

## **METRO**

Metro wing was formed to enhance safe and sustainable urban Transport system by constructing Grade Separators, Foot Over Bridges, Pedestrian Subways, Railway Over Bridges and Railway Under Bridges (under Railway Works Programme). The improvement in infrastructure reduces traffic congestion and road accidents in the Chennai Metropolitan Area.

### **CHENNAI METROPOLITAN DEVELOPMENT PLAN (CMDP) SCHEME:**

To cater to the future demand for traffic in Chennai Metropolitan Area, the Chennai Metropolitan Development Plan is being implemented since 2003-04 with State budgetary allocation. The Comprehensive Traffic & Transportation Study for the Chennai Metropolitan Area in the Second Master Plan of the CMDA has recommended about 340 projects are to be implemented in a span of 15 years (2010- 2025) at an approximate cost of Rs. 14070 Crore.

So far, the Government has given its approval for 269 improvement works at a cost of Rs. 2160.79 Crore which includes 14 Grade Separators (including DPR for 1 RUB work), 12 Railway Over Bridge/ Railway Under Bridge (including DPR for 2 ROB works), 16 river Bridges, 482.47 Km of Road works, 5 Pedestrian subways, 1 Sky walk, and 1 Foot Over Bridge.

Major works under implementation are detailed below:-

#### **Grade Separators :**

Grade separators are provided at major intersections to avoid conflicts. Grade separators are provided as a part of long term strategy for better management of traffic. During 2015-16, 9 spillover works are being taken up at a cost of Rs.675.39 Crore. Out of which 5 works have been completed at a cost of Rs. 348.93 Crore and remaining 4 works are in progress at a cost of Rs.326.46 crore. During 2015-16, Administrative Sanction is

accorded for 4 Works at a cost of Rs. 278.45 Crore. Out of which, 3 works are in progress at a cost of Rs.220.45 crore and LA for 1 work is in progress at a cost of Rs.58.00 crore. Detailed Project Report for 1 RUB work is in progress. The various stages of works are detailed below:

**Details of Grade Separators**

Sl. No	Nomenclature	Cost (Rs. in Crore)
<b>COMPLETED WORKS during the year 2015-16</b>		
1	Grade Separator at the intersection of Madhavaram High road with G.N.T Road at <b>Moolakkadai</b>	49.55
2	Grade Separator at the intersection of Anna Nagar IInd Avenue and Mogappair road with Inner Ring road at <b>Thirumangalam</b>	60.23
3	Grade Separator on EVR Salai at the intersection of <b>Nelson Manickam road</b> and Anna Nagar 3rd Avenue road	117.00
4	Construction of a Grade Separator at the junction of Perambur – Redhills road near <b>Kolathur Rettai Eri</b> (LHS) in Inner Ring Road	52.72
5	Grade Separator at the intersection of N.S.K Salai (Arcot Road) with Inner Ring road at <b>Vadapalani</b> taken up under CMRL	69.43
	<b>Total</b>	<b>348.93</b>
<b>WORKS IN PROGRESS</b>		

<b>Sl. No</b>	<b>Nomenclature</b>	<b>Cost (Rs. in Crore)</b>
6	Grade Separator at the intersection of Mount - Poonamallee road with Kodambakkam - Sriperumpudur road at <b>Porur</b>	54.00
7	Construction of a Grade Separator at the junction of Kundrathur road and Santhai road at <b>Pallavaram</b> in GST road	80.74
8	Construction of a Grade Separator at the junction of Taramani road, Tambaram – Velachery road and Velachery bypass in <b>Velachery Vijayanagaram</b> junction.	98.22
9	Construction of a Grade Separator connecting the junctions of Mofussil bus entrance of CMBT and <b>Kaliamman Koil road</b> junction in Jawaharlal Nehru Salai (IRR)	93.50
	<b>TOTAL</b>	<b>326.46</b>
<b>NEW WORKS (2015-16)</b>		
10	Grade Separator at <b>Medavakkam</b> – Sholinganallur road junction, Medavakkam – Mambakkam road junction and Mount – Medavakkam junction in MaramalaiAdigal Bridge – Irumbuliyur (MBI) road.	133.10
11	Construction of Grade Separator at the intersection of mount Medavakkam road and Pallavaram-Thuraipakkam road near <b>Kilkattalai</b>	58.22

<b>Sl. No</b>	<b>Nomenclature</b>	<b>Cost (Rs. in Crore)</b>
12	Construction of a Grade Separator at the junction of Perambur – Redhills road near <b>Kolathur Rettai Eri</b> (RHS) in Inner Ring Road	29.13
	<b>Total</b>	<b>220.45</b>
<b>DPR STAGE</b>		
13	Grade Separator at the junction of <b>ECR –Thiruvanmiyur</b> road (Land Acquisition)	58.00
14	Construction of RUB at Mount-Medavakkam road and Southern Sector of Inner Ring Road (DPR only)	---
	<b>Total</b>	<b>58.00</b>
	<b>Grand Total</b>	<b>953.84</b>

### **RAILWAY OVER BRIDGES/ UNDER BRIDGES AT RAILWAY LEVEL**

#### **CROSSING:**

Under Railways works program, 10 spillover works were taken up in 2015-16 at a cost of Rs. 318.04 Crore in the Chennai Metropolitan Area. Out of which, 1 work was completed at a cost of Rs. 35 Crore. The Remaining 9 works at a cost of Rs. 283.04 Crore are in various stages as detailed below. Administrative Sanction has been accorded for 2 works for the preparation of Detailed Project Report as shown below.

**Railway Over Bridges/ Under Bridges at Railway Level Crossing**

<b>Sl. No</b>	<b>Nomenclature</b>	<b>Cost (Rs. in Crore)</b>
<b>COMPLETED WORK</b>		
1	LC No.5 - Construction of Railway Over Bridge near <b>Pattaravakkam</b> (Completed at a cost of Rs. 36.06 Crore).	35.00
<b>Works In Progress</b>		
2	LC No.3 -Construction of Railway Over Bridge near <b>Tiruvottiyur - Mattumandhai</b>	47.00
<b>Works To Be Taken Up For Execution</b>		
3	LC No.4 -Construction of Railway Under Bridge near <b>Tiruvottiyur</b> Railway station.	28.00
4	LC No.6 - Construction of Railway Under Bridge near Tiruvottiyur - <b>Wimco Nagar</b> Railway station.	25.50
5	LC No.14 - Construction of Railway Over Bridge near <b>Veppampattu</b> Railway station	29.50
6.	LC No.4 -Construction of Railway Under Bridge near Korattur Railway station	19.97
7.	LC No.16 -Construction of Railway Over Bridge near <b>Nandhiyambakkam- Minjur</b> Railway station	28.32
8.	LC No.32&33 - Construction of Railway Over Bridge near <b>Perungalathur</b> Railway station	76.00
9.	LC No.22 -Construction of Railway Under Bridge near <b>Thirusulam</b>	14.00

<b>Sl. No</b>	<b>Nomenclature</b>	<b>Cost (Rs. in Crore)</b>
10.	LC No.27 -Construction of Limited Use Subway near <b>Chrompet Radha Nagar</b>	14.75
	<b>Total</b>	<b>318.04</b>
<b>DPR Stage</b>		
11	Widening of ROB at Km 20/8 of Mount-Poonamallee-Avadi road.	-
12	Widening of ROB to dual four lane at Km 12/2 -13/2 of Inner Ring Road	-

### **River Bridges :**

Administrative sanction was accorded for 11 River Bridges at a cost of Rs. 178.02 Crore. Out of which, 7 works were completed at a cost of Rs. 96.25 Crore and 4 works at a cost of Rs. 81.77 Crore are in progress. Administrative Sanction was also accorded for 2 River Bridges at a cost of Rs.39.10 crore for Land Acquisition.

The various stages of the River Bridges are as detailed below.

### **Details of River bridges**

<b>Sl. No</b>	<b>Nomenclature</b>	<b>Amount Rs. in Crore</b>
<b>Completed Works</b>		
1	Widening of Bridge across Coovam river in Periyar EVR salai at Km6/6 of GWT Road	6.91
2	Construction of Two lane bridge adjacent to the existing Thiru-vi-ka bridge at Chennai, Adyar	15.64

<b>Sl. No</b>	<b>Nomenclature</b>	<b>Amount Rs. in Crore</b>
3	River bridge across coovam river at road connecting GWT road at Km 11/2 and Mogappair	16.04
4	Providing a bridge across Ennore Creek to connecting Ennore- Expressway Road with North Chennai Thermal Power Station	52.66
5	Widening of Bridge at Km.3/4 of Mount – Poonamallee - Avadi road (SH-55)	1.00
6	Construction of a bridge at Km.16/6 of Tambaram - Mudichur road (SH110)	2.00
7	Construction of an additional two lane bridge at Km.62/2 of Singaperumalkoil – Sriperumpudur –Thiruvallur – Senkundram road (SH-57)	2.00
	<b>Total</b>	<b>96.25</b>
<b>Works in progress</b>		
8	Construction of additional 3 lane bridge across the river Cooum near Aminjekarai in EVR Salai	8.00
9.	Construction of an additional two lane bridge at Km.15/8 of Mount – Poonamallee - Avadi road (SH-55)	5.00
10	Widening of high level bridge at Km 2/6 across the river Adyar in Mount – Poonamallee Road near Ramapuram	15.46
11.	Construction of high level bridge across Buckingham Canal at KM 0/6 of Thiruvottiyur - Ponneri- Panchetty Road.	53.31
	<b>Total</b>	<b>81.77</b>

Sl. No	Nomenclature	Amount Rs. in Crore
<b>Works in Land Acquisition Stage</b>		
12	High level bridge across Coovum river in NH 4 at Nolambur road junction (Land Acquisition)	36.00
13	Construction of high level bridge across Coovum River at Km 0/6 from M.P. Road at Paruthipattu (Land Acquisition).	3.10
	<b>Total</b>	<b>39.10</b>
	<b>Grand Total</b>	<b>217.12</b>

**ROAD WORKS:**

The following three road works are taken up.

**Details of ROAD WORKS**

Sl. No	Nomenclature	Stage of work	Cost (Rs. in Crore)
1	Formation of new link road connecting MBI road at <b>Km 17/4 in Rajakilpakkam</b> and Tambaram Eastern Bypass at Agaramthensalai. (Only completed LA portions).	3 Km completed. Out of 9 Km, balance 6 Km LA is in progress	25.00
2	Forming New Link Road connecting Puzhal Chennai GNT Road and <b>Amullaivoyal</b> in IRR at Km 20/8	Land demarcation is in progress	20.00



<b>Sl. No</b>	<b>Nomenclature</b>	<b>Stage of work</b>	<b>Cost (Rs. in Crore)</b>
3	Forming link road and construction of Bridge across Buckingham canal connecting Rajiv Gandhi Salai and East Coast Road at <b>Neelankarai</b>	Land Acquisition is under progress	204.20
	<b>TOTAL</b>		<b>249.20</b>

**Pedestrian subways:**

To provide safe crossing for Pedestrians and for ensuring uninterrupted traffic on the important roads, administrative sanction has been accorded for Construction of Pedestrian subways 5 Nos. for Rs. 19.00 Crore. The various stages of works are detailed below

**LIST OF PEDESTRIAN SUBWAYS**

<b>Sl. No</b>	<b>Nomenclature</b>	<b>Stage of work</b>	<b>Amount Rs. in Crore</b>
1.	Near A.G Church in Anna Salai.	Fresh AS to be obtained from Government	3.50
2.	Near M.K.N road junction at Guindy in GST road.	Fresh AS to be obtained from Government	3.50
3.	At Km 1/6 of Jawaharlal Nehru Salai (IRR) near Malladi company at Ekkattuthangal.	RAS under preparation	3.50
4.	At Km 2/7 Nehru Salai (IRR) near Kasi theatre.	RAS under preparation	3.50
5.	At Km 7/7 of Jawaharlal Nehru Salai (IRR) near CMBT.	DPR stage	5.00
	<b>Total</b>		<b>19.00</b>

### **Foot Over Bridge (FOB)**

To facilitate safe pedestrian crossing near Tambaram railway station and Bus stop, administrative sanction have been accorded for Construction of FOB at Tambaram Railway station at KM 26/8 with escalators at a cost of Rs. 19.49 Crore. DPR is nearing completion. The work will be taken for execution during 2016 - 17.

### **Elevated Corridor from the Chennai Airport to Chengalpattu (Toll-Plaza) along the Grand Southern Trunk Road ( NH-45)**

The Feasibility study for the development of Elevated Corridor from the Chennai Airport to Chengalpattu (Toll-Plaza) for a length of 40 Km along the Grand Southern Trunk Road ( NH-45) has been entrusted to M/s CDM Smith Consulting Private Limited by CMDA at a cost of Rs. 84.18 lakhs in pursuance of the announcement made by Hon'ble Minister for Housing and Urban Development in 2014-15. The finalisation of alignments are in process and the final report is yet to be completed by CMDA.

Based on the submission of Final Detailed Feasibility report by CMDA, further DPR will be prepared by engaging consultants.

### **TAMIL NADU URBAN DEVELOPMENT PROJECT-III (TNUDP-III):**

The TNUDP -III Scheme was formulated in 2005 and was implemented with World Bank loan assistance till March 2012. In this scheme 5 roads works, 5 FOBs were sanctioned out of which 4 road works and 5 FOB at were completed. The remaining works of TNUDP-III are merged with CMDP Division IV of Metro Wing, the details of the works are shown in (Table 9.6)

#### DETAILS OF TNUDP -III WORKS

Sl. No	Nomenclature	Stage of work	Amount Rs. in Crore
1.	Widening and Strengthening of Koladi Road km 0/0-7/0 (Single Lane to Double Lane) ODR		25.55

Sl. No	Nomenclature	Stage of work	Amount Rs. in Crore
2.	Widening and Strengthening of Ariyalur Vilangadupakkam Road km 0/0-6/4 (ODR) (Single Lane to Double Lane)	Completed	10.24
3.	Widening and Strengthening of Madhervedu Road km 0/0-1/6 (ODR) (Single Lane to Double Lane)		3.62
4.	Widening and Strengthening of Minjur Kattur Thirupalaivanam Road km 0/0-17/4		45.41
5.	Widening and strengthening of the Taramani link road km 0/0-3/650	Work has been completed on the LHS and RHS will be completed after the completion of Macro drain work by PWD, WRD.	32.23
6.	Construction of Foot Over Bridges with escalators in 5 places at Tambaram-MEPZ, Pallavaram, Perungudi, Taramani, SBIOA-annanagar of Chennai Metropolitan Area	Completed	28.00
	Other project component		22.27
		<b>Total</b>	<b>167.32</b>

**OVERALL EXPENDITURE FOR THE YEAR 2015-16 AND ALLOCATION FOR 2016 – 17:**

During 2015-16, an expenditure of Rs.160.73 crore has been incurred for implementation of various works under the above schemes. For the year 2016-17, a total budgetary allocation of Rs. 306.60 Crore has been made under CMDP scheme.