

Brief on MUTP- 3A

MUTP 3 A - Rs. 33690 crore Infrastructure Input to Mumbai Suburban Railway System

1. Need for further augmentation/strengthening of Suburban Rail System :

- To cater future requirement of Suburban Traffic for next 20 years
- To augment and upgrade existing system to enhance capacity and safety
- As MMR region is rapidly expanding in Northern part , upgrading the suburban transport in Island City and expansion of the Network in Northern Part are essential.

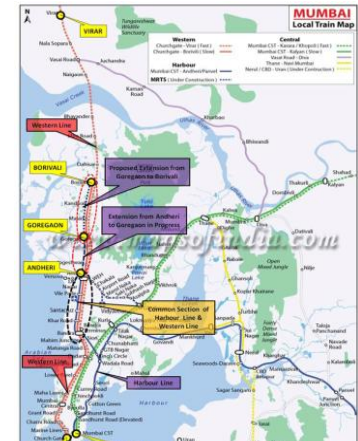
MRVC has **conceptualized all rail projects for Sustainable Urban Transport in the City of Mumbai and put it in a single basket, named MUTP 3A.**

2. Major Components of MUTP 3 A are

SN	MUTP 3A corridors	Route km	Completion Cost in cr
1	Extension of Harbour Line between Goregaon-Borivali	7	826
2	5th & 6th line between Borivali-Virar	26	2184
3	4th line between Kalyan-Asangaon	32	1759
4	3rd & 4th line between Kalyan-Badlapur	14	1510
5	Kalyan Yard - Segregation of Long distance and Suburban Traffic		866
6	a) CBTC on CSMT-Panvel on Harbour Line	49	1391
	b) CBTC on CSMT-Kalyan on Central Railway	53	2166
	c) CBTC on CCG-VR on Western Railway	60	2371
7	Station Improvement		947
8	Procurement of Rolling Stock - 191 AC EMU rakes		15802
9	Maintenance facilities for Rolling Stock		2353
10	Stabling Lines		557
11	Augmentation of Power Supply Arrangement		708
12	Technical Assistance		250
	Grand Total		33690

3. **Extension of Harbour Line between Goregaon to Borivali :**

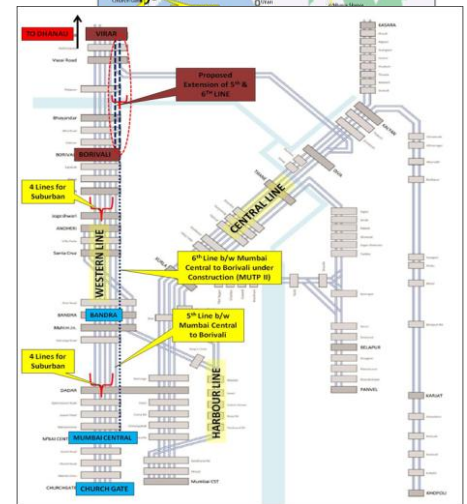
Presently the Harbour line connects CSMT with Goregaon. This will be extended to Borivali thus providing a direct connection to CSMT for people of Borivali.



4. **5th& 6th Line between Borivali to Virar:**

There are 5 lines between Mumbai Central and Borivali 6th line is under construction. From Borivali to Virar there are only 4 lines.

This proposal will segregate the suburban and non-suburban services on Western Line and will provide a slow and fast suburban corridor between Borivali Virar improving its connectivity and increase of services.



5. **4th line between Kalyan-Asangaon -**

Kalyan to Kasara is important route connecting Mumbai with North part of Country. The existing two lines are carrying mix traffic of Mail/ express, Goods trains and also suburban services. There is substantial development of residential area up to Asangaon on Kalyan- Kasara section.

There is sanctioned work of 3rd line between Kalyan –Kasara presently in execution by Central Railway. Present services are run with terminal at Titwala, Asangaon & Kasara.

Construction of 4th line upto Asangaon will provide proper suburban connectivity to this upcoming section which is home to millions of Mumbaikars.

6. **3rd& 4th line between Kalyan-Badlapur -**

The existing two lines between Kalyan and Karjat are carrying mix traffic of Mail/ express, Goods trains and also suburban services.

The Satellite towns and cities of Badlapur, Ambarnath, Ulhasnagar need proper suburban rail connection for journey to Kalyan and Mumbai. Present services are run with terminals at Ambarnath, Badlapur, Karjat, Khopoli and cannot be increased due to saturation on Kalyan Badlapur section

The new suburban corridor from Kalyan to Badlapur will enable augmentation of suburban rail services and will provide much need suburban rail connectivity to these towns and will provide the infrastructure for their development.

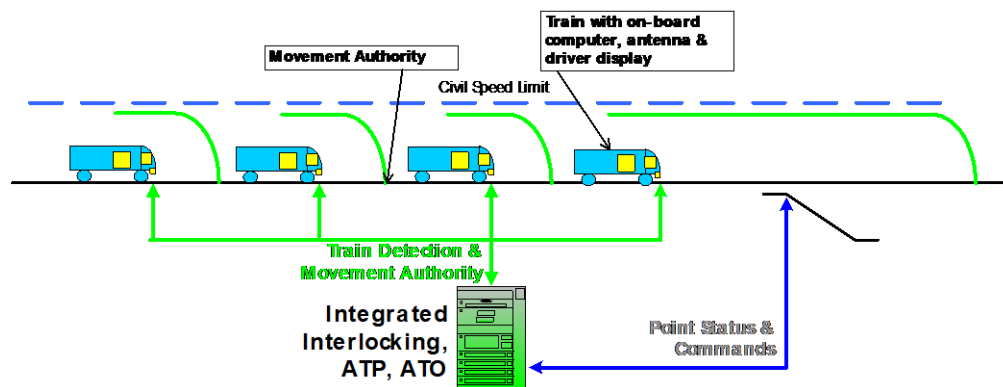
7. Kalyan Yard - Segregation of Long distance and Suburban Traffic -

After Kalyan Yard modification, there will be complete segregation of suburban and long distance traffic. It will decongest the crowding on platforms, facilitate smooth movements & augmentation of suburban services. This will facilitate better suburban network connectivity with proposed corridors between Kalyan-Asangaon and Kalyan-Badlapur under MUTP 3A. Separate and independent Platforms will be available for dealing with long distance trains avoiding their clashing with Suburban traffic.

8. Augmentation of Carrying Capacity and Safety enhancement using Communication Based Train Control (CBTC) -

Introduction of CBTC (communication Based Train Control System) on Suburban Sections will enhance not only the safety of the section but will also reduce the headway on these sections thus increasing capacity for running of additional services.

With the introduction of CBTC, it would be possible to provide the Platform Screen Doors (PSD). Platform screen doors will minimize the cases of trespass at stations which results in the casualties as people cross the platforms through track and not using FOBs.



CBTC is proposed to be introduced on all sections of Suburban Mumbai viz.

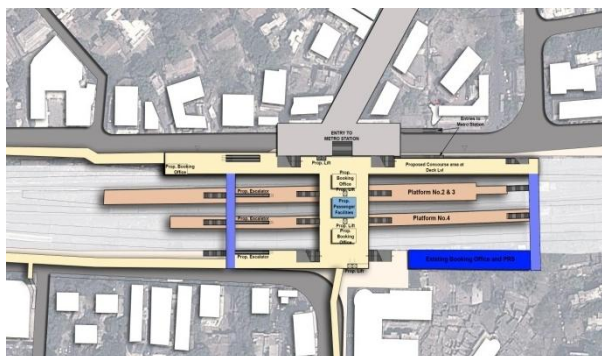
- a) CSMT-Panvel on Harbour and Trans Harbour Line of Central Railway -
- b) CSMT-Kalyan on Central Railway- on both slow and fast lines.
- c) Churchgate-Virar on Western Railway - on both slow and fast lines.

9. Station Improvement

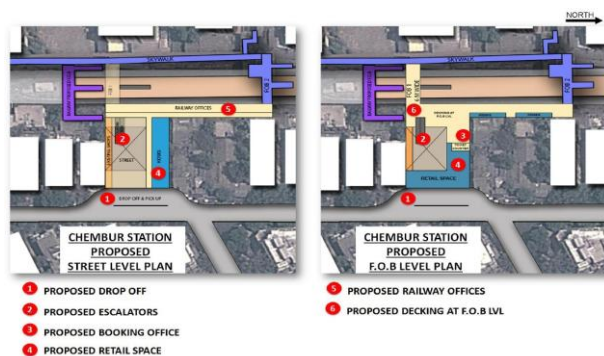
There are total 119 stations on Mumbai Suburban Railway System. Most of the stations are more than 80 years old and highly congested. All suburban stations need to be improved and upgraded from passenger's amenities point of view.

In addition, the circulating space for passengers has become restricted due to augmentation of service and increase of length of trains to 12/15 coach. **There is urgent need for additional circulating space by provision of elevated decks,**

interconnection between FoBs, improving entry/exit projects. It is planned to upgrade about 16 Suburban Stations by provision of FoB's, elevated decks, inter connection between deck/FoB's, skywalk, relocation of service buildings, stalls, kiosks etc., improving entry/exit, improve circulating area, provision of green space, improvement in general lighting and general electrical services etc. A sum of Rs. 947 cr has been earmarked for this work.



Bhayander



Chembur

S No	Railway Network	Line	Station
1	Central Railway	Central Line	Bhandup
2			Mulund
3			Thane
4			Dombivalli
5			Shahad
6			Neral
7			Kasara
8	Central Railway	Harbour Line	GTB Nagar
9			Chembur
10			Govandi
11	Western Railway	Western Line	Mankhurd
12			Mumbai Central (Local)
13			Jogeshwari
14			Kandivli
15			Mira Road
16			Bhayander
17			Vasai Road
18			Nala Sopara
19			Virar

10. 191 Air-conditioned EMU Rakes -

At present 258/12 car EMU rakes are used for providing 2951 trains services every day.

There is a problem of overcrowding and casualties due to falling of passengers from trains.

191 Air Conditioned rakes with automatic closing doors will be procured to provide a better and safe service to people of Mumbai.



11. **EMU Maintenance facilities -**

Suitable EMU facilities to take care of maintenance of the enhanced number of EMU rakes by way of additional facilities in existing workshops and car shed and additional car shed and workshop have been planned.

12. **Stabling Lines**

97 new stabling lines to take care of the additional EMU rakes in the system have been proposed.

13. **Power Supply Augmentation – Traction Power Supply & General Power Supply-**

To take care of the additional power requirement due to additional and air-conditioned rakes, three additional traction sub-stations and sectioning posts on CR and two additional traction sub-station and two sectioning posts on WR have been proposed.

14. **Funding Arrangement :**

The cost of project is proposed to be shared 50:50 by Ministry of Railways and Government of Maharashtra. The summarized funding arrangement is proposed as follows:-

SN	Source	Amount (Rs. In cr)
	Ministry of Railways	
1	MFA/ IRFC/Commercial Bank	3500
2	GBS	4729
3	Deferred funding	8616
	Total MoR	16845
	Govt. of Maharashtra	
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3	Deferred funding	8616
	Total GoM	16845
	Grand Total (MoR + GoM)	33690

MUMBAI SUBURBAN RAIL NETWORK

