How to make a city great

A review of the steps city leaders around the world take to transform their cities into great places to live and work
How to make a city great

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Half of the world’s inhabitants—3.6 billion people—live in cities. The proportion is the highest in mankind’s history, and it is growing fast. By 2030, 60 percent of the population—5 billion people—will be city dwellers. The ways in which cities develop and cope with such rapid urbanization are of huge importance to citizens. But they matter to others too. Cities are the main source of global economic growth and productivity, and they account for most resource consumption and greenhouse gas emissions. Urban development therefore matters to the well-being of all the world’s occupants.

The formidable task of managing growing cities in ways that support and drive economic growth while reducing pollution and safeguarding resources led McKinsey & Company to launch, in 2011, the Cities Special Initiative (CSI). The aim is to help those in the public, social, and private sectors to make informed decisions about city development strategies, and to help them build the skills to implement those strategies. This is not a new space for McKinsey. Research by the McKinsey Global Institute into the economics of urbanization, collaboration with think-tanks such as the Urban China Initiative, and client work with city leaders, private developers, and city service providers all testify to McKinsey’s engagement in urbanization. This latest report by the CSI—“How to make a city great”—examines what it takes to advance a city’s performance.

Various studies have looked at how cities perform in economic, environmental, and social terms, and ranked them accordingly. Such studies help us to understand the elements of a great city. But they do not tell us what their leaders do to make them great. Moreover, an absolute measure of performance risks masking the efforts that have helped some cities to rise from low down the rankings.

This research starts to fill that gap. Through analysis, case studies, and interviews, we sought to learn what mayors and other leaders do to make their cities better places in which to live and work. The findings make clear there is no single method. Rather they suggest that successful leaders find a balance between three areas. They achieve smart growth, which means securing the best growth opportunities while protecting the environment and ensuring that all citizens enjoy prosperity. They do more with less. And they win support for change by delivering results swiftly. The report describes some of the managerial practices they deploy.

We are grateful to the city and community leaders who talked to us in detail about their visions, philosophies, successes, and failures. Their experiences form the basis of our findings—and, we hope, will inform others in their task of improving the cities in which so many live, and upon which so many more depend.

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Introduction

What makes a great city? It is a pressing question because by 2030, 5 billion people—60 percent of the world’s population—will live in cities, compared with 3.6 billion today, turbo-charging the world’s economic growth.1 But for the leaders who govern cities, the challenges are tough. Those in many developing nations have to cope with urbanization on an unprecedented scale. Those in developed nations, where growth prospects are weaker, wrestle with aging infrastructure and stretched budgets. All are fighting to secure or maintain their competitiveness and hence the livelihoods of residents. All are conscious of the quality of life enjoyed by present citizens. And all are aware of the environmental legacy they will leave citizens of the future if they fail to find more sustainable, resource-efficient ways of expanding their local economies and managing their cities.

A city’s performance has to be measured in a way that reflects all of these concerns—the strength of the economy, social conditions, and the environment. Various studies have looked at these three measures of performance either separately or together, and ranked cities accordingly.2 But while such studies can help us understand the elements of a great city, they do not tell us what city leaders actually do to make their cities great. What drives a city’s performance? Moreover, an absolute measure of performance can overlook the fact that each city has a different starting point; a relatively low ranking for a city that had an extremely low starting point would mask the efforts and innovations that helped such a city make significant progress. Therefore, to understand performance, it is important to consider not only current measures but also the trajectory of change.

With this in mind, we undertook the research presented in this report. We developed and analyzed a comprehensive database of urban economic, social, and environmental performance indicators, interviewed 30 mayors and other city leaders in city governments on four continents, and synthesized the findings from over 80 case studies that sought to understand the steps city leaders had taken to improve a whole range of processes and services, from urban

Exhibit 1
Cities can transform themselves into great places to live and work by doing three things…

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This report is the result of extensive research conducted over the course of a year by McKinsey teams around the world. The research reviewed data measuring city performance along economic, environmental, and social dimensions. Three sources were particularly helpful in this respect: the Mercer Quality of Life Index, the Siemens Green City Index, and MGI’s Urban Performance Index. We also drew on MGI’s Cityscope database—which includes data on demographics, household structure, and income, and national economic and demographic data—and on China’s 2010 and India’s 2011 censuses.

Simultaneously, we conducted extensive interviews with city leaders, other public servants, and community leaders in over 30 cities around the world to capture their experience, learning, and advice. We added to this by examining more than 80 case studies of cities that had improved their performance, developed from literature, the news media, and Web searches. While the report leans heavily on the data and other information collected, the synthesis and prioritization of the insights are ours.

This report is the most recent in a growing body of work by McKinsey and the MGI on cities and urbanization. For further reading on the topic, please see the following reports:

- Preparing for China’s urban billion (March 2009)
- India’s urban awakening: Building inclusive cities, sustaining economic growth (April 2010)
- The urban world: Mapping the economic power of cities (March 2011)
- Building globally competitive cities: The key to Latin America (August 2011)
- Urban world: Cities and the rise of the consuming class (March 2012)
- Infrastructure productivity: How to save $1 trillion a year (January 2013)

These and other articles on urban development are available on mckinsey.com.
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Achieve smart growth

All city leaders want their local economies to grow. Economic growth, however, does not automatically deliver a better quality of life for citizens and can often harm the environment. Indeed, many cities find they have to take expensive remedial action to fix problems caused by growth itself. It is better, then, not to assume that all growth is good, but to learn what smart growth looks like.

Smart growth depends upon a strategic approach that identifies the very best growth opportunities and nurtures them, planning so the city and its surroundings can cope with the demands growth will place on them, integrating environmental thinking, and ensuring that all citizens enjoy their city’s prosperity.

ADOPT A STRATEGIC APPROACH

While all city leaders look for ways to promote their city’s prosperity, what marks the best among them is the strategic manner in which they pursue that goal. Simply offering tax breaks to entice newcomers or deciding without sufficient analysis that the city’s future lies in the latest nascent industry, be it clean technology or biotechnology, is unlikely to have much impact. A more rigorous approach is required to identify the city’s best growth prospects. This is not to suggest that city governments should get overly involved in business. Rather, their leaders’ vision for the city should be colored by a sound assessment of where the city’s competitive advantages lie, so they can identify potential clusters of companies that can power growth. Cities must then support growth by making targeted investments and offering a “client service” to businesses to help them flourish.

Identify competitive clusters

Different cities have different starting points. But each needs to decide which sectors can best support growth and focus on those. Economic growth is likely to be stronger if clusters of companies from a sector or sectors develop. Their physical proximity to one another will lower supply costs, improve R&D collaboration, and assist the building of an appropriately skilled workforce, among other benefits.

A first step therefore is to identify a city’s competitive advantages. The exercise might reveal that existing clusters have potential to be strengthened or that new ones can be nurtured. Cities in the southeastern United States, including Atlanta, Savannah, and Nashville, have succeeded in attracting foreign automakers because of their core strengths: talent, proximity to centers of innovation and higher education, good transport, and low input costs. London, meanwhile, has succeeded in forming a new high-tech cluster known as Tech City as a result of a national government initiative to foster growth. Within three years in a small part of the city’s East End, the number of companies grew by 40%
of digital and creative companies in the cluster grew from 11 to 300.

**Invest to support growth**

Targeted public-sector investment may be required to attract business to the city. As the city of New York pointed out in its 2011 Sustainability Plan, “Today’s mobility of people and capital has created fierce competition among cities. We’re competing for the best ideas and the most capable workforce. To thrive economically, we must create a setting where talented entrepreneurs—and the businesses they grow—want to be.” In response, the city has set no fewer than 400 targets to be met by the end of 2013 to improve public safety, green areas, mobility, and much more.

Such improvements require investments of varying degrees. Dubai has invested hugely in infrastructure to transform itself into an international business and tourist center that is now home to the world’s largest port and the offices of 120 of the Fortune Global 500. The activities thus generated account for 25 percent of Dubai’s annual GDP and for 20 percent of foreign direct investment for the entire United Arab Emirates. On a different scale but no less targeted in its intent, the state of Georgia in the United States spent $14.5 million to build a job-training facility in West Point for would-be automotive workers to help secure an investment by car manufacturer Kia. According to Chris Cummiskey, commissioner of Georgia’s Department of Economic Development, “Our people went over to Korea to see how [Kia] runs a manufacturing plant. Then we replicated that, set up an onsite training center, sorted through 30,000 applications, found the best, and trained more than 1,000 people. On the first day, the company opened at 100 percent efficiency.” The job-training facility has since trained all 3,000 employees hired by Kia at its plant in West Point.

The city of Bogotá’s investment to attract IT companies was on a smaller scale but no less important to attracting business. “Lack of English-language skills was perceived as an obstacle for the IT sector, so we worked with the Economic Development Secretary to tackle it,” said Adrianna Suarez, director of the city’s investment promotion agency, Invest in Bogotá. “In 2008 we developed a program...”

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called Talk to the World to certify English-speaking people. Right now, 10,000 people are certified as English speakers, helping investors to find talent.”

**Think client service**

Cities can help attract companies and organizations to their chosen clusters by holding regular conversations with industry leaders; forging connections between businesses, investors, and talent; and organizing road shows and conferences. Mayors can play a leading role, using their convening power and connections and leading trade delegations that travel to target regions. Mike Bell, mayor of Toledo, Ohio, in the United States, succeeded in attracting Chinese companies to his city even though Toledo ranks 182nd in Forbes’s 2012 Best Places for Business and Careers. The mayor pitched Toledo’s advantages—affordability, manufacturing know-how, and central location at the intersection of two major interstate highways—and made three official visits to China with this pitch. His reward was Chinese investment worth more than $6 million, a new metalworking plant for a Chinese company, and the promise of further investment worth $200 million.5

But it is not only about shouting a city’s wares. Key to successful economic development campaigns is the attitude that investors and businesses are the city’s clients and the city must do what it can to help them thrive. “Our main question is, how can we, the city, serve them well?” commented Marcelo Haddad, president of the investment promotion agency Rio Negócios in Rio de Janeiro. Bogotá’s investment promotion agency provides free investment support services including fact-finding visits to the city, administrative support to apply for permits and comply with regulations, and programs to develop a trained workforce. Between 2010 and 2011, foreign direct investment in Bogotá increased by 27 percent. The UK government made legislative changes to entice companies to London’s Tech City, making it easier to issue visas to those running entrepreneurial companies and updating intellectual-property rights laws.

Some cities engage still more deeply, believing that an important way to drive a city’s economic growth is to home in on local companies that demonstrate high growth potential, as opposed to supporting all small businesses or focusing only on trying to attract new ones. The Edward Lowe Foundation, a US organization that promotes entrepreneurship, sees this as an often-overlooked element of what it calls economic gardening. It might entail connecting high-growth companies with those that can offer strategic advice on how to develop new markets or refine their business models, for example.6

**PLAN FOR CHANGE**

Smart growth means planning for what lies ahead. The world has many examples of cities that have expanded rapidly without any kind of planning. The result is chaotic at best, but too often it also impedes further development and is detrimental to citizens’ quality of life and the environment. City leaders therefore need to be forward looking, planning for growing and changing populations and the impact on transportation, schools, hospitals, and many other aspects of city life. They also need to make sure those plans can be adapted over time to reflect the changing needs of the city. The most effective cities adopt a regional perspective and make the planning process inclusive and flexible.

Adopt a regional perspective

Good city leaders think about regional growth, not just city growth, for as the metropolis expands, they will need the cooperation of surrounding municipalities and regional service providers. Without it, the result will likely be local competition and conflict, over- or underinvestment in infrastructure because of concerns about who pays for what and who benefits, and confusion over roles and responsibilities. An example of the need for cooperation is China’s Pearl River Delta region, which has five competing international airports in Guangzhou, Shenzhen, Zhuhai, Macau, and Hong Kong, all within an area of 39 square miles (100 square kilometers). The consequences—delayed flights, extra fuel costs, and concerns

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about safety—led to an agreement in 2012 aiming for more collaboration.

A regional planning model helps overcome such conflicts and so promotes growth not only in the city but also in the entire region. In Germany, the city-state of Berlin is surrounded by the state of Brandenburg. The two states’ inevitable impact on each other has shifted their relationship from informal collaboration to more formal arrangements, to the extent that they have a significant number of joint authorities, courts, offices, institutions, and agencies. One such joint organization, the Joint Spatial Planning Department, lays out land use policies and transportation guidelines for the whole region, which are followed by the two states’ own planning organizations. Similarly, the US city of Portland, Oregon, set up a Metro Council to oversee regional planning. Cities and counties in the region have representation on the council, but all have given up much of their own planning power in order to meet regional planning goals with the engagement and support of communities throughout the area.

**Make planning an inclusive process**

City planning needs to be a dialogue between parties, not an outcome dictated by any single party. Top-down planning alone, by a remote regional or metropolitan authority, cannot hope to address local concerns adequately, while a bottom-up approach led by smaller bodies risks unnecessary duplication and overlap, particularly in transportation and utility services. Smart growth therefore ensures a planning process that combines the two, and good planners are adept at managing the process that enables it.

The French region of Ile de France (essentially the Paris metropolitan area) adopted this approach in 2008, when municipal and county leaders came together to develop a regional plan that set targets to be met by 2030. A framework coordinates public policies on transportation, open space, land use, social inclusion, and housing; regulates local plans (for example, by prescribing density requirements); and oversees the location of regional infrastructure and transport. The views of local associations and public institutions have resulted in thousands of modifications. San Francisco’s approach to planning also takes care to involve citizens. The Trans Bay Redevelopment Project, for example, appointed a citizens’ advisory committee and has held three large facilitated workshops to gather local input on the design of the development.

**Keep it flexible**

Cities are increasingly adopting flexible urban plans that serve as frameworks into which they fit projects proposed at a local level. These plans are akin to a set of guiding principles to help planners to assess new proposals, rather than documents that determine the future once and for all. As a result, they evolve along with the city’s changing needs while ensuring that the city continues to make progress toward long-term targets.

This kind of flexibility requires a great deal of skill, and cities that excel at urban planning have multidisciplinary planning departments. San Francisco’s planning department works in this flexible way. The department, which employs some 100 people skilled in areas including urban planning, economics, and transportation, has a “live” plan based on principles that promote the city’s vision of “protecting, preserving and enhancing the city’s economic, social, cultural and aesthetic values.” The plan does not, however, specify precise usages for specific plots. Project proposals are instead assessed case by case with the principles in mind.
INTEGRATE ENVIRONMENTAL THINKING

The way city leaders integrate the environment into economic decision making is vital to smart growth. Already, cities produce 70 percent of global greenhouse gas emissions, largely from energy consumption in buildings and transportation. This takes a heavy toll on the local as well as global environment. Traffic congestion, for example, raises the cost of doing business, while the air pollution it generates threatens citizens’ health. Lack of regard for sustainability could threaten long-term growth prospects too, as resources become scarcer.

The optimum approach to environmentally aware growth recognizes the costs of degrading the environment and so integrates environmental goals into the planning process. Vancouver, for example, has a Greenest City Action Plan that sets targets for 2020. In common with Copenhagen, Europe’s most sustainable city according to Siemens’ European Green City Index, it aims to become carbon neutral (see sidebar “Copenhagen: Building for the environment,” page 12). Seattle has set a goal of zero waste to landfills, as have the Belgian region of Flanders, Kamikatsu in Japan, and Bath in England. Planning and building infrastructure in an environmentally conscious way and using a combination of pricing, regulations, and information campaigns to encourage citizens to safeguard resources can help achieve such goals.

Plan and build green infrastructure

At the current pace of urbanization, the world’s cities combined will add 65 million inhabitants a year between 2010 and 2025, according to MGI research. The resulting demand for infrastructure will mean that each year, for example, India’s cities will add floor space equivalent to the entire residential and commercial square footage of the city of Chicago. China’s cities will add 2.5 times that amount. Sustainable growth will therefore depend upon investment in infrastructure that reduces emissions, waste production, and water use, as the way we build and renovate our cities will determine their ecological sustainability for decades to come. Improving existing infrastructure, building green districts, and making the most of scarce land resources by building high-density communities can all help.

Improve existing infrastructure. Most cities have opportunities to reduce the environmental impact of existing infrastructure. The 2011 retrofit of New York’s Empire State Building transformed the approximately 80-year-old building into a landmark of green construction and placed it in the top 25 percent of US commercial office buildings in terms of energy efficiency. The retrofit implemented cutting-edge technologies, including windows, automated

8 McKinsey Global Institute, Resource revolution: Meeting the world’s energy, materials, food, and water needs (November 2011), mckinsey.com.
monitoring and controls systems, and high-efficiency cooling equipment. The $13.2 million invested in energy efficiency reduced annual energy consumption by 38 percent, generating a payback period of 3.5 years and reducing greenhouse gas emissions by 100,000 metric tons over 15 years.10

Many cities have sought to tackle traffic congestion and local air pollution problems by reserving stretches of road space for buses only. Istanbul, faced with delays in the construction of its subway system, dedicated 26 miles (nearly 42 kilometers) of existing road lanes to a new bus rapid-transit system. Buses in the system now travel the route approximately twice as fast as cars and arrive at 30- to 45-second intervals, giving continuous service to some 620,000 passengers a day.11 Bogotá, Delhi, and Pittsburgh are among the many other cities that have introduced bus rapid-transit systems over the past two decades.

Build green districts. Many cities seek to improve the energy efficiency of individual new buildings and infrastructure by requiring that they meet emerging green-building standards. Some go further, seeking to build entire “green districts.” There is no single definition of what constitutes a
Copenhagen
Building for the environment

The city of Copenhagen has invested substantially in green infrastructure and is now ranked the most sustainable city in Europe, according to Siemens' European Green City Index.

**Energy.** Each district has a centralized heating system that takes waste heat from electricity generation and uses it to heat buildings.

**Transportation.** The city has a world-class infrastructure for non-automobile transportation, including an extensive and expanding subway system, bus networks, and a suburban rail system. As a result, all residents live within about a quarter mile (400 metres) of public transportation. Copenhagen is also known for its bicycling culture and the infrastructure that supports it. There are 241 miles (388 kilometers) of cycling routes within the city, and 50 percent of commuting trips are by bicycle. A traffic system, called Green Wave, is being designed to ensure that cyclists will never encounter a red light on their commute to and from work. In addition, the city aims to facilitate the rollout of electric vehicles by installing charging infrastructure.

**Water.** In 2001, Copenhagen embarked on a scheme to replace its entire water main network over the course of the century, upgrading 1 percent of the network, or 5.6 miles (nine kilometers), each year. Water leakage is now 5 percent, compared with an average of 20 to 25 percent for most European cities. The city has also modernized the sewage system by building rainwater reservoirs, which store wastewater during storms until there is capacity in the sewage system, and systems to clean the water and minimize nutrient salts and heavy metals.

**Waste.** As well as regulations, incentives, and information campaigns to encourage waste diversion, the city has developed a pilot plant that separates household waste into organic and inorganic materials and produces biogas and bioethanol. These are used as an energy supply for the city’s district heating.

**Neighborhoods.** Copenhagen is piloting carbon-neutral neighborhoods with energy-efficient residential and commercial buildings, sustainable energy networks including renewable-energy installations, and low-emission transportation systems.
green district, although most aim to optimize resource consumption at scale. Exhibit 2 (overleaf) offers examples. Transit-oriented designs, microgrids, district heating and cooling systems, and rainwater management systems are all features of a green district. In some emerging cities where there is relatively little existing infrastructure, city leaders have the chance to build sustainable infrastructure from the outset at relatively low additional cost, surpassing the environmental credentials of even the most eco-friendly of today’s older cities. Some may even decide to build entire eco-cities.

Build high-density communities. Land consumption is inevitably a concern when considering a city’s growth, as land is becoming a scarce resource, and competition for it intense. This dictates the approach to urban planning of the mayor of Rio de Janeiro, Eduardo Paes. “It’s not about extending boundaries,” he says. “It’s about regaining lost spaces.” Singapore approaches the problem methodically, identifying plots that are underutilized with a view to encouraging high-density development wherever possible. New York encourages the refurbishment of existing housing units, sometimes splitting them into smaller units or studios and building on rooftops.

High-density communities are a response not only to land constraints but also to concern about the environment, as they tend to use fewer resources—allowing people to walk rather than use cars, for example. They also tend to reduce unit infrastructure costs. However, high-density areas need to be close to good public transportation, so their success usually requires the expansion and upgrading of mass-transit systems. The city of Chicago decided to increase the concentration of new housing and commercial developments around existing or extended rail lines. Its “Go to 2040” plan set the ambition that 75 percent of residents’ homes should be within walking distance of public transit by 2040.
Chengdu, China’s westernmost megacity, is building a “prototype city” designed for 80,000 residents who will live and work within a half-square-mile circle, where any one location will be no more than a 15-minute walk away from any other. The plan aims to cut landfill by 89 percent, wastewater by 58 percent, and energy use by 48 percent compared with a typical Chinese city the same size, reductions largely facilitated by the city’s design. While the outcome remains to be seen, Chengdu’s ambitious sustainability goals may prove to be a model for future investment in environmental infrastructure in China and beyond.

**Safeguard resources**

A mixture of pricing mechanisms (both penalties and incentives), information, and regulation can be used to improve the use of resources.

**Pricing.** Zurich uses pricing to reduce the volume of household rubbish, requiring residents to dispose of rubbish in garbage bags that cost around $4.25 each. As a result, household rubbish has decreased by 40 percent, with the average Zurich resident generating 25 percent less waste than the average European. Singapore uses pricing to tackle road congestion. Its electronic road-pricing system, recognized as one of the world’s most innovative, sets a variable congestion charge according to prevailing traffic conditions. As well as reducing congestion and emissions by encouraging drivers to take less-congested roads, join
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Carpools, or use public transport, the scheme generated revenue of $125 million for the city in 2010. Plans include combining these variable fees with a charge for the distance traveled.

*Information*. Sometimes offering more information can change behavior. When the local authority of Les Sorinières in western France announced a pilot scheme to charge residents for each garbage bin they put out for collection, it simultaneously began to track waste volume throughout the city and give householders data on the amount of waste they were generating. The result? Waste dropped by more than 20 percent, and the volume of recycled waste rose. The plan to charge residents was not implemented, as it was deemed no longer necessary, and the change in behavior has persisted.

*Regulation*. Green building codes can increase energy efficiency in new buildings. Having discovered that commercial buildings consumed 80 percent of the city’s electricity, the authorities in Washington, DC, implemented building codes that require all construction projects in publicly owned buildings to apply for Leadership in Energy and Environmental Design (LEED) certification, a standard for measuring a building’s sustainability. To encourage owners of private and residential buildings to seek certification, the city offers rebates on retrofit costs and expedites the permit application process. Washington and New York City now have the most LEED projects in the United States. San Francisco uses regulation to reduce waste sent to landfills. Residents are obliged to compost leftover food, while construction companies have to recycle or reuse at least 65 percent of waste at building sites. As a result of the mandates plus the collaboration of local waste-recycling company Recology, 77 percent of the city’s waste is now recycled or composted rather than sent to landfill, the highest diversion rate in the United States.
**INSIST ON OPPORTUNITY FOR ALL**

A great city’s value proposition is not confined to luring business. It offers opportunities to all residents, seeks to reduce inequalities, and protect the vulnerable. According to the mayor of Boston, Thomas Menino, “My job is to make sure that everybody has an opportunity in Boston. More than 50 percent of our population is made up of different minorities. We have to look out for everyone. This includes good education, good schools, and good services.” There are myriad ways to promote opportunity and quality of life for all. Our research points to three of the most important actions:

**Connect the city outskirts.** Those living on city peripheries can feel excluded and find it hard to take up available jobs unless there is transportation linking them to the center. This was the case in Boston, where the train line running between the central business district and the southern outskirts of the city had only three stops, leaving some of the most densely populated and poorest city regions three miles (4.8 kilometers) from the nearest station on the line. The Massachusetts Bay Transit Authority therefore committed $37.2 million to upgrade the line in 2002, adding four new stations. Communities along the route have since been revitalized: community development corporations have bought and rebuilt 1,500 housing units, developed 780,000 square feet (roughly 72,000 square meters) of commercial space, and created some 1,300 jobs.

**Promote social integration.** Progressive city governments run schemes to integrate the most vulnerable members of society. For example, Chengdu’s Migrant Management Office, which is a division of city government, historically focused on controlling migrant populations. Today it has an explicit mandate to help migrants access the city’s educational, health, and community resources. Los Angeles and Amsterdam run schemes to reduce youth criminality and participation in gangs. And Berlin runs an initiative to improve education, employment, and social and ethnic integration in struggling neighborhoods. Thirty-four districts are under the scheme’s management, and many have been transformed to the extent that they are no longer regarded as deprived.

**Build affordable housing.** Globally, one billion people—32 percent of the urban population—live in slums. Education and job creation are the primary means of helping these populations move into the formal urban structure. But as living standards rise, access to affordable inner-city housing is critical—not only to meet the housing needs of those looking to move into the city, but also to ensure that lower-income residents are not forced out of the city by housing costs as the city
grows in prosperity. Great cities are diverse communities. Recognizing this, the Hong Kong government is proposing requiring developers to provide affordable public housing as a condition of being allowed to build commercial properties. In Singapore, over 80 percent of the population lives in government subsidized housing designed to ensure access to affordable housing for all income levels. And in San Francisco, Hope SF, a partnership between the city and private developers, is transforming 2,500 distressed public housing units on five sites into thriving, mixed-income communities with more than 50,000 housing units. The scheme also involves investment in surrounding neighborhoods.
Do more with less

Few cities are awash with financial resources. On the contrary, their budgets are under pressure. A first step is therefore to secure all revenues due, and do so at low cost. A high-performing tax agency that strives to implement best practices in all its functions will help. So too will incentives. São Paulo has increased the collection of its value-added tax (VAT) by 7 percent a year since 2007 by offering a 30 percent rebate on VAT paid by consumers who submit an electronic receipt for the goods bought. The receipt reduces the underreporting of sales by store owners. Other ways to increase revenues include sponsorship arrangements such as naming rights and the leasing of city-owned assets for private use. London secured £50 million ($74.4 million) over eight years from Barclays Bank to sponsor the city’s bicycle-sharing program and £37 million ($55.1 million) over ten years from Emirates Airlines to sponsor a cable car across the river Thames.

Then, to make the most of the available resources, effective city leaders rigorously assess and manage expenses, explore private partnerships, introduce investment accountability, and embrace technology. The constant aim is to do more with less.

**ASSESS AND MANAGE EXPENSES RIGOROUSLY**

Cost-efficient operations are a hallmark of high-performing cities in good times and bad. Besides making the best use of taxpayers’ contributions, cost efficiency is key to prudent budgeting; by staying lean in good times, cities can put funds aside to cover operating costs when tax revenue falls short, thus avoiding cuts to core services when the cycle turns and people need the services most. The elimination of waste and deployment of limited resources for maximum impact are therefore priorities at all times.

There are numerous ways to improve a city’s cost efficiency. A few possibilities are outsourcing to lower-cost centers, cost-efficient IT investments, organizational changes that eliminate overlapping roles, and a review of processes to eliminate waste—perhaps to ensure customer service inquiries get routed directly to the right team, for example. All save money that can be better spent elsewhere. In 2011, New York’s Metropolitan Transit Authority launched a strategic procurement initiative aimed at realizing savings of at least $100 million. New measures included the introduction of real-time, online reverse auctions, which were intended to save on contracts for office supplies, computers, and facilities services, and the downgrading of standardized specifications on vehicles and computers, which aimed to reduce unit prices.

Zero-based budgeting processes can help identify scope for cost efficiencies. Traditional budgeting procedures work on the assumption that the “baseline” is automatically approved, so department heads have to justify their spending
only when it is set to rise or fall. With zero-based budgeting, every line item of the budget must be approved. This is the process that the US city of Phoenix, Arizona, deployed for the fiscal year 2012–13, after citizens complained that their city’s spending plans were opaque and questioned water rate increases, employee promotions, and longevity bonuses. The result was a balanced budget, in contrast with shortfalls in the two previous years.

**EXPLORE PARTNERSHIPS**

Many cities remain reluctant to enter private-public partnerships (PPPs), wary of giving away control of what they see as core functions to the private sector, potential job losses, and the quality of service delivered. Moreover, if the function can be value-creating (as is often the case for waste management, for example), why hand it over to the private sector? PPPs are certainly not always the right choice. However, successful city leaders have learned that, if designed and executed well, private-sector expertise harnessed within a PPP has the potential to deliver lower-cost, higher-quality infrastructure and services, making them an essential element of smart growth. For example, in 2011, the US city of Denver, Colorado, set up the East and Gold Line Enterprise (Eagle) PPP to develop 122 miles (196 kilometers) of commuter and light rail. The cost of the project came in $300 million below internal estimates.12

Paes, Rio de Janeiro’s mayor, has eagerly embarked on a string of high-profile PPPs, including the redevelopment of the city’s old port area, and the TransOlimpica road and Bus Rapid Transit development. “I’m thrilled when the private sector shows interest in projects where it can make a profit. It allows me to spend money on projects in which it has no interest. The private sector does not want to pay for free schools, for example,” he says. But he, like others, realizes that the key to a successful PPP is the ability to define concrete, measurable goals for which private enterprise can be rewarded. If the objectives are complex and diffuse, so that it becomes difficult to align profit with goals without undermining some other desirable outcome, PPPs may not be the right solution.

Cities that have a successful track record therefore develop and publish a clear cost-benefit analysis to gain and demonstrate support from citizens and business alike, establishing economic and socioeconomic goals and performance metrics to avoid conflicts of interest that can arise if the public sector focuses on the quality of service delivery and undefined social benefits, while private partners focus on economic efficiencies. At the same time, they avoid overspecification, such as dictating precisely the technologies that must be deployed or the design requirements. Such strictures can lead to higher costs, and finding the best solution can be left to the better-qualified private partner once goals are set. One of the best-known PPP markets in the world is that for road building in the United Kingdom. There,
the government imposes only very high-level guidelines and regulations, such as the conditions under which toll roads can be built.

Cities that have not entered into a PPP before will need to hire legal and strategic advisers with a track record of successful deals. This will ensure a smooth pathway to well-designed agreements and give the private sector greater confidence that the city has done the proper analysis and has the right legal frameworks in place. Canada’s Vancouver, which has $3.5 billion worth of public and private investment in transportation infrastructure projects, is supported by Partnership BC, a company that is owned by the province of British Columbia, reports to the minister of finance, and has vast private-sector experience.

**INTRODUCE INVESTMENT ACCOUNTABILITY**

It is notoriously hard for any organization to manage large capital investments well, and cities are no different. Often they end up with gold-plated systems that are unnecessarily expensive, especially if contractors are allowed to charge on a cost-plus system. Alternatively, they cut back on capital expenses only to end up with higher operational costs, which
can then lead to cash constraints and poor performance of services. Deferring decisions to buy a new bus fleet, for example, could raise the cost of operating the current one due to mounting maintenance expenses. Investment accountability helps prevent such problems and so enables city authorities to do more with less. But like PPP projects, it requires highly capable staff with experience in evaluating and running capital projects.

A large component of investment accountability is knowledge of how best to prioritize spending. The first step is developing a portfolio of infrastructure projects and evaluating them to ensure the proposed projects meet specific goals. There must be an analytical approach to measuring the return on investment (ROI), using quantitative metrics to reflect both the traditional ROI elements of a public capital project and the city’s economic, environmental, and social goals. In the traditional category are feasibility, impact on safety, and the extent to which the investment can defer maintenance spending. The second set of goals may include job creation, tax revenues, carbon reduction, and access to social services.

The analysis often reveals potential to meet some needs better by improving existing capacity rather than investing in costly new projects. One European city that was anxious to reduce traffic congestion sought to entice more commuters on to public transportation, in part by improving the efficiency of the existing network. It instigated a range of measures such as ensuring maintenance was carried out overnight, improving the coverage and frequency of buses, creating dedicated bus lanes to speed up public transportation, introducing tickets that could be used on any mode of transport and allowed passengers to make any number of changes, and expanding the ticket distribution system so passengers did not have to stand in line to buy tickets. The average time saved on a typical commute is about 16 minutes as a result of these kinds of measures.

A recent MGI report emphasized the extent to which money is unnecessarily spent on new infrastructure when what exists can be improved. For example, reducing transmission and distribution losses in power and water (which can be more than 50 percent of supply in
some developing countries) often costs less than 3 percent of the cost of adding the equivalent new production capacity.

Active management is another component of investment accountability. The same MGI research identified potential to save up to $400 billion annually in global infrastructure costs by streamlining delivery of major projects. Much of the opportunity lies in speeding up approval processes, investing heavily in the early stages of project planning and design, and structuring contracts to encourage time and cost savings by, for example, stipulating that the lowest-cost means must be used to meet a prescribed performance specification.

Governance systems are the third component. Often, these systems will need to be upgraded so cities can plan and manage infrastructure projects optimally, as many cities currently lack the necessary specialized skills in project development, accounting, and management. In 2005, San Francisco developed a new governance structure to oversee the capital planning process. It included a Capital Planning Committee that is responsible not only for prioritizing capital projects, but also for forecasting maintenance costs at the department level and engaging citizens in the decision-making process.

**EMBRACE TECHNOLOGY**

Technological advances give city leaders the tools to collect vast quantities of data, which—if the right systems, structures, and people are in place—can be analyzed and applied to help reduce capital and operating expenditures, increase revenues, and improve services. According to Seth Pinsky, president of the New York City Economic Development Corporation, “Using data is fundamental, and we’re constantly investing in this area.”

There are many examples of cities that are doing the same. Smart technology is deployed to dim or turn up street lighting automatically by using real-time data on prevailing light
conditions, saving as much as 30 percent on energy costs while still providing residents with safe lighting. Cameras at intersections are used to optimize traffic lights and cut transit time while reducing air pollution and the costs of tackling it. And crime is reduced by analyzing crime data and using predictive technology to indicate where illegal activity is likely to occur.\footnote{Brian Heaton, “Predictive policing a success in Santa Cruz, Calif.”, Government Technology, October 8, 2012, http://www.govtech.com/public-safety/Predictive-Policing-a-Success-in-Santa-Cruz-Calif.html.}

Singapore uses OneMap, an online portal that enables government, businesses, organizations, and residents to use geospatial data. Parents use it extensively to find elementary schools within 0.6 mile (1 kilometer) of their homes, as Singapore’s system for placing children into an elementary school gives priority to those who live within that distance.

Smart technology also means data from different government sources can be combined and analyzed to reveal valuable insights. Several leading cities are creating teams whose purpose is to do exactly this. In New York, the analysis of reports of clogged catch basins along with data showing which nearby restaurants had not reported using licensed waste haulers suggested which ones might be illegally dumping grease down the drain. Inspectors then targeted the likely suspects (and gave them information about biodiesel companies that would pay to collect the used oil). As a result, inspectors identified illegal dumping in 95 percent of site visits. Similarly, cross-departmental data analysis found ways to improve the efficiency of building inspectors and so reduce the risk of fire in so-called illegal conversions (buildings housing more people than legally permitted). By combining data about neighborhood economic conditions, the age of a building, whether the building was under foreclosure, and complaints made by neighbors, inspectors were able to detect major safety problems in 80 percent of their site visits, compared with 13 percent previously.\footnote{Sharon Machlis, “How New York data analysts not only boost efficiency, but save lives,” Computerworld, September 19, 2012, http://blogs.computerworld.com/business-intelligence-analytics/2012/how-new-york-data-analysts-not-only-boost-efficiency-but-save-lives.}

Big data and smart technologies can also help engage citizens and business in the process of improving a city and its services. Consider these examples:

- In Boston, citizens use a digital application to register concerns about streets that need cleaning or potholes that need fixing,
helping the city authorities to address the problems quickly without first having to dispatch employees to investigate. Potholes, for example, are detected by volunteer citizens who use a mobile app that applies an accelerometer and GPS to record and locate any bumps hit by the car the user is driving.

- Berlin posts information online about pending changes to its land use plan, helping the city collect feedback from many more residents.

- Alameda County, California, which covers most of the East Bay region of the San Francisco Bay Area, launched an interactive Budget Challenge Web site. The site invited users to tackle the same policy decisions that the mayor and city council faced in balancing the budget: which programs to cut, which funds to shift, which taxes to raise, and by how much.

- In London, the transport operator Transport for London has shared its data to encourage the development of service-oriented apps such as BusIT London, which suggests the best bus route for any journey in the city depending on the user’s location.

- Bucheon City in South Korea provides drivers with real-time traffic information from various sources, such as cameras and speed radars, helping drivers to avoid congested roads and city authorities to track traffic volumes and plan for new roads.
Win support for change

Many city leaders craft a personal vision that drives their endeavors. Yet however far-sighted the vision, its real value lies in the changes people come to see in their lives. Achieving smart growth and doing more with less both deliver results. But no change effort is easy, and momentum can even attract opposition. Successful city leaders therefore need large reserves of resilience to see their vision through. They never give up. But they cannot do it alone. To win long-term support for change, they will need to deliver results swiftly, and for that, they will need to build a high-performing team of civil servants, create a working environment where all employees are accountable for their actions, and take every opportunity to forge stakeholder consensus. This reinforces the personal vision. Indeed, it is the means by which the vision will be ultimately realized.

CRAFT A PERSONAL VISION

Struggling cities often lack a coherent vision that the city hall and citizens understand and support. Outstanding cities, in contrast, are associated with a vision that powers progress. “In my job as CEO of the city, a large part of what I do is articulate the vision of the board and the community,” says R. T. Rybak, mayor of Minneapolis. That vision expresses the city’s history as well as its aspirations, and Rybak believes it is his job to convey this vision to residents and to guide city hall toward realizing it. It influences everything from long-term capital plans to the look of the city’s streets.

Michael Bloomberg, mayor of New York, embodies the idea of mayor as CEO. His vision is of New York City as a business and its residents as customers who deserve high-quality services. The concept influences the working style of every city department. For example, a 24-hour, 3-1-1 call line makes it easier and faster for citizens to find information. The city introduced this service after the newly elected mayor came across an overturned garbage can, asked who should be notified to clean up the mess, and received three different answers from three of his aides.

Personal commitment to the vision gives it credence. There is no doubting, for example, the commitment of Boris Johnson, mayor of London, to making the city a success on the world stage. This was particularly apparent in relation to the Olympic Games. As the games infrastructure took shape, Johnson became personally involved in the major transit expansions and upgrades (even, in the run-up to the event, recording messages to be played on the London Underground to encourage commuters to plan their journeys during the games), while supporting alternative modes of transportation by bicycling to work.

In Seoul, the vision of the mayor, Park Won-soon, is of a city that is open and democratic,
values he attempts to exemplify through his own actions. Park was a student activist, expelled from school for taking part in political demonstrations, and before his election was a human rights lawyer and leader of civic organizations that sought to expose government corruption. He came into office pushing for more open, democratic government. His philosophy was “No one great genius can lead a city . . . . Instead citizens need to lead, and my job is to get their ideas into the system.” Civic committees, mechanisms for e-government, a participatory budgeting process, and increased disclosure of government information are ways of putting that philosophy into action. Although many civil servants are uncomfortable with the level of disclosure, Park believes that if the mayor is determined and sets a strong example, civil servants will follow. To symbolize openness and accountability, his inauguration was conducted entirely online with residents texting questions to him.

**BUILD A HIGH-PERFORMING TEAM**

Park was aware that he could not bring about change on his own, however strong his passion. Other city leaders know this, too. “The thing I’ve done most successfully is hire good people,” says Chris Coleman, mayor of Saint Paul, Minnesota. “Manage but don’t overmanage. Trust the team. Treat them professionally.” In this way, mayors can move from being visionaries constrained by election cycles to managers who can drive lasting change throughout a city. It entails recruiting and retaining the best talent, getting the most out of it though collaboration, and investing in learning.

_Recruit and retain top talent._ To attract the best people, the best city governments have targeted, data-driven recruitment processes, and they strive to employ people who bring skills and perspectives from the public, private, and social sectors. Such diversity helps city governments understand, communicate, and work with a broad range of stakeholders. “We’re trying to create the right mix of people and skills at our municipality government,” says Boston’s Mayor Menino. “We want graduates from Harvard, very well trained, as well as people with deep local knowledge of our problems and neighborhoods. You need be thoughtful in creating the right mix of folks. You need to work hard to attract the right people.” Some cities find they have to make
significant changes to the working environment to meet this challenge, offering opportunities for employee development along with competitive compensation and benefits. The sidebar “Singapore: Retaining talent” describes how this city goes about recruiting, developing, and retaining high performers.

Get the most from the team through collaboration. To get the most from teams, cross-departmental collaboration is needed to facilitate idea generation and project coordination. In New York City, Mayor Bloomberg has introduced the Office for Long-term Planning and Sustainability, a dedicated body that reports directly to the mayor and focuses on cross-agency issues and coordination of long-term plans. Bloomberg has styled his office around the “bullpen” of a trading room, with the mayor, deputy mayors, and chiefs of staff sharing one large, open-plan room. Staff members are encouraged to hold meetings on central daises rather than in closed-off conference rooms. In Luxembourg, the former mayor of Luxembourg City, Paul Helminger, sums up city government thus: “There is one key rule to organization of city governments: you need to ensure organization across departments.”

Invest in learning. Increasingly, new skills are required of civil servants. As technology and data analysis become central to setting local policy and delivering city services, for example, many

Singapore Retaining talent

Singapore has attracted, developed, and retained top talent by making substantial changes to its work environment. Today, Singapore’s civil service is ranked among the most efficient and least corrupt in the world.

Compensation. The civil service in Singapore receives market-competitive salaries benchmarked to the private sector.

Meritocracy. Compensation and promotions are largely performance based. Once a year, supervisors meet staff individually to review their performance, report on it, and offer guidance for earning promotion. Staff members are assigned a mark for “currently estimated potential,” which forecasts their career path and speed of progress based on skills and character.

Training and development. Government agencies are given training budgets, and it is their responsibility to ensure that staff members receive training. Public officers receive 100 hours of training a year. Every employee is given individual guidance on what programs to take. Strong performers are put forward for leadership development opportunities such as departmental rotations and specialized leadership training.

Employee engagement. Singapore stresses the importance of public service, framing the work of city officials as a duty. Supervisors, managers, and other government leaders highlight this sense of duty to motivate frontline public servants.
civil servants require additional training in the use of technology. In Japan, as a result of decentralization, city governments have begun to train staff in legal and policy formulation skills. In China, the federal government has invested in more than ten institutes whose sole purpose is to provide training to current city officials.

CREATE A CULTURE OF ACCOUNTABILITY

No city vision is likely to be realized without a culture of accountability that holds individuals responsible for progress toward it. First, cities need plans that map the way forward, with metrics to gauge progress. After the 2011 earthquake and tsunami, Tokyo revised a previous ten-year plan with new objectives to improve disaster management and international competitiveness. To meet these objectives, it set quantifiable goals such as completing seismic assessments of all elementary and middle schools, developing 741 more acres (300 hectares) of green space, and using business incentives to attract 500 additional foreign companies to Tokyo by 2016.

Performance management systems help achieve such goals and can bring about a culture of accountability at all levels. Minneapolis has developed a program called Results Minneapolis, whereby each department head is assigned a series of metrics and targets he or she is responsible for achieving. A senior team then meets with a different department head each week to track progress, discuss strategies, and identify areas where the city is performing well and where there are opportunities for improvement. The information is also published online, allowing residents to track performance.

Many city leaders use performance management offices or delivery teams to assist or monitor progress toward goals, particularly for high-priority projects. For example, when Chicago launched its Retrofit Chicago Residential Partnership, aimed at providing homeowners with resources and information relating to residential energy efficiency, the city’s Innovation Delivery Team ran a data analysis to determine where retrofits would
have the greatest impact, and helped design an outreach strategy to reach homeowners who might be interested.

**FORGE STAKEHOLDER CONSENSUS**

Building consensus with the local population and the business community through transparency and two-way communication is key to defining a city leader’s vision. “Get everyone engaged,” says Boston’s Mayor Menino. “Listen to the neighborhoods. The story of change is not about the mayor, it is about the engagement. Make people believe and understand you’re making their lives better.”

This paper has already described how many city leaders strive to engage with their stakeholders during the planning process, and how they commandeer the power of big data to engage their citizens in the management of the city. In addition, cities can harness the broader power of their business and civic communities though formal organizations or new structures. World Business Chicago, a not-for-profit economic development organization, recently expanded its board to include more than 60 business leaders. With a revised mission to promote broad economic growth rather than simply attract business, it has a staffed program office to implement its growth strategy and ten leadership committees that include business, not-for-profit, academic, and other civil leaders. Similarly, collaborative partnerships between businesses, non-profit bodies, and government can be effective at setting a regional agenda and broadening support for their policies. For instance, the Itasca Project in the Minneapolis–Saint Paul metro region is a virtual coalition of civic and business leaders who contribute expertise in the field of planning and funding, and in other areas affecting regional economic competitiveness, such as education and job growth.
Pilot programs also are important for winning support, as they test whether a new service or an innovation will work with a small group of people before it is rolled out widely. Mayors cannot afford many mistakes if they are to maintain citizens’ good will. Mayor Bloomberg in New York City launched his historic reform of the school system as a pilot, and he did the same with making Times Square pedestrian-friendly and adding bike lanes in the city. Similarly, Mayor Jaime Lerner piloted bus rapid transit in Curitiba, Brazil, before rolling it out to the entire city.

Public backing also improves the likelihood of reaching longer-term goals. Mayors are only too aware that their tenure will be limited. But if longer-term plans are articulated—and gain popular support because of short-term successes—subsequent city leaders may find them harder to ignore.

While city leaders will want to consider all the ideas addressed in this report, they will have different priorities. Those priorities will be shaped by their own passions and vision, and by their cities’ needs. City leaders will find themselves at different starting points in their quest to make their cities great, so each will have a different mandate. For some, kick-starting economic growth may be more important than improving performance. Imposing budgetary discipline may be the burning issue for others, while some may feel that further progress depends upon building an ace team. But wherever the starting point and whatever the ambition, delivering results is the only fuel for change, and delivering results will ultimately hinge upon mastering many of the management practices described in this paper. City leaders who attain that mastery will find themselves equipped to achieve smart growth, do more with less, and win support for change—the three hallmarks of any journey on the road to greatness.
“How to make a city great” builds on the insights and advice of city and community leaders in over 30 cities around the world. We would like to thank all of those who took the time to share their stories and learnings with our team. This report would not have been possible without their input.

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