

Discussion Paper - May 2019¹

Counting the Costs

Supporting Sustainable Urbanization to Achieve SDG 11

Introduction - Why Count the Costs?

Implementing the Sustainable Development Goals (SDGs) and the New Urban Agenda (NUA) requires a financial commitment by member states, city leaders and stakeholders. The global development agenda's graduation from the Millennium Development Goals (MDGs) to the SDGs imposes more demands on available resources and establishes the need to mobilize additional resources through leveraging private investments and increasing local revenue generation capacity.

But, in the absence of quantifiable information on the costs to implement the SDGs, including SDG 11 (Sustainable Cities and Communities) and New Urban Agenda, it is difficult for leaders to accurately assess what resources are needed, or identify shortfalls, and how to address them. The challenge is exacerbated for city leaders in developing countries, who bear the burden of service delivery, all the while operating in data constrained environments with limited resources at their disposal.

It is a well documented fact that, over the course of the SDGs, it will be the mid-sized cities that would experience the highest growth. In most cases where urban development is financed by transfers from national and state governments and grants, aggregate estimates of cost do not offer a

distinction in investments needed between the various tiers of cities, and thus fail to account for differences in type of inputs and their prices. To overcome these challenges in current costing approaches, UN-Habitat and AidData have partnered for a two-phase effort to develop a systematic, bottom-up and replicable methodology to comprehensively capture the costs to support sustainable cities in the lead up to 2030.

Key Points

- **To achieve SDG-11 and the NUA, knowing how much to spend is the first step.**
- **Existing estimates are limited to infrastructure costs, and do not holistically reflect sustainable urban development needs of cities.**
- **Costing needs to be bottom-up so as to account for differing needs of mega-, midsize and small cities, as well as the price differences for service delivery.**

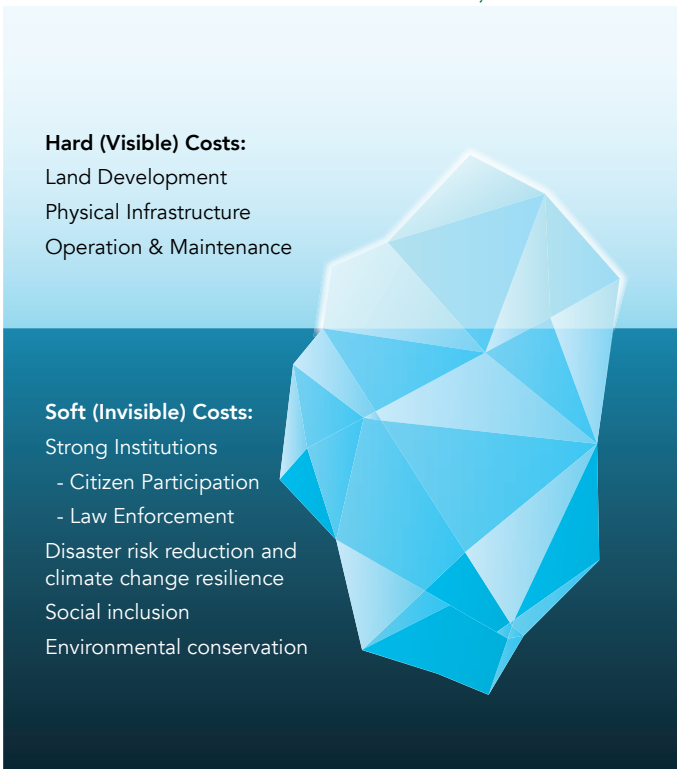
2019



2030



¹ This discussion paper is written by Mihir Prakash (AidData) and reviewed by Marco Kamiya and Roberto Herrera (UN-Habitat).



interconnectedness. This serves two purposes: (1) input costs can be adjusted to account for co-benefits² for accuracy ; and (2) for targets whose achievement is linked to progress on others are identified (e.g. air quality is associated with shift from private to public transport).

How to Cost? - Phase I

Developing a methodology to cost the achieving SDG-11 and the NUA with a bottom-up approach is a challenging task. Particularly so, given the varying nature and needs of cities worldwide. To ensure the study's methodological robustness as well as alignment with the needs of the urban community, the study was divided into two phases. The first phase is aimed at learning lessons on two fronts: (1) what would an achieved SDG-11 and NUA by 2030 look like; and (2) how do you contextualize the costs to different countries. For the first phase, we conduct the costing for six pilot countries: Cote d'Ivoire, India, Malaysia, Colombia, Bolivia and Sweden.

In consultation with experts, a hybrid approach was deemed to be the best way forward. This approach first establishes aspirational benchmarks for 2030 based on the systems analysis discussed in the previous section. Then, gaps are measured at the city level between present and the aspiration for 2030 for a selection of cities in the six countries. This city selection is based on a stratified sampling approach such that it offers generalizable information, while being most resource feasible. Criteria, such as population (large, medium and small cities) and consumer price index, are used to ensure the sample's representativeness. Further, price data is gathered

What to Cost?

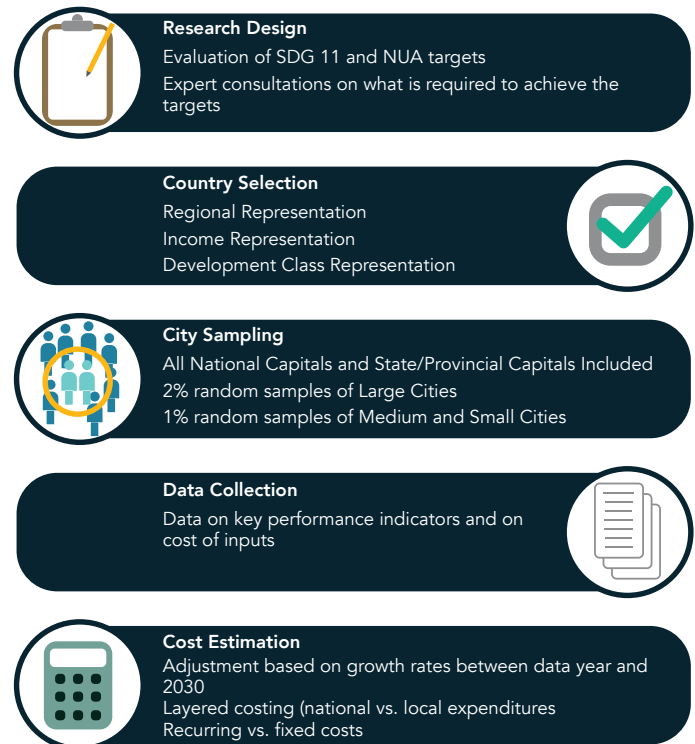
Determining the cost of achieving sustainable cities and communities by 2030 needs a systems approach. For instance, a city's transportation system comprises several moving parts: policy leadership; transportation planning department; public transit network of metros, buses and intermediary public transport; network operators; construction crew and maintenance personnel. Similar arguments can be made for other systems that are critical for a city's sustainable functioning.

The most visible costs are those incurred in the development of infrastructure and its operation, such as roads, buses and bus drivers. Previous studies have done well in estimating the aggregate spending required by 2030 on these needs. However, for cities to pursue growth *sustainably*, we need to also account for those costs that are less visible like a city's transport planning department, who are crucial in ensuring universal transit access through better routing design.

This study evaluates the SDG-11 and NUA targets, and classifies it into **seven categories** for costing:

1. Housing;
2. Transportation;
3. Waste Management and Air Quality;
4. Public Spaces;
5. Heritage and Conservation;
6. Disaster Risk, Climate Change and Urban Resilience; and
7. Urban Governance and Planning.

Distinct parts of each system are clearly identified through expert consultations and research, along with their



² Co-benefits are those outcomes that benefit multiple systems within a city. For example, improving law enforcement impacts safety targets in public spaces as well as transportation.

for each of the identified inputs for each city through primary data collection. For the targets that are hard to measure (such as expenditure on road safety education), the study relies on evaluation of spending by developed countries (e.g. Sweden, US, UK) and applies an adjusted cost at the national level.

Adjustments to the data are made to correct for outdated data where no up-to-date data is available, both on the gaps statistics, using projection methods, and on price statistics, using economic measures such as inflation and GDP growth rates. Each of the costs is then classified as a fixed (one-time) or a recurring (annual) cost, which is needed to estimate the total resources needed in the lead up to 2030.

Cost to What Effect? - Phase II

While it is expected that at the end of Phase I a robust baseline costing methodology would be ready, as we scale up the costing to other countries in Phase II, AidData and UN-Habitat hope to continue to refine the methodology further on the basis of lessons learned from the pilot exercise and new knowledge as it emerges. The aim is to produce estimates and tools that can be updated on a regular basis in the lead up to 2030 and are equally relevant to stakeholders working at the local, national and international levels.

A secondary outcome that is envisioned is to support the dialogue on how to mobilize the resources to bridge the current gaps that are identified through this research. With more accurate estimates of granular costs to achieve SDG-11 and NUA by 2030, researchers and decision makers can determine the best possible combination of intergovernmental transfers, local revenue generation and privatization that is contextually fit for purpose.

About Us:

This project is a collaboration between AidData and the Urban Economy and Finance Branch, and is supported by the Global Urban Observatory (GUO) of UN-Habitat.

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Further Reading

UN World Urbanization Prospects 2018 Revision. Available at: <https://bit.ly/2sR9H9I>

2. Bridging Global Infrastructure Gaps (McKinsey, 2016). Available at: <https://mck.co/2CsljDG>

3. Forecasting Infrastructure Investment Needs and Gaps (GIO). Available at: <https://outlook.gihub.org/>

4. Investment Needs to Achieve the SDGs (UNSDSN, 2015). Available at: <https://bit.ly/2eP3blq>

5. The Costs of Meeting the 2030 Sustainable Development Goal Targets on Drinking Water, Sanitation, and Hygiene (World Bank, 2016). Available at: <https://bit.ly/2qfKC4G>

6. Financing transformative health systems towards achievement of the health Sustainable Development Goals: a model for projected resource needs in 67 low-income and middle-income countries. Available at: <https://bit.ly/2QqSbDq>