

World  
Resources  
Report

TOWARDS A MORE EQUAL CITY

# Seven Transformations for More Equitable and Sustainable Cities

EXECUTIVE SUMMARY

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**Ani Dasgupta** is President and CEO of World Resources Institute, where he works to advance the institute's global vision to improve the lives of all people and ensure that nature can thrive. A widely recognized leader in the areas of sustainable cities, urban design and poverty alleviation, he developed his expertise in positions ranging from nonprofits in India to the World Bank, where he developed the Bank's first Knowledge strategy. He took the helm at WRI after seven years as Global Director of WRI's Ross Center for Sustainable Cities.

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# Foreword

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Our planet needs successful cities—cities that are centers of innovation and productivity, cities where every family thrives, cities that realize the promise of low-carbon prosperity.

**We are not yet building the cities we need.** One in two people live in cities and 2.5 billion more will do so by 2050. Cities produce over 80% of GDP but also 70% of global GHG emissions. Our cities are growing, while inequality widens and livelihoods dwindle. Urban infrastructure is not keeping pace with the surge in residents. With many cities already struggling to meet people's basic needs, global development and climate challenges are increasingly urban challenges. A sustainable future depends on whether cities can transform. Is there a path to transformative change that can make cities more prosperous, more equal, and low-carbon at the same time?

**The COVID-19 pandemic has devastated cities, exposing long-present inequalities.** The urban poor are much more vulnerable to disease without even simple measures to protect themselves. And it is not only lives lost, but livelihoods. The pandemic pushed millions more people into urban poverty, often with no social safety net. The 2 billion informal workers who pick up waste, do construction, drive minibuses, sell goods on the street, and do domestic work are engines of growth and productivity in many places. Cities cannot function when informal workers are unable to participate fully in the economy. Cities must emerge from this crisis with a deliberate focus on tackling inequality.

**The time is now for more sustainable urban development.** There is a narrow window to limit global warming and adapt to climate impacts. We need radical shifts in the way we use energy, produce food, manage land, and live in cities. And we must invest much more in building resilience. Trillions of dollars of stimulus spending for COVID-19 recovery has opened a once-in-a-generation opportunity to reset and reshape our economies—but it must be a green recovery. We must invest in more equitable and sustainable cities that are better prepared for the next crisis.

**Urban leaders should chart a new path with equity at its core.** Historically, cities have been founts of innovation and leadership. A handful of forward-thinking cities have made breakthroughs in recent years. But most cities remain on the path of unequal, unsafe, polluting growth while re-creating known failures. We need to rapidly transform how all cities around the world are built, managed, and experienced.

**This synthesis report is the culmination of six years of work from 160+ authors and reviewers across the globe.** It offers a roadmap for how to unleash transformative change in cities. We present the best thinking on priority actions and investments that can create prosperity and improve livelihoods for everyone. It is as relevant for Houston or Madrid as it is for Delhi or Lagos.

**When we began this research, we asked if cities could thrive by prioritizing the needs of the under-served.** The answer is a resounding yes. In fact, we can create the cities we need only if we focus on ending inequality and invigorating livelihoods. But there is no time to waste.

A handwritten signature in black ink that reads "Ani Dasgupta".

**Ani Dasgupta**  
President & CEO  
World Resources Institute

## HIGHLIGHTS

- ▶ A different kind of urbanization is unfolding in the global South. Under-resourced cities are growing fast and haphazardly, with large swaths of city dwellers living in informal settlements and working in the informal economy.
- ▶ Globally, more than 1.2 billion people—or one in three urban residents—are under-served daily by core urban services (good-quality housing, transport, water, sanitation, and energy). Bridging the “urban services divide” can bring cascading benefits to the entire city and unleash citywide transformative change.
- ▶ Inequality is typically measured by analyzing differences in incomes, but this is only one dimension of the problem. Unequal access to essential infrastructure and services can have a much greater impact on lives, livelihoods, and long-term prospects than differences in earnings.
- ▶ This synthesis report is the culmination of the World Resources Report series, *Towards a More Equal City*, and shows how growing cities in the global South can ensure equitable access to urban services and opportunities and, in doing so, build city-wide prosperity and better environmental quality for all.
- ▶ We reveal seven crucial urban transformations that are needed in the areas of infrastructure design and delivery, service provision, data collection, urban employment, finance, land management, and governance.
- ▶ These transformations require decision-makers to break out of silos, build new coalitions, and embrace new resources, technologies, and policy innovations. Global efforts to fight poverty and climate change hinge on how cities will meet this challenge. The time to act is now.

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## THE URBAN SERVICES DIVIDE IN THE GLOBAL SOUTH

**The coronavirus pandemic has laid bare the growing inequalities in cities between those who have money and options to remain safe and employed and those who do not.** It has exacerbated the effects of a long-standing urban services divide, with disastrous consequences. On one side of that divide are city dwellers who have access to crucial urban services and infrastructure; on the other side are those who lack running water and sanitation, electricity, decent housing, transport, and other amenities. For them, even the most basic precautions—such as frequent hand washing and keeping a safe distance from others—are near impossible. Disease and job loss have stalked these communities in ways that most well-to-do urbanites can barely fathom. These communities are often made up of the essential workers who toil to keep cities running. The burdens they face impact the functioning of the entire city.

**These inequalities are deepening and spreading, particularly in growing cities of the global South.** The majority of city dwellers are already suffering from the consequences of the urban services divide, and that share is rising fast as urban populations increase. Today, more than 1.2 billion people live in urban slums and are among the under-served—representing about one-third of urban dwellers worldwide and two-thirds in low-income countries.<sup>1</sup> Solutions from the past may not apply in these challenging, yet dynamic contexts, so new approaches are needed.

**Globally, more than 2 billion people work in the informal economy, which has been decimated by COVID-19, and these workers are not covered by social safety nets.**<sup>2</sup> This represents almost 90 percent of the workforce in rapidly urbanizing countries such as Kenya and India.<sup>3</sup> In many cities, unequal access to services and insecure employment force many to struggle daily for life's most basic necessities and denies them the chance to improve their lives.

**Those who are under-served by urban services suffer disproportionately, not only from disease outbreaks but also from threats of all kinds, including economic shocks, environmental degradation, and natural disasters.** Even in normal times, the urban services divide does more than exacerbate inequality and punish those who are marginalized and vulnerable. It could lock cities into a cycle of poverty, low

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productivity, and unhealthy living conditions for the rest of the century and beyond, undermining everyone's quality of life. Unless leaders can act decisively, these trends will be hard to stop, let alone to reverse.

**Scholars have identified pervasive, growing urban social and spatial inequalities as the crisis of our times**—one that impacts everyone and must be confronted if we are to meet the Sustainable Development Goals (SDGs) by 2030.<sup>4</sup> Yet inertia prevails, even as the consequences of ignoring this reality loom ever larger and more ominously.

**Richer cities have been able to spearhead a host of innovations to improve services and tackle inequalities in access.** But for the vast majority of the world's cities, these ideas and breakthroughs have not touched most of the 3.4 billion city dwellers in low- or middle-income countries. The tools, frameworks, and methods available to these cities are often inadequate, irrelevant, or, worse, detrimental. Replicating wealthy cities' experiments or following in their footsteps may be ill-advised. Of more than 4,200 cities in the world (with populations over 100,000 in 2010), most have not figured out a successful way forward.<sup>5</sup> They struggle

with concurrent needs to increase quality of life, jobs, and resilience and to reduce carbon emissions. Transformative change is urgently needed, and a few cities have shown this is possible, despite challenges.

**Our research explores this question: As the world continues to urbanize, how can growing cities in the global South ensure equitable access to urban services and opportunities and, in doing so, generate prosperity and environmental benefits for all?** This flagship World Resources Report series, *Towards a More Equal City* provides answers. Over five years, we developed a knowledge base culminating in a road map for sweeping, durable, and transformative changes in the ways cities are built, managed, and experienced (see Box ES-1). This synthesis report builds on that work and presents new analysis that identifies common threads and effective strategies. The report synthesizes our sectoral research, in-depth case studies, and deep examination of how cities actually change. It documents breakthrough innovations that cities have pioneered and reveals not only which solutions must be our highest priorities but also how to implement them.

## BOX ES-1: The World Resources Report series, *Towards a More Equal City*

At World Resources Institute, we investigated the ways in which economic, demographic, and resource challenges can widen gaps in urban services. We then synthesized a large body of evidence on how providing equitable access to urban services and opportunities—land, housing, transport, energy, water, sanitation, and secure employment—can lead to more economically prosperous and environmentally sustainable cities for all (Figure BES-1.1). Seven **thematic papers** highlight sectoral interventions that have proven effective in cities around the world, with a focus on struggling and emerging cities.<sup>a</sup> They draw upon the deep experience of the authors in these sectors. We did not include waste management and telecommunications access as part of this series; however, evidence shows these sectors face many public provision challenges that are similar to the ones we discuss.

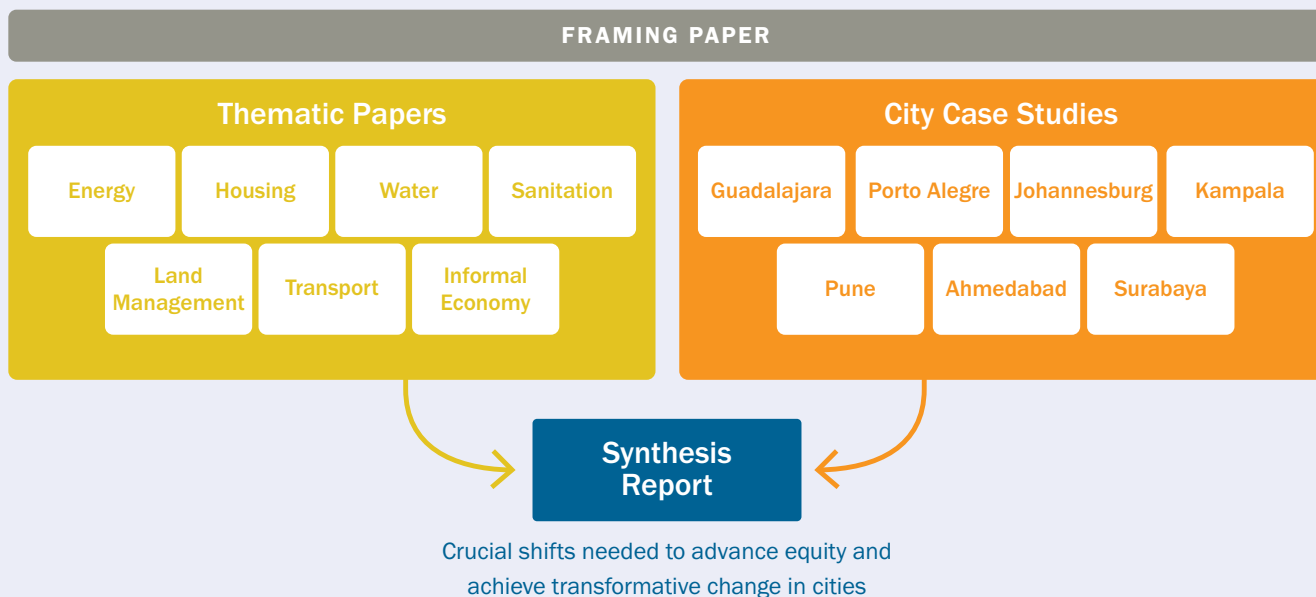
We identified **key conditions that trigger, enable, or inhibit positive change** at the city level. Confronting the urban services divide, however, is not only about providing better infrastructure. It also means transforming the fundamental levers of city life and

creating a new dynamic that can support change—and not just change that is halting and incremental but change that is durable and transformative.

Seven **case studies**<sup>b</sup> offer examples of cities that have striven for and achieved transformative change by intentionally tackling inequities. They document the experiences of seven different cities in their advancement towards this goal, the opportunities they seized, and the constraints they faced. Cities can learn from one another's successes and failures to help bring about their own change.

This **synthesis report** presents the findings from the entire series, identifying crucial transformations needed in thinking and practice. It shows that addressing service and opportunity inequities in cities will yield cascading benefits for the city overall. It can bend trajectories of growth and development towards sustainability, shared prosperity, and a better quality of life for all urban residents.

Figure BES-1.1 | **This synthesis report draws from seven thematic papers and seven city case studies**



Note: To access the full set of publications, please visit [www.citiesforall.org](http://www.citiesforall.org).

We also developed a global city categorization to allow us to identify the cities facing the greatest challenges and to consider approaches best suited for these contexts, recognizing that there are no one-size-fits-all solutions. We grouped cities according

to their 2015 levels of income and the extent to which their urban economic growth might or might not keep pace with their population growth between 2015 and 2030 (Figure BES-1.2).<sup>c</sup>

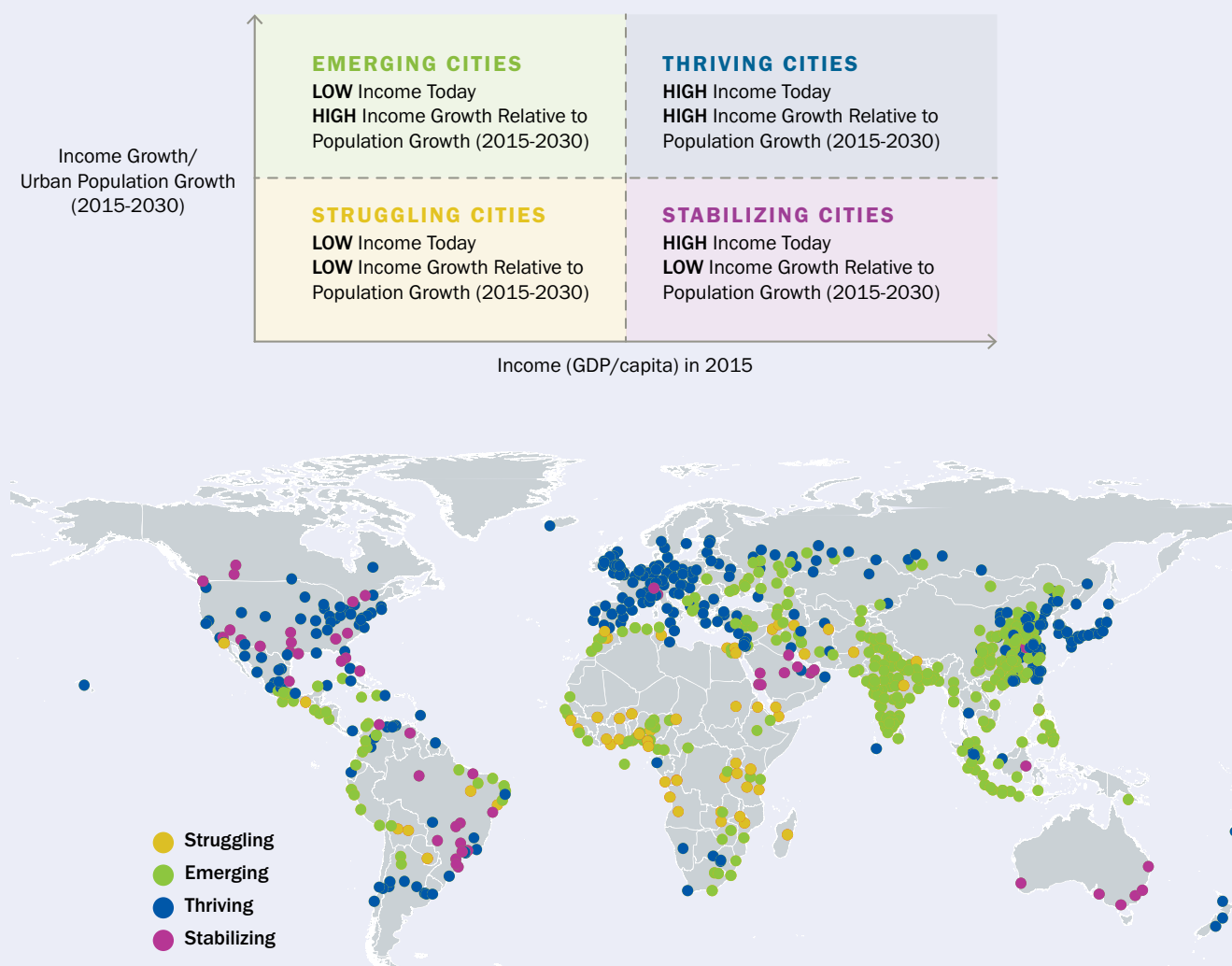


**BOX ES-1: The World Resources Report series, *Towards a More Equal City* (Cont.)**

Struggling and emerging cities that still need to invest the most to provide necessary infrastructure and services will actually have the greatest opportunity to avoid the mistakes other cities have

made and alter their development trajectory while considering risks such as climate change.

Figure BES-1.2 | **Struggling, emerging, thriving, and stabilizing cities are regionally clustered**



Notes: a. These are the seven World Resources Report thematic papers: Chen and Beard (2018), King et al. (2017), Mahendra and Seto (2019), Mitlin et al. (2019), Satterthwaite et al. (2019), Venter et al. (2019), and Westphal et al. (2017); b. These are the seven World Resources Report case studies: Abers et al. (2018), Das and King (2019), Kamath et al. (2018), Lwasa and Owens (2018), Mahadevia et al. (2018), Pieterse and Owens (2018), and Sarmiento et al. (2019); c. n = 769. The vertical line indicates median value of GDP per capita and the horizontal line indicates a value of 1.

Sources: Oxford Economics, 2016; Beard et al., 2016.

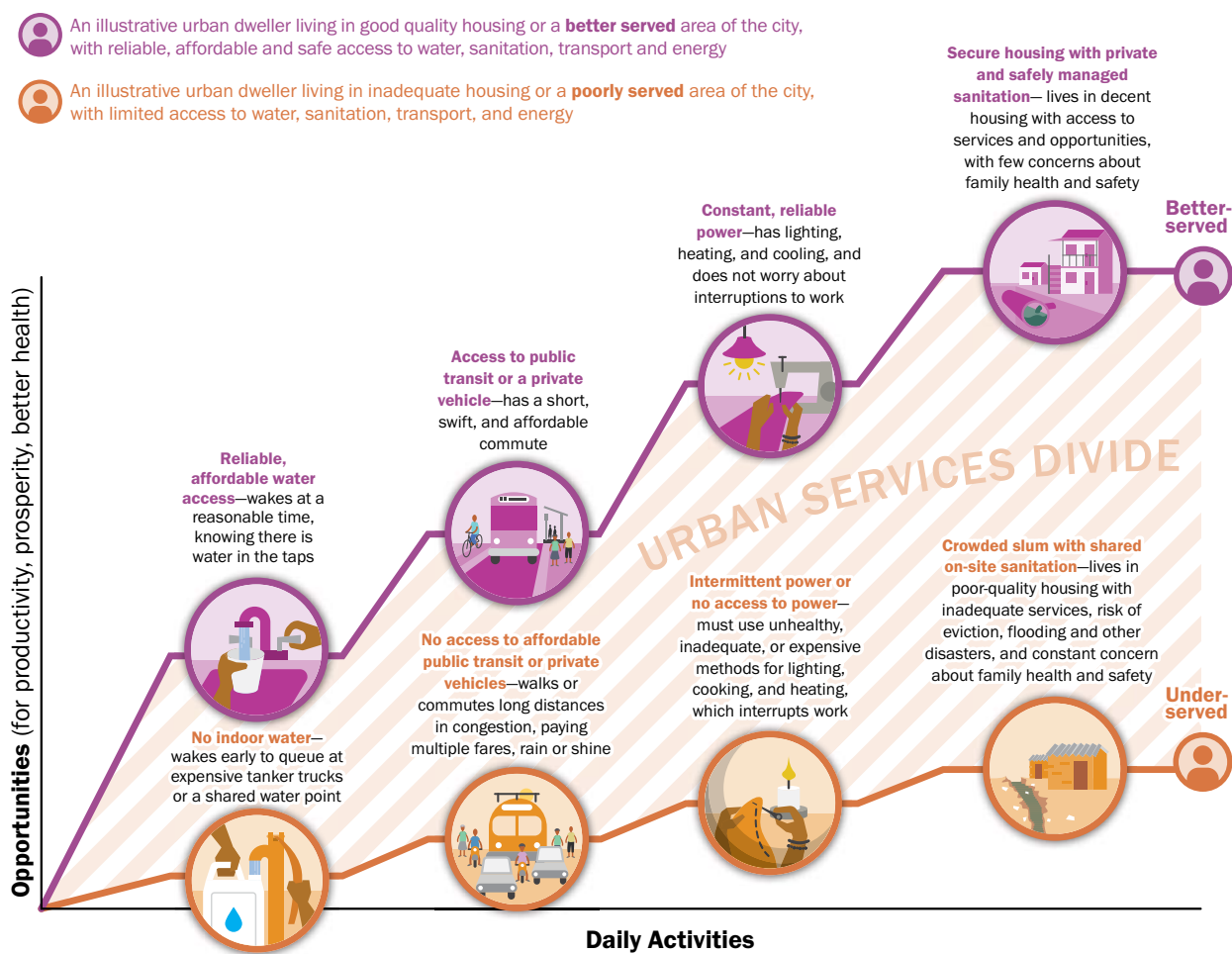
## THE LIVED EXPERIENCE OF AN UNEQUAL CITY

Most research analyzes poverty and inequality by measuring differences in incomes, but this is only one dimension of the problem. The way people experience a city is shaped by their access to services and opportunities—whether they have safe and affordable housing, clean water, adequate sanitation, reliable transport, and ways to get the employment, health care, education, and other amenities they need. Unequal access to essential infrastructure can have a much greater impact on lives, livelihoods, and long-term prospects than differences in earnings.<sup>6</sup>

Our research therefore took a new approach: examining urban inequalities by looking at the everyday lives of urban dwellers and the relative burdens they face in accessing core urban services. Figure ES-1 highlights the contrast between better-served and under-served groups. It shows how the urban services divide creates more opportunities for the better-served groups and higher burdens for the under-served in terms of time, cost, and ill health.

Figure ES-1A | Inequities in access to services affect every part of people's lives

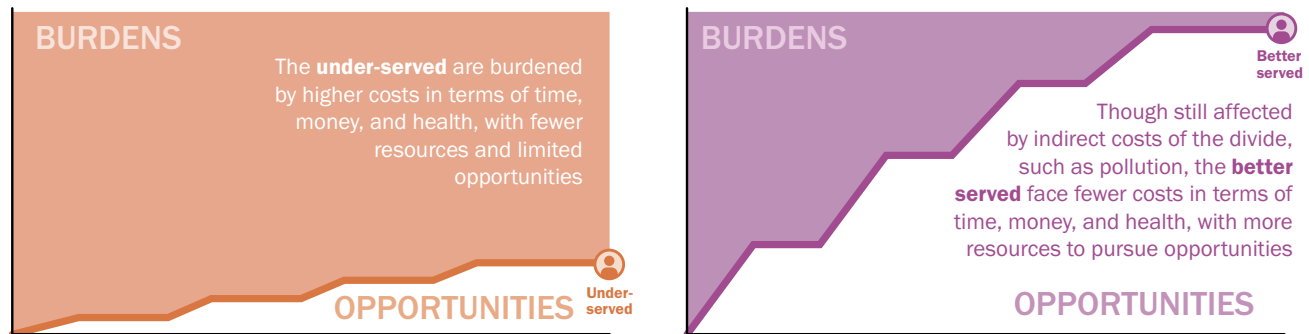
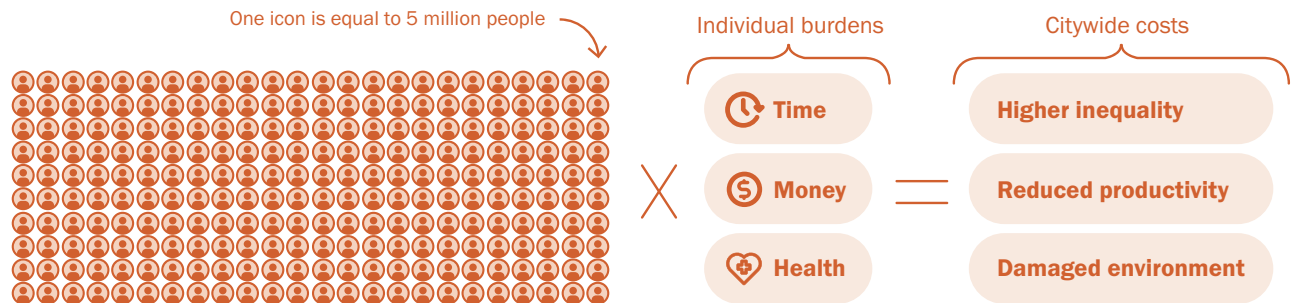
### The urban services divide shows why daily activities are easier for some and a struggle for others



Note: This is a conceptual diagram.

Source: Authors



Figure ES-1B | **Inequities in access to services affect every part of people's lives****The urban services divide leads to higher burdens and fewer opportunities for the under-served****The cumulative costs of the urban services divide impact everyone in the city**

More than **1.2 billion urban dwellers** are under-served globally, representing **2 in 3 city residents** in low-income countries.<sup>a</sup>

**Closing the urban services divide is beneficial for everyone.**

Note: a. This figure is based on data from the World Development Indicators (2018b) on only the global population of slum dwellers in urban areas, and is therefore a minimum estimate of the under-served. A slum is defined as a group of individuals living under the same roof lacking one or more of the following conditions: access to improved water, access to improved sanitation, sufficient living area, and durability of housing. Not only are urban slum populations underestimated, the under-served in cities comprise many low-income people who may not live in slums.

Source: Authors.

**Our findings reveal the enormous gap between the services accessible to the majority of urban residents and those available to the privileged few.** Up to 70 percent (and in some cases more) of the urban population in the global South is reported to be under-served by municipal infrastructure (see Figure ES-2 for specific sectoral examples).<sup>7</sup> These people must rely on informal or alternative arrangements to procure core services such as housing, water, sanitation, transport, and energy.

**“Self-provision”<sup>8</sup> of this nature wastes time, exhausts resources, degrades the environment, jeopardizes health, and exacerbates inequalities.** It forces people to rely on parallel or informal markets that are often unregulated, so the quality and price of urban services can vary widely. The alternative arrangements may be illegal, costly, unsafe, or exploitative, imposing heavy burdens on the environment, on individuals, and whole societies.

### Self-provision harms low-income residents the most.

They struggle every day to meet basic needs for water, sanitation, energy, and transport—and what they can get is often inferior to, and more expensive than, municipal services available to others.<sup>9</sup> They also may pay more, not just as a share of income but in absolute terms. This disproportionately burdens them, limits their opportunities to thrive, and can leave them further and further behind.

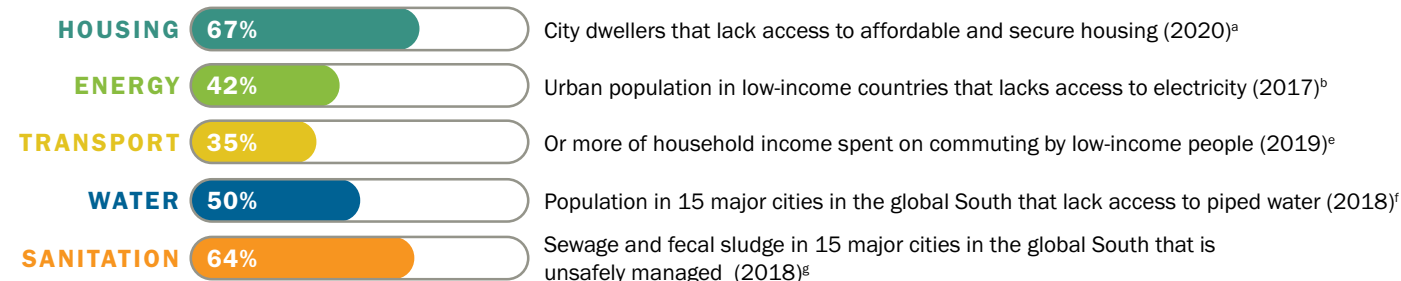
**The well-to-do can be more resilient.** They are the most likely to have running water piped into their homes and be connected to the electrical grid. But if their water is not clean or flows intermittently, they can supplement and purchase in-home water storage tanks, water treatment equipment, and bottled water. If the power goes out regularly, they can buy diesel generators and the fuel to run them. They can move to gated, privately serviced communities, insulated from the hardships that others endure.

### The urban services divide has a stark spatial dimension.

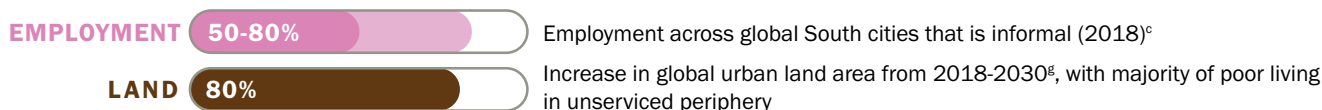
Unplanned or poorly planned urban expansion with little public investment often relegates those without wealth to informal settlements and to peripheral areas of cities where land is cheap. This creates long-term zones of disadvantage, where basic urban services are scant, inadequate, or missing altogether. Haphazard and sprawling development creates a vicious cycle. It makes neighborhoods harder to reach, which, in turn, can make connecting all parts of the city to good-quality infrastructure and services prohibitively expensive and difficult. The cumulative impact of lacking access to multiple services, day after day, is crippling. Individual families suffer, but our research shows that whole communities and cities also suffer when most citizens lack access to basic services.

Figure ES-2 | **High percentages of urban dwellers lack reliable, affordable, and safe access to core services and opportunities offered by cities**

#### Core services:



#### Cross-cutting issues:



Note: Analysis from the World Resources Report: *Towards a More Equal City* series, 2016 to 2019.

Sources: a. World Bank, 2018b; b. World Bank, 2016a; c. Venter et al., 2019; d. WRI, 2018; Mitlin et al., 2019; e. WRI, 2018; Satterthwaite et al., 2019; f. ILO, 2018b; g. Mahendra and Seto, 2019; Seto et al., 2012.



## CURRENT URBANIZATION TRENDS EXACERBATE INEQUALITIES

**The pace and scale of today's urbanization is unprecedented, and urban growth has shifted to low- and middle-income countries.**<sup>10</sup> The world's urban population is expected to grow by 2.5 billion people by 2050, with almost 90 percent of the increase occurring in Africa and Asia.<sup>11</sup> Urban populations in countries of the global South will climb by about 75 percent by 2050, and most of the world's struggling and emerging cities are in these countries (see Box ES-1).

**The historic link between urbanization and growing prosperity is breaking.** In earlier decades, urbanization and rising incomes went hand in hand. Booming economies helped bankroll investments needed to tackle urban problems. But today, that link is weak or broken in many low- and middle-income countries. The fastest-growing cities currently face the most daunting problems and often have the fewest resources to deal with them. They are constrained by stagnant economies, weak institutions, and low capacity. Cities lack the revenue they need to build better infrastructure and improve access to services, which makes it harder to attract investment and spur economic growth.

**The rise of informality means that a growing share of economic activity is taking place without government regulation or oversight.** Informality—in the sense of the informal provision of services, informal settlement, and informal employment—is pervasive in the rapidly growing cities of the global South. Between 50 and 80 percent of urban employment is informal,<sup>12</sup> and about 29 percent of all urban residents globally live in informal settlements or slums<sup>13</sup>—a number considered to be a serious underestimation. Informality in its different forms is one of the less studied but most important trends that we examined. In many cities, decision-makers are ill-equipped to deal with informality in a constructive way, often ignoring or hobbling this sector and the primarily female workers who rely on it for their livelihoods.<sup>14</sup>

## NATIONAL AND GLOBAL IMPLICATIONS OF THE URBAN SERVICES DIVIDE

**Global efforts to fight poverty hinge on whether urban populations have access to services and opportunities.**

In many countries, poverty is increasingly shifting from rural to urban areas and, in a worrying change from historic trends, a growing share of the poor live in urban areas. This is particularly evident when measures of poverty go beyond income to include access to education and basic infrastructure such as electricity, water, and sanitation. Current patterns of urban development are making poverty an increasingly urban problem, with women and children bearing the brunt.

**Environmental degradation and climate change are linked to urban problems too.** Unplanned, sprawling development without basic infrastructure leaves residents stripping and burning forests for fuel, sitting in endless traffic jams, and discharging sewage into open pits. Valuable resources are being squandered, and air and water pollution are making people sick. If current trends continue, the cities of the global South will account for more than half of global urban carbon dioxide emissions by 2050.<sup>15</sup> In addition, their populations will face some of the gravest environmental risks and impacts of climate change. Low-lying and coastal cities, especially in Africa and Asia, will be flooded by rising seas and battered by more violent storms, and they will have only minimal capacity to adapt. Within these cities, large informal settlements are the most vulnerable to these risks. Much of the infrastructure is yet to be built in these cities, and so they hold a valuable opportunity for more climate-resilient development.

**The stakes—for our economy, our planet, and our common future—could not be higher.** Decisions made today can embed poverty, deny opportunity, and widen the urban services divide in ways that grow harder and harder to reverse. They also can lock in high energy consumption and carbon emissions for decades to come. But if done right, these decisions can also lead to transformative change for people, cities, and the environment.



## THE CASE FOR TRANSFORMATIVE CHANGE

**Prosperous cities are crucial for national economic development.** For much of human history, cities have been reliable engines of economic growth. They have concentrated talent, incubated ideas, fueled productivity, and nurtured innovation. They have offered opportunities for work, study and entrepreneurship that have lifted the fortunes of whole nations. But today, unequal access to services could prove a fatal drag on this growth.

**A new approach is needed for transformative change in cities and the time for short-lived, piecemeal solutions is over.** Narrow, sectoral approaches are not going to be enough to help cities in the midst of unsustainable, unequal, ad hoc development that traps most residents in poverty. Transformative change is fundamentally more people centered. It starts with the lived experience of people and uses this as the metric of success rather than focusing only on income or carbon emissions. We have gathered evidence from across the world on how cities can start providing access to services and opportunities more sustainably and equitably.

**To pursue transformative change, cities in the global South will need to depart from business as usual.** This report includes numerous examples of innovative strategies from cities worldwide. While organizations and governments

are piloting ideas and trying new approaches in fits and starts—in one sector, one neighborhood, or one city—we are not making the needed transformational course corrections because of the size of the problem and the momentum behind traditional ways of doing things. In this report, we have drawn together scattered experiences and insights that illustrate a new way to understand and implement sustainable urbanization, from top to bottom.

**We define *transformative change* as lasting change that enhances access to urban services and opportunities while improving institutional practices and outcomes across multiple urban sectors and enduring across political administrations.**<sup>16</sup> It will not be enough to channel more money into infrastructure and investments that fail to address gaping inequities in access to services.

**This synthesis report highlights seven transformations cities can make to halt the current downward spiral.** Through examples, we highlight how these transformations can alter current trajectories and galvanize action to achieve more equal, thriving, and sustainable cities. Making these transformations, narrowing inequities, and improving access to services can yield large dividends and cascading benefits that reach across sectors and institutions, improving life for a



broad swath of the population (see Figure ES-3).<sup>17</sup> For instance, each dollar invested in water and sanitation generates between US\$4 and \$34 in benefits by saving time, improving health, and raising productivity.<sup>18</sup> Improving transport for under-served populations is safer, saves time, reduces congestion and air pollution, and supports employment and economic development.<sup>19</sup> Fewer power outages mean less disruption of work, leading to higher incomes and output in both formal and, especially, informal enterprises, and electricity consumption per capita is positively correlated with a city's per capita gross domestic product (GDP).<sup>20</sup>

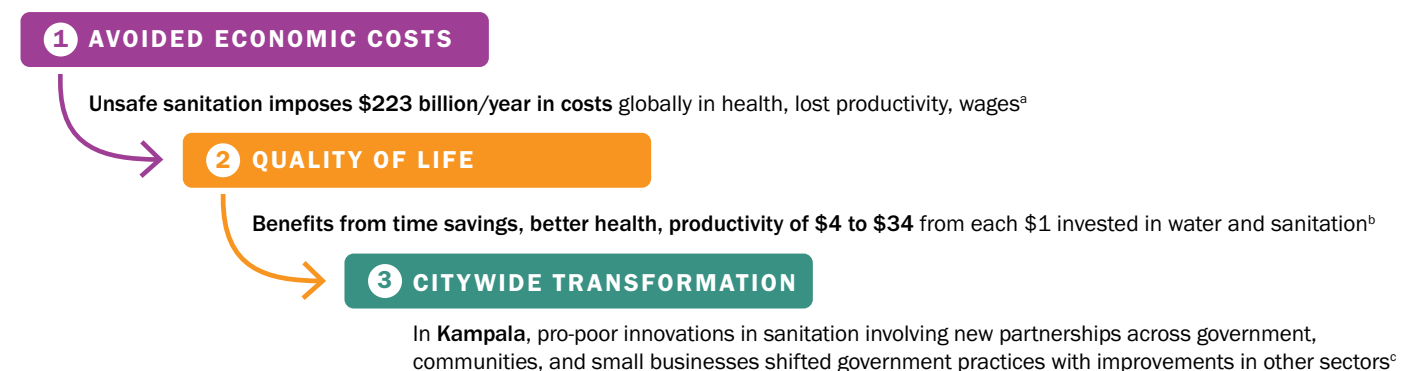
## SEVEN CROSS-SECTORAL TRANSFORMATIONS TO ACHIEVE A MORE EQUAL, PROSPEROUS, AND SUSTAINABLE CITY

Five years of research enabled us to identify crucial transformations that would allow cities to close the urban services divide and move towards greater equality while driving overall sustainability (see Figure ES-4). The experiences of the cities we studied provide insights that are transferable and may be generalized, even if their stories of change are unique. The value of thinking in terms of these seven transformations is that they are broad and adaptable

to different local contexts and needs. They are not mutually exclusive—and we have identified some of the linkages between them—but each represents a significant shift in mindsets and practices. Whatever the starting point for cities, these transformations provide pathways to improve the quality of life for all urban residents by **reimagining service provision, including the excluded**, and **enabling change**. We describe each of these transformations with examples in the next section.

- ▶ **Transformation 1: Infrastructure Design and Delivery**—Prioritizing the Vulnerable
- ▶ **Transformation 2: Service Provision Models**—Partnering with Alternative Service Providers
- ▶ **Transformation 3: Data Collection Practices**—Improving Local Data through Community Engagement
- ▶ **Transformation 4: Informal Urban Employment**—Recognizing and Supporting Informal Workers
- ▶ **Transformation 5: Financing and Subsidies**—Increasing Investment and Targeting Funds Innovatively
- ▶ **Transformation 6: Urban Land Management**—Promoting Transparency and Integrated Spatial Planning
- ▶ **Transformation 7: Governance and Institutions**—Creating Diverse Coalitions and Alignment

Figure ES-3 | **Closing the urban services divide can yield cascading benefits for cities (example of sanitation shown)**



Notes: All figures are in U.S. dollars.

Sources: a. Wee, 2018; b. WHO, 2012; c. Lwasa and Owens, 2018.

Figure ES-4 | **Seven transformations can help achieve a more equal, prosperous, and sustainable city**

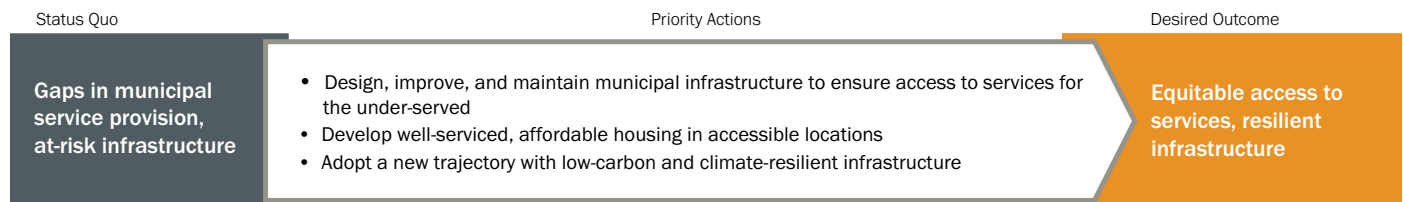


Source: Authors.



## TRANSFORMATION 1: INFRASTRUCTURE DESIGN AND DELIVERY— PRIORITIZING THE VULNERABLE

*Municipal infrastructure must be designed and delivered to prioritize neglected populations, address backlogs, minimize carbon lock-in, and anticipate future risks.*



### What Must Change and Why

**The majority of urban residents have limited or no access to municipal infrastructure that provides core services such as water, sanitation, transport, and energy.** In many cities, decisions about infrastructure design and development ignore where new development and informal growth is actually occurring in the city. Unprecedented numbers of people are crowding into informal settlements devoid of basic services or in locations of the city that are under-served. Their needs are not being met, and the costs of even poor-quality services can be prohibitively high. Infrastructure design and investments are skewed to benefit more well-off populations. For instance, low-income commuters overwhelmingly depend on walking, cycling, and public transport, yet upwards of 95 percent of road space is typically allocated to cars and trucks (including on-street parking).<sup>21</sup> Frequent power outages—with as many as 25 outages per month in South Asian cities and every day in African cities—burden informal firms and settlements the most.<sup>22</sup> In some cases, the lack of coverage is a result of existing informality. For instance, **Addis Ababa, Ethiopia**, received a large loan from the World Bank to expand its sewer network, yet the share of the population served rose only from 10 to 20 percent because the utility would only extend sewer lines to households showing evidence of land tenure. With almost half the city being tenure insecure, most households were left unsafely disposing of human waste instead.<sup>23</sup> This shows how a lack of secure housing acts as a barrier to receiving services from utilities looking to recover costs.

### Priority Actions

#### 1. Design, improve, and maintain municipal infrastructure to ensure access to services for the under-served

Targeting improvements in quality, coverage, and affordability to under-served communities benefits everyone. Meeting their need for municipal services can make whole cities cleaner, safer, more livable, and more prosperous. **Colombo, Sri Lanka; Kampala, Uganda; and Nairobi, Kenya**, have shown how extending formal piped water and sewer networks in low-income neighborhoods protects public health and the environment and allows citizens to be more productive.<sup>24</sup> **Bogotá, Colombia**, and **São Paulo, Brazil**, demonstrated how cities can design safer streets that prioritize those who walk, cycle, and use public transport over private vehicles.<sup>25</sup> **Medellín, Colombia**, showed how investing in safe, affordable multimodal public transport services, including cable cars, can tame congestion and connect poor, peripheral, or hillside communities with jobs in the city center, reducing one-way commutes from two hours to 30 minutes in some cases.<sup>26</sup> Cities can improve access to clean, affordable, reliable energy by scaling up distributed renewable energy sources. Solar photovoltaic systems in **Bengaluru, India**,<sup>27</sup> and community solar in cities in **Kenya, Tanzania, and Uganda**,<sup>28</sup> for instance, have broadened access to energy and lowered costs for poor households while curbing air pollution and carbon emissions.



## 2. Develop well-served, affordable housing in accessible locations

Location must be a key consideration in social housing policies, balancing affordability with livable density that provides adequate access to services and open space. Cities should prioritize building more rental units, converting under-utilized urban land to affordable housing,<sup>29</sup> and investing in public transport to connect housing with employment centers. Cities can upgrade informal settlements in otherwise secure locations through partnerships with communities that live there. Cities such as **Windhoek, Namibia**, and **Nairobi** are doing this by changing land-use regulations, improving infrastructure, and allowing for the incremental building of homes over time.<sup>30</sup>

**Bangkok, Thailand**, partnered with community groups and nongovernmental organizations (NGOs) to upgrade informal settlements through the Baan Mankong program, creating a model that has scaled up to over 215 cities in 19 Asian countries.<sup>31</sup>

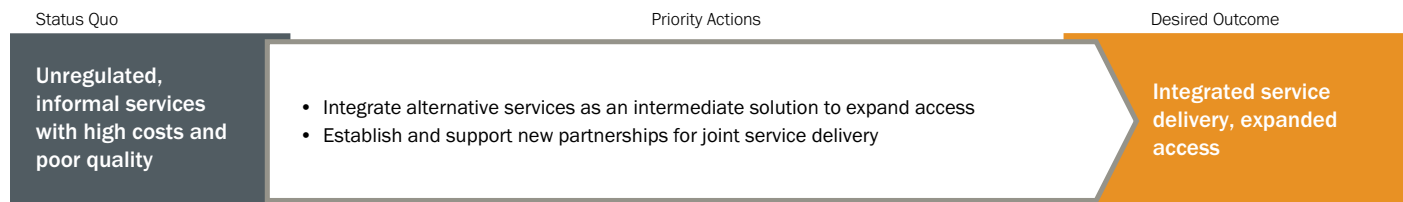
## 3. Adopt a new trajectory with low-carbon and climate-resilient infrastructure

Struggling and emerging cities have a huge opportunity to chart a new development model that both mitigates and adapts to threats posed by climate change. Shifting to cleaner cooking fuel and more energy-efficient buildings and appliances saves money and slows greenhouse gas (GHG) emissions. Public and active (nonmotorized) transport not only offers mobility to under-served populations but also reduces carbon emissions and other types of pollution.<sup>32</sup> Cities also need to fortify all core infrastructure, such as water, sanitation, and drainage, against climate impacts, including increased flooding, droughts, and heat waves.<sup>33</sup> **Durban, South Africa**, and **Rosario, Argentina**, are doing this by upgrading infrastructure in physically and socially vulnerable areas, such as flood-prone slums, and by planning for resilience.<sup>34</sup>



## TRANSFORMATION 2: SERVICE PROVISION MODELS—PARTNERING WITH ALTERNATIVE SERVICE PROVIDERS

*Cities must transform urban service provision, partnering with and integrating alternative service providers to increase access.*



### What Must Change and Why

**In most growing cities in the global South, gaps in municipal public services are filled by a network of informal and semiformal providers, by community organizations, and by other private businesses.**<sup>35</sup> These alternative service providers (such as van drivers or water vendors) provide vital services, but what they offer may sometimes be expensive or of poor quality, in part because government authorities provide limited oversight and rarely regulate them in ways that protect consumers. Informal service providers are often harassed or encumbered in ways that make it difficult for them to operate. Informal transport, or paratransit, serves the majority of travelers in many global South cities that lack reliable public transport.<sup>36</sup> Local authorities may bar these vehicles from certain routes but do nothing to ensure fair competition and pricing or to keep unsafe vehicles off the roads. Similarly, without government protection, customers who rely on private water tankers are vulnerable to poor water quality or price gouging when demand is high.<sup>37</sup>

City authorities in the global South often ignore or impede these informal services because they do not have the capacity to oversee and regulate numerous small-scale, independent formal and semiformal service providers. They may also lack the technical capacity and political will needed to set quality standards and enforce regulations to protect consumers or safeguard health, safety, and the environment.

### Priority Actions

#### 1. Integrate alternative services as an intermediate solution to expand access

Informal and small-scale operators and community-based organizations can help expand access in the short and medium term until the city can build, invest in, and expand infrastructure to fill gaps and meet basic needs. In some low-density peripheral areas of cities, alternative or decentralized modes of service provision may actually be more appropriate than extending municipal networks. National authorities and development agencies can invest in building the regulatory capacity of cities or utilities to help integrate alternative services while guaranteeing basic standards of service and affordability. **Kampala** has followed a performance-based management approach to integrate informal sanitation providers, and cities in **India** have organized the informal transit sector by issuing permits, regulating fares, and authorizing unions.<sup>38</sup>

*Informal service providers are often harassed or encumbered in ways that make it difficult for them to operate. Informal transport, or paratransit, serves the majority of travelers in many global South cities that lack reliable public transport.*

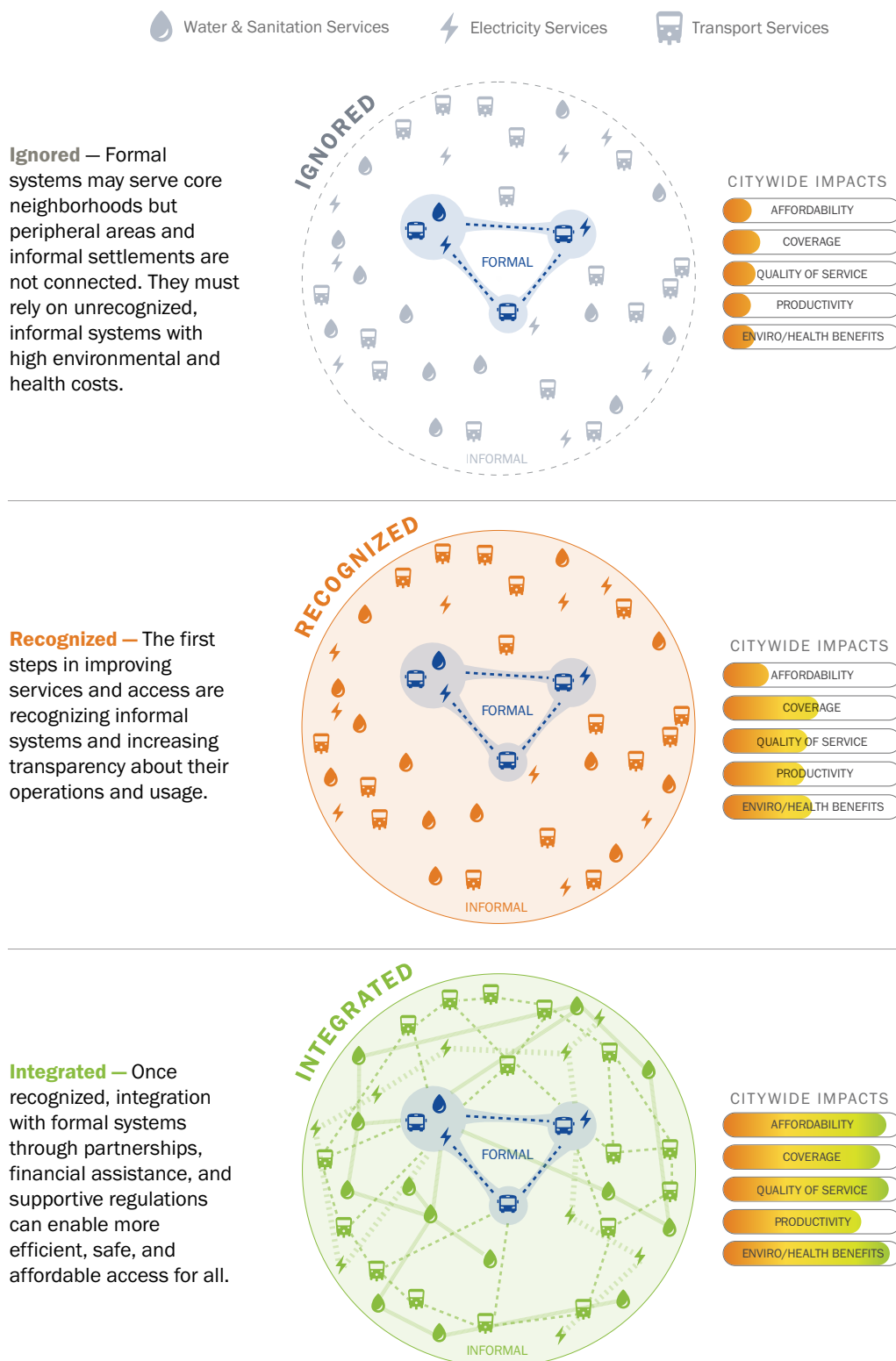
## 2. Establish and support new partnerships for joint service delivery

Many cities have shown that partnering with communities and private entrepreneurs can expand services in ways that best match local needs. Communities can also help manage local operations while the city plans and expands its coverage of mainline infrastructure. Utilities in **Lilongwe, Malawi**, and **Nairobi**, for instance, collaborate with community-based organizations and water user associations to oversee prepaid water kiosks in informal settlements. Such arrangements give communities a say in how the service is delivered and where the facilities are built, and they create local employment opportunities as well.<sup>39</sup>

Figure ES-5 highlights how cities that shift from ignoring to recognizing and integrating these alternative solutions can enhance citywide access to services. In the case of urban transport, whereas some cities have banned alternative operators, others, such as **Cape Town, South Africa**; **Lagos, Nigeria**; and **Indore, India**, have integrated them into new transport systems, with financial assistance to upgrade vehicles and trainings to build new skills.<sup>40</sup>



Figure ES-5 | **Existing alternative services can be integrated with publicly provided services to enhance access for all**



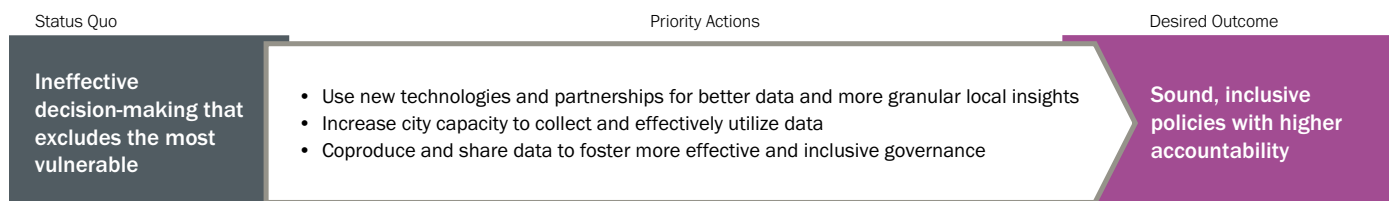
Note: Citywide impacts are schematic.

Source: Authors.



## TRANSFORMATION 3: DATA COLLECTION PRACTICES—IMPROVING LOCAL DATA THROUGH COMMUNITY ENGAGEMENT

*Credible, open local data creates an opportunity to ensure sound policies and investments, understand their impacts on vulnerable communities, and improve governance processes in cities.*



### What Must Change and Why

**Cities cannot solve problems that are poorly understood, and many cities have only limited information on the needs of their residents.** Such large information gaps lead to misinformed, ineffective, or incomplete policy responses or to paralysis in choosing between competing priorities for action. Even where data exist, cities often lack the technical capacity to manage, share, and use data to guide decision-making. The lack of data is also an obstacle to holding governments accountable.

In struggling and emerging cities, where resources for data collection are limited, citywide surveys are conducted infrequently or not at all. They lack the granularity needed to draw meaningful inferences about groups that are vulnerable or do not have access to basic services such as water and sanitation. Cities often remain oblivious to the size of the informal workforce or the deprivations faced by residents of informal settlements because these groups remain uncaptured in formal surveys and censuses.

### Priority Actions

#### 1. Use new technologies and partnerships for better data and more granular local insights

An explosion of new technologies is revolutionizing data collection. Data about service coverage and access can now be collected cost-effectively, frequently, and with high resolutions of spatial detail and disaggregation across socioeconomic groups. Tools to conduct rapid community surveys and gather crowdsourced information, anonymized mobile phone records, electronic transactions, and satellite imagery can generate unprecedented amounts

of information. Cities in **China, India, Rwanda, Tanzania**, and some countries in Latin America are utilizing satellite imagery with other technologies for mapping land-use and development patterns.<sup>41</sup> Emerging sources of “big data” may miss low-income people who lack access to cell phones or bank accounts. But cities can partner with communities, universities, and the private sector to complement this data with other sources (see Figure ES-6).

#### 2. Increase city capacity to collect and effectively utilize data

National and regional governments, as well as development agencies, can invest in building this capacity at the city level. They can provide the tools and training needed to gather, analyze, and share data and use it to inform policy. This can empower cities to help tackle regional challenges, such as curbing air pollution, managing water resources, mitigating climate risks, and conserving biodiversity and green spaces. It can also help them measure and understand the impacts of public policies, particularly on vulnerable populations.

#### 3. Coproduce and share data to foster more effective and inclusive governance

Investing in better data can enhance decision-making and has many payoffs over time—increasing efficiencies in resource use, helping plan for and avoid future risks, supporting citizen participation in policymaking processes, and enabling more equitable service provision. Democratizing data production and access by integrating community knowledge can expose gaps in government action. It can help communities identify problems and advocate for change. For example, under

the Know Your City initiative of the Slum/Shack Dwellers International, community-gathered data from thousands of informal settlements across approximately 500 cities are being used to upgrade core services and support planning.

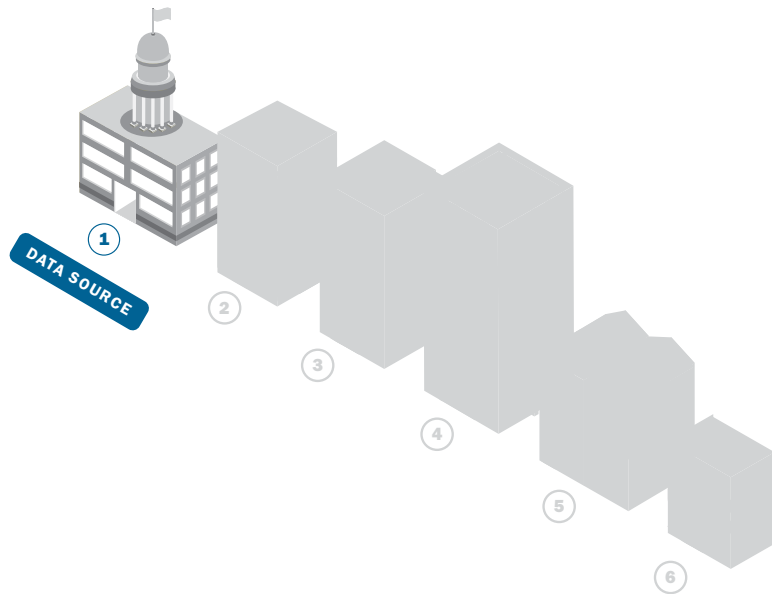
In **Nairobi**, community groups mapped more than 50,000 households in the city, identified priorities, and were able to lobby the city's water and sewer company to provide convenient water sources.<sup>42</sup>

Figure ES-6 | **Data from multiple actors lead to more effective and inclusive decision-making**

### When the right data and capacity are absent....

#### Ineffective, exclusionary policy

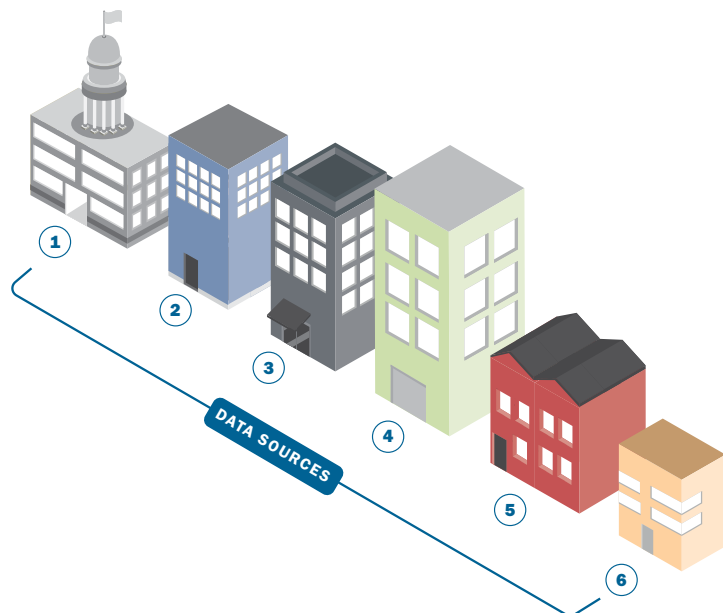
- 1 **Government Agencies**
  - Outdated data, only formal areas
  - Insufficient disaggregated data
- 2 Private Sector
- 3 Global/National Orgs
- 4 Research Institutions
- 5 Universities
- 6 Community Organizations



### When diverse data and capacities are harnessed....

#### Effective, inclusionary policy with well-informed targets and indicators

- 1 **Government Agencies**
  - Updated service access data
  - Subcity, disaggregated data
- 2 **Private Sector**
  - Service provision data
  - Financial data
- 3 **Global/National Orgs**
  - Geospatial, regional data
  - SDG monitoring data
- 4 **Research Institutions**
  - Climate risk data
  - SDG monitoring data
- 5 **Universities**
  - Demographics
  - Natural environment
- 6 **Community Organizations**
  - Data on informal settlements

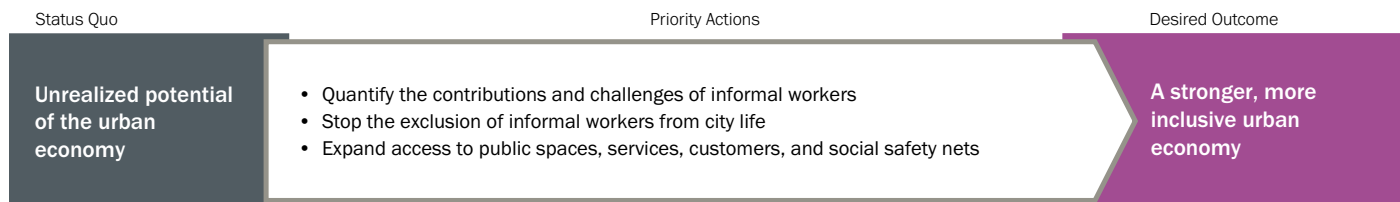


Note: SDG = Sustainable Development Goals.

Source: Authors.

## TRANSFORMATION 4: INFORMAL URBAN EMPLOYMENT—RECOGNIZING AND SUPPORTING INFORMAL WORKERS

*Informal economic activities must be supported because they not only provide livelihoods for the working poor but also supply goods and services that keep the city's formal economy running.*



### What Must Change and Why

**The informal economy is like an invisible giant, too often overlooked, hamstrung, and deprived of what it needs to function efficiently.** Worldwide, 2 billion workers operate in the informal economy. In cities across the global South, they represent over 50 percent of urban employment and, in some cases, up to 80 to 90 percent.<sup>43</sup> Mukuru, one of **Nairobi's** largest informal settlements, has an informal economy that generates almost US\$64 million annually, representing 4 percent of **Kenya's** national budget and a fifth of the revenue of the Nairobi city authority.<sup>44</sup> Yet informal workers face severe inequities in access to urban services, which can drag down productivity and threaten livelihoods. Our research finds that poor access to public spaces, services, and opportunities harms small, informal enterprises the most. Increasing access to these, as well as credit for informal workers to grow their businesses, can be a powerful lever for inclusive economic growth and prosperity.<sup>45</sup>

**Why this giant remains in the shadows: Information on urban employment and productivity focuses on the formal sector and ignores informal work.** City officials who focus on conventional measures of employment often fail to recognize the importance of the informal workforce and the home-based workers crowded into informal settlements. Academic research, donors, and multilateral institutions, too, have concentrated on the formal sector.<sup>46</sup> Yet it is impossible to exclude this sector and effectively support the urban poor. The poor and women make up a disproportionate share of the informal workforce.<sup>47</sup> For example, women make up 88 percent of street vendors in **Ghana**, 68 percent in **South Africa**, and 63 percent in **Kenya**.<sup>48</sup>

### Priority Actions

#### 1. Quantify the contributions and challenges of informal workers

Cities must strive to assess the value generated by informal workers and enterprises located in informal settlements. Dharavi in **Mumbai, India**—often considered Asia's largest slum—has an active informal economy comprising about 20,000 small-scale enterprises producing leather, textile, and pottery products exported around the globe with an annual turnover of over \$1 billion.<sup>49</sup> Reports show that 60 percent of Mumbai's segregated waste is processed in Dharavi, which is home to almost 30,000 waste pickers.<sup>50</sup> A study across 50 Indian cities found the total contribution of urban informal settlement dwellers to be 7.5 percent of national GDP.<sup>51</sup> A third to half of these residents lacked one or more urban services, a number that rose to 80 percent in lower-income Indian states. This affects the productivity and quality of life of these workers and has high shadow costs for the economy, with negative impacts on well-being and economic resilience, made clear during the pandemic.

#### 2. Stop the exclusion of informal workers from city life

Recognizing the legitimacy of informal and home-based workers and granting them the same rights as others (Figure ES-7) can bolster the economic resilience of cities. Cities can boost the productivity and well-being of these workers by ensuring that they have decent housing, reliable energy and water, and transport connecting them with suppliers and markets. In Indian cities such as **Surat** and **Ahmedabad**, the Mahila Housing Trust does this by negotiating with city agencies and leveraging city funds on behalf of informal workers. These funds have been used to upgrade housing



conditions and access solar energy technologies to run refrigerators, soldering irons, and sewing machines for home-based businesses. This has raised incomes, saved money, and lowered energy consumption.<sup>52</sup> During the COVID-19 pandemic in 2020, as health restrictions kept informal transport operators off the roads, **Nigeria** committed almost \$200 million as part of a survival fund to compensate informal workers.<sup>53</sup>

### 3. Expand access to public spaces, services, customers, and social safety nets

Cities can procure goods and services from informal workers, make their operations less costly and precarious, and ensure access to credit so that they can expand their businesses or invest in housing. Faced with many restrictions and fees,

informal workers can pay a steep price for the right to operate. Easing costs and red tape can improve their job security and livelihoods while generating broader benefits for the city. For example, some cities have designated zones and improved markets for street vendors.<sup>54</sup> **Bengaluru** and **Pune** in **India**, as well as several cities across **Brazil**, **Colombia**, and **Argentina**, have signed contracts with previously informal waste picker cooperatives for door-to-door waste collection. This not only supports secure livelihoods but also citywide recycling and waste management, protecting the environment and reducing GHG emissions.<sup>55</sup> In Bengaluru, waste pickers pick up solid waste that would otherwise accumulate in streets, public spaces, urban waterways, landfills, or incinerators. They protect the environment and reduce GHG emissions.<sup>56</sup>

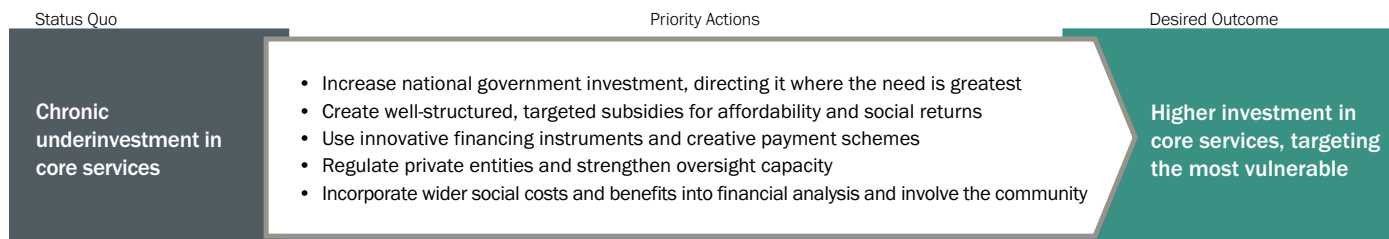
Figure ES-7 | **Cities can support informal workers in various ways for a more inclusive economy**



Source: Chen and Beard, 2018.

## TRANSFORMATION 5: FINANCING AND SUBSIDIES—INCREASING INVESTMENT AND TARGETING FUNDS INNOVATIVELY

*Cities, countries, and investors need to substantially increase investment and target it innovatively to fill the gap in affordable urban services.*



### What Must Change and Why

**Cities are failing to make necessary investments to fill gaps in core services that would clearly serve the public interest and pay for themselves.** The price tag for closing the urban services divide is often beyond what low- and middle-income cities can afford on their own. They cannot collect the tax revenue needed to fund big-ticket infrastructure projects, but failing to build them can exact an even larger toll.<sup>57</sup> According to the World Health Organization, providing all city dwellers with clean drinking water would cost \$141 billion over five years,<sup>58</sup> but unsafe water and inadequate sanitation currently cost 10 times that much, mostly in time and health costs.<sup>59</sup>

Cities need national governments to help finance major infrastructure investments. National governments collect almost three-quarters of total public revenues worldwide,<sup>60</sup> but they do not provide the reliable fiscal support cities need to successfully plan and implement urban infrastructure projects. Many urban infrastructure projects rely on funds from international aid agencies, but cities cannot borrow directly. They need national governments to take out or guarantee loans.

Privatization has proved to be no panacea. To expand services, governments moved towards privatization during the 1990s. The idea was to tap into additional financial, technical, and management resources. Yet privatizing many urban services has not worked without government subsidies, especially for the poorest.<sup>61</sup> Businesses must charge enough to recover costs and make a profit, but the poor cannot access services priced

beyond their reach. Experiments with privatization have also revealed the need for public sector supervision to ensure good performance and equitable access.

The status quo reflects the tragedy of the urban commons, which ignores the social and economic costs of failing to invest. The methods used to analyze urban infrastructure investments often calculate only short-term costs and do not factor in the actual long-term economic costs and benefits for the city as a whole.

### Priority Actions

#### 1. Increase national government investment, directing it where the need is greatest

The lumpy but long-lasting up-front capital and connection costs often require low-cost, long-term national government financing, sometimes in combination with other sources. Government finance must be seen as an investment because urban services are key to productivity. Examples include **Mexico's** Federal Program to Support Mass Transit (Programa Federal de Apoyo al Transporte Urbano Masivo; PROTRAM), which offers grants to city, state, and regional government agencies for up to 50 percent of the infrastructure cost of urban mass transit projects; the **Kenya** Water Sector Trust Fund, which provides grants to counties to finance water and sanitation services in under-served areas; and in **India**, the national government's infrastructure financing program, the Atal Mission for Rejuvenation and Urban Transformation.<sup>62</sup> **Bangladesh** combined subsidies, microfinance, and

concessionary loans in 2003 to incentivize solar panel adoption by homeowners, with 3 million systems installed by 2014.<sup>63</sup>

## 2. Create well-structured, targeted subsidies for affordability and social returns<sup>64</sup>

Providing targeted subsidies for electricity and water connections for the neediest residents has proven effective and affordable, allowing residents to pay the up-front costs over time. Many cities in **Chile**, **Colombia**, and **South Africa** subsidize water for households below a certain income threshold, using existing socioeconomic classifications.<sup>65</sup> Such programs must be designed carefully, though, to ensure that the under-served derive the intended benefits. For example, in South Africa, free basic water is provided only to formal homeowners, which excludes informal tenants and those without formal title to their homes.<sup>66</sup> This leads to a situation of double jeopardy: the poor spend more on inferior services, and the publicly funded subsidies meant for low-income people instead go to higher-income groups.

## 3. Use innovative financing instruments and creative payment schemes

Combining national government finance with both traditional and innovative local financing instruments can support vital investments. Property taxes and subsidies can be combined with innovations such as land value capture techniques (described in Transformation 6) or green bonds. **Ouagadougou, Burkina Faso**, tapped funds from sewer bills for higher-income households to support safe on-site sanitation for low-income households, create a training program for safe emptying practices, and construct school latrines.<sup>67</sup> **Mexico City, Mexico**, issued its first green bond in 2016, with proceeds used for energy-efficient lighting, bus rapid transit improvements, and water infrastructure modernization.<sup>68</sup> Such innovative mechanisms are key to capturing value from public investments, generating potential sources of revenue, and enabling partnerships with the private sector. In **Chile**, the ABC program uses creative schemes for residents to access credit to finance housing. It uses their savings as a base to offer loans and subsidies to make housing more affordable.<sup>69</sup> Companies such as M-KOPA offer low-cost, pay-as-you-go access to solar power and have connected more than 280,000 homes in **Kenya**, **Tanzania**, and **Uganda** to electricity since 2012.<sup>70</sup>

## 4. Regulate private entities and strengthen oversight capacity

The private sector cannot serve the public interest without public sector regulation. Although the public sector is responsible for providing core urban services, governments may decide to contract private entities to build physical infrastructure and deliver services. Most regulatory authority lies with national authorities, but local officials can monitor service provision in their jurisdictions. They can more deliberately engage communities and civil society organizations to understand the access and affordability challenges facing the under-served. Regulators need training and capacity building to engage with utility managers and financiers to negotiate improved outcomes, along with authority and political will to enforce their decisions.

## 5. Incorporate wider social costs and benefits into financial analysis and involve the community

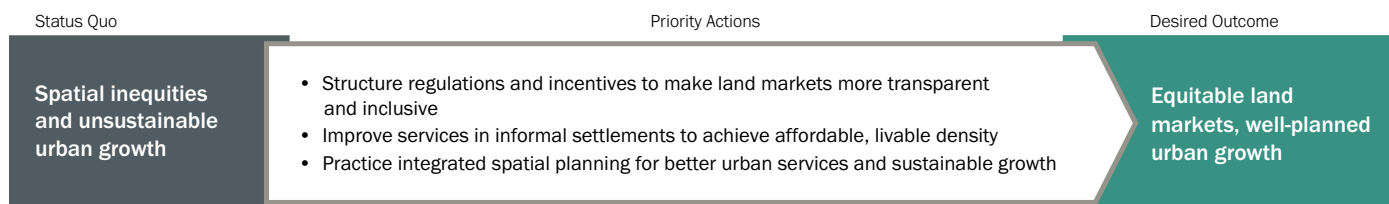
Infrastructure investment decisions should be based on long-term environmental and social benefits, such as impacts on productivity and health, not just on short-term financial considerations. For example, when considering the positive impacts on residents' livelihoods and health, economic gains, and avoided losses, the benefits of climate-resilient investments in infrastructure outweigh costs by four-to-one.<sup>71</sup> The best way to target and allocate public funds and plan infrastructure investment effectively is to involve local communities. Experience from **Porto Alegre, Brazil**, emphasizes how well-structured participatory budgeting can catalyze citizen involvement and agency to allocate these public funds to meet community needs.<sup>72</sup>

*Providing targeted subsidies for electricity and water connections for the neediest residents has proven effective and affordable, allowing residents to pay the up-front costs over time.*



## TRANSFORMATION 6: URBAN LAND MANAGEMENT—PROMOTING TRANSPARENCY AND INTEGRATED SPATIAL PLANNING

*Transparent, well-regulated land markets and effective integrated spatial planning are absolutely central for delivering services equitably and ensuring the long-term future of the city.*



### What Must Change and Why

**In the global South, many land markets do not reflect the true value they hold for cities.** This is because of a lack of transparency in land records and property rights, scant oversight, and ineffective regulation. This can allow private developers to buy land too cheaply and profit exorbitantly, capturing the gains in land value that result from public investments in infrastructure. Collusion between politicians and private developers is also known to contribute to this. Opaque land markets make it harder for local governments in the global South to tap into urban land as a key tax base and source of municipal finance.<sup>73</sup>

**When city governments lack the authority, resources, or technical capacity to plan, development is driven by landowners' quest for profits rather than the best interests of the public.** Globally, urban areas are expected to expand by 80 percent between 2018 and 2030,<sup>74</sup> yet in the fastest-growing cities, governments have little control over how and where this growth happens. Development plans are absent or poorly enforced, and private investors can build in distant locations disconnected from services and employment. Government policies driving investment in housing and special economic zones in peripheral areas, as well as restrictive density policies in central areas, are also a contributing factor.

**Trying to retrofit unplanned, far-flung neighborhoods with public services can be prohibitively expensive for cities.**<sup>75</sup> Retrofitting costs more than investing in or planning for infrastructure in advance. Cities pay a heavy price for fragmented development in long-term social and

environmental costs. Unplanned expansion can take the form of formal or informal settlements. Informal or self-built settlements are growing across cities in the global South. They lack essential public services and suffer from poor housing quality, overcrowded living spaces, and often no land titles or tenure security, even if families may have lived there for multiple generations.

### Priority Actions

#### 1. Structure regulations and incentives to make land markets more transparent and inclusive

Cities can use an array of policies, regulations, and fiscal instruments to make land markets more inclusive, efficient, and responsive to the needs of the public.<sup>76</sup> They can establish incentives to steer development towards specific locations within cities, impose time limits on how long land can be held without being built upon, tax vacant land and buildings, and implement land value capture policies that benefit both private land developers and the city. To do this, cities need accurate, complete land records and new technology can help provide a clear picture of what is happening on the ground. Increasingly, cities in **China, India, Tanzania**, and some Latin American countries are using low-cost satellite imagery combined with drone surveys to monitor formal and informal growth, complete land cadasters or registries, and collect tax revenue.<sup>77</sup> Property taxes and land value capture schemes in cities such as **Bogotá** and **São Paulo**<sup>78</sup> allow city infrastructure to keep pace with growth. Cities such as **São Paulo, Mexico City**, and **Johannesburg, South**

**Africa**, provide incentives and national housing subsidies to developers to build affordable housing in designated zones based on access to core services and employment.<sup>79</sup>

## 2. Improve services in informal settlements to achieve affordable, livable density

*Affordable, livable density* means a level of density that allows a good quality of life and well-being for all, especially the more vulnerable. It means no overcrowding in living spaces, good access to core services, and a human scale that achieves a balance between mid- to high-rise buildings, open public spaces, and street connectivity. For informal settlements, cities must prioritize upgrading infrastructure in place instead of displacing residents to housing in the urban periphery, as long as the locations chosen are safe from climate and related risks, are suitable for housing, and planning standards are flexible to keep housing affordable. As mentioned in Transformation 1 under affordable housing, the African cities of **Windhoek** and **Nairobi** collaborated with community groups to upgrade informal settlements with revised planning standards that kept housing affordable.<sup>80</sup> The Community Organizations Development Institute's Baan Mankong program in **Bangkok** is also a successful example of upgrading informal settlements at scale in over 215 cities in partnership with communities.<sup>81</sup> With significant proportions of people living under insecure land titles and unclear tenure, some cities are attempting to increase tenure security for vulnerable residents by accepting existing community-recognized titles and tenure systems.<sup>82</sup> **Botswana, Namibia, Rwanda, and Zambia** are recognizing tribal and customary landownership as part of formal land tenure systems and upgrading programs.<sup>83</sup>

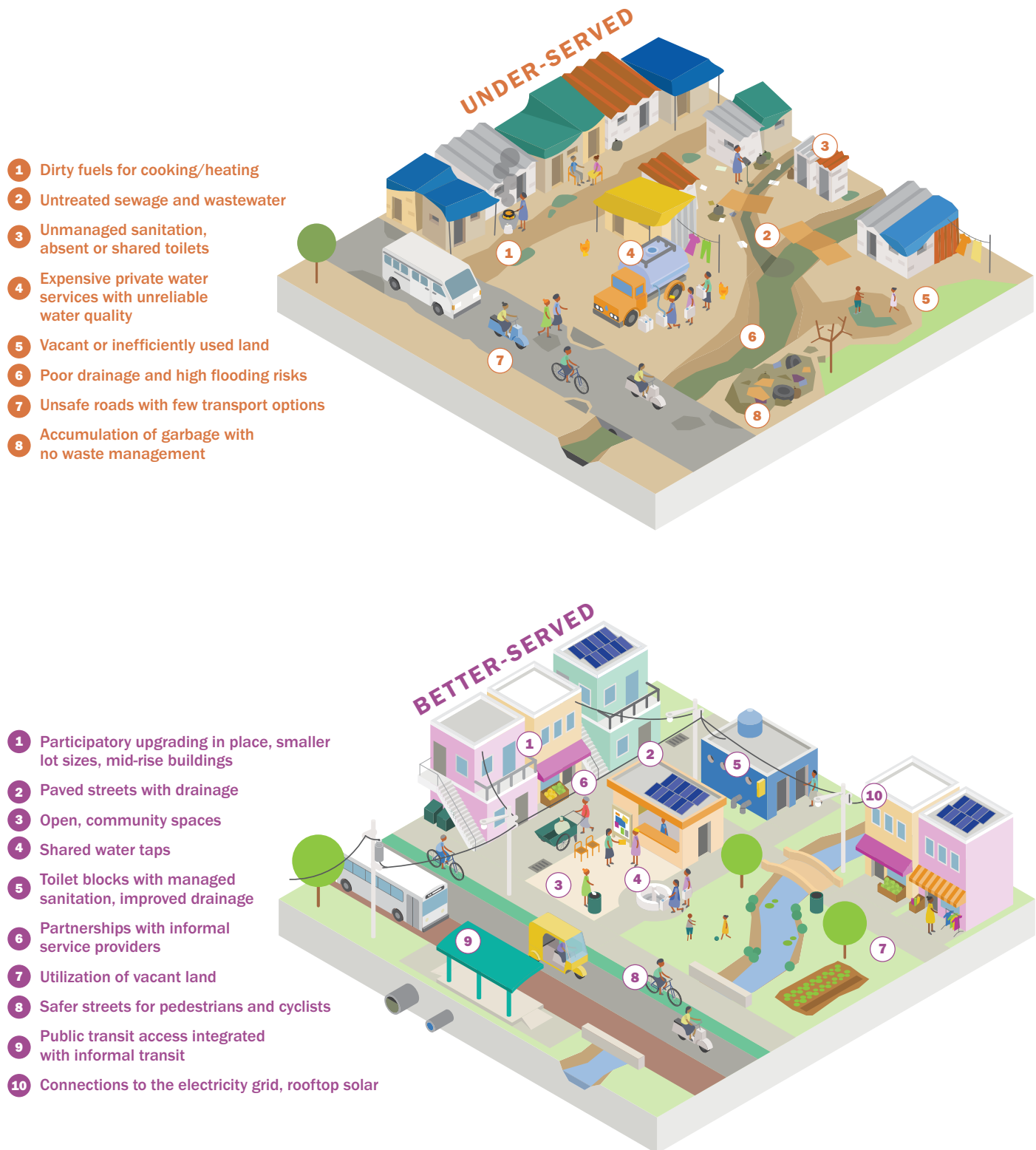
## 3. Practice integrated spatial planning for better urban services and sustainable growth

Cities must develop density and land-use policies—aligned across spatial scales from metropolitan to regional to local—to guide citywide growth and development of neighborhoods.<sup>84</sup> New data from *Towards a More Equal City* showing urban growth patterns within and across about 500 cities highlight the need for a two-pronged approach when considering where to expand the supply of serviced land. Building upward moderately with higher density is the most efficient way to use land in well-connected but vacant, underutilized, or sparsely settled areas that are safe from climate or other environmental risks (see Figure ES-8). But to build



more affordable housing for growing populations, cities will need to extend infrastructure and add some serviced land at their periphery. In **India, Ahmedabad and Hyderabad** have implemented Town Planning Schemes to manage growth in this controlled way, just as cities such as **Seoul, South Korea**, have used land readjustment policies in the past. These policies generate serviced land for urban development projects in which landowners give up a portion of their land and the city provides the infrastructure and services.

Figure ES-8 | **Using land efficiently and ensuring its connectivity to employment and services brings great value to cities**

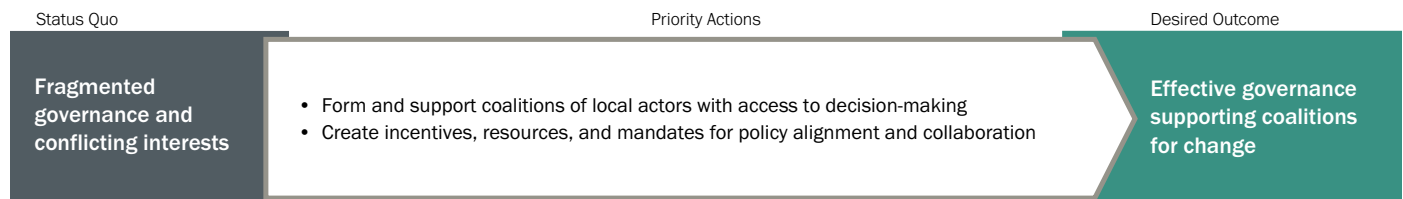


Source: Authors.



## TRANSFORMATION 7: GOVERNANCE AND INSTITUTIONS—CREATING DIVERSE COALITIONS AND ALIGNMENT

*Cities need to transform governance to work for, with, and by the people. Diverse coalitions of public, private, grassroots, and civil society organizations can galvanize political action around a shared vision and achieve lasting change when empowered by coherent policies.*



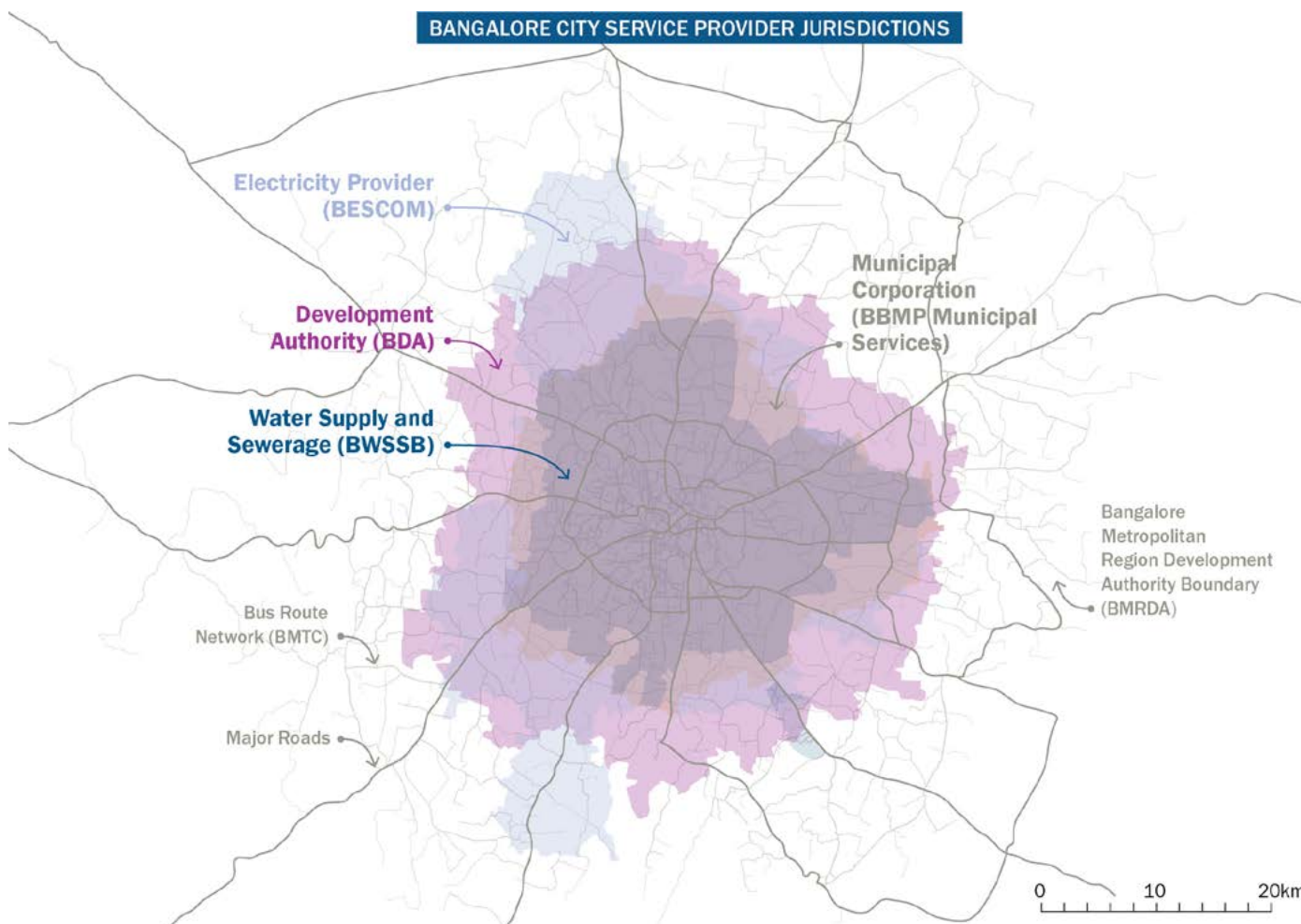
### What Must Change and Why

**Cities and urban areas do not exist in isolation, and they may lack the power, jurisdiction, or resources to make needed changes on their own.** Access to transport, energy, water, and sanitation often depends on metropolitan or regional agencies that plan these networks. City agencies need a shared vision or consensus to harness synergies across different urban investments and prevent waste, inefficiency, gaps, and duplication. Cities need cooperation from national and state governments and the participation of civil society to build lasting support for transformative change.

**Alignment is lacking in part because institutional structures and processes, set up when cities were small, become obsolete and inadequate when they expand.** Administrative jurisdictions no longer correspond to the situation on the ground, and government authorities tasked with providing services may lack awareness or control over natural resources or the built environment. Officials within different silos may have no mechanisms or incentives for coordinating their planning or investments and may end up working at cross purposes. For example, in **Nairobi** the water and sanitation utility installed water taps near a dense informal settlement, but the roads authority removed them just five years later in order to build new roads.<sup>85</sup> The areas of the city where different agencies provide services may not even match, as the map of **Bengaluru** in Figure ES-9 shows. In addition, collaboration and alignment are hindered by rigid, hierarchical bureaucracies; confused and inconsistent formal and informal processes; mistrust; political rivalry; and poor communication.



Figure ES-9 | In Bengaluru, India, the jurisdictions of key service-providing agencies do not align



Note: Bengaluru is the current name of the Indian city formerly known as Bangalore.

Source: Mahendra and Seto, 2019, contributed by WRI India.

## Priority Actions

### 1. Form and support coalitions of local actors with access to decision-making

Civil society participation in making and implementing policies can offer valuable perspectives and catalyze broader political support for change. Transformative change requires a sustained, shared vision among diverse local stakeholder groups, including representatives of international or multilateral agencies operating locally. When city officials welcome and empower these groups, they can keep vital policies and programs from getting stalled or overturned when political leaders depart, commitment wanes, or

resources dwindle. Our case studies on **Guadalajara, Mexico**; **Kampala**; and **Pune** show how coalitions of civil society and small business groups working together and with key government officials produced improved public space in Guadalajara, increased access to sanitation in Kampala, and better transport and solid waste management in Pune.<sup>86</sup> We found that transformative change is most likely when effective leaders pull together people and organizations in broad coalitions that move forward with a shared vision (see Figure ES-10).

## 2. Create incentives, resources, and mandates for policy alignment and collaboration

Policy alignment that is horizontal—across sectoral agencies and city jurisdictions—allows for integrated planning and tackling of regional challenges, such as preventing pollution and flooding or protecting biodiversity, wetlands, and forests. Vertical alignment—between local, regional, and national levels of government—keeps national policies from clashing with or neglecting urban needs and priorities. Higher levels of government can provide metropolitan agencies with the authority and resources they need to enforce development

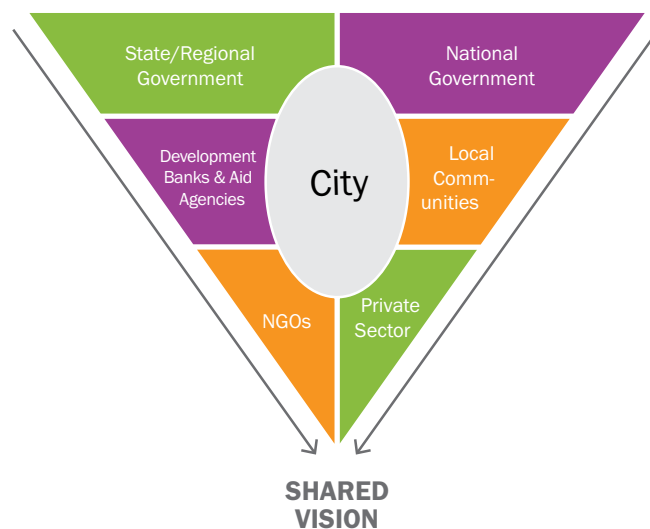
plans and the incentives they need to collaborate. For example, **Brazil's** National Law on Urban Mobility, passed in 2012, required over 3,000 municipalities to adopt urban mobility plans by 2015. It was accompanied by a national financing program for urban mobility infrastructure that incentivized cities to coordinate across land-use and transport agencies and with other jurisdictions as they prepared these plans.<sup>87</sup> Working to align policies and create local coalitions drives collaboration and progress from both the top down and bottom up.

Figure ES-10 | **Policy alignment and a shared vision drive collaboration**

**When actors are not aligned,** the city suffers from the costs of conflicting agendas, uncoordinated investments, inefficiencies, and short-lived change.



**When actors are aligned towards a shared vision,** the city benefits from harnessing synergies, minimizing trade-offs, and increased collaboration between actors on implementation.



Note: This is an indicative set of actors with influence in cities.

Source: Authors.



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## A CALL TO URGENT ACTION AND A ROAD MAP FOR TRANSFORMATIVE CHANGE

**This synthesis report was drafted while a global pandemic battered cities across the world, punishing low-income people most of all.** With urban areas at the front lines of the crisis, we have watched the dangers highlighted in this report unfold in real time, making its recommended priority actions even more urgent.

**The *Towards a More Equal City* series documents how more equitable access to core urban services not only makes life better for the majority of people but also generates citywide economic and environmental benefits.** This key lesson emerges from the literature as well as from new evidence collected from multiple cities, sectors, and interventions. By committing to the SDGs (specifically SDG 11 on cities) and the New Urban Agenda in 2015 to 2016,<sup>88</sup> countries set ambitious goals: safer, more affordable, more accessible housing and transport for all; inclusive and integrated planning; and better air quality, sanitation, and other basic services. They promised to make cities more equitable, sustainable, and resilient in the face of risks posed by climate change. *Towards a More Equal City* series explores what countries and cities that share this vision must do to attain it. In addition to guiding efforts to recover from the pandemic and reduce inequities exposed by it, this body of knowledge can also contribute to climate justice and just transition goals in urban areas<sup>89</sup> (see Figure ES-11).

**Solving these problems may seem like an uphill climb littered with obstacles, but innovative approaches and purposeful, sustained action can lead to breakthroughs.** Scarce resources, limited capacity, competing needs, entrenched inequities, and short-term vested interests are just some of the obstacles facing cities. But failing to act now will

allow these challenges to grow deeper and more intractable as time goes on. Implementing the transformations detailed in this synthesis report is an important start, but not all cities are starting from scratch; cities are at different points on the continuum represented by these transformations. However, retaining the status quo in much of the global South—urbanization that degrades the environment, economically benefits only the privileged and powerful, and leaves the majority of people behind—will incubate greater risks, including the kind of corrosive, intractable inequality that can ignite unrest and violence.

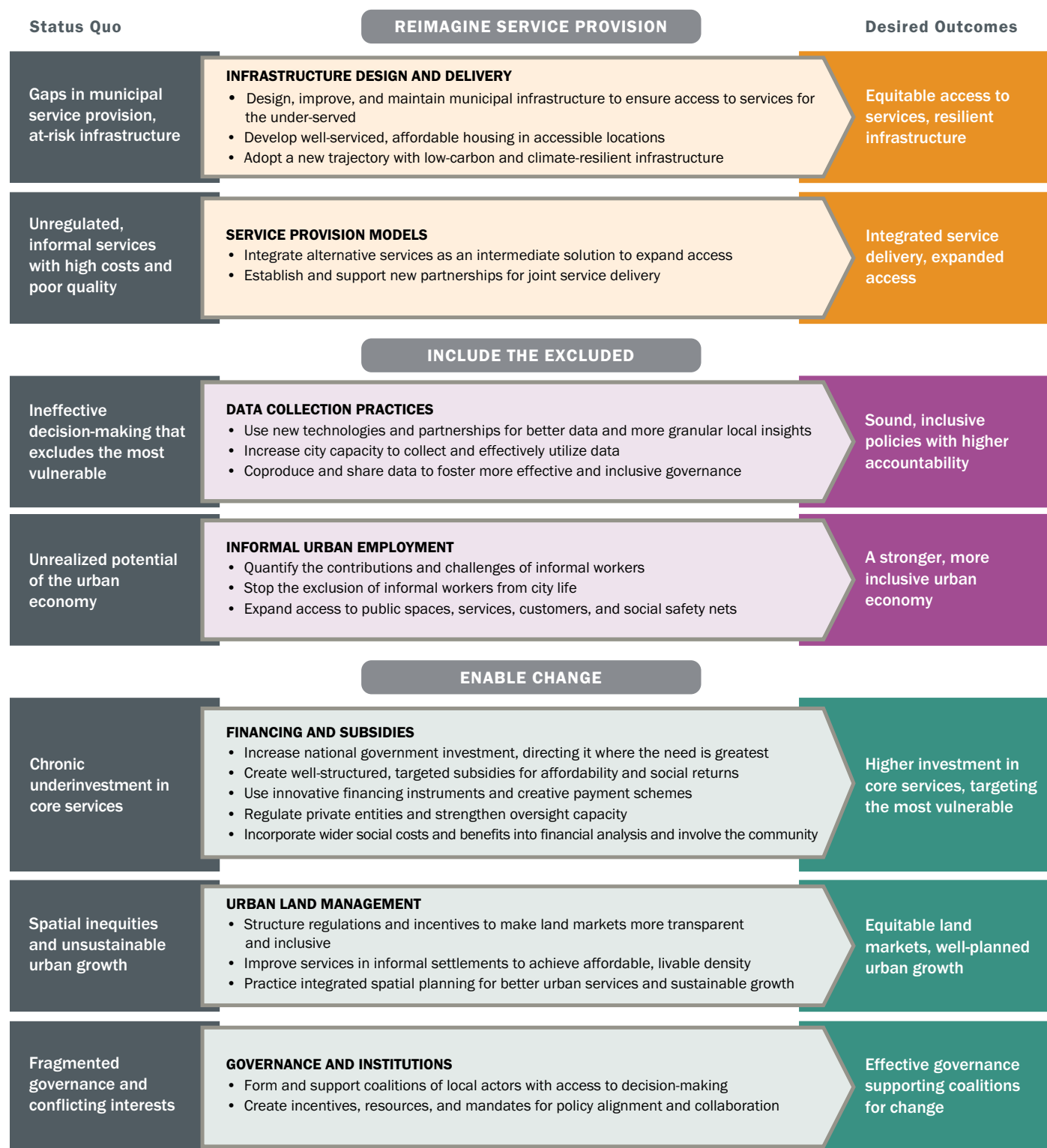
**Cities are also key cogs in the global economic machine where the quest to increase incomes and competitiveness has led to an emphasis on creating high-skill jobs.**

Although important, this must be balanced with making physical urban infrastructure and services accessible to all residents in order to foster inclusive economic growth. This is why the seven transformations in this report are meant to complement and be embedded in the wider economic development, COVID recovery, and climate strategies that cities and national governments may implement.

**The road map comprising seven transformations offers a set of priority actions under each and emphasizes how specific actors can implement them.** It brings together numerous examples of cities that have made these changes amid difficult circumstances. Not all cities will follow the same path or find the same entry point. But wherever they begin, making these transformations will help propel them forward to a brighter and more resilient future.

*By committing to the SDGs and the New Urban Agenda in 2015 to 2016, countries set ambitious goals: safer, more affordable, more accessible housing and transport for all; inclusive and integrated planning; and better air quality, sanitation, and other basic services.*

Figure ES-11 | **This road map with seven cross-sectoral transformations can help achieve a more equal, prosperous, and sustainable city**



Source: Authors.

## ENDNOTES

1. Data on the population living in slums (percentage of urban population) are from World Bank (2018b). This is a conservative estimate because many more urban residents who live outside slums, in disconnected peripheral areas, also face similar challenges.
2. ILO, 2018b.
3. Mehrotra, 2019; Racaud et al., 2018.
4. Florida, 2017; McGranahan et al., 2016; Nijman and Wei, 2020.
5. Worldwide, 4,245 cities had populations greater than 100,000 in 2010 (Angel et al., 2016).
6. World Bank, 2020b.
7. Beard et al., 2016; Watson, 2009a
8. Based on Mizrahi (2011): "Self-provision mechanisms are defined here as informal methods and strategies used by individuals and groups to satisfy their immediate interests and need for services. By choosing self-provision strategies, individuals and groups use none of society's established institutional settings (i.e., the formal rules and laws), whether these are dominated by the public, the private, or the third sector. Rather, they attempt to improve their outcomes through extralegal or illegal strategies. Self-provision strategies may belong to one of two categories: informal (or under-the-table) payments for services and self-production of services. Informal payments to providers of public services change the incentive scheme, meaning that the payer actually creates alternative production channels as compared to the established legal mechanisms in society. The two categories require self-financing and hence may contribute to welfare state retrenchment as well as increase social inequalities."
9. Mitlin et al., 2019; Satterthwaite et al., 2019.
10. Beard et al., 2016.
11. UN DESA, 2019; World Bank, 2020b.
12. ILO, 2018b.
13. Data on the population living in slums (percentage of urban population) are from World Bank (2018b).
14. Chen and Beard, 2018.
15. Westphal et al. (2017), using data from Erickson and Tempest (2014).
16. Beard et al., 2016.
17. UN-Habitat, 2020b.
18. Hutton and Haller, 2004; WHO, 2012; WWAP, 2016.
19. Venter et al., 2019.
20. Westphal et al., 2017: 9–10.
21. Kazis, 2011.
22. Westphal et al., 2017; World Bank, 2016a.
23. AAWSA, 2015; Damania et al., 2017.
24. McLoughlin and Harris, 2013; Mitlin et al., 2019.
25. CET, 2017; Venter et al., 2019.
26. Brand and Dávila, 2011.
27. Government of Karnataka, 2014.
28. See the M-KOPA website, <http://www.m-kopa.com/>.
29. Lines and Makau, 2018; King et al., 2017.
30. Mitlin and Muller, 2004; King et al., 2017.
31. For more information about Baan Makong, see the Community Organizations Development Institute, <https://en.codi.or.th/>.
32. Colenbrander et al., 2019; Venter et al., 2019.
33. Global Commission on Adaptation, 2019.
34. Sutherland et al., 2019; Almansi, 2009.
35. Mitlin et al., 2019; Venter et al., 2019.
36. Venter et al., 2019.
37. Bhaskar, 2019; Safe Water Network, 2016.
38. Cervero and Golub, 2007; De la Pena and Albright, 2013; Kumar et al., 2016.
39. WSUP, 2019.
40. Venter et al., 2019.
41. Wihbey, 2017; Chandran, 2018.
42. Lines and Makau, 2018.
43. ILO, 2020; Racaud et al., 2018.
44. Corburn et al., 2020.
45. World Bank Group, 2015.
46. World Bank Group, 2015: 26.
47. Chen and Beard, 2018.
48. ILO and WIEGO 2013.
49. Assainar, 2014; Mahawar, 2018.
50. Assainar, 2014; Mahawar, 2018.
51. PRIA, 2013.
52. MHT, 2018, 2019a, 2019b.
53. HVT, 2020.
54. Roever, 2014.
55. ILO and WIEGO, 2013; Kamath et al., 2018.
56. Scheinberg et al., 2010; UN-Habitat, 2010.
57. Colenbrander et al., 2019.
58. WHO, 2012.
59. WHO, 2012.
60. Colenbrander et al. (2019) based on Organisation for Economic Co-operation and Development data.
61. Angel and Loftus, 2019; Bakker, 2007; Karunanathan, 2019; Langford and Russell, 2017; Pestova, 2016.
62. Ahluwalia, 2019; Habtemariam et al., 2021; World Bank, 2017.
63. Khandker et al., 2014.
64. Feltenstein and Dalta, 2020; le Blanc, 2007.
65. Mitlin et al., 2019.
66. Heymans et al., 2016.
67. Trémolet et al., 2007.
68. Swope, 2017.
69. Bredenoord et al., 2014.
70. M-KOPA Solar, 2016.
71. Global Commission on Adaptation, 2019.
72. Abers et al., 2018.
73. Mahendra et al., 2020.
74. Seto et al., 2012.
75. Brueckner and Sridhar, 2012; Carruthers and Ulfarsson, 2003; Hortas-Rico and Solé-Ollé, 2010; Libertun de Duren and Guerrero Compeán, 2015.
76. Smolka and De Cesare, 2006.
77. Wihbey, 2017.
78. Turok, 2018: 100.



79. CoJ, 2004; National Treasury, 2004; Ochoa et al., 2017; OECD, 2015.
80. King et al., 2017; Mitlin and Muller, 2004.
81. For more information about Baan Makong, see the Community Organizations Development Institute, <https://en.codi.or.th/>.
82. Bakker et al., 2008; Ngoga, 2019.
83. Lall et al., 2017: 29.
84. Mahendra and Seto, 2019.
85. Habtemariam et al., 2021.
86. Kamath et al., 2018; Lwasa and Owens, 2018; Sarmiento et al., 2019.
87. AFD and MEDDE, 2014.
88. SDG 11: "Make cities inclusive, safe, resilient and sustainable." SDG 11 includes targets for access for all to adequate, safe, and affordable housing and transport as well as to public spaces. It also provides for slum upgrading and participatory and integrated human settlement planning and management. To learn more, see SDG 11, <https://sustainabledevelopment.un.org/sdg11>, and the New Urban Agenda, <http://habitat3.org/the-new-urban-agenda/>.
89. Gulati et al., 2020; ILO, 2015; Just Transition Research Collaborative, 2019; Mahendra et al., 2019.

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