

Article

Fertile Ground: Implementing the 2030 Agenda in U.S. Cities

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Abstract: The 2030 Agenda for Sustainable Development promotes sustainable global prosperity by encouraging the coordination of social, economic, and environmental policies and good governance reforms. Cities are expected to play an essential role in implementing the 2030 Agenda. Local programs are to be implemented by multi-actor governance systems (including government agencies, businesses, nonprofits, and philanthropic organizations) that operate across multiple policy domains and provide extensive opportunities for stakeholder participation. Local program finance may require a combination of public, private, and philanthropic resources. We analyze the prospects for local implementation of the 2030 Agenda in large U.S. cities by examining local capacity to plan and carry out cross-sectoral collaborative initiatives. We review sustainability planning in the cities that participated in the Sustainable Development Solutions Network planning demonstration. We analyze an inventory of urban revitalization initiatives to assess local capacity to carry out collaborations. We show that local capacity is associated with having an active local environmental agenda and making progress toward achieving sustainable development goals. However, local capacity appears to be concentrated in larger cities. Although the demands on local governance are daunting, our examination of local capacity to plan and execute cross-sectoral collaborative initiatives in large U.S. cities creates guarded optimism.

Keywords: urban; local capacity; sustainable development; collaboration; implementation



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1. Introduction

The 2030 Agenda for Sustainable Development is a United Nations (UN) initiative to promote sustainable global prosperity by encouraging the coordination of social, economic, and environmental policies and good governance reforms. The agenda identifies seventeen Sustainable Development Goals (SDGs). Though there are both synergies and trade-offs between the SDGs, the nature of the connections and the balance of trade-offs are likely to vary between and within nations [1,2]. Thus, initiatives to implement the SDGs are likely to vary nationally and locally [3]. The challenge is to create a “whole-of-government” and “whole-of-society” approach that establishes national priorities and mobilizes contributions from multiple stakeholders without dominating local implementation processes [4].

Cities are critical to achieving sustainable prosperity. Cities and metropolitan areas worldwide, as centers of population growth and economic vitality, are expected to play an essential role in implementing the SDGs [5,6]. However, the United Nations’ global indicator framework, which is used to assess progress on SDG implementation, focuses on countries as the main spatial unit for which national governments and agencies should report. National measures mask disparities at the subnational level, particularly for regions and cities. In addition, the Organization for Economic Cooperation and Development (OECD) has noted, “attainment of at least 105 of the 169 SDG targets included in the global indicator framework will require the full engagement and participation of regions and cities to deliver the intended outcomes” [7].

Although the U.S. participated in the development of the SDGs and adopted the goals along with other UN member states in 2015, follow-through at the national level has been limited. In part this reflects the Trump Administration's hostility toward climate change mitigation, sustainable development, and institutions that support international cooperation [8]. While the Biden Administration is likely to renew the U.S. commitment to implementing the SDGs and the president's support is expected to enhance the prospects for success, local capacity remains a significant concern [9,10].

Local programs are to be implemented by multi-actor governance systems (including government agencies, businesses, nonprofits, and philanthropic organizations) that operate across multiple policy domains and provide extensive opportunities for stakeholder participation. Implementing the SDGs locally will require sustained efforts in the face of inevitable local political change, mobilization across sectors, and coordination across existing policy silos from local governments that are "well-functioning" and "well-managed" [10]. Beyond this, finding the resources to implement local projects is likely to be a significant challenge that may require innovative arrangements that combine support from public, private, and philanthropic sources [11–13].

Are U.S. cities prepared to meet these daunting challenges? Our analysis of local capacity to plan and carry out cross-sectoral collaborative initiatives suggests there are reasons for guarded optimism.

2. Research Questions and Design

Our analysis uses a mixed-methods approach and draws upon several data sources to address five research questions about the capacity of U.S. cities to implement the SDGs. First, are U.S. cities capable of developing local sustainable development plans? We present case studies that review local sustainability plans and planning processes in Baltimore, New York, and San José, the cities selected to participate in the Sustainable Development Solutions Network (SDSN) planning demonstration project (which was in operation from 2014 to 2017). Although the SDSN's framework is intended to be a guide, we use the ten-step process described in the guide to assess the extent to which local planning in the selected cities reflects the holistic approach the SDSN recommends [11]. However, our descriptions of local planning are not limited to the plans developed in response to the SDSN's demonstration project; we include information about sustainability planning before and after the SDSN's initiative. Our review shows that the selected cities, working in cooperation with civil society institutions and local stakeholders, made significant progress despite inaction by the Trump Administration [14,15]. All three cities completed sustainability plans that reflect the best practices identified by the SDSN [11], demonstrating that local sustainability planning is possible, even in the absence of supportive national policy.

Second, are U.S. cities capable of carrying out complex cross-sectoral initiatives that feature extensive community engagement and blended finances? To assess local capacity to implement the SDGs, we developed an indicator of city experience implementing similar policies. We present an original inventory of recent city collaborative initiatives to reduce poverty and promote economic mobility in sixty large (populous) U.S. cities to assess local experience implementing collaborative initiatives that featured cross-sector mobilizations, extensive community engagement, integration across multiple policy domains, and blended financing. Our goal was to create a thorough and geographically balanced inventory of collaborative initiatives implemented in large U.S. cities during the study period (from 2010 to 2018). The inventory includes the fifty largest U.S. cities (based on 2010 population) and ten additional cities that ranked between 51 and 70 in population size in 2010 (New Orleans, Honolulu, Tampa, St. Louis, Pittsburgh, Cincinnati, Toledo, St. Paul, Newark, and Buffalo). The additional cities were included in the inventory to balance geographic representation and provide more comprehensive coverage of major cities with experience implementing federal programs to combat urban distress.

We call this an inventory rather than survey because we are building a list of initiatives within the selected cities rather than selecting initiatives within each city from a sampling

frame. A similar assessment of collaborative initiatives in education was undertaken by Henig and colleagues [16,17]. To create the inventory, we conducted two separate web-based searches. We initially searched for evidence of cross-sector collaborations within the selected cities and included all initiatives related to a comprehensive, holistic approach to reducing poverty and/or promoting economic mobility. We then searched in each of the selected cities for initiatives within four policy domains related to these goals: housing and neighborhood revitalization, education, workforce development, and economic development. Initiatives that featured cross-sectoral collaboration were included in the inventory. Additional details about the search process are presented in Appendix A. The inventory shows that large U.S. cities are not starting the SDG implementation process from scratch; many have substantial local capacity developed through several decades of experience planning and implementing collaborative initiatives. They are primed for success.

Third, is more extensive local experience implementing collaborative initiatives associated with local activity in the environmental policy domain? We gathered data from the inventory cities on local environmental policy actions from 2010 to 2021 in five areas related to environmental policy. These actions included:

- Adoption of a climate action plan or sustainability plan.
- Membership in the C40 Climate Leadership Group, a network of 97 of the world's largest cities that share knowledge and collaborate on efforts to address climate change [18].
- Membership in the Cities for Climate Protection Campaign (CCPC), an initiative of the International Council for Local Environmental Initiatives to assist cities in reducing local greenhouse gas emissions, improving air quality, and enhancing urban livability and sustainability. More than 650 local governments have joined the CCPC by passing resolutions pledging to reduce greenhouse gas emissions in local government operations and throughout their communities [19].
- Participation in Bloomberg Philanthropies' American Cities Climate Challenge, launched in 2018, to provide resources to mayors in 25 cities to accelerate action on climate change through a holistic approach focused on clean buildings and transportation.
- Receipt of a Sustainable Communities Initiative planning or implementation grant, a joint effort of the U.S. Departments of Housing and Urban Development and Transportation under the Obama Administration's Neighborhood Revitalization Initiative to improve regional and local planning that integrates housing and transportation investments and increases the capacity for land use and zoning decisions that promote private investments that support sustainable communities.

Although some of these initiatives have a low threshold for local participation, the evidence shows that cities in our inventory with more experience in cross-sector collaboration were more likely to have an extensive local environmental policy agenda.

Fourth, is more extensive local action in the environmental policy domain associated with making greater progress toward achieving the SDGs? To assess local progress in SDG implementation, we use the OECD's localized indicator framework [20], drawing on sources such as United Cities and Local Governments and the UN Sustainable Solutions Network, among others. OECD's localized indicator framework includes 135 indicators aggregated at the subnational level, covering all 17 SDGs for regions and cities, though coverage for cities is limited to 11 of the SDGs (Table A1). To promote comparability across countries, the OECD defined cities as functional urban areas, based on population density and travel-to-work, rather than local government boundaries. Fifty-six indicators (most of which are proxies for SDG targets) are currently available.

The OECD normalized the indicators using the min-max method, with the best and worst performers set to the maximum and minimum values. The minimum value is the average of the bottom 10 percent of all cities. The maximum value is the unweighted average of indicators in the top performing city in each country. In most cases, multiple indicators were combined into an additive index based on the unweighted means of the

normalized indicators, with index values ranging from 0 to 100; the index value represents the percentage of the SDG goal that a given urban area has attained. Appendix B reports the mean value for U.S. cities and OECD cities for each SDG goal (normalized) and its component indicators (non-normalized).

Although data to assess local progress is limited, the available evidence indicates that more extensive local action in the environmental policy domain is associated with making greater progress toward achieving the SDGs.

Finally, is local capacity to implement the SDGs widespread across U.S. local governments or concentrated in larger cities? We examine a survey of U.S. local governments conducted by the International City/County Management Association in partnership with the Sustainable Communities and Small Town and Rural Planning divisions of the American Planning Association, the U.S. Department of Agriculture, and two U.S. universities [13]. When we compare the broader survey of local governments to the cities in our inventory, we are less confident about the potential to advance the 2030 Agenda uniformly across the U.S. The survey shows that local governments in smaller population centers are less likely to have an active and extensive environmental policy agenda, less likely to coordinate environmental policy across agencies, and less likely to extensively consult stakeholders in the process. In the U.S., local capacity to implement the SDGs is likely to be concentrated in larger cities.

3. Planning Local SDG Implementation

3.1. The SDSN Implementation Guide

The Sustainable Development Solutions Network (SDSN) developed a guide for implementing the SDGs in American cities to jump-start local planning processes and encourage best practices in localization [11]. “Localization refers to the process of adapting, implementing, and monitoring the SDGs at the local level” [3]. The guide emphasizes the need for a “holistic approach” to planning with extensive input from stakeholders, including residents, civic institutions, and the private sector. The guide also notes that local variation is likely: “While the SDGs will not all apply in same way for all cities, they can be prioritized and customized to meet the conditions and requirements for any city”. Are U.S. cities capable of developing local sustainable development plans?

The SDSN’s guide promotes several good governance practices. Given the need to sustain initiatives over time, the guide recommends establishing a leadership/management structure (Step 1). To encourage local ownership of the SDGs, it is important to identify the city’s core values and to identify local stakeholders, establish working relationships, and integrate their ideas into local plans (Steps 2 and 8). Given the expectation that sustainable development requires integration of action plans across policy domains, the SDSN guide recommends the establishment of work teams (Step 3). Given the emphasis on evidence-based policymaking, the guide recommends assembling baseline data and taking stock of existing projects (Steps 4 and 5). To meet the critical need for resources, the guide encourages cities to identify existing and potential sources of program support (Step 6). Of course, the policymaking process is iterative and SDSN’s guide emphasizes the importance of assessment, feedback, and policy adjustment in response to what is learned (Steps 7, 9, and 10).

However, Step 9 is likely to be a source of local controversy. Decisions about aligning resources and directing funds to selected projects at the expense of others are likely to bring conflicts about the SDGs into sharp relief and may result in local controversy once the trade-offs of sustainable development plans become more evident. Controversial resource allocation decisions are unlikely to be ceded by local government officials to cross-sectoral planning processes. Beyond this, budgeting decisions for many programs related to accomplishing the SDGs may be beyond the reach of local government officials.

The potential strengths and limitations of sustainable development planning in U.S. cities are indicated by examining the planning processes and results in Baltimore, New York, and San José, the SDSN demonstration cities. In all cases sustainability was in-

tegrated into city planning processes and the cities completed one or more sustainable development plans.

3.2. Sustainability Planning in Baltimore

Baltimore's first sustainable development plan was approved in 2009. However, the selection of Baltimore by the USA Sustainable Cities Initiative as one of three cities to host demonstration projects related to implementing the SDGs resulted in an expansion of the city's sustainability plans. Resources provided by the SDSN helped Baltimore and the other cities selected for the demonstration to link existing projects with the SDGs, targets, and indicators [21].

Baltimore developed a local planning project to integrate the SDGs into the city's existing sustainability plans. The activities undertaken in the planning process included consultations with local stakeholders; organization of work teams; identification of existing sustainable policy initiatives in the city; and identification of local indicators to correspond to the SDGs [22]. Working in an iterative process with local partner organizations that had been active in sustainable development efforts, the project team identified 56 local indicators of progress toward implementing the SDGs. Members of the community were then invited to identify local priorities by scoring the indicators (see [22] for scores on all 56 indicators). The scoring process revealed that community stakeholders were most concerned about social and economic conditions including: racial equity; child poverty; hunger and food deserts (lack of access to nutritious foods); affordable housing and transportation; earning a living wage and gender income equity; infant mortality; preparing children for kindergarten and high school graduation rates; and health (indicated by life expectancy). Widespread environmental concerns included water quality (and specifically, lead contamination) and expanding the city's tree canopy.

Sustainability planning is now an established feature of local government in Baltimore. The SDSN guide emphasizes the importance of getting "buy-in" from city leadership [11]. A series of Baltimore's mayors endorsed the city's sustainability initiatives and advanced sustainability planning, indicating that momentum has continued through changes in local leadership. The latest iteration of Baltimore's sustainable development plan continues local efforts to integrate the SDGs into local planning. That plan has five themes (Community, Human-Made Systems, Climate and Resilience, Nature in the City, and the Economy), and identifies 23 topic areas and 243 action items. The planning process continues to emphasize extensive community engagement: "This plan is the result of hundreds of conversations, comments, and drafts among Baltimore's residents, those who work at its nonprofits, businesses, and in government, and the Sustainability Commission and the Baltimore Office of Sustainability" [23].

The plan was developed through an "equity lens", reflecting stakeholders' concerns about historic and structural inequality. Equity is defined as "*The condition that would be achieved if identities assigned to historically oppressed groups no longer acted as the most powerful predictors of how one fares*" [23] (italics in original). The most recent status report concludes: "As of the end of 2020, a total of 23%, or 55 actions, have reached mid-stages of implementation or beyond, with 71% of the actions reaching at least early stage implementation" [24].

Considering the ten steps the SDSN identified to encourage sustainability planning, significant progress has been made in Baltimore. Baltimore has developed a series of sustainable development plans and has established processes to work with key stakeholders. The city's Department of Planning has an Office of Sustainability (created in 2007) that is responsible for implementing the city's plans. In addition, Baltimore's Sustainability Commission oversees the continuing development and implementation of the city's sustainability plans; members include public officials and a broad array of local stakeholders. Baltimore has established a local vision that reflects the city's values. Working groups have been established and continue to function. Baseline data (through the Baltimore Neighborhood Indicators Alliance) have been assembled and analyzed. Baltimore provides periodic reports about the status of sustainable development initiatives.

While the planning, consultation, and monitoring infrastructure is in place, Baltimore has not yet found the financial resources that will be needed to advance much of its sustainable development agenda (though government grants, foundation awards, and local revenue have financed a series of demonstration projects). Financing local initiatives is a significant constraint, as Baltimore struggles to contend with population decline and a limited tax base. Consequently, the sustainable development plan has not been fully aligned with the city's budget, and only some elements of the plan have been launched.

3.3. Sustainability Planning in New York

New York City (NYC) first initiated sustainable development planning in 2007 when it launched *PlaNYC 2030*. Since then, the city has developed a series of plans to promote sustainable development and respond to climate change. To institutionalize sustainability concerns, NYC amended its charter to create a sustainability office in 2008. In 2013, the city amended its charter again in the aftermath of Hurricane Sandy to establish a resiliency office to develop plans to improve storm water management and help coastal communities adapt to the challenges of climate change. In 2015, the city adopted the *OneNYC: The Plan for a Strong and Just City*, which committed to the “principles of growth, equity, sustainability, and resiliency” by linking plans for environmentally friendly development with equity concerns [25]. In 2018, the *OneNYC* plan was updated and retitled *OneNYC 2050: Building a Strong and Fair City*: “*OneNYC 2050* consists of eight goals and 30 initiatives that together comprise a strategy to prepare New York City for the future” [26].

NYC initiated the *OneNYC* planning process in 2014, when more than 71 of the city's agency heads met to discuss inter-agency collaboration for sustainable development. Cross agency working teams were established to identify indicators to monitor conditions and track progress; baseline data were assembled, and ongoing data collection (featuring annual reporting) was instituted. The working groups established priorities and worked on collaborative policies that were assessed based on “feasibility, ambition, scalability, funding and external dependencies” with special emphasis placed on the importance of available local funding [25]. Members of the city's Office of Management and Budget were included in the process to analyze the financial implications of proposals. The process identified eight local goals as foundations for the city's development plans: a vibrant democracy; an inclusive economy; thriving neighborhoods; healthy lives; equity and excellence in education; a livable climate; efficient mobility; and modern infrastructure.

Significant outreach efforts and community consultations were undertaken during the initial planning process [25]. To solicit stakeholders' opinions, the city conducted surveys (online and by telephone); more than 1300 stakeholders participated in face-to-face meetings, town halls, and roundtable discussions; a business roundtable was conducted with leading employers; and a *OneNYC* Advisory Board was established with representatives of the five boroughs, civic leaders, and community leaders, working with policy experts. Consultations were initiated with surrounding authorities in New York, New Jersey, and Connecticut to discuss regional concerns.

The *OneNYC 2050* planning process also included significant outreach and stakeholder participation. The *OneNYC* Advisory Board consulted with nonprofits and city agencies seeking to discover new approaches to local problems. Regional collaborations continued. Members of the public had direct input: “More than 16,000 New Yorkers' voices shaped the vision and priorities that make up *OneNYC 2050*” by sharing opinions while attending community forums and events or participating in a public survey [26]. The most common concerns stakeholders expressed were the need to improve public transit, housing affordability, and inequality of opportunity in the job market. Concern about resiliency planning was often expressed by stakeholders from coastal communities. The most recent progress report indicates that *OneNYC 2050* initiatives are being actively managed; many have been implemented and completed, while others have been partially completed, time extended, or reconsidered [27].

NYC has strived to relate its sustainable development plans to the SDGs by presenting Voluntary Local Reviews (VLRs). The city has presented two VLRs and aspires to produce a series of reports [24,25]. Each report focuses on a limited number of the SDGs (identified in the reports as the “Priority Goals”). The 2018 VLR, based on the initial *OneNYC* plan, focused on providing clean water and sanitation (SDG 6); providing access to affordable, reliable, sustainable, and modern energy (SDG 7); making cities and human settlements inclusive, safe, resilient, and sustainable (SDG 11); ensuring sustainable consumption and production patterns (SDG 12); and protecting, restoring, and promoting sustainable use of terrestrial ecosystems (SDG 15). For each goal, a series of indicators was identified, and baseline data and the latest available data were reported. The second VLR was based on the revised plan, *OneNYC 2050*, and focused on: quality education (SDG 4); decent work and economic growth (SDG 8); reduced inequality (SDG 10); climate action (SDG 13); and peace, justice, and strong institutions (SDG 16).

The *OneNYC* planning process (including both the initial version and the revised version) displays the features identified in the SDSN implementation guide as the components needed for successful local SDG implementation [11]. A structure was created to lead and manage the planning process. Interagency work groups were organized to initiate planning and to take stock of ongoing initiatives, assemble and analyze baseline data, and identify budgetary resources within the city. Widespread consultations with stakeholders were conducted and stakeholders’ ideas were included in a plan that identified core values and eight local goals. Outreach efforts continued as the initial plan was revised and updated. Annual reporting was instituted: The most recent annual progress report indicates that budgets have been aligned and accountability measures are in place, as initiatives are tracked and managed [27]. The plan has been launched and revisions to the plan that occurred in 2019 indicate that the process has effective accountability and feedback mechanisms to adjust local sustainability policies as new information becomes available.

3.4. Sustainable Development in San José

The city of San José is located within the San José–Sunnyvale–Santa Clara, California, metropolitan region, which the SDSN identified as the leading urban area in the U.S. for implementation of the SDGs [28]. San José has a history of environmental leadership, including a sustainability report that was commissioned in 1980; a series of local initiatives to reduce waste, improve air quality, encourage recycling, and conserve and reuse water; and a “Green Building Policy” [29]. The city has created two updated local sustainability plans since the SDGs were adopted: *Climate Smart San José* in 2018 and *Envision San José 2040* (the city’s General Plan, which was first adopted in 2011, but is updated on a four-year cycle, most recently in 2021).

Climate Smart San José is a revised and updated version of San José’s *Green Vision* plan, a sustainable development plan that was adopted in 2007. The *Green Vision* plan focused on creating clean tech jobs, reducing energy consumption, generating power from renewable sources, reducing landfill waste, converting waste into energy, constructing green buildings, recycling and reusing wastewater, planting trees, building paths for walking and biking, and acquiring a fleet of public vehicles powered by alternative energy [30]. *Climate Smart San José* emphasizes the quality-of-life benefits the city’s residents can enjoy by embracing sustainable development [31].

Climate Smart San José identifies three pillars and nine strategies to guide sustainable development. San José aspires to be sustainable and climate smart; vibrant and growing; and a source of inclusive economic opportunity. To be sustainable and climate smart, the city plans to expand the use of renewable energy and create opportunities to enjoy lifestyles that take advantage of California’s climate. To focus and manage expected population growth, the city will increase the density of selected neighborhoods, make homes more affordable and energy efficient, create clean options for personal mobility, and develop integrated and accessible public transit. To create inclusive economic opportunities, San

José will create jobs, improve commercial buildings, and make commercial transportation cleaner and more efficient. *Climate Smart San José* also includes a detailed discussion of “Funding Models” (financing options) to implement the plan [31].

The planning process for *Climate Smart San José* included data analysis, consultation with experts, and community outreach. The analysis focused on energy use in the city and its connections to carbon dioxide emissions, suggesting ways in which emissions might be reduced. Elements of the plan were enhanced by the advice of hundreds of subject area experts in “energy, water, mobility, and land use and open space”. The planning process also included numerous community consultations designed to heighten awareness of the plan, solicit insights and opinions from the community, and to understand how residents connected the plan’s vision of enjoying life in San José to sustainability initiatives. Numerous events and activities (including multilingual announcements and events) were undertaken: 13 public meetings were held, and more than 2200 people responded to a survey [31].

Envision San José 2040 (the city’s General Plan) guides land use planning. The plan aims to increase population density in designated growth areas, developing urban villages that encourage walking and use of mass transit [32]. *Envision San José 2040* identifies four types of urban villages: Regional Transit Urban Villages (locations near regional transit infrastructure); Local Transit Urban Villages (locations served by light rail or bus facilities for local transit); Commercial Corridor and Center Urban Villages (locations with redevelopment potential due to underutilized commercial sites); and Neighborhood Urban Villages (locations in existing neighborhoods that can be enhanced through mixed-use development). *Envision San José 2040* also identifies seven community values: “innovative economy” (to create job opportunities and provide ample fiscal resources); “environmental leadership” (sustainable and effective use of resources); “diversity and social equity” (achieving equity while celebrating the city’s diverse cultures); “interconnected city” (activities are in close proximity and accessible by walking, biking, or mass transit); “healthy neighborhoods” (neighborhoods that are attractive, affordable, and safe); “quality education and services” (offering high quality local services for all); and “vibrant arts and culture” (supporting the creative energy that enriches the city’s quality of life) [32].

There was extensive community participation in the *Envision San José 2040* planning process. The latest update of the plan was developed by a 37-member Task Force composed of “dedicated community members, representing political, business, resident, development, religious, and labor interests, appointed by the City Council” who were “joined by numerous volunteer community members who participated in the Task Force meetings, at community workshops and through online engagement activities” [32]. The Task Force held 57 meetings and more than 125 outreach sessions, that reached more than 5000 residents. Five priority concerns were identified by this process: promoting economic development, ensuring fiscal stability, providing environmental leadership, building urban villages, and promoting transit use [32].

Progress toward achieving the goals established in *Envision San José 2040* is monitored and reported by San José’s Department of Environmental Services, which maintains a dashboard that displays baseline data and projections to report the city’s progress on sustainable development goals. Graphic displays include data on energy production and consumption, use of different modes of transit (public, automobiles, and walking or biking), water consumption, job creation, and greenhouse gas emissions.

The planning processes for sustainable development in San José exhibit the features of effective local planning identified by the SDSN. The city has several institutions that are actively engaged in ongoing sustainability planning (including the Department of Planning and the Sustainability Department). Concerns about sustainable development are thoroughly embedded in the city’s policymaking processes. The planning processes for both current sustainability plans included work teams that conducted outreach efforts to identify core values, took stock of ongoing projects, and analyzed baseline data. Experts were consulted. Plans were developed and implemented. Local planning processes

emphasize mobilizing and working with key stakeholders. The city monitors progress and reports to the public through its sustainability dashboard.

3.5. Comparing Plans in the Demonstration Cities

Plans to implement the SDGs are expected to vary locally because of the complexity of the 2030 Agenda, which features seventeen SDGs that are expected to have complex interactions that vary from place to place [1–3]. Beyond this, respect for local differences in planning may enhance support among local elites and residents for SDG implementation [11].

All the sustainability plans developed in the SDSN demonstration cities reflect long-standing environmental concerns such as air quality, solid waste management, mass transit development, energy consumption, and water quality. All three cities are planting trees. All are trying to reduce solid waste. All are seeking to improve mass transit and to encourage alternative modes of transportation. All plan to increase density and encourage mixed-use development along existing and proposed mass transit lines. All plan to reduce the energy and water consumption in future construction (housing and commercial). Then, although all three cities express concern about water quality, each has distinctive priorities. Baltimore is concerned about contamination of its water supply and pollution related to its port; NYC is concerned about maintaining the high quality of its drinking water, with efforts to maintain and enhance its up-state supply infrastructure; and San José is concerned about managing a water shortage, prioritizing initiatives to conserve and recycle water.

All three cities express concern about housing affordability and displacement of existing residents in their sustainability plans. All three cities aspire to reduce rent burdens for lower income households. However, each city has a distinct view of housing affordability. In Baltimore, housing affordability is linked to poverty and substandard housing, which are seen as manifestations of historic inequities in federal policies related to housing finance. In NYC, concerns about housing affordability reflect high housing costs (and rent burdens) and income inequality, connected to the limitations of the city's past efforts to provide an adequate supply of affordable housing. In San José, concern about housing affordability reflects high demand (a shortage of housing units to rent or purchase), high housing costs (and rent burdens), and the location of housing in relation to other types of development.

There are also noteworthy differences in local sustainability plans. One of the most striking differences distinguishes San José. Baltimore and NYC did more to integrate social, economic, and political concerns into their sustainability plans. By comparison, the plans in San José focus more directly on environmental concerns and land use. This is not to suggest that San José is a laggard city in social, economic, or political policymaking. Rather, it is to observe that the social, economic, and political policy agendas in San José have not been fully integrated into the city's sustainability plans. By contrast, the sustainability plan in NYC stands out for its ambitious social, economic, and political agenda. The *OneNYC 2050* plan includes city-sponsored universal pre-school and universal healthcare and has an extensive discussion of democratic participation, including voting rights.

In sum, our case evidence indicates that local sustainability planning that reflects local concerns and context is ongoing in Baltimore, New York, and San José. The plans that have been developed conform to the process envisioned in the SDSN's implementation guide. However, in a broader sense the demonstration sites have accomplished much more; they have invested in the civic infrastructure that will be needed to continue to promote sustainable development. As Baltimore's SDSN demonstration project report observed: "The project team has convened government, non-profit and civil society representatives to provide feedback for these activities, and in so doing they have established a community of practice that can continue as a coalition for SDG achievement" [22].

4. Inventory of Local Capacity

Implementing the SDGs will place significant demands on local governance, broadly conceived to include local officials, foundations, anchor institutions, businesses, nonprofits,

and community stakeholders. The limited national progress made to date in the U.S. casts doubt on local capacity to convene, mobilize, and empower collaborative, cross-sector, comprehensive initiatives to address sustainable prosperity and climate change. Do U.S. cities have the capacity to carry out complex cross-sectoral collaborations that feature extensive community engagement and blended finances?

Many U.S. cities have developed substantial capacity to execute cross-sectoral collaborations through local efforts to combat urban distress, where such initiatives have been encouraged by federal policy and foundation sponsorship (sometimes in conjunction) for more than three decades. This section summarizes our recent research on city collaborative initiatives designed to reduce poverty and promote economic mobility, important components of urban revitalization and the 2030 Agenda.

Our assessment of the Empowerment Zones and Enterprise Communities initiative, the U.S. federal government's most ambitious effort to combat urban distress, concluded: "The quality of local governance distinguished the performance of the revitalization initiatives undertaken in the original urban EZs" [33]. The quality of local governance reflected the actions of stakeholders who were able to create the capacity to implement cross-sectoral collaborations, leading to successful local projects and programs to promote economic opportunity and reduce poverty. This finding was consistent with other studies that identified the importance of local capacity in community and economic development policymaking [34–37].

To assess local capacity, we constructed an inventory of local revitalization initiatives implemented in sixty large U.S. cities from 2010 to 2018. The inventory includes *comprehensive initiatives* (multi-sector initiatives that featured collaborative leadership) focused on poverty reduction and/or the promotion of economic mobility and *collaborative initiatives within four policy domains* related to these goals—housing and neighborhood revitalization, education, workforce development, and economic development. The selected cities were classified on a continuum to capture the breadth and depth of their recent experience with collaborative policymaking. Three primary groups are identified in Table 1: cities with no collaborative initiatives; cities with collaborative initiatives within a single policy domain; and cities with comprehensive collaborations and from zero to four domain-specific collaborations related to urban revitalization. The table further subdivides the second and third categories to show the number of collaborative efforts that were operating in the city during the study period. The results indicate that experience implementing collaborative revitalization initiatives is broad and deep. During the study period, only three of the sixty cities (5%) had no experience with collaborative initiatives; the vast majority of cities (43 of 60, 72%) had deep experience, engaging a variety of local stakeholders in multiple collaborative initiatives operating across several policy domains.

Table 1 also shows that cities with more extensive collaborative experience were more likely to have previous experience with community-based, cross-sectoral collaborations. Most of the cities with deep experience have a history of collaboration that can be traced back to comprehensive community initiatives (CCIs) that were launched in the 1980s and early 1990s, primarily through support provided by national and local foundations [38]. This initial experience was continued; these same cities were more likely to be successful in the following waves of revitalization initiatives launched during the Clinton and Bush administrations, including HOPE VI public housing revitalization [39], the Empowerment Zones and Enterprise Community initiative [33], and Renewal Communities [40]. A similar pattern holds for the Obama Administration's Neighborhood Revitalization Initiative (NRI): Cities with previous CCIs or earlier experience with federal revitalization programs were more likely to receive NRI planning and implementation grants [41–43].

Table 1. City characteristics by experience with collaborative initiatives. Median values. Sources: U.S. Bureau of the Census, Decennial Census of Population (2000) and American Community Survey, ACS, (Five Year Estimates 2015–2019); authors’ inventory of community initiatives and tabulation of local philanthropic giving for poverty reduction and economic mobility initiatives in sample cities from search of the Foundation Directory. KEY: CCI Comprehensive community initiatives; EZ Empowerment Zones; EC Enterprise Communities; RC Renewal Communities; NRI Neighborhood Revitalization Initiatives.

City Characteristics		No Collaborative Initiatives	Collaborations within a Single Policy Domain		Cross-Domain Collaborations and Number of Initiatives Related to Urban Revitalization			
			One	Two	None	One	Two	Three
Number of cities		3	3	6	1	4	20	14
Population	Total population (thousands), ACS 2015–2019	467	464	602	1633	465	643	651
	% Change, 2000–2019	5.9	28.8	18.4	23.6	13.2	21.1	12.3
	% Nonwhite, 2000	30.5	28.3	35.7	44.2	49.8	50.9	49.3
	% Nonwhite, ACS 2015–2019	38.7	37.2	47.5	57.5	56.7	56.4	59.0
Percent of Persons Below Poverty	2000	8.9	11.2	14.6	15.8	16.4	17.7	18.7
	ACS 2015–2019	14.8	12.6	16.5	18.0	15.7	17.3	18.2
Percent Unemployed	2000	4.2	5.3	5.7	5.6	6.0	7.2	6.9
	ACS 2015–2019	4.9	5.6	4.9	5.4	6.1	6.3	5.3
Collaborative revitalization initiatives	% with CCI (1984–1995)	0.0	0.0	16.7	0.0	0.0	40.0	71.4
	% with EZ/EC/RC (1995–2000)	0.0	0.0	66.7	100.0	75.0	80.0	92.9
	% with HOPE VI (1993–2010)	0.0	33.3	16.7	100.0	50.0	80.0	85.7
	% with NRI (2010–2016)	0.0	33.3	16.7	0.0	25.0	70.0	79.6
	Total collaborative initiatives, 2010–2018	0.0	1	2	1	2.5	7	8.5
Philanthropy	Total national intermediary organizations (max = 5)	1	0	1.5	2	1	2	3
	Number of local foundations	7	27	42	44	50	77	162
	Local foundation dollars per capita, 2010–2018	0.35	6.33	17.20	23.64	12.07	113.99	169.46

Cities with collaborative experience were not only more successful at securing federal funding, but they were also more likely to find local sources of support—state and local government and philanthropic grants—to support local initiatives. As Martinez-Cosio and Bussell [44] observe, the role of foundations in activating comprehensive community initiatives “cannot be underestimated”. They add that “many foundations, both large and small, are convening strategic partnerships involving public partners, the corporate community, scholars, nonprofits, and other foundations to more effectively address the complex problems that keep residents in low-income neighborhoods, particularly children, from achieving success”. Table 1 confirms their observation and shows that cities with more collaborative experience had a greater number of local foundations providing substantially more funding to support local revitalization initiatives.

In sum, data from the cities included in our inventory presented in Table 1 shows that many large U.S. cities have broad and deep experience with collaborative, cross-sectoral revitalization initiatives that operated in multiple policy domains and attracted blended funding (from governmental and foundation sources). Cities with broader and deeper experience tended to have higher rates of poverty and unemployment, more diverse populations, and lower population growth over the past two decades. Thus, there appears to be a relationship between the extent of need within a city and the breadth and depth of a city’s collaborative initiatives. Experience with CCIs and federal revitalization programs contributed to local capacity, as cities with such experience were better able to develop and execute complex local initiatives in multiple policy domains.

5. Local Environmental Policies

Is local experience with collaborative revitalization initiatives related to the likelihood that cities undertake local initiatives in the environmental policy domain? We gathered information on local policy actions in the cities selected for the inventory over the past decade (from 2010 to 2021) in five areas related to environmental policy and examined how they aligned with local collaborative urban revitalization initiatives.

Table 2 shows a modest positive and statistically significant relationship ($r = 0.29$) between a city’s collaborative experience in urban revitalization and recent local actions taken to address environmental issues, climate change, and sustainable development. While the list of recent environmental actions in the table is not comprehensive, our evidence does show that cities with more extensive collaborative experience in urban revitalization were more likely to engage in collaborative environmental policymaking. In a related analysis, we examined Portney’s Taking Sustainable Cities Seriously Index [45]. We did find a stronger and statistically significant relationship between the number of environmental actions taken by cities and Portney’s Index, an additive index based on 38 environmental, energy, and sustainability programs and policies adopted and implemented by the nation’s 55 largest cities ($r = 0.43$). However, we also found a weak and insignificant relationship between our measure of the breadth and depth of city collaborative initiatives and Portney’s Taking Sustainable Cities Seriously Index ($r = 0.17$). This suggests that our measure of local capacity may complement Portney’s index in explaining local environmental policymaking by tapping into distinct elements of local capacity.

Table 2. City Environmental and Sustainability Actions Taken by Breadth and Depth of City Collaborative Experience. Source: Authors' coding and calculations.

City Classification of Collaborative Initiatives	Total Environmental/ Sustainability Actions Taken (Mean)	Adopted Climate Action or Sustainability Plan %	C40 Climate Leadership Member %	Cities for Climate Protection Member %	Bloomberg American Cities Climate Challenge Member %	HUD-DOT Sustainable Communities Recipient %
No collaboration ($n = 3$)	1.33	100	0	33	0	0
Collaboration within a single domain ($n = 3$)	1.00	33	0	33	0	33
Collaborations within two policy domains ($n = 6$)	2.33	83	17	50	67	17
Cross-domain collaboration only ($n = 1$)	3.00	100	100	0	0	100
Cross-domain and collaboration in an urban revitalization domain ($n = 4$)	1.75	75	0	25	50	25
Cross-domain and collaborations in two urban revitalization domains ($n = 20$)	2.60	90	25	35	35	75
Cross-domain and collaborations in three urban revitalization domains ($n = 14$)	2.86	79	29	43	50	86
Cross-domain and collaborations in four or more urban revitalization domains ($n = 9$)	2.44	89	33	44	33	44
Total ($n = 60$)	2.41	83	23	38	38	58

6. Advancing the SDGs

It is premature to evaluate SDG implementation locally. Nonetheless, Table 3 examines the relationship between local environmental actions taken (the actions we discussed in Table 2) and local progress toward SDG end values. Is more extensive local action in the environmental policy domain associated with greater progress toward achieving the SDGs?

The SDG end values are drawn from the OECD's localized indicator framework [20] which includes 135 subnational indicators covering all 17 SDGs for regions and cities, though coverage for cities is limited to 11 of the SDGs. The second column in the table reports the mean percentage of goal attainment for all the U.S. cities included in our inventory for which data are available. Columns three through seven present two sets of means. The first is the percentage of the SDG achieved in cities that did not take environmental action; the second is the percentage achieved in cities that did take environmental action. Overall, the cities in our inventory have made the most progress toward attaining SDG 11 (Sustainable Cities), SDG 16 (Peace and Institutions), and SDG 6 (Clean Water), with an average percentage of the SDG achieved of 80 percent or higher. The goals in which inventory cities have made the least progress are SDG 10 (Reduced Inequalities), SDG 14 (Life Below Water), and SDG 9 (Industry and Innovation), with average completion rates of one-third or less.

To further assess the relationship between local environmental actions taken and progress toward achieving the SDGs, we conducted a correlation analysis. The number of local environmental actions taken is positively associated with progress toward SDG end values for seven of the eleven goals. Three of these relationships are statistically significant: SDG 1 Poverty ($r = 0.33$), SDG 9 Industry and Innovation ($r = 0.51$), and SDG 17 Partnerships and Enablers ($r = 0.37$). In terms of the substance of local environmental action, the data suggest that network membership is more important than individual actions in explaining progress toward the SDG end values. Six of the eight statistically significant relationships displayed in Table 3 were in the predicted direction (adopters achieved a higher percentage of goal attainment) for cities that were members of the C40 Climate Leadership Group, Cities for Climate Change, or the American Cities Climate Challenge. These differences represent progress toward SDG 1 (No Poverty), SDG 9 (Industry and Innovation), and SDG 17 (Partnerships and Enablers for SDGs). Network members reported progress toward SDG end values that were 19 to 28 percentage points higher than non-members. By contrast, for two goals, SDG 7 (Clean Energy) and SDG 10 (Reduced Inequalities), non-members made greater progress than network members.

In sum, many of the cities in our inventory have extensive local experience implementing complex collaborative initiatives, an indication of local capacity to implement the SDGs. Local capacity is associated with local action in the environmental policy domain. Actions taken locally in the environmental policy domain, especially network membership, are associated with greater local progress on achieving several of the SDGs.

Table 3. Mean Percentage Attainment of SDG Goals by Environmental and Sustainability Action, Sample Cities in Inventory of Collaborative Initiatives. Statistically significant differences between no and yes cities are noted with * ($p < 0.05$) and ** ($p < 0.01$). Source: Authors calculations from OECD data [20].

Sustainable Development Goal	Total	Adopted Climate Action or Sustainability Plan		C40 Climate Leadership Member		Cities for Climate Protection Member		Bloomberg American Cities Climate Challenge Member		HUD-DOT Sustainable Communities Recipient	
		No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
1. No poverty ($n = 48$)	54	62	53	52	60	47	68 **	45	65 **	50	57
6. Clean water ($n = 28$)	80	88	79	80	79	78	83	79	81	80	80
7. Clean energy ($n = 50$)	50	54	49	49	51	53	42 *	50	49	48	50
9. Industry and innovation ($n = 50$)	34	13	39*	27	54 **	31	42	23	51 **	31	37
10. Reduced inequalities ($n = 48$)	29	45	26*	33	17 **	27	32	29	28	31	28
11. Sustainable cities ($n = 50$)	94	98	93	95	90	93	95	92	95	96	92
13 Climate action ($n = 50$)	64	68	63	63	66	63	64	61	68	60	66
14. Life below water ($n = 16$)	30	19	31	28	31	29	31	32	26	31	29
15. Life on land ($n = 28$)	38	33	38	38	38	41	34	42	35	37	38
16. Peace and institutions ($n = 50$)	87	91	87	87	88	86	91	86	89	88	87
17. Partnerships and enablers for SDGs ($n = 50$)	44	45	43	36	63 **	36	58 *	38	51	35	49

7. City Size and Local Capacity

Is local capacity to implement the SDGs widespread across U.S. local governments or concentrated in larger cities? The analysis presented thus far has focused on planning in the three large SDSN demonstration cities and on experience, actions, and achievements in the populous U.S. cities included in our inventory. In this section, we use data from a survey conducted by the International City/County Management Association (ICMA) to assess the scope of local government sustainability practices and local good governance practices in the environmental policy domain within a broader sample of U.S. local governments [13]. The survey, which asked local governments to report on sustainability policies and practices, was distributed to 8562 U.S. local governments via direct mail (with an online response option) and achieved a response rate of 22.2%.

Table 4 summarizes the ICMA survey data on sustainability policies and practices of U.S. local governments, by type of local government (county, municipality, town/township), population size, region, and form of local government. The evidence indicates that few local governments had a sustainability policy agenda in 2015 (when the survey was conducted). Overall, only about one-third of local governments had adopted a sustainability plan, one in five had dedicated a budget line for sustainability and/or environmental protection, one in seven had conducted a greenhouse gas (GHG) emissions inventory of local government operations, and only one out of ten had set GHG targets for local government operations. Less than 10 percent of U.S. local governments had adopted a climate mitigation plan, a climate adaptation plan, conducted a GHG inventory of the community or set GHG targets for the community.

Table 4 also shows that the tendency of local governments to adopt sustainability practices reflects population size, region, and form of government. Several previous studies have observed similar tendencies [46–49]. For example, Table 4 shows that more than three of four of the largest jurisdictions (those with populations of one million or more) had adopted a sustainability plan as compared to about half of the jurisdictions between 100,000 and one million, and only 29 percent of those with populations below 100,000. This pattern is consistent across the sustainability practices reported in the table, except for setting GHG targets for the community. The table also shows that U.S. local governments in the West were more likely to employ sustainability practices, particularly GHG inventories and GHG targets. A city's form of government also appears to be associated with taking some sustainability actions. Though mayor-council and council-manager cities adopted sustainability plans and dedicated budget lines for sustainability and environmental protection at about the same rate, council-manager cities were more likely to undertake GHG inventories and set GHG targets.

Table 5 shows that variation in local government sustainability practices continues to hold and in some cases is even more pronounced when local good governance processes in the environmental policy domain are examined. Most notably, nearly all the nation's largest local governments (those with populations of 250,000 or more) coordinated environmental programs and policies among their departments and with other localities in their region. Beyond this, consultation with community stakeholders is also much more common in the larger population centers. Almost seventy percent of the largest cities (those with populations over one million) had residents participate in the planning process. These observations suggest that local population size influences the likelihood that good governance practices related to SDG implementation are institutionalized. Smaller local government are less likely to exhibit good governance practices, especially in terms of inter-agency and regional coordination in response to climate change.

Table 4. U.S. Local Government Sustainability Practices. Percent responding yes. Source: International City/County Management Association, Local Government Sustainability Practices Survey [13].

U.S. Local Governments		<i>n</i>	Adopted Sustainability Plan	Adopted Climate Mitigation Plan	Adopted Climate Adaptation Plan	Dedicated Budget Line for Sustainability/Environmental Protection	Conducted GHG Inventory of Local Government Operations	Conducted GHG Inventory of the Community	Set GHG Targets for Local Government Operations	Set GHG Targets for the Community
Total		1899	31.5	6.4	3.2	18.6	14.1	9.1	10.7	7.0
Type	County	424	35.2	4.5	2.6	19.3	8.7	4.5	7.3	3.5
	Municipality	1146	32.3	8.0	4.1	19.4	17.8	12.6	13.4	9.5
	Town/Township	329	24.1	3.0	0.6	15.2	7.9	3.0	5.5	2.7
Population Group	Over 1 million	13	76.9	46.2	38.5	69.2	69.2	30.8	61.5	7.7
	500,000–1 million	24	50.0	20.8	8.3	54.2	45.8	25.0	33.3	20.8
	250,000–499,999	37	55.6	21.6	8.1	48.6	40.5	18.9	29.7	18.9
	100,000–249,999	145	46.5	11.7	9.0	35.2	33.1	25.5	24.1	15.2
	Less than 100,000	1680	29.0	5.1	2.2	15.7	11.0	22.6	8.3	5.8
Region	Northeast	348	27.0	4.9	2.0	17.5	12.1	5.5	8.3	5.2
	Midwest	652	27.0	3.4	1.2	15.6	7.1	4.1	5.4	3.1
	South	537	33.2	3.5	2.4	18.1	11.5	6.3	9.1	4.7
	West	362	41.5	17.4	8.8	26.0	32.3	25.7	24.9	19.3
City Form of Government	Mayor-Council	383	31.4	4.2	2.3	16.2	9.4	5.5	5.5	3.4
	Council-Manager	862	31.6	9.4	4.4	20.9	20.9	14.6	15.8	11.6

Table 5. U.S. Local Government Collaboration and Capacity Regarding Environmental and Sustainability Programs or Policies, 2015. Percent responding yes. Source: International City/County Management Association, Local Government Sustainability Practices Survey [13].

U.S. Local Governments		Departments Coordinate on Environmental Programs or Policies	Departments Coordinate on Climate Change Programs or Policies	Localities in Region Coordinate on Environmental Programs or Policies	Localities in Region Coordinate on Climate Change Programs or Policies	Residents Participate in Planning Strategies through Committees, Commissions, or Task Forces
Total	<i>n</i> %	1730 64.6	1617 11.5	1703 61.0	1630 20.2	1899 37.7
Type	County	61.2	5.6	58.2	17.9	34.0
	Municipality	65.5	14.7	62.0	22.4	39.2
	Town/Township	65.3	6.8	60.5	15.3	37.4
Population Group	Over 1 million	92.3	69.2	91.7	83.3	69.2
	500,000–1 million	90.5	30.0	90.5	52.4	50.0
	250,000–499,999	88.9	20.6	77.8	33.3	48.6
	100,000–249,999	77.0	22.5	72.0	26.2	53.1
	Less than 100,000	62.2	9.5	58.9	18.4	35.7
Region	Northeast	71.9	9.0	63.1	16.9	43.4
	Midwest	53.9	6.5	54.5	14.1	35.3
	South	67.7	7.2	66.7	19.2	34.8
	West	71.3	27.9	61.8	34.8	40.9
City Form of Government	Mayor-Council	60.2	8.1	55.7	15.3	36.3
	Council-Manager	68.7	17.4	65.1	25.2	41.2

Finally, the ICMA survey identified factors that are likely to limit sustainability policy-making in U.S. local governments (see Table 6). The largest local jurisdictions are much less likely to report concerns about lack of staff capacity or support and challenges in coordinating across agencies. Less than 10 percent of the largest jurisdictions reported they had no staffing, goal recognition, or task force/committee addressing sustainability as compared to about 18–24 percent of local governments with populations between 100,000 and one million and nearly half of local governments with populations less than 100,000. However, lack of funding was the most prominent factor identified by all local governments as hindering their sustainability efforts. All local governments with populations of 500,000 or more cited this as a very significant or significant factor as did more than eight out of ten local governments with populations less than 500,000. (The need for federal resources to support local sustainability initiatives was also cited in the local sustainability plans developed by the cities that participated in the SDSN demonstration projects.) A large proportion of local governments also cited state or federal funding restrictions as a constraint on their sustainability efforts and a slightly smaller share also expressed concerns regarding state or federal government policies.

In sum, the ICMA survey suggests that large U.S. cities have more local capacity (including staff) to develop and implement an active environmental agenda; to coordinate initiatives across policy silos and regionally; and to exhibit good governance practices. However, large local jurisdictions are much more likely to identify lack of funding, state and federal funding restrictions, and state and federal policies as significant constraints.

Table 6. Factors that Hinder Sustainability Efforts in U.S. Local Governments, 2015. Percent responding yes. * Percent responding “very significant” or “significant”. Source: International City/County Management Association, Local Government Sustainability Practices Survey [13].

US Local Governments		State or Federal Government Policies	State or Federal Funding Restrictions *	Lack of Funding *	Lack of Staff Capacity and/or Support *	No Staffing, Goal Recognition, or Task Force/Committee	Challenges Coordinating Across Agencies *
Total	<i>n</i> %	1589 46.3	1598 60.9	1633 88.0	1612 58.6	1792 42.2	1594 36.5
Type of local government	County	51.2	62.6	87.2	52.7	42.1	38.7
	Municipality	44.9	60.9	88.9	60.3	40.9	35.0
	Town/Township	45.0	58.5	85.3	59.9	46.9	39.8
Population size	Over 1 million	83.3	91.7	100.0	41.7	7.7	16.7
	500 k–1 million	23.8	47.6	100.0	61.9	18.2	33.3
	250–499 k	46.9	62.1	84.8	51.5	22.2	48.5
	100 k–249 k	51.2	65.1	89.3	56.9	23.7	33.1
	Less than 100 k	45.8	60.5	87.7	59.0	44.9	36.8
Region	Northeast	44.1	60.1	89.1	61.9	41.4	38.4
	Midwest	47.8	60.3	86.4	58.1	47.8	35.0
	South	44.7	59.2	87.4	54.8	40.4	35.3
	West	47.8	64.9	90.5	61.9	35.8	38.9
City Form of Government	Mayor-Council	40.1	56.6	84.6	58.9	47.0	36.5
	Council-Manager	46.8	63.2	90.4	61.2	39.1	35.3

8. Conclusions

The prospects for successful implementation of the 2030 Agenda for sustainable development in U.S. cities are mixed. There are good reasons for optimism about the potential for large U.S. cities to successfully implement the SDGs: Large cities are fertile ground for developing plans and undertaking projects related to sustainable development. Though local implementation is challenging, many large U.S. cities have extensive experience developing and managing complex cross-sectoral initiatives because of participation in CCIs and federal urban revitalization programs. That experience created significant local capacity. That capacity was also reflected in the local environmental policy domain, resulting in more activity and more progress toward achieving many SDG goals locally. However, local capacity varies: Among large cities, it is widespread and deep, but not universal.

Despite this solid foundation to implement the SDGs in large cities, smaller local governments in the U.S. face more significant challenges. The ICMA survey placed the promising results of the planning review and our inventory of large U.S. cities in the broader context of U.S. local governments nationwide. Local capacity appears to be closely related to city size. The ICMA survey suggests that smaller local jurisdictions have less capacity, less extensive environmental agendas, and fewer good governance practices in the environmental policy domain. Local capacity to implement the SDGs appears to be concentrated in larger U.S. cities.

As we noted above, President Biden hopes to renew the nation's commitment to implementing the SDGs. President Biden, a Democratic president, is likely to have policy priorities that are aligned with those of Democratic mayors in the largest U.S. cities, which are governed predominantly by Democratic mayors. Nearly two-thirds (63%) of the nation's 100 largest cities have a Democratic mayor, whereas Republican mayors are currently serving in twenty-six cities, the remainder are non-partisan, according to the most recent data compiled by Ballotpedia [50]. Only two Republican mayors are found among the twenty-five largest U.S. cities.

This political alignment and the evidence we have presented suggests that larger U.S. cities would welcome federal assistance to support SDG implementation. President Biden has appointed a Special Presidential Envoy for Climate and rejoined the Paris Climate Agreement. Other forms of federal assistance the Biden Administration may provide include restoring regulatory limits on carbon pollution emissions and planning and technical assistance from agencies such as the Environmental Protection Agency and the Department of Energy that significantly scaled back their activities supportive of climate change and sustainability during the Trump Administration. However, it remains to be seen whether the Biden Administration can deliver increased funding to state and local governments to support local initiatives to achieve the SDGs. The most likely vehicle to provide federal assistance is the Administration's "Build Back Better" agenda that is currently pending in Congress. The difficulties the Administration has encountered trying to advance that legislation indicate that creating national government financing for local sustainable development initiatives is a significant challenge.

If some form of the Build Back Better agenda moves forward, the distributional consequences of any new funding will largely depend on the structure of the grant programs through which the aid is delivered. Scholarship on the distribution of grants in the U.S. federal system has produced mixed findings regarding the extent to which federal aid is distributed largely in support of co-partisans at the state and local level as opposed to other factors such as the need, demand, and capacity of recipient governments [51–54]. However, the history of federal urban revitalization initiatives suggests that the assistance that Congress does provide is likely to be selective, domain specific, and competitively distributed. This will reflect and amplify local capacity differences and result in uneven implementation of the SDGs across cities and policy domains.

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Appendix A. Google Search Strategy to Construct an Inventory of Place-Based Collaborative Initiatives in Major U.S. Cities

Our identification of comprehensive community revitalization initiatives in the selected cities was based on an extensive web search using the following Google queries.

Step 1. “city name” AND comprehensive AND “collective impact” OR collaboration OR cooperation OR coalition OR collective OR “cross sector” OR “multi sector” OR collaborative OR partnership OR initiative

Based on the results of the search, every site on the first five pages of results was visited to identify and capture web pages that met the following criteria:

- I. Include only place-based initiatives (citywide, clusters of neighborhoods, or single neighborhood within city).
- II. Include only multi-sector initiatives (participation from two or more of the following: city government, other local government, business, nonprofits, philanthropic organizations, and resident associations or organizations).
- III. Include only initiatives with evidence of collaborative leadership (e.g., board, steering committee, advisory committee, etc. comprised of representatives from two or more sectors).
- IV. Include only initiatives with substantive focus on comprehensive, anti-poverty, housing and neighborhood revitalization, pre-K-12 education, workforce development, or economic development.
- V. Include only initiatives that were operational locally at some point during the period from 2010 to 2018.

Step 2. Repeat the query described in step 1 sequentially for each city, replacing comprehensive with each of the following keywords: poverty, housing, neighborhood, education, workforce development, economic development.

Based on the results of the search, the initiatives included in the inventory from the larger universe of collaborative initiatives identified were selected based on the following criteria:

- I. Include only place-based initiatives, with evidence of city participation.
- II. Include only multi-sector initiatives (includes additional participants from the public, private, nonprofit, philanthropic, faith-based, and/or community).
- III. Include only initiatives with collaborative leadership (does not include initiatives in which only one sector forms the leadership/governance team).
- IV. Include only initiatives focused on outcomes related to poverty reduction and/or promoting economic mobility.
- V. Include only initiatives that were operational locally at some point during the period from 2010 to 2018.

Step 3. Several characteristics of each initiative were then coded based on the material obtained from the inventory and from follow-up queries of officials affiliated with the initiative. These characteristics included year begun, year ended; lead agency or organization;

participating agencies, organizations, and groups; how initiative was started; geographic scope; policy domain(s); governance structure, status of the initiative, and progress to date.

Appendix B. SDG City Indexes and Indicators

Table A1. Average Scores for OECD City Indicators in the U.S. and OECD. Source: Authors calculations from OECD data [20]. Data download, extracted 19 August 2021. * Average year in the indicator for the sample of cities. ** The suggested end value to be achieved by 2030. When end values are not inferable from the UN framework, the OECD defines end values based on the knowledge of experts in the field, or alternatively, based on the best performance of cities in that indicator. For the latter, OECD estimates an unweighted average using the top performer in each country. For each SDG, the first row represents the percentage of the SDG goal attained based on the component indicator(s); subsequent rows report the indicator(s) used to assess goal attainment and their average value.

SDG Index/Indicator	Year *	US City Average	OECD City Average	End Value **
SDG 1. No Poverty		51.59	63.84	100.0
Percentage of population with a disposable income below the 60% of national median disposable income	2016	15.86	13.68	Best Performers
SDG 6. Clean Water		78.74	73.65	100.0
Change in water bodies (from 1992 to 2015, percentage points)	2015	−0.01	−0.02	Best Performers
SDG 7. Clean Energy		57.16	64.78	100.0
Percentage of total electricity production that comes from renewable sources	2019	28.44	56.63	Best Performers
Percentage of total electricity production that comes from coal	2019	17.62	72.34	0 Percent
Percentage of total electricity production that comes from fossil fuels (natural gas and oil, excluding coal)	2019	44.92	75.14	0 Percent
SDG 9. Industry and Innovation		35.76	28.28	100.0
Patent applications (PCT) per 1,000,000 people	2014	280.15	266.58	Best Performers
SDG 10. Reduced Inequalities		34.56	51.02	100.0
Gini index of disposable income (after taxes and transfers) (from 0 to 1)	2016	0.38	0.37	Best Performers
SDG 11. Sustainable Cities		99.03	76.72	100.0
Difference between built-up area growth rate and population growth rate (percentage points)	2014	0.03	0.06	0 Percent
Exposure to PM2.5 in $\mu\text{g}/\text{m}^3$, population weighted (micrograms per cubic metre)	2017	7.38	13.09	Less than 10 $\mu\text{g}/\text{m}^3$
SDG 13. Climate Action		68.20	72.67	100.0
CO2 emissions per electricity production (in tons of CO2 equivalent per gigawatt hours)	2019	378.89	444.31	Best Performers
Change in cooling degree-days needed to maintain an average building indoor temperature of 22 degree Celsius, from 1970–1984 to 2004–2018	2018	43.09	41.00	0 Percent
SDG 14. Life Below Water		38.75	40.31	100.0
Protected coastal area as a percentage of total coastal area	2017	14.61	18.19	Best Performers

Table A1. Cont.

SDG Index/Indicator	Year *	US City Average	OECD City Average	End Value **
SDG 15. Life On Land		36.23	57.38	100.0
Change in tree cover (from 1992 to 2015, percentage points)	2015	−3.09	−0.66	Best Performers
Terrestrial protected areas as a percentage of total area	2017	7.82	15.03	Best Performers
SDG 16. Peace and Institutions		89.72	86.01	
Homicides per 100,000 persons	2017	5.67	6.41	Best Performers
SDG 17. Partnerships and Enablers for SDGs		38.99	31.60	
Percentage of houses and buildings connected to optical fiber	2017	23.04	27.11	Best Performers

Source: OECD [20].

References

- Pradhan, P.; Costa, L.; Rybski, D.; Lucht, W.; Kropp, J. A Systematic Study of Sustainable Development Goal (SDG) Interactions. *Earth Future* **2017**, *5*, 1169–1179. [CrossRef]
- Nilsson, M.; Griggs, D.; Visbeck, M.; Ringler, C.; McCollum, D. Introduction: A Framework for Understanding Sustainable Development Goal Interactions. In *A Guide to SDG Interactions: From Science to Implementation*; Griggs, D., Nilsson, M., Stevance, A., McCollum, D., Eds.; International Council for Science: Paris, France, 2017.
- Kanuri, C.; Revi, A.; Espey, J.; Kuhle, H. *Getting Started with the SDGs in Cities: A Guide for Stakeholders*; The Sustainable Development Solutions Network: New York, NY, USA, 2016. Available online: <https://www.unsdsn.org/cities> (accessed on 8 August 2021).
- Gornitzka, C.; Pipa, A. *A New Type of Leadership for National Governments Is Essential for Success of the SDGs*; The Brookings Institution: Washington, DC, USA, 2018.
- Valencia, S.; Simon, D.; Croese, S.; Nordqvist, J.; Oloko, M.; Sharma, T.; Buck, N.; Versace, I. Adapting the Sustainable Development Goals and the New Urban Agenda to the city level: Initial reflections from a comparative research project. *Int. J. Urban Sustain. Dev.* **2019**, *11*, 4–23. [CrossRef]
- United Nations. *DG 11 Synthesis Report 2018: Tracking Progress towards Inclusive, Safe, Resilient and Sustainable Cities and Human Settlements*; United Nations: Nairobi, Kenya, 2018.
- Organization for Economic Cooperation and Development. *A Territorial Approach to Sustainable Development Goals: Synthesis Report*; OECD Urban Policy Reviews; OECD Publishing: Paris, France, 2020. [CrossRef]
- Patrick, S. Sustainable Development Takes Center Stage at the U.N. World Politics Review. 2019. Available online: <https://www.worldpoliticsreview.com/articles/28190/sustainable-development-takes-center-stage-at-the-u-n> (accessed on 20 July 2021).
- Cordell, K. *It's Time for the United States to Reengage with the SDGs, Starting with SDG 16*; Center for Strategic and International Studies: Washington, DC, USA, 2021. Available online: <https://www.csis.org/analysis/its-time-united-states-reengage-sdgs-starting-sdg-16> (accessed on 21 July 2021).
- Saner, R.; Saner-Yiu, L.; Gollub, N.; Sidibé, D. Implementing the SDGs by Subnational Governments: Urgent Need to Strengthen Administrative Capacities. *Public Adm. Policy* **2017**, *20*, 23–40.
- Mesa, N.; Edquist, M.; Espey, J. *A Pathway to Sustainable American Cities: A Guide to Implementing the SDGs*; The Sustainable Development Solutions Network: New York, NY, USA, 2019. Available online: <https://resources.unsdsn.org/a-pathway-to-sustainable-american-cities-a-guide-to-implementing-the-sdgs> (accessed on 18 July 2021).
- Organization for Economic Cooperation and Development. *Making Blended Finance Work for Sustainable Development Goals*; OECD Publishing: Paris, France, 2018.
- International City/County Management Association. *Local Government Sustainability Practices, 2015: Summary Report 2016*; International City Management Association: Washington, DC, USA, 2016. Available online: <https://icma.org/documents/icma-survey-research-2015-local-government-sustainability-practices-survey-report> (accessed on 18 October 2021).
- Kharas, H.U.S. *Global Leadership through an SDG Lens*; The Brookings Institution: Washington, DC, USA, 2018.
- Pipa, A.; Brown, K. *American Leadership on the Sustainable Development Goals*; The Brookings Institution: Washington, DC, USA, 2019.
- Henig, J.; Riehl, C.; Houston, D.; Rebell, M.; Wolff, J. *Collective Impact and the New Generation of Cross-Sector Collaborations for Education: A Nationwide Scan*; Teachers College, Columbia University: New York, NY, USA, 2016.
- Lyon, M.; Henig, J. Blurring Lines? How Locally Based Collaborations Handle the Redistribution/Development Tradeoff. *Urban Aff. Rev.* **2017**, *55*, 1100–1124. [CrossRef]
- Lee, T.; van de Meene, S. Who Teaches and Who Learns? Policy Learning through the C40 Cities Climate Network. *Policy Sci.* **2012**, *45*, 199–220. [CrossRef]

19. Zahran, S.; Grover, H.; Brody, S.; Vedlitz, A. Risk, Stress, and Capacity: Explaining Metropolitan Commitment to Climate Protection. *Urban Aff. Rev.* **2008**, *43*, 447–474. [CrossRef]
20. Organization for Economic Cooperation and Development. *Measuring the Distance to the SDGs in Regions and Cities*; OECD Publishing: Paris, France, 2020. Available online: <https://www.oecd-local-sdgs.org/> (accessed on 19 August 2021).
21. Ruckstuhl, S.; Espey, J.; Rae, L. *The USA Sustainable Cities Initiative: Lessons for City-Level SDG Action*; Sustainable Development Solutions Network: New York, NY, USA, 2018.
22. Iyer, S.; Howland, A.; Ruckstuhl, S.; Sheehan, I.; Samuelson, L.; Bowman, L. *Baltimore's Sustainable Future: Localizing the UN Sustainable Development Goals, Strategies and Indicators*; University of Baltimore, College of Public Affairs: Baltimore, MD, USA, 2016.
23. Baltimore Office of Sustainability. *The 2019 Baltimore Sustainability Plan*; Baltimoresustainability.org: Baltimore, MD, USA, 2019. Available online: <https://www.baltimoresustainability.org/plans/sustainability-plan/> (accessed on 5 August 2021).
24. Baltimore Office of Sustainability. *Annual Report 2019–2020*; Baltimoresustainability.org: Baltimore, MD, USA, 2021. Available online: <https://www.baltimoresustainability.org/about/achievements-2/> (accessed on 6 August 2021).
25. City of New York. *Voluntary Local Review: New York City's Implementation of the 2030 Agenda for Sustainable Development*; Mayor's Office of International Affairs: New York, NY, USA, 2018.
26. City of New York. *Voluntary Local Review: New York City's Implementation of the 2030 Agenda for Sustainable Development*; Mayor's Office of International Affairs: New York, NY, USA, 2019.
27. City of New York. *2021 Progress Report: Delivering on the Green New Deal*; Office of Climate and Sustainability: New York, NY, USA, 2021. Available online: <http://onenyc.cityofnewyork.us/strategies/onenyc-2050/#main-content> (accessed on 18 August 2021).
28. Prakash, M.; Teksoz, K.; Espey, J.; Sachs, J.; Shank, M.; Schmidt-Traub, G. *Achieving a Sustainable Urban America: The U.S. Cities Sustainable Development Goals Index 2017*; Sustainable Development Solutions Network: New York, NY, USA, 2017.
29. Nixon, H. *San José: Implementing the UN's Sustainable Development Goals at the Local Level*; Mayor's Office of Strategic Initiatives: San José, CA, USA, 2016. Available online: <https://partners.sanjosemayor.org/performance/sustainable-development/> (accessed on 14 August 2021).
30. City of San José. *San José Green Vision*; Environmental Services Department: San José, CA, USA, 2021. Available online: <https://www.sanjoseca.gov/your-government/environment/climate-smart-san-jos/green-vision> (accessed on 16 August 2021).
31. City of San José. *Climate Smart San José: A People-Centered Plan for a Low-Carbon City*; Environmental Services Department: San José, CA, USA, 2018. Available online: <https://www.sanjoseca.gov/your-government/environment/climate-smart-san-jos> (accessed on 14 August 2021).
32. City of San José. *Envision San José 2040: General Plan*; Department of Planning, Building & Code Enforcement: San José, CA, USA, 2021. Available online: <https://www.sanjoseca.gov/your-government/departments/planning-building-code-enforcement/planning-division/citywide-planning/envision-san-jos-2040-general-plan> (accessed on 15 August 2021).
33. Rich, M.; Stoker, R. *Collaborative Governance for Urban Revitalization: Lessons from Empowerment Zones*; Cornell University Press: Ithaca, NY, USA, 2014.
34. Greenberg, D.; Verma, N.; Dillman, K.; Chaskin, R. *Creating a Platform for Sustained Neighborhood Improvement: Interim Findings from Chicago's New Communities Program*; MDRC: New York, NY, USA, 2010.
35. Briggs, X. *Democracy as Problem Solving: Civic Capacity in Communities Across the Globe*; MIT Press: Cambridge, MA, USA, 2008.
36. Chaskin, R.; Brown, P.; Venkatesh, S.; Vidal, A. *Building Community Capacity*; Aldine de Gruyter: New York, NY, USA, 2001.
37. Nye, N.; Glickman, N. Working Together: Building Capacity for Community Development. *Hous. Policy Debate* **2000**, *11*, 163–198. [CrossRef]
38. Kubisch, A.; Auspos, P.; Brown, P.; Dewar, T. *Voices from the Field III: Lessons and Challenges from Two Decades of Community Change Efforts*; The Aspen Institute: Washington, DC, USA, 2010.
39. Cisneros, H.; Engdahl, L. (Eds.) *From Despair to HOPE: Hope VI and the New Promise of Public Housing in America's Cities*; The Brookings Institution: Washington, DC, USA, 2009.
40. United States Government Accountability Office. *Revitalization Programs: Empowerment Zones, Enterprise Communities, and Renewal Communities*; Government Accountability Office: Washington, DC, USA, 2010.
41. Stoker, R.; Rich, M. Obama's Urban Legacy: The Limits of Braiding and Local Policy Coordination. *Urban Aff. Rev.* **2020**, *56*, 1607–1629. [CrossRef]
42. DeFilippis, J. (Ed.) *Urban Policy in the Time of Obama*; University of Minnesota Press: Minneapolis, MN, USA, 2016.
43. White House. *Building Neighborhoods of Opportunity: White House Neighborhood Revitalization Initiative Report*; The White House: Washington, DC, USA, 2011.
44. Martinez-Cosio, M.; Bussell, M. *Catalysts for Change: 21st Century Philanthropy and Community Development*; Routledge: London, UK, 2013.
45. Portney, K. *Taking Sustainable Cities Seriously: Economic Development, the Environment, and Quality of Life in American Cities*; MIT Press: Cambridge, MA, USA, 2013.
46. Fastiggi, M.; Meerow, S.; Miller, T. Governing Urban Resilience: Organizational Structures and Coordination Strategies in 20 North American City Governments. *Urban Stud.* **2021**, *58*, 1262–1285. [CrossRef]
47. Hawkins, C.; Krause, R.; Feiock, R.; Curley, C. Making Meaningful Commitments: Accounting for Variation in Cities' Investments of Staff and Fiscal Resources to Sustainability. *Urban Stud.* **2016**, *53*, 1902–1924. [CrossRef]

-
48. Opp, S.; Osgood, J., Jr.; Rugeley, C. Explaining the Adoption and Implementation of Local Environmental Policies in the United States. *J. Urban Aff.* **2014**, *36*, 854–875. [[CrossRef](#)]
 49. Krause, R. Policy Innovation, Intergovernmental Relations, and the Adoption of Climate Protection Initiatives by U.S. Cities. *J. Urban Aff.* **2011**, *33*, 45–60. [[CrossRef](#)]
 50. Ballotpedia. List of Current Mayors of the Top 100 Cities of the United States. Available online: https://ballotpedia.org/List_of_current_mayors_of_the_top_100_cities_in_the_United_States (accessed on 18 October 2021).
 51. Kriner, D.; Reeves, A. *The Particularistic President: Executive Branch Politics and Political Inequality*; Cambridge University Press: New York, USA, 2015.
 52. Berry, C.; Burden, B.; Howell, W. The President and the Distribution of Federal Spending. *Am. Political Sci. Rev.* **2010**, *104*, 783–799. [[CrossRef](#)]
 53. Stein, R.; Bickers, K. *Perpetuating the Pork Barrel: Policy Subsystems and American Democracy*; Cambridge University Press: New York, NY, USA, 1995.
 54. Rich, M. Distributive Politics and the Allocation of Federal Grants. *Am. Political Sci. Rev.* **1989**, *83*, 193–213. [[CrossRef](#)]