



**GOVERNMENT OF TAMIL NADU**

**HIGHWAYS AND MINOR PORTS  
DEPARTMENT**

**DEMAND NO. 21**

**PERFORMANCE BUDGET**

**2011-2012**

**2012**

# PERFORMANCE OF HIGHWAYS AND MINOR PORTS DEPARTMENT DURING 2011-12

## I.HIGHWAYS DEPARTMENT

### 1 INTRODUCTION

In the globalised economy, an efficient road network is very essential to improve competitiveness and increasing productivity and efficiency. Good physical connectivity in urban and rural areas is essential for economic growth. By developing road infrastructure, efficient and safe transport of men and material are ensured.

To achieve balanced socio-economic development, infrastructure such as broader roads, ring roads, bridges, Railway Over Bridges and Junction improvements works are taken up by this department all over the state.

#### 1.1 ROAD LENGTH

The Highways Department maintains 62017 km length of government roads. The classification of roads and their lengths and type of existing bridges and their numbers as on 31.03.2012 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**

<b>Classification of Road</b>	<b>Length (Km)</b>
National Highways (NH)	
NH	1,500
NHAI	3,474
<b>Total</b>	<b>4,974</b>
State Highways (SH)	10,764
Major District Roads (MDR)	11,247
Other District Roads (ODR)	35,032
<b>Total</b>	<b>62017</b>

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

<b>Types of Bridges</b>	<b>Nos.</b>
Major Bridges	1,357
Minor Bridges	7,936
Culverts	1,08,915
Road Over Bridges at Railway level crossing (ROB)	197
Road Under Bridges at Railway level crossing (RUB)	59
<b>Total</b>	<b>1,18,464</b>

**TABLE 3****SURFACE WISE LENGTH****(length in Kms)**

<b>S. No.</b>	<b>Category of Road</b>	<b>Cement Concrete (C.C)</b>	<b>Black Topped (B.T)</b>	<b>Metalled</b>	<b>Total</b>
1	National Highways	2	4972	-	<b>4974</b>
2	State Highways	13	10751	-	<b>10764</b>
3	Major District Roads	10	11237	-	<b>11247</b>
4	Other District Roads	16	35016	-	<b>35032</b>
<b>Total</b>		<b>41</b>	<b>61976</b>	<b>-</b>	<b>62017</b>

**TABLE 4****LANEWISE DETAILS OF ROADS**

(length in Km)

<b>S. No</b>	<b>Category of road</b>	<b>Single lane</b>	<b>Inter mediate lane</b>	<b>Double lane</b>	<b>Multi lane</b>	<b>Total</b>
1	<b>National Highways</b>					
	a)National Highways wing	13	54	1394	39	1500
	b) National Highway Authority of India	-	-	1371	2103	3474
	Sub-Total	13	54	2765	2142	4974
	Percentage of lanewise width of roads		1%	56%	43%	
2	<b>State Highways</b>	32	693	9028	1011	10764
	Percentage of lanewise width of roads		6%	84%	10%	
3	<b>Major District roads</b>	2791	5289	3033	134	11247
	Percentage of lanewise width of roads	25%	47%	27%	1%	
4	<b>Other District roads</b>	31732	2429	823	48	35032
	Percentage of lanewise width of roads	91%	7%	2%		
	<b>Total</b>	<b>34568</b>	<b>8465</b>	<b>15649</b>	<b>3335</b>	<b>62017</b>
	Percentage of lane width to the total length of roads	56%	14%	25%	5%	

## 2 PLAN SCHEMES

### 2.1 FINANCIAL PERFORMANCE FOR 2011-2012

The financial performance under the plan schemes for the year 2011-12 and Budget Estimate for the year 2012-13 are given in **Table 5**.

**TABLE 5**  
**FINANCIAL PERFORMANCE**

(Rupees in Lakhs)

S. No.	Name of Scheme	2011-12		2012-13 Budget Estimate
		Budget Estimate	Expenditure	
<b>Construction and Maintenance Wing</b>				
<b>State Highways</b>				
1	Bridges (Part II Scheme)	489.14	388.73	200.08
2	Roads (Part II Scheme)	0.08	0.02	3380.08
3	16 major works	220.66	214.00	220.44
4	Bridges- 17 minor works	25.00	25.00	50.00
	<b>Sub-Total</b>	<b>734.88</b>	<b>627.75</b>	<b>3850.60</b>
<b>Major District Roads</b>				
5	Major District Roads (Part II Scheme)	0.08	0.08	0.08
6	16 Major works	220.43	220.00	220.44
7	17 minor works	60.51	59.93	60.00
	Sub-Total	281.02	280.01	280.52
<b>Other District Roads</b>				
8	Other District Roads (Part II Scheme)	0.17	87.68	0.17
9	16 major works	220.53	228.00	221.10
10	17 minor works	100.58	100.00	100.00
	<b>Sub-Total</b>	<b>321.28</b>	<b>415.68</b>	<b>321.27</b>
Rehabilitation of Distressed Bridges				
11	Rehabilitation of Distressed Bridges (Part II Scheme)	121.30	492.36	96.77
12	16 major works	70.65	78.00	100.00
	<b>Sub-Total</b>	<b>191.95</b>	<b>570.36</b>	<b>196.77</b>

S. No.	Name of Scheme	2011-12		2012-13 Budget Estimate
		Budget Estimate	Expenditure	
13	construction of bridges in Unbridged crossings (Part II Scheme)	0.02	0.02	0.02
14	Other Roads (Part II Scheme)	0.10	251.68	1199.72
	Comprehensive Road Infrastructure Development Programme			
15	CRIDP - SH	50000.00	71699.99	79685.00
16	CRIDP - MDR	43009.00	49299.99	59375.00
17	CRIDP - ODR	21000.00	21000.00	19940.00
18	CRIDP - SCP	31000.00	31000.00	31500.00
	<b>Sub- total</b>	<b>145009.00</b>	<b>172999.98</b>	<b>190500.00</b>
19	Plastic and Litter Free Highways	26.25	26.25	26.25
20	Improvement to Chennai Radial Roads	138.35	264.27	0.02
21	Acquisition of lands for bypasses			
	(i) works	0.02	295.01	0.02
	(ii) lands	0.07	207.67	0.07
	<b>Acquisition of land Sub- total</b>	<b>0.09</b>	<b>502.68</b>	<b>0.09</b>
22	Improvement of roads in Kancheepuram City under Textile Centre Infrastructure Development Scheme	0.01	0.01	0.01
23	Improvement of vital roads in industrial areas through Tamil Nadu Road Infrastructure Development Corporation	4000.02	4000.01	6000.02
24	Chennai - Outer Ring Road (Phase-I&II)	10000.00	10299.99	24000.00
25	Construction of Buildings	925.42	523.77	964.05
26	Improvement to accident prone spots	0.01	0.01	0.01
27	Improvement of roads with loan assistance from HUDCO/ TUFIDCO	0.01	0.01	0.01

S. No.	Name of Scheme	2011-12		2012-13 Budget Estimate
		Budget Estimate	Expenditure	
28	Upgradation of IT highway in Chennai	1300.01	3500.00	0.02
29	Improvements of roads in Coastal Districts	0.01	0.01	0.01
30	Improvements of roads in Industrial Areas	0.01	0.01	0.02
31	Tools and Plant	0.02	64.99	0.00
32	City Traffic Improvement works	0.01	0.01	0.01
33	Construction of bridges in PU areas	0.01	0.01	0.01
34	High density Corridor	0.01	0.01	0.01
35	Improvements to Junctions in Rajiv Gandhi Salai	5000.01	0.02	5000.01
36	Formation of Roads in Tribal areas	0.05	0.01	0.01
	<b>Plan – Total (Construction and Maintenance Wing)</b>	<b>167928.60</b>	<b>194327.56</b>	<b>232339.46</b>
37	Tsunami – Centrally assisted	4413.00	2320.00	8000.00
	<b>Total for Construction and Maintenance Wing</b>	<b>172341.60</b>	<b>196647.56</b>	<b>240339.46</b>
<b>NABARD and Rural Roads Wing</b>				
38	Improvement to rural roads with NABARD assistance	81.42	356.02	349.60
39	Construction of Bridges in Government Roads with loan assistance from NABARD	18000.00	14276.55	18592.54
40	Construction of Bridges in Government and rural roads	1631.59	1285.48	927.37
41	Improvement of District and other District Rural Roads with NABARD assistance	8359.73	7472.58	829.74
42	Improvement to bus route with NABARD assistance	0.02	59.07	17.87

S. No.	Name of Scheme	2011-12		2012-13 Budget Estimate
		Budget Estimate	Expenditure	
43	Improvement to Rural Roads with loan assistance from NABARD under Special Component Plan	0.02	0.00	0.01
44	Comprehensive Road Infrastructure Development Programme- Rural Panchayat union roads	-		
45	NABARD assisted Panchayat and Panchayat Union Roads	-		
46	Construction of bridges under Tsunami Emergency Assistance Project with loan assistance from ADB	0.02	0.78	0.01
47	Bypass works	1306.69	502.00	10000.00
	<b>Plan – Total Nabard and Rural Roads Wing</b>	<b>29379.49</b>	<b>23952.48</b>	<b>30717.14</b>
48	Tsunami – Centrally assisted	3022.00	1557.73	1400.00
	<b>Total for NABARD and Rural Roads Wing</b>	<b>32401.49</b>	<b>25510.21</b>	<b>32117.14</b>
	<b>Projects Wing</b>			
49	Construction of over and under bridges in lieu of existing level crossings	1591.34	1769.32	2326.13
50	Construction of ROB in Chennai Metro Area for Traffic Management	13351.29	10869.31	10875.31
51	Construction of bridges	501.63	431.13	379.86
52	Construction/ Reconstruction of bridges and improvement of roads with loan assistance from NABARD	5176.87	4568.75	1711.01
53	Provision for road works under TNUDP	411.84	374.35	0.01

S. No.	Name of Scheme	2011-12		2012-13 Budget Estimate
		Budget Estimate	Expenditure	
54	Construction of Road Over Bridge/Road Under Bridge in lieu of level crossings	71300.01	29962.87	51316.00
55	Madurai Radial Roads	0.01	0.00	0.01
56	CRIDP - Madurai Radial Roads	0.12	0.00	0.01
57	Rural Roads - Marketing centre	0.22	1.45	0.01
58	Roads in cyclone affected areas	0.13	0.00	0.06
59	Construction of Interchange at the junction of Pondy-Krishnagiri road under IS&EI	0.01	0.00	0.01
60	City Traffic Improvement works	0.07	0.00	0.01
	<b>Total for Projects Wing</b>	<b>92333.54</b>	<b>47977.18</b>	<b>66608.43</b>
	<b>Metro Wing</b>			
61	Chennai Metropolitan Development Plan	5000.00	5000.00	12681.80
	<b>Total for Metro Wing</b>	<b>5000.00</b>	<b>5000.00</b>	<b>12681.80</b>
	<b>National Highways</b>			
62	Revamped Central Road Fund Scheme	12830.04	14744.46	13733.55
63	Inter State Connectivity Scheme	1000.02	867.51	1000.20
64	Economic Importance Scheme	3179.62	824.32	1000.01
65	Bharat Nirman Scheme(Tender excess and Maintenance to be borne by State Government)	239.20	206.42	284.79
66	Western Ghats Development Programme (Road Sector)	100.04	127.65	100.02

S. No.	Name of Scheme	2011-12		2012-13 Budget Estimate
		Budget Estimate	Expenditure	
67	State Plan – Miscellenous Original Works	4.45	6.05	0.05
68	Token Provision for Miscellenous Heads included in the demand of Highways Department	0.12		
	<b>Total for National Highways</b>	<b>17353.49</b>	<b>16776.41</b>	<b>16118.62</b>
<b>Tamil Nadu Road Sector Project</b>				
69	Establishment charges for Revenue staff for PMG and special staff for Environment Project Management	727.50	591.58	550.05
70	Establishment charges for PMG	5.61	18.61	22.49
71	TNRSP	27503.00	12873.81	3222.93
	<b>Total for TNRSP</b>	<b>28236.11</b>	<b>13484.00</b>	<b>3795.47</b>
<b>Quality Assurance &amp; Research</b>				
72	Institute of Highways Research and Management	0.01	0.00	0.01
73	Equipment for lab	52.01	134.29	68.00
	<b>Total for Quality Assurance &amp; Research</b>	<b>52.02</b>	<b>134.29</b>	<b>68.01</b>
	<b>Plan – Total (All wings)</b>	<b>340283.25</b>	<b>301651.91</b>	<b>362328.93</b>
	<b>Tsunami Rehabilitation Scheme – Total (All wings)</b>	<b>7435.00</b>	<b>3877.73</b>	<b>9400.00</b>
	<b>Grand Total</b>	<b>347718.25</b>	<b>305529.64</b>	<b>371728.93</b>

## 2.2 PHYSICAL PERFORMANCE

The physical targets and achievements under the plan schemes for the year 2011-12 and targets for the year 2012-13 are given in **Table 6**.

**TABLE 6****PHYSICAL PERFORMANCE**

S. No.	Name of Scheme	Achievements 2011-2012		Targets 2012-2013	
		Bridges/ Culverts/ Structures in Nos.	Roads length in km.	Bridges/ Culverts / Structures in Nos.	Roads length in km.
(1)	(2)	(3)	(4)	(5)	(6)
<b>Construction and Maintenance Wing</b>					
1	Part II Scheme				
	Buildings	7		33	
	Bridges	1		7	
2	Comprehensive Road Infrastructure Development Programme				
	State Highways	122	1221	175	1500
	Major District Roads	70	1207	125	1100
	Other District Roads	59	974	150	1200
	Other District Roads Special Component Plan (CRIDP)	23	1551	75	1500
	<b>CRIDP total</b>	<b>274</b>	<b>4953</b>	<b>525</b>	<b>5300</b>
	Plan Total				
	<b>Roads/ Bridges</b>	<b>275</b>	<b>4953</b>	<b>532</b>	<b>5300</b>
	<b>Buildings</b>	<b>7</b>		<b>33</b>	
3	Tsunami Rehabilitation Programme(Centrally Assisted)			7	
	C & M Wing Total				
	Roads/ Bridges	275	4953	539	5300
	Buildings	7		33	
	<b>Overall Total</b>	<b>282</b>	<b>4953</b>	<b>572</b>	<b>5300</b>

S. No.	Name of Scheme	Achievements 2011-2012		Targets 2012-2013	
		Bridges/ Culverts/ Structures in Nos.	Roads length in km.	Bridges/ Culverts / Structures in Nos.	Roads length in km.
<b>Nabard And Rural Road Wing</b>					
4	Improvements to Major District Roads/ Other District Roads under NABARD loan assistance		219		49
5	Bridges on Government roads	2		4	
6	Construction of bridges in Government and rural roads	67		79	
7	Rural Roads Scheme	3		2	
8	Bus Route Scheme	1			
	Plan Total	<b>73</b>	<b>219</b>	<b>85</b>	<b>49</b>
9	Tsunami Rehabilitation Programme	1		2	
	<b>Total</b>	<b>74</b>	<b>219</b>	<b>87</b>	<b>49</b>
<b>Projects Wing</b>					
10	Road over/ under bridges in lieu of existing Level Crossings	2		1	
11	Construction of Over Bridges/ Under Bridges in lieu of level crossings	5		15	
12	Construction of bridges	1		3	
13	Construction of bridges in Cauvery delta districts and Improvement of Sugarcane roads with NABARD loan assistance	4		3	
14	Tamil Nadu Urban Development Project				
15	CMDP Grade Separator			2	
	<b>Total</b>	<b>12</b>		<b>24</b>	

S. No.	Name of Scheme	Achievements 2011-2012		Targets 2012-2013	
		Bridges/ Culverts/ Structures in Nos.	Roads length in km.	Bridges/ Culverts / Structures in Nos.	Roads length in km.
<b>Metro Wing</b>					
16	Chennai Metropolitan Development Plan				
	1) ROB/RUB			2	
	2) Grade Separator			2	
	3) River Bridge	1		3	
	4) Roads / Bridges		3	1	1
	<b>Total</b>	<b>1</b>	<b>3</b>	<b>8</b>	<b>1</b>
<b>National Highways</b>					
17	Revamped Central Road Fund Scheme	5	244	2	275
18	Inter State Connectivity Scheme		20		
19	Economic Importance Scheme				31
20	Western Ghats Development Programme (Road Sector)	4	3	3	2
	<b>Total</b>	<b>9</b>	<b>267</b>	<b>5</b>	<b>308</b>
<b>TNRSP</b>					
21	Tamil Nadu Road Sector Project				
	Upgradation		4		1
	Maintenance component		42		
	Bridges/Minor Bridges	1		3	
	<b>Sub Total</b>	<b>1</b>	<b>46</b>	<b>3</b>	<b>1</b>
	<b>Plan</b>				
	Roads/ Bridges/ Culverts	371	5488	664	5659
	Buildings	7		33	
	<b>Plan Total</b>	<b>378</b>	<b>5488</b>	<b>697</b>	<b>5659</b>
	Tsunami	1		9	
	<b>Overall Total</b>				
	Roads/ Bridges/ Culverts	372	5488	673	5659
	Buildings	7		33	
	<b>Total</b>	<b>379</b>	<b>5488</b>	<b>706</b>	<b>5659</b>

### 3 NON-PLAN SCHEMES

Maintenance of roads and bridges are carried out as per IRC norms under Non-Plan scheme. Special repairs and Periodical renewal and maintenance of bridges are also undertaken.

During 2011-12, renewal of 6035 km roads have been completed including 2735 km from the funds allotted in Thirteenth Finance Commission.

#### 3.1 FINANCIAL PERFORMANCE

The financial performance indicating the details of expenditure made during 2011-12 under various heads of Non Plan and the allocation made for 2012-13 is given in Table 7.

**TABLE 7**  
**NON PLAN-FINANCIAL ALLOCATION AND EXPENDITURE**

(Rs.in lakhs)

S. No.	Name of Scheme	2011-2012		2012-2013
		Budget Estimate	Expenditure	Budget Estimate
1	National Highways Urban	202.58	202.58	212.71
2	Certain important Roads in the city of Chennai taken from Corporation of Chennai	1823.25	1823.25	1914.41
3	State Highways	12892.91	13037.69	13543.35
4	Major District Roads	11450.23	11589.85	12005.19
5	Other District Roads	41218.21	41749.81	43330.43
6	Sugarcane Roads	1597.91	1597.91	1677.81
7	Improvements to Nilgirs Ghat Roads	86.40	86.40	111.45
8	13th Finance Commission grant for maintenance of Rural Roads	28500.00	28500.00	30164.87
9	Maintenance of Panchayat and Panchayat Union Roads through Director, Rural Road Development	14300.00	14300.00	15135.12
	<b>Total</b>	<b>112071.49</b>	<b>112887.49</b>	<b>118095.34</b>

### 3.2 PHYSICAL PERFORMANCE

Maintenance of roads including Special repairs and Periodical renewal are taken up every year under non-plan maintenance scheme. The physical achievement during 2011-12 and target for 2012-13 is given in Table 8.

**TABLE 8**  
**NON PLAN -PHYSICAL PERFORMANCE**

(Length in Km)

Sl. No	Name of wing	Achievement 2011-12	Target 2012-13
1.	Construction and Maintenance	5168.00	5200.00
2.	NABARD and Rural Roads	867.00	900.00
	<b>Total</b>	<b>6035.00</b>	<b>6100.00</b>

## 4 SCHEMES BEING IMPLEMENTED

During the year 2011-2012, an amount of Rs.3402.83 Crore was provided in the Budget Estimate for all wings of Highways Department and the expenditure which has been incurred under Plan Schemes is Rs.3016.52 Crore.

### 4.1 COMPREHENSIVE ROAD INFRASTRUCTURE DEVELOPMENT PROGRAMME (CRIDP)

Under this programme, development of road infrastructure like widening and strengthening of roads, Improvements to existing riding surface, construction of bridges / culverts, protective works like retaining walls, drains and centre median, formation of bypasses are being taken up in a comprehensive manner.

#### **4.1.1 STATE HIGHWAYS**

During 2011-12, Spill over works of 673 km roads and construction of 105 bridges/culverts were taken up at a cost of Rs.631 Crore. New works of 1279 km roads and construction of 87 bridges/culverts have been taken up at a cost of Rs.847.91 Crore.

Apart from the above, Widening of GST road km 15/9-16/7 on the right side has been sanctioned for Rs.12.70 Crore.

During 2011-12, 1221 km of roads and construction of 122 bridges/culverts out of spill over works and new works have been completed at an expenditure of Rs.717 Crore.

#### **4.1.2 MAJOR DISTRICT ROADS**

During 2011-12, Spill over works of 544 km of roads and construction of 57 bridges/culverts were taken up at a cost of Rs.166.23 Crore. New works of 1607 km roads and construction of 46 bridges/culverts have been sanctioned and taken up at a cost of Rs.652.16 Crore.

During 2011-12, 1207 km of roads and construction of 70 bridges/culverts out of spill over and new works have been completed at an expenditure of Rs.493 Crore.

#### **4.1.3 OTHER DISTRICT ROADS**

During 2011-12, Spill over works of 613 km roads and construction of 54 bridges/culverts were taken up at a cost of Rs.118.31 Crore. New works of 682 km roads and construction of 57 bridges/culverts have been sanctioned and taken up at a cost of Rs.124.82 Crore.

During 2011-12, 974 Km of roads and construction of 59 bridges/culverts out of spill over works and new works have been completed at an expenditure of Rs.210 Crore.

#### **4.1.4 IMPROVEMENT TO ROAD CONNECTIVITY TO ADI DRAVIDAR HABITATIONS**

Under Comprehensive Road Infrastructure Development Programme, ODR-SCP, Government is implementing the scheme of improving Other District Roads connecting villages having more than 40% Scheduled Caste habitations.

During 2011-12, Spill over works of improvements to 422 km and construction of 22 bridges/culverts were taken up at a cost of Rs.138.09 Crore. New works of widening/improvements to 1775 km and construction of 54 bridges/culverts have been sanctioned and taken up at a cost of Rs.275.09 Crore.

During 2011-12, 1551 Km of roads and construction of 23 bridges / culverts out of spill over works and new works have been completed at an expenditure of Rs.310 Crore.

#### **4.2 PART II SCHEME**

State Government allocate a sum of Rs.10 Crore every year to this department for construction of bridges, buildings, travellers' bungalows depending on need and necessity, purchase of office and laboratory equipments, undertaking research studies and purchase of software etc.

Spill over works of 9 bridges and 9 buildings have been taken up at a cost of Rs.16.90 Crore

In 2011-12, new works for construction of 14 office buildings at cost of Rs.3.25 Crore and 17 travellers' bungalows at a cost of Rs.5.38 Crore works have been taken up.

During 2011-12 one bridge and 7 buildings at an expenditure of Rs.12.21 Crore for bridges and Rs.5.24 Crore for buildings have been completed.

### **4.3 BYPASSES FOR MAJOR TOWNS**

Due to rapid economic development there is widespread growth of towns resulting in formation of satellite towns and industrial areas around the developing cities. This leads to manifold increase in vehicle growth and heavy traffic congestion in cities. Formation of bypasses helps in relieving traffic congestion in important towns by diversion of traffic and helps in reduction of travelling time. Improvements to arterial roads and Formation of bypasses / ring roads is the top priority of the Government for the effective traffic flow in major cities.

Formation of bypasses is executed in two phases (viz) land acquisition in first phase, and formation of road works in the second phase.

Altogether 67 bypasses for different towns to reduce traffic congestion were taken up. During 2011-12, 4 nos. of bypasses (Ettukudi, Ilayankudi, Nagapattinam and Thuraiyur) have been completed. The bypasses under various stages of implementation are detailed below.

Completed	: 16
Works in progress	: 13
LA in progress	: 17
Feasibility / DPR in progress	: 21
<b>Total</b>	<b>: 67</b>

Apart from this, 96 bypasses are undertaken by NHAI, out of which 58 bypasses have been completed and 38 are in progress.

### **4.4 TSUNAMI REHABILITATION SCHEME**

Under this scheme, improvement of roads and construction of bridges in coastal areas to act as an escape route in case of any emergency are being taken up. Only spill over works which had already been sanctioned are in progress.

**Under Construction and Maintenance wing,** Spill over works 15 bridges and 2 roads have been taken up for Rs.116.34 Crore. Out of this, during 2011- 12, 2 road works have been completed at an expenditure of Rs.23.20 Crore. 15 bridge works are in progress.

**Under Nabard and Rural Roads wing,** during 2011-12, spillover works of 6 km roads and 3 bridges have been taken up for implementation for Rs.44.22 Crore. Of which, 1 bridge work at a cost of Rs.15.19 Crore has been completed and the balance bridges and road works will be completed during 2012-13.

#### **4.5 NABARD ASSISTED SCHEMES**

##### **4.5.1 IMPROVEMENTS TO MAJOR DISTRICT ROADS/OTHER DISTRICT ROADS UNDER NABARD LOAN ASSISTANCE**

Under this scheme, improvements to roads in MDR/ODR are taken up with loan assistance from NABARD. During 2011-12, spill over works of 268.10 km road at a cost of Rs.96.86 Crore was taken up for execution. Of which, 219.10 km roads have been completed during the year 2011-12 incurring an expenditure of Rs.74.73 Crore. The balance works will be completed during 2012-13.

##### **4.5.2 CONSTRUCTION OF BRIDGES IN GOVERNMENT ROADS**

During the 2011-12, spill over works of construction / reconstruction of 13 bridges in SH, MDR and ODR were taken up at a cost of Rs.24.72 Crore. 2 bridges have been completed incurring an expenditure of Rs.12.85 Crore during 2011-12 and the remaining bridges will be completed during 2012-13.

### **4.5.3 CONSTRUCTION OF BRIDGES IN GOVERNMENT AND RURAL ROADS**

During the year 2011-12, spill over works of construction / reconstruction of 134 bridges in SH, MDR, ODR and Panchayat and Panchayat Union Roads were taken up at a cost of Rs.268.88 Crore and newly sanctioned 65 Bridges at a cost of Rs.151 Crore were taken up for execution. 67 bridges have been completed at an expenditure of Rs.142.67 Crore during 2011-12 and 79 Bridges will be completed during 2012-13.

### **4.5.4 RURAL ROADS SCHEME**

Under this scheme, BT road connectivity is provided for villages having a population range between 500-1000. During 2011-12, spill over works of construction of 5 bridges were taken up at a cost of Rs.7.07 Crore.

3 bridge works have been completed during 2011-12 incurring an expenditure of Rs.3.66 Crore.

The balance 2 bridge works will be completed during the year 2012-13.

### **4.5.5 BUS ROUTE IMPROVEMENT SCHEME**

Under this scheme, Bus Plying roads in the Panchayats and Panchayat Unions have been taken up for improvements. During 2011-12, spill over work of 1 bridge was taken up at a cost of Rs.172 Lakhs and completed with an expenditure of Rs.59 Lakhs.

## **4.6 CONSTRUCTION OF BRIDGES IN CAUVERY DELTA AREA WITH NABARD AND HUDCO LOAN ASSISTANCE**

### **4.6.1 NABARD SCHEME**

Under this scheme, Government sanctioned construction of 59 River bridges and improvements to 417 km sugarcane roads

at a cost of Rs.204.73 Crore in Cauvery Delta Districts. Of these, 52 river bridges and 412 km road works have been completed.

The balance bridge works at a cost of Rs.96.93 Crore will be completed during 2012-13

A sum of Rs.45.69 Crore has been spent for this scheme in 2011-12.

#### **4.6.2 HUDCO SCHEME**

Sanction was accorded for construction of 61 bridges at a cost of Rs.60 Crore with HUDCO financial assistance. This scheme was being implemented with HUDCO funds till the year 2004 - 05 and thereafter works are being carried out from State Government funds.

Of these, 56 bridges have been completed at a cost of Rs.51.07 Crore and the balance bridge works at the cost of Rs.11.04 Crore will be completed in 2012-13.

A sum of Rs.4.31 Crore has been spent for this scheme in 2011-12.

#### **4.7 RAILWAY OVER BRIDGES (ROB) / RAILWAY UNDER BRIDGES (RUB) UNDER RAILWAY WORKS PROGRAMME**

Construction of Road Over / Road Under Bridges in lieu of existing level crossings on Government roads are undertaken on priority basis when Train Vehicle Units (TVU) exceed One Lakh per day. The State Government and Ministry of Railways share the cost equally for construction of Road Over / Under Bridges including approach and service roads.

Under Railway Works Programme, 136 ROBs / RUBs works have been taken up at a cost of Rs.3048.87 Crore. Out of these, 47 works have been completed at a cost of Rs.739.89 Crore and 38 works are in progress at a cost of Rs.875.05 Crore.

A sum of Rs.333.32 Crore has been spent for this scheme in 2011-12.

#### **4.8 ERODE OUTER RING ROAD**

In order to mitigate the traffic congestion and thereby to ease and have trouble free traffic in Erode Town, the Government have accorded sanction for Rs.22 Crore for first phase towards land acquisition for formation of road from Kokkarayanpettai to Thindal to a length of 14.20 km and Rs.35.00 Lakhs for the preparation of detailed project report through consultants.

In the formation of Erode Outer Ring Road, Construction of high level bridge in between Kokkarayanpettai – Lakkapuram across Cauvery River and forming approach road from Kokkarayanpettai to Karur road km 0/0 - 2/2 has been technically sanctioned for Rs.14 Crore and the work is in progress.

The work of formation of outer ring road to Erode town from Km.2/2-7/6 is in progress at a cost of Rs.12 Crore.

Land Acquisition is in progress in Km.7/6-14/8.

#### **4.9 ERODE GOVERNMENT HOSPITAL JUNCTION IMPROVEMENT**

Administrative Sanction have been accorded for the work of improvements to junction at km. 1/8 of Erode – Perundurai – Kangeyam near Government Hospital including Land Acquisition for Rs.11 Crore and the work will be taken up after completion of Land Acquisition.

#### **4.10 SUGARCANE ROAD DEVELOPMENT SCHEME**

The cess fund collected from sugar mills is utilised for formation of roads from sugarcane growing areas to sugar mills. Government have accorded administrative sanction for 51 road works of 89.70 km at a cost of Rs.21.78 Crore. Out of 51 works, 40 works have been completed.

An expenditure of Rs.4.11 Crore has been incurred during 2011-12.

#### **4.11 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 a Chennai Metropolitan Area Development Plan during the year 2003 - 2004. Since then, about 239 works costing Rs.975.51 Crore have been taken up, which consists of various categories of works such as widening of roads, resurfacing, improvements to Pedestrian Foot path, Centre Median, Grade Separators, River Bridges, ROB's etc.,

Further a Grade Separator in Periyar EVR Salai at the junction of Nelson Manickam road and Anna Nagar III Avenue junction have been approved by the Government at a cost of Rs.117 Crore in 2010-11 and the work is in progress.

Till 2011 - 12, about Rs.619 Crore have been spent for these works. During the year 2011 - 12, an expenditure of Rs.50 Crore have been incurred and out of total 473 Km, so far 472 km road widening and 1 bridge work have been completed and the balance 1 Km will be completed during 2012-13.

Some of the Major works under implementations are detailed below.

##### **4.11.1 GRADE SEPARATORS**

1. At the intersection of Mount Poonamallee road with Kodambakkam - Sriperumpudur road at Porur at a revised cost of Rs.34.72 Crore is in progress.
2. At the intersection of Madhavaram High road with G.N.T Road at Moolakkadai, at a revised cost of Rs.49.55 Crore is in progress.
3. At the intersection of Anna Nagar IInd Avenue and Mogappair road with Inner Ring road at Tirumangalam at a revised cost of Rs.60.23 Crore is in progress.

4. At the intersection of N.S.K Salai (Arcot Road) with Inner Ring road at Vadapalani in Chennai at a revised cost of Rs.69.43 Crore, is being executed by the Chennai Metro Rail Limited in an integrated manner since the metro rail alignment and the Grade Separators are one and the same. On the Highways part, Land Acquisition and approach work has been planned.
5. 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.

#### **4.11.2 RIVER BRIDGES**

Government have sanctioned Rs.81.78 Crore for 3 river bridges in Chennai Metropolitan Area. The details are:

- Construction of Bridge across Coovam river at the road connecting GWT road at km11/2 and Mogappair near Nerkundram at a cost of Rs.16.04 Crore is in progress.
- Additional 3 lane High level Bridge across Adyar river, adjacent to the existing Thiru.vi.ka Bridge in Chennai at a cost of Rs.13.08 Crore is in progress.
- High Level Bridge at Ennore Creek on the road connecting Ennore with North Chennai Thermal Power Station in Thiruvallur District at a revised cost of Rs.52.66 Crore is in progress.

#### **PREPARATION OF DETAILED PROJECT REPORTS**

Preparation of DPR is taken up for the following 4 Grade Separators.

1. At the intersection of Velachery bypass, Taramani link road and Velachery - Tambaram road at Velachery Vijayanagaram.
2. At the intersection of Kundrathur road and Sandhai road in G.S.T road at Pallavaram
3. At the intersection of Perambur Red Hills road with Inner Ring Road at Kolathur Irattai Eri Junction.

4. Elevated bridge in EVR Salai connecting all road junctions between Raja Muthaiah Salai Junction to Pulla Avenue.

GAD and alignment for 3 of the above works have been finalized and the DPR is prepared based on the finalized GAD. Based on this, Administrative sanction proposals for these 3 works are likely to be issued soon and these 3 works will be taken up for implementation during the year 2012-13. For the 4th work, feasibility study is in progress.

#### **4.12 TAMIL NADU URBAN DEVELOPMENT PROJECT – III**

This scheme is being implemented since 2005 with the World Bank loan assistance. This project consists of Urban Water Supply, Sewerage works and traffic components. Under the traffic component, Highways Department is implementing, 5 Road projects of 36 km length at a cost of Rs.145 Crore in and around Chennai Metropolitan areas. 3 works have been completed and the balance 2 works will be completed during the year 2012-13.

##### **4.12.1 FOOT OVER BRIDGES**

Government have accorded sanction for the construction of Foot Over Bridge at the following seven locations at a total cost of Rs.28 Crore.

1. GST road, near Chromepet G.H
2. GST Road, near MEPZ, Tambaram
3. Inner Ring Road, near SBOA School road Junction, Tirumangalam
4. Taramani link road, near TCS.
5. Taramani link road, near Perungudi Junction.
6. EVR Salai near MOP Vaishnava College.
7. Velachery bypass, near Metro water filling station.

Among these, first 5 foot over bridges were taken up and will be completed during 2012-13.

#### **4.13 ORAGADAM INDUSTRIAL PARK INFRASTRUCTURE DEVELOPMENT SCHEME**

Road infrastructure facilities in Oragadam Industrial Park has been taken up to facilitate the development of industries in and around Sriperumpudur in Kancheepuram District. This project is being executed in two phases at a cost of Rs.300 Crore.

##### **4.13.1 PHASE I**

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

##### **a. Singaperumalkoil - Sriperumpudur Road (SH-57) (24.60 km)**

Widening the road from single lane to four lane with centre median.

This work is split up into two packages as follows:

From Singaperumalkoil to Oragadam	12.60 km
From Oragadam to Sriperumpudur (including formation of bypass to Ponthur village for a length of 2.39 km)	12.00 km
<b>Total Length</b>	<b>24.60 km</b>

##### **b. Vandalur – Walajabad Road (SH-48) (33.4 KM)**

Widening the road from two lane to four lane with Centre median.

This work is split up into two packages as follows:

From Vandalur to Oragadam	16.60 km
From Oragadam to Walajabad	16.80 km
<b>Total Length</b>	<b>33.40 km</b>

The road works in the first phase have been completed for a length of 41 Km. Totally 166 cross drainage works have been completed. Also construction of a Grade Separator at Oragadam junction at a cost of Rs.23 Crore is in progress.

The total expenditure incurred for this project is Rs.318 Crore which includes the expenditure of Rs.134 Crore for Land acquisition.

RAS for Rs.462.42 Crore has been accorded and work is expected to be completed by Aug.2012 except for the Forest Portion.

#### **4.13.2 PHASE II**

The Government have accorded administrative sanction for Rs.86.65 Crore for the work of "Widening four lane to six lane for the stretch from Oragadam to Sriperumbudur, Km 12/6 – 24/6 in Singaperumalkoil - Sriperumpudur road" and entrusted the work to TNRIDC for implementation. Tender for this work will be called for shortly.

#### **4.14 RAJIV GANDHI SALAI (IT EXPRESSWAY)**

Under Phase – I, the Rajiv Gandhi Salai (IT Corridor) was developed as a six lane road to international standards 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 widened to four lane. This road is being maintained as a Toll road by M/s IT Expressway Ltd., the Special Purpose Vehicle (SPV) of Tamil Nadu Road Development Company Ltd.

In the second phase, the Government have proposed to construct a six lane road for a length of 25 km from Siruseri to East Coast Road near Mamallapuram, under a viable financial arrangement through Public Private Partnership. The rough cost estimate for the project is Rs.550 Crore. The Government have sanctioned Rs.70 Crore for land acquisition and works are in progress. Updating of the DPR as per current rates and modified specifications is in progress.

#### **4.15 CHENNAI OUTER RING ROAD**

In view of the vehicular congestion in the major roads in Chennai City, Orders have been issued for implementing Chennai Outer Ring Road project Phase-I, as a six lane road for a length of 29.65 Km from Vandalur in NH-45 to Nemilichery in NH-205 via Nazarathpet in NH-4 at a cost of Rs.1,081.40 Crore and Phase-II for a length of 30.50 Km at an approximate cost of Rs.1000 Crore from Nemilichery in NH-205 to Minjur in Thiruvotriyur Ponneri Pancheti Road (TPP Road) via Padiyanallur in NH-5.

The project has been taken up under Public Private Partnership on Design, Build, Finance, Operate and Transfer (DBFOT) Annuity basis with the concession period of 20 years. Tamil Nadu Road Development Company Limited has been appointed as "Managing Associate" for this project.

The works for phase-I is in progress and is programmed to be completed by November 2012.

The Land Acquisition for Phase-II is nearing completion. The tendering process for the selection of the concessionaire is in progress.

### **5 NATIONAL HIGHWAYS - SCHEMES**

Tamil Nadu has 4974 km length of National Highways. Out of this, 1500 km length of roads are improved, maintained and renewed by National Highways wing of this Department making use of the funds provided by Government of India. Balance 3474 km length of roads are being widened to four lane / six lane and improved by National Highways Authority of India.

#### **5.1 PLAN WORKS**

In the year 2011-12, 24 road works for a length of 278.28 Km and 3 bridge works were taken up as spillover works at a cost of Rs.248.87 Crore. Further, the Ministry had sanctioned 27 road works for a length of 332.72 km, 2 bridge works and

1 repair work to the existing bridge for an amount of Rs.277.47 Crore under Annual Plan 2011-12.

During 2011-12, 12 works were completed which includes 6 Km of widening to four lane, widening of 1.10 km length of road to two lane, 73.10 km length of roads under improvement to riding quality, 19.70 km length of strengthening two lane stretches, 95.88 km of widening and strengthening, 35.30 km length of paved shoulders on both sides, 1 minor bridge and 20 culverts.

An expenditure of Rs.160.08 Crore was incurred during 2011-12.

## **5.2 MAINTENANCE WORKS**

During 2011-12, under Special Repairs/ Periodical Renewal, 4 road works for a length of 72.82 Km at a cost of Rs.24.37 Crore were taken up as spillover works. Further, the Ministry had sanctioned Rs.36.07 Crore for 7 new road works for a length of 73.15 km.

Out of these, 4 road works for a length of 72.82 km were completed at an expenditure of Rs.26.67 Crore.

Moreover, an expenditure of Rs.13.57 Crore was incurred towards Flood damage works and Ordinary repair works.

## **5.3 REVAMPED CENTRAL ROAD FUND SCHEME**

During the year 2011-12, 369.15 Km length of 29 road works and 7 bridge works at a cost of Rs.232.45 Crore were taken up as spillover works. Out of this, 244.08 km length of 18 road works and 5 bridge works were completed at a cost of Rs.147.44 Crore.

Further, the work of "Construction of High level bridge at Km 69/2 of Salem - Thiruppathur - Vaniyambadi road at Anumantheertham at a cost of Rs.5.50 Crore had been completed and opened to traffic on 27.01.2012 by the Hon'ble Chief Minister, Government of Tamil Nadu.

## **6 TAMIL NADU ROAD SECTOR PROJECT**

Tamil Nadu Road Sector Project with the loan assistance from the World Bank is constructing roads conforming to international standards. The project commenced with World Bank assistance at the estimated cost of Rs.2160 Crore. The current revised estimate of the project is Rs.2442 Crore, with additional finance to the extent of Rs.236 Crore (US\$ 50.70 Million) of which the World Bank loan component is Rs.1906 Crore and the remaining Rs.536 Crore is funded by Government of Tamil Nadu.

### **6.1 UPGRADATION OF ROADS**

Under this component, some of the stretches in National Highways and selected stretches of State Highways and Major District Roads along the Arcot – Tiruvarur - Nagapattinam – Tuticorin corridor to a length of 724 km were taken up for upgradation in 6 packages with World Bank assistance at a cost of Rs.1339.15 Crore. It includes 13 bypasses, 11 ROBs in these bypasses, 15 Major river bridges, 67 Minor river bridges and 1600 culverts. Out of this stretch, 723 km of road works 11 bypasses, 9 ROB's in these bypasses, 15 Major river bridges, 64 Minor river bridges and 1598 culverts were completed and the balance minor bridge work and its approaches in Kumbakonam bypass will be completed in September 2012. Two ROBs at Ramanathapuram bypass and Kumbakkonam bypass are being executed by Railways as deposit work.

Reconstruction of Tsunami affected bridge between Keezhamanakudi and Melamanakudi village at a contract price of Rs.21.29 Crore has been taken up and will be completed in September 2012.

### **6.2 ROAD MAINTENANCE WORKS**

Under this scheme, 39 works of Enhanced Periodical Maintenance for State Highways and Major District Roads for a total length of 1033 km at a cost of Rs.430 Crore have been taken up in four phases.

- Under First Year Enhanced Periodical Maintenance works (2004-05) 597 km Roads are completed at a cost of Rs.168.76 Crore.
- Under Second Year Enhanced Periodical Maintenance, 252 km road works at a cost of Rs.146.75 Crore have been completed.
- Under Third and Fourth Year Maintenance, 183.89 km of roads at a cost of Rs.115.43 Crore have been taken up and 180.89 km have been completed at a cost of Rs.112.28 Crore. During 2011-12 an expenditure of Rs.50.48 Crore has been incurred.

### **6.3 ROAD ACCIDENT DATA MANAGEMENT SYSTEM (RADMS)**

The accident details are collected at the accident site and registered in computers by Police, Highways and Transport departments. The data collected is analysed and accident preventive measures are being taken up by the concerned department.

### **6.4 ROAD MANAGEMENT SYSTEM (RMS)**

A computerized road management system is developed to scientifically prioritise the roads to be improved from the core network of the roads in Tamil Nadu. The collection of field data of roads and bridges has been completed for 21000 Km and updated in the Road Management System. Further, collection of data for the remaining reaches is in progress. The data collected is analysed with HDM4 software and the economic feasibility is obtained for prioritization of 2500 Km roads for Strategic Option Study from Road Management System.

### **6.5 GEOGRAPHICAL INFORMATION SYSTEM (GIS)**

To enhance decision making in prioritizing road works for maintaining and executing them, the Road Information System (RIS) and Bridge Information System (BIS) available in Road Management System are being created in GIS platform and

customized for the use of Highways Department. GIS Software was procured and Consultant has been appointed for Customization of software for the department and the work is in progress. Supply and installation of Advanced Data collection equipments has been completed. The equipments have been launched by Hon'ble Chief Minister on 27.01.2012. The initial calibration for data collection is in progress.

## **6.6 PERFORMANCE BASED MAINTENANCE CONTRACT (PBMC)**

A new concept for maintenance of roads viz. Performance Based Maintenance Contract (PBMC) has been introduced on a pilot basis. A length of 296 km roads has been taken up and entrusted to the Contractor for maintenance for 5 years and the works are in progress under the supervision of individual supervision consultant.

## **7 RESEARCH WORKS**

Quality Assurance and Research wing of this department takes up Research works every year. Alternative Materials, Alternate Technologies, Improvement of the existing road conditions, Material specifications, and accident free roads are the focus areas of research.

Research study on primary areas of Highway Engineering with focus on aging of bitumen pavement layers, strength versus composition of alternative material (Fly ash and Copper slag) in sub-base layers of roads, the effect of M.sand (Manufactured sand- crushed stone) instead of fine aggregate (sand) on the strength of concrete, Vulnerability of pedestrians in Chennai Metropolitan Area due to traffic congestion and accidents etc., are being conducted.

## II. MINOR PORTS WING

### A. TAMIL NADU MARITIME BOARD

Along the 1076 km coastline of Tamil Nadu, there are 3 major ports viz., Ennore, Chennai and Thoothukudi notified under the Major Port Trust 1963 and 23 minor ports notified under the Indian Port Act 1908. The major ports come under the control of Government of India and the minor ports come under the control of the State Government.

#### 1 COMMODITIES HANDLED IN MINOR PORTS

**TABLE 9**  
**GOVERNMENT PORTS**

Sl. No.	Port	Loaded	Unloaded
1.	Cuddalore		Vinyl Chloride Monomer
2.	Nagapattinam	Diesel and Naphtha	Edible Oil, Crude oil and General cargo

**TABLE 10**  
**CAPTIVE PORTS**

Sl. No.	Port	Loaded	Unloaded
1.	Kattupalli	Plant and Machinery	Container handling Cranes, Containers & Spares
2.	Ennore Minor Port		Liquid Ammonia
3	PY 03 Oil field	Crude oil	
4	Thirukkadaiyur		Naphtha, Crude Oil, Gas

## **2 PORT DEVELOPMENT**

### **2.1 GOVERNMENT PORTS**

#### **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.

M/s. Cuddalore Powergen Corporation Limited has proposed to set up a jetty at an approximate cost of Rs.325 Crore. The port limits of Cuddalore Port has been extended. Land acquisition from private / public is under progress.

It was decided to develop this port on Develop, Operate, Maintain, Share and Transfer (DOMST) basis on a PPP mode through bidding process. The bids received are under consideration.

The cargo handled at this port during the year 2011-12 is detailed below.

**TABLE 11**

<b>Cargo</b>	<b>No. of Ships</b>	<b>Quantity (Metric Tonnes)</b>
Vinyl Chloride Monomer	32	2,20,087
Petroleum Products and Miscellaneous cargo	3	9,603
<b>Total</b>	<b>35</b>	<b>2,29,690</b>

#### **2.1.2 A GREENFIELD PORT AT NAGAPATTINAM**

The Government have ordered to develop an All Weather, Deep Water, Direct Berthing, Green Field Port at Nagapattinam on a PPP mode through competitive bidding process. Tamil Nadu Maritime Board is in the process of appointing a Consultant for providing consultancy services for the selection of the prospective

developer. The cargo handled at this port during the year 2011-12 is detailed below.

**TABLE 12**

<b>Cargo</b>	<b>No. of Ships</b>	<b>Quantity (Metric Tonnes)</b>
Edible Oil	6	25,395
Crude Oil	24	3,08,940
Naphtha	25	2,31,383
Diesel	2	27,857
SKO	3	31,278
Miscellaneous		4,451
Petroleum Products		639
<b>Total</b>	<b>60</b>	<b>6,29,943</b>

### **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. 264 vessels were piloted at this port during the year 2011-12.

### **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. 1,59,751 passengers were ferried during the year 2011-12.

### **2.1.5 VALINOKKAM PORT**

This port is situated in Ramanathapuram district. Presently, there is no activity at this port.

### **2.1.6 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. 20,37,318 passengers were ferried and Tamil Nadu Maritime Board during the year 2011-12.

### **2.1.7 COLACHEL PORT**

A Techno Economic Feasibility Report has been prepared for the development of this port as per which establishing a Liquefied Natural Gas (LNG) Terminal here is under consideration.

## **2.2 CAPTIVE PORTS**

### **2.2.1 KATTUPALLI PORT**

M/s L&T Shipbuilding Limited, a Joint Venture company of Tamil Nadu Industrial Development Corporation (TIDCO) and M/s. L&T Mumbai is setting up an Integrated Shipyard cum Minor Port complex at Kattupalli in Thiruvallur district. The construction of the Port is nearly complete. The Port is expected to commence its commercial operations soon.

The cargo handled at this port during the year 2011-12 is detailed below

**TABLE 13**

<b>Cargo</b>	<b>No. of Ships</b>	<b>Quantity (Metric Tonnes)</b>
Container handling Cranes	4	7,451
Welded Platform		2,109
Crane spares		770
Total	4	10,330
Containers		2 Nos.

### **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 2011-12, 7 vessels called at this port and 46,302 M.T of Liquid Ammonia has been handled.

### **2.2.3 MUGAIYUR PORT**

Based on the request of M/s. Marg Swarnabhoomi Port Private Limited to develop a captive Ship repair facility at an approximate cost of Rs.500 Crore, this port was declared as a minor port. The company has been allotted coastal land within the port limits on lease basis.

### **2.2.4 THIRUCHOPURAM PORT**

M/s. Nagarjuna Oil Corporation Limited is setting up a captive port at Thiruchopuram in Cuddalore district for handling crude Oil and finished petroleum products required for their refinery. The development of a multi purpose – multi user port in this region will provide the much desired port connectivity to the industries situated in the Central and Western districts of Tamil Nadu.

### **2.2.5 SILAMBIMANGALAM SHIPYARD PORT**

The port limits of Silambimangalam Shipyard port has been notified by the Government for M/s. Goodearth Shipbuilding Private Limited to establish a captive shipbuilding yard. The Government of India has also notified this port under Sea Customs Act.

### **2.2.6 PARANGIPETTAI PORT**

M/s. IL & FS Tamil Nadu Power Company Ltd is setting up a captive port at Parangipettai in Cuddalore district for handling coal required for their power plant. Consent to establish the port and power plant has been granted by Tamil Nadu Pollution

Control Board and field works for the Power Plant have commenced.

### **2.2.7 PY-03 OIL FIELD PORT IN CUDDALORE DISTRICT**

This port, situated 50 km South East off Cuddalore, has been exclusively declared for loading Crude oil being extracted from the oil wells situated at PY-3 Oil Field on to ships. 5 vessels called at this port and 58,614 MT of Crude Oil has been handled during the year 2011-12.

### **2.2.8 KAVERI PORT**

M/s. PEL Power Limited have proposed to develop a jetty for handling coal required for their 1320 MW Power Plant for which this port has been notified. Proposal to declare this port under Sea Customs Act is under consideration of Government of India.

### **2.2.9 VANAGIRI PORT**

M/s. NSL Power Limited have proposed to develop a jetty for handling coal required for their 1500 MW Power Plant for which this port has been notified. Proposal for Customs Notification of this port is under consideration of the Government of India.

### **2.2.10 THIRUKKADAIYUR PORT**

This port situated near Thirukkadaiyur in Nagapattinam district was declared for the captive use of M/s. PPN Power Generating Company so as to handle Natural gas and Naphtha required for their 330 MW gas combined Cycle Power Project at Pillaiperumalnallur. So as to accommodate the landfall point of the Gas pipelines of M/s. Hindustan Oil Exploration Company Limited, the port limits of this port have been extended.

The cargo handled at this port during the year 2011-12 is detailed below

**TABLE 14**

<b>Cargo</b>	<b>No. of Ships</b>	<b>Quantity (Metric Tonnes)</b>
Naphtha	13	1,36,975
Gas		93,050
Crude Oil		4,763
<b>Total</b>	<b>13</b>	<b>2,34,788</b>

### **2.2.11 THIRUKKUALAI PORT**

The limits of Thirukkuvalai port in Nagapattinam district has been declared for M/s. Tridem Port and Power Company Private Limited, to establish a port to handle coal required for their proposed 2000 MW Merchant Power Plant. The company is in the process of obtaining clearance for the port project, from Ministry of Environment and Forests.

### **2.2.12 PUNNAKKAYAL PORT**

This port situated in Thoothukudi district was declared as a captive port for the use of M/s. DCW Limited for handling Vinyl Chloride Monomer, Low Sulphur Heavy Stock, Liquified Petroleum Gas etc., The Company have recently stated that they have decided not to develop the captive port facilities. Tamil Nadu Maritime Board is on the lookout for a prospective port developer.

### **2.2.13 UDANGUDI PORT**

This port has been notified as a minor port for M/s. Udangudi Power Corporation Limited, Chennai for establishing an open sea jetty to receive coal for their 1600 MW Thermal Power Project. The company is in the process of obtaining environmental clearance from Ministry of Environment and Forests, New Delhi.

#### **2.2.14 MANAPPAD PORT**

The Government have declared Manappad in Thoothukudi district as a Minor Port for the captive use of M/s. Indian Gas Limited, for handling LNG required for the proposed 2000 MW Gas Turbine Power Project to be set up by M/s. Indian Power projects Ltd. Coastal land within the port limits of this port has been allotted on lease basis for construction of marine facilities.

#### **2.2.15 KOODANKULAM PORT**

Koodankulam port in Thirunelveli district was declared for the captive use of M/s Nuclear Power Corporation of India Ltd., for their proposed Nuclear Power project at Koodankulam consisting of 2 units of 1000 MW each. A RCC Jetty with necessary breakwater protection has been constructed for receiving over- dimensional and heavy lift Machineries.

#### **2.2.16 CHETTINAD THARANGAMBADI PORT**

The Government have declared Chettinad Tharangambadi port based on the request of M/s. Chettinad Power Corporation Limited for handling coal required for their 1200 MW Thermal Power Project at Tharangambadi Taluk in Nagapattinam district. Action has been initiated to allot coastal land to this company.

### **3 TAMIL NADU MARITIME ACADEMY**

The Tamil Nadu Maritime Academy established at Thoothukudi is functioning under Tamil Nadu Maritime Board. The Academy has so far conducted 16 batches of pre-sea rating course. Initially, the Academy conducted separate Seaman and Engine Rating Training courses. At present it is conducting General Purpose Rating training Course instead of separate Deck and Engine Rating Crew 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".

#### **4 CARGO TRAFFIC**

During the year 2011-12, Minor Ports in Tamil Nadu handled total cargo of 12,09,667 Metric Tons through 124 vessels.

## **B. POOMPUHAR SHIPPING CORPORATION LTD.**

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). The coal required by TANGEDCO is transported from the load Ports at Haldia, Paradip and Vizag and discharged at Ennore and V.O. Chidambaranar port at Tuticorin. PSC has acquired three specially designed shallow draft geared bulk carriers of 40000 DWT 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 15**

<b>Name of the own vessels</b>	<b>Month and Year</b>	<b>Total carrying capacity(MT)</b>
M.V Tamil Kamaraj	November 2004	45,000
M.V Tamil Periyar	May 2005	45,000
M.V Tamil Anna	November 2005	45,000

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.

### **1 MOVEMENT OF COAL**

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

**TABLE 16**

In Lakh Metric Tonnes

Year	Target for coal movement	Coal arrived at load ports	Coal Moved by Chartered vessels	Coal moved by Own vessels	Total coal moved	Achievements in %
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2010-11	135.00	125.74	97.38	27.11	124.49	99.00
2011-12	135.50	126.02	93.49	33.11	126.60	100.46

Physical performance of Own and Chartered Vessels for the period 2010-2011 and 2011-2012 are as follows:

**TABLE 17**

	2010-11	2011-12
Own Vessels		
No. of vessels	3	3
No. of voyages	61	74
Quantity of coal moved (in lakh MT)	27.11	33.11
Average quantity of coal moved per voyage in MT	44443	44744
Chartered Vessels		
No. of Vessels	8	8
No. of voyages	202	183
Quantity of coal moved (in lakh MT)	97.38	93.49
Average quantity of coal moved per voyage in MT	48208	51089
Total quantity moved (in lakh MT)	124.49	126.60

## 2 PERFORMANCE OF OWN VESSELS

Cargo carried by own vessels per voyage for 2011-12 was 44744 M.T as against 44443 M.T. of cargo carried during 2010-11. Though Own Vessels have crossed over 25 years of operation, they are performing satisfactorily.

### **3 FINANCIAL PERFORMANCE FOR 2010-11 AND 2011-12**

The estimated profit of Poompuhar Shipping Corporation for the year 2011-12 is Rs.287.14 lakhs as against the profit of Rs.203.84 lakhs earned during the previous year 2010 - 11.

### **4 PANAMAX SELF UNLOADER VESSEL (CHSU)**

For the Paradip-Ennore sector One Panamax CHSU vessel (mv.Gem of Ennore DWT 75066 built in 2000) owned by M/s.West Asia Maritime Limited, Chennai, was inducted into PSC service on 19.02.2002 for a TEN YEARS TIME CHARTER. This is a very sophisticated and specially built modern vessel. The vessel has its own discharging gear consisting of cranes and grab and also has conveyor system with a discharge boom. The coal from the vessel is directly discharged to the shore based hopper. This vessel is achieving a discharge rate of 2600 MT per hour, thereby giving fast delivery of cargo to TANGEDCO.

### **5 HANDYMAX GEARED VESSEL**

For Haldia – Paradip - V.O.Chidambaranar Port, Tuticorin Sector and Visakhapatnam – V.O.chidambaranar Port, Tuticorin Sector, the operation of Handymax Geared vessels will continue to be operated by Poompuhar Shipping Corporation.

### **6 KANYAKUMARI FERRY SERVICE**

Besides transporting of coal to TANGEDCO's Thermal Power Stations, Poompuhar Shipping Corporation is also operating a ferry service from main land of Kanyakumari to the Vivekananda Rock Memorial and Ayyan Thiruvalluvar Statue. The physical and financial performances of the ferry service for the past two years are given below:

**TABLE 18**

	<b>2010-2011</b>	<b>2011-2012</b>
No. of Ferry in service	3	3
No. of Passengers ferried (In lakhs)	19.15	20.26
Fare collection (Rs.in lakhs)	373.35	394.89
Operation Profit/Loss (Rs.in lakhs)	(-)52.43	(-)16.00 (Estimated)

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