American cities over the 20th century, which resulted in the separation and isolation of people, spaces, and experiences at the scale of sites and blocks, all the way to the scale of the metropolis. The alienation of urban renewal and segregation—as well as the professions’ knack for dividing up responsibilities for different urban functions—remains a deeply embedded problem. Knitting back together the public life of cities, through its civic assets, is one of the major challenges of the current moment in urban history.

2. Governance Is the Key

In projects large and small, across many cities, our research suggests that the arrangements, institutions, and decisions embedded in governance—how projects, public spaces, and civic assets are conceived, implemented, and sustained—enables them to achieve their complex civic asset-redevelopment goals. Governance provides resources, leadership, and learning across sectors and areas of practices, and networks for collaboration and feedback.

Good governance by itself is no guarantee of success, but without effective governance, even the best design and policy ideas with ample resources stand little chance of being implemented, let alone sustained.

3. Adapting Leadership

When governance works well, site, system, and policy aspects of civic asset-redevelopment projects are positively connected to produce more-equitable outcomes in broad community-development terms. These connections are forged through formal and informal relationships, leadership, and innovation within and between organization,
resource flows, and political dynamics. Like an ecosystem, all these factors must be present and contribute to the overall function of the system.

It’s important to acknowledge that governing relationships are difficult to design, measure, and sustain; they have to be flexible and adaptive enough to weather changes in resource availability (as funding streams grow or wane), in leadership (inevitable in any organization), and in ideology (ranging from trickle-down to bottom-up approaches to community development).

4. Leveraging Areas of Practice

Many areas of practice contribute to civic-asset redevelopment. We have highlighted five: civic engagement; design, programming, and maintenance (encompassing creative placemaking); organizations and management (including public-private partnerships and modes of financing); measuring and monitoring; and economic inclusion (as a particular policy matter needed to translate civic asset-redevelopment work into direct, local, and equitable economic impacts).

How these areas of practice combine varies greatly, depending on the specific needs of sites and capacities/interests of partners. Civic engagement often rises to the top of a projects’ concern, as deficits of engagement are perhaps the most-common barrier to progress. Innovation in the other areas of practice can catalyze redevelopment in myriad ways—with the caveat that single, isolated measures in one area of practice don’t automatically elevate another area of practice. Leverage has to be created with intention. Beautiful designs, loads of money, brilliantly conceived metrics, or novel partnerships cannot in and of themselves result in equitable, sustainable redevelopment of civic assets.

5. Supporting Practitioners

The daily, rooted-in-place work of civic-asset redevelopment is guided by many hands. Practitioners working at site, system, and policy scales in a given city need both practical tools and ideal concepts to drive their work ahead. This report presents findings, principles, and lessons from this burgeoning area of national work for consideration by leaders, advocates, designers, officials, funders and others—a community of practice looking less for recipes and more for grounded insights and rich explorations of the challenges ahead.
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<td>Deborah Jacobs, Bill &amp; Melinda Gates Foundation; (former) Seattle Public Library</td>
<td>Mike Tomas, Garfield Park Community Council</td>
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<td>Joseph Kaltenberg, MKE Plays</td>
<td>Jennifer Toy, Kounkuey Design Initiative</td>
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<td>Adam Kent, LISC DC</td>
<td>Sarah Treuhaft, PolicyLink</td>
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<td>Tori Kjer, The Trust for Public Land</td>
<td>Tamara Walker, Citizen Film</td>
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<td>Scott Kratz, 11th Street Bridge Park</td>
<td>Dana Wedeles, City of Alexandria Department of Recreation, Parks, and Cultural Activities</td>
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<td>Sean Malone, Dix Park Conservancy</td>
<td>Mark Wheeler, City of Philadelphia Office of Innovation and Technology</td>
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<td>Bridge Marquis, U3 Advisors</td>
<td>Beth White, Houston Parks Board</td>
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<td>Laura Wolf-Powers, Columbia University</td>
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