The USA Sustainable Cities Initiative: Lessons for City-Level SDG Action

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Background

In September 2015, the Sustainable Development Solutions Network (SDSN) partnered with leading academic institutions through the USA Sustainable Cities Initiative (USA-SCI) to pilot technical processes for long-term strategies on the Sustainable Development Goals (SDGs) in three U.S. cities: New York, San José, and Baltimore. The SDGs provide a universal standard for achieving targets to end all forms of poverty, social equity, and environmental sustainability, all while ensuring no one is left behind. As they are applied in locations worldwide, the nuances of local circumstances and operating conditions for investment and policy have become apparent. Understanding these realities and mapping out contextually-relevant practical strategies accordingly to achieve the 17 SDGs has commonly become known as “localization.” As the USA-SCI pilot cities pioneered sub-national processes of SDG localization, they found that the SDGs have utility in guiding, providing more coherence, and promoting equity and inclusion in sustainability efforts. This paper synthesizes the lessons learned from these pilot cities as they built their SDG strategies (Part 1) and provides a set of guidance and examples that cities around the world can apply and adapt as they develop their own strategies (Part 2).

The foundation of the pilot cities’ SDG strategy process was “start with what we know.” The cities found it most efficient to launch their efforts by building up their SDG achievement strategy from existing city plans and programs. They used the SDGs, targets, and indicator frameworks as tools to improve those city-level sustainability efforts and make them more comprehensive and coordinated. The cities determined the most efficient path was to systematically examine and coordinate their plans and data resources, as well as capitalize on existing political initiatives and will, institutional mandates, financing mechanisms, and human talent that give momentum to those activities. Due to their own resource limitations, efficiency and coordination have been a consideration in every step of their process, and hence this paper aims to provide guidance and structure for other cities with these same concerns.

To this end, the pilot cities found that SDG indicators and data provided a common language for strategy building, helping to structure coherent discussions about a coordinated city initiative in order to meet the goals by 2030 and beyond.
As alignments between SDG targets and city data systems were determined, policymakers and other stakeholders established a common understanding of their long-term vision, the impact they wanted to achieve, and their starting points.

Lessons from the pilot cities’ SDG strategy-building processes are synthesized below in a step-by-step process that other cities can use (see Part 2). An “SDG Mapping Worksheet” template is provided to support cities as they apply this guidance (see Appendix A, or download here). Partners in each USA-SCI pilot city used a version of the mapping worksheet as a tool to develop the local SDG strategy. The pilot cities consistently sought ways to ensure their strategy-building processes were both comprehensive and efficient. Many other cities launching their own SDG plans are requesting the same, and so this brief and worksheet attempt to provide an adaptable blueprint inclusive of reflections and guidance from all of the pilot city experiences.

For additional information on the efforts of each of the pilot cities, refer to these SDG recommendations reports prepared by the USA-SCI local academic partners:

- Baltimore’s Sustainable Future: Localizing the UN Sustainable Development Goals, Strategies and Indicators
- San José: Implementing the UN’s Sustainable Development Goals at the Local Level

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C. Data and measurement


A. Target mapping
B. Data and measurement
C. Engagement
Part 1: Lessons Learned from the USA-SCI

A. Strategy development

The three USA-SCI pilot cities found that the best starting point for a local SDG initiative was to review existing city plans and strategies and assess how those aligned to the SDGs and associated targets. All of the cities had existing plans and policies closely related to SDG themes, representing local priorities, experience, and tacit knowledge. Therefore, pilot cities felt strongly that SDG initiatives should “grow from what we know,” rather than launching an altogether new strategy process that may be viewed as externally-driven, duplicative, and inefficient.

Developing an organized record of the interlinkages between existing plans and policies and the SDG goals and targets helped to build stakeholder knowledge and confidence and informed the development of an SDG strategy. Each city chose to conduct a systematic assessment of this kind, using a spreadsheet-based “mapping worksheet” as a guide. The SDG Mapping Worksheet referred to here (see Appendix A) is an analytical template that incorporates what the cities found useful in recording, discussing, and creating their local SDG strategy.

In all three cities, the SDG Mapping Worksheet provided a framework through which to assess the comprehensiveness of existing sustainability plans against the SDGs, their targets, and their indicators. Existing plans and strategies—such as master plans, sector strategies, and sustainability plans—may not cover all 17 SDGs and 169 targets, but they provide an important basis on which to analyze city efforts and build a holistic strategy that covers the scope of Agenda 2030. The worksheet provides a guide for action so that cities can build a more complete plan, inclusive of local targets and monitoring systems.

Mapping exercises were used in USA-SCI pilot cities to promote transparency, accountability, and participation while building SDG achievement strategies. For this reason, while the SDG Mapping Worksheet intended to provide structure and promote efficiency, the task of completing it was coupled with multi-stakeholder consultations that sought to improve comprehensiveness and inclusiveness of the city’s sustainable development practices overall. Furthermore, the mapping tool allowed stakeholders to connect SDG concepts to existing language and knowledge that frame their local efforts.

B. Partnerships and roles

At the outset of an SDG localization effort, it can be helpful to clarify different actors’ roles and responsibilities. An inclusive localization process should involve government stakeholders, civil society, and academia to different extents. Here, we outline some lessons learned from the three USA-SCI pilot cities.

Government focal points – Offices of Sustainability

Identifying which government department will lead on SDG coordination and implementation within a city can be challenging. This often depends on departments’ resources and capacities, future plans, and departmental commitment.
But the SDGs also present an opportunity for departments to build capacities and attract funding.

In the three pilot cities, the Office of Sustainability (or its equivalent) was considered a natural home for the effort. In Baltimore, the Office of Sustainability was actively involved in the USA-SCI consultation process from 2015 to 2016. Though the Office of Sustainability did not initially lead the SDG effort, they have since assumed an integral role in carrying the agenda forward and have recently launched a new sustainability plan that links to the SDGs. San José has also recently launched a new sustainability plan, entitled Climate Smart San Jose. It is a collaborative effort between the Mayor’s Office and the Environmental Services Department, which houses the Manager for Sustainability and Compliance.

Though it may not be the initiator for the city’s SDG efforts, a city’s Office of Sustainability can be the general gatekeeper and coordinator for sustainability initiatives, making it an integral government partner for an efficient effort over the long term. But if such an office exists and its mandate does not cover the spectrum of the SDGs, then Agenda 2030 provides a platform to consider expanding that mandate. In San José, for example, the city considered various options for establishing a hub to coordinate sustainability policy and programs, such as by expanding the resources of the Sustainability and Compliance Manager’s office or by creating a sustainability team within the Office of Civic Innovation.

**Government leadership**

High-level government endorsement for a local SDG initiative can provide significant impetus for initiating a local SDG effort. In San José and New York, the mayors were vocal about their interest in and commitment to the SDGs before the USA-SCI pilot project commenced; for example, both signed on to a Declaration of Support for the SDGs in New York in 2015. However, as USA-SCI was kicked off during an election period in Baltimore, obtaining an official endorsement from the city government was not possible. In lieu of this support, the University of Baltimore announced its support via a press release inclusive of an endorsement by University president Kurt Schmoke; this was significant as both the institution and Schmoke (as a former mayor) have a strong history with the city. Following the mayoral election, the University of Baltimore shared information on the SDG initiative with the new mayor, Catherine E. Pugh, and she consequently released her own letter of endorsement (see page 2 of Baltimore’s Sustainable Future). Additionally, the cities frequently mentioned that a statement from the U.S. president endorsing the SDGs would have provided a positive push. For example, in Baltimore, this would have had a positive impact if done by then-President Barack Obama, who was very popular in the city. The challenges in securing a large, government-level announcement or endorsement of the SDGs can be complex. For this reason, having a non-government partner to support communication, particularly in early stages, is significant. This is explained more in the section below.
Cities do not always have the capacity to launch SDG efforts, no matter how good their intentions might be. Experiences in the pilot cities show that a local knowledge partner outside of city government, such as a university or research organization, can provide much-needed technical capacity to kick off and maintain an SDG initiative. In USA-SCI, university commitments and activities have served as a strong foundation for local SDG efforts. In each city, the SDG process was hosted by an academic institution that had a history of collaborating with city authorities and residents on urban policy and development issues. It was important that each of the local universities had a strong working relationship and history of partnership with city government. Under USA-SCI, SDSN partnered with the University of Baltimore and University of Maryland-College Park in Baltimore, San José State University (SJSU) and Stanford University in the San José area, and Columbia University in New York City. USA-SCI participants in the cities also suggest that independent research organizations could play a similar role.

Implementing partners in the pilot cities noted several positive factors for centering SDG activities within an academic or research institution:

- **Laying the groundwork**: Political will within the government is required in order for a coalition to effectively build an SDG localization initiative. Academic and research institutions can lay the groundwork for political engagement and support by conducting relevant analyses, informing government stakeholders, and communicating the results of an SDG Mapping Worksheet. Once this groundwork is done, it can be easier to engage and excite political officials on the relevance and utility of the work and foster a broad sense of city and community ownership.

- **Student support**: Academic institutions can use SDG localization efforts as an opportunity to tap into student talent to conduct analysis and consultations. In turn, students benefit from a practical education on sustainability and research, which can ultimately lead to career opportunities. Baltimore maximized the involvement of university students when the University of Baltimore and University of Maryland-College Park conducted a broad review of numerous city sector strategies, data, and reporting mechanisms. This resulted in a comprehensive example of an SDG Mapping Worksheet that was provided as a resource to educate the new government, including the mayor elected in 2016.

- **Public messaging**: City governments have complex public communications and messaging procedures that revolve around an overarching political agenda. Hence, government officials may hesitate to communicate publicly about a global agenda, such as Agenda 2030, if it seems like a foreign concept to their constituents. For this reason, broadcasting support for the SDGs was a low priority among local government in the pilot cities. With fewer political constraints, universities and research institutions are more readily equipped to serve as
communicators and educators on the SDG initiative, particularly in the initial stages These organizations can utilize their own official communications channels and staff (for example, through the dissemination of press releases or posts on a website or through Twitter), as well as individual faculty members’ social media accounts. Senior university administrators can also initiate high-profile communications and can serve as ambassadors to the city government, as was the case in Baltimore.

- **Program continuity**: City governments are subject to election cycles and associated policy and personnel changes, whereas academic and research institutions can provide continuity and maintain momentum over the course of these transitions. A mayoral election was underway in Baltimore during the early stages of the SDG initiative. Therefore, the University of Baltimore, a USA-SCI partner, played a convening role. It drew from the faculty’s extensive experience providing data and analytical services to the city. After educating the newly elected mayor, Catherine E. Pugh, on the SDG effort, the initiative received her official endorsement. In San José, a new mayor and city council member promoted the SDG effort in the city, while SJSU served as the “brain trust” and facilitator of the SDG mapping effort. SJSU’s faculty, including former and current city workers, brought intellectual resources to bear on this analytical process. Furthermore, in both San José and Baltimore, it proved beneficial that university partners were previously involved in city development strategies and data monitoring activities, as they understood the political and technical context in which decisions had been made and how they could be made over the course of future SDG implementation.

### C. Data and measurement

The pilot cities determined that assessing city-level SDG data and monitoring options helped facilitate prudent planning discussions and lay the groundwork for an accountable and transparent implementation effort. Baltimore and New York used the official indicators from the Inter-agency and Expert Group on Sustainable Development Goal Indicators (IAEG-SDG) as a launching point for this assessment. However, these indicators are not all always directly relevant and appropriate for a city context, and the city’s jurisdiction may dictate its means of participation in achievement efforts. For example, target levels (e.g., national versus sub-national), geographic context (e.g., coastal versus landlocked), and various data constraints have implications for how cities utilize the official indicators and structure city-level SDG monitoring. Therefore, SDG localization requires partners to critically analyze and practically identify a functional set of indicators for their city that can guide monitoring and evaluation.

The pilot cities used discussions on SDG indicators and metrics as a means to establish a common language for targets and achievement strategies. This common language also helped stakeholders coordinate initiatives with complementary goals. As they determined alignment between SDG targets and city data systems, stakeholders developed a common understanding of linkages.
between baseline conditions and impact objectives. As such, mapping SDG-aligned data provided structure for discussions on meaningful and effective measures of success and on setting shared targets where these were missing. The cities determined measurement indicators and located indicator data with the objective of establishing an SDG data monitoring mechanism. Academic partners in San José and Baltimore are continuing to research and set up SDG data systems for the cities, and they are seeking to establish open-access SDG data platforms that align with existing datasets and provide user-friendly visualization tools for policymakers and public citizens. Additionally, all three cities are considering methods for integrating these with the U.S.’s national reporting platform for the SDGs.

It is important to note: Stakeholders in USA-SCI cities asserted that where measurement indicators needed to be chosen, the indicator should point to the highly-localized, root cause of the development problem. This would effectively inform policy solutions. This approach may conflict with IAEG-SDG-recommended indicators, which may utilize more global, comparable standards for assessing state-level achievements. For example, in Baltimore, stakeholder discussions on appropriate measurement indicators for SDG 1 turned to the topic of causes of poverty in the city. Stakeholders concluded that liquid asset poverty is a strong indication that a household may not be resilient to shocks such as layoffs in an economic recession, illness of the household breadwinner, or property damage in an environmental disaster. Consequently, the group determined that a measure of liquid asset poverty should be included as an indicator to track the city’s progress in achieving SDG 1.

A step-by-step review of the cities’ process for preparing an SDG strategy is provided below. This outline provides a practical template that can be utilized by other cities seeking to achieve the SDGs; each step can be adapted to accommodate a city’s particular needs and resources.

The process includes three steps: (1) target mapping, or mapping of existing plans and policies to SDG targets; (2) establishing measurements, or identifying appropriate local indicators and data sources; and (3) local engagement, or an effort to reach out to a wide variety of local stakeholders to solicit their inputs on the strategy (notably, this should occur concurrently with the other steps).

The SDG Mapping Worksheet referred to in the sections below can be downloaded here. A screenshot can also be viewed in the appendix.

Step 1: Target mapping

The cities took a primary step of mapping existing local SDG-related targets and gaps in order to ensure that the SDG effort was built up from current plans and resources. This mapping exercise was done by reviewing local plans and strategy documents. It documented how city-based targets matched up with the SDGs and their targets. The individual steps in the target mapping process are outlined below (see Columns D-F in the SDG Mapping Worksheet).

1. Create a library of existing city strategies and plans that correlate with the SDGs. The cities surveyed official documents that they felt could provide a good overview of existing SDG-related policies, investments, human resources, and data. The documents included: city master plans, sustainability plans, and sector strategies.

2. Review the requirements of the SDG Mapping Worksheet and determine which city documents would be most useful for completing the worksheet. In New York, the target mapping effort focused on the OneNYC plan, which was approved in April 2015. This document was chosen as it was determined to be sufficiently comprehensive in detailing the majority of the city’s relevant strategies. Similarly, San José reviewed its Envision 2040 Master Plan. The University of Baltimore determined it more relevant and comprehensive to review a series of sector strategies, some of which were under implementation and others of which had recently expired but had not been replaced (e.g. Baltimore Climate Action Plan, Sustainability Plan, Healthy Baltimore 2015).

3. Locate SDG-aligned targets in the chosen city documents. The USA-SCI academic partners reviewed the documents to locate SDG-aligned targets, and they noted these on the Mapping Worksheet (Column D). They also noted the institutions named as being responsible for achieving each of those targets (Column F). When no target was identified, the partners found it beneficial to insert the names of local institutions that could be made responsible for that target into the correlating cell in
Column F. This helped to inform next steps in consultations as the city built an SDG achievement strategy.

4. Where local SDG-aligned targets are blank (Column D), determine which corresponding global SDG targets (Column B) are relevant for the city and which are not. The determination of relevant versus irrelevant targets helped to focus attention and resources during the SDG strategy-building process. Not all 169 SDG targets are relevant to a city. This may have to do, for example, with the level of reference (national versus sub-national) and geographic location (e.g. coastal versus landlocked regions). It has been estimated that 65 percent of the SDG agenda is dependent upon urban and local actors, while the rest is the purview of national governments and the international community. (See page 19 of Cities Alliance’s Sustainable Development Goals and Habitat III: Opportunities for a successful New Urban Agenda.) For example, in New York City’s SDG Mapping Worksheet (see Appendix B for screenshot or click here for full worksheet), the cells of relevant SDG targets, where no corresponding local target was found, were highlighted in yellow (in Column D). This flagged the target for further investigation and stakeholder discussion on local application. Cells determined as not relevant were highlighted in gray, signaling they did not require follow-up. A discussion on alignment of SDG targets and OneNYC targets is also available in SDSN’s Getting Started with the SDGs in Cities–see Appendix 2.

5. Populate blank cells (in Column D) where the SDG target is marked “relevant”. The cities identified several methods for filling blank cells in Column D that were marked as relevant. In Baltimore, the university team contacted city staff with expertise on topics related to the target (e.g. the institutions named in Column F) and reviewed additional city documents that were potentially relevant to the target. Though the pilot cities did not have the capacity to do this during the USA-SCI program, they recommended two methods other cities can use to fill these blank cells. First, expand the scope of the literature and policy document review to include SDG-aligned programs and documentation of non-government entities (e.g. charitable organizations, corporations, and nongovernmental organizations). Second, use a reverse process for setting targets. The reverse process would involve following Step 2 (Measurement) to establish a local measurement indicator for the SDG target, and then using this indicator and the baseline data to set a quantified target that local stakeholders can plan toward.

6. Take steps to quantify SDG-aligned city targets that are not yet quantified. When conducting the document review, the city partners often found goal statements that aligned with the SDGs but did not include a quantified target. The cities identified two functional methods for setting targets in these cases. First, a city could set quantified targets in new policy documents, such as Baltimore’s Sustainability Plan and San José’s
Environmental Sustainability Plan. Second, quantified targets could be determined through local budget planning initiatives, which link to defined work plans and outcome targets for SDG-related investments in public services and infrastructure. The reverse process for target setting, as explained above, could also be utilized here.

Mapping worksheet examples from each of the pilot cities can be viewed here:

- **Baltimore SDG Mapping Worksheet**
- **New York SDG Mapping Worksheet**
- **San José SDG Mapping Worksheet**

**Step B: Establishing measurements**

To guide and inform their SDG target achievement efforts, cities are required to establish local SDG data monitoring and reporting systems. To inform the design of these systems, academic partners in each of the pilot cities took a first step by conducting a data assessment. The objective was to determine existing resources for local-level SDG monitoring and to identify data gaps that needed to be filled to complete the measurement system. Columns C and G through N of the **SDG Mapping Worksheet** provide a template for the data assessment that can be applied by cities seeking to build their own achievement tracking systems. Examples from USA-SCI pilot city data assessments can be accessed in the **Baltimore SDG Mapping Worksheet** and **New York SDG Mapping Worksheet**.

Further step-by-step guidance is provided below.

1. **Identify the city’s existing local SDG-aligned indicators.** Academic partners from each city reviewed established data monitoring and reporting mechanisms in order to identify data indicators that: (1) could be used to measure local SDG-aligned targets (Column D) and/or (2) effectively localized official IAEG-SDG indicators (Column C). The first resources to be used in the data assessment were the same policy documents reviewed in Step 1 (above) and their associated monitoring reports (e.g. department website, a database, or a written annual report). The objective was to collate existing indicator data resources on which SDG monitoring systems could capitalize.

2. **Review six characteristics to determine the quality of identified local SDG indicators.** During the cities’ data assessments, a total of six data characteristics were considered particularly important to record as a guide for SDG monitoring. These characteristics also provided a basis of comparison when assessing quality and long-term utility of potential indicators. The **SDG Mapping Worksheet** provides a template for this assessment in Columns H through N. These characteristics are also listed below.

   ✓ **Indicator source:** Name the location where this data is stored and/or presented (e.g. government database, annual report) so that future
users know how to access the data. This needs to be a valid and reliable source that users will be permitted to use.

✓ **Baseline indicator:** State the baseline indicator so that change can be tracked in the lead-up to 2030 and beyond.

✓ **Baseline year:** State the year of the baseline indicator, which should be during or before 2015.

✓ **Level of disaggregation:** Provide specifics on how the indicator data is disaggregated (e.g., gender, race, geospatial location) to inform targeted initiatives and yield inclusive outcomes from all SDG target achievement efforts.

✓ **Reporting frequency:** Specify how frequently the indicator data is reported (e.g., daily, monthly, annually). This should occur at minimum once per year.

✓ **Public/Private:** Reference if the indicator data is provided by an openly-available public source (e.g., census) or if it is private/proprietary (e.g., owned by a private entity) and how to access it.

3. **Fills gaps by identifying new local SDG-aligned indicators.** After beginning their data assessments, each of the cities found numerous gaps or deficiencies in available data. Consequently, they needed to identify or develop new local SDG-aligned indicators. They identified several ways to do this. The first option was to utilize disaggregated national census data. In addition to meeting the requirements described above, this data links easily to national reporting systems. Census methods can also be replicated by other sub-national efforts. Second, the assessment incorporated other local official resources and city data systems. For example, in Column I of the [New York SDG Mapping Worksheet](#), a range of potential indicator data sources are recorded. These additional resources included: reports (e.g., annual city reports such as New York City’s [Mayor’s Management Report](#)), databases for public services (e.g., a water quality or waste management data system), and city data networking portals (e.g., [LinkNYC](#) in New York). The cities utilized four different methods to identify new indicators. These are outlined below.

- **Top-down official indicator localization:** With this method, the cities began with the official IAEG-SDG indicators (Column C) and determined closely comparable local indicators that were being maintained by the city. Take, for example, IAEG-SDG indicator 1.a.2: “Proportion of total government spending on essential services (education, health and social protection).” For New York City, “percentage of NYC budget allocation to essential services (education, health and social protection)” was determined to be an option for a new indicator. Source data was available from the city’s Office of Management and Budget.
- **Bottom-up official indicator localization**: The city teams scoped current city data and reporting systems to determine which indicator data could be most closely reconciled with the official IAEG-SDG indicators.

- **Create new indicators with official data**: Local teams focused on the global targets and goals and created new indicators that did not match exactly with the official IAEG-SDG indicators. These indicators were determined by local stakeholders to be relevant to local development challenges and aligned with existing city priorities and processes that envision the city’s future—therefore, useful for planning, policy and investment. These new indicators used official data.

- **Innovate new indicators with non-official data**: The cities considered how to innovate and create new indicators using non-official data. These might include citizen-generated data or other sources of big data that are highly concentrated in urban environments, e.g. mobile call record data from telecommunications companies, networking platforms like LinkedIn, or transportation services such as Uber. However, this approach faced several challenges and the USA-SCI cities did not move forward with developing any type of dataset in this category. Issues included methodology and associated costs to track this kind of data over time. Additionally, there was governmental preference to utilize official sources, which already link into the range of city planning and reporting systems. Furthermore, localized non-official data poses challenges for city and regional comparisons. [For additional examination of these technical issues, refer to Section C: Technology, Innovation and Citizen-Led Analysis on page 33 of SDSN’s *Counting on the World: Building Modern Data Systems for Sustainable Development*.]

### Box 1: Examples of Local-level SDG Indicators

Listed below are a range of examples of local-level SDG indicators that cities can consider as they develop their own measurement strategies to track target achievement over time:

- **New York SDG Mapping Spreadsheet**: The New York mapping spreadsheet (see Appendix B) was the first SDG Mapping Worksheet exercise to be conducted and was prepared by SDSN. The spreadsheet analyzes linkages between SDG targets and those outlined in the OneNYC plan. It then goes further to specify which targets are relevant to the city, proposes how city data systems mesh with official indicators, and outlines potential solutions to fill data gaps.

- **Baltimore’s Sustainable Future** (see pages 17 to 50): This list of indicators was established using an iterative process that began with the Baltimore Neighborhood Indicators Alliance (BNIA) using a top-down approach to complete an SDG Mapping Worksheet. BNIA, in collaboration with the National Center for Smart Growth at the University of Maryland-College Park, then used its expertise to “fill in the blanks” and provide a list of indicator options to be discussed in consultative discussions with city staff and other local stakeholders. These discussions generated a city index inclusive of...
two to four indicators for each SDG. Based on the input of those consulted, the index is designed to inform city policy and programs that can intervene on the root causes of the city’s sustainability challenges.

✓ **SDG Dashboard for San José:** The dashboard developers from Stanford University originally developed this tool together with the San José Environmental Sustainability Plan, which had announced an explicit focus on three SDGs: water (SDG 6), energy (SDG 7) and emissions reductions (SDG 13). The dashboard demo tool provides a means to visually examine consumption behaviors at the block group level are associated with carbon emissions production, and analyzes these in tandem with layers of socioeconomic and employment data. The display aims to provide a means for residents, business owners, and policymakers to understand behavioral patterns across the city and consider targeted interventions that can mitigate those patterns and, in turn, reduce emissions.

✓ **The 2018 U.S. Cities SDGs Index** (see also 2017 edition): This index of 42 indicators across 15 of the 17 SDGs ranks the 100 most populous cities (measured as Metropolitan Statistical Areas, or MSAs) in the U.S. The preparation of the index revealed the range of challenges for long-term maintenance of an open data tool that can track and compare SDG performance across MSAs in the U.S. For example, the exercise illuminated various measurement inconsistencies between locations and widespread deficiencies in disaggregation, particularly with regards to gender.

### Step 3: Local engagement

The pilot cities consulted a variety of local stakeholders, including government, civil society, academia, and the private sector. They determined that local engagement was integral to creating an SDG achievement strategy that was: (a) relevant and feasible because it would be informed by local experts with contextual knowledge, (b) endorsed by a coalition of fully informed local stakeholders, and (c) operationally supported by the necessary stakeholder capacities and resources.

#### Box 2: Time constraints and representative consultations

Without question, consulting local stakeholders is critical to informing and executing an SDG strategy. However, time is a valuable resource and preferred means of communication are highly contextual. When planning any type of consultation, consider the limitations of poorer households and under-resourced organizations that may not be able to offer their time freely. As one representative said in a Baltimore workshop, “The people you really need to have in these meetings are the ones who cannot afford to take the time. People in poorer households may be working multiple jobs at all hours. So, they cannot afford to take a break for a lunch meeting on a university campus to discuss SDG targets.” Portions of the population may also have limited access to information and communications technology (ICT) resources. Professional institutions may have preferred communications platforms for internal and external group communications. Any tools and barriers to participation and the strategic value of any stakeholder’s knowledge should be surveyed and applied with purpose during stakeholder engagement efforts.
1. **Consult stakeholders referenced in Columns F and I on the worksheet and ask for their help completing the worksheet.** As the cities completed target mapping (Step 1) and measurement (Step 2) activities, they noted the institutions responsible for SDG target achievement and data monitoring (Columns F and I). The objective in pinpointing these entities was to ensure that they would be held accountable during the course of the SDG effort. Some of these entities were engaged one-on-one or in small group settings, and they were asked to help populate blank cells under city targets (Column D) and indicator data characteristics (Columns G through N).

2. **Build an “SDG coalition” to ensure broader engagement in support of short- and long-term objectives.** Building from the list of stakeholders named in the worksheet (Columns F and I), the cities found strategic benefit in creating a broader coalition for the SDG effort. The Baltimore team convened an SDG Executive Team (SDG-ET), which then proposed a set of even more broadly inclusive “working group” meetings. [For more information on this process see Section 3.3.2 on page 12 of *Baltimore’s Sustainable Future*]. Baltimore’s SDG-ET was comprised of representatives with knowledge of SDG-aligned initiatives and data in Baltimore. The working groups incorporated new members recommended by the SDG-ET as influential actors who could contribute to target setting and achievement efforts. The primary objective of this meeting series, which was convened by the university partners, was to support target mapping (Step 1) and data assessment activities (Step 2). To this end, the SDG-ET and working groups brainstormed sources to populate blank cells in the SDG Mapping Worksheet by recommending additional city documents and data sources for review and naming city program implementers and service providers working on relevant targets. They also reviewed proposed SDG-aligned indicators for the city index. On a macro level, these meetings aimed to build stakeholder buy-in for the SDGs in Baltimore and to coordinate stakeholder capacities to achieve SDG targets.

3. **Engage SDG-aligned technical working groups and apply their knowledge to establish missing targets and indicators.** The cities found that engaging small technical groups aligned with a particular SDG was an efficient way to tackle gaps revealed in Steps 1 and 2. In Baltimore, for example, members of the SDG-ET identified SDG 16 as a critical gap in the city’s strategy. The Baltimore Neighborhood Indicators Alliance (BNIA) convened the Baltimore Justice Indicators Round Table to establish indicators and discuss targets (see *Finding Sustainable Data Sources to Track Evictions to Monitor Progress for Achieving SDG #16* for more details on current work of the group). The San José team planned to consult policy working groups that focused on specific sectoral issues in the city. These included a policy forum on energy efficiency (comprised of utility companies, private business, and government entities) and an education coalition (consisting of Department of Education staff, teachers, and parents).
4. Identify organizational “champions” to lead SDG efforts. BNIA solicited “SDG endorsements” from organizations that emerged as champions of the city’s SDG effort in the SDG-ET and working group meetings. They ultimately received seven letters of endorsement from SDG “champions” in the city (letters of endorsement can be found on pages 64 to 71 in *Baltimore’s Sustainable Future*). The endorsers stated their support for one or more SDGs relating to their organizational mission and agreed to educate the public about the goal, broadcast their support for the full global agenda, and convene actors to collaborate on the goals.

5. Tap into ongoing local consultation efforts and visioning activities. The Baltimore team noted that a myriad of stakeholder and community meetings were occurring at the same time as the USA-SCI project, and they determined it was important not to compete for people’s time. Instead, they chose to utilize those convenings as an opportunity to observe; they referred to this as the “listening to the listening” approach (see section 3.3.3 on page 14 of *Baltimore’s Sustainable Future*). Members of the team attended various community meetings to record public priorities, vision statements, challenges, and other information relating to the city’s SDG effort. Using the hashtag #SDGBaltimore on Twitter, the observers posted about what they heard and applied that crowdsourced information to the SDG Mapping Worksheet. The Baltimore team used this information to ensure local targets and indicators were relevant, actionable, and aligned with the stakeholders’ objectives.

6. Utilize online communications. The academic partners in the cities used their websites and social media accounts to inform the public about the effort, announce meetings, and share press releases and SDG-aligned city documents. Websites can provide a user-friendly interface to centralize information and announcements, resource archives, and monitoring systems for local SDG initiatives. In the case of Baltimore, website development was constrained by limited resources and domain managers’ rules (e.g. communications clearance procedures related to posting on a partner university’s domain). As an alternative, BNIA used its Twitter handle (@bnijfi) heavily to broadcast information about the SDG initiative and to solicit input from stakeholders. Both websites and social media postings can ensure the implementation of the strategy is as transparent and accessible as possible and that a more comprehensible presentation of the initiative is maintained for the long term.
The process of building SDG strategies in Baltimore, San José, and New York City yielded a variety of lessons and recommendations for other cities to consider. These USA-SCI pilot cities are continuing their SDG efforts. For example, the recently-released Climate Smart San José. The city’s request for proposals, which solicited consulting services to support the creation of the plan, specified alignment with three SDGs: sustainable water (SDG 6), sustainable energy (SDG 7), and greenhouse gas emissions reductions (SDG 13). In Baltimore, the Office of Sustainability’s Sustainability Plan also aligns both the SDGs and the STAR Community Rating System. This plan is an example of an integrative dual-system sustainability plan and provides a model for other cities’ plans that seek to merge multiple sets of assessment criteria. At the same time, SDG partners at BNIA are continuing to develop an SDG data platform to track the city’s achievement efforts.

As new information on the pilot cities’ experiences becomes available, it will be posted on the USA-SCI website.

Other cities around the world continue to join the SDG localization effort. To support local action for SDG achievement, practical material for sub-national SDG data monitoring can be accessed on SDSN’s Local Data Action Solutions Initiative webpage.
## Appendix A

**Screenshot of SDG Mapping Worksheet Template**

Available online at UNSDSN.org

<table>
<thead>
<tr>
<th>SDG Target</th>
<th>Indicators</th>
<th>Target (s) from City/State/Region, if possible</th>
<th>Target source document</th>
<th>Institution responsible for target</th>
<th>Measurement indicator</th>
<th>Data Source</th>
<th>Institution responsible for target</th>
<th>Baseline indicator</th>
<th>Baseline Year</th>
<th>Level of Aggregation</th>
<th>Reporting Frequency</th>
<th>Public/Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 By 2030, end poverty in all its forms everywhere</td>
<td>1.1.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)</td>
<td></td>
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<tr>
<td>1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to officially recognized national definitions</td>
<td>1.2.1 Proportion of population living below the national poverty line, by sex and age</td>
<td></td>
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</tr>
<tr>
<td>1.3 By 2030, implement internationally agreed asset protection systems and measures for all, including floors, and by 2040 achieve substantial coverage of the poor and the vulnerable</td>
<td>1.3.1 Proportion of population covered by social protection floors/systems, i.e. by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, and women and the poor and the vulnerable</td>
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<tr>
<td>1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate technology and financial services, including microfinance</td>
<td>1.4.1 Proportion of population living in households with access to basic services</td>
<td></td>
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</tr>
<tr>
<td>1.5 By 2030, build the resilience of the poor and those in vulnerable situations and increase their ability to recover from adverse events and other economic, social or environmental shocks and disasters</td>
<td>1.5.1 Number of deaths, missing persons and directly affected persons (in millions) per 100,000 population</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1.6 Eradicating poverty in all its forms everywhere</td>
<td>1.6.1 Proportion of agriculture generated income allocated to poverty reduction programmes</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1.7 Ensure sustained, reliable and sustainable access to affordable, basic services, for all, with priority to the poor and most vulnerable, including public transport, safe drinking water and sanitation, energy, information technology and communications, and affordable housing</td>
<td>1.7.1 Proportion of government expenditure on essential services (education, health and social protection)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1.8 Promote the integration of the Agenda 2030 with national policies and with actions to support sustainable development strategies at country level</td>
<td>1.8.1 Proportion of government expenditure on essential services (education, health and social protection)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>
# Appendix B

**Screenshot of Baltimore SDG Mapping Worksheet**

Available online at UNSDSN.org

<table>
<thead>
<tr>
<th>Sustainable Development Goals</th>
<th>Potential Indicator</th>
<th>Baseline Measure</th>
<th>Year</th>
<th>SDG Goals for Baltimore</th>
<th>Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 End poverty in all its forms everywhere</td>
<td>N Children Living In Poverty</td>
<td>34.3%</td>
<td>2013</td>
<td>BNA</td>
<td></td>
</tr>
<tr>
<td>2 End hunger, achieve food security and improved nutrition, and promote sustainable agriculture</td>
<td>Number of Homeless Persons</td>
<td>2,638</td>
<td>2013</td>
<td>BNA</td>
<td></td>
</tr>
<tr>
<td>3 Ensure healthy lives and promote well-being for all at all ages</td>
<td>N Baltimoreans with health Insurance</td>
<td>88.4%</td>
<td>2013</td>
<td>BNA</td>
<td></td>
</tr>
<tr>
<td>4 Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</td>
<td>N 3rd Graders Passing MSA Reading</td>
<td>64.5%</td>
<td>2013</td>
<td>BNA</td>
<td></td>
</tr>
<tr>
<td>5 Achieve gender equality and empower all women and girls</td>
<td>N 8th Graders Passing MSA Math</td>
<td>37.9%</td>
<td>2013</td>
<td>BNA</td>
<td></td>
</tr>
<tr>
<td>6 Ensure availability and sustainable management of water and sanitation for all</td>
<td>High School Completion Rate</td>
<td>78.3%</td>
<td>2013</td>
<td>BNA</td>
<td></td>
</tr>
<tr>
<td>7 Ensure access to affordable, reliable, sustainable and modern energy for all</td>
<td>Chronic Absence Rate</td>
<td>21.8%</td>
<td>2014-15</td>
<td>BNA</td>
<td></td>
</tr>
<tr>
<td>8 Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</td>
<td>Gender Wage-Ratio (MS)</td>
<td>87.4%</td>
<td>2013</td>
<td>BNA</td>
<td></td>
</tr>
<tr>
<td>9 Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</td>
<td>Average residential daily water usage</td>
<td>130 gallons</td>
<td>2013</td>
<td>UMD</td>
<td></td>
</tr>
<tr>
<td>10 Reduce inequality within and among countries</td>
<td>N occupied housing units lacking complete plumbing facilities</td>
<td>0.50%</td>
<td>2018</td>
<td>UMD</td>
<td></td>
</tr>
<tr>
<td>11 Make cities and human settlements inclusive, safe, resilient and sustainable</td>
<td>Total electric usage</td>
<td>6449053417 kWh</td>
<td>2014</td>
<td>UMD</td>
<td></td>
</tr>
<tr>
<td>12 Ensure sustainable consumption and production patterns</td>
<td>Total gas usage</td>
<td>35021800 Thems</td>
<td>2014</td>
<td>UMD</td>
<td></td>
</tr>
<tr>
<td>13 Take urgent action to combat climate change and its impacts</td>
<td>Per capita income in past 12 months (2014 dollars) 2010-2014</td>
<td>38% (57); 79% of those are African American</td>
<td>2014</td>
<td>UMD</td>
<td></td>
</tr>
<tr>
<td>14 Conserve and sustainably use the oceans, sea and marine resources for sustainable development</td>
<td>N Disconnected Youth</td>
<td>38% (57); 79% of those are African American</td>
<td>2014</td>
<td>BNA</td>
<td></td>
</tr>
<tr>
<td>15 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</td>
<td>Housing ownership rate</td>
<td>64.4%</td>
<td>2014</td>
<td>UMD</td>
<td></td>
</tr>
<tr>
<td>16 Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</td>
<td>Housing + Transportation cost as % of income</td>
<td>35%</td>
<td>2013</td>
<td>UMD</td>
<td></td>
</tr>
<tr>
<td>17 Ensure access to affordable, reliable, sustainable and modern energy for all</td>
<td>Number of days with Air Quality index “good”</td>
<td>216 days</td>
<td>2014</td>
<td>UMD</td>
<td></td>
</tr>
<tr>
<td>18 Reduce inequality within and among countries</td>
<td>Total value of city innovation fund</td>
<td>4864000 dollars</td>
<td>2015</td>
<td>UMD</td>
<td></td>
</tr>
<tr>
<td>19 Make cities and human settlements inclusive, safe, resilient and sustainable</td>
<td>Economic equality index</td>
<td>64.4%</td>
<td>2014</td>
<td>UMD</td>
<td></td>
</tr>
<tr>
<td>20 Ensure sustainable consumption and production patterns</td>
<td>Racial Equality Index</td>
<td>35%</td>
<td>2013</td>
<td>UMD</td>
<td></td>
</tr>
<tr>
<td>21 Conserve and sustainably use the oceans, sea and marine resources for sustainable development</td>
<td>Number of days with Air Quality index “good”</td>
<td>216 days</td>
<td>2014</td>
<td>UMD</td>
<td></td>
</tr>
<tr>
<td>22 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</td>
<td>Total value of city innovation fund</td>
<td>4864000 dollars</td>
<td>2015</td>
<td>UMD</td>
<td></td>
</tr>
</tbody>
</table>
### The USA Sustainable Cities Initiative: Lessons for City-Level SDG Action

**SDG [16/6- Green] vs One NYC**

<table>
<thead>
<tr>
<th>SDG</th>
<th>One NYC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target 1.1:</strong> By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than USD 1.90 a day.</td>
<td>Proposed Indicator 1: Proportion of population below international poverty line, disaggregated by sex and age group and employment status (or: Proportion of employed people living below the international poverty line).</td>
</tr>
<tr>
<td><strong>Target 1.2:</strong> By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.</td>
<td>Proposed Indicator 2: Proportion of men, women and children of all ages living in poverty in all its dimensions, according to national definitions.</td>
</tr>
<tr>
<td><strong>Target 1.3:</strong> Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030, achieve substantial coverage of the poor and the vulnerable.</td>
<td>Proposed Indicator 3: Percentage of the population covered by social protection systems, disaggregated by sex, and distinguishing children, unemployed, old age, people with disabilities, pregnant women/new-borns, work injury victims, poor and vulnerable.</td>
</tr>
<tr>
<td><strong>Target 1.4:</strong> Integrate nationally appropriate social protection systems and measures for all, including floors, and by 2030, achieve substantial coverage of the poor and the vulnerable.</td>
<td>Proposed Indicator 4: Percentage of resources allocated by the government directly to poverty reduction programmes.</td>
</tr>
<tr>
<td><strong>Target 1.5:</strong> By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.</td>
<td>Proposed Indicator 5: Proportion of population with moderate or severe food insecurity, based on the Food Insecurity Experience Scale (FIES).</td>
</tr>
<tr>
<td><strong>Target 2.2:</strong> By 2030, end all forms of child labor, including slavery, and child-related deaths and all forms of violence against children.</td>
<td>Proposed Indicator 1: Proportion of children aged 0-17 from the module of the WHO Child Growth Standards among children under five years of age.</td>
</tr>
<tr>
<td><strong>Target 2.3:</strong> By 2030, double the agricultural productivity and incomes of small-scale farmers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.</td>
<td>Proposed Indicator 2: Proportion of women and girls aged 15-24 years who are married or in consensual union.</td>
</tr>
</tbody>
</table>

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## The USA Sustainable Cities Initiative: Lessons for City-Level SDG Action

### SDG 6: Ensure availability and sustainable management of water and sanitation for all

**6.1 by 2030, achieve universal and equitable access to safe and affordable drinking water for all**

- **San José Description of Goal/Policy/Action**: Recycle or beneficially reuse 100% of our wastewater by 2022

- **San José Source/Policy/Influence**: Green Vision Goal 6, San José General Plan, Goal MS-20

**6.2 by 2030, achieve access to adequate and equitable sanitation and hygiene for all, and end open defecation, paying special attention to the vulnerable**

- **San José Description of Goal/Policy/Action**: Recycle or beneficially reuse 100% of the City’s wastewater supply, including the indirect use

- **San José Source/Policy/Influence**: San José General Plan, Goal MS-20

**6.3 by 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, having the proportion of untreated wastewater, and increasing recycling and safe reuse by 4x globally**

- **San José Description of Goal/Policy/Action**: Work with public and private water wholesalers and retailers to cost-effectively expand the delivery of incentives to encourage the use of recycled water. Enact ordinances that ensure that strong, well-defined, and informative labels are used to advise consumers.

- **San José Source/Policy/Influence**: San José General Plan, Actions MS-3

### SDG 6.4 by 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawal and supply of freshwater to address water scarcity, and substantially reduce the number of people suffering from water scarcity

- **San José Description of Goal/Policy/Action**: Participate in the Santa Clara Valley Urban Runoff Pollution Prevention Program (VCURPP) in San José, public, and non-profit agencies on public outreach and education on the problem of water resources because they are vital to the ecological and economic health of the area.

- **San José Source/Policy/Influence**: San José General Plan, Goal MS-20

### SDG 7: Ensure affordable and clean energy for all

**7.1 by 2020, make sustainable energy systems available at all levels. Include through transboundary cooperation as appropriate**

- **San José Description of Goal/Policy/Action**: Reduce the dependency on fossil fuels for energy generation by encouraging awareness of energy conservation and efficient use of energy.

- **San José Source/Policy/Influence**: San José General Plan, Goal MS-18

### Screenshot of San José SDG Mapping Worksheet

Available online at UNSDSN.org
References


CIVICUS. n.d. “Making Use of Citizen-Generated Data.”


NYC Mayor’s Office for International Affairs. n.d. “Global Vision | Urban Action.”


