



Urban Mass Transit: A Lifeline for the World's Growing Cities

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As developing countries continue to urbanize, cities are increasingly important engines of economic development. The challenge for many developing cities is to achieve economic growth that is also equitable, inclusive, and sustainable. Achieving this vision for prosperous and livable cities will require transport policies and systems that deliver sustainable mobility for all through accessibility, efficiency, safety and appropriate environmental considerations.

Urban mobility enables cities and their residents to flourish by providing universal accessibility to jobs, services, markets, and other opportunities that enhance quality of life. As cities grow, densify, and become congested, high-quality public transport is essential for achieving sustainable mobility and supporting economic development for all residents. Lower-income urban residents rely disproportionately on public transport and non-motorized transport (walking and biking) for their daily travel needs. Without fast, secure, and affordable public transport, many people are forced to spend more time and limited income on commuting, or greatly limit their job options and other opportunities. Moreover, urban roads are often over-used by private automobiles and motorized two-wheelers to the detriment of public transport and non-motorized modes, resulting in excessive congestion, road injuries and fatalities, air and noise pollution, global emissions, and other negative externalities.

Therefore, dense urban areas and high-demand corridors often require rapid transit or mass transit solutions—such as urban rail (metro, commuter rail), light rail transit (LRT), or bus rapid transit (BRT)—to provide high-capacity transport on exclusive rights-of way in a safe, clean, and affordable manner. As cities and regions continue to grow and densify, increasing travel demand often necessitates the development of projects in cities and regions with little or no experience in this area.

What have we done so far?

The WBG's experience with urban mass transit projects goes back to the 1970s with the rehabilitation or extension of existing systems, the procurement of rolling stock (trains and buses) and equipment, and support for studies and reforms. In the past decade alone, the WBG's has advised or financed more than 30 new mass transit projects (rail-based and bus-based) in more than 20 countries in all regions of the world, including the following:

- Bus Rapid Transit projects of varying capacities and designs in Argentina, Bangladesh, Brazil, Colombia, China, India, Kenya, Lebanon, Mexico, Nigeria, Pakistan, Peru, Philippines, Senegal, Tanzania, and Vietnam.

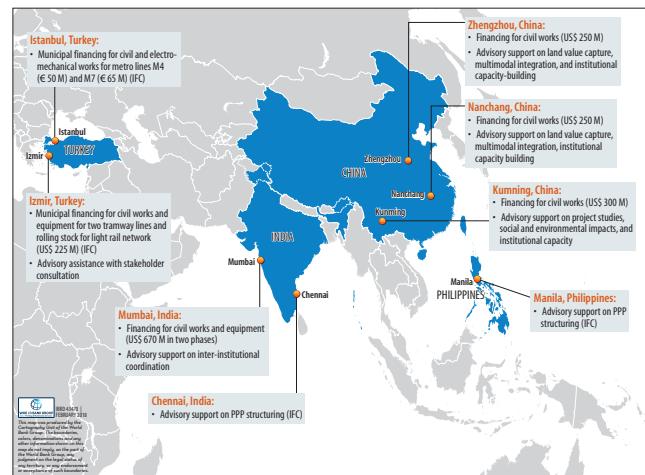
Key facts

30+ new mass transit projects

in more than 20 countries in all regions of the world

- Urban Rail projects in Latin America (Bogotá, Colombia; Quito, Ecuador; Lima, Peru; Santiago, Chile; and Rio de Janeiro, São Paulo, and Salvador, Brazil), India (Mumbai), and China (Nanchang, Kunming, and Zhengzhou). The International Bank for Reconstruction and Development (IBRD) support has included advisory and financing for studies, civil works, equipment, and rolling stock. Additionally, the International Finance Corporation (IFC) has helped to structure, finance and mobilize private sector financing for projects in Turkey (Izmir and Istanbul), India (Chennai), and the Philippines (Manila). The Multilateral Investment Guarantee Agency (MIGA) also provided Non-Honoring of Sovereign Financial Obligations guarantees for Panama City Metro's Line 1 and urban rail projects in Izmir and Istanbul.

Figure: Snapshot of World Bank Group's Experience in Urban Rail Projects, 2007-2017



Mass transit projects are usually megaprojects by their size, complexity and importance. The knowledge gained from the WBG experience suggest the following main lessons for developing urban rapid or mass transit projects:

1. Successful implementation requires strong political and technical champions, as well as stakeholder engagement and comprehensive communications strategies.
2. Metropolitan transport governance and coordination, especially on planning, funding, and fare policies, are key to ensuring the availability, accessibility, affordability, and acceptability of services;
3. The projects cannot be developed in isolation and must be part of a broader urban mobility and land use strategy, institutional or sector reform process, and a multi-modal, hierarchically integrated transit system;

4. The project design process should also include sufficient flexibility to ensure solutions that are acceptable in the local context, implementable, and operationally sustainable in the long-term;
5. Rapid transit projects are not only about building infrastructure and operating vehicles—they should be planned and designed as opportunities to support existing and future socio-economic activities in the region, to build internal capacity, and improvement of local operators.

Where can we go from here?

Urban rapid or mass transit projects are a public good, capital-intensive and long-lived. Therefore, it is important to plan, implement, and operate these systems with a good understanding of the risks and returns over the life of the investment, especially from a socio-economic perspective. If not well planned or implemented, these projects can become a financial burden (subsidies), or can lead to unintended consequences or opportunity costs.

Based on its extensive sector experience, independence from commercial interests, and unbiased view of different modes and technologies, the WBG can serve as a financier, trusted advisor, or honest broker in any phase of the project development process. The WBG has worked with numerous clients and Non-Governmental Organizations to develop guidance on mass transit development and associated reforms. Latest in a line of experiential learning, is the 2018 *Urban Rail Development Handbook* (Pulido, Dariño, Munoz-Raskin and Moody) which shares good practices and recommendations for decision-makers to improve the planning, design, implementation and operations. While several chapters are applicable to the planning or design of any urban mass transit project, other chapters are focused on specific aspects and characteristics of urban rail projects.

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For more information, please visit Internal WBG Link

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