



FIXING MUMBAIKAR'S INFRA WOES



A cleaner, more efficient and easier-to-live-in Mumbai is what is needed



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Mumbai's aura as the commercial capital of India is in danger of wearing thin because the infrastructure growth in the past couple of decades has not kept pace with demand arising from the population. The city has expanded geographically and is now recognized more as the Mumbai Metropolitan Region, but a good part of the work commute remains north-south. Projects announced by the authorities get delayed for a plethora of reasons, and as a result often

fail to achieve their desired impact on the life and work efficiency of the populace. What do the authorities have in their respective hats which they can pull out?

To discuss this, the FPJ-IMC Forum organized a panel discussion with experts at the Indian Merchants Chamber, Mumbai. The panel comprised Mrs. Ashwini Bhide, IAS, Managing Director, Mumbai Metro Rail Corporation; Ajoy Mehta, IAS, Municipal Commissioner,

MCGM; and U.P.S. Madan, IAS, Commissioner, MMRDA. The event was moderated by R.N. Bhaskar of FPJ with editorial support from Pankaj Joshi.

The welcome address was given by Dilip Piramal, president, IMC, and the Vote of thanks by the President-Elect Deepak Premnarayan.

Given below are edited excerpts. The full text can be found on <http://www.freepressjournal.in/fixing-mumbaikars-infrastructural-woes/851812>

Unlocking the potential

ASHWINI BHIDE: A city's competitive edge is through a robustly efficient public transport system, which fortunately has been Mumbai's case, primarily the 433-km suburban rail system. But over a period of time the system is oversaturated, and losing utility in relative terms despite the best capacity enhancement efforts by Indian Railway as well as MMRDA. Each train carries 5,000 passengers against its capacity of 1,700-1,800. People still use the suburban train system only for lack of options within Mumbai's geographical linear structure.

If Mumbai has to be the national financial centre and even an international finance centre over a span of 50-100 years we have to enhance our existing public transport. The metro network plan is probably the best way forward.

U.P.S. MADAN: From the time a well-planned city was left by the Britishers upto the nineties and beyond, Mumbai has evolved and population increased manifold, but two important infrastructure components which grew at a very low pace were public transport and housing.

You had a linear city, with a business district at one end. In the nineties, BKC was not as developed as it is now. Today we have partial business hubs in Andheri and elsewhere but then people had to travel a long distance and the only mode was suburban trains and BEST buses for shorter distances. While both were efficient and reliable, lack of augmentation saw overcrowding and service quality declined. The modal split which once was aligned 88-90% towards public transport, has come down to about 68-69%.

New modes are needed, in line with worldwide trends. The Mumbai Urban Transport Project (MUTP) in 2000 was the first time in India where a State Government agreed to provide 50% funds with the railways to augment capacity in a city. A number of new technology rakes were introduced, new tracks laid, conversion from DC to AC system done, conversion of some nine coach trains to 12-15 coaches have all helped. The next step now is other modes of transport, and the best option for Mumbai, is the metro.

AJOY MEHTA: Mumbai is the commercial capital, and without employment you cannot remain the commercial capital. Any infrastructure that you create must generate and facilitate employment. Second, having created employment the next need is housing infrastructure. And of course, in parallel you need transport for connectivity. After employment, housing



ASHWINI BHIDE
Managing Director
Mumbai Metro Rail
Corporation

On safety, the Metro 3 system is the state-of-the-art, the most modern system, which is how tendering has taken place. The communications-based train control system (CBTC) is the most latest signaling system which we have in India. From the safety viewpoint, we will have the latest surveillance system. Escalators, lifts, all even Wi-Fi system is being put in. The underground Metro will have platform screen doors.

and transport connectivity, next is quality of life. You need open spaces, theaters, hospitals, schools. But in this, you tend to forget those people who have a great capacity to contribute, but are at the margins. You need infrastructure which caters to social equity. Today just about 17% of the women are in the workforce in Mumbai. Are you creating infrastructure so that women and the differently abled can come forward, contribute to your economy? Is your infrastructure compliant to ensure that every citizen delivers to his best?

These are the four things to my mind that need to be done for infrastructure in Mumbai on an equal plane, and the whole challenge, administrative and political is to ensure that all four get delivered quickly and together.

Unique public transport and enhancements

ASHWINI BHIDE: Globally the public transport system density is six people per square metre whereas Mumbai has 12-16 people per square metre, which is why so many people are dying. Today, the suburban rail system cannot be stopped even for a day. Without an alternative transport mode, railways will never be able to upgrade the way they desire.

U.P.S. MADAN: A question for

MMRDA is making a thorough road from Churchgate to Borivali on both sides of the railway tracks. Foremost, one cannot encroach on the directive of another agency. This is Railway property, and in fact they have a plan of constructing an elevated corridor of railways over the railways. Practically too it is difficult. To just construct a bridge over the tracks, it sometime takes two years. Here you are talking of 60-70 km of along the track when we are allowed to work only 2-3 hours out of 24.

Inter-modal transfer is being coordinated in two ways. One is the physical way of linking stations of two different modes of transport. The other is the same tickets to be used for more than one mode of transport. We are working on both.

For improving BKC connectivity, we have planned connectivity via a bridge or elevated road from BKC G-Block to Eastern Express Highway. We have also invited tenders for two flyovers which will link BKC to the Sea-Link immediately after crossing the road from the Western Express highway. After coming from the Sea-Link, you can straight away take a bridge and enter BKC. The third initiative is a direct elevated road from BKC to Vakola Junction.

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Defining MMRDA's role

U.P.S. MADAN: The unwritten law is that major regional projects should be taken up by MMRDA and local level projects by the Municipal Corporation. MMRDA is a regional authority, so projects which are regional come to us. For Metro, being public transport, the Government and MMRDA took a conscious decision that it be taken up by us. The MMRDA was set up as an SPV between Government of India and Government of Maharashtra – they both and MMRDA provide funds.

MMRDA's role is first planning for the entire MMR (4,300 square kilometers) which is ten times the MCGM area, but with 50% of population in MCGM area. Second is execution of the major public transport projects across the MMR. Roads and flyovers and bridges are vital to connect the rest of MMR with the city. 2004 onwards all the major roads in the city were taken up for upgradation and aug-



U.P.S. MADAN
Commissioner
MMRDA

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mentation. Then MMRDA constructed the Eastern Freeway. People going to Navi Mumbai, Thane or Pune have benefited. Other flyovers constructed include the Sahar Elevated Road, the new Santacruz-Chembur Link Road, the JVLR, the Andheri-Ghatkopar Link Road. We may not realize today living in the city, but a person who comes back in the city after 4-5 years can see the difference.

Among upcoming projects one is the Mumbai Trans-Harbour Link (MTHL) where MMRDA will put in funds, an in-principle loan approval from JICA is in place and in 5-6 months work will be awarded. A multi modal corridor linking Vasai-Virar to Alibaug is also in the pipeline. We aim to link the entire MMR in a way that you can go from anywhere to anywhere within one hour.

The last important project is having an International Financial Services Center (IFSC) in BKC. Within the next decade you can definitely see a city which is very different from what we have seen today.

Metro: Gathering speed

ASHWINI BHIDE: Bandra-Kurla Complex is an example where growth and employment generation need to be complemented by connectivity. Once this corridor is completed, it is going to connect six such centers which are today not on the

Mass Rapid Transit System network (MRTS).

The first corridor is done and the 11-km travel between Ghatkopar to Versova which used to take 70 minutes earlier has now come down to 17 minutes. We are aiming for such efficiency over our 172 km layout. This Rs.23,000-crore project has funding tied up through multi-lateral funding agencies, Central Government and a soft loan from Japan International Co-operation Agency (JICA). The tendering is over and we will start work after the monsoon, to complete it within the stipulated five years.

The advantage of a metro corridor is last mile connectivity which the suburban rail system does not provide. The metro network is planned such that there is a station at every one kilometer or so.

U.P.S. MADAN: The first Metro corridor came two years back from Versova to Ghatkopar and has been running with 3 lac ridership on weekdays. The Metro right now comprises of isolated corridors, but within the next four years the entire city will be covered with Metro corridors. Like major cities worldwide, you may have to change the Metro at a place, but you don't have to take another mode of transport.

We also introduced the first Monorail in the country. The 20 kilometers of monorail will be going through congested areas, making available a comfortable option of public transport. Monorail is a transport option for congested areas where other public transport modes like railway or metro could not be introduced.

AJOY MEHTA: It will be linked to the station where possible. When we talk monorail, we are talking about local travelers.

Ashwini Bhide: Monorail is not a mass rapid transit system, but a complementary system. Today suburban rails are carrying passengers much more than their capacity. The quality of travel is absolutely subhuman. Many people who are today taking cars would like to travel in a public transport system, if it could be a quality experience.

The way this Metro Master Plan has been prepared by MMRDA, with the help of DMRC, areas not connected by the suburban rail are captured. Again the suburban rail network in Mumbai is completely linear. It is North-South. There is no East-West connectivity. What is being developed via Metro is a grid, from anywhere to anywhere. The Metro network is planned in such a way that it actually enhances the utility of the suburban rail system and it further gives the last mile connectivity to any passenger.

Next point is possible delay due to rehabilitation issue. Without taking care of rehabilitation, and without public ac-



AJOY MEHTA
Municipal
Commissioner
MCGM

In housing, Mumbai today is 42% slums and 20% cessed buildings, so 62% of Mumbai today is entitled for free housing. Therefore 38% of Mumbai has to pay for the 62%. Yes social equity is important and that has made housing very difficult. There are people today who don't live in slums or cessed buildings, for whom that we are talking affordable housing in the development plan. Let us not push this category of people into the slums.

ceptance, we cannot proceed. Another query is about flooding in underground project tunneling. Tunneling is a 150-year old technology and all major cities in the world have tunnels. The way tunneling is done, the water table is managed, flooding won't be an issue.

Last is fares. Fares are fixed to maximize commuters. This transport system is there to make people shift from the road, from cars to metro system, or from the overcrowded suburban rail system.

BMC and open issues

AJOY MEHTA: Corruption has to be dealt with system improvement. Yes, policing has a role, but finally you must repose trust. We are now taking things to a level where everybody must self-certify. We are the first city in the country which will launch a completely online building proposal approval system.

For roads, we have tried to reduce work time, and the police was cooperative. The police allow us to work during the day and now road maintenance happens much faster. Also, closing a road for 21 days for curing concrete is criminal in Mumbai, when you can have a seven-day concrete option.

Waste disposal is weighing on everybody's mind, especially since the Deonar fire. We need a shift towards scientific processing of garbage. We are going in

for waste-to-energy, biomethanation and scientific segregation. We are also setting up a debris to construction material plant. The minute debris has a value, nobody dumps it.

For footpaths, it is clear that there cannot be commercials on footpaths. Hawkers are a necessity, but we need regulation. Street selling is something that is recognized world over, but proper hawking zones have to be notified.

For parking we are proposing a Parking Authority for Mumbai which will map all parking spaces and then ensure that these parking spaces are efficiently used, and also inform a citizen in advance whether, at the destination, a parking would be available.

A road for emergencies is not possible. Mumbai's road network area is just 9% of its area against the world standard of 18%. We hope to start work on the Coastal Road by November. The expression of interest is out. Coastal Road will be the first road in Mumbai with a dedicated BRTS, so it's not just for cars. We will also create green spaces, cycling tracks, and play areas for children.

A big problem in Mumbai is trenching, for putting in power cables, data cables, gas lines, water lines, sewer lines. The trick is how quickly and how well you close your trench. We have now a system in place, where we will close an open trench in a small time, if we have consolidated demand.

On sewerage, we supply about 3,200 million litres of water every day to Mumbai and 1,200 million litres go untreated into the sea.

The remedy, in the next four years, is sewage treatment plants to bring back 1,000 million litres back into the city for washing, cleaning and non-potable purposes.

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Next is the mosquito issue. Mumbai surprisingly doesn't have malaria, the biggest incidence is dengue. People don't realize that dengue is a mosquito that breeds on clean water. The tray under your refrigerator, that little Feng Shui plant in the corner, that little tyre, all that collects water, and then leads to dengue.

The development plan is almost ready. We put the plan line-by-line in public domain as it was being made. We ourselves are correcting each rating as we move on. Probably by the end of May, drafting will be done.