

Rail transit not suitable

By Murtaza Haider

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A renowned transport expert, who teaches urban planning at McGill University, Prof Madhav Badami does not consider rail transit to be the panacea for the clogged urban arterials. According to him rail transit is inflexible, expensive, and does not relieve congestion in metropolises in developing countries.

Prof Badami is equally critical of the metro rail system in New Delhi. He wrote his doctoral dissertation on the mobility challenges in New Delhi. According to him the land use patterns in New Delhi and the lack of affordability for market-based transit fares resulting from persistent poverty limit metro rail's potential in relieving traffic congestion.

Earlier in June, I visited Delhi to participate in an international forum on urban service delivery. Experts from China, the Philippines, and other developing nations at the forum were of the view that the rail transit may not be the best alternative for relieving urban traffic congestion in developing countries.

There are at least three major impediments to rail's success in South Asia. First, compared with the bus rapid transit systems, rail transit is many times more expensive to build and operate.

Second, the unique land use patterns in South Asian cities may not be suitable for high-capacity rail transit. Third, the average commuter in Karachi or New Delhi cannot afford to pay even the minimum fare required by the rail transit to break even.

Therefore, state subsidy is required for capital and operating costs. Even if debt finance covers the one-time capital costs, the long-term operating subsidies are hard to find in these time of fiscal austerity.

According to The Times of India, the head of Karachi Mass Transit Cell, Mr. Zaheer-ul- Islam, was in New Delhi last week to meet the operators of Delhi metro rail corporation (DMRC). He also rode in the Delhi metro. He may or may not have sat in

one of the 10,000 buses that ply on New Delhi's roads every day.

The success story in New Delhi is not the Delhi metro. Instead, it is the compliance to the Supreme Court's decision that converted all public transit vehicles in New Delhi, including buses, taxis, and rickshaws, from diesel and petrol to CNG.

I found the citizens of New Delhi more proud of the conversion to CNG, which significantly improved the air quality, than of Delhi Metro. The almost five million urban commuters in New Delhi pose a mobility challenge that is beyond the capacity of Delhi metro, even when its network is completed.

Most trips in New Delhi are walk or bike trips, followed by bus-based transit trips. Cars and motorized two-wheelers constitute the remaining trips. The Delhi Metro carries a fraction of trips, not enough to reduce congestion by any means. Even in the western world, rail transit relies on the network of buses, which act as a feeder network to provide commuters for the rail transit.

Consider Montreal and Toronto. Both cities operate underground rail transit. In Montreal, almost 50 per cent of the transit trips, and in Toronto more than 60 per cent of all transit trips are made on buses. Without the extensive bus networks, the underground rail transit system may collapse because of lack of ridership.

This could happen even when the transit systems are heavily subsidized. For instance, transit riders in Montreal cover only 55 per cent of the annual operating costs of nearly 750 million dollars.

The federal and provincial (state) governments in the developed world provide huge subsidies for urban transit. In the European metropolises, transit subsidies run as high as 60 to 70 per cent of the operating costs. Could the same transit subsidies be sustained in the developing countries?

The experience in Pakistan shows that subsidy-based transit is unlikely to succeed. Earlier,

provincial transit agencies operated urban and intercity transit. However, the provincial governments in Pakistan have divested from public transit in the past decade.

When the public transit system in Punjab was abolished, the bus fleet had shrunk from more than 1000 buses to fewer than 50 operating buses. The workforce of the Punjab road transport corporation during the same period had increased manifold. With fewer than 50 operating buses and almost no revenue, Punjab government abolished the money-losing enterprise in 1998.

If the Metro system in Karachi is operated on state subsidy, it is likely to meet the same fate. The ultimate goal for the planners in developing countries is to provide not just rail transit, but affordable mass transit capable of serving the mobility needs of all segments of society.

Rather than focusing on specific technology, the planners in Pakistan should first determine the transit fare that is affordable by most urban commuters. Based on that affordable fare and the demand for urban mobility, a transit system should then be devised. This approach will help design a subsidy-free transit system, which may be sustainable over the long run.

The affordability gap in urban transit provision is the challenge. Researchers argue that even the minimum bus fare is beyond the reach of most low-income commuters in Pakistan.

If you are in doubt, just ask the bus franchise operators in Pakistan, who are contractually prevented from raising bus fares even when the operating costs, especially fuel costs, have increased manifold. Commuters react sharply to any attempt to raise bus fares.

Rail transit is much more expensive than buses. The capital and operating costs of magnetic levitation trains, favoured by General Pervez Musharraf, are even more prohibitive.

Transit experts in Shanghai, the only city where MagLev trains are operating, have found that transit fares for the airport-bound MagLev train are beyond the reach of most commuters.

Rather than searching for rail-based solutions in New Delhi or Shanghai, the planners should explore

the success of bus rapid transit in Curitiba and Bogota. With low capital and operating costs, these bus rapid transit systems have revolutionized urban mobility. Transit operators from the West are flocking to the two Latin American metropolises, which have developed indigenous solutions for their low-income population.

Even the transport experts at the Indian Institute of Technology in New Delhi are devising a bus rapid transit system for the capital. Why? Because bus rapid transit is affordable, flexible, and it has the capacity and potential to relieve congestion. The goal for the planners is not to be awe-struck by the glitzy technology, but to provide affordable mass transit for all.

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