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How much can public private partnership really do for urban transport in developing countries?

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ABSTRACT

A few cities in some of the larger developing countries in Latin America and Asia have made increasing use of multi-year concessions or franchises, competitively awarded to private companies, for construction and operation of urban transport infrastructure and for provision of public transport services. In view of the strong prospective growth of developing-country cities with large transport needs, and the rise in the emerging economies of potential new sources of private capital, it is important to see how effective PPP has so far been in this area. The experience is analyzed principally by thorough comparative review of what has actually happened for some of the main users to date: Bogotá, Santiago, São Paulo, Seoul, and several cities in both China and India. Despite delays and mistakes that have been made in development of most of the projects, the overall results, already delivered and in prospect, are very positive and urban public transport is benefiting substantially, with significant side effects on poorer people's access to work and to services, air pollution levels and road accident rates. The widest and most important advantage of the PPP arrangements, as compared with more conventional short-term contracting, is found to be the innovations, technical and managerial, developed, and, in particular, the mutual capacity building of the countries' private and public sectors and their more effective interaction. The experience in the six countries covered suggests that other developing-country cities may be best assisted to develop sound urban transport PPPs more rapidly through provision of help on chosen items among 7 elements that have proved particularly crucial but sometimes weak in the projects reviewed: Civic consultation systems, Land-use/Transport strategic planning, Land/property market management, Monitoring systems, Progressive policies, Economic regulation, and Public institutional framework for

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1. Introduction

Competitive assignment of enlarged responsibilities to private enterprises for development of infrastructure and services has been much discussed over the last twenty years as a promising way to improve transport sector performance. One thrust of importance to urban areas has been the promotion of joint undertakings between the public sector and private enterprises, for construction and subsequent operation for a substantial period, of major works such as subways, expressways or road bridges. Such schemes have become known as PPPs, normally involving substantial investments by the private partners and their financial backers. A variant with lower investment has been long-term concession to a private party of responsibility for maintenance and/or operation of a major

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transport facility or network, with remuneration from either user-paid tolls or regular payments by government for adherence to agreed performance standards. Another line of action that usually involves close public—private cooperation and has received much attention in the last ten years is improvement of urban bus services, including the introduction of Bus Rapid Transit (BRT) services on major corridors.

New PPP infrastructure projects in urban transport have remained concentrated in a few countries, in recent years principally China, India, Brazil, Chile, Malaysia, Poland and several other Latin American and East Asian countries. This type of project has spread to only a few cities in most of these countries and little at all to most other countries. Urban public transport reforms, involving private investment mainly in the buses used and ancillary services, have attracted effort more widely and the number of cities with BRT initiatives has grown sharply in the last five years. The spread of action has been helped by the educational and advisory work of some international groups such as the Institute for Transportation

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and Development Policy (ITDP), the Embarq subsidiary of the World Resources Institute, and the GTZ Sustainable Urban Transport Project. But cities' rapidly rising concerns about traffic congestion and its economic costs, air pollution and its effect on people's health, traffic accidents and climate change (ITF, 2011; May & Marsden, 2010; Mitric, 2011) all point to the urgency of more efforts to increase the share of urban transport needs that are handled by public conveyance or by non-motorized means, by adapting them better to citizens' needs and by charging individual vehicles more fairly for the costs that their use imposes.

Bringing about these changes from ingrained patterns and habits is a very large and gradual process requiring extensive joint effort by different levels of government and by the private sector, non-commercial as well as commercial, in addition to collaboration with cultural and social leaders. Public-private partnerships, in the broad sense defined above, are an important dimension of the effort required. Reassessment of experience to date is appropriate at this time not only because partnerships, if worthwhile, do need to be activated in cities much more generally but also because financial bases for their activities are changing and may be able to evolve in ways that will make more resources available. Recent data indicate that the volume of financing committed for PPP projects in transport of all sorts (not only urban) in developing countries reached a new high in 2006 (some US \$30 billion, more than three times the average annual commitment in the first five years of the new millennium), from which it has since fallen some 25%, and possibly further in 2011 (Izaguirre, 2011). This largely reflects the uncertainties stemming from the financial crises that have arisen in various OECD countries, one after another, since 2007. More important for future possibilities of financing investments in developing countries are the improved record of GDP growth achieved by most of the countries in the last few years, the recent transformation of numbers of developing-country enterprises into multinationals investing widely, the much-changed distribution of financial reserves among countries, and the trends toward development of new regional centers of financial assets and management located in a few of the emerging economies themselves (World Bank, 2011a).

Based on a wide-ranging desk review of experience to date in the developing countries which have tried to develop public—private partnership initiatives of the types described, this article seeks to identify the broad lessons of experience so far and their implications for future work. Compared with available alternatives, major privately financed and run projects, giving service over long periods up to 30 or more years, have indeed been able to deliver in developing countries advantages similar to those offered in richer countries. But because the government institutions were often weaker these advantages may well have been more important:

- to some extent in easing the resource constraints of local authorities, the *financing advantage*,
- to significant degree in enabling competition more fruitful in terms of additional efficiencies, resulting from better division of risks, than obtainable through the contracting procedures previously used, the efficiency advantage,
- and notably in introducing, and adapting to local circumstances, more modern techniques in fields from ticketing to land management, and sounder practices of maintenance and performance monitoring, the *innovation advantage*.

As also in the richer countries however, PPP projects delivering these services often took a long time to prepare and sell sufficiently convincingly to needed constituencies. And even after they had reached the bidding stage some still suffered from weaknesses in the institutional framework. It therefore seemed that the most productive way to advance the review was to pursue main aspects of public private partnership development and design through more detailed assessment of what had actually been achieved in a few of the cities or countries which have gone furthest in use of partnerships for urban transport.

Beyond this introduction, the article proceeds by very briefly reviewing (Section 2) recent urban transport PPP experience in the traditional OECD countries, both investment trends and efforts at evaluation of earlier commitments, before turning to the developing countries. Sections 3–8 introduce in turn each of the six broad design aspects and give main emphasis to succinctly analyzing the overall experience of one city or country which has achieved some success on the element focused, sometimes following problem-ridden earlier efforts. Section 9 of the paper draws the main conclusions from the overall study, emphasizing the need for substantially increased efforts to develop — in a rapidly increasing number of cities — the building blocks that have proved critical to progress in the cases studied.

2. OECD country experience

The last 10-15 years have seen gradual growth of public-private partnership in urban transport in most of the countries that have long been members of OECD and a degree of convergence among them, but less change than has occurred in the trunk transport modes, especially airports/airlines and rail freight provision. The widest-spreading change of significance for urban areas, especially in Europe and Australasia, may have been in the management of public transport, especially bus services, with much increased use of competitive franchising and experiments to focus the competition more effectively toward customer needs and consequent attraction of increased patronage. The change in continental Europe has been strongly promoted by the EU, so that urban bus services are now much more generally provided by the private sector than was the case in 1990, and remaining government-owned services are subject to a threat of competition that has often been used to secure efficiency improvements (Buehler & Pucher, 2011). Infrastructure PPPs for urban areas have grown gradually in number and spread across most of the traditional OECD member countries, with focus principally toward construction and operation of individual light rail lines (LRT), additional subway lines, major road bridges and tunnels, with financing from user charges often supplemented by some degree of government financial support; such activity has been significant especially in UK, Spain, Portugal, Australia and USA and has been assisted by the European Investment Bank in many other European countries.

Private participation in urban road provision, other than under construction or maintenance contract from the national/local road authority, remains very limited. But there have been some important experiments, mostly with addition of comparatively short stretches of tolled facility to respond to serious local bottlenecks. One interesting case of this sort was the famous 10mile private project on route SR91 in California, involving construction of tolled lanes in the road's median in 1995 and operation of them with time-varying tolls (electronically charged) intended to ensure free flow at all times but maximize usage. The project was a great success both in dissolving the bottleneck and proving within a few years highly profitable. It was sustained by the state after buy-out at a high price in 2003 when the owner refused (under a non-compete clause in his concession) to permit any other state response to the high congestion arising on the route's untolled conventional lanes (Engel, Fischer, & Galetovic, 2011).

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