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ABSTRACT

The World Bank urban transport strategy review, "Cities on the Move" analyzed urban transport problems in developing and transitional economies and articulated a proposed strategy framework for national and city governments. This paper describes how the urban transport problems of the developing world have changed in the last decade and assesses the extent to which the strategies recommended in 2002 have been successfully implemented. It shows that progress has been widespread in some areas – particularly in mass transit analysis and investment and some environmental policies – and that there have developed some good planning and public transport practices in a smaller number of model cities. But more strategic institutional and policy issues, including the mobilization and regulation of private sector initiative in meeting infrastructure and public transport supply deficiencies, have tended to be poorly developed. Above all, the growth of medium sized cities with weak institutions and finance highlights the need for the international development institutions to put greater emphasis on helping those cities by dissemination of best practice in strategic transport planning and traffic management. © 2012 Published by Elsevier Ltd.

1. Introduction

In 2002, the World Bank published its urban transport strategy review, "Cities on the Move" (World Bank, 2002).¹ The paper had three objectives, (i) to develop a better understanding of urban transport problems in developing and transitional economies; (ii) to articulate an urban transport strategy framework for national and city governments; and, (iii) to identify the role of the World Bank in supporting governments in the development and implementation of urban transport strategies. The purpose of the present paper is to take stock, a decade later, of how the urban transport problems of the developing world have changed and the extent to which, and success with which, the strategies recommended in 2002 have been implemented.

The report fell into four parts. The first, identified and analyzed the main strategic objectives with chapters on city economic development, poverty reduction, the urban environment and safety and security. The second part dealt with strategy for the

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modes, comprising chapters on the road system, road passenger transport, mass rapid transit, and non-motorized transport The third dealt with the instruments of pricing and financing and urban transport institutions. The final part considered how the World Bank could assist countries to achieve their strategic objectives. This review follows the same structure, with each section briefly describing the 2002 strategy and then discussing subsequent developments.

2. Strategic objectives

2.1. City economic development

Cities on the Move argued that economies of agglomeration in trade and industry generate the growth of cities where the "advanced" sectors with the highest rate of growth of labor productivity are located and that urban transport oils this engine of growth. However, as cities grow and become richer, ownership and use of motorized vehicles — including private vehicles (as in Eastern Europe), small buses (as in much of Latin America and Africa) and 2–3 wheelers (as in Asia) — grows more rapidly than the available road space. This results in increased congestion and traffic-generated air pollution, particularly in megacities with population of over 10 million. As the sources of pollution differ so would the prescribed solutions.

The report identified several other factors contributing to urban transport deterioration including inadequate quantity and structure of road space and poorly developed institutional, fiscal and



 $[\]Rightarrow$ This paper has benefitted from input from former colleagues at the World Bank, including Tony Bliss, Jean-Charles Crochet, Roger Gorham, Masami Kojima, Ajay Kumar, Shomik Mehndiratta, Gerhard Menckhoff, Slobodan Mitric, Richard Podolske, Jorge Rebelo, Tom Rickert, Chris Willoughby and Zhi Liu, They are not responsible, however, for the opinions and judgments offered in the paper.

¹ A summarized version of the contents of the report is contained in Gwilliam (2003).

regulatory arrangements at the municipal level. Excessive concentration of activity in the capital cities and megacities was to be addressed by removal of the fiscal advantages which they enjoy in many countries. Counterproductive policies on land use control were to be improved by more reliance on market signals. And inconsistencies between sector policies were to be addressed by the incorporation of all sector policies within a coherent city development strategy.

2.1.1. Urbanization continues...

By 2008, more than half of the globe's population, 3.3 billion people, was living in towns and cities, and urban population is projected to grow to 4.9 billion by 2030. At the global level, *all* future population growth will thus be in towns and cities. Most of this growth will be in developing countries. The urban population of Africa and Asia is expected to double between 2000 and 2030. It will also continue to expand, but more slowly, in Latin America and the Caribbean (United Nations Population Fund, 2010). Poverty is now growing faster in urban than in rural areas: a billion people already live in urban slums.

2.1.2. ...but is not confined to megacities

While the number of megacities with a population of over 10 million is expected to increase from the present 27, most of the growth is expected to occur in smaller and medium sized cities. The number of cities with more than one million people has already grown from 74 in 1950 to 442 today (National Geographic, 2011). The policy implication is that urban transport strategy must concentrate more than was suggested in *Cities on the Move* on the medium sized cities, which are often less well endowed in either financial or human resources to deal with the transport problems of urbanization. It is notable that in the national transport strategy reviews currently taking place in Russia and India, the focus of urban transport strategy has shifted from the problems of megacities to the more general issues which affect cities of all size.

2.1.3. In many countries the economic context is now more favorable...

The first decade of the new millennium was also a period of growth for many of the developing countries. Economic growth proceeded at about 8% per annum in India and 10% per annum in both China, while sub-Saharan Africa, achieved overall growth in excess of 5% per annum for a continuous period of over 5 years at the end of the decade, despite the world recession and the continued ravages of war in some of its countries. The improvement of the economy in general is having significant effects on urban transport, including an actual or incipient explosion in private car ownership in the wealthier countries or cities. The effect of that rapid rate of income growth has been an unprecedentedly rapid growth in car ownership which has had profound implications for transport infrastructure, public transport, transport finance and institutions.

2.1.4. ... and car ownership is accelerating at an unprecedented rate

Recent research on car ownership trends in developing countries throws some light on this. Dargay, Gately, and Sommer (2007) use a conventional sigmoid curve to model the relationship between car ownership and income, but allow the saturation level to be determined endogenously to reflect differences in urbanization and population density. They conclude that saturation levels for countries presently in the earlier stages of development are likely to be similar to those of already developed countries with similar density and urbanization, and that the elasticity of car ownership with respect to income peaks at a value over two somewhere in the range of average GDP per capita of \$5000-\$10,000. The fact that many developing countries with GDP in this range also have relatively high rates of growth of income over time thus explains the phenomenon of rates of growth of car ownership which are consistently higher than those previously experienced in developed countries. Taken together with the relatively much lower income elasticity and growth rate of road stock (Ingram & Liu, 2000) this also presages a continuing deterioration in urban road conditions in developing countries.

2.1.5. Transitional economies are adjusting to a changed economic paradigm...

Although by 2000 the Russian Federation had substantially recovered from the post-liberalization economic depression, many other countries of the former Soviet Union were still struggling to overcome the traumatic economic changes associated with the dismantling of the economic linkages of the FSU. Similarly, some of the former COMECON member states had still to find effective realignment of their economic systems and trading patterns as they lost their traditional markets or suppliers in the FSU. By 2010, the necessary readjustments were largely achieved. The exploitation of the oil and natural gas reserves of the region in a booming international market created wealth for a number of the states of the region (including Azerbaijan, Kazakhstan, and Turkmenistan as well as the Russian Federation), which had beneficial spin-off effects for their regional trading partners. Access of several of the former COMECON states to the European Union also boosted their economies.

2.1.6. ...but an effective balance between planning and market mechanisms remains elusive

In addition to the former COMECON countries many other countries such as China, India and Vietnam have shifted in the direction of market economics during the nineties to great effect. Greater involvement of the private sector in manufacturing has enabled high growth rates to be maintained during the last decade, despite the world recession. But that shift has been less extensive or effective in the urban transport sector. Two aspects have been particularly disappointing. First, the private sector contribution to transport infrastructure investment, of which so much was expected in the late nineties, has not flourished as hoped. Private investment in infrastructure continues to be concentrated in Latin America and East Asia. Second, private sector provision of urban transport services, particularly bus services, has tended to be accidental and chaotic rather than planned and well managed. In both cases, as discussed later, the problem has arisen from a failure to find an appropriate procurement or regulatory mechanism to reconcile the public need for efficiently provided service at an affordable price with the private sector requirement of an adequate return on capital and management effort supplied.

2.1.7. ... and freight transport efficiency is an increasing concern

There is also a growing recognition of the importance of urban freight transport to the efficiency — and environmental sustainability of cities. For example in China, where road freight transport accounts for over 50 percent of transport energy consumption, two factors have hindered its efficiency. The fuel efficiency of Chinese trucks is estimated to be 30 percent below that of the industrialized countries, while logistics management is also comparatively backward, partly as a consequence of the fragmented nature of the trucking industry. Donors are assisting efforts to develop comprehensive "green freight" programs at the national level in Brazil and at the city level in Guangdong, China (Mehndiratta, Liu, & Fang, 2011). But those types of program are still rare. Download English Version:

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