

Mumbai's infrastructure has always been the biggest challenge for the authorities. No mode of travel, however advanced, seems to ease the helplessness of commuters. Mumbai needs to move, and not crawl. Will that happen? **VIDYOTTAMA SHARMA** writes on the promises for better mobility. Proper results will, however, be visible only in 2021, if the delays do not rock the plans, that is

umbai, with an assemblage of over 23 million people over its area of 603.4 km2, is among the densest cities of the world, accounting for about 21,000 people per square kilometre. It wasn't even born normal if you look deeply. It is like a C-section baby, elongated over two vertical lines, basically two railway lines — Central and Western around which the entire development has taken place for over a century. There is also a third railway line, the Harbour line, almost like a long lost cousin that often gets forgotten when the highlights are reck-

With the increase in population, the residential and commercial clusters diversified; penetrating deep into the suburbs with lanes, by-lanes, streets, nullahs, hills, forts, concrete structures, slums, water bodies, railway lines, bus routes, electricity cables, television cables, gutters, water lines,

greenery and much more snuggling with each other – either above or below the ground.

With such an unplanned city spreading its tentacles at every land parcel that can be found or acquired, the challenge was, and still is, to offer it proper infrastructure. While electricity is more or less, taken care of, and tele communications is at its best, it is the water supply and transport that deserve the maximum attention. Water scarcity in Mumbai, unlike many other countries, also arises out of its sheer misuse and uneven distribution, and of course, the tanker mafia. But then, it is the transport infrastructure of Mumbai that is being tackled

Despite the fleet of 3800 buses, despite the 400km route of suburban train network that operates about 2500 train services carrying 65 lakh commuters daily, despite about

a lakh black and white taxis, despite

over 2.5 lakh auto rickshaws and despite the lakhs of private vehicles, two-wheelers and Uber and Ola cars on our roads, Mumbai moves at a snail's pace. The new addition of the advanced mode of travel – the Metro trains — has eased the east-west connectivity a wee bit but Mumbai still needs to straighten its back up and move.

So what can Mumbai look forward to vis-à-vis transport infrastructure in the near future? "For the past many years, a lot of efforts have been undertaken to improve the road infrastructure," says Ashwini Bhide, Managing Director, Mumbai Metro Rail Corporation (MMRC), a Joint Venture of Government of India and Government of Maharashtra. "Flyovers were constructed over both, expressways and elevated corridors, to address almost all junctions. However, they were not the panacea for Mumbai's traffic. Enhancement or further expansion

of our very dependable public transport system, the suburban railway, was kind of neglected for some time. However, because of overcrowding on that system and expansion of Mumbai outside the influence zone of the suburban corridor, the state government decided to create a new, modern and very city-specific public transport system — the Metro. Henceforth, you will find more emphasis on

you will find more emphasis on development of Metro infrastructure in Mumbai".

Out of almost close to 200kms of Metro network planned for the city, the first 11km long corridor, Versova-Andheri-Ghatkopar, is already operational. Tenders are awarded for parts of Corridors 2, 3, and 7, and the work has begun. The remaining corridors, having received approvals, are in the process of tendering. Line 5, almost merged with Line 3, wit-

is a debatable issue. (see Ashwini Bhide's interview on page 5).

The government is trying to acti-

vate the water transport facility too

along with two coastal roads. After

all the necessary environmental clearances, the tendering process for the projects has already been initiated by the Municipal Corporation of Greater Mumbai (MCGM). "Initially, these will be from Girgaum Chowpatty to Bandra Sea Link as the present scope of work allows only that link. Later, the expansion will see the Sea Link being extended till Dahisar. However, the decision is yet to be taken whether in the second phase, the Sea Link should be

While Phase 1 of Monorail is operational, Phase 2 is also being taken up by MMRDA to complete that

expanded or another Coastal Road

should be built".

While Eastern Expressway, Western Expressway, Sahar Elevated road, expansion of the existing road network and flyovers on arterial roads are all ready, a few missing links are being looked into. MMRDA's BKC Connector will connect BKC to Chunabhatti as another option for east-west connectivity. "Since all the projects were taken up in isolation, many of them need further integration. For example, Santacruz-Chembur Link Road (SCLR) and Eastern Express Freeway land near Mankhurd Junction. So, all the fast movement on both the roads gets disjointed there. MMRDA has planned the change in movement at the junction," says Bhide. Many such bottlenecks are being revisited and efforts are being made to clear them. Also, the corridors built in isolation will deliver much better results once the entire network is





nesses an expansion from Bandra to airport. Tendering process is on for the 32.32km long Line 4 – Wadala to Kasarvadavali in Thane. The tendering process for Line 6 is expected to be activated soon.

The capacity of Line 3, when fully commissioned in 2021, would be 14 lakh passengers daily. Figures are similar for Line 2 and Line 1 carries 2.5 to 3 lakh passengers each day. While MMRC is responsible only for the fully underground corridor of the Mumbai Metro Line, i.e, 3, the rest of the elevated corridors are being undertaken by Mumbai Metropolitan Region Development Authority (MMRDA).

In the final break-up, 30 percent of the load would come from the existing suburban trains, 10 to 15 percent from the cars and the rest from the buses and non-public transport. MMRDA, MMRC and the government expect majority of the passengers to shift to Metro by 2021, which entire grid for the commuters. The alomost 22km long Mumbai Trans Harbour Link (MTHL) will connect Mumbai with other parts of Navi Mumbai. The corridor, which will have 16-17 kms of sea bridge, is in the tendering stage.

It is Metro, however, that invites the maximum attention, for right or wrong reasons. The elevated corridors, easier to complete, might be commissioned for the first two phases – 2A and 7A – in 2019 itself. Phase 1 of Line 3, Colaba to BKC will be completed by 2020 and the rest of the corridor is expected to be operational by March 2021. If we leave aside the issue of felling of trees that has brought much criticism MMRC's way, the picture of a well-connected Mumbai in the next five years looks promising.

But then, what beyond Metro? Well, better road connectivity, of course. And for that, more overbridges and over-rails are needed. ready and inter-modal connectivity comes into place.

Now MCGM has planned many flyovers on the congested junctions where movements create a conflict, and is planning the same for eastwest connectivity too.

The biggest hindrance in MMRDA's planning has been its working in isolation for years. Whatever the claims, it did not include the traffic police in its plans till about two or three years ago. As a result, while its infrastructure projects were planned well, the traffic management went havwire as thought was not given to the landing and movement of vehicles. With quite a few jolts, MMRDA and MCGM seem to have woken up to the need of taking other enforcement agencies along with them in the planning stage itself. Promises are many. Work has also begun. Delivery is awaited. Till then, well, till then, be patient. That's all.