

### **GOVERNMENT OF TAMIL NADU**

# HIGHWAYS AND MINOR PORTS DEPARTMENT

### **DEMAND NO. 21**

PERFORMANCE BUDGET 2014-2015

# PERFORMANCE OF HIGHWAYS AND MINOR PORTS DEPARTMENT DURING 2014-2015

### I. HIGHWAYS DEPARTMENT

### 1. INTRODUCTION

Road infrastructure plays a vital role in overall economic development of the State. Development of road infrastructure is back bone of economical development, which develops socio diversification economic through urbanization and industrialization. Road infrastructure acts of as nerves development in that region. Quality roads ensure faster and safer travel. Broader and safer roads, ring roads, interlinking bridges, arade separators, Railwav Over Bridges, and iunction form the basis for frame work improvements for road infrastructure development. Construction of roads and bridges are carried out through Highways Department.

The detailed physical and financial performance of the department during 2014 - 2015 is elaborated below:-

### 1.1. ASSETS BEING MAINTAINED BY HIGHWAYS DEPARTMENT

The Highways Department maintains 62294 km length of government roads. The classification of roads and their lengths and the type of existing bridges and their numbers are tabulated in **Table 1 and Table 2** respectively. The surface wise details and lane wise details of the roads are tabulated in **Table 3 and Table 4** respectively.

**TABLE 1: CLASSIFICATION OF ROADS** 

SI. No.	Classification of Road	Length (km)
1.	National Highways	
	National Highways wing	1998
	National Highways Authority of India (NHAI)	3006
	NH Total	5004
2.	State Highways (SH)	11752
3.	Major District Roads (MDR)	11304
4.	Other District Roads (ODR)	34234
	Total	62294

**TABLE 2: TYPES OF BRIDGES AND THEIR NUMBERS** 

Types of Bridges	Nos.
Major Bridges and Minor Bridges*	9293
Culverts	108915
Railway Over Bridges at Railway level crossing (ROB)	225
Railway Under Bridges at Railway level crossing (RUB)	60
Total	118493

<sup>\*</sup> includes bridges with Linear Waterway 6m and more

**TABLE 3: SURFACE-WISE LENGTH** 

(Length in km)

S. No.	Category of Road	Cement Concrete (C.C)	Black Topped (B.T)	Metalled	Total
1	National Highways	2	5002	-	5004
2	State Highways	15	11737	-	11752
3	Major District Roads	21	11283	-	11304
4	Other District Roads	72	34162	-	34234
	Total	110	62184	-	62294

**TABLE 4: LANE-WISE DETAILS OF ROADS** 

(length in km)

S. No	Category of road	Single lane	Inter mediate lane	Double lane	Multi lane	Total
	National Highwa	iys				
	a)National Highways wing	11	4	1851	132	1998
1	b) National Highways Authority of India	-	-	903	2103	3006
	Sub-Total	11	4	2754	2235	5004
	Percentage of lane-wise width of roads	0%	0%	55%	45%	
	State Highways	51	409	9853	1439	11752
2	Percentage of lane-wise width of roads	0%	4%	84%	12%	
	Major District Roads	581	7433	3115	175	11304
3	Percentage of lane-wise width of roads	5%	66%	28%	1%	
	Other District Roads	30045	3265	870	54	34234
4	Percentage of lane-wise width of roads	88%	10%	2%	0%	
	Total	30688	11111	16592	3903	62294
	Percentage of lane width to the total length of roads	49%	18%	27%	6%	

### 1.2. PERFORMANCE UNDER PLAN SCHEMES

### 1.2.1. FINANCIAL PERFORMANCE

The financial performance under the plan schemes for the year 2014-2015 and Budget Estimate for the year 2015-2016 are given in **Table 5.** 

**TABLE 5: FINANCIAL PERFORMANCE** 

(Rupees in Lakhs)

SI.		2014	2015-2016	
No.	Name of Scheme	Budget Estimate	Expenditure	Budget Estimate
	Construction and	Maintenance	(C & M)	
	State Highways			
1	Bridges	0.07	0.00	0.07
1	(Part II Scheme)	0.07	0.00	0.07
2	Roads	0.07	9619.02	0.06
2	(Part II Scheme)	0.07	8618.93	0.06
3	16 major works	200.38	155.62	0.01
4	17 minor works	40.00	20.00	-
	Sub-Total	240.52	8794.55	0.14
	Major District Roads			
5	Major District Roads (Part II Scheme)	0.08	0.00	0.08
6	16 Major works	200.00	175.69	0.01
7	17 minor works	50.00	49.00	-
	Sub-Total	250.08	224.69	0.09
	Other District Roads			
8	Other District Roads (Part II Scheme)	0.07	0.00	0.05
9	16 major works	200.00	199.77	0.01
10	17 minor works	50.00	50.00	-
	Sub-Total	250.07	249.77	0.06

SI.		2014	-2015	2015-2016	
No.	Name of Scheme	Budget Estimate	Expenditure	Budget Estimate	
	Rehabilitation of Distressed Bridges				
11	Rehabilitation of Distressed Bridges (Part II Scheme)	0.03	0.00	0.03	
12	16 major works	150.00	149.00	0.01	
	Sub-Total	150.03	149.00	0.04	
13	Other Roads (Part II Scheme)	0.09	635.76	0.09	
	Comprehensive Road Infrastructure Development Programme (CRIDP)				
14	CRIDP - SH	119948.07	119891.54	119948.07	
15	CRIDP - MDR	102234.22	102230.98	102234.22	
16	CRIDP - ODR	26317.71	26317.71	26317.71	
17	CRIDP - SCP	31500.00	29653.10	31500.00	
	Sub-Total	280000.00	278093.33	280000.00	
18	Improvement to Chennai Radial Roads	0.01	160.42	0.02	
19	Acquisition of lands for bypasses				
	(i) works	0.02	0.00	0.02	
	(ii) lands	20000.00	1317.18	20000.00	
	Acquisition of land Sub- total	20000.02	1317.18	20000.02	
20	Improvement of vital roads in industrial areas through Tamil Nadu Road Infrastructure Development Corporation	9165.01	12397.01	8409.01	
21	Chennai Outer Ring Road (Phase-I)	32600.00	12799.06	28500.00	

SI.		2014-2015		2015-2016
No.	Name of Scheme	Budget Estimate	Expenditure	Budget Estimate
22	Chennai Outer Ring Road (Phase-II)	9000.00	8009.05	10600.00
23	Construction of Buildings	1409.44	3314.01	656.16
24	Upgradation of IT highway in Chennai	0.02	0.02	0.02
25	Formation of Roads in Tribal areas	0.01	0.00	0.01
26	Schemes implemented under State Infrastructure and Amenities fund- Controlled by CE(H) C&M	375.02	500.76	0.03
27	Special Project for attending to Road Safety	10000.00	2048.67	10000.00
28	Palar bridge in ECR road	4000.00	4000.00	4400.00
29	Northern Port Access Road	0.01	0.00	0.01
30	Construction of CE Quarters	500.00	500.00	14.00
31	City Traffic Improvement works			21300.00
32	High Density Corridor			3700.00
33	Construction of flyover at Salem junction-Yercaud Road			0.01
	Sub Total (C&M)	367940.33	333193.28	387579.71
34	Tsunami – Centrally assisted	0.01	3318.11	0.01
	Total (C &M)	367940.34	336511.39	387579.72

SI.		2014	l-2015	2015-2016
No.	Name of Scheme	Budget Estimate	Expenditure	Budget Estimate
	NABARD and Rura	al Roads Wing	(NABARD & RR	)
35	Improvements to Major District Roads/ Other District Roads under NABARD loan assistance	10000.00	95.07	10000.01
36	Construction / Reconstruction of Bridges in Government roads with loan assistance from NABARD	245.94	42.31	140.22
37	Construction of bridges in Government and Panchayat Union roads	26500.00	23359.42	20000.00
38	Improvements to Rural Roads with NABARD loan assistance	152.79	25.48	0.02
39	Improvements to Bus Route with NABARD loan assistance	0.01		0.02
40	Improvements to Rural roads with loan assistance from NABARD under Special Component Plan	0.01		0.02
41	Construction of bridges under Tsunami Emergency Assistance Project with loan assistance from ADB	1.58	1.58	1.58

SI.		2014	2014-2015		
No.	Name of Scheme	Budget Estimate	Expenditure	Budget Estimate	
42	By-pass works (L.A.)	2494.12	206.68	2500.00	
	Sub - Total (NABARD & RR)	39394.45	23730.54	32641.85	
43	Tsunami Rehabilitation Programme	0.00	305.76	0.00	
	Total (NABARD & RR)	39394.45	24036.30	32641.85	
	Project Wing				
44	Construction of over and under bridges in lieu of existing level crossings	18363.00	7889.10	23636.25	
45	Construction of ROB in Chennai Metro Area for Traffic Management	6491.10	2876.52	9244.42	
46	Construction / Reconstruction of bridges	2772.36	886.72	2772.36	
47	Construction/ Reconstruction of bridges and improvement of roads with loan assistance from NABARD	777.29	921.90	777.29	
48	Provision for road works under TNUDP	0.02	362.56	0.02	

SI.		2014	2015-2016	
No.	Name of Scheme	Budget Estimate	Expenditure	Budget Estimate
49	Construction of Road Over Bridge/Road Under Bridge in lieu of level crossings	50000.03	23868.76	47974.51
50	Madurai Radial Roads	0.01	0	0.01
51	CRIDP - Madurai Radial Roads Phase - II	0.01	0	0.01
52	Rural Roads - Marketing centre	0.01	0	0.01
53	Roads in cyclone affected areas	0.01	0	0.01
54	Construction of Interchange at the junction of Pondy- Krishnagiri road under IS&EI	0.01	0	0.01
55	City Traffic Improvement works - CE (Projects)	0.01	0	0.01
56	Arbitration case trestle approaches to Road Over Bridge at V.M Street near Tondiarpet Railway stations (Funds received from Contingency Fund 2014-15)	197.01	197.43	0.01
	Total (Projects Wing)	78600.87	37002.99	84404.92

SI.		2014	2015-2016		
No.	Name of Scheme	Budget Estimate	Expenditure	Budget Estimate	
	Metro Wing				
57	Chennai Metropolitan Development Plan	25000	12022.98	25000.00	
	Total (Metro wing)	25000	12022.98	25000.00	
	National Highway	s wing (NH)			
58	Revamped Central Road Fund	18900.00	15831.16	12136.25	
59	Inter State Connectivity	1000.00	3759.83	1000.00	
60	Economic Importance	0.01	17.00	1000	
61	Bharat Nirman Scheme (Mainte- nance borne by State Government)	602.85	1994.66	561.24	
62	Western Ghats Development Programme (Road Sector)	0.01	0.00	0.01	
63	State Plan – Miscellaneous Original Works	0.01	14.88	0.01	
	Total (NH)	20502.88	21617.52	14697.51	
	Tamil Nadu Road Sector Project(TNRSP)				
64	TNRSP	49335.04	6619.49	124497.08	
	Total (TNRSP)	49335.04	6619.49	124497.08	
	Highways Research Station (HRS)				
65	Equipment for Laboratories	0.01	0.00	0.00	

SI.		2014	2015-2016	
No.	Name of Scheme	Budget Estimate	Expenditure	Budget Estimate
66	Institute of Highway Research and Management	0.01	0.00	0.01
67	Operation and Maintenance of Road Measurement and data acquisition system in respect of ODR and NH	5.4	5.4	5.4
68	Tamilnadu Innovative Initiatives Fund (TANII)	-	1	283.70
	Total (HRS)	5.42	5.40	289.11
	Director General (	(DG)		
69	Operation and Maintenance of Advanced Data Collection Equipments in respect of SH, MDR and NHAI Roads	3.02	2.12	3.02
	Total (DG)	3.02	2.12	3.02
	Plan Total	580781.94	434194.33	669113.15
	Tsunami Rehabilitation programme Total	0.01	3623.87	0.01
	Grand Total	580781.95	437818.20	669113.16

### 1.2.2. PHYSICAL PERFORMANCE

The physical achievements under the plan schemes for the year 2014-2015 and targets for the year 2015-2016 are given in **Table 6.** 

**TABLE 6: PHYSICAL PERFORMANCE** 

		Achieve 2014-2		Targets 2015-2016	
S. No	Name of Scheme	Bridges/ Culverts/ Structures in Nos.	Roads length in km	Bridges/ Culverts/ Structures in Nos.	Roads length in km.
	Construction a	ınd Mainten	nance		
1	Part II Scheme Buildings	21		27	
2	Comprehensive Road Infrastructure Development Programme				
	State Highways	128	709	150	1000
	Major District Roads	64	824	100	1100
	Other District Roads	67	1137	80	1200
	Other District Roads Special Component Plan (CRIDP)		760	10	600
	Sub-Total	259	3430	340	3900
	Plan Total (C&M)				
	Roads/ Bridges	259	3430	340	3900

		Achievements 2014-2015		Targ 2015	gets -2016
S. No	Name of Scheme	Bridges/ Culverts/ Structures in Nos.	Roads length in km	Bridges/ Culverts/ Structures in Nos.	Roads length in km.
	Buildings	21		27	
	Tsunami – Centrally assisted	5		6	
	NABARD and I	Rural Road	(NABARD	& RR)	
3	Improvements to Major District Roads/ Other District Roads under NABARD loan assistance		8.70		
4	Construction / Reconstruction of Bridges in Government roads with loan assistance from NABARD				
5	Construction of bridges in Government and rural roads	126		50	
6	Improvements to Rural Roads with NABARD loan assistance				
	Sub Total (NABARD &RR)	126	8.70	50	

		Achievements 2014-2015		Targ 2015-	
S. No	Name of Scheme	Bridges/ Culverts/ Structures in Nos.	Roads length in km	Bridges/ Culverts/ Structures in Nos.	Roads length in km.
7	Tsunami Rehabilitation Programme				
8	Railway Works Programme			9	
	Total (NABARD &RR)	126	8.70	59	
	Projects				
9	Road over/ under bridges in lieu of existing Level Crossings			4	
10	Construction of Over Bridges/ Under Bridges in lieu of level crossings	13		9	
11	Construction of river bridges HUDCO				
12	Construction of bridges in Cauvery delta districts and Improvement of Sugarcane roads with NABARD loan assistance	2		1	

		Achievements 2014-2015		Targ 2015	
S. No		Bridges/ Culverts/ Structures in Nos.	Roads length in km	Bridges/ Culverts/ Structures in Nos.	Roads length in km.
13	Construction of Road over Bridges in Chennai Metro Area for Traffic Management			1	
	Total (Projects)	15		15	
14	Metro				
	a) ROB/RUB	1		1	
	b) Grade Separator			3	
	c) River Bridge			4	
	d) Roads / Bridges (km)		9.45		6.65
	Total (Metro)	1	9.45	8	6.65
	National High	ways (NH)			
15	Revamped Central Road Fund Scheme		242.13		432.46
16	Inter State Connectivity scheme		44.89		24.30

		Achievements 2014-2015		Targ 2015-	
S. No	Name of Scheme	Bridges/ Culverts/ Structures in Nos.	Roads length in km	Bridges/ Culverts/ Structures in Nos.	Roads length in km.
17	Economic Importance Scheme				
	Total (NH)		287.02		456.76
	Tamil Nadu Ro	oad Sector I	Project (T	NRSP)	
18	Tamil Nadu Road Sector Project-II				
19	Upgradation (DPR Preparation)		DPR prepared for 575 km		DPR preparation for 1504 km
20	Bridges/Minor Bridges				
	Total (TNRSP)		575.00		1504.00
		Gra	nd Total		
	Road and Bridges	401	3735.17	422	4363.41
	Buildings	21	-	27	
	Tsunami – Centrally assisted	5		6	

### 1.3. PERFORMANCE UNDER NON-PLAN SCHEMES

During 2014-15, an allocation of Rs.1157.02 Crore has been made for maintenance of roads and bridges. This is inclusive of Rs.337.33 Crore provided out of the Grant–In-Aid recommended by the  $13^{\rm th}$  Finance Commission. Further the

allocation also includes provision for salary component of the work-charged establishment.

An amount of Rs.168.67 Crore has been provided for maintenance of Panchayat Union roads taken up by Rural Development and Panchayat Raj department out of the Grant-in-Aid recommended by the 13<sup>th</sup> Finance Commission.

During 2014-15, renewal of 4030 km length of roads has been completed at an expenditure of Rs.1176.27 Crore.

### 1.3.1. FINANCIAL PERFORMANCE

The financial performance indicating the details of expenditure incurred during 2014-2015 under various heads of Non Plan and the allocation for 2015-2016 is given in **Table 7**.

TABLE 7: NON PLAN-FINANCIAL ALLOCATION AND EXPENDITURE

(Rs.in lakhs)

_		2014	-2015	2015-
S. No.	Name of Scheme	Budget Estimate	Expenditure	2016 Budget Estimate
1	National Highways (Urban)	234.52	234.52	234.52
2	Certain important Roads in the City of Chennai taken from Corporation of Chennai	2110.64	2110.64	2110.64
3	State Highways	15296.00	15646.37	15296.00
4	Major District Roads	13567.68	13948.97	13567.68
5	Other District Roads	48819.93	50008.72	48819.93
6	Sugarcane Roads	1849.79	1849.79	1849.79
7	Improvements to Nilgiris Ghat Roads	94.51	94.51	94.51

		2014	-2015	2015-
S. No.	Name of Scheme	Budget Estimate	Expenditure	2016 Budget Estimate
8	13th Finance Commission grant for Highways Department for maintenance of Rural Roads	33733.33	33733.33	0
9	Maintenance of Panchayat and Panchayat Union Roads through Director, Rural Road Development	16866.66	16866.66	0
	Total	132573.06	134493.51	81973.07

### 1.3.2. PHYSICAL PERFORMANCE

The length of roads renewed under Non plan maintenance during 2014-2015 and the target for 2015-2016 is given in **Table 8.** 

TABLE 8: NON PLAN -PHYSICAL PERFORMANCE (Length in km)

SI. No	Name of wing	Achievement 2014-2015	Target 2015-2016
1.	Construction and Maintenance	3555	3500
2.	NABARD and Rural Roads	475	-
	Total	4030	3500

## 2. PERFORMANCE UNDER MAJOR SCHEMES AND KEY PROJECTS

During the year 2014-2015, an amount of Rs.5812.38 Crore was provided in the Budget Estimate for

Highways Department and the expenditure incurred under Plan Schemes is Rs.4341.94 Crore.

### 2.1. COMPREHENSIVE ROAD INFRASTRUCTURE DEVELOPMENT PROGRAMME (CRIDP)

In view of the need to augment the capacity of the roads, widening of all State Highways to Double Lane and widening of Major District Roads to Intermediate Lane has been given importance. During 2014-15 widening and improvements of 843 km roads and improvements of 3203 km roads, 746 numbers of construction of culverts, bridges and protective works were taken up under this scheme for which Rs.3000 Crore was sanctioned.

During 2014-15, Road works to a length of 3430 km and 259 Bridges / Culverts / Protective works have been completed incurring an expenditure of Rs.2780.93 Crore.

### 2.1.1. CRIDP - STATE HIGHWAYS

During 2014-15, spill over works of widening/improvements to 349 km length of roads and construction of 91 bridges/culverts/ protective works were taken up at a cost of Rs.1279.93 Crore.

New works of widening / improvements to 927 km length of roads and construction of 432 bridges/ culverts/ protective works have been sanctioned at a cost of Rs.1186.55 Crore in the year 2014-15.

During 2014-15, widening/improvements in 709 km length of roads and 128 bridges/culverts/ protective works has been completed at an expenditure of Rs.1198.92 Crore.

#### 2.1.2. CRIDP - MAJOR DISTRICT ROADS

During 2014-15, spill over works of widening/improvements to 686 km length of roads and construction of 49 bridges/ culverts/ protective works were taken up at a cost of Rs.943 Crore.

New works of widening/improvements to 772 km length of roads and construction of 187 bridges/ culverts/ protective works have been sanctioned at a cost of Rs.735.32 Crore in the year 2014-15.

During 2014-15, widening/ improvements in 824 km length of roads and 64 bridges/ culverts/ protective works has been completed at an expenditure of Rs.1022.31 Crore.

#### 2.1.3. CRIDP - OTHER DISTRICT ROADS

During 2014-15, spill over works of widening/improvements to 590 km length of roads and construction of 45 bridges/culverts were taken up at a cost of Rs.319 Crore.

New works of widening/improvements to 1848 km length of roads and construction of 116 bridges/ culverts/ protective works have been sanctioned at a cost of Rs.884.39 Crore in the year 2014-15.

During 2014-15, widening/improvements in 1137 km length of roads and 67 bridges/ culverts/ protective works has been completed at an expenditure of Rs. 263.18 Crore.

### 2.1.4. CRIDP - OTHER DISTRICT ROADS - SPECIAL COMPONENT PLAN

During 2014-15, spill over works of widening/improvements to 261 km length of road was taken up at a cost of Rs.101 Crore.

New works of widening/improvements to 499 km length of roads and construction of 11 bridges/ culverts/ protective works have been sanctioned at a cost of Rs.193.74 Crore in the year 2014-15.

During 2014-15, widening/improvements in 760 km length of roads has been completed at an expenditure of Rs.296.53 Crore.

### 2.1.5. ERODE OUTER RING ROAD

In order to ease the heavy traffic congestion in Erode Town and to have a free flow of traffic, Government have accorded sanction for Rs. 22.00 Crore towards land acquisition for the formation of a ring road from Kokkarayanpettai to Thindal to a length of 14.80 km under CRIDP. Land Acquisition has been completed in the entire stretch from km 0/0 to 14/8.

In Phase I & II, the work of formation of the outer ring road from km 0/0 to 2/2 including construction of a high level bridge across Cauvery River and the stretch from km 2/2 to 7/6 respectively were completed under CRIDP scheme and opened by the **Hon'ble Chief Minister of Tamil Nadu**.

### 2.1.6. ERODE GOVERNMENT HOSPITAL JUNCTION IMPROVEMENT

The work on improvements to the junction of the Erode – Perundurai – Kangeyam road near the Government

Hospital including Land Acquisition to a value of Rs.11.00 Crore has been completed under CRIDP scheme in 2014-15.

### 2.2. PART-II SCHEME

During the year 2014-15, spill over works of 24 buildings were taken up for construction. New works have been sanctioned for constructing office buildings for 2 divisions, 4 sub divisions including one QC subdivision, one section office, and 4 travelers' bungalows, one parking shed for ADCE vehicle at a cost of Rs.3.63 Crore. These works are in progress.

During 2014-15, 21 buildings have been completed at an expenditure of Rs.33.14 Crore.

However, from 2015-16, the Government have decided to create Tamil Nadu Innovative Initiatives Fund for taking up various innovative programme in lieu of Part-II scheme.

### 2.3. CHENNAI METROPOLITAN DEVELOPMENT PLAN (CMDP)

Chennai being a Metropolitan City is growing fast in all sectors. In order to meet the demand for good infrastructure, especially traffic improvements, Government have formed Chennai Metropolitan Area Development Plan during the year 2003 - 2004.

So far, the Government has given its approval for 265 improvement works at a cost of Rs.2017.03 Crore which includes 482.47km of road works, 17 bridges, 11 grade geparators, 10 railway over bridge / railway under bridge, one sky walk, 5 pedestrian subways and one foot over Bridge.

Till 2014– 15, about Rs.1038.62 Crore have been spent for these works. Details of head wise expenditure incurred based on allocation of funds during 2014-15 is given below:

**TABLE 9: EXPENDITURE DETAILS** 

SI. No	Head	Allocation for 2014 -15 (Rs. in lakhs)	Expenditure (Rs. in lakhs)
1	JW 1608	20000.00	11344.33
2	KJ 1603	5000.00	678.65
3	JD1601 Bridges	4496.10	2125.03
4	JT 1604	12606.01	1890.53
5	JJ 1601	500.00	1.30
	Total	42602.11	16039.84

Out of total 482.47 km, so far 472 km road widening have been completed and Formation of new link road connecting MBI road at km 17/4 in Rajakilpakkam and Tambaram Eastern Bypass at Agaramthen salai (only completed LA portions) is completed. During 2014-15, one Railway Over Bridge is completed.

Some of the major works under implementation are detailed below.

### 2.3.1. GRADE SEPARATORS

- At the intersection of Madhavaram High road with G.N.T Road at Moolakkadai, at a cost of Rs.49.55 Crore is in progress
- At the intersection of Anna Nagar IInd Avenue and Mogappair road with Inner Ring Road at Tirumangalam, at a cost of Rs.60.23 Crore is in progress

- At the intersection of N.S.K Salai (Arcot Road) with inner ring road at Vadapalani in Chennai at a cost of Rs.69.43 Crore
- 4. At the intersection of Nelson Manickam road and Anna Nagar 3rd Avenue road in Periyar EVR Salai in Chennai, at a cost of Rs.117 Crore is in progress
- At the intersection of Mount Poonamallee road with Kodambakkam - Sriperumpudur road at Porur, at a cost of Rs. 54.00 Crore is in progress
- At the intersection of IRR near Kolathur Rettai Eri at Sembium Red Hills Road Junction at a cost of Rs.52.72 Crore is in progress

#### 2.3.2. RIVER BRIDGE WORKS

- Construction of bridge at km 16/6 of Tambaram-Mudichur – Sriperumbudur Road at a cost of Rs.2.00 Crore is in progress
- Construction of additional three lane bridge across coovam river at EVR salai near Aminjikarai km 6/6 (upstream side) at a cost of Rs. 8.00 Crore is in progress
- Construction of additional two lane high level bridge at km 62/2 of Singaperumal Koil - Sriperumbudur-Tiruvallur-Red Hills road (SH 57) at a cost of Rs.2.00 Crore is in progress
- Widening the existing bridge at km 3/4 of Mount Poonamallee – Avadi Road (SH55) at a cost of Rs.1.00 Crore is in progress
- Construction of additional two lane bridge at km 15/8
   Mount -Poonamallee Avadi Road at a cost of Rs.5.00 Crore is in progress.

#### 2.3.3. ROAD OVER BRIDGE AT RAILWAY CROSSING

Construction of ROB in lieu of LC No.3 between Thondiarpet Thiruvottiyur Railway station near Thiruvottiyur Mattumandhai at a cost of Rs. 47 Crore is in progress

### **2.3.4. ROAD WORKS**

- Widening from two lane to four lane and strengthening of Chennai-Ennore Road in km 8/0-9/0 (SH-114) (Tollgate-Kaladipet) at a cost of Rs.4.89 Crore is in progress
- Widening from two lane to four lane and strengthening of Chennai – Ennore Road in km 11/0 – 12/0 (SH-114) (Ajax Bus stand – Wimco Nagar) at a cost of Rs.9.86 Crore is in progress
- Widening from two lane to four lane and strengthening of Chennai – Ennore Road in km 12/0 – 13/0 (SH-114) (Wimco Nagar – Ernavur) at a cost of Rs.7.45 Crore is in progress
- 4. Widening and strengthening of Taramani link road km 0/0-3/650 (TNUDP III) at a cost of Rs.32.23 Crore

#### 2.3.5. PREPARATION OF DETAILED PROJECT REPORTS

Based on the studies and recommendations of Comprehensive Traffic & Transportation Study (CTTS), the Government have accorded administrative approval for the preparation of DPR for 13 works under CMDP Scheme, in which alignment proposals for 9 works have been approved by the Steering Committee. Out of 9 works, in-principle Government Order have been issued for 7 works, in which 4 works have been sent for administrative sanction and 1 work is in estimate stage. Remaining 4 works are

in design stage. Based on the DPR, the works will be taken up for implementation in the ensuing years.

### 2.4. ROAD OVER / UNDER BRIDGES AT RAILWAY LEVEL CROSSINGS

Construction of Road Over Bridges and Road Under Bridges in lieu of existing level crossings in coordination with the Railways on a cost sharing basis are taken up under the Railway Works Programme.

Under this Programme, 103 spillover works were taken up in 2014-15, of which, 14 works have been completed at a cost of Rs. 270.24 Crore and 36 works are in progress for a value of Rs. 1059.40 Crore. The remaining works are in various stages of pre-construction.

In the year 2012-13, the Government have accorded administrative sanction for Rs.100.90 Crore to carry out preliminary works for 12 ROBs/RUBs, which are in various stages of pre-construction. For one work at LC 8 in Dindigul district, Government has accorded administrative sanction for Rs.20.35 Crore and is in tendering stage.

In the year 2013 - 14, the Government have accorded administrative sanction for Rs.231.49 Crore to carry out preliminary works such as land acquisition, shifting of service utilities and investigation for 18 ROBs/RUBs which are in progress. On completion of preliminary works, administrative sanction will be accorded for carrying out main bridge works.

A sum of **Rs.241.31 Crore** has been spent for this scheme in 2014 - 15.

### 2.5. NABARD LOAN ASSISTANCE SCHEMES

#### 2.5.1. CONSTRUCTION OF BRIDGES

Under this scheme, 3 river bridges were taken up as spill over works to a value of Rs.102.76 Crore in 2014-15 and the same have been completed .

A sum of **Rs. 9.22 Crore** has been spent for this scheme in 2014-15.

### 2.5.2. CONSTRUCTION OF BRIDGES IN GOVERNMENT AND RURAL ROADS

During the year 2014-15, spill over construction / reconstruction of 200 bridges in SH, MDR, ODR and panchayat and panchayat union roads at а cost of Rs.412.11 Crore and newly sanctioned 94 bridges with a cost of Rs.293.47 Crore, totally 294 bridges with а cost of Rs.705.58 Crore have been taken up for execution. expenditure of Rs.233.59 Crore has been incurred and 126 Bridges has been completed.

### 2.5.3. IMPROVEMENTS TO OTHER DISTRICT ROADS AND MAJOR DISTRICT ROADS

Under this scheme, improvements to roads in MDR/ODR are taken up with loan assistance from NABARD. Spill over works of 8.70 km length of road at a cost of Rs 3.75 Crore were taken up for execution. Of which all 8.70 km length of roads (Widening-2.00 km & Strengthening-6.70 km) have been completed. An expenditure of Rs.0.95 Crore has been incurred.

### 2.5.4. CONSTRUCTION OF RIVER BRIDGES ON GOVERNMENT ROADS

During the year 2014-15, spill over work of 1 bridge was taken up at a cost of Rs.4.24 Crore. An expenditure of Rs.0.42 Crore has been incurred.

### 2.5.5. RURAL ROADS SCHEME

Under this scheme, BT road connectivity is provided for villages with a population between 500-1000 including bridges.

During 2014-15, spill over work of construction of 1 bridge was taken up at a cost of Rs.1.53 Crore. An expenditure of Rs.0.25 Crore has been incurred.

### 2.6. BYPASSES FOR MAJOR TOWNS

Bypasses play a major role in the diversion of through traffic and help in reduction of traffic congestion in major towns.

During 2014-15, Hosur Ring Road has been completed. The status of bypass works is as follows:

**TABLE 10: STATUS OF BYPASSES** 

DESCRIPTION	Nos.
Completed	29
In progress	5
LA work in progress	34
DPR work in progress	16
Works in consideration	3
Total	87

Construction of Thanjavur bypass (Phase-II) in km.0/0-9/0 at a cost of Rs.88 Crore is in progress. An amount of

Rs.38.93 Crore has been sanctioned for formation of bypass to Edapady town and land acquisition is in progress.

During 2015–16, Thanjavur bypass (Phase-II) from km 9/0 - 14/265 at a cost of Rs.42 Crore and Pattukottai phase - II from km 4/2 - 7/4 at a cost of Rs.21.90 Crore has been sanctioned. Further land acquisition for forming of bypass to Kamuthi and Walajabad towns at a cost of Rs.67.83 Crore has been sanctioned.

Further preparation of detailed project report for bypass to Mettupalayam, Dindugal and Thuraiyur phase II are in progress.

### 2.7. TSUNAMI REHABILITATION PROGRAMME

Under Construction and Maintenance wing, during 2014-15, spillover works of 13 bridges to a value of Rs.75.84 Crore were taken up out of which, 5 bridge works have been completed. An expenditure of Rs.33.18 Crore has been incurred in this scheme.

Under NABARD and Rural Roads wing, during 2014 - 15, 2 bridges have been taken up for implementation for Rs.11.11 Crore. These 2 bridges will be completed, after completion of land acquisition. An expenditure of Rs.3.06 Crore has been incurred.

### 2.8. WORKS IN CHENNAI EXTENDED CORPORATION AREA

In the extended corporation area, 250.91 km length of roads are being maintained by this department. These roads are spread over in 3 Revenue Districts namely Chennai, Thiruvallur and Kancheepuram Districts.

During Budget Demand 2014-2015, the **Hon'ble Chief Minister of Tamil Nadu** has announced that in the newly extended Chennai corporation area, development works on 250 km of highways roads such as end to end widening of roads, construction of foot path cum drain and providing footpaths have been identified for Rs.1033 Crore. In the first phase, work will be taken up at a cost of Rs.250 Crore.

Based on that, Government has accorded administrative sanction for Rs.250 Crore for 7 works in State Highways, 3 works in Major District Roads and 4 works in Other District Roads for taking up improvements like widening end to end, construction of drain, footpath in the newly extended corporation areas and these works are in progress.

### 2.9. PERFORMANCE BASED MAINTENANCE CONTRACT (PBMC)

Performance Based Maintenance Contract for roads is designed to increase the efficiency and effectiveness of road asset management and maintenance. PBMC ensures the physical condition of the roads under contract is adequate for the need of road users with comfort travel, over the entire period of the contract.

Performance Based Maintenance Contract (PBMC) is being implemented in 191.40 km of State Highways (SH) roads and 185.98 km of Major District Roads in Pollachi Division for a period of five years at a cost of Rs.233.93 Crore. This scheme includes Initial Rectification, Periodical Renewal, Minor Improvements, Ordinary Maintenance and Emergency works.

In continuation, administrative sanction was accorded for Rs.460 Crore for maintenance of 307 km length of State

Highways and 274 km length of Major District Roads in Krishnagiri division under Performance Based Maintenance Contract, and these works will commence soon.

In addition, for maintenance of 229 km length of State Highways and 340 km length of Major District Roads in Ramanthapuram divisions under Performance Based Maintenance Contract (PBMC), sanction was accorded for Rs. 460 Crore and works will commence soon.

### 2.10. ROAD SAFETY MEASURES

The identification, analysis and treatment of road accident black spots are widely regarded as one of the most effective approaches to mitigate road accidents. It is well established that considerable safety benefits accrue from the application of appropriate road engineering or traffic management measures at hazardous road locations. Results from such applications at "black spots" demonstrate high returns from relatively low cost measures.

In order to reduce the road accident levels and improve safety measures, Government announced a special project to rectify the black spots in highly accident prone areas including urban roads. Under Comprehensive Road Infrastructure Development Programme, an amount of Rs.245.30 Crore has been sanctioned for widening of culverts, provision of metal crash barriers, junction improvements, construction of protective walls etc.

In addition, Government sanctioned Rs.200 Crore for Widening of narrow culverts, Construction of safety walls/crash barriers around the road side open well/tank bunds, Construction

of center median, and junction improvements to improve the safety aspect of the road. The works are in progress.

### 2.11. NATIONAL HIGHWAYS WORKS

Tamil Nadu has 5004 km length of National Highways. Out of this 1998 km length of roads are improved / maintained by National Highways wing utilizing the funds provided by Government of India. The balance 3006 km length of roads are being maintained by National Highway Authority of India (NHAI).

### 2.11.1. NATIONAL HIGHWAYS PLAN WORKS

During the year 2014-15, value of spill over works to the tune of Rs.751.27 Crore were taken up. This comprises of 43 road improvement works to a total length of 351.95 km and 11 bridge works. In addition to this, the Ministry of Road Transport and Highways, Government of India has sanctioned 14 road works and 7 bridge works to the tune of Rs.814.05 Crore under Annual Plan 2014-15.

Out of this, 27 road works to a length 98.31 km and 8 bridge works have been completed at a cost of Rs.167.12 Crore during 2014-15.

### 2.11.2. NATIONAL HIGHWAYS NON-PLAN WORKS

Under PR / IRQP, 13 road works to a length of 180.25 km at a cost of Rs. 82.62 Crore were taken up as spill over during 2014-15.

Further, the Ministry of Road Transport and Highways, Government of India has sanctioned 12 new road works to a length of 254.69 km at a cost of Rs.157.85 Crore under this scheme. Out of the above works, 16 road works to a length

309.85 km have been completed at cost of Rs.164.15 Crore during 2014-15.

### 2.12. SCHEMES SPONSORED BY GOVERNMENT OF INDIA

#### 2.12.1. REVAMPED CENTRAL ROAD FUND SCHEME

During the year 2014-15 under this scheme, works costing Rs.209.88 Crore comprising 286.43 km length of 26 road works and one bridge work were taken up as spill over.

Out of these, 242.13 km length of 23 road works have been completed at a cost of Rs.158.31 Crore during 2014-15. One road work is in land acquisition stage.

#### 2.12.2. INTER STATE CONNECTIVITY SCHEME

In 2014-15, 5 road works to a length of 44.89 km amounting to Rs.39.03 Crore were taken as spill over under this scheme. All these works have been completed at a cost of Rs.37.60 Crore.

#### 2.12.3. HILL AREA DEVELOPMENT PROGRAMME

During 2014-15, 4 numbers of road works to a length of 4.40 km and 2 Cross Drainage / protective works amounting to Rs.1.44 Crore were taken up as spill over works.

Further, the Government has sanctioned 3 new road works to a length of 2.80 km and 4 numbers of paver block / CC drain/ protective works amounting to Rs.2.20 Crore during 2014-15. All the above works have been completed at a cost of Rs. 3.64 Crore.

### 2.12.4. PRADHAN MANTRI GRAM SADAK YOJANA PROGRAMME PHASE VIII (2012-13)

Under this programme, 330 Other District Road works to a length of 1062.55 km amounting to Rs.278.54 Crore have been taken up for upgradation. Out of these, 326 Other District Road works to a length of 1053.35 km have been completed at a cost of Rs.270.62 Crore till date.

### 2.12.5. PRADHAN MANTRI GRAM SADAK YOJANA PROGRAMME PHASE IX (2014-15)

Under this programme, Administrative Sanction for upgradation of 59 Other District Road works to a length of 170.335 km amounting to Rs.49.20 Crore have been received from the State Government on 13.02.15. These works will be taken up during this financial year.

### 2.13. OTHER SPECIAL PROJECTS

#### 2.13.1. ROAD OVER BRIDGE AT PALLIPALAYAM

Construction of road over bridge in State Highways 79 at km 90/2 in Namakkal district for Rs.40.16 Crore was taken up as deposit work and the work is in tender stage and will be commenced shortly.

#### 2.13.2. ROAD OVER BRIDGE AT AMBUR

During 2013-14, Government has accorded Administrative Sanction for preliminary works for Rs. 6.97 Crore under deposit work for construction of Railway Over Bridge at Bethlegam area in Ambur Town, between Ambur and Vaniyambadi Railway Stations in Vellore district. On completion of Preliminary works, Administrative Sanction will be accorded for carrying out main bridge works.

#### 2.13.3. CHENNAI OUTER RING ROAD

#### 2.13.3.1. CHENNAI OUTER RING ROAD - PHASE I

Administrative sanctions have been accorded for the development of Chennai Outer Ring Road (CORR) project phase-1 as a Green Field Project with the formation of dual three lanes with service roads for a length of 29.65 km from Vandalur in NH-45 to Nemillichery in NH-205 Via Nazarathpet in NH-4 at a cost of Rs 1081.40 Crore.

Tamil Nadu Road Development Company Ltd has been appointed as the "Managing Associate" for this project.

The completed portion of the project road to a length of 27.00 km from Mannivakkam to Nemilichery has been inaugurated by the **Hon'ble Chief Minister of Tamil Nadu** on 28.08.2014 and put to public use.

#### 2.13.3.2. CHENNAI OUTER RING ROAD - PHASE II

The Government have sanctioned the Chennai Outer Ring (CORR) project phase-II, a major six lane road connectivity project to a length of 30.50 km from Nemilicheri in NH-205 to Minjur in Thiruvottiyur Ponneri Pancheti (TPP) Road via Padiyanallur in NH-5 at a cost of Rs.1075 Crore under the Design, Build, Finance, Operate and Transfer (DBFOT) with semiannual annuity payment.

Tamil Nadu Road Development Company Itd. has been appointed as "Managing Associate" for Chennai outer ring road project phase-II.

The **Hon'ble Chief Minister of Tamil Nadu** laid Foundation Stone for Chennai outer ring road phase-II on 28.08.2014.

At present 55% of the works are completed and the balance works are in progress. The project work is expected to be completed by September 2016.

### 2.13.4. ENNORE MANALI ROAD IMPROVEMENT PROJECT (EMRIP)

The Project envisages the improvement of about 30 km road network in North Chennai with the objective of establishing seamless and efficient road connectivity from Chennai and Ennore Ports to NH network. The roads that are being improved include the Ennore Expressway, Manali Oil Refinery Road, Northern part of Inner Ring Road and Thiruvottiyur-Ponneri-Panchetti Road.

NHAI, the project lead sponsor, has engaged TNRDC as its Managing Associate and subsequently as supervision consultant.

As on date, 90% of the works have been completed and the remaining works will be completed soon.

Under the rehabilitation and resettlement programme for the project affected families in Ennore Expressway, 1824 tenements have been constructed at Ernavoor. So far, 1814 families have been shifted to the new tenements.

## 2.13.5. IMPROVEMENTS TO NORTH CHENNAI THERMAL POWER STATION ROAD (INCLUDING ATHIPATTU ROB) AND ENNORE PORT ROAD

M/s. Toshiba, a Japanese concern-JSW (JV) Turbine and Generator Pvt. Ltd. have set up a manufacturing plant in Andarkuppam km.6/150 of Thiruvottiyur – Ponneri -Panchetti Road. The heavy special transport vehicle (525 MT) will have to travel 7.35 km on the Thiruvottiyur-Ponneri-Panchetti (TPP) road, 4.8 km on North Chennai Thermal Power Station (NCTPS) road

and 2.4 km on the Ennore Port road to reach Ennore Port. Among these three roads, Thiruvottiyur-Ponneri-Panchetti Road which is part of the Ennore Manali Road Improvement Project (EMRIP) is being improved in EMRIP.

This is a unique project in which the road and bridges are designed to take 525 MT special over designed cargo for the first time in Tamil Nadu including the railway bridge with massive challenges technically because of the difficult terrain, area wise and location being proximate to the sea. All these challenges have been overcome successfully and all the bridges have been completed and tested successfully.

For the other two roads viz.,

- (i) North Chennai Thermal Power Station Road km 0/0-4/8 and
- (ii) Ennore Port Road km 0/0 2/4

the TNRDC is the Managing Associate for this project. At present, 98% of work has been completed.

### 2.13.6. NORTHERN PORT ACCESS ROAD (CHENNAI PERIPHERAL ROAD PHASE-I)

The proposed Northern Port Access Road is an important link to the fast growing Ennore and Kattupalli Ports which handle major cargo movements. The proposed new road will connect the Northern Gate of Ennore Port and Thatchur on NH-5 with an additional spur road for connecting to the Thiruvottiyur – Ponneri - Pancheti (TPP) Road. This will also cater to the needs of the recently developed Kattupalli Ship Yard by L&T.

The total length of this road connecting Ennore Port to Thatchur will be about 21.15 km and length of the TPP link Road will be 4.35 km.

The work is proposed for execution in two phases as under:

**Phase-I:** Construction of the road from Ennore Port entrance to Neidavoyal village (km 0/0 to km 6/200, from Neidavoyal village to Vallur Link road (km 4.350) totaling 10.550 km length.

**Phase-II:** Construction of the balance portion of length 14.95 km from Neidavoyal to Thatchur in NH-5.

The land acquisition cost works out to Rs.360 Crore for Phase I and Rs.900 Crore for Phase II, which is being funded by the State Government.

# 2.13.7. WIDENING OF EAST COAST ROAD FROM DOUBLE LANE INTO FOUR LANE FROM KM.22/300 TO KM 55/800 INCLUDING IMPROVEMENTS TO 13 CURVED STRETCHES AND 7 JUNCTIONS FROM KM 55/800 TO KM.135/500

The East Coast Road, maintained by TNRDC as a Toll Road from Akkarai to Puducherry, was initially improved in 2002 to a two lane carriage way. The ever growing traffic, increasing accidents in the absence of centre median and insufficient carriage way necessitated the widening of this road to four lane with divided carriage way from Akkarai to Mamallapuram as Phase I including curves and junction improvements between Mamallapuram to Puducherry border wherever necessary.

Accordingly, administrative sanction was accorded by the Government for Rs.272.10 Crore. Out of this, a sum of Rs.108.84 Crore was sanctioned being 40% of Project Cost to TNRDC and the balance is to be mobilized by TNRDC.

The work was commenced on 28.2.2014 and more than 50% of works have been completed as on date. The balance is expected to be completed by February 2016.

#### 2.13.8. BRIDGE ACROSS RIVER PALAR IN ECR

The Government have sanctioned an amount of Rs.134 Crore for "Reconstruction of the existing Palar Bridge and construction of an additional two lane bridge near Vayalur on the East Coast Road (km 76/000)".

The revised estimated cost works out to Rs.105.2 Crore including the construction cost of Rs.85.19 Crore, supervision charges, Quality control, escalation etc. The construction period is 2 years and at present 70% of works have been completed. The balance work is expected to be completed by March, 2016.

### 2.13.9. RAJIV GANDHI SALAI (IT CORRIDOR) Phase I:

The Rajiv Gandhi Salai (IT Corridor) Phase-I was developed as a dual three lane road from Madhya Kailash to Siruseri for a length of 20.10 km. The link road connecting Sholinganallur and East Coast Road for a length of 2.15 km was also included in the project and was widened to a four lane road. This road is being maintained as a toll road.

#### Phase II:

In view of extending the Phase–I of Rajiv Gandhi Salai (IT Corridor) upto Mahabalipuram, the Government has proposed the formation of six lane road from Siruseri to Mahabalipuram for a length of 25 km, including two bypasses (Kelambakkam and Thiruporur) in Phase– II of Rajiv Gandhi Salai, under a viable financial arrangement through public private partnership.

The Government have sanctioned Rs.294.68 Crore for land acquisition works in first phase. An extent of 88.62 Hectares is required to be acquired in 13 villages for widening this road to a right of way width of 60m and out of 32.40 Hectares have been acquired so far and the land acquisition process in respect of the balance extent of lands is in under various stages of progress.

The Consultant had submitted the final detailed project report (DPR). The estimated project cost as per the DPR is Rs.573.99 Crore.

The Government have decided to implement the two bypasses for Kelambakkam and Tiruporur in the first stage.

#### 2.13.10. MULTI LEVEL CAR PARKING (MLCP) AT SIRUSERI

The **Hon'ble Chief Minister of Tamil Nadu** has made an announcement for "The Construction of a Multi Level Car Parking (MLCP) at Siruseri, under Public Private Partnership mode". It will be designed with 20 floors to accommodate 2000 cars and Bus Parking area to park 50 buses at a time. The project will be executed under Design, Build, Finance, Operate and Transfer (DBFOT) basis. The cost estimate is Rs. 200 Crore.

The Detailed Feasibility Report (DFR) has been received and it is under consideration.

#### 2.13.11. ELEVATED ROAD

The **Hon'ble Chief Minister of Tamil Nadu** has made an announcement for the construction of an elevated road from Taramani to Siruseri under phase-I and from Siruseri to Mahabalipuram under phase-II, for a total length of 45 km. Administrative sanction of Rs.5 Crore has been accorded for the preparation of DPR for the above work.

The preparation of phase-I of Detailed Project Report (DPR) is expected to be completed by September 2015 and phase-II by June 2016.

### 2.13.12.CONSTRUCTION OF GRADE SEPARATOR IN ERODE DISTRICT

In 2013-14, Government has accorded administartive sanction for preliminary works for **Rs. 22.93 Crore** under State fund work for construction of grade separator at km 1/8 of Erode – Perundurai – Kangeyam Road Government hospital Junction. On preparation of DPR, administrative sanction will be accorded for carrying out main bridge works.

#### 2.13.13. ERODE OUTER RING ROAD (PHASE III)

In Phase III, the work of formation of the outer ring road for a length of 7.20 kms from km 7/6 to 14/8 including construction of road over bridge at km 11/2 – 11/6 for Rs.69.30 Crore was taken up under State funds and the work is in progress.

#### 2.13.14.SUGARCANE ROAD DEVELOPMENT SCHEME

To form and improve the roads from sugarcane growing areas to sugar mills, the cess fund collected by the Agricultural department from sugar mills is utilized.

9 new road works and 1 high level bridge at a cost of Rs.14.40 Crore were taken up as under this scheme and 7 road works have been completed at a cost of Rs. 9.04 Crore and the other works are in progress.

#### 2.13.15. ORAGADAM INDUSTRIAL CORRIDOR PROJECT

Considering the speedy development of industries in and around Sriperumpudur in Kancheepuram district, it was decided

during the year 2005-06 to improve the road infrastructure facilities in Oragadam Industrial Park at an estimated cost of Rs.300 Crore in Phase-I, Rs.86.65 Crore in Phase-II in 2011-12, and Rs.115 Crore in Phase-III in 2014-15. The scheme is under implementation with the revised estimated cost of Rs.547.82 Crore for Phase-I and Rs.108.66 Crore for Phase-II.

#### 2.13.15.1. PHASE - I

The following works were taken up for implementation in the first phase:

- (a) Singaperumalkoil-Sriperumpudur road (SH-57) km 0/6 to 24/6 (24.00 km) Widening the road to four lane with centre median
- (b) Vandalur Wallajabad road (SH-48) km 30/4 to 63/8 (33.40 km) Widening the road to four lane with centre median.
- (c) Construction of a grade separator at Oragadam junction in Vandalur-Wallajabad road.

Out of 57.40 km, 44.60 km have been completed in Phase-I work. Out of balance 12.80 km, 9.40 km work is in progress and 3.40 km will be completed after the completion of land acquisition. The work of construction of a grade separator at Oragadam junction has been completed.

After the completion of land acquisition process, all the works in the first phase will be completed by October 2015. The total expenditure incurred for this project till this date is Rs.451.23 Crore which includes the expenditure of Rs.184.62 Crore for aand acquisition.

#### 2.13.15.2. PHASE - II

In second phase, the following work was taken up for implementation.

(a) Widening to the existing four lane to six lane at km 12/6 to 24/6 in Singaperumalkoil – Sriperumpudur road.

In the second phase, the work of "Widening the stretch from 12/6 to 24/6 in Singaperumalkoil-Sriperumpudur road from 4 lane to 6 lane" (to a length of 12 km). This work is in progress. Out of 12 km, 10 km have been completed. An expenditure of Rs.75.51 Crore has been incurred. The Phase-II works excluding Sriperumbudur land acquisition stretch will be completed during this financial year.

#### 2.13.15.3. PHASE - III

Under Phase-III, the widening of stretch from km 0/6 to 12/6 of Singaperumalkoil-Sriperumpudur road from four lane to six lane work was announced by the **Hon'ble Chief Minister of Tamil Nadu** under Rule 110 on 25.07.2014. The Government have accorded administrative sanction for Rs.115.00 Crore. Agreement has been executed for two packages and the works are in progress.

#### 2.14. DESIGN WORKS COMPLETED

During the year 2014-2015, design, drawings and quantity estimate for 14 railway over bridges, 42 river bridges and proof checking of DPRs prepared by the consultant for 2 railway over bridges, 22 river bridges, 4 grade separators, 2 pedestrian sub ways, 1 training centre at Highways Research Station complex and revised design for 9 bridge works totaling 96 works have been completed.

### 2.15. TAMIL NADU ROAD SECTOR PROJECT (TNRSP)

The Tamil Nadu Road Sector Project I was implemented through World Bank loan assistance at a total project cost of Rs.2442 Crore from 2004 to 2012. The works taken up under the project included upgradation of 725 km of roads, enhanced maintenance works in 1330 km of roads, road safety, black spot improvement works and institutional development etc. Spillover Works of TNRSP I Viz., strengthening of Ramnad bypass and construction of Kumbakonam bypass extension have been completed during 2014-15. On successful completion of Phase I of the project, strategic option study II was carried out to arrive at candidate projects for improvement through World Bank and other financial agencies. The study was conducted through M/s. Indian Institute Technology Madras (IITM), Chennai and as part of this roads to a length of 2867 km were prioritized based on economic return consideration.

The Tamil Nadu Infrastructure Development Board (TNIDB) under the Chairmanship of **Hon'ble Chief Minister of Tamil Nadu** allotted an amount of Rs. 65 Crore to carry out the detailed project report (DPR) preparation for a length of 2079 km. DPR preparation for the selected roads have been taken up through five consultants and so far, has been completed in 575 km length of roads. The remaining DPR work is expected to be completed shortly.

World Bank appraisal mission for the initial phase of the Project was completed in December 2014. Loan and project agreement were signed on 28.05.2015 and loan became effective on 10.07.2015. World Bank consented to fund the following components:

### Upgradation and maintenance through Engineering Procurement Contracts:

Construction of civil works for widening and upgrading of approximately 427 km of roads of Core Road Network (CRN) to two-lane with paved shoulders standards through EPC contracts including maintenance for a 5 year period after the construction, at a cost of Rs.2414 Crore.

### Up gradation and maintenance through Public Private Partnership (PPP) concessions:

Construction of civil works for widening and upgrading of approximately 145 km of roads of CRN, to four-lane standards and maintenance during the concession period, at a cost of 1499 Crore, adopting modified annuity mode.

### Maintenance through Multi-year Performance - based Maintenance Contracts:

Maintenance of approximately 597 km of CRN for a 5-year period, at a cost of 229 Crore.

World Bank loan component will also support the associated activities like transaction advisory, supervision of quality control, and advisory services. The project roads will be designed and implemented with particular attention to achieve better road safety outcomes especially the vulnerable road users. A comprehensive road safety plan has also been framed as part of the Project.

Upgradation of 427 km of two lane roads in 10 packages under EPC mode has been awarded and agreement signed. Maintenance of 597 km of roads in two package adopting Output and Performance based Road maintenance Contracts (OPRC)

mode have already been invited and bids are under evaluation. Three supervision consultants to supervise the EPC works have been engaged.

Government has given in principle approval for the Institutional Enhancement Component (ICE) components of the project covering institutional restructuring for effective functioning, policy reforms with an aim to accelerate road development in the State. The Road safety and Institutional Enhancement component of the project will be implemented through the Director General (H) wing in coordination with Transport Department.

A Resettlement Policy Frame work has been prepared for the project in line with the new Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (RFCTLARR) ACT 2013 and World Bank Operational guidelines. This document gives guidance for providing compensation for land acquisition and project affected people.

#### II. MINOR PORTS WING

#### 3. TAMIL NADU MARITIME BOARD

The State of Tamil Nadu has a coast line of about 1076 kms. Along this coastline, there are three Major Ports, namely, Ennore, Chennai and Tuticorin notified under the Major Port Trust Act, 1963 and 23 Non-Major (Minor) Ports notified under the Indian Ports Act 1908. The major ports come under the control of Government of India and the non-major ports come under the control of the State Government.

Out of the seven Government Ports, M/s. Chemplast Sanmar Ltd., imports Vinyl Chloride Monomer (VCM) for their P.V.C. factory established at Cuddalore SIPCOT Complex through their Captive Marine Terminal facility located within the port limits of Cuddalore Minor port limits. Similarly, M/s Chennai Petroleum Corporation Ltd., (CPCL) exports Diesel and Naphtha from their Narimanam (Nagapattinam District) refinery through their captive open sea jetty located within the port limits of Nagapattinam port. Import of wooden logs and edible oil and Export of Cement are done occasionally at Cuddalore and Nagapattinam ports respectively. Small ships are piloted through Pamban Channel. Kanniyakumari and Rameswaram ports are used for passenger ferry service.

The captive ports are operated by private companies for their own use. The development of entire infrastructure facilities in these captive ports are the responsibility of the companies concerned.

Out of the sixteen captive ports, five ports, viz., Kattupalli Port (Thiruvallur), Ennore Minor Port (Thiruvallur),

PY-03 Oil Field (Cuddalore), Thirukkadaiyur Port (Nagapattinam) and Koodankulam Port (Thirunelveli) have been permitted to operate the port either for import / export of cargo for their captive industry.

Out of the above five ports, at Ennore Minor Port and Thirukkadaiyur Minor Port, Liquid ammonia and Naphtha are being transferred directly from the vessel at Buoy Mooring System to the storage tank on shore through Sub-marine Pipelines and Containers, General Cargo etc., are handled through Kattupalli port. Presently, there are no activities in the ports of PY-03 Oil Field, Thiruchopuram and Koodankulam. NPCIL has asked for denotification of the minor port because of the expansion of the KKNPP. The remaining eleven ports are under various stages of obtaining the requisite statutory approvals / financial closure to commence the construction of the port based industry/port.

#### 3.1. COMMODITY HANDLED IN MINOR PORTS.

#### 3.1.1. GOVERNMENT PORTS

**Table 11: GOVERNMENT PORTS** 

SI. No.	Port	Shipped	Landed
1.	Cuddalore		Vinyl Chloride Monomer
2.	Nagapattinam	Diesel and Naphtha	Edible Oil and General cargo

#### 3.1.2. CAPTIVE PORTS

**Table 12: CAPTIVE PORTS** 

SI. No.	Port	Shipped	Landed
1.	Kattupalli Port	Containers	Shipbuilding and ship repair activities take place @ Kattupalli Port, General cargo
2.	Ennore Minor Port		Liquid Ammonia
3.	Thirukkadaiyur		Naphtha and Natural Gas.

#### 3.2. PORT DEVELOPMENTS

#### 3.2.1. GOVERNMENT PORTS.

#### 3.2.1.1. CUDDALORE PORT

M/s. Chemplast Sanmar Limited has developed Marine Terminal Facility (MTF), within Cuddalore port limits and handling Vinyl Chloride Monomer (VCM) required for the Poly Vinyl Chloride (PVC) factory, established at SIPCOT Complex.

The cargo handled at this port during the year 2014 - 2015 is detailed below:-

Table 13: LANDED

SI. No.	Commodity	No. of Ships	Quantity (in M.T)
1	Vinyl Chloride Monomer	31	234028
2	Machineries		5
3	Miscellaneous		529
	Total (A)	31	234562

Table 14: SHIPPED

SI. No.	Commodity	No. of Ships	Quantity (in M.T)
1	Petroleum Products	-	165
2	Iron	-	1
3	Miscellaneous	-	677
	Total (B)		843
	Grand Total (A+B)	31	235405

#### 3.2.1.2. NAGAPATTINAM - CPCL PORTS.

The cargo handled at this port during the year 2014 - 2015 is detailed below:-

**Table 15: LANDED** 

SI. No.	Commodity	No. of Ships	Quantity (in M.T)
1	Crude Oil	-	1917
2	Miscellaneous	-	2
	Total (A)	-	1919

Table 16: SHIPPED

SI. No.	Commodity	No. of Ships	Quantity (in M.T)
1	Naphtha	12	127380
2	HSD	8	86399
3.	Cement	5	1220
4.	Miscellaneous	-	1394
5.	Petroleum Products	=	88
6	SKO	-	3960
	Total (B)	25	220441
	Grand Total (A+B)	25	222360

#### **3.2.1.3. PAMBAN PORT**

This port is situated in Rameswaram Island of Ramanathapuram district. The only function at this port is to pilot small drafted vessels passing through Pamban Channel in the Gulf of Mannar. 191 vessels were piloted at this port during the year 2014 – 2015.

#### 3.2.1.4. RAMESWARAM PORT

This port is situated in Rameswaram Island of Ramanathapuram district. A short distance passenger ferry service near Agnitheertham in Rameswaram is available. 1,49,844 passengers were ferried during the year 2014 - 2015.

#### 3.2.1.5. KANYAKUMARI PORT

This port, situated in Kanyakumari district, is solely meant for facilitating ferry service between shore and Vivekananda Rock Memorial / Ayyan Thiruvalluvar Statue. M/s. Poompuhar Shipping Corporation Limited is operating this ferry service. Tamil Nadu Maritime Board is supervising the ferry service and derive establishment charges from the Corporation. 19,53,959 passengers were ferried during the year 2014 – 2015.

#### 3.2.1.6. COLACHEL PORT

The Government has instructed to analyse the possibility of setting up a LNG terminal at Colachel. Accordingly, M/s.i-maritime Consultancy Private Limited has been requested to analyse the view of the Government and revise the TEFR according to the above concept proposed by Government. The consultants submitted a TEFR and informed that the risks involved in developing an LNG terminal can be mitigated by forming strategic partnership with global companies. TNMB has requested

to furnish the list of global companies for forming such partnership. Further, consultant has expressed various models of developing Colachel Port either as a LNG Terminal or as an industrial zone based port or as a base for a Maritime city including tourism, pleasure cruise etc., and the consultant stated that, vide letter dated 12.12.2013 the Consultant has submitted the outline of these options. This subject was placed before the Board in its 80<sup>th</sup> meeting held on 03.07.2014 the board invited EOI for the development of existing Colachel Minor Port with wide publicity on 24.09.2014.

In response, only one firm, M/s.WAPCOS Ltd has submitted EOI for Colachel port. However, M/s.WAPCOS Ltd in their report has not indicated the project/port related for developing Colachel port. Moreover the document submitted by M/s.WAPCOS Ltd is related to consultancy work and without any proposal for development methodology

#### 3.2.2. CAPTIVE PORTS

#### 3.2.2.1. KATTUPALLI PORT

M/s L&T Shipbuilding Limited have commenced operation at this port. Containers and general cargo are handled at this port. Shipbuilding and ship repair activities are taking place regularly.

The cargo handled at this port during the year 2014 - 2015 is detailed below:-

Table 17: LANDED

SI. No.	Commodity	No. of Ships	Quantity (in M.T)
1	Fabricated Steel Structure	10	92,284
2	Timber logs	1	8,323
	Total (A)	11	1,00,607

Table 18: SHIPPED

SI. No.	Commodity	No. of Ships	Quantity (in M.T)
1	Iron pipes	1	9,874
	Total (B)	1	9,874
	Grand Total (A+B)	12	1,10,481

Table 19: LANDED & SHIPPED DETAILS

LANDED			SH	IPPED		
SI. No.	Containers	No. of Ships	Units	Containers	No. of Ships	Units
1	20 Ft Loaded		4,142	20 Ft Loaded		2,528
2	40 Ft Loaded		5,474	40 Ft Loaded		5,236
3	20 Ft Empty		76	20 Ft Empty		5,146
4	40 Ft Empty		636	40 Ft Empty		5,133
	Total (C)		10,328	Total (D)		18,043
	Grand Total (C+D)				82	28,371
	(A+B+C+D) <b>Total No. of ships</b>				94	

#### 3.2.2.2. ENNORE MINOR PORT

This port is also situated in Thiruvallur district. The port, consisting the marine structures of Multiple Buoy Mooring System with submarine pipelines for receiving Liquid Ammonia, had been developed by M/s. Coromandel International Ltd., Chennai.

During the year 2014 - 2015, 10 vessels called at this port and 57,832 M.Ts. of Liquid Ammonia has been handled.

#### 3.2.2.3. THIRUKKADAIYUR PORT

This port situated in Nagapattinam district was declared for the captive use of M/s. PPN Power Generating Company so as to handle Naphtha and Natural gas required for their 330 MW gas combined Cycle Power Project at Pillaiperumalnallur. This Port is in operation since 2001.

The cargo handled at this port during the year 2014 – 2015 is detailed below:-

**Table 20: LANDED** 

SI. No.	Commodity	No. of Ships	Quantity (in M.T)
1	Naphtha	18	1,96,795
2	Gas	-	716
3	Crude Oil	-	1,881
	Total	18	1,99,392

**Table 21: SHIPPED** 

SI. No.	Commodity	Quantity (in MMBTU)
1	Gas	1104839.517

#### 3.2.3. CARGO TRAFFIC.

During the year 2014 - 2015, Minor Ports in Tamil Nadu handled total cargo of 8,25,470 Metric Tons and 28,371 Nos. Container through 178 vessels.

#### 3.2.4. OTHER CAPTIVE PORTS.

The captive ports which are under the various stages of process in Tamil Nadu.

1) Mugaiyur 7) Thirukkuvalai

2) Thiruchopuram 8) Punnakkayal

3) Silambimangalam Shipyard 9) Udangudi

4) Parangipettai 10) Manappad

5) Kaveri 11) Chettinad Tharangampadi

6) Vanagiri

#### 3.3. TAMIL NADU MARITIME ACADEMY

The Tamil Nadu Maritime Academy at Thoothukudi is functioning under Tamil Nadu Maritime Board. The Academy has so far conducted 23<sup>rd</sup> batches of pre-sea (GP) rating courses. It is conducting General Purpose Crew training Course of 6 months duration with 40 trainees per batch. The Academy is also conducting five STCW-95 courses namely, 'Personal Survival Techniques', 'Elementary First Aid', 'Personal Safety and Social Responsibility', 'Oil Tanker Familiarization' and 'Fire Prevention and Fire Fighting'. The 24<sup>th</sup> batch of GP rating course has commenced from January 2015.

### 4. POOMPUHAR SHIPPING CORPORATION LIMITED

Poompuhar Shipping Corporation Limited (PSC) was formed on 11.04.1974 under the Companies Act, 1956 with the objective of transporting the coal required for the thermal power stations of Tamil Nadu Generation and Distribution Corporation (TANGEDCO). PSC has acquired three specially designed shallow draft geared bulk carriers of 40000 DWT each between August 1985 and January 1987 which are exclusively utilized for this purpose.

The Dead Weight Tonnage (DWT) of the vessels were increased to 45000 M.T during dry docking of the vessels as follows:

**TABLE 22: CARRYING CAPACITY OF THE VESSELS** 

Name of the vessels	Month and year	Total carrying capacity (MT)
M.V.Tamil Kamaraj	November 2004	45000
M.V.Tamil Periyar	May 2005	45000
M.V.Tamil Anna	November 2005	45000

In addition to its own three ships, PSC also charters ships from Private Shipping Companies to transport the coal required by TANGEDCO for the various Thermal Power Stations in Tamil Nadu.

#### 4.1. MOVEMENT OF COAL

#### 4.1.1. COAL MOVEMENT FOR TANGEDCO

The coal required by TANGEDCO is transported from the load ports at Haldia, Paradip and Vizag and discharged at Kamarajar Port, Ennore and V.O. C Port, Tuticorin.

#### 4.1.2. COAL MOVEMENT FOR NTECL

The Corporation is also transporting coal through chartered vessels for M/s. NTPC Tamil Nadu Energy Company Ltd., (NTECL), a joint venture Company of TANGEDCO and NTPC, from the load ports of Paradip / Gangavaram to Kamarajar Port, Ennore for their 3  $\times$  500 MW thermal power stations at Vallur, North Chennai, as per the Memorandum of Understanding.

The details of linkage of coal, arrival of coal at load ports and coal moved by own and chartered vessels for the last two years are as follows:

**Table 23: COAL MOVEMENT** 

Year	Target for coal movement	ports	Coal moved by chartered vessels	Coal moved by own vessels	Total coal moved	Achieve ments
	(In lakhs Metric Tonnes)					
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2013-14	202.72	147.24	123.28	26.37	149.65	101.63%
2014-15	230.44	162.68	127.96	33.58	161.54	99.30%

#### 4.2. PHYSICAL AND FINANCIAL PERFORMANCE

#### 4.2.1. PHYSICAL PERFORMANCE

Physical performance of own and chartered vessels for the period 2013-2014 and 2014-2015 are as follows:

**Table 24: PHYSICAL PERFORMANCE** 

	2013-14	2014-15
Own Vessels		
No. of vessels	3	3
No. of voyages	59	75
Quantity of coal moved (in lakhs MT)	26.37	33.58
Average quantity of coal moved per voyage in MT	44695	44769
Chartered Vessels		
No. of Vessels	10	10
No. of voyages	229	231
Quantity of coal moved (in lakhs MT)	123.28	127.96
Average quantity of coal moved per voyage in MT	53834	55396
Total quantity moved (in lakhs MT)	149.65	161.54

#### 4.2.2. FINANCIAL PERFORMANCE

The overall financial performances of the corporation during the last three financial years are as follows:

**TABLE 25: FINANCIAL PERFORMANCE OF PSC** 

(Rs.in Crore)

Year	Turn Over	Profit
2012-2013	544.90	5.17
2013-2014	667.21	6.85
2014-2015	625.13	7.72

#### 4.3. KANYAKUMARI FERRY SERVICE

Besides transporting of coal to M/s TANGEDCO and M/s.NTECL, PSC is also operating ferry services from the shore of Kanniyakumari to Vivekananda Rock Memorial and the Ayyan Thiruvalluvar Statue. The physical and financial performances of the ferry service for the last two years are given below.

Table 26: PHYSICAL & FINANCIAL PERFORMANCE OF FERRY SERVICE

	2013-2014	2014-2015
No. of Ferry in service	3	3
No. of Passengers ferried (In lakhs)	18.70	19.46
Fare collection (Rs.in lakhs)	719.19	716.27
Operational Profit (Rs. in lakhs)	237.72	179.98

**Edappadi K. Palaniswami Minister for Highways and Minor Ports**