

handshake

IFC's quarterly journal on public-private partnerships

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mass rapid transit: A tool for urban expansion

financing: Beyond sovereign guarantees

low-income housing: Lessons from Latin America

q&a: Economist Edward Glaeser, former U.K. Secretary of State for International Development
Clare Short, Barcelona Global
CEO Mateu Hernández



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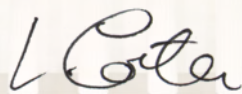
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Letter from IFC

There is a near-perfect correlation between urbanization and prosperity across nations, as pioneering urban economist Edward Glaeser points out in his myth-busting *Triumph of the City*. He reminds us that “the real city is made of flesh, not concrete,” and that cities succeed or fail due to human capital, rather than physical capital. However, the right physical capital—thoughtfully tailored infrastructure—increases the efficiency of cities, allowing for more and better innovation. Public-private partnerships (PPPs), at their best, facilitate this growth on a scale and timeline that would be impossible without private capital.

This issue of *Handshake* takes readers on a tour of urban PPPs that put citizens first. Expert authors introduce readers to solutions that have revolutionized citydwellers’ experience, like PPPs for housing, transportation, and water delivery. We focus especially on the need for a new vision of the city, featuring provocative discussions with Glaeser and with Clare Short, former U.K. Secretary of State for International Development. Glaeser reacquaints readers with the virtuous cycle created by dense urban spaces, where employers are attracted by the large pool of potential employees and workers are drawn by the abundance of potential employers. Short builds on the social benefits of this urban concentration. By pointing out that “real democracy” is based on the practice of engaging people in local development, she returns us to the certainty that cities are at the heart of civilization.



Laurence Carter, Director



Tanya Scobie Oliveira, Editor

IFC Advisory Services in Public-Private Partnerships

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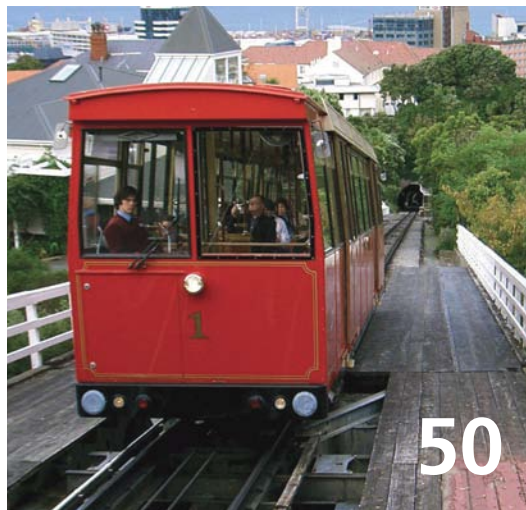
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PERSPECTIVE

GETTING CITIES RIGHT

By Abha Joshi-Ghani & Vipul Bhagat



Cities are the hearts of nations, and their pulse can be felt upon touchdown. Does it take too long to make your way out of the terminal? Can you easily find a trolley for your luggage? Are taxis waiting to take you to convenient hotels? Do bad roads turn a ten-mile ride into a two-hour nightmare? How readable is the signage along the way? Do the streets look clean, or are garbage cans overflowing? Those and many other successful elements of urban infrastructure and services create a world-class city.

World-class cities do not result from public efforts alone. Cities are limited in resources and must engage the private sector to meet infrastructure and service provision needs. Urban public-private partnerships (PPPs) are one answer. They help deliver city services and infrastructure by introducing private sector innovation, efficiency, and financing. We see long-term, positive effects of PPPs across the globe, from a toll ring road in Tamil Nadu to the reinvention of Barcelona for the 1992 Olympics.

The role of PPPs in urban settings is particularly relevant now, as the world experiences a massive upsurge in the population of cities. By 2030, many cities will have doubled in population. The impact will be strongest in many African and Asian cities with rudimentary infrastructure—metropolitan areas that are already bursting at the seams. PPPs will allow these constrained cities to meet the needs of their burgeoning populations, supplying the resources that make a city livable and attractive, in the midst of this unprecedented demographic shift.

MEASURING SUCCESS

The success of these PPPs will be measured by how they contribute to urban growth: making opportunities for businesses to innovate, assur-

Thinking ahead guarantees the sustainability of rapidly urbanizing areas around the globe.

ing services reach the right people, and keeping citizens mobile, employed, and safe. After all, as pioneering urban economist Edward Glaeser (*Triumph of the City*) says in *Handshake's* feature interview, cities are ultimately about human capital, not physical capital. This basic understanding underpins the diversity of urban PPPs profiled here, including those that:

CREATE COMMUNITIES

Handshake showcases urban PPPs that make a difference at the local level, such as community water supply schemes and popular bikeshare programs. These projects show that it's not always necessary to attract big players to improve citizens' quality of life. Small-scale projects in transportation can include modest bus terminals (a steady revenue stream is assured because you capture value around the land, attracting shops and other renters), a sole cable car, or a parking garage (the direct revenue stream makes this one of the most straightforward urban PPPs around).

TRANSFORM TRANSPORTATION

Handshake's feature on innovative transportation PPPs includes links to Bogota's successful, cost-effective TransMilenio, which operates like a rail-based system, and São Paulo's Yellow Line, which boosts the reach of that city's urban rail network to 420 km. Mass Rapid Transit (MRT) projects like these are tools for urban expansion, as experts explain in an article about balancing MRTs' complexity and risks with the benefits.

TREAT WASTE AND DELIVER WATER

In wastewater treatment, the private sector builds and operates the treatment facility, and absorbs the up-front capital investment while the public sector provides residential connections and bears the risk of collecting user charges. Water delivery projects in Morocco, Colombia, and Bucharest present several different options for city governments to fulfill the basic obligation to deliver water 24/7. Manila Water deserves singling out in our pages because the city was infamous throughout Asia for its outdated, inefficient water system. The privatization of Manila's Metropolitan Waterworks and Sewerage System, on which IFC was lead advisor, fundamentally changed the sector.

REGENERATE BROWNFIELDS

PPPs can also be the key to brownfield development, when old industries have disappeared and the land left behind, often in prime areas, is too polluted to build on. A forward-looking govern-

ment will clean up that land and bid it out for redevelopment. The same is true for waterfronts – prime spots for squatters in cities with little or no provision for low-income housing. Mixed-use PPPs provide a way to compensate the squatters fairly, clean up the land, and put amenities and real estate in a central location.

SUPPLY LOW-INCOME HOUSING AND DEVELOP SLUMS


Many cities see the benefits of mixed-use and low-income housing, offering incentives to developers. *Handshake* gives readers insight into Latin American countries that have instituted sweeping structural reforms in the urban housing sector during the last two decades. These countries, including Brazil, Chile, Colombia, and Mexico, have built sound regulatory environments conducive to the growth of primary mortgage markets. In the same section, we address the PPP potential of slum development, noting that the poor's purchasing power can represent a significant market for the private sector if organized and leveraged effectively.

IF YOU BUILD IT, THEY WILL COME

Cities must plan ahead and build infrastructure before it's needed, being proactive rather than reactive. The investments may not break even quickly, but they attract people and firms that are vital for vibrant world-class cities. Chinese cities, for example, invested billions in infrastructure in anticipation of growth, and many of their cities are already up to capacity. A forthcoming World Bank publication excerpted in this issue explains

how China's rapid urbanization could ultimately create 45 million jobs in urban areas. In Barcelona, innovation and foresight also pay off for generations that follow, explains Mateu Hernández, CEO of Barcelona Global, in *Handshake's* first video interview.

Thinking ahead guarantees the sustainability of rapidly urbanizing areas around the globe, and our treatment of cities and climate change reinforces why cities must be compact and energy-efficient, green and sustainable. Sustainable cities are also inclusive, former U.K. Secretary of State for International Development Clare Short reminds us in *Handshake's* second feature interview. These cities integrate all of their citizens into the socioeconomic fabric, engaging them in developing the practical systems that comprise "real democracy."

Ultimately, as with most things in life, the key to success for cities is in doing all of this well, as Cities Alliance Manager William Cobbett tells *Handshake* readers. "Getting cities right... will become the most important developmental challenge of this and the next generation," he concludes, explaining what's at stake in rapid urbanization. "Cities are the places where we will fail, or succeed, in dealing with most of our global challenges." 

Saint Petersburg: Lessons in PPP implementation

By Jeff Delmon

The enchanting city of Saint Petersburg, Russia, boasts the canals of Venice, the cathedrals of Paris, the architecture of Stockholm, and the non-stop festival atmosphere of white nights in July and August. As Russia's second city, with around 4 million people and a bustling economy, it is also becoming a global business leader, and many have watched with great interest during the past several years as the federal government started efforts to implement PPPs. Saint Petersburg has now closed five projects, and several more are in process. It has not been easy; the city has learned hard-won lessons along the way, including:

Lesson 1: Start with the basics.

The city started with projects—very big, very bold projects, like a €6 billion toll road and a €1 billion tunnel, followed by a €1 billion light rail line and a €1.2 billion airport expansion. The toll road and tunnel came to bid in late 2008—leading to Lesson 1a: Timing is everything. But rather than get discouraged, the city restructured the tunnel, flipping it around so that the concessionaire finalized the design first, thereby delaying the search for financing until the

markets could recover. The toll road bid process was cancelled and the project broken up (more on this later). The light rail project was also restructured to fit with evolving ridership in the city. The airport, the last project to be launched, was the first to reach financial close, so here we simply note that hard currency revenues and an existing asset and revenue stream are convenient advantages when financial markets are lean. Lesson 1b: Roll with the punches.

Lesson 2: Maintain the vision while remaining practical.

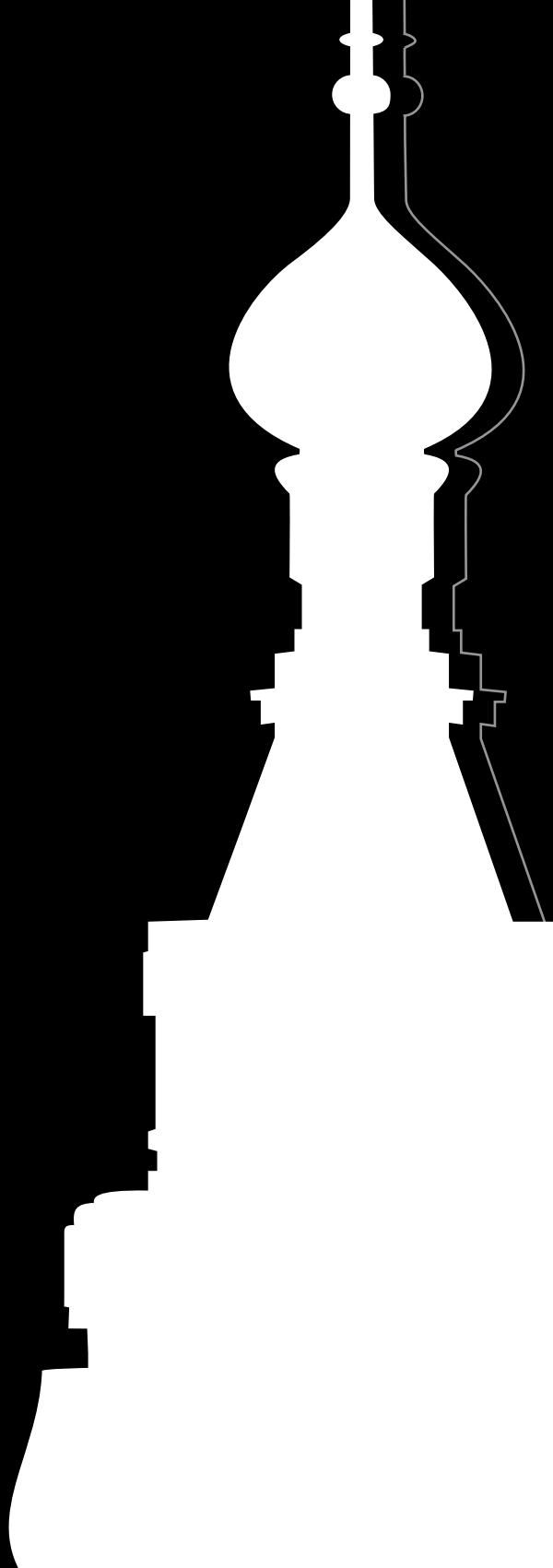
Without distracting from these strategic projects, the city looked forward, to a large portfolio of PPP projects, and began creating a PPP framework. It passed a municipal law on PPPs and created a central unit to capture lessons learned. As teams gained experience in transaction procurement and closure, they were moved on to the next project. While this is an effective way to use the skills developed among the deal teams, it made it difficult to empower the central PPP unit, which did not have its own transaction-tested validation.

The city allocated a PPP project to the central PPP unit to implement directly. This distracted the central PPP unit from its other functions of developing standard practices and other commodification. But it was an essential capacity building exercise and gave the PPP unit needed gravitas.

Lesson 3: Seek financing where it is most attractive; avoid the myopia of normalcy.

As part of the federal government's effort to encourage PPPs, the Investment Fund was created, providing grants for strategic PPP projects to make them more financially viable. (This mechanism is similar to India's viability gap fund and the U.K.'s PFI credits). The city is one of the few entities to access the Investment Fund (for the toll road and the tunnel), due to its proactive approach. When the airport came up for financing, the city looked to allies in IFC and the European Bank for Reconstruction and Development, as well as Russian banks like Vnesheconombank (VEB) and VTB.

When the toll road hit the wall of the financial crisis, the city got creative, using the Investment Fund, issuing city infrastructure bonds backed by federal guarantees to fund part of the road, and looking to Russian banks to finance the PPP portion. Some suggest that the city should have sought international financing, but the continuing soft international financial markets, the bitter pill of foreign exchange risk, and the success of Saint Petersburg's neighbors in India with local financing look to have proven them right. 🏙️



Managing urbanization

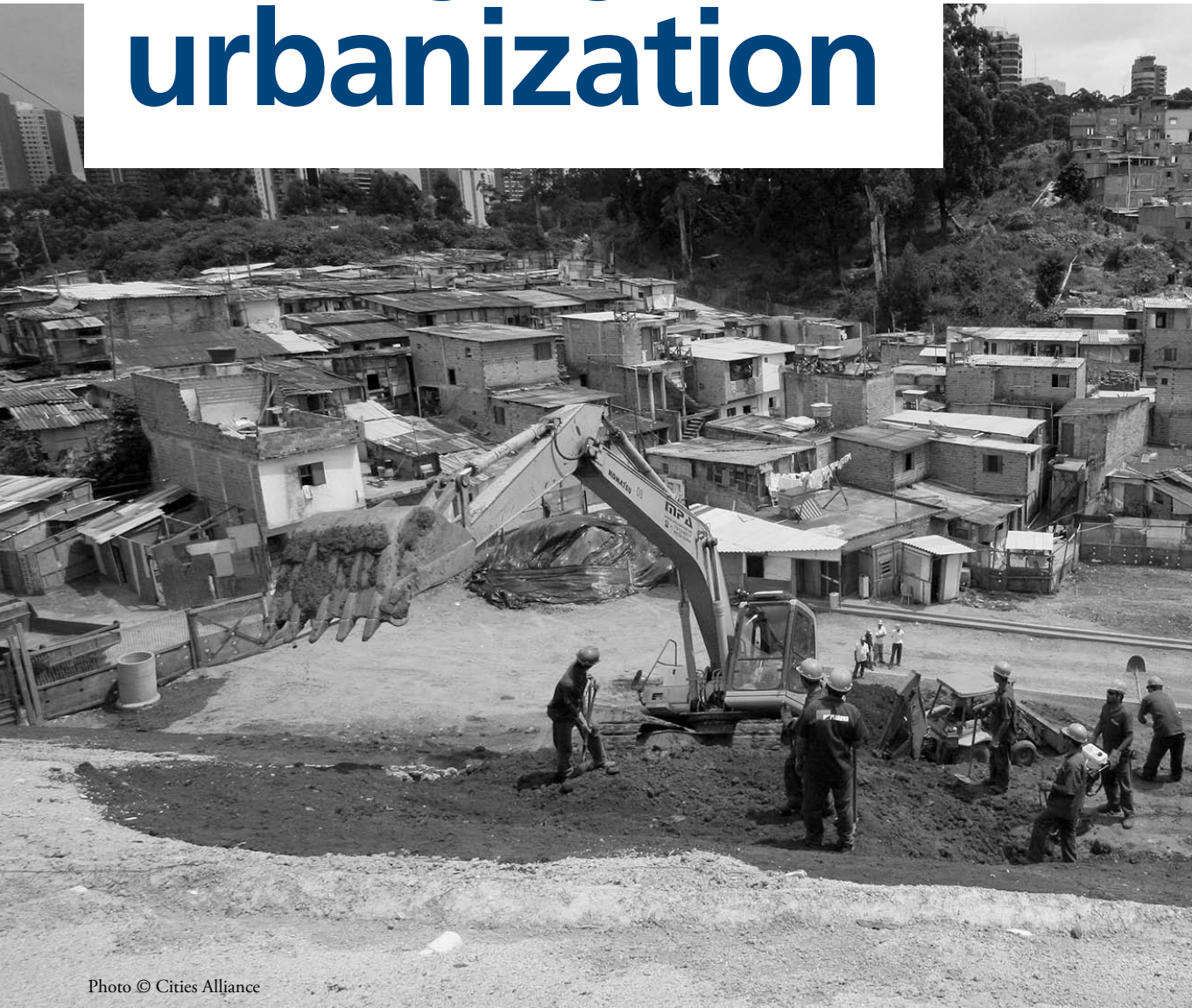


Photo © Cities Alliance



Former U.K. Secretary of State for International Development reflects on PPPs' role in rapid urbanization

Interview by Alison Buckholtz

Clare Short, the former U.K. Secretary of State for International Development and head of the Department for International Development, was a Member of Parliament for 27 years. Her activism now focuses on the urbanization of the poor and the need to prevent the spread of slums. She spoke to Handshake about how to apply the lessons of the past to the rapid urbanization taking place in developing countries.

What sort of trajectory can today's rapidly urbanizing cities expect, based on the lessons of history?

The lessons of history fall on Africa and South Asia, which are urbanizing faster than anywhere else. This is an enormous opportunity, and an inevitable historical transition that no one can stop. It can either be well managed or poorly managed, and what we've seen from the past is that with poor management you get spreading squalor and slums, disgruntlement, and angry populations, accompanied by political instability. Then, from the agitation and anger of the poor in urban areas comes transformation and reform. No piece of history is the same everywhere, but usually it's not a pretty journey, and there is lots of conflict and unhappiness.

The lessons of history fall on Africa and South Asia, which are urbanizing faster than anywhere else.

So what are the most important lessons for rapid urbanization?

It's critical to include your urbanizing population in the building of the cities. They're vibrant people: they build their own houses, have their

own businesses, and they're an enormous source of economic development if you give them a chance. It's also critical to remember that delivering education, healthcare, water, and sanitation, and getting access to new technology like renewable energy, is cheaper to do in urban areas. Demand is concentrated, rather than spread out as in rural areas. There is real opportunity for economic uplift in urban populations.

How does urbanization lead to better economic opportunities?

Everybody's worried about food prices and agricultural productivity, and thinks the answer is putting investment in rural areas. But again, let's look at the lessons of other continents. When you get concentrated populations in the city, you get a market for agricultural production and an outlet for some of the population that can't find a place to be productive in rural settings.

But governments don't often see it this way. Why?

Governments fear urbanization and they fear slum dwellers. They think they're messy, and that they will keep coming if their lives are improved by sanitation and better houses. In trying to prevent them from coming to the city, governments are in danger of missing the opportunity urbanization brings when slum dwellers are invited into the city as full and equal citizens. Governments are behind: the old model of all-powerful governments is changing. You've got to engage local government and people.

Is there a role for the private sector?


You cannot create the cities of the future without people saving and borrowing, and the private sector wants to be there and needs to be there. That's the opportunity. Because you can't get the resources that cities need without it. Public-private partnerships are very much part of the equation. But the development model also has to change.

Why do you say the development model is part of the problem?

People's image of the poor of the world is a rural population. If you take a snapshot of all the good and caring people working in development, 90 percent of the pictures would be in rural areas. There's a fixed idea in peoples' mind. And if everyone could just catch up, the beauty of the possibility is that as people concentrate in urban areas, all sorts of connections can be made that lead to greater efficiency. You can really take advantage of the spirit and benefits of city living. But it takes a while for the story line to change, and for peoples' image of poor people to change.

The old model of all-powerful governments is changing. You've got to engage the local government and people.

Have any organizations evolved to serve the needs of the new urban poor?

If you look at SlumDwellers International, it is helping the slum dwellers to come together, save, and form relationships with local governments to talk about what they need and want. They save a lot of money in the hope that some will be allocated for housing and they can borrow against their savings. They're doing what's needed, and now they just need partnerships to be able to achieve development. Everyone claims to support democracy, and the practice of engaging people in the development of their country is real democracy. 

Governments fear urbanization and they fear slum dwellers.



DEVELOPMENT AT THE BASE OF THE PYRAMID

How PPPs can meet the growing needs of slums

By Judy L. Baker

By 2030, the number of slum dwellers in the developing world will double to 2 billion people. This signifies an enormous opportunity. The unmet needs in these rapidly growing slums are staggering, including basic services like housing, along with clean drinking water, sanitation, roads, drainage, electricity, solid waste collection, and health and education services.

This major development challenge presents a significant market opportunity for private entrepreneurs. The poor, who comprise the base of the economic pyramid, have substantial purchasing power based on numbers alone. There is also increasing recognition of the considerable resources generated through remittances that are often channeled into housing and education.

Much of the poor's purchasing power fuels the informal economy. If organized and leveraged effectively, the poor's purchasing power can rep-

resent a significant market for the formal private sector as well.

IS BUSINESS PREPARED?

Yet private sector investments in slum areas do not come easily. Businesses are often ill-prepared to service low-income markets, or wary of the market. Informality of land property rights is an enormous barrier, particularly in areas where the risk of eviction is high. Many of the needs in low-income urban neighborhoods are also public goods that create minimal private demand. Streets, drainage, and sanitation are often considered the responsibility of the state.

PPPs have tremendous potential for reaching the urban poor. Such partnerships can take many forms. The experience in urban slums to date has mainly been through components of larger projects that may include an entire utility (water,

sewerage, electricity, transport) within a certain city or region. Municipal governments may hire a private company to extend the water and sanitation network to new parts of the city, including slum communities (a service contract), or they may include in a concession the commitment to extend service to certain slum communities. This latter option obliges the private company to recover the costs of service provision and initial investment from its customers, including slum dwellers.

Pilot projects to extend service to poor communities as part of water concessions have had success in some cities, although moving beyond the pilot phase has been difficult. In Port Vila, Vanuatu, a concession contract successfully extended free potable water service to poor areas through cross subsidies from wealthier areas. In Manila, the concessionaires Mayniland Water Services and Manila Water Company use a variety of internal programs and partnerships with nongovernmental organizations (NGOs), community organizations, and small entrepreneurs to increase water distribution to slums.


OUTPUT-BASED AID

Output-based aid is also a growing trend in structuring subsidies to the private sector to ensure that performance targets are met—particularly those related to service provision for the poor. Examples include extending water connections to slums through a one-time network extension, and connection fee subsidies in Manaus (Brazil), Ethiopia, Jakarta and Surabaya (Indonesia), Mozambique, and Manila (Philippines).

GOVERNMENT'S ROLE

The private sector can be encouraged and assisted by partnerships with government agencies and NGOs. Government can fulfill the dual role of liberalizing the markets that affect the urban poor—for example, by adjusting building and land use regulations for affordable housing, and by ensuring a regulatory framework that permits the delivery of services by small-scale providers.

Government can also support the private sector's interest in the urban poor with assistance that helps to subsidize and/or mitigate the commercial risk of entering the low-income sector. Where the government is the holder of property rights, it has discretion over stabilizing and legalizing land tenure to slum dwellers. In most cases the existence of urban slums is directly correlated to the government's inability to provide infrastructure, basic services, and planning capacity to urban residents. But governments can still obstruct the private sector's involvement in service provision and development by claiming exclusive rights to service provision, or by using free public housing or services to gain political favor.

Involving the private sector in public utilities and works does bring challenges. But as cities continue to consider PPPs to improve public services, service expansion to slums can be integrated into PPP contracts. The private sector has much to gain from PPPs, given the rapidly expanding market opportunities. This is a significant incentive to work toward sustainable solutions for reaching the urban poor. 

Legal challenges and regulations in urban PPPs

By Victoria Delmon

In many ways, urban environments are ideal for developing PPPs: there is a high concentration of potential customers, and projects are often high-profile and prioritized by government. There are also a number of sectors in addition to the traditional infrastructure sectors where PPPs have been developed in urban areas: hospitals, solid waste facilities and court buildings, as well as projects tailored to urban areas, such as mass rapid transit and light rail systems in the transport sector.

But urban PPPs in developing countries present significant legal challenges, especially where they involve slums or informal settlements. There are specific concerns about land rights relating to slums: for instance, if a road is to be built through a slum, it must be decided whether the residents have rights to resettlement. Governments debate how to provide services like water or electricity to slums because they recognize that provision of a service might be deemed to be a step towards recognition or “formalization” of the settlement. One solution includes providing a water stand pipe at the entry point to the slum. But private operators may have safety concerns when entering into informal settlements where

they may not be able to benefit from police protection.

Land acquisition for infrastructure can also be problematic, given the competition in cities for land use. It is important to identify a right-of-way or plot of land that can be acquired for a PPP project early in the project development process, as this will reflect on the fundamental feasibility of the project.

Urban PPPs in developing countries present significant legal challenges, especially where they involve slums or informal settlements.


The World Bank Legal team has developed the PPPI Resource Center to provide guidance and materials on the legal, contractual, and regulatory issues around PPPs. It includes checklists and risk matrices as well as sample

laws and regulations, terms of reference for consultants, and sample agreements and contracts.

Many reference materials on the website relate to urban PPPs and can serve as useful resources. In the transport sector, for example, there are materials for light rail projects and mass rapid transit projects, such as the TransMilenio bus-based rapid transit project in Colombia. Links to and summaries of urban water projects such as the Manila water concession may also be helpful. A section of the PPPI Resource Center is devoted to theft or non-technical losses of water and electricity and the legal tools that countries have developed to manage this issue.

One notable developing trend is that solutions for solid waste collection and disposal increasingly involve PPPs. The World Bank has been involved in a number of initiatives in this sector, including developing model agreements to be used by local authorities for waste collection and disposal services in several countries in North Africa.

There are also significant social and legal issues in developing PPPs in this sector, including the question of how to manage or regularize informal waste-picking and to ensure that the private sector is able to regularize sorting of waste.

To address the needs of practitioners working in solid waste, the PPPI Resource Center has added this sector to its resources. 



PPPs FOR LOW-INCOME HOUSING

6 lessons from Latin America

By Taimur Samad

During the last two decades, many Latin American countries have instituted sweeping structural reforms in the housing sector. These reforms have enabled sound regulatory environments conducive to the growth of formal land and housing markets. One key component has been the expansion of primary mortgage markets.

Increasingly, housing policy in much of Latin America complements market forces through instruments that create incentives for lenders and builders to venture down-market, meeting the demand from low and middle income households. Such instruments include:

- Large demand subsidy or voucher programs that enable lower income residents to close the financing gap for formal housing.
- State lenders originating mortgages in Mexico and Brazil for the low and middle income segments.
- Mortgage securitization, which in countries like Colombia now exceeds approximately

30 percent of the mortgage portfolio to the secondary market.

- Mortgage insurance products that enable lenders to hedge risks for mortgage lending to lower income segments.
- Targeted tax incentives for low-income mortgage lenders and investors in secondary markets as well as targeted interest rate subsidies for low-income households.
- A package of enabling reforms including those that have improved land management and property rights.

The net impact of these structural reforms and “demand-side” incentives has been a brisk increase in mortgage lending and home production for middle and low-income segments. However, policymakers have found that these reforms and incentives have not made a significant dent in housing deficits. In Colombia, for example, officials estimate a 2.5 million housing deficit in cities, with annual production barely able to keep up with the demand generated from



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new household formation. In Mexico, this figure is approaching 9 million units.

In the face of continued and significant housing deficits, countries like Brazil, Mexico and Colombia are considering more aggressive supply-side strategies organized around PPP principles. These PPPs aim to create incentives for private developers to develop and take to market low-income housing projects by providing access to subsidies within the structure of “concession-style” or “output-based” contracts.

The largest of these regional programs is the Minha Casa Minha Vida (MCMV) in Brazil. MCMV was launched in 2009 and has committed a staggering 160 billion Brazilian reais (\$81 billion in 2009) in subsidies and associated incentives through 2014 to meet a target of 3 million low and middle income homes. The program involves three product lines targeting three income segments with a PPP-style approach for middle income segments. For these middle income segments, developers receive subsidies on the sale of units to eligible households while

bearing the commercial risk for project development, marketing, and sales.

In Mexico, the government has launched an ambitious land and housing development program on municipal land, Desarrollos Urbanos Integrales Sustentables (DUIS). The program aims to support large-scale land and housing developments through integrated planning and a mix of public and private investments on a project-by-project basis. The government also guarantees access to mortgage lending from state mortgage companies. Developers bear partial project risk.

The Macroproyectos Urbanos program in Colombia (under development with the support of the World Bank) will dedicate up to \$500 million in supply-side subsidies through 2014 under a mixed-use land and housing development PPP approach in partnership with developers.

While these PPP programs for land and housing development are nascent, lessons are emerging to guide policymakers through the opportunities and risks of such interventions.

1 Scale is good, but beware (negative) externalities.

Large land and housing PPP programs that consolidate and direct subsidies can attract developers and catalyze private financing in low-income housing.

However, reaching this scale is not without risks. In Brazil, the magnitude of the MCMV program has generated concern that it—alongside overall buoyant growth and a large public investment program—is contributing to rapidly escalating land prices as developers rush to buy land in larger cities where absolute deficit levels are considerable. Additionally, analysts are concerned that effective demand—clients with access to mortgage lending—may dry up as banking institutions reach mortgage lending limits. When thinking big, policymakers are advised to keep a full system view of how the potential PPP program will impact different aspects of the housing markets.

2 Allow developers to drive project development, with oversight.

Private developers are best placed to identify and structure a project pipeline. The role of the public sector is to create a clear regulatory framework and to invest in technical and real estate capacity to be able to effectively analyze proposals and negotiate with developers. In Colombia, initial investments under the Mac-

roproyectos Urbanos program suffered from poor quality technical and environmental design because municipal governments were responsible for project development.

Relying on private developers is not without risk. Developers frequently have a land pipeline that they are looking to take to market. This pipeline may not always be the most appropriate, due to indirect investment requirements in infrastructure and social services. This reinforces the need for the public sector to build strong and independent project evaluation capacity.

3 Mixed-use land and housing development has multiple benefits.

Mixed-use land and housing PPPs require developers to deliver a minimum built area of low-income housing alongside market rate housing, commercial and industrial use installations, and others based on the developer's discretion. Colombia's Macroproyectos Urbanos program, for example, employs a mixed-use approach to maximize cross subsidies from higher rent uses, and to mitigate social risks associated with purely low-income housing projects.

Mixed-use projects can also serve to expand the tax base for cash-strapped municipalities. While municipalities rarely want to dedicate precious land to low-income housing, they might be convinced by the costs and benefits of a well articulated mixed-use approach.

Develop a framework for post-construction asset and social management.

PPPs in low-income housing have not traditionally dealt well with post-construction asset and social management—these functions tend to be left to municipal governments with limited ability and capacity. In Brazil, for example, the evaluation of the first phase of the MCMV program found that low-income housing projects were susceptible to poor operations and maintenance practices and potential asset deterioration.

To address post-construction asset management, policymakers should consider a concession-style arrangement where a portion of subsidy payouts are made over a five-year post-construction period, conditional on the structuring of a condominium management arrangement.

Similarly, regional experience demonstrates that better post-construction social management practices reduce social risks in low-income housing projects. In Medellín, Colombia, low-income housing programs are accompanied by the provision of integrated social services that have proven to enhance livability and security.

Promote a cautious, output-based design for supply side subsidies.

Subsidies for low-income housing PPPs should be designed to minimize excessive public sector risk.


Where construction finance markets are deep, subsidies can be disbursed on an output basis against the sale of homes to eligible buyers. This is possible in countries like Brazil and Mexico, where private construction finance markets have emerged and state banks and provident funds actively lower borrowing costs for developers or directly extend credit to home builders.

In less developed markets, policymakers may consider a more nuanced approach to disaggregating PPP contracts with developers into output-based stages. In such instances the public sector will take on more project risk and will need to carefully understand and mitigate these risks. In either context, the public sector should build capacity in PPP contract design and management.

Create incentives for smart and sustainable urban growth.

The need for significant new home construction is inevitable in Latin America, given the scale of housing deficits. A significant increase in housing production can reinforce existing urban sprawl. Policymakers should be careful to design the next generation of low-income land and housing PPP programs around smart growth principles. Incentives may be built into PPP programs that encourage improved public transport connectivity and the use of low-cost, green homebuilding technologies.

CITIES & Climate Change



As the world hurtles toward its urban future, the opportunities and challenges of urbanization become ever more apparent. Cities are the most complex, economically powerful, culturally diverse, and socially important creation of humanity, but also a key factor in climate change.

A call to action

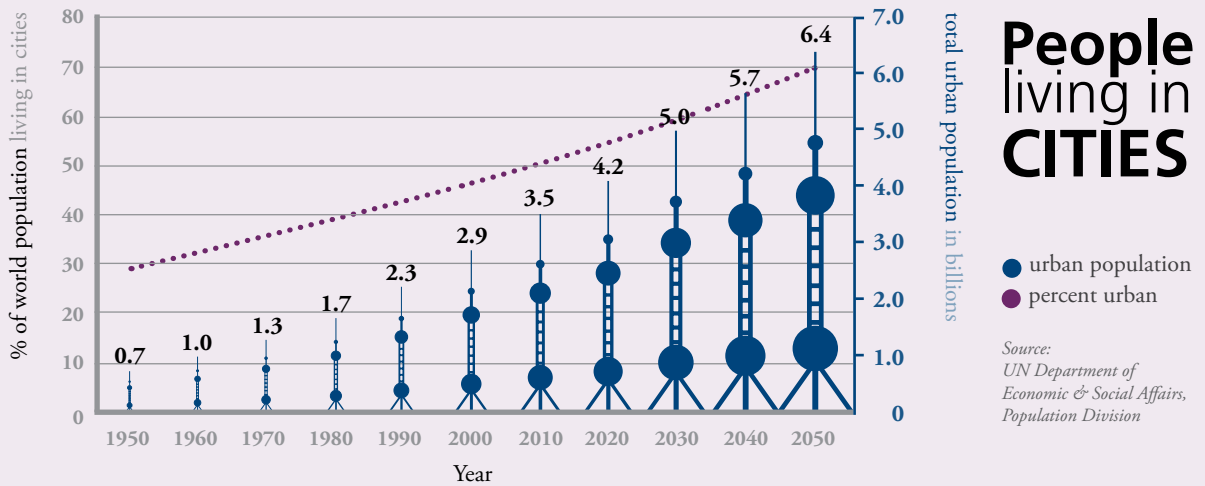
By Dan Hoornweg

Cities drive our economies and cultures; they bring together ideas, passions, finance, and a rainbow of colorful agendas. They are home to most of the world's infrastructure, governments, and cultural institutions, as well as Fortune 500 companies.

But storm clouds are gathering. Eighty percent of GHG emissions come from cities, and citydwellers will bear the brunt of adapting to climate change. The rapid urbanization of the coming 25 years promises that cities in developing countries will need to accommodate 2 billion additional residents who will require water, sanitation, transportation, electricity, healthcare, and education. Addressing future GHG emissions and increasing resilience must be an integral part of any city's climate change plan.

Urban residents, governments, and businesses need to develop sustainable cities—not only because cities contribute to climate change, but also because they are particularly vulnerable to it. Low-carbon cities reduce GHG emissions as they usher in an era of cost savings, cleaner air, and better living standards.

The experiences of cities like Barcelona, Portland, and Vancouver supply important lessons, as illustrated by the video interview with Barcelona Global's CEO in this issue. After all, cities, like people, can learn from each other as they focus worldwide on climate change mitigation and adaptation.



50 largest cities & urban areas by population

Combined, the 50 largest cities and urban areas are home to 500 million people, have a total GDP of \$9,564 billion, and emit 2.6 billion tonnes of CO₂e per year.

1. Tokyo, Japan
2. Mexico City, Mexico
3. Mumbai, India
4. New York, U.S.A.
5. São Paulo, Brazil
6. Delhi, India
7. Calcutta, India
8. Jakarta, Indonesia
9. Buenos Aires, Argentina
10. Dhaka, Bangladesh
11. Shanghai, China
12. Los Angeles, U.S.A.
13. Karachi, Pakistan
14. Lagos, Nigeria
15. Rio de Janeiro, Brazil
16. Osaka, Japan
17. Cairo, Egypt
18. Beijing, China
19. Moscow, Russia
20. Manila, Philippines
21. Istanbul, Turkey
22. Paris, France
23. Seoul, South Korea
24. Tianjin, China
25. Chicago, U.S.A.
26. Lima, Peru
27. Bogota, Colombia
28. London, U.K.
29. Tehran, Iran
30. Hong Kong, China
31. Chennai, India
32. Bangalore, India
33. Bangkok, Thailand
34. Dortmund, Germany
35. Lahore, Pakistan
36. Hyderabad, India
37. Wuhan, China
38. Baghdad, Iraq
39. Kinshasa, Congo
40. Riyadh, Saudi Arabia
41. Santiago, Chile
42. Miami, U.S.A.
43. Belo Horizonte, Brazil
44. Philadelphia, U.S.A.
45. St. Petersburg, Russia
46. Ahmadabad, India
47. Madrid, Spain
48. Toronto, Canada
49. Ho Chi Minh City, Vietnam
50. Chongqing, China

The 2006 population figures are based on censuses carried out between 2000 and 2005 and adjusted to take account of average annual population changes (www.citymayors.com).

By 2050, global urban population will

double;
built-up area will
triple.

TOP COUNTRIES & 50 largest cities

in terms of population, GHG emissions, and GDP

Population (millions)		
1.	China	1,192
2.	India	916
3.	50 largest cities	500

GHG emissions (M tCO ₂ e)		
1.	USA	7,107
2.	China	4,058
3.	50 largest cities	2,606

GDP (billion US\$ PPP)		
1.	USA	14,202
2.	50 largest cities	9,564
3.	China	7,903

Source: World Bank 2010. Table is for indicative purposes only. The years of data sources vary across countries and are determined by the last available UNFCCC-reported country data.

Low-carbon China?

China's cities continue to absorb about 13 million rural residents each year. Accompanied by sustained high economic growth, this rapid urbanization puts tremendous pressure on all forms of public services such as energy, water, transport, and waste. This pressure will continue during the 12th Five-Year Plan period (2011–15) with explicit targets for a four percentage point increase in urbanization, to 51.5 percent, and the creation of 45 million jobs in urban areas. That cities are responsible for about 70 percent of global energy-related greenhouse gas emissions adds an additional challenge for China, given that it already is the single largest generator of carbon emissions.

China's leaders have made ambitious commitments to reduce the carbon and energy intensity of the economy and transition to a low-carbon growth path. Consider President Hu Jintao's commitment to a 40–45 percent reduction in the carbon intensity of GDP by 2020, relative to 2005. The 12th Five-Year Plan includes, for the first time, an explicit target to reduce carbon emissions by 17 percent by the end of 2015.

This is possible because Chinese cities have a high level of autonomy. Indeed, they have been the primary agents of economic transformation in the last three decades. Today, in response to the emerging focus on environmentally sustainable growth, many cities are already developing eco- and low-carbon city initiatives. Such initiatives are expected to intensify as the implementation of the 12th Five-Year Plan unfolds.

Adapted from *Sustainable Low-Carbon City Development in China* by Axel Baeumlner, Ede Ijjasz-Vasquez and Shomik Mehndiratta (World Bank, February 2012)

The lifestyle choices of urban residents can significantly impact emissions. According to economist Edward **Glaeser**, the average household in 48 major metro areas generates up to 35 percent less GHG emissions when located in the city instead of the corresponding suburbs. Here *Handshake* presents three examples that show how infrastructure, policy, and access to services are closely interrelated.

GHG emissions & urban lifestyle



Photo © Nikada/istockphoto

Maria, a program assistant for a private company, lives in **Bogota City**. She shares a house with her husband and two children and loves to cook. She has many electrical appliances in her kitchen, including a refrigerator, microwave, stove, and blender. She also has a TV, DVD player, computer, and miscellaneous other items to make life easier. She does not have heating or AC, as it's not needed. Maria commutes from home using the Transmilenio bus rapid transit system. She usually spends her vacations at home.

3.5 tCO₂e per year

tCO₂e (tonnes of CO₂ equivalent) is a measure for describing how much global warming a given type and amount of GHG may cause, using the functionally equivalent amount or concentration of CO₂ as reference.

11.5 tCO₂e per year



Nathan is a student living with his parents in the **suburbs of Toronto**. He owns a medium-sized car which he uses to go to school (25 kms each way daily). He also travels by plane at least twice a year. He cannot imagine not having a mobile phone, iPod, and laptop. He also has other entertainment systems at home that he keeps plugged in all the time. Due to the weather, his house needs to be both heated and cooled.

Yusuph, a Tanzanian tailor, lives in **Dar es Salaam**. He never has his electrical appliances plugged in unless he is using them, as he is afraid that they might overload during one of the common power cuts. He has a TV, sewing machine, radio, refrigerator, water boiler, and table fan. He lives with his wife, his three children, and two cousins in a typical Swahili house. Despite the warm weather year round, he has no air conditioning. Every day, he takes the “daladala” (minivan) to work (10 kms).



1.8 tCO₂e per year



Edward Glaeser, author of Triumph of the City: How Our Greatest Invention Makes Us Richer, Smarter, Greener, Healthier, and Happier, is the Fred and Eleanor Glimp Professor of Economics in the Faculty of Arts and Sciences at Harvard University, where he has taught urban and social economics, and micro-economic theory since 1992. A World Bank Fellow and a Senior Fellow at the Manhattan Institute, his work focuses on the determinants of city growth and the role of cities as centers of idea transmission. He spoke to Handshake about the role of PPPs in urban settings.

Interview by Alison Buckholtz

Photo © Louise Kennedy Converse

TRIUMPH

A leading urban economist on risks and rewards

of the PPP

In *Triumph of the City* you have written that “there’s a lot to like about urban poverty”—that it should be judged not against urban wealth, but against rural poverty, which is worse.

The basic point here is that cities don’t make people poor. They attract poor people with economic opportunity, with a better social safety net, the ability to get around without a car for every adult. People are moving for a reason. It’s a terrible thing that there are so many poor people in the world, but it’s not a terrible thing that they have come to cities to try and make their lives better.

Statistically, there is a near-perfect correlation between urbanization and prosperity among nations. As a country’s urban population rises by 10 percent, the country’s per capita output increases by 30 percent. And per capita incomes are almost four times higher in those countries where a majority of people live in cities than in those countries where a majority of people live in rural areas.

Along the same lines, you confess your frustration that smart people enact so many foolish urban policies. Which of these urban policies would you counsel against first?

The most basic mistake [on policymakers' part] is looking at the enormous challenges that our cities face, and then concluding the right policy is to keep people on the farm. Because if we are to see a path out of poverty to prosperity, that path will run through cities. It's really crucial to react to the enormous difficulties of cities by trying to solve these difficulties, rather than to keep people from moving to urban areas.

But there is always the challenge of funding new infrastructure. Which approaches have proven themselves?

There's a lot of wisdom in Adam Smith's old view, which is that the best way to fund infrastructure is to pay for it with user fees. And when PPPs work best, they actually play to this,

It's a terrible thing that there are so many poor people in the world, but it's not a terrible thing that they have come to cities to try and make their lives better.

like the very successful Chilean highway system, one of the great PPP success stories of the world. The highways are paid for by user fees, getting the right infrastructure to people who need and value it the most. That's a great achievement. It prevents the construction of infrastructure in places that don't need it.

The problem is that there is infrastructure needed that you can't always require user fees for, as with providing clean water or sewage services. This is an issue of basic human decency...and it is where things become the most difficult, because it's not clear that the revenue stream will come from the government. That makes things harder, but it doesn't mean they don't need to be done. They do. They just require alternate models of financing.

If there were well managed PPPs where the contract and regulations were clear and the government did not have any direct subsidies, would that stop the capturing of subsidies by the middle class?

It's not easy, but you want to do as much as you can to mimic the idea of a user fee from vouchers. I do want to stress that nothing is going to work perfectly, and any situation on the ground is going to be



London School of Economics
“Triumph of the City” presentation
March 14, 2011



University of Chicago
Future of the City Symposium
February 1, 2011



“There’s no such thing as a poor urbanized country. There’s no such thing as a rich rural country.” Edward Glaeser

gamed heavily by all the factors involved. That’s fundamentally unavoidable. We have to know that and still try to design as robust an institution as possible.

Are there significant differences in lessons learned about infrastructure PPPs in the developed and developing world?

In the developed world, we see the mistake of putting infrastructure ahead of people. For example, the great mistake of urban renewal and public transport subsidies in the 1970s and the 1980s in the United States was when these policies were used to rebuild declining cities in the U.S. This missed the fundamental point—cities are really about human capital, more than physical capital. If you look at a city like Detroit, which has an abundance of physical capital, the

last thing it needed was new houses and a monorail. That message is relatively irrelevant for most of the developing world, which desperately does need new houses and new infrastructure because they might have a lot of human capital but they don’t have the physical capital that’s needed to manage it.

Infrastructure is key for cities, but everyone everywhere now has to do more with less—it’s referred to as “smart infrastructure.” Can we look at developing country cities and apply the idea to PPPs doing more with less?

Obviously, we should always be trying to do things in as efficient a manner as possible. We should always be open to new technologies. But

the view that infrastructure used to be expensive and can now be cheap—that feels wildly implausible to me. There are no silver bullets.

Can citydwellers consider themselves environmentalists?

Absolutely. Cities are friends of the environment. [In developed countries,] nature lovers who live surrounded by trees and grass consume more energy than their urban counterparts; traditional cities have fewer carbon emissions because they don't require vast amounts of driving. New York State's per capita energy consumption is next to last in the country, which largely reflects public transit use in New York City. Car-based living imposes environmental costs on the entire planet.

To me, good environmentalism means putting buildings in places where they will do the least ecological harm. We should be more tolerant of tearing down the short buildings in cities in order to build tall ones, and more intolerant of the activists who oppose emissions-reducing urban growth.

What advice would you give to analysts and PPP practitioners working on urban infrastructure projects?

There is a lot to be gained in the marriage of public and private, but there are also enormous risks. There are cases where either the government has mistreated the private partner, or companies have figured out a way to mistreat the government. PPPs always require firm oversight. They are enormously valuable as a way to solve a financing problem, and the people who are fighting to solve this problem are doing one of the most important jobs in the world. 🏙️

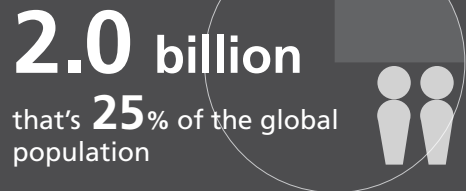
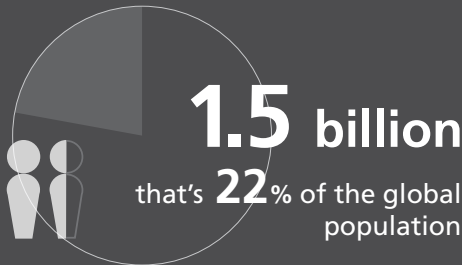


TOP 600 CITIES*

2010...

...2025

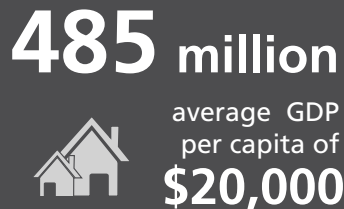
POPULATION



GDP



HOUSEHOLDS



...of which



* McKinsey's City 600 lists the top 600 cities by contribution to global GDP growth from 2007 to 2025.

Source: McKinsey Global Institute, *Urban World: Mapping the Economic Power of Cities*, March 2011.

PPPs in **REVITALIZATION**

Mateu Hernández is CEO of Barcelona Global, a non-governmental forum that brings together experts, companies, and entrepreneurs involved in economic development in Barcelona. Before that, he was director of economic development for the city of Barcelona, served as executive vice president of Barcelona Activa, an agency promoting entrepreneurship under the Barcelona City Council, and was acting manager of the 22@ district.



Video production by Jeanine Delay

In the past two decades, Barcelona has emerged as one of the world's leading centers of innovation in urban development and economic regeneration.

After the reinstatement of democracy in 1978, the city was confronted with huge public infrastructure needs, particularly in transportation, communications, and in deteriorated industrial and inner-city areas. At the time, however, the city lacked the financial means to tackle its challenges.

By hosting the 1992 Olympic Games and subsequently the 2004 Forum of Cultures, the city was able to invest in infrastructure, reverse serious inner-city problems, and enhance its global brand. The success was due largely to strong public leadership coupled with innovative private collaboration.

To this day, the Barcelona City Council remains committed to using new technologies for intelligent city management and for deploying infrastructure, such as Wi-Fi on public roads, iBicing (bikeshare access via iPhone), and mGovernment (mobile technologies for the provision of public services). All this is helping the city become an international benchmark for creative urban solutions, exemplified by the innovation district of 22@.

The experience of **BARCELONA**



In 2000, the Barcelona City Council approved a new urban planning ordinance aimed at transforming the old industrial area of Poblenou into a magnet for innovation.

The 22@Barcelona zone encourages the replacement of previous industrial activity with offices or other business services and equipment related to new technology and knowledge. 22@Barcelona is the most important urban transformation project the city has embarked on in recent history and one of the most ambitious in Europe.



22@ Overview

Photo © BarcelonaDigital



22@ Urban planning

URBAN INNOVATION

Ultimately, the goal of the 22@ project is a compact city where the most innovative companies co-exist with research, training and technology transfer centers, along with housing (4,000 new subsidized residences), facilities (145,000 m² of land), and green areas (114,000 m²).



Photo © BarcelonaDigital

22@ Ten years



22@

Mass Rapid Transit

A TOOL FOR URBAN EXPANSION

By John Leber & Clelan Mandri-Perrott

As the world experiences rapid urbanization, there is growing interest in using Mass Rapid Transit (MRT) to solve urban transportation problems. Yet developing MRTs is a complex and capital intensive process. Governments and public authorities are using a variety of public-private partnership (PPP) models to leverage resources and expertise.

MRT is a bus or rail-based public transport mode operating on fully or partially exclusive rights-of-way—also known as the “alignment.” This alignment can be at-grade (i.e., surface-based), elevated, or underground. Some of the most common forms of MRT are metros, streetcars, tramways (sometimes referred to as light-rail transport, or LRT), and bus rapid transit (BRT).

BENEFITS OF MRT




MRT solutions are increasingly preferred by policymakers because they provide high carrying-capacity coupled with energy efficiency. MRTs support strategies for reduced air pollution and

encourage higher density development and better use of scarce, expensive urban space. They can also promote greater equity and mobility for a larger segment of the population.

CRITICAL SUCCESS FACTORS

MRT solutions are typically customized to a particular city or transportation corridor. Coordination is necessary among various levels of central and urban governments that have overlapping responsibilities and policies. Managing such complexity and the associated risks can be a daunting challenge for even the most experienced and sophisticated public authorities. Critical success factors for MRT schemes include:

- Completing robust engineering feasibility studies to ensure viable technical design solutions (particularly for elevated and underground MRT).
- Having a good understanding of the minimum passenger volumes (ridership) so that the system and its operations can be dimensioned accordingly.
- Ensuring that the operation of the system is responsive to customer needs such as comfort, speed, and punctuality, and that the system is safe and reliable.

MRT Type 	Speed 	Peak Capacity (pax/hr)*	Technical Traits 
Streetcar/Tram	Low (less than 30 kph)	Low (5k or less)	<ul style="list-style-type: none"> • Frequent street crossing • Primarily at-grade • Single-car configurations
Light Rail Train	Low-medium (avg. 30 kph)	Low-medium (10k-20k)	<ul style="list-style-type: none"> • Mostly at-grade • Single and double car configurations • 2-3 lanes from existing road
Bus Rapid Transit	Medium (avg. 25-30 kph)	Medium (5k-10k)	<ul style="list-style-type: none"> • Mostly at-grade • Articulated buses • 2-4 lanes from existing road
“Light” Metro	High (avg. 45-65 kph)	Medium-high (15k-30k)	<ul style="list-style-type: none"> • Either elevated or underground • Requires grade crossing
Heavy Metro	High (avg. 45-65 kph)	High (60k or more)	<ul style="list-style-type: none"> • Either elevated or underground • Complex civil works

*passengers/hour at peak

- Understanding the fare structure and how that structure may affect demand.
- Designing operations and maintenance to maximize the system life, and adequately budgeting for regular operations and maintenance expenditures.
- Considering continued investment in the system design and contractual mechanisms that allow for this investment.
- Considering integration of the MRT scheme with other transportation modes (pedestrian links, parking, rail, and airport links) to ensure a comprehensive urban transport strategy.

Together, these factors can ensure that the MRT solution, and the PPP mechanism in place to deliver it, are tailored to the particular needs of a city or transport corridor.

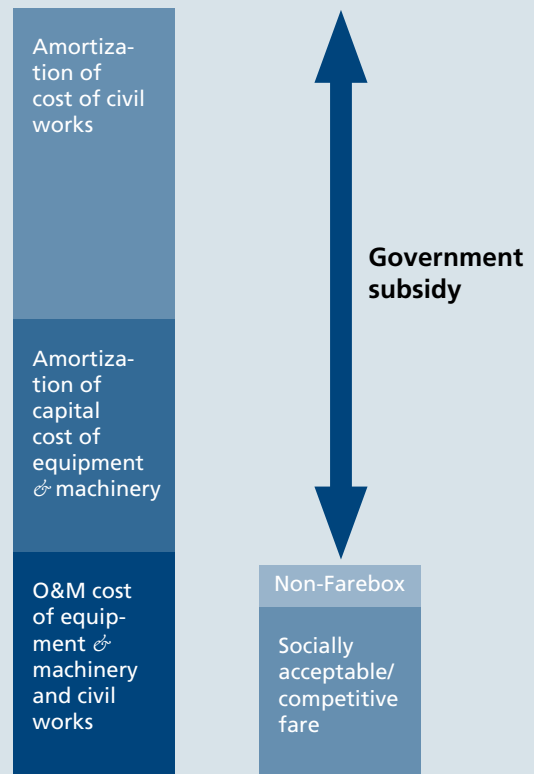
THE ECONOMICS OF MRT

MRT projects involve large capital expenditures for the design and construction of the system, along with significant operation and maintenance costs (O&M). Revenues generated by the system (known as farebox revenues) are generally set by public authorities with political, social, transport, or urban planning objectives in mind. As a result, farebox revenues rarely cover operating expenses, and rarely cover the full cost of the project. As the graphic to the right shows, for a project to succeed, more often than not the funding gap must be met by some form of government subsidy.

A common misconception is that the gap between the farebox revenue and the cost of

service can be made up with other forms of revenue, such as advertising and real estate development. Typically, revenues from advertising in stations and trains are not significant. Figures represent around 4 percent of farebox revenue; station concessions such as small kiosks, newsstands, and vending machines may generate an additional 7 percent. Similarly, real estate development or capturing increased land values directly linked to MRT presents challenges.

True Cost of Service



TRENDS IN MRT PPPs

PPP models for MRT projects can range from full system concessions, where the private sector takes design, construction, and operation risk, to outsourcing of operation and maintenance, where the role of the private sector is limited to operations risk. Appropriate risk allocation is a defining quality for a successful PPP—risk should be transferred to the party that is best suited to manage it.


Some of the advantages for cities developing MRT projects through PPP structures include placing the risk of development and construction with the private sector to achieve improved system design, faster completion, and lower cost, and leveraging the diversity of expertise and experience of a worldwide operator. Together, these can help achieve more innovative and cost-effective approaches to service delivery.

More recently, the trend for MRT PPPs is a move away from full concession and investment risk, toward public financing of capital investment with private operation and management. These contracts, which would appear to be easier to structure and manage, pose their own inherent challenges. Although under an O&M contract structure, ownership of the assets remains with the government metro authority and some or all of the operation and maintenance risk of the metro system is transferred to an O&M operator, the typical commercial incentives are not present. This is because the operator has not had a financial stake in the development of the project and its payments are normally not directly linked to the revenue received from the system's customers.

This structure also does not allow lenders to watch over the operator, which acts a form of internal oversight. Care needs to be taken to ensure that the contractual terms avoid the potential for “asset sweating,” where the operator defers maintenance on assets to reduce costs.

Contracts can be designed to overcome some of these issues by incentivizing the operator to behave as if it owned the system. One method of accomplishing this is through a financial structure that encourages ridership, thereby creating the incentive for the operator to ensure the system's performance is attractive to customers.

Another method is through a carefully-defined regime of key performance indicators (KPIs) that covers a variety of O&M areas, such as punctuality of train services, and ensures the best use of the system's assets. Payment deductions and bonuses would be based on the operator's performance, incentivizing the desired behavior. In many instances, both of these methods (rider-ship incentive and KPIs) are used in tandem.

As MRT becomes a tool for urban expansion, it is important to take stock of its record. Understanding the importance of effectively allocating risk between the public and private parties, and developing structures that are flexible and responsive to the public's needs, will power MRTs forward in a rapidly urbanizing world. 

7 PUBLIC TRANSPORT PPPs

Hong Kong's MTR



The MTR Corporation Limited serves 4 million passengers daily throughout Hong Kong and mainland China. It is one of the preeminent mass transit systems in the world and one of the few to generate an operating profit through its development of real estate and other associated commercial opportunities. Hong Kong's approach illustrates how MRTs can achieve financial success by combining the development of commercial opportunities with high quality transport services.

Bangkok's Skytrain



Bangkok's extraordinary levels of traffic congestion suggested that demand was robust enough to support a large, complex rail system. But debt and equity investors in Skytrain eventually suffered considerable losses when actual ridership figures fell well below preliminary estimates. Why? Poor integration with other modes of transport and difficult access to the system for users. Once these problems were addressed, ridership improved.

Stockholm's Metro



The Stockholm Metro ran successfully for years under a purely public sector model. In 1990, Stockholm Transport awarded five- to ten-year operations and maintenance contracts for its three metro rail lines, its light rail system, the suburban railway service, and commuter rail services. This approach has allowed Stockholm Metro to improve service and reduce costs through competitive tendering, and to tap into private sector expertise to chart the course for the system's next 50 years.

Seoul's Metro Line 9



The Seoul Metro Line 9 Corporation developed, operates, and maintains the Seoul Subway Line 9 Section 1, a 25.5 km subway line with 25 stations. The company benefits from minimum revenue support from the government for the first 15 years of the 30-year concession. The other eight lines are publicly owned and operated. The Seoul Metropolitan Government concessioned Line 9 to a private operator to increase productivity and set a benchmark for the public operators of the other lines.

Dakar's Toll Road



The \$315 million Dakar Toll Road is paving the way toward improved transport and trade in Senegal. The road is being built as a concession, the first experience of its kind on the continent, outside of South Africa. When completed, the Dakar-Diamniadio toll road will connect Senegal's capital city and the rest of the country, easing the way for tens of thousands of local commuters and greatly improving access to markets for businesses. IFC was lead transaction advisor on the project.



Bogota's TransMilenio

The cost-effective TransMilenio BRT (bus rapid transit) operates like a rail-based system by providing exclusive bus lanes. The operator is responsible for integrating all public transport services for the city. By 2016, TransMilenio will serve 5 million passengers per day along 388 km of main lines on 22 corridors—at a cost of \$5 million per kilometer. TransMilenio demonstrates how MRTs can be successful when fully integrated into a city's public transport services, without the higher costs associated with a rail based system.

São Paulo's Yellow Line (Line 4)



By 2012, a critical section of São Paulo's Yellow Line, built by the ViaQuatro consortium, will be 12.8 km long. The concessionaire has spent \$450 million on equipment and rolling stock, and estimates that its total investment will reach \$2 billion during the 30-year operating contract. During the opening celebrations, officials predicted that São Paulo's urban rail network would reach 420 km by 2014. The Yellow Line was implemented as a PPP to share development and operational risks with the private sector and to reduce the state government's capital expenditure, allowing investment in other priority projects.

Keep an eye on...

...INDIA

Speeding toward the future: Chennai's new metro

India, with six of the fifty largest cities in the world, is a rapidly developing market for MRT projects. Because projects of this size (\$3 billion+) require a blended approach, MRT PPPs have been developed or are under development for the Delhi Airport Line, Mumbai Metro, Hyderabad Metro, and Chennai Metro (a PPP for O&M services).

Traffic congestion in Chennai, the capital city of the Indian State of Tamil Nadu, disrupts the lives of over 7 million people who live and work in the area. To ensure sustainability in this rapidly urbanizing city, the Tamil Nadu government, along with the government of India, is constructing a 45 km metro rail system. When completed in 2015, the Chennai Metro is expected to significantly reduce travel time and vehicular pollution. The cost of the Chennai Metro is about \$4 billion, funded jointly by the government of India and the state of Tamil Nadu with a 60 percent loan from the Japan International Cooperation Agency. IFC is transaction advisor to the Chennai Metro for the design and tendering of an operations and maintenance (O&M) contract. K. Rajaraman, Managing Director of Chennai Metro Rail Limited (CMRL), spoke to Handshake about CMRL's approach to contracting for such a large-scale MRT project.



K. Rajaraman

What was the impetus for the Chennai Metro?

Shorter travel times and comfortable transportation throughout the city will directly impact economic productivity and improve living standards. The metro will serve the two busiest corridors in Chennai and is expected to carry 700,000 passengers every day, beginning in 2015.

Bus transport is dominant; the system carries up to 3 million passengers per day. The suburban rail and elevated rail systems carry about 1 million passengers per day. Despite this, the share of public transport in Chennai is only 29 percent. People cannot rely on the timetable

or determine when they'll arrive at home or at work because the traffic situation on the roads is becoming worse, with 25 percent more vehicles on the roads every year. The only effective solution in Chennai is an underground and elevated rail network that will cover the busiest corridors and ensure on-time transportation. The state government's goal is to raise the share of public transport in Chennai City to about 45 percent by 2025. This calls for investments of around \$20 billion in this sector. The state government has also recently announced it will set up a monorail system in certain corridors.

Why did CMRL split the project into numerous contracts?

Our experience showed us that there were three options. One option could have been bundling the project into a few consolidated packages with few contractors that could carry out the whole project. The other option was to break it down into a moderate number of packages. Third, we could break it down into 150-200 micropackages, with individual contracts addressing even the materials. But we did not feel that any company would have been able to provide everything we needed, and the risks and costs would be obviously higher anyway. The other extreme, having to split the project into several hundred micropackages, meant that CMRL would have had to do a lot of work with tendering and contracts. Interfacing with contractors would have presented enormous time demands—too many contracts and too many contractors.

So we went with the moderate approach and broke it up into 22 contracts. Most are system contracts such as trains, signaling, track, and

tunneling. We feel this is the optimal solution: specialized contracts which are not too small, not too large. These contracts were sized suitably so that they were not too big for reputed contractors available in the market. This approach has enabled us to get the right price with the right number of contractors so that CMRL could handle all this activity. Optimization of the number of contracts has also enabled us to keep the project on time.


What were the other benefits of this approach?

CMRL is a public body and we need to justify the prices of these contracts. Full transparency is essential and this ensured that we were able to establish confidence among bidders, enabling them to quote competitively.

What advice would you give to other government officials?

Ensure you have a strong team with the right contract management skills and that there is strong competition among bidders for all of the contracts. You don't have to compromise on quality, but you do have to ensure the prices are right.

What are your hopes for Chennai Rail?

By showcasing the private sector's role, particularly in O&M, the project could be a model for developing similar infrastructure projects in India. CMRL would also be able to use this experience to expand its network in a more efficient manner with the lessons learned from this project. 

CaBi

Launched in September 2010, Capital Bikeshare (also known as CaBi) is the nation's largest bikesharing system. It is owned by the (D.C.) District Department of Transportation (DDOT) together with Arlington, Virginia, and operated in a public-private partnership with Alta Bicycle Share, Inc.

The system is the successor to DDOT's first bikesharing system, called Smartbike D.C., which launched in August 2008 and was the first program of its kind in the U.S.

Setup and operating costs are covered by the city, and revenue is recouped on a monthly basis from membership and usage fees. Costs for Capital Bikeshare totaled \$5 million for 100 stations, with additional first-year operating costs of \$2.3 million.

Alta Bicycle Share purchases the equipment, builds the bikes and stations, does the installation and back-end membership support, and handles all the maintenance and operations.

In April 2011, the District said it expects to earn revenue to cover 50 percent of annual operating costs. It also starting the process to sell advertising with the goal of raising \$500,000.

A bicycle sharing system or bikeshare is a service in which bicycles are made available for shared use to individuals who do not own them.

For users, bikeshares remove some of the primary disadvantages to owning a bike, including theft, lack of parking or storage, and maintenance.

Capital Bikeshare, Washington, D.C., USA

Founded: 9/2010

Users: 18,000+

Bikes: 1,225 | Stations: 115+

Type: PPP

Partners: Arlington, Virginia, (D.C.) District Department of Transportation, Alta Bikeshare

sharing

Usually implemented by governments to reduce traffic congestion, air and sound pollution, and revitalize public spaces, bikeshares have also been cited as a way to connect users to public transit networks.

There were an estimated 200 bikeshares worldwide in 2010—see the Bikesharing Map.

Vélib, Paris, France

Founded: 7/2007

Subscribers: 200,000+

Bikes: 24,000 | Stations: 1,800

Type: PPP

Partners: City of Paris, SOMUPI (a joint venture of JCDecaux and Publicis)

Vélib

On July 15, 2007, Paris launched Vélib, the bike-based system of individual public transportation.

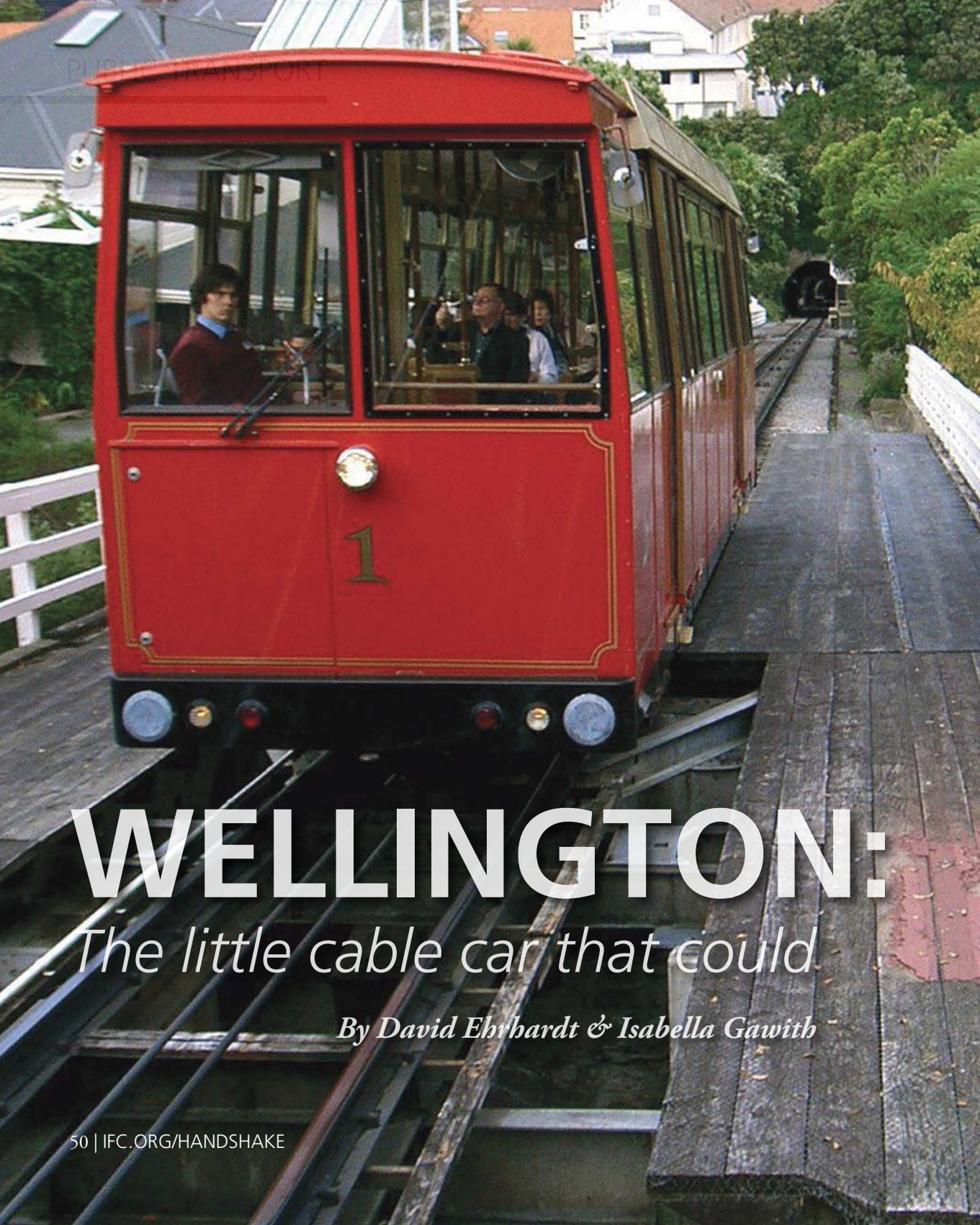
Although many systems have been set up since the 1960s, Vélib—a PPP between Paris and SOMUPI, a company led by JC Decaux—is one of the largest and most successful. SOMUPI is responsible for the full cost of set-up, operation, and management of the system, which is integrated into Paris' public transport network. In return, the company receives exclusive rights to operate billboards in 1,628 locations.

The city of Paris collects all revenue from subscriptions and rental fees. If contractual standards are met, SOMUPI is also entitled to a 12 percent share of the revenue as well as an amount equal to 12 percent of its advertisement sales.

Vélib's bikes are designed to be sturdy and deter theft, but 16,000 bikes had to be replaced during the first three years. This has cost the city €1.6 million per year. The city agreed to cover costs of €400 for each bike that needs replacement due to high theft and vandalism rates.

Since 2001, bicycle use in Paris has risen by 48 percent.

Photo © Boris Doesborg



WELLINGTON:

The little cable car that could

By David Ehrhardt & Isabella Gawith

Wellington, New Zealand, recently judged the coolest small capital in the world by Lonely Planet, is also home to one of the coolest small PPPs in the world.

Lonely Planet gave Wellington top honors for its cultural scene, its local film industry, and the abundance of independent coffee roasters. But its editors missed the real symbol of Wellington: the shiny red cable car that carries around 3,000 passengers each day from the Central Business District to the university and suburbs on the steep hills above the city.


The cable car was built with private finance in the 1890s by the Upland Estate Company (UEC), developers of what is now the swanky suburb of Kelburn. The property developers realized that their project's success depended on providing quick access between the new suburb and the city. The solution: a cable car modeled on successful projects in San Francisco and another booming New Zealand city, Dunedin.

UEC formed the Kelburn and Karori Tramway Company (KKTC) in 1889. UEC intended to fund two-thirds of the required £30,000, and raise the remainder through a public share offering. But of the 10,000 shares offered, only 1,680 sold, requiring UEC's existing shareholders to buy the rest. No public finances were available either, so after lengthy negotiations, the Wellington City Council allowed the purchase of land and retained the right of purchase, but offered no financing. Without public monies, KKTC turned to a risk sharing mechanism popular among speculative companies of the time:

paying lawyers, surveyors, engineers and other external experts in debentures, to be paid back only if and when shareholders were paid.

The cable car was completed in 1902, at an estimated cost of £17,479 (equivalent to \$1.6 million today). By 1926, annual ridership was 2 million, and the investors earned a handsome profit. However, by the 1940s, competition from council-run buses was causing problems for the company. A dispute over unfair competition reached the Supreme Court in 1946, resulting in purchase of the cable car by the Wellington City Council.

The Council operated the cable car for 44 years until 1991, when national legislation required council-owned passenger transport services to be corporatized or privatized. This led to the formation of the council-owned Wellington Cable Car Limited (WCCL). WCCL initially tendered out contracts for maintenance and operation to private firms. Serco had the operating contract from 1997 to 2007, and since 2007 WCCL has managed it. Operations and maintenance take place in-house.

Wellington's cable car PPP (as well as a less picturesque, but still very useful PPP that treats Wellington's wastewater) is a good example of New Zealand's strong tradition of public-private cooperation in infrastructure. This bodes well for the new national PPP policy and its implementing agency, the National Infrastructure Unit. 

Principles for Sustainable Transport



Walk

Great cities start with great pedestrian environments. Walking is the most universal form of transport and when streets are designed to prioritize pedestrians, health, economic activity and safety all improve. Walkable streets are the fundamental building blocks of a sustainable city.

Mix

Sustainable transit will not be viable unless it connects people to attractive places that encourage them to stay. Making a street “great” includes having a diversity of places and activities along it. Lively downtowns stack retail on the ground floor, with residential and office space above. Shops and offices are supported by the people who work there by day and by the people who live there at night, helping to create a vibrant street life.

Cycle

Bicycles and other means of people-powered transport, like pedicabs, allow for the convenience of door-to-door travel, but use less space and fewer resources. They are the healthier and more sustainable alternative to cars and taxis for short trips. To encourage their use, riders first need to feel safe, and in general, the more bicycles on the streets, the safer they become. This also requires slowing down traffic and providing high-quality dedicated space, like bike lanes.

Densify

By 2030, cities are projected to absorb 2 billion more people. High density is crucial to low-carbon cities. Density needs to be related to the capacity of all modes of transportation. If roads are designed to be bike and pedestrian-friendly and transit priority lanes on major arterials, activities like shopping, working and day care can be co-located to make walking, cycling and mass transit more convenient than driving. This will shorten trip distances, save travel time, and preserve millions of square kilometers of arable land. These dense communities use resources more efficiently, reducing the carbon footprints of its residents.

The successful city of the 21st century will be replete with choices, including non-motorized, post-fossil fuel travel options. Citizens of the world do not want to sit in bumper-to-bumper traffic. They do not want to walk in mud, nor feel threatened on a simple bike ride. They want to be in cities that provide for creative interaction, affordable living and healthy movement. These principles will help achieve that end.



Connect

Cities that are pleasant to walk and bicycle through typically have large numbers of narrow, short streets and many intersections. This makes the traffic slow down while walking becomes more direct, varied, interesting and attractive. Streets that are short and relatively narrow are also well-scaled to the perception of people on foot. Buildings, shops, trees and other streetscape elements are closer to the pedestrians and cyclists as they travel, increasing the vitality of local retail.

Compact

Community location has a long-term impact on sustainability. New developments placed far from existing cities are inconvenient and rarely thrive. City planners can avoid this by locating compact new sub-centers within or adjacent to existing cities. In addition to protecting arable land, this strategy significantly decreases the cost of providing transit, utilities, and other services to these new locations, while reducing most residents' daily commute.

Transit

Some trips are too long to make walking or cycling a viable option in our growing cities. Comfortable, safe, high-speed public transit can move millions of people quickly and comfortably using a fraction of the fuel and space required by automobiles. Bus-based mass transit systems like bus rapid transit (BRT) have often proven to be a cost effective, high quality solution, combining the efficiencies of metro systems with exclusive bus lanes and clean new buses.

Shift

Even in 2030, some trips will still be made by car. But more cars will mean more congestion, pollution and time on the road unless traffic is managed better. This includes what many cities are doing now: using parking and congestion charging to encourage people to leave their cars at home, eco-zones where only clean vehicles can enter, and removing highways in favor of community revitalization.

This is excerpted from Our Cities Ourselves: Principles for Transport in Urban Life, a collaboration between the Institute for Transportation and Development Policy (ITDP), Gehl Architects and Nelson Nygaard, and a companion to the ITDP "Our Cities Ourselves" program.

myth *vs* fact

Private sector participation in urban water and sewerage

By Edouard Perard

There is a perception among some scholars that the number of urban water and sewerage utilities operated by the private sector in low- and middle-income countries is declining, and that the urban water sector may be experiencing a “remunicipalization” phase. True or not, this belief merits close examination.

With the boom of desalination markets and increasing need for water treatment, it is true that most new private activity in the water sector concerns treatment activities rather than urban utilities. For example, 78 percent of new water projects with private participation signed during the last five years were for water treatment.

However, new urban water and sewerage utility projects with private participation reach financial closure every year in all regions. Over the last five years, 64 urban water and sewerage utility projects reached financial closure in 19 low- and

middle-income countries: 22 in East Asia and the Pacific, eight in Europe and Central Asia, 21 in Latin America and the Caribbean, three in the Middle East and North Africa, six in South Asia and four in Sub-Saharan Africa.


In fact, in 2010 the total number of urban water and sewerage utilities operated by the private sector reached a record high of 257 utilities in 35 countries. A closer look reveals that the total number of urban water and sewerage utilities operated by the private sector in low- and middle-income countries has actually never decreased over the last 20 years. The number of new and renewed projects implemented across the years outweighs by far the number of projects concluded or cancelled.

This trend is also verified at the regional level. Here, the number of urban water and sewerage utilities operated by the private sector has never significantly decreased over the last 20 years.

The Latin America and Caribbean region has the highest number of urban water and sewerage utilities currently operated by the private sector (149 utilities in operation), followed by East Asia and the Pacific (56), Europe and Central Asia (30), Sub-Saharan Africa (10), South Asia (eight) and the Middle East and North Africa (four).

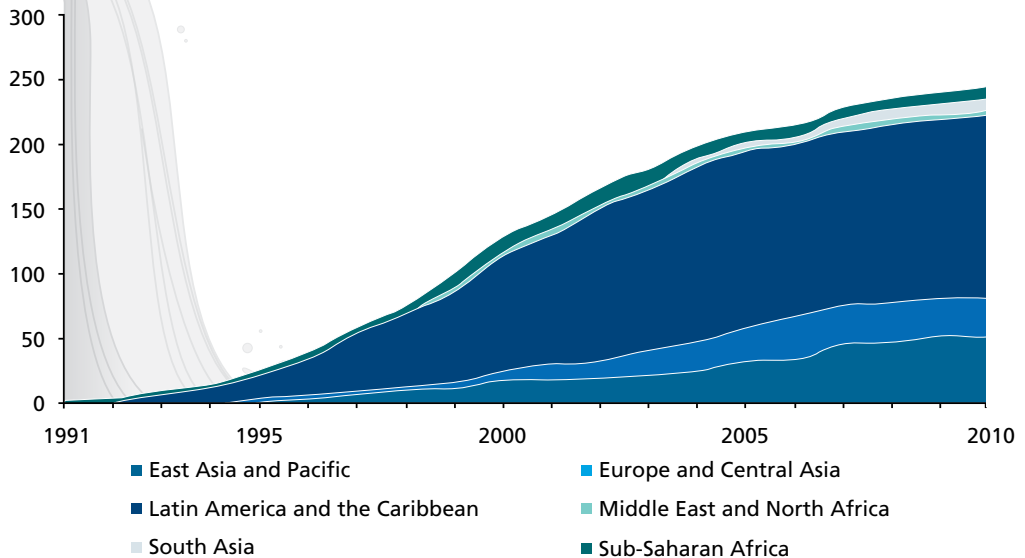
When it comes to the type of contractual arrangements, most urban water and sewerage utilities currently operated by the private sector are established under a concession agreement (165). Next is a management and lease contract

(61), followed by divestiture (20), and greenfield project (11).

A closer look at the data makes it clear that the hypothesis of an ongoing “remunicipalization” phase is more a misperception than a reality. If the current trend follows the evolution of the last 20 years, the number of urban water and sewerage utilities operated by the private sector in low- and middle-income countries should exceed 300 within the next five years. 

All calculations are based on data from the PPI Database (World Bank and PPIAF): <http://ppi.worldbank.org>

Number of urban water and sewerage utilities operated by the private sector in low- and middle-income countries



By Cathy Russell

Informal settlements in Morocco gain access to water & sanitation

“Everything became
POSSIBLE”

In Morocco, many people who move to cities in search of a better life end up living in informal settlements without access to basic services such as clean water and sanitation. This has a negative effect on their health and well-being, especially for women and children who must spend several hours a day fetching water from public fountains or wells.

In 2005, Morocco made it a priority to extend service to these poor peri-urban neighborhoods and encouraged operators and local governments to reduce connection fees for water and sanitation services. The government and the operators of water utilities in three cities subsequently requested a grant from The Global Partner-

ship on Output-Based Aid (GPOBA), a World Bank-administered program, for a pilot project to expand services using an innovative output-based aid (OBA) approach. The pilot is being implemented by two private operators, LYDEC in Casablanca and Amendis in Tangiers, and a public utility, RADEM, in Meknès.

“Under the OBA approach, the operators receive the subsidy payment only after an independent agent has verified that they have delivered working connections to the targeted households,” explains Adriana de Aguinaga, acting program manager of GPOBA. “This increases transparency and ensures that the funding benefits the people who need it most.”



Photo © GPOBA

VIDEO: IMPROVING LIVES IN MOROCCO


The OBA approach is re-focusing service provision on households. This has increased accountability, strengthened partnerships between local authorities and operators, and made monitoring of service delivery a priority.



“The OBA subsidy fills the gap between the affordable level that these households can pay and the real cost of extending services to these households,” says Xavier Chauvot de Beauchêne, World Bank task team leader for the project.

So far, more than 50,000 residents of informal settlements have benefited from water and sanitation connections provided via the OBA pilot. The impact on their lives has been dramatic.

“Before, without water, it was difficult to plan or do things. I felt doors were closed but they are now finally open. Everything became possible,” said Hassana Jaatouti, a project beneficiary in Meknès.

The World Bank is now working with the government of Morocco to plan a scale-up program to bring water and sanitation services to other disadvantaged communities in urban areas, using the OBA method. 

BUCHAREST WATER & SANITATION

For decades, the municipality of Bucharest, Romania struggled with the city's water and sanitation needs. Because of leaks and waste in the distribution network, water losses were nearly 50 percent. That, along with an inadequate metering system, resulted in low revenues for the municipality, with water consumption levels four times the European Union average. To meet European Union standards, Bucharest was required to make large investments in sewerage and water storage, and to increase accountability and incentives to improve efficiency. But low tariffs meant that investment funds were insufficient.

The municipality hired IFC to facilitate efficiency gains so that consumer service levels could improve with minimum tariff increases, to transfer most of the investment responsibilities to the private sector and make it as self-sufficient as possible, and to avoid the dangers of a private monopoly. In 2000, Bucharest created APA Nova, a joint venture concessionaire company, to establish and manage all water and sanitation services in metropolitan Bucharest under a 25-year concession contract. This marked Romania's first public-private partnership in the water and sanitation sector, and it was one

Photo © Danilo Pinzon/World Bank



Among major Asian cities, metropolitan Manila was infamous for its outdated, inefficient water system. The government agency responsible for delivering water and sewerage services was heavily indebted, and by 1995, three-quarters of the homes in the eastern half of Manila lacked 24-hour water services. Only 8 percent had sewerage connection. Overall, almost two-thirds of the water produced was lost to leaks, poor metering, and illegal connections.

That changed with the privatization of the Metropolitan Waterworks and Sewerage System (MWSS), which followed government legisla-

of the first sector transactions in Europe. In the decade since this pioneering transaction paved the way for others, Bucharest has seen dramatic improvements to its water and sanitation needs, including:

- A new water treatment plant which reduced dependence on two older plants.
- Reduced water losses by 44 percent (during the 2002-2006 period).
- A new metering system and reduced leakages, leading to a 50 percent drop in total water demand.



tion in 1995 that fundamentally changed the sector. IFC ultimately helped the government design, manage, and implement a competitive and transparent bidding process for two parallel 25-year concessions that were awarded based on the lowest average water tariff bids. A \$7 billion investment to expand and improve metropolitan Manila's water and sewerage system focused on better service, lower rates, and fewer leaks and illegal connections. Successes included:

- An initial drop in rates of 74 percent in Manila's east zone and 43 percent in the west.
- In the east zone, households with 24-hour access to water increased from 26 percent in 1997 to 99 percent in 2006, and system losses were cut in half. Sewerage connections also doubled over the same period.
- Manila Water Company's "Water for the Poor" program now allows residents in the poorest neighborhoods to pay \$1.50 per month for clean water, a fraction of what they paid before.

MANILA WATER

Water concessions in **COLOMBIA**

By Luis A. Andrés, David Sisen & Philippe Marin


An increasing number of the urban poor in Colombia have access to water and sanitation because of an innovative approach by the government, which shares responsibility for key services with local authorities and the private sector.

These reforms were led by the cities of Cartagena and Barranquilla. Both cities contracted operations out to “mixed” companies jointly owned by the municipality, a private operator, and local private shareholders, with the city authorities retaining ownership of the infrastructure.

Results were impressive. Access to water and sanitation services improved substantially in both cities between 1994 and 2002. More than 80 percent of the new connections were in poor neighborhoods. Services became more efficient and reliable. Metering reduced losses from unaccounted-

for water and the time taken to respond to consumer complaints was dramatically reduced.


New approaches have now emerged. Municipalities are extending services to the urban poor by promoting local entrepreneurs in the water sector, creating a pool of small, local service providers who can respond more quickly to demand.

The key to Colombia’s success in improving access to water and sanitation services has been devising homegrown solutions and adapting models developed in other countries to its own conditions and needs. 

Excerpted from Charting a New Course: Structural Reforms in Colombia’s Water Supply and Sanitation Sector, World Bank (2010).

The case of **CARTAGENA**

About 30 percent of Colombians—many of them poor—live in small cities and towns with insufficient water supply and sanitation coverage. To remedy this, in June 1995 the District of Cartagena entered into a management contract with ACUACAR for the operation, maintenance, and rehabilitation of the water supply and sanitation systems for a period of 26 years, granting management autonomy to the operating partner. To fulfill its contractual obligations, ACUACAR is required to generate and maintain a minimum corporate capital of 4 billion Colombian pesos (approximately \$1.9 million in 2009).

In turn, ACUACAR executed a management contract with AGBAR. Its commitment as operating partner included the transfer of technology, recruitment of specialized staff, and training of workers, in addition to improving the indicators for efficiency in operations and investment for the rehabilitation and replacement of networks and systems. The operator's remuneration for its work is a percentage of ACUACAR's income from tariff revenue, in addition to earnings on its ACUACAR shares. 



Beyond sovereign guarantees

THE CASE FOR SUB-NATIONAL FINANCE

By Joshua Gallo & Isabel Chatterton

In many countries, central governments have devolved the responsibility of infrastructure service provision to the sub-national level, which is essential for economic growth. Along with this devolution of provision responsibility comes the requirement to raise revenues, enhance efficiencies, improve commercial viability, and reduce a dependence on external financial support—including central government guarantees.

However, central governments are increasingly unwilling or unable (due to limitations of fiscal space) to guarantee sub-national borrowings. This new paradigm is testing the sub-nationals' ability to raise financing to fulfill newfound responsibilities in infrastructure service provision.


Perhaps this is a blessing in disguise. Historically, easy access to sovereign guarantees has cre-

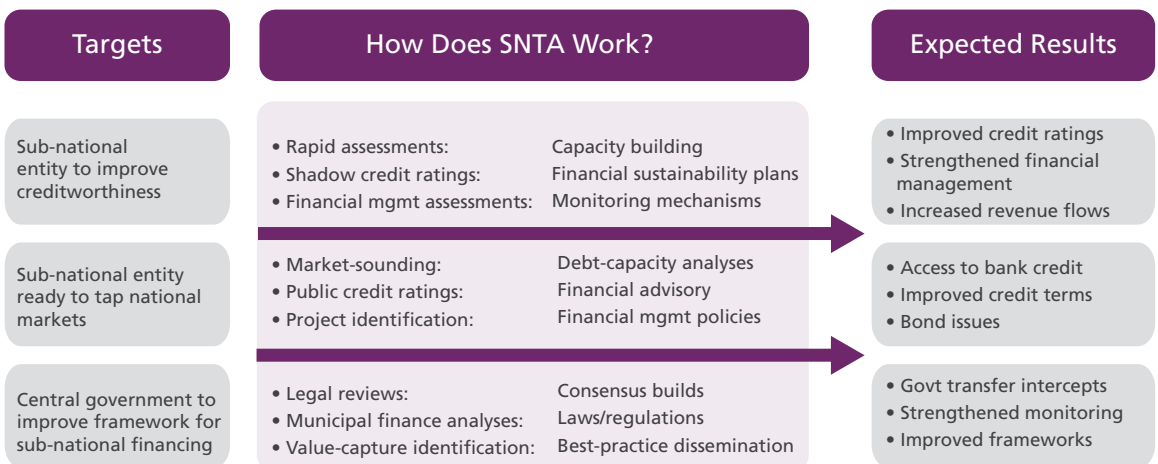
Photo © epSos.de

ated perverse incentives for not pursuing more sustainable financing solutions. This dependence has also tainted the way that sub-nationals are perceived by the markets, by making them seem like reactive agents of development. This in turn has limited their access to finance and therefore their ability to develop. This approach must evolve, because whether the focus is climate change, massive migratory movements, or basic infrastructure needs, the struggle to advance the global fight against poverty and unsustainable development may be won or lost primarily at the local level in developing countries.

Change isn't easy, but rapid urbanization places growing demands on governments in the developing world to deliver essential infrastructure services to an ever-increasing number of people in cities. City budgets alone are usually unable to meet these demands, and sub-nationals' weak creditworthiness is a major constraint when it comes to raising other sources of finance. Many

cities are beginning to view the market as a potential source of much-needed infrastructure financing. To understand and weigh the various options that exist for tapping this source of finance, city officials may need specialized advice. The World Bank, in partnership with many donors, responded to this need with the creation of the Sub-National Technical Assistance (SNTA) Program.

Of course, financing without guarantees cannot guarantee access to finance. But it promises the beginning of more pragmatic and forward-looking planning at the local level; more proactive approaches to revenue raising; and a sharper focus on sound financial management practices. This enhances the ability of local government officials to meet infrastructure needs. All local governments, regardless of their size or capacity, can step forward to take on this challenge. 



The Peruvian experience

Until recently, Peruvian banks were discouraged from considering the sub-sovereign market. This was due to a lengthy and complex sub-national borrowing approval process, the limited technical and financial capacity of sub-nationals outside of Lima, the difficulty predicting and intercepting intergovernmental transfers, and the uncertainty about whether mayors and regional presidents would honor the debt obligations contracted by their predecessors.


This changed in 2008, when SNTA funded technical assistance to facilitate Peruvian sub-national governments' access to financing from commercial banks and capital markets. The goal was to complement existing government transfers and revenues, diversify funding sources, lengthen the maturity of available commercial bank financing, create and strengthen credit histories, and introduce financial discipline. Success included the following results:

- The Metropolitan Municipality of Lima signed a \$70 million commercial bank loan with a local commercial bank in April 2010—the largest market-based borrowing ever concluded by a sub-national government entity in Peru. The loan was backed by a \$32 million IFC partial credit guarantee. Technical assistance was instrumental for the overall engagement with Lima officials and transaction support. In particular, SNTA supported the consolidation of the accounts of the Municipality of Lima and the 19

public companies and other entities it controls; the credit rating from an international credit rating agency; and the development of a five-year macroeconomic corporate report for Lima with projections up to 2015.

- The Regional Government of Arequipa signed a \$10 million loan with a local commercial bank to finance its regional road rehabilitation program. This marks the first time that a regional government in Peru has borrowed without a sovereign guarantee. As with Lima, the loan was backed by an IFC guarantee.

Other Peruvian local governments and public utilities supported by SNTA are also improving their creditworthiness. At least one additional commercial financing is expected to close in 2012.

Lima, driven by its need to achieve higher levels of leverage and by its desire to benchmark its debt management capacity in light of the subnational debt's rapid growth, is reviewing its debt management and planning functions. Corporate-level financing options may be feasible for Lima along the more traditional project-level financing. SNTA support has delivered a rapid market assessment to provide a glimpse of market appetite for long term corporate borrowing by domestic institutional investors, as well as to help inform the views of underwriters, rating agencies, and fiduciary banks. 

CITIES AS DEVELOPMENT PARTNERS

By William Cobbett

Policymakers at the city, national, and international levels have a rapidly diminishing window of opportunity to allow their responses to catch up with the facts of rapid urbanization. The populations of most developing world cities will double in the next two decades, and failure to respond will carry huge financial, social, and political consequences. Some results are already evident in the spatial inefficiency of thousands of cities, the huge additional costs of retrofitting infrastructure, marginalized communities condemned to live in unrecognized and unserved slums, anger at huge price increases on staple foods, a generation of youth with limited prospects for education or employment, and the continued marginalization of young girls and women.

Photo © Cities Alliance

Getting cities right—assuring that they are efficient, safe, environmentally, and economically sustainable—is the most important developmental challenge of this and the coming generations. Cities are the places where we will fail, or succeed, in dealing with our global challenges. Even though cities are sometimes presented as concentrations of poverty, degradation, and vice, they are more appropriately understood as centers of culture, social and political progress, and sites of economic development. To achieve this vision, Cities Alliance’s decade of experience and success suggests the most promising ways forward:

1 Urgently improve the policy response.

A deficit of creative ideas fails to deal with existing realities and denies a future that is both certain and predictable. Urbanization is a reality, and it will continue. All attempts to prevent, divert, or slow the process have failed miserably, certainly in the long term. The single most important change needed is a mindset and policy framework based on facts, which anticipates and plans for urban growth.

2 Pay far more attention to small and medium cities.

Only a very small percentage of the world’s population will live and work in mega-cities. The policy challenge is increasingly in small and medium size cities, most likely already ignored, under-resourced and struggling to cope.

3 Reject the urban/rural dichotomy.

Long one of the stalest topics in development, this false and outdated

method of compartmentalizing poverty or growth undermines the relationship between urban growth and rural poverty reduction, in which cities provide markets, remittances, and goods to the rural spaces beyond. Neither poverty reduction nor economic growth occurs in discrete locales.

4 Focus on systems of cities.

Using the national economy as a framework, cities should be regarded as interrelated systems that require connections, while allowing for regional differentiation and city-level specialization.

5 Increase cities’ autonomy and accountability.

Cities are too often regarded as either an inferior level of government, or little more than the administrative arm of a higher tier. For real progress, city mayors and officials should be made accountable to their voters and taxpayers, with local innovation and solutions encouraged. This

process is more likely to provide solutions than distant bureaucrats or committees in regional or national government.

6

Adopt a whole city, long-term perspective.

Too much of city development is weakened by a project-based approach to development, such as trying to solve the challenge of slums only in the slums. Too many cities are weakened by a short-term outlook more concerned with the next elections (or donor's budget requirements) than with the long-term future of the entire city, viewed from the perspective of the whole and future population. Realistically, city development should adopt a 20- to 30-year time horizon, with administrative boundaries that facilitate long-term planning.

7

Recognize the permanence, and citizenship, of the urban poor.

Possibly the most obvious consequence of inappropriate policies is the systematic exclusion of the urban poor. This results in their diversion to poorly located and dangerous land, where they are forced to obtain services through parallel and expensive markets, and denied access to economic opportunity. The energy and resilience of the urban poor is often the least understood and most under-utilized driver of city development.

8

Unlock urban land markets.

Long a source of power, patronage, speculation, and corruption, opaque and dysfunctional urban land markets have universal pride of place as the most consistent obstacle to sound city development and good governance.

9

Focus on women as development partners.

Just as cities are the hidden agents of development and change, so the role of women in development is neglected, despite their proven role as the most successful vectors of development. We need active steps toward improving girls' and women's access to education, family planning, land and property rights, credit, and political representation. Historically, these changes have overwhelmingly occurred not on the farm or the village, but in the city.

10

Engage the private sector as partner.

We have no knowledge of any city that has escaped poverty and sustained economic growth without attracting significant private investment. Development assistance should be geared to providing a platform for such investment, and recognize the many guises of the private sector, including the entrepreneurs in the slums.

FAST FACTS



For the first time in history, more than half of the world's people live in cities.

Nearly **2,000,000,000** new urban residents are expected in the next **20** years.

70% of global GDP is created by cities.

The proportion of the urban population in developing countries living in slums is

1/3

The number of slum dwellers is estimated to grow by nearly **500,000,000** by 2020.



Three largest cities in the world ranked by population

Tokyo, Japan

33,200,000

New York City, USA

17,800,000

São Paulo, Brazil

17,700,000

Sources: citymayors.com, *UN-HABITAT State of the World's Cities Report 2010/2011*, *The World Bank's World Development Report 2009*.

“ The city as a center where, any day in any year, there may be a fresh encounter with a new talent, a keen mind or a gifted specialist—this is essential to the life of a country. ”

—Margaret Mead

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