



# **HIGHWAYS AND MINOR PORTS DEPARTMENT**

**Policy Note  
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**Demand No. 21**

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# **1. INTRODUCTION**

Safe, reliable and efficient road infrastructure is not only a pre-requisite for economic growth of any region but also helps in improving the quality of life of people. An efficient road network triggers growth in all important sectors like agriculture, industry, mining, energy, tourism, etc. It improves competitiveness and increases productivity and efficiency. For achieving social goals of providing access to essential services and amenities to all citizens and achieving balanced socio-economic development of the State, a safe and reliable road network is very essential. Hence, the Government of Tamil Nadu attaches paramount importance to the road infrastructure projects.

Tamil Nadu is blessed with the second longest (1,076 km) coastline in India. There are 17 minor ports, which have potential to improve the domestic and international trade leading to promotion of the export-oriented and port-based industries in the State.

## **1.1 HIGHWAYS**

The Highways and Minor Ports Department has been given the mandate of creating, augmenting, and maintaining the road infrastructure in the State. The prime activities of the Highways Department are construction and upgradation of roads, formation of bypasses, construction of High-Level Bridges, Grade Separators, Railway Over/Under Bridges. Maintenance of existing road network to provide good surface to road users has always been the priority of this Department. To make the travel accidents-free, road safety works have also been taken up in a big way in recent years.

State Highways (SH), Major District Roads (MDR) and Other District Roads (ODR) of 66382 km length are under the control of the Department. National Highways (NH) of 6,805 km are being maintained by the Ministry of Road Transport and Highways (MoRTH), Government of India.

The total length of road network in the State is 2.71 lakh km. The density of road in Tamil Nadu is 2084.71 km per 1000 sq.km,

which is higher than the National average of 1926.02 km per 1000 sq.km. This indicates availability of sound road network in the State.

**Length of roads (in Km)**

<b>Classification of Roads</b>		<b>Length</b>
National Highways (NH)	State National Highways Wing	1677
	National Highway Authority of India	5128
	<b>Total</b>	<b>6805</b>
State Highways (SHs)		12291
Major District Roads (MDRs)		12034
Other District Roads (ODRs)		42057
<b>Total length of roads other than NH</b>		<b>66382</b>
<b>Overall Total</b>		<b>73187</b>

The classification of roads is normally done based on the traffic intensity and importance of connectivity to major habitations, establishments, and places of importance. National Highways and State Highways normally connect State headquarters, District headquarters, cities, tourist places, industrial

hubs etc. MDRs and ODRs are normally link roads which provide connectivity to market centres, production centres, Taluk or Block headquarters, etc.

**DETAILS OF LANE CONFIGURATION (in Km)**

Category	Single Lane	Intermediate lane	Double Lane	Two Lane with Paved Shoulder	Four Lane	Six Lane	Eight Lane	Total
National Highways (NH)	-	-	1602	2212	2649	333	9	6805
State Highways (SH)	39	366	7519	2651	1466	250	-	12291
Major District Roads (MDR)	745	5416	5412	405	53	3	-	12034
Other District Roads (ODR)	33505	7029	1433	78	12	-	-	42057
<b>Total</b>	<b>34289</b>	<b>12811</b>	<b>15966</b>	<b>5346</b>	<b>4180</b>	<b>586</b>	<b>9</b>	<b>73187</b>

### **DETAILS OF BRIDGES**

<b>Sl. No.</b>	<b>Types of Bridges</b>	<b>Nos.</b>
1	Culverts	129810
2	Major Bridges and Minor Bridges*	9183
3	Grade Separator	75
4	Road Over Bridges at Railway level crossing(ROB)	145
5	Road Under Bridges at Railway level crossing (RUB)	59
6	Pedestrian Sub Way/ Limited Use Subway	15
	<b>Total</b>	<b>139287</b>

\* includes minor bridges with linear waterway of 6-60 m and major bridges with linear waterway of more than 60m.

### **1.2 MINOR PORTS**

The coastline in the State of Tamil Nadu with length of 1076 km has three Major Ports, i.e. Chennai, Ennore and Tuticorin and seventeen Minor Ports. Major ports are under the control of Government of India and Minor ports are administered, controlled and managed by Government of Tamil Nadu.



### **1.3 POOMPUHAR SHIPPING CORPORATION LIMITED (PSCL)**

Poompuhar Shipping Corporation Limited (PSCL) was formed on 11-04-1974 under the Companies Act, 1956. The main activity of PSCL was to transport coal for Tamil Nadu Generation and Distribution Corporation (TANGEDCO) for generation of electricity. To promote tourism, PSCL is also operating ferries from the shore of Kanyakumari to Vivekananda Rock Memorial and Ayyan Thiruvalluvar Statue.

### **1.4 SUSTAINABLE DEVELOPMENT GOALS (SDG)**

United Nations set out the universal agenda in the year 2015 for transforming the world by 2030 in economic, environmental, and social aspects. This consists of 17 Sustainable Development Goals (SDGs) and 169 related targets.

The Government has setup its own indicator framework to monitor the state level performance in various sectors related to SDGs.

Specific indicators related to the following goals have been assigned to Highways Department.

**GOAL 3 - ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES.**

**Target 3.6:** By 2020, Halve the number of global deaths and injuries from road traffic accidents.

The above indicator committed to halve the number of deaths from road accidents by 2020. Various road safety measures such as improving the Junctions, rectification of blackspots and other protective measures are being taken up on priority. Special drive to sensitize stakeholders on road safety measures has also been launched to reduce the occurrence of accidents.

Comprehensive and integrated approach in the fields of Road Engineering, Education, Health, Traffic regulation and Law Enforcement can only reduce road accidents. This department is striving hard towards delivering safe roads to the public and efforts are being taken in

co-ordination with other stakeholders such as Departments of Transport, Health, Home and Education to achieve the above goal.

**GOAL 9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE - BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION.**

**Target 9.1:** Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.

The intention of this goal is to provide strong and reliable infrastructure for the economic prosperity.

The performance of the above indicator is as follows;

## State Indicator Framework – 9.1.1a length of Roads

S. No	Indicators	Year		
		2015 (Base Year)	2021	2022
1	9.1.1b-Length of SH road network (km)	12093	11279	12291
2	9.1.1b.1- Length of 4 lane to SH (Proportion)	-	9.02	13.96
3	9.1.1c -Length of MDR (km)	11617	11625	12034
4	9.1.1c.1 - Length of Two lane to MDR (%)	27.23	40.16	48.80
5	9.1.1d -Length of ODR (km)	33756	41052	42057
6	9.1.1d.1 - Length of Two lane to ODR (%)	2.51	3.24	3.62
7	9.1.1d.2 - Length of Single Lane to ODR (%)	88.01	80.54	79.67

The Department strives hard to augment the capacity of SH, MDRs, and ODRs for delivering the sustainable, quality and efficient road network.



Hon'ble Chief Minister inaugurated Chief Minister Road Development Programme (CMRDP) on 01.05.2022 during Platinum Jubilee Celebrations.



Platinum Jubilee Celebrations on 01.05.2022 - Memento presented to Hon'ble Chief Minister by Hon'ble Minister

(1B)



Platinum Jubilee Celebrations – Memorial Pillar opened by  
Hon'ble Chief Minister on 01.05.2022

(1C)



## **2. ORGANIZATIONAL STRUCTURE**

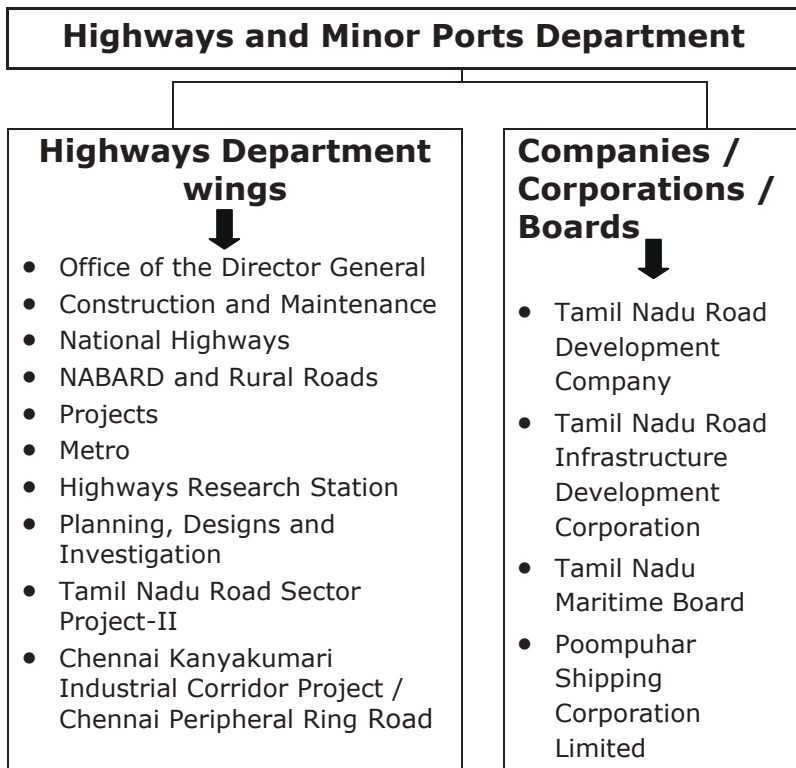
The Government of Tamil Nadu has the unique distinction of creating a separate Highways Department as early as in 1946 exclusively to attend to roads and bridges in the State. It remained a part of Public Works Department earlier but subsequently, became a separate and distinct department. A new post of Secretary to Government came into being in 1996. Minor ports were later brought under the purview of this Department and the Department was renamed as Highways and Minor Ports Department.

Highways Department has completed 75 Years on 01.04.2022 since its inception. On successful completion of 75 years, the department celebrated its Platinum Jubilee on 01.05.2022 in the presence of Honorable Chief Minister of Tamil Nadu.

The Highways Department functions under the overall coordination of the Director General. There is also an exclusive wing for quality

control to monitor quality of works being executed.

The Organizational structure and functions of the Highways and Minor Ports Department are as follows.



## **2.1 FUNCTIONS**

### **2.1.1 *Office of the Director General***

The post of Director General has been created for smooth and efficient functioning of the department and to coordinate the work of all other wings. The Director General is also head of all Technical Committees.

- Human Resources and Personnel administration.
- Inter-departmental and Intra-departmental co-ordination for smooth and effective functioning.
- Appeals, Complaints and Court cases related to service matters.
- Information Technology (IT) initiatives and maintenance of websites.
- Any other work assigned by the Government.
- Participating in the following technical committees as permanent member.

## **Board of Engineers (BOE)**

This committee comprises the Director General, all the Chief Engineers and the Director, Highways Research Station of Highways Department and is empowered to take policy decision in respect of important issues and technical matters.

## **Commissionerate of Tenders (COT)**

This Committee, comprising the Secretary, Finance or his / her representative, the Director General, the Chief Engineer (Construction and Maintenance), the Chief Engineer (NABARD and Rural Roads) and the Chief Engineer of the work concerned takes decision on recommending and streamlining the tender acceptance procedure.

## **Revised Administrative Sanction Committee (RASC)**

This committee comprises the Director General, the Chief Engineer of the work concerned, the Chief Engineer (Planning, Designs and Investigation), Additional/

Deputy Secretary to Government (Highways and Minor Ports Department) and Deputy Secretary to Government (Finance Department) and is empowered to recommend the technical deviation in work to the Government for revised administrative sanction.

### **Technical Audit Committee (TAC)**

This committee, comprising the Director General, the Director, Highways Research Station and all the Chief Engineers, offers suggestions and expert opinion in the technical matters of the project proposals.

### **APPOINTMENTS**

During the year 2022-23, appointments for 178 posts of Junior Draughting Officer and 1 Junior Assistant have been made through Tamil Nadu Public Service Commission (TNPSC). 40 Junior Assistant, 5 Typist, 1 Assistant Draughtsman, 15 Record Clerk, 15 Office Assistant posts were filled-up through Compassionate Ground Appointments.

This wing is headed by the Director General, supported by 3 Joint Directors.

### **2.1.2 Construction and Maintenance Wing**

- Maintenance of existing roads and bridges
- Widening, strengthening and improvements of roads
- Special/urgent flood restoration works.
- Road Safety related works.
- Construction of major structures.

This wing is headed by a Chief Engineer, supported by 9 Superintending Engineers and 44 Divisional Engineers.

### **2.1.3 National Highways Wing**

- Improvements and maintenance of National Highways by widening, strengthening and road safety works.
- Construction of bridges/flyovers, RoBs.
- Flood damage repair works

This wing is headed by a Chief Engineer, supported by 5 Superintending Engineers and 17 Divisional Engineers.

#### **2.1.4 Nabard and Rural Roads Wing**

- Construction of High-Level River Bridges with NABARD loan assistance and State Fund.
- Upgradation of Panchayat Union / Panchayat roads to Other District Road standards.
- Formation of Bypasses
- Construction of Road Over Bridges (ROB) / Road under Bridges (RUB) under Railway Works Programme.

This wing is headed by a Chief Engineer, supported by 4 Superintending Engineers and 14 Divisional Engineers.

### **2.1.5 Projects Wing**

- Construction of ROB/ RUB under Railway Works Programme and State Funded Schemes.
- Construction of Major River Bridges.
- Construction of High-Level Bridges in place of existing narrow and dilapidated bridges.
- Construction of Grade Separators.
- Construction of Elevated Highways.
- Formation of Bypasses and Ring Roads.

This wing is headed by a Chief Engineer, supported by 4 Superintending Engineers and 11 Divisional Engineers.

### **2.1.6 Metro Wing**

- To provide "Comprehensive Urban Highway Infrastructure Development integrated with other transport modes for seamless, safe movement of public



including enhancement of facilities for the Pedestrians and Cyclists in Chennai Metropolitan Area (CMA)“

- Construction of Grade-separators/ Vehicular Under Passes & High-level bridges, widening of roads/ bridges, formation of new link roads, Bypasses and construction of Foot Over Bridges (FOB) with Escalators etc. under the Chennai Metropolitan Development Plan (CMDP) Scheme.
- Construction/widening of Road Over Bridges/Road under Bridges/Limited Use Subways within the Chennai Metropolitan Area (CMA) under Railway Works Programme.

This wing is headed by a Chief Engineer, supported by a Superintending Engineer and 5 Divisional Engineers.

### **2.1.7 Highways Research Station**

- Research on innovative materials and techniques

- Testing on construction materials
- Technical guidance
- Quality Control
- Training for capacity building
- Road safety

Highways Research Station (HRS) is headed by Director and supported by;

- Joint Director, HRS with 4 Deputy Directors for testing and research, 9 Divisional Engineers for Quality Control
- Joint Director, Training Centre with 2 Deputy Directors
- Superintending Engineer, Road Safety wing with 8 Divisional Engineers.

### **2.1.8 *Planning, Designs and investigation wing***

- Preparation of design, drawings and quantity estimates for River Bridges, ROBs, RUBs, Grade Separators, FOBs and other highway structures.
- Proof checking of Designs and Drawings prepared by consultants and other Government Departments.

- Technical suggestions for the issuance of permit for non-standard heavy motor vehicles to ply on bridges.

This wing is headed by a Chief Engineer, supported by a Joint Chief Engineer and 4 Divisional Engineers.

### **2.1.9 *Tamil Nadu Road Sector Project-II***

- Upgradation of heavy traffic intensity roads connecting important National Highways, State Highways & Major District Roads.
- Providing better riding quality so as to reduce the travel time and vehicle operating cost.
- Use of better contracting approaches like Engineering, Procurement and Construction (EPC), Public Private Partnership (PPP) and Output and Performance based Road Contract (OPRC).
- Multi-sector interventions to improve road safety at the State and District level to reduce fatalities from road accidents.

This project is headed by a Project Director, supported by a Chief Engineer with 2 Superintending Engineers, 8 Divisional Engineers and 3 Land Acquisition and Resettlement units with Special District Revenue Officers.

#### **2.1.10 *Chennai Kanyakumari Industrial Corridor Project***

The main activity under this project is to develop roads connecting industrial areas in the influence area of the Chennai Kanyakumari Industrial Corridor. Presently, 589 km of 16 state highways are being upgraded with Asian Development Bank loan assistance.

This project is headed by a Project Director, supported by a Chief Engineer, with 2 Superintending Engineers, 6 Divisional Engineers and 4 Land Acquisition Units with special District Revenue Officers.

#### **2.1.11 *Tamil Nadu Road Development Company Limited***

- Concessionaire for East Coast Road (Akkarai to Mamallapuram) as Toll road.

- Managing Associate for Chennai Outer Ring Road (CORR)
- Managing Associate for construction of Chennai Peripheral Ring Road Project, Section-I (Northern Port Access Road) and Section-V.
- Managing Associate for construction of 2 bypasses i.e. at Kelambakkam and Tiruporur along Phase II of OMR.
- Managing Associate for construction of "U shaped " Flyovers on Rajiv Gandhi Salai.

**IT Express Limited - a subsidiary of TNRDC**

Concessionaire for Rajiv Gandhi Salai IT Expressway (from Madhya Kailash to Siruseri) as Toll road.

TNRDC and ITEL Companies are being managed by the Board of Directors with the members from TIDCO, TIDEL, nominees from the Government and Independent Directors under the Chairmanship of the

Additional Chief Secretary, Highways and Minor Ports Department.

These companies are managed by the Managing Director with the support of Chief General Manager, General Manager, Senior Managers, Managers, supporting Engineers and staff.

### **2.1.12 Tamil Nadu Road Infrastructure Development Corporation (TNRIDC)**

TNRIDC is a non-profit making company to implement Projects funded by the State Government or Externally Aided as Managing Associate. The projects under implementation are detailed below:

- Construction of Chennai Peripheral Ring Road Project - Section II, III & IV.
- Madurai Ring Road.
- Construction of ROB in lieu of LC 47 near Singaperumalkoil.
- Construction of Oragadam Industrial Corridor Project including construction of Grade Separator at Padappai Junction.

The Additional Chief Secretary to Government, Highways and Minor Ports Department is Chairman and Managing Director of the Company. Officials of various Government Departments are on the Board of Directors of the Company. An Executive Director in the rank of Chief Engineer looks after the activities of the company. To assist the Executive Director, one Superintending Engineer and 3 Divisional Engineers have been appointed.

### **2.1.13 Tamil Nadu Maritime Board**

- To provide port facilities to promote export-oriented industries and port-based industries.
- To cater to the needs of increasing traffic of Southern States by providing efficient facilities and services to support domestic and International trade.
- To create sufficient port related infrastructure facilities.
- To promote port based Thermal Power plants by providing exclusive port

facilities to import different types of fuel.

- To facilitate optimum utilization of port infrastructure developed in the State.

Tamil Nadu Maritime Board is functioning under the Chairmanship of Hon'ble Minister for Public Works, Highways and Minor Ports Department.

#### **2.1.14 Poompuhar Shipping Corporation Ltd (PSCL)**

- Transportation of thermal coal along the East Coast of India.
- Ferrying passengers from the shore of Kanniyakumari to Vivekananda Rock Memorial and Ayyan Thiruvalluvar statue.

PSCL is functioning with 9 Directors including Chairman and Managing Director. At present, the Board consists of only one independent Director and 8 Directors from Government Departments and TANGEDCO.





Hon'ble Chief Minister issued Appointment order to Junior Draughting Officer on 08.08.2022.

(2A)

### **3. MAJOR SCHEMES/PROJECTS**

The vision of the Department is to increase the capacity, connectivity, efficiency and safety of the road network so as to enable balanced socio-economic development of all sections of society and regions of the State. The department aims to maximize satisfaction of road users utilizing State and Central Government funds and funding from external agencies. Comprehensive traffic study is conducted on regular basis to identify roads for widening, strengthening and improvement/upgradation.

#### **3.1 STATE FUNDED SCHEMES/PROJECTS**

##### **3.1.1 *Comprehensive Road Infrastructure Development Programme (CRIDP)***

CRIDP aims at capacity augmentation of State Highways, Major District Roads and Other District Roads and strengthening of roads to ensure smooth and safe riding surface to cater to the increasing vehicular movement. Any activity, resulting in enhanced service levels including widening and improvements of roads can be taken up under CRIDP.

In the last two years, widening/ improvements of 4503 Km length of roads and construction of 1343 bridges / culverts at a cost of Rs.7723.41 crore and Improvements to Riding Quality Programme (IRQP) to a length of 4016 km at a cost of Rs.1233.94 crore have been completed.

### **3.1.1.1 Chief Minister's Road Development Programme (CMRDP)**

CMRDP was announced in the Budget session 2021-22, which aims at promoting 2,200 km of two-lane roads into four-lane and 6,700 km of single-lane and intermediate-lane roads into the double-lane roads in the next 10 years. The selection and prioritization of roads are being done based on traffic intensity and need for improvements.

In the year 2021-22, widening of 255.02 km length of important State Highways to four lane at a cost of Rs.2123.64 crore and 639.10 km length of intermediate lane to double lane at a cost of Rs.865.35 crore were taken up. In the year 2022-23, widening of 147.90 km of State Highways to four lane at a cost of

Rs.1406.71 crore and 524.45 km of roads to double lane at a cost of Rs.802.94 crore has been taken up and the works are in progress. So far, widening of 30 km length of roads to four lane and 550 km length of roads to two-lane have been completed.

Some of the major widening to four laning works taken up under CMRDP are listed below:

1. In Tiruvannamalai District, widening from two lane to four lane at km 2/2 - 17/7 of Arni - Ettivadi road at a cost of Rs.133.00 crore.
2. In Thiruvallur District, widening from two lane to four lane at km 7/0 - 18/4 of Korattur - Thinnanur -Periyapalayam road at a cost of Rs.111.00 crore.
3. In Cuddalore District, widening from two lane to four lane at km 0/0 - 6/8 of road branching from km 6/8 of Vridhachalam-Tholudur road to Madhanathur (via) Jayankondam (SH-140) at a cost of Rs.108.00 crore.

4. In Krishnagiri District, widening from two lane to four lane at km 17/0 - 20/2, widening from multi lane to four lane at km 21/6-26/0, 33/4-36/0, 38/2, 37/10, 38/4, 39/320-39/8 of Rayakottai Athipalli Road (SH85) at a cost of Rs.80.00 crore.
5. In Ariyalur District, widening from two lane to four lane of Virudhachalam - Jayankondam - Madhanathur road at km 6/8 - 14/8 (SH-140) at a cost of Rs.65.00 crore.

Some of the major two laning works taken up under CMRDP are listed below:

1. In Dindigul District, widening from intermediate lane to two lane at km 6/4 - 7/0, 7/4 - 9/0 of Sitharevu - Chinnalapatty Road at a cost of Rs.6.95 crore.
2. In Trichy District, widening from intermediate lane to two lane at km 0/0 - 4/0 of Musiri -Pulivalam road (MD276) at a cost of Rs.7.00 crore.

3. In Ramanathapuram District, widening from intermediate lane to two lane at km 0/0 - 5/0 of Anjukkottai - Neerkundram road at a cost of Rs.7.00 crore.
4. In Villupuram District, widening from intermediate lane to two lane at km 0/0 - 4/0 of Alankuppam-Konerikuppam (via) Avanipur road (MDR-748) at a cost of Rs.7.00 crore.
5. In Chengalpattu District, widening from intermediate lane to two lane at km 15/6 - 19/6 of GST road to Cheyyur (via) Padalam at a cost of Rs.7.00 crore.

### **3.1.1.2 State Highways**

The State Highways normally provide connectivity to District Headquarters with other highways and major production/ marketing centres. In the year 2022-23, administrative sanction has been accorded for widening, strengthening and improvements of 428.82km length of roads, and construction of 32 bridges/ culverts at a cost of Rs.2462.06 crore.

Some of the major works taken up are as follows:

1. In Coimbatore District, formation of Western Ring Road at km 0/0-11/8 to Coimbatore City with Four-Lane divided carriageway at a cost of Rs.250.00 crore.
2. In Tiruvannamalai District, widening from Two-Lane to Four-Lane at km 19/0 - 20/6, 22/0 - 24/4, 29/0 - 31/0 and 37/0 - 40/0 of Tiruvannamalai - Arur road (Via) Thanipadi at a cost of Rs.80.00 crore.
3. In Tiruppur District, widening from Two-Lane to Four-Lane at km 0/0 - 6/0 of Palladam - Dharapuram road at a cost of Rs.58.00 crore.
4. In Tirunelveli District, widening from Two-Lane with Paved Shoulders to Four-Lane and Strengthening at km 1/4 - 3/369, 4/071 - 4/6, 5/5 - 7/4 of Tirunelveli Bypass Road at a cost of Rs.51.00 crore.

5. In Vellore District, widening from Two-Lane with Paved Shoulders to Four-Lane and Strengthening at km 7/8 - 10/0 of Thiruvalam - Katpadi - Venkatagirikottah Road at a cost of Rs.15.50 crore.

In addition, spill over works of widening/ improvements to 767.84 km length of roads and construction of 102 bridges / culverts at a cost of Rs.3892.98 crore have been regularly followed up for execution. Widening / improvements of 476.03 km length of roads and 73 bridges / culverts have been completed at an expenditure of Rs.1946.71 crore including new works.

### **3.1.1.3 Major District Roads**

The Major District Roads (MDRs) connect towns/ municipal areas with district headquarters. These roads are also link to production and marketing centres with National Highways and State Highways. In the year 2022-23, administrative sanction has been accorded for widening, strengthening and improvements of 551.39 km length of roads,



construction of 45 bridges/ culverts at a cost of Rs.1084.38 crore.

Some of the works taken up are as follows:

1. In Kallakurichi District, widening from Intermediate-Lane to Two-Lane and Strengthening at km 3/3 - 6/0, Strengthening at km 3/0 - 3/3 of Parikkal Periyasevalai road at a cost of Rs.6.40 crore.
2. In Dindigul District, widening from Intermediate-Lane to End-to-End and Strengthening at km 18/8 - 19/960 of Sitharevu - Chinnalapatty Road at a cost of Rs.6.50 crore.
3. In Pudukottai District, widening from Intermediate-Lane to Two-Lane and strengthening at km 24/2 - 29/2 of Pattukkottai - Peravurani - Aranthangi road at a cost of Rs.6.76 crore.
4. In Nagapattinam District, widening from Intermediate-Lane to Two-Lane and improvements at km 0/6 - 2/8 and 14/0 - 15/0 of Keevalur -

Katchanam Road at a cost of Rs.6.88 crore.

5. In Dharmapuri District, widening from Intermediate-Lane to Two-Lane and strengthening at km 25/0 - 29/6 of Pennagaram - Nagamarai road at a cost of Rs.6.80 crore.

In addition, the works on widening/ improvements to 992.84km length of roads and construction of 160 bridges/ culverts as spill-over works at a cost of Rs.1574.28 crore were continuously followed up for completion. Widening / improvements to 838.79 km length of roads and construction of 132 bridges / Culverts have been completed at an expenditure of Rs.1150.05 crore including new works.

#### **3.1.1.4 Other District Roads**

The Other District Roads (ODRs) normally connect villages and marketing centres with Taluk Headquarters and other important roads nearby. These roads are the backbone of the rural economy. The ODRs are maintained as single lane or intermediate lane based on the traffic intensity of roads. In the year 2022-23,

widening and improvements of 896.47 km length of roads, construction of 168 bridges/culverts at a cost of Rs.1430.01 crore have been taken up.

Some of the works taken up are as follows:

1. In Thanjavur District, widening from Single-Lane to Intermediate-Lane and strengthening at Km 6/4-11/235 of road branching from Km 3/10 of Vallam - Kallaperambur road to Singaperumalkulam Municipal limit at a cost of Rs.8.15 crore.
2. In Tuticorin District, widening from Single-Lane to Intermediate-Lane and strengthening at km 0/0 - 1/4, 2/8 - 8/635 of Meignanapuram-Kayamozhi-Therikudiyiruppu road at a cost of Rs.6.90 crore.
3. In Erode District, widening from Two-Lane to Four-Lane and strengthening at km 2/6 - 3/4 of Erode Outer Ring Road at a cost of Rs.6.60 crore.
4. In Namakkal District, widening from Single-Lane to Intermediate-Lane and

strengthening at km 0/0 - 4/040, 4/290 - 4/8, 5/0 - 7/0 of Solakadu - Kulivalavu road at a cost of Rs.6.50 crore.

5. In Salem District, widening from Intermediate-Lane to Two-Lane and strengthening at km 0/0 - 4/6 of Kolathur Guruvareddiyur road at a cost of Rs.6.80 crore.

In addition, efforts were made to complete spill over works of widening/ improvements to 1406.45km length of roads and construction of 697 bridges / culverts at a cost of Rs.2213.73 crore. Widening / improvements to 1211.07 km length of roads and 567 bridges / Culverts have been completed at an expenditure of Rs.1662.87 crore including new works.

### **3.1.1.5 Other District Roads – Special Component Plan**

Under this component, roads connecting habitation with more than 40% of SC/ST population are taken up for improvements. In the year 2022-23, widening, strengthening and

improvements of 139.63km length of roads, have been taken up at a cost of Rs.169.33 crore.

Some of the works taken up are as follows:

1. In Tiruvarur District, widening from Single-Lane to Intermediate-Lane and strengthening at km 0/0 - 4/2 of Mangudi - Nagalore - Periyathumbur road at a cost of Rs.6.33 crore.
2. In Tirupattur District, widening from Single-Lane to Intermediate-Lane and strengthening at km 0/0 - 2/20, strengthening at km 2/20 - 4/60 of Matrapalli - Pudurnadu Road at a cost of Rs.6.26 crore.
3. In Nilgiris District, strengthening at km 3/2 - 9/0 of Kaikatty Kolacombai road at a cost of Rs.4.90 crore.
4. In Kallakurichi District, widening from Single-Lane to Intermediate-Lane and strengthening at km 0/0 - 2/0 of Chinnasalem Pandiyankuppam Road at a cost of Rs.5.10 crore.

5. In Pudukottai District, widening from Single-Lane to Intermediate-Lane and strengthening at km 4/0 - 5/4, 7/0 - 8/0 of Avudayarkoil - Kottaipattinam road at a cost of Rs.5.00 crore.

In addition, on-going spill over works of widening/ improvements to 166.31km length of roads at a cost of Rs.183.55 crore were also closely followed up for completion. Widening / improvements to 152.08 km length of roads have been completed at an expenditure of Rs.156.37 crore including new works.

### **3.1.1.6 *Improvements of Riding Quality Programme (IRQP)***

The wearing surface of the roads is designed to serve for a period of 5 years. Considering the renewal cycle, roads are taken up for strengthening and improvements based on the roughness index. In the year 2022-23, widening and improvements of 1069.85km length of roads at a cost of Rs.387.77 crore have been taken up and all these works are in progress.

In the last year, widening/ improvements to 2058.64km length of roads at a cost of Rs.880.10 crore were taken up and road works to a length of 2453.85 km have been completed at an expenditure of Rs.780.26 crore including new works.

### **3.1.1.7 *Development works in Urban areas***

In Urban areas, movement of local traffic with heterogeneous mix leads to traffic congestion. To ensure a smooth and safe flow of traffic, special attention to roads in urban areas is being given by restoring the right of way to the extent possible and paving it for use. State Highways and Major District Roads passing through Corporation, Municipality, and Town Panchayat areas are being widened as four-lane with paved shoulders depending on the availability of land. These improvements are being done to ensure safety of road users.

In the year 2022-23, 88 works for a length of 42.54 km have been taken up at a cost of Rs.281.81 crore. 98 works for a length of 99.16 km, as spill over works, at a cost of Rs.244.41 crore were at various stages

of completion. Roads to a length of which 58.02 km length of roads have been completed and remaining works are in various stages of progress including new works.

### **3.1.1.8 Flood Permanent Restoration Works**

In the year 2022-23, to mitigate flood inundation in and around Chennai, based on the recommendation of the Committee, headed by Dr.V.Thiruppugazh, the Government has accorded sanction for carrying out 14 works, primarily construction of micro/ major drains and culverts at a cost of Rs.91.73 crore. Of which, 3148m drain, 781m macro drain and 4 culverts have been completed at an expenditure of Rs.80.39 crore.

### **3.1.1.9 Tourism**

Road connectivity to places of tourist importance is very essential for safe and easy access. Road network plays a major role in promotion of tourism. In the current financial year, 20 works providing connectivity to places



of tourist importance have been taken up at a cost of Rs.100.35 crore.

Some of the major works are as follows:

1. Forming footpath and providing basic amenities to the pilgrims of Irukkankudi Mariamman Temple in Km 1/0 - 6/0 of Sattur - Nenmeni - Nagalapuram road for Rs.30.00 crore.
2. Widening and strengthening of Girivalam Road at Srinivasa Perumal Temple for Rs.5.00 crore.

### **3.1.1.10 Works to Prevent Coastal erosion**

In the year 2022-23, the Government has sanctioned construction of groynes in Neerodi - Erayumanthurai and Pottel - Puthenthurai - Pallamthurai road in Kanyakumari district for Rs. 41.00 crore. Preliminary works for gathering technical details are going on and CRZ permission has been obtained. To address the long pending demand of Kanyakumari fishermen, Detailed Project Report (DPR) is being prepared to form a new link road connecting 47 villages from Arogyapuram to

Neerodi for a length of 79 Km connecting Chinnamuttam Port, Kulachal port and Thenkaipatnam port at a cost of Rs.75 Lakhs.

### **3.1.1.11 *Converting all existing causeways into High Level Bridges.***

The main objective is to ensure an uninterrupted connectivity to the nearby villages for all seasons. This helps people, particularly school going children to remain connected during flood time. Due to all season connectivity, farmers can also transport their agricultural produce to the market centres without delay and extra costs. Further, the travelling distances as well as the vehicle operating cost are also reduced considerably.

During the Budget session 2021-22, **it has been announced that in lieu of existing causeways, High level Bridges will be constructed by the year 2026** under “**all season uninterrupted connectivity scheme.**”

In the year 2022-23, conversion of 215 numbers of causeways into High-Level Bridges has been taken up under various schemes. Out

of 648 causeways taken up in the previous year, 558 numbers of causeways, have been completed and remaining are in progress.

### **3.1.2 Chennai Metropolitan Development Plan(CMDP)**

Under the Chennai Metropolitan Development Plan (CMDP) Scheme, projects, which have been identified in the Comprehensive Traffic and Transportation Study (CTTS) and second Master Plan developed by Chennai Metropolitan Development Authority (CMDA) for improving the transport facilities in Chennai Metropolitan Area (CMA) are taken up for implementation.

In the past 2 years, the following works have been completed under CMDP and opened to public use by Hon'ble Chief Minister of Tamil Nadu.

1. Two level Grade Separator at Velachery - Vijayanagaram junction at a cost of Rs.145.49 crore on 17.09.2022.

2. Four-Lane Grade Separator at Koyambedu at a cost of Rs.93.50 crore on 01.11.2021.
3. Two-Lane Tambaram – Velachery arm in the Grade Separator work at Medavakkam at a cost of Rs.95.21 crore on 13.05.2022.

A few projects taken up under the Chennai Metropolitan Development Plan (CMDP) Scheme are as follows:

### **3.1.2.1 *Grade Separators/ Vehicular Passes***

Work on two-lane Grade Separator from Sardar Patel Road to Rajiv Gandhi Salai (OMR) at Madhya Kailash junction at a cost of Rs.49.59 crore has been going on as per schedule. Four-Lane Grade Separator on Mount-Poonamallee-Avadi road from MIOT Hospital to Mugalivakkam at a cost of Rs.314.48 crore and Vehicular Under Pass at Madipakkam at a cost of Rs.45.50 Crore are being executed by Chennai Metro Rail Limited (CMRL) integrated with Metro Rail project. The work of construction of four-lane Grade Separator at Kattupakkam is being taken

up and a portion of the work will be executed by Chennai Metro Rail Limited (CMRL) integrated with Metro Rail projects.

Preparation of Detailed Project Reports for 9 works at a cost of Rs.9.08 crore and land acquisition for 8 works at a cost of Rs.796.41 crore are in progress for construction of Grade Separators at i) P.T.Rajan Salai Junction in Inner Ring Road ii) Akkarai Junction, iii) Avadi Junction, iv) Selaiyur and Camp Road Junction, v) Kundrathur junction, vi) Kaiveli junction in Velachery-Tambaram Road vii) Korattur Junction viii) Vanagaram Junction ix) Ambattur Estate Bus Depot (DPR only).

### **3.1.2.2 River Bridges**

During 2022-23, works on 2 High Level bridges i.e. across Buckingham canal at Thiruvotriyur near Manali Oil Refinery Plant at a cost of Rs.58.64 crore and across Coovam river at Paruthipattu at a cost of Rs.18.37 crore are in progress and these shall be completed in the current year. For construction of 2 High Level Bridges across Coovam river at Padikuppam and Nolambur, land acquisition work is in progress.

### **3.1.2.3 Road Works**

During 2022-23, the work of widening and strengthening of East Coast Road with six lane carriageway, cycle track and footpath for a length of 6.60 kms in Neelangarai, Injambakkam and Sholinganallur stretch has been taken up at a cost of Rs.134.58 crore. Works for a length of 1.15 kms in Palavakkam Stretch at a cost of Rs.17.43 crore and for a length of 0.94 km in Kottivakkam Stretch at a cost of Rs.18.86 crore are in progress.

In the work of Formation of new link road connecting OMR and ECR at Neelangarai, a portion of the work from OMR to Buckingham canal is completed at a cost of Rs.18.25 crore. The connectivity across and from Buckingham canal to ECR is being examined by consultants. Chennai Metropolitan Development Authority (CMDA) has also taken up preparation of DPR for forming a Rotary bridge across B-canal with ramps on the canal bunds and connecting internal roads.

In the work of formation of six-lane Tambaram Eastern Bypass for a length of 9.30 kms connecting GST road at Perungalathur

to Velachery-Tambaram road near Madambakkam, the work in Mappedu stretch for a length 3.05 kms was already completed at a cost of Rs.25.00 crore; the work in Nedungundram stretch for a length of 2.63 kms is in progress at a cost of Rs.36.69 crore and the work in Puthur stretch for a length of 1.55 Kms is in tender stage at a cost of Rs.55.77 crore. For the remaining stretches, the process on Land Acquisition including transfer of forest lands is in progress.

#### **3.1.2.4 *Pedestrian Infrastructure Facilities - Foot Over Bridges with Escalators***

To ensure safety of pedestrians and to improve the movement of pedestrians, Foot Over Bridges with escalators are being taken up. Foot Over Bridge with escalator to cross GST road and to connect the existing Foot Over Bridge of Railways with ticket counter near Tambaram Railway station has been completed.

During 2022-23, administrative sanction has been accorded for an amount of Rs.30.67 crore for construction of 2 Foot Over Bridges in Grand Western Trunk Road near Nelson Manickam Road junction and in Inner Ring Road

at Senthil Nagar junction and designs & investigation works are in progress. Preparation of Detailed Project Report is in progress for construction of Foot Over Bridges; i) near DAV & Velammal School, Mogappair, ii) for connecting East Tambaram and West Tambaram.

### **3.1.2.5 *Elevated Corridor – Light House To Guindy***

The administrative sanction for Rs.45.00 lakh has been accorded for the preparation of Detailed Feasibility Report for the work of “Construction of Elevated Corridor from Light House to Guindy” and the process of finalization of agency is at advanced stages.

### **3.1.2.6 *Construction of Road Over Bridges***

During 2022-23, administrative sanction for Rs.139.17 crore has been accorded for widening the existing Road Over Bridge near Padi flyover in Inner Ring Road and works in Highways portion will be taken up after the completion of Railway portion.



### **3.1.2.7 Expenditure in the year 2022-23 Under CMDP Scheme**

During 2022-23, an expenditure of Rs.498.83 crore was incurred upto 20.03.2023.

### **3.2 UPGRADATION OF PANCHAYAT UNION ROADS / PANCHAYAT ROADS TO ODR STANDARD:**

The rural road network serves as lifeline for rural people by providing them access to various socio-economic services like health, education and agricultural marketing centres. Therefore, the Government accords very high priority to upgradation of rural roads to Other District Road (ODR) standard. The Panchayat Union / Panchayat roads connecting major roads, important tourist places, pilgrim centres, educational institutions, hospitals etc. are given priority in taking up of works.

In the year 2022-23, Panchayat Union / Panchayat roads of 2000.31 km length at a cost of Rs.2178.01 crore have been taken up for improvements. Efforts were made to complete 138 spill over works to a length of 361.76 km at a cost of Rs.555.85 crore, of which 91 road

works to a length of 232.77 km have been completed and remaining length of road works are at advanced stages.

During 2022-23, an expenditure of Rs.228.33 crore was incurred upto 20.03.2023.

### **3.3 FORMATION OF BYPASSES**

Bypasses provide an alternate route for the through-traffic in towns and built-up areas to reduce traffic congestion within urban locality and improve the safety of the public. There are two critical phases in construction of bypasses viz., Land Acquisition stage (I- Phase) and formation stage (II- Phase)

In the year 2022-23, 3 bypasses i.e. in Uthiramerur, Tiruppur & Coimbatore Western Ring road have been taken up at a cost of Rs. 435.39 crore. At the beginning of the year, work were going on in 17 nos. of bypasses as spill over. 1 bypass at Iluppur has been completed at a cost of Rs.23 crore and works are at advanced stages in remaining 16 bypasses i.e. Thiruthani, Thiruthurai Poondi-Part-2, Rasipuram (Phase-I Part-2), Conoor,

Parthibanoor, Pollachi, Aruppukottai, Bhavani, Ambasamudram, Mudukulathur, Kamuthi, Thiruporur, Tambaram Eastern bypass, Kelambakkam, Sivagangai and Jalakandapuram.

Further, preliminary works on 58 nos of bypasses are at various stages like Land Acquisition, planning and preparation of Detailed Project Report.

### **3.4 FORMATION OF LINK ROADS**

In 2022-23, the Government have accorded administrative sanction for carrying out Link Road at Pasumalai near Thiruparankundram at a cost of Rs. 41.89 crore. The work is in tender Stage. Work on another link road i.e. widening and improving the road connecting Erode - Perundurai - Kangeyam road to Ooty - Kothagiri - Mettupalayam - Sathy - Gobi - Erode road near Kaniravutharkulam via Vilarasampatty, as spill over, at a cost of Rs. 20.85 crore is at advanced stage of completion.

### **3.5 CONSTRUCTION OF HIGH-LEVEL BRIDGES (HLB)**

High-Level Bridges are normally constructed to cross over the water bodies along the road alignments. In the last two years, 147 nos of HLBs have been completed and put to public use.

Loan assistance of National Bank for Agriculture and Rural Development (NABARD) is also availed for construction of High-level River Bridges in lieu of causeways / weak bridges / narrow bridges under Rural Infrastructure Development Fund (RIDF). The loan assistance is 80% and balance 20% is met out from State Fund. In the year 2022-23, 158 High Level Bridge (HLB) works have been taken up at a cost of Rs.818.66 crore. In the last two years, 139 Nos of HLBs funded under NABARD assistance at a cost of Rs.382.49 crore have been brought to public use. Works on 136 spill over High Level Bridges at a cost of Rs.888.07 crore are going on.

In the year 2022-23, 14 High-Level Bridge works have been taken up at a cost of

Rs.148.90 crore with only State funding and the works are in various stage for implementation. Some of the newly sanctioned works taken up are as follows;

1. Construction of High-level bridge across the river Cauvery in between Unniyur in Trichirappalli District and Nerur in Karur District at a cost of Rs.92.38 crore.
2. Reconstruction of High-level Bridge across Ambuliyar River at Km 21/8 of Pattukottai - Peravurani - Aranthangi Road (MDR 653) at a cost of Rs.7.42 crore.
3. Reconstruction of High-Level Bridge across Poonaikuthi River at km 16/10 of Pattukottai - Peravurani - Aranthangi road (MDR-653) at a cost of Rs.6.37 crore.

In addition, works on 25 nos. of HLBs were going on as spill over works with state funding at a cost of Rs. 333.82 crore. In the last two years, 8 nos. of High-level bridges have been completed at a cost of Rs.180.18 crore.

Some of the completed works are as follows;

1. Construction of High-level Bridge across River Pennaiyar connecting Mettupalayam village of Villupuram District and Melkumaramangalam village of Cuddalore District at a cost of Rs.27.92 crore.
2. Construction of High Level Bridge across the river Gedilam at km 5/0 of Arunkurukkai Road branching at km 59/10 of Cuddalore - Chittoor road at a cost of Rs.10.05 crore.
3. Construction of High level bridge at Km.21/2 of Gudiyatham - Gadambur - Kailasagiri - Vaniyambadi road across Malataru river at a cost of Rs.16.93 crore.

Further, preliminary works such as Land Acquisition and Preparation of Detailed Project Reports for 41 nos. of works are at various stages.

### **3.6 CONSTRUCTION OF ROAD OVER BRIDGES/ ROAD UNDER BRIDGES/ LIMITED USE SUBWAY**

#### **Railway Works Programme (RWP)**

Road Over Bridges/ Road Under Bridges are being constructed to allow free flow of traffic and to prevent accidents at the Railways level crossings. The construction of ROB/RUB in lieu of existing level crossings is undertaken on priority basis when Train Vehicle Units (TVUs) exceeds one lakh per day. In the current year, administrative sanction has been accorded for 10 nos. of works under RWP at a cost of Rs.393.50 crore. Some of the newly sanctioned works are as follows.

1. Construction of ROB in lieu of existing LC No.48 at Railway km 77/700-800 between Nagore and Nagapattinam Railway Stations at km 0/2 of Nagapattinam - Akkaraipettai - Velankkanni Road at a cost of Rs.101.60 crore.
2. Construction of ROB in lieu of LC.No.26 at Railway km. 35/05-07 in between

Ponneri-Kavaraipettai Railway Stations at a cost of Rs.63.83 crore.

3. Construction of Road over Bridge at km 0/2 of Rasipalayam road in lieu of existing LC 142 at Railway Km 466/21-23 in between Somanur and Sular Railway stations at a cost of Rs.40.21 crore.
4. Construction of ROB at km 3/0 of Goodanagaram - Anankanallur Road in lieu of existing LC No 67 at Rail way km 160/2-4 in Between Melalathur and Valathur Railway stations at a cost of Rs.35.98 crore.

In addition, 44 nos. of ROB/RUBs at a cost of Rs.1844.81 crore were spill over works. In the last two years, 14 nos. of ROB/ RUBs at a cost of Rs.464.31crore have been completed and level crossings have been closed.

### **State Funded**

Due to increasing traffic, some places require construction of ROB/RUB to avoid stagnation of vehicles near Level Crossings which are not eligible for cost sharing with Railways. Additional ROB/RUBs are required due



to existing narrow ROB/RUB with insufficient space for traffic movement, which can be taken up only under State Funding. 1 work is in progress at a cost of Rs.19.78 crore and 16 works are in various stages like Land Acquisition and Detailed Project Report.

### **3.7 GRADE SEPARATORS**

In urban areas, improving at-grade intersections plays an important role in regulating the traffic flow. If the traffic intensity at the intersections increases beyond certain level, interventions such as Space and Time separation techniques such as roundabouts and signalized traffic flow etc. need to be applied. However, with ever increasing traffic flow, these interventions also do not serve the intended purpose. Hence, Grade Separators are provided at the junctions to minimize the traffic congestion and to ease the flow of traffic.

Some of the important Grade Separators taken up by the department are mentioned below;

1. Construction of Grade Separator at Madurai - Thondi road and Madurai

Ring Road junction in Madurai District at a cost of Rs.53.12 crore was completed.

2. Ukkadam -Athupalam in Coimbatore city at a cost of Rs.140.49 crore is in progress.
3. Construction of Flyover at Goripalayam Junction in Madurai City from km 440/100-441/0 of Varanasi-Kanyakumari Road (SHU 73) and km 0/0-1/4 Of Madurai -Alagarkoil - Melur Road (SH72A) for Rs.199.12 crore is at tender stage.
4. Grade Separator at km 0/0-1/8 of Madurai-Thondi road (Apollo Hospital Junction) and Grade Separator at km 6/6 of Tirunelveli Bye Pass Road (SH75A) near Veeramanickapuram are in Detailed Project Report stage.

### **3.8 CONSTRUCTION OF ELEVATED HIGHWAYS**

Elevated Highways in major cities are beneficial in curbing the traffic congestion in city limits by allowing through-traffic unhindered. On

the other hand, it also enables seamless travel at grade. In the last year Budget Session, construction of Elevated corridor from Teynampet to Saidapet has been announced. A detailed estimate, keeping in view the underground tunnel of Chennai Metro Rail Limited, has been prepared at the cost of Rs.621 crore and the work will start at the earliest. Construction of Elevated Highways along Avinashi road in Coimbatore City from Goldwins to Uppilipalayam for 10.10 km at a cost of Rs.1621.30 crore is in progress, and it will be completed by August 2024. Preparation of Detailed Project Reports for elevated corridors on Anna Statue to Trichy Railway Junction, Madurai -Natham Road at km 0/0 -1/8, Periyar to Eyanakal via Meenakshi bazar in Madurai city, Gandhi Statue and Mutharaiyar Statue to Trichy Court Roundana, Nelpettai Junction to Avaniyapuram Junction in Madurai City and Odatthurai Cauvery Bridge through Anna statue and Kalaigarnar Arivalayam to Mallachipuram in Trichy City is at advanced stages.

### **3.9 MAINTENANCE WORKS**

Construction and Maintenance wing undertakes routine maintenance /periodical maintenance of roads. The maintenance activities are as follows:

- Renewal/ special repairs to roads/bridges.
- Repairs of potholes and patches.
- Maintenance of shoulders and jungle clearance
- Cleaning vegetation in channels and culverts and desilting of drains.
- Maintenance of Kilometer/hectometer stones, Kerbs, center medians and crash barriers.
- Removal of encroachments and prevention of encroachments.
- Planting and watering of avenue plantation.

The works of rehabilitation of bridges in Trichy across river Cauvery at a cost of

Rs.6.51 crore and rehabilitation of ROB in Tindivanam town at a cost of Rs.8.17 crore are some of the complex works taken up in the year 2022-23 to increase the riding comfort and durability of the bridges. Maintenance and renewal of 2434 km length of roads were completed at an expenditure of Rs.694.63 crore in the year 2021-22. Maintenance and renewal of 2030.29 km length of roads have been completed at an expenditure of Rs.456.14 crore in the year 2022-23.

### **3.10 GOVERNMENT OF INDIA FUNDED SCHEMES**

#### **3.10.1 *Annual Plan (For National Highways)***

Ministry of Road Transport and Highways (MoRTH) allocates fund for maintenance and upgradation of National Highways every year under 'Annual Plan'. In the year 2021-22, Road works for a length of 464.11 km and 13 Bridges works costing Rs.2791.26 crore have been sanctioned under Annual Plan and the works are at various stages. In the year 2022-23 , 227.00 km of Road works and 3 Grade Separator works have been completed.

Major projects completed during 2022-23 are as follows;

1. Grade Separator at Km 15/2 (Vadapalanji) of Madurai – Cochin Road (NH 49Extn) at a cost of Rs.52.04 crore.
2. Grade Separator at Km 138/2 (Deepam Nagar – Thiruvannamalai) of Mangalore - Villupuram Road (NH 234) at a cost Rs.19.31 crore.
3. Grade Separator at Km 144/2 (Kilnachipattu – Thiruvannamalai) of Mangalore - Villupuram Road (NH 234) at a cost of Rs.21.47 crore.
4. Widening to two-lane with Paved Shoulders from Dindigul to Appasapuram Pirivu-Natham of Dindigul – Natham - Kottampatti Road (NH 383) for a length of 38 km at a cost of Rs.240.38 crore.
5. Widening to two-lane with Paved Shoulders from Sharjapur to Samathuvapuram - Hosur of Sharjapur – Bagalur – Hosur Road (NH 207) for a length of 15 km at a cost of Rs.68.07 crore.

In the year 2022-23, projects costing Rs.2559.00 crore have been proposed for sanction under Annual Plan 2022-23.

- ***SETU BHARATHAM SCHEME***

“SETU BHARATHAM” scheme envisages construction of Railway over and under bridges (ROBs/RUBs) at all railway level crossings in National Highways.

6 ROBs (LC-17 Chekkanurani (Madurai), LC-68 Theni (Theni), LC-85 Bodinayakanur (Theni), LC-109A Kannamangalam (Vellore), LC-86 Ettivadi (Thiruvannamalai), LC-503 Tenkasi (Tenkasi)) at a cost of Rs.412.11 crore have been sanctioned under Annual Plan. Of which, works are in progress for 5 ROBs and 1 ROB is to be taken up shortly.

### ***3.10.2 Centrally Sponsored Schemes***

- ***Central Road And Infrastructure Fund (CRIF) (For State Roads)***

The works taken up under CRIF scheme include widening, strengthening of roads and rehabilitation/ construction / reconstruction of bridges & culverts of State Highways, Major

District roads, Other District roads with the funds provided by Government of India (GoI) from Central Road Fund.

In the year 2022-23, works on spillover projects i.e. 5 Road works for a length of 19.15 km and 1 Bridge work at a cost of Rs.75.18 crore are going on.

- ***Setu Bandhan***

Ministry of Road Transport and Highways has announced a new scheme "SETU BANDHAN" for construction of ROB/RUB to eliminate the Level Crossings in State roads as part of Road safety with additional funds under CRIF. A proposal for construction of ROB/RUB in lieu of existing Level crossings has been sent under "SETU BANDHAN" scheme during 2022-23 to MORTH for obtaining approval.

- ***Pradhan Mantri Gram Sadak Yojana (PMGSY)***

PMGSY scheme of Government of India (GoI) was launched for upgrading rural roads for providing connectivity to unconnected habitations. "Other District Roads" are upgraded



under this scheme by the funds provided by GOI. In the year 2022-23, 4 works for a length of 31.98 km at a cost of Rs.34.16 crore have been sanctioned by Ministry of Rural Development and all these works are in progress.

### **3.10.3 Deposit Works**

The following road improvement works have been taken up as deposit works of NHAI by State National Highways wing;

- Widening of NH-45 from 4-Lane to 8-Lane between Guduvanchery to Chettipunniyam (Mahindra City) of 13.30 km has been taken up for Rs.230.69 crore and the works are in progress.
- Widening of NH-4 from 4-Lane to 6-Lane between Maduravoyal By-pass to Sriperumpudur of 23.20 km has been taken up for Rs.428.95 crore and the works are in progress.
- Widening of NH 544 H Thoppur – Mettur – Bhavani – Erode Road to 2-Lane with Paved Shoulders of 85.00 km has been taken up for

Rs.186.50 crore and the works are in progress.

### **3.11 COMPUTERIZATION**

Computerization of the Department has been taken up as a special drive to improve efficiency and effectiveness in execution of works. The required hardware and software have been procured to strengthen the functioning of the Department.

Presently, the Department is using advanced software and in-house tools for analysis, design and preparation of drawings and estimates of all bridge structures, flexible and rigid road pavements. Procurements by various wings of the department are made in electronic mode (**e-Tenders**) through the portal [www.tntenders.gov.in](http://www.tntenders.gov.in) maintained by National Informatics Centre (NIC).

The Highways Department has been using Road Maintenance and Management System (RMMS) to manage the entire road network of the State more judiciously and efficiently. RMMS is a web-enabled system developed for economic analysis and prioritization of roads for

improvement. Road condition and inventory data collected through Advance Data Collection Equipment (ADCE) are uploaded in RMMS to keep it updated. Tamil Nadu Highways Project Monitoring System (TNHPMS) is a web-based Project monitoring tool to monitor status of the projects executed by the department. The department is in the process of upgrading the RMMS & TNHPMS for effective usage.

The following websites are being maintained by this Department.

- ✓ <https://www.tnhighways.tn.gov.in>
- ✓ <https://www.tnrsp.tn.gov.in>
- ✓ <https://www.ckicp.tn.gov.in>

In the year 2022-23, with the assistance under TNRSP-II, 1484 desktops and 1213 laptops were procured to augment the existing resources of the department.



Erode Outer Ring Road-Avenue Plantation by Hon'ble Minister

(3A)



Controlling landslides using new technology in Udhagai Kothagiri  
Mettupalayam road - Inspected by Hon'ble Minister

(3B)



Flood Mitigation Works on Walltax Road  
Inspected by Hon'ble Minister

(3C)



Grade Separator at Velacherry Vijayanagaram level -1 –  
Inaugurated by Hon'ble Chief Minister through Video Conference  
on 17.09.2022



Hon'ble Chief Minister inaugurated Flyover at Ramanathapuram - Sungam Junction & at Goundampalayam junction in Coimbatore District on 11.06.2022 through Video - Conference



## **4. EXTERNALLY AIDED PROJECTS**

### **4.1 TAMIL NADU ROAD SECTOR PROJECT -II**

Tamil Nadu Road Sector Project-II was initiated to upgrade heavy traffic intensity roads connecting important National Highways, State Highways, Major District Roads, selected based on the DPR prepared through TNIDB funding. This is an Externally Aided project, being executed at a total cost of Rs.5171 crore with World Bank loan amount of Rs.2122.90 crore (300 MUSD).

The project involves up-gradation and maintenance of roads covering a length of 1187.04 kms running across many Districts in Tamil Nadu, Institutional Capacity Enhancement and Road Safety. The main objective is to enhance road capacity with improved road safety.

Under the TNRSP II, upgradation of 535.35 km has been taken up using

Engineering, Procurement and Construction (EPC) mode of procurement: 70.20 km using Public Private Partnership (PPP) and 581.49 km through Output and Performance based Road Contract (OPRC).

#### **4.1.1 Completed Works**

- **Engineering, Procurement and Construction (EPC) Contracts**

EPC approach relies on assigning the responsibility for design, construction and maintenance to the contractor for a lump sum price determined through competitive bidding. This is to ensure that the project is implemented to the specified standards with a fair degree of certainty relating to costs and time while transferring the construction risks such as soil conditions, weather and technical risks to the contractor.

The contractors have freedom to plan the construction schedule for efficient use of their manpower, equipment and other resources while

payments are linked to specified stages of construction in contrary to the routine payment being made for individual items in the Bill of Quantities (BOQ) mode of contract.

Under the EPC mode of contract, 427.97 km of roads across the state have been widened to two-lane with paved shoulders. Two packages of length 39.59 km have been handed over to the respective Construction & Maintenance wing after 5 years maintenance period and the remaining 388.38 km length of roads are under 5 years maintenance period.

- **Public Private Partnership (PPP) Contract**

In the Public Private Partnership (PPP) Design, Build, Finance, Maintenance, Operation and Transfer (DBFMOT) mode, the contractor has to build, maintain and operate the road on his own financial resources and transfer the road after a fixed number of years. The cost of Construction, Maintenance and Operation will be

paid to the contractor as Annuity during the maintenance period.

Under Public Private Partnership mode (PPP), four-laning of Oddanchatram–Dharapuram–Avinashipalayam Road (SH 37) of 70.20 km length has been completed in August 2020 and now it is under 3<sup>rd</sup> year of maintenance. The remaining maintenance period is 8 years.

- **Output and Performance based Road Contract (OPRC)**

In this mode of contract, the minimum essential technical standards and service levels for roads are prescribed and only upon the output made to the standards, contract is valued and paid. OPRC increases the efficiency, effectiveness of road asset management and maintenance to ensure good condition of the roads over the entire period of contract. This novel approach emphasizes quicker response towards standard level of maintenance uniformly

throughout the contractual period and delivering satisfactory output. The payment is linked to the various performance standards.

Arcot- Thiruvarur Road and Nagapattinam-Tuticorin Road, which were improved under TNRSP-I for a total length of 581.49 km, have been taken up under Output and Performance based Road Contract (OPRC) for five years maintenance at a cost of Rs.220.07 crore and the works have been completed. The roads have been handed over to the respective Construction & Maintenance wing after completion of 5 years maintenance.

#### **4.1.2 Works in Progress**

At present, the following 6 works for a length of 107.38 km are in progress, under Engineering, Procurement and Construction contract.

<b>Package</b>	<b>Name of the Road</b>	<b>Length in km</b>	<b>Contract Price in Cr</b>
EPC 11	Four Laning of Omalur to Mecheri Section of SH 222 From Ex.km 1.15 to Ex.km 14.30	13.17	144.64
EPC 12	Strengthening and Widening of Malliyakarai – Attur road of SH-30 (km.81/12 - 91/20)	9.88	95.14
EPC 13	Four Laning of Chithode to Erode Section of SH 15 from Existing km 153.50 To Existing Ch 161.62	8.13	104.70

<b>Package</b>	<b>Name of the Road</b>	<b>Length in km</b>	<b>Contract Price in Cr</b>
EPC 14	Strengthening and Widening (Four Lane) of Tirunelveli – Sengottai – Kollam Road of SH-39 from km 5+00 to km 27+70(package I)	22.70	176.58
EPC 15	Strengthening and Widening (Four Lane) of Tirunelveli – Sengottai – Kollam Road (SH 39) km 27+70 to km 50+60 (package II)	22.90	254.13
EPC16	Four Laning of Gobi - Erode Section of SH-15 from km 123+00 to km 153+60	30.60	272.53
	<b>Total</b>	<b>107.38</b>	<b>1047.72</b>

Of the above 6 works, 2 works are nearing completion. Other 4 works will be completed in the financial year 2023-24.

#### **4.1.3 Preparation of Detailed Project Report by Using Tamil Nadu Infrastructure Development Board (TNIDB) Fund:**

Under TNIDB fund, an amount of Rs.132.76 crore has been earmarked for Preparation of Detailed Project Report for 3319 km of roads. Out of this, in first phase, 718.71 km length of roads have been taken up for preparation of DPRs by engaging Consultants.

#### **4.1.4 Proposal for TNRSP-III**

Under TNRSP III, it is proposed to widen the existing 11 two-lane roads of length 400.43 km into four-lane and the DPR preparation for the same is in progress. For this Project, seeking External Aided Fund is under active consideration of the Government.



#### **4.1.5 DPR for Transforming Chennai City Roads into Smart Urban Roads**

Under Chennai City Partnership-2 (CCP) Programme i.e. Urban Mobility and Spatial Development (UMSD) with the World Bank Loan Assistance, for developing 134.20 km length of eight major roads in Chennai City into smart roads, preparation of Detailed Project Report is under progress at a cost of Rs.15.94 crore. The DPR preparation has been awarded to the consultant, M/s. L & T Infrastructure Engg. Ltd., Chennai in two packages for a length of 54.50 km & 79.70 km.

<b>Package 01</b>		
<b>S.No.</b>	<b>Name of road</b>	<b>Length in km</b>
1	Grand Southern Trunk (GST) Road Km 0/0 to km 28/0 (SHU-88)	28.00
2	Grand Western Trunk (GWT) Road Km 0/0 to km 9/0 (SHU-86)	9.00
3	Inner Ring Road km 0/0 to km 17/5 (SH-2)	17.50
	<b>Total</b>	<b>54.50</b>

<b>Package 02</b>		
<b>S. No.</b>	<b>Name of road</b>	<b>Length in km</b>
1	Grand Northern Trunk(GNT) Road km 0/8 to km 11/5 (SHU-87)	10.70
2	Velachery By Pass road km 0/0 to Km 1/9 (SH-48C)	1.90
3	Marmalong Bridge Irumbuliyur road km 5/0 to km 21/2 (SH-48)	16.20
4	Mount Poonamallee Avadi (MPA) Road km 0/0 to km 20/8 (SH-55)	20.20
5	ECR from Akkarai to Mahabalipuram km 22/3 - km 53/0	30.70
	<b>Total</b>	<b>79.70</b>
	<b>Total length in Km (Package 01 + Package 02)</b>	<b>134.20</b>

#### **4.1.6 Institutional Capacity Enhancement And Road Safety (ICERS)**

##### **Institutional Capacity Enhancement (ICE)**

Institutional Capacity Enhancement was taken up at a cost of Rs.66 crore. The main components are as follows;

- Updation of Highways Manuals (I, II, III & IV).
- Procurement of laptops and desktops through Electronics Corporation of Tamil Nadu (ELCOT).
- Development of “Computerized Management Information System (CMIS)” for land acquisition through National Informatics Centre (NIC).
- Proposal for Development of “Works Management System (WMS)” for automation of key activities of the department.

- Developing e-Library

The work on all the above mentioned components is in progress.

### **Road Safety**

Road Safety improvement works including Intelligent Transport System (ITS) have been taken up under this project at a cost of Rs.120.00 crore, to make 95.60 km length of roads in Kanchipuram and Tiruvannamalai District as safe corridors. Various supports to the other stakeholders viz. Transport, Police, Health & Education Department have been extended under road safety activities. As a part of Road Safety, 20 numbers of 108 ambulances has been procured and the ambulance service was inaugurated by the **Hon'ble Chief Minister of Tamil Nadu**. The same has been handed over to Health Department for operation in Safe Demonstration Districts. In addition, Road Safety awareness campaigns are being conducted among the school children in Kanchipuram and Chengalpattu Districts.

#### **4.1.7 Expenditure in the year 2022-23**

During 2022-23, an expenditure of Rs.752.94 crore was incurred upto 20.03.2023.

#### **4.2 CHENNAI KANYAKUMARI INDUSTRIAL CORRIDOR PROJECT**

Under Chennai Kanyakumari Industrial Corridor Project, 589 km of 16 State Highways corridors for improvement with loan assistance from the Asian Development Bank under Tamil Nadu Industrial Connectivity Project have been taken up. These works are executed on Engineering, Procurement and Construction (EPC) contract mode.

Among these roads, 72.43 km of roads are being upgraded from two-lane to four-lane and 516.57 km of roads are being upgraded from two-lane to two-lane with hard shoulders.

The roads being upgraded are tabulated below.

<b>S. No</b>	<b>EPC No.</b>	<b>Project Road</b>	<b>Total Length in km</b>
1	EPC - 01	Cheyyur to Polur Road (SH115) including ECR link	109.27
2	EPC - 02	Kanchipuram-Arakkonam - Tiruthani Road (SH 58-2)	41.78
3	EPC - 03	Chengelpet - Kancheepuram Road (SH 58-1) including Military Road (Four lane with paved shoulder: 26 km; Two lane with paved shoulder: 13.78 km)	39.79
4	EPC - 04	Tiruchendur – Palayamkottai Road (SH 40-1)	50.59
5	EPC - 05	Melur – Tirupattur Road (SH 191)	30.49
6	EPC - 06	Thanjavur – Mannargudi Road (SH 63)	29.44
7	EPC - 07	Kumbakonam – Mannargudy Road (SH 66)	14.90

<b>S. No</b>	<b>EPC No.</b>	<b>Project Road</b>	<b>Total Length in km</b>
8	EPC - 08	Kumbakonam – Sirkazhi Road (SH 64)	36.78
9	EPC - 09	Mayiladuthurai – Thiruvarur Road (SH 23)	29.88
10	EPC - 10	Thuraiyur – Perambalur Road (SH 142)	30.06
11	EPC - 11	Virudhachalam – Ulundurpettai Road (SH 69)	22.86
12	EPC - 12	Cuddalore - Madapattu Junction Road (SH 9)	37.36
13	EPC - 13	Mohanur – Namakkal – Senthamangalam - Rasipuram Road (SH 95)	31.50
14	EPC - 14	Tiruchengode - Erode Road (SH 79) (Four lane with paved shoulder: 7 km; Two lane with paved shoulder: 4.15 km)	11.15
15	EPC - 15	Omalur to Tiruchengode via Sankakiri Road including Tiruchengode Bypass (SH 86) (Four lane with paved shoulder: 39.43 km; Two lane with paved shoulder: 12.28 km)	51.72

<b>S. No</b>	<b>EPC No.</b>	<b>Project Road</b>	<b>Total Length in km</b>
16	EPC - 16	Palayamkottai - Ambasamudram Road (SH 40-2)	21.40
		<b>Total</b>	<b>588.97</b>

#### **4.2.1 Project Cost**

The total cost of the project, including land acquisition, is Rs.6448 crore. The land acquisition cost of Rs.1574 crore is borne by the State Government. Funding of 80% of the total construction cost is through the Asian Development Bank loan assistance and the remaining 20% of the construction cost and other works including shifting of utilities are being funded by the State Government.

#### **4.2.2 Project Features**

Under this project, 22 Bypasses, 13 Major Bridges, 9 ROBs, 1 RUB, 2 Grade Separators, 1 Pedestrian underpass, 1 Limited use subway, 2 Vehicular Under Passes, 120 Minor Bridges,



1285 culverts have been taken up. As a road safety measure, adequate signages, gantry boards, streetlights and other road furniture are being installed. Incident monitoring cameras are being installed at Major junctions, accident zones and School and Hospital Junctions. In order to facilitate the passengers, drinking water and toilet facilities are also being provided at a few bus shelters.

### **4.2.3 Land Acquisition Works**

The total extent of private lands to be acquired for the project is 440 hectares in 348 villages. So far, 431 hectares of private lands have been acquired and the remaining extent is under award enquiry/ final award stages.

As per the Asian Development Bank's Social Safeguards Policy, for the resettlement of 41 families of Indigenous people affected due to land acquisition located in Melpakkam Village near Arakkonam Railway Station in Ranipet District, residential buildings, Anganvadi, community hall, temple, Over Head Water Tank,

pump room and cement concrete pavement with water supply facility are being constructed under this project.

#### **4.2.4 Progress of Construction Works**

Out of total 16 road development works, Thuraiyur-Perambalur road work of 30.06 km length has been completed and works are in progress in the remaining 15 roads of 558.91 km. Of the remaining 15 works, it is planned to complete 6 works in 2023 and 9 works in 2024.

As per Asian Development Bank regulations, construction supervision consultants have been appointed and projects are being executed effectively by ensuring quality.

#### **4.2.5 Expenditure in the Year 2022-23**

During 2022-23, an expenditure of Rs.1500.97 crore was incurred upto 20.03.2023.

### **4.3 CHENNAI PERIPHERAL RING ROAD**

The Chennai Peripheral Ring Road (CPRR) is being implemented to mitigate the traffic congestion in Chennai City and to provide connectivity for the south bound vehicles to reach the Ennore and Kattupalli Ports, and also to the neighbouring states, thereby enhancing commercial as well as industrial growth around Chennai city.

CPRR is proposed for a length of 132.87 km with six-lane dual carriageway and two-lane service roads on either sides, augmented with Intelligent Transport System (ITS) at an overall cost of Rs.15626 crore.

The primary beneficiaries of the project will be the general population using private and public vehicles. In addition, variety of businesses including commercial cargo logistics using the project road will also be benefitted substantially. The benefits will accrue from a safe, efficient, and reliable road network. Indirect benefits will include improved access to economic, social, and

life-enriching facilities and services. The project will enhance urban mobility within Chennai City by reducing congestion and minimizing the Green House Gas (GHG) emissions.

CPRR is split into 5 sections for administrative and execution convenience and is being taken up with the external assistance of the Multi-lateral and Bilateral funding agencies.

#### **4.3.1 Section I of CPRR**

Section I (25.40 km) of CPRR Project starts from Ennore port to Thatchur, with a link road to Chennai Outer Ring Road. The Government has accorded administrative sanction for the land acquisition of Section-I (Ennore Port-Thatchur) to an extent of 245.25 hectares at a cost of Rs.951 crore and land acquisition is nearing completion in line with the guidelines of the funding agency.

The Government has also sanctioned a sum of Rs.2673.42 crore for the implementation of Section I of this project through Tamil Nadu Road Development Company as executing

agency with the funding assistance for an amount of Rs.2473.70 crore from Japanese International Co-operation Agency (JICA). The LARR Implementation Consultant and the Construction Supervision Consultant have been appointed to monitor the Land Acquisition, Resettlement and Rehabilitation activities and civil works.

The civil work for a contract value of Rs.2122.10 crore is in progress and is scheduled to be completed by 2025.

#### **4.3.2 Section II & III of CPRR**

The section II of CPRR starts from Thatchur and ends at the starting point of Tiruvallur Bypass. Section III of CPRR starts from Tiruvallur Bypass and ends at Sriperumpudur. The total length of this section is 56.20 km.

The Government has accorded administrative sanction of Rs.1855.40 crore for the land acquisition of 313.93 hectares. About 238.05 hectares of land has been acquired and

the Land Acquisition of balance 75.88 hectares is in progress.

The Government has accorded administrative sanction of Rs.4899.00 crore for the implementation of Section II & III of this project through Tamil Nadu Road Infrastructure Development Corporation (TNRIDC) as executing agency. The Loan Agreement for a financial assistance of 478.07 million USD is likely to be signed with the AIIB (Asian Infrastructure Investment Bank) and OFID (OPEC Fund for International Development) shortly.

The LARR Implementation Consultant, LARR Monitoring Consultant, Project Management Consultant, Supervision Consultant have been appointed for effective implementation of the project.

The Civil Works in Section II have been divided into 2 EPC Packages (EPC-01 & EPC-02).

- **EPC-01:** The civil work for a contract value of Rs.820.59 crore is in

progress. It is scheduled to be completed by 2025.

- **EPC-02:** The civil work for a contract value of Rs.719.10 crore is in progress. It is scheduled to be completed by 2025.

The tenders for the civil works in Section III in 3 EPC Packages are to be invited.

#### **4.3.3 Section IV of CPRR**

Section IV of CPRR starts from Sriperumbudur and ends at Singaperumal Koil. The construction work for Section -IV has been already completed with state funds and is to be upgraded to CPRR standards. The length of this section is 23.80 km.

#### **4.3.4 Section V of CPRR**

Section V of CPRR starts from SingaperumalKoil and ends at Poonjeri near Mahabalipuram. The length of this section is 27.47 km. The Government has accorded

administrative sanction of Rs.747.92 crore for the land acquisition of 126.84 hectares of private land and land acquisition is in progress.

Preliminary Project Report has been sent to Department of Economic Affairs, Government of India and is under consideration for obtaining external assistance.

#### **4.3.5 *Expenditure in the Year 2022-23***

During 2022-23, an expenditure of Rs.550.00 crore was incurred upto 20.03.2023.





Hon'ble Chief Minister flagged off the services of 20 Ambulances procured under Tamil Nadu Road Sector Project - II for Road Safety Demonstration Corridors at Kanchipuram and Tiruvannamalai Districts on 14.04.2022

(4A)



Road safety Awareness Campaign Programme in Kanchipuram and Chengalpattu Districts - Inaugurated by Hon'ble Minister on 24.08.2022

(4B)



Road Safety Awareness Hand Book for School Children in Kanchipuram & Chengalpattu Districts - Released by Hon'ble Minister on 24.08.2022

(4C)

## 5. ROAD SAFETY

Accident-free travel on roads is one of the visions of the **Hon'ble Chief Minister of Tamil Nadu**. The State Government has taken several measures to reduce the occurrence of road accidents by enhancing the levels of road safety.

Road accidents occur due to various factors such as overspeed, careless driving, drunken driving, overtaking at acute curves, animal crossing and poor geometrics of the road. Reducing fatalities and injuries due to traffic accidents requires co-ordination of various departments like Transport, Home, Highways, Health and Education. Comprehensive approach on 5E's i.e. Engineering, Education, Enforcement, Emergency care and Empathy, as per guidance of International Road Federation, requires involvement of all stakeholders.

The Highways Department aims to provide quality, efficient and safe road infrastructure considering the exponential growth of vehicular population. Capacity building through Road

Safety Audit training and sensitizing public by conducting Road safety awareness programme will help in preventing road accidents.

## **5.1 ROAD SAFETY WING**

Road Safety wing in Highways Department was formed with the aim of improving the road safety by recommending short-term, mid-term and long-term measures and monitoring the road safety works. The wing works on minimizing the road accidents by suggesting improvements in Highway geometrics and other related activities like;

- Scientific method of accident data collections on i-RAD and its analysis.
- Coordinating with various stake holder departments and NGOs on the issues of Road Safety.
- Identifying Black spots and rectification.
- Identifying hot spot and remedial measures.

- Suggestion for improving the junctions.

The Road Safety Engineers of Highways Department are also conducting awareness programmes at School and college level to impart training on Road Safety. Road safety Engineers of Highways department are actively coordinating with the traffic police in the optimizing the signal timing thereby reducing traffic congestion leading to saving of time and to prevent accidents.

## **5.2 BLACK SPOTS**

Black spot is a stretch of Highway of about 500m in length in which either 5 road accidents (in all three years put together involving fatalities/grievous injuries) took place during last 3 calendar years or 10 fatalities (in all three years put together) took place during last 3 calendar years. Ministry of Road Transport and Highways (MoRTH), GOI identified 1208 locations as black spots in Tamil Nadu. The identified black spots are at various stages of rectification.

## **5.3 ROAD SAFETY AWARENESS**

### **5.3.1 *District Level Road Safety Awareness Meetings***

Road Safety awareness meetings are being conducted by the Hon'ble Minister for Public Works, Highways and Minor Ports for sensitizing stakeholders on the road safety. So far, road safety awareness meetings have been conducted in 11 districts viz. Namakkal, Chengalpattu, Nilgiris, Theni, Madurai, Thoothukudi, Sivagangai, Ramanathapuram, Erode, Coimbatore and Virudhunagar. In these meetings, all stake holders including representatives from vehicle owner associations and NGOs are made to actively participate. These meetings have been very useful in creating awareness among the road users.

### **5.3.2 *Road Safety Training***

As a component of "Accident-free Tamil Nadu" drive, training on 'Road Safety Engineering' was inaugurated by the Hon'ble Minister for Public Works, Highways & Minor Ports on 15.12.2021. So far, 475 Engineers in 13 batches have been trained. Training was

given on integrated Road Accident Data Management System (iRAD), Traffic calming measures, Application of Intelligent Transport System (ITS) in road Safety, work zone safety, Road Safety Audit etc. As an interdepartmental capacity building exercise on Road Safety, Highway Engineers are imparting training in Anna Administrative Staff College and Police department.

### **5.3.3 Road Safety Awareness Programme**

The Hon'ble Chief Minister of Tamil Nadu has released a booklet on 'Guide for Road Safety Awareness' on 22.08.2022 to create awareness about Road Safety. The Hon'ble Chief Minister of Tamil Nadu has also reviewed road safety aspects for reducing the accidents and fatalities with all stakeholder departments on 03.01.2023. Road Safety Engineers have been conducting awareness meetings in schools and colleges to sensitize students on road safety issues.

## **5.4 INNUIYIR KAPPOM THITTAM**

The **Hon'ble Chief Minister of Tamil Nadu** announced Seerana Saalaigal i.e Fatality Accident Incident Reduction (FAIR), under



**“Innuyir Kappom Thittam” (IKT)** during the meeting on Road Safety held on 18.11.2021. To implement FAIR, a **Special Task Force on Road safety (STF-RS)** was constituted on 15.3.2022 under the Chairmanship of Additional Director General of Police, State Crime Records Bureau and Chief Engineer (H), Construction and Maintenance wing is one of the members to identify short-term and long-term solutions for reducing road accidents and fatalities. The Task Force is also mandated to monitor implementation of short-term solutions by the District Collectors and other road owning agencies and to undertake preparatory work for formation of Tamil Nadu Road Safety Authority (TNRSA). The Special Task Force has identified 2095 hotspots and allotted an amount of Rs.43.48 crore to carry out short-term measures.

## **5.5 ACCOLADES ON ROAD SAFETY INITIATIVES**

The Hon'ble Union Minister for Road Transport and Highways Thiru. Nitin Gadkari has placed on record his appreciations in the House of Parliament for the Road Safety initiatives

taken by the Government of Tamil Nadu and requested other states to emulate the best practices followed in Tamil Nadu. The same was also reiterated by the Hon'ble Minister of state for Road Transport and Highways and Civil Aviation, General. Vijay Kumar Singh during the Manthan Conference, held at Bangalore on 9<sup>th</sup> September,2022. The Hon'ble Justice Abhay Manohar Sapre, Retd., Justice, Hon'ble Supreme Court and Chairman of Supreme court committee on Road Safety (SCCORS) had also appreciated the Road Safety initiatives of Government of Tamil Nadu.

## **5.6 FUND ALLOCATION**

For junction improvements and various protective measures on road safety, funds were allotted for the year 2021 – 2022 & 2022 – 2023 as follows:-

S. no	Description	2021 - 2022		2022 - 2023	
		No. of Works	Amount Rs.in Cr	No.of Works	Amount Rs.in Cr.
1.	CRIDP Works	403	200	532	191.37
2.	Road Safety component works	99	100	-	-

Out of which 439 nos of works completed at a cost of Rs.188.14 crore.

These works are being executed by the Construction and Maintenance Wing of the Highways Department. 121 nos of Road Safety works from 2019 -2020 to 2021-22 have also been sanctioned by MoRT&H to an amount of Rs.476.81 crore in National Highways, maintained by the State wing and most of the works have been completed and the remaining works are in advanced stages of completion.



Hon'ble Chief Minister released Road Safety Awareness Guide on 22.08.2022

(5A)



Road Safety Meeting in Virudhunagar District - Conducted by  
Hon'ble Minister for Public works, Highways and Minor Ports Department  
on 23.12.2022

(5B)



Road Safety Works at Avinashi-Tiruppur-Palladam-Pollachi-Cochin Road

## **6. QUALITY CONTROL, RESEARCH AND TRAINING**

### **6.1 QUALITY CONTROL**

Strict Quality control protocols are being followed in the construction of roads and bridges by conducting relevant tests as per IRC and MORT&H specifications. Quality control is exercised by conducting routine checks at every stage of work and carrying out rectification then and there. Concurrent checks result in considerable savings of time, energy and cost. It also improves the durability and serviceability, thereby offering a safe and comfortable ride to the road users.

In the pre-construction stage, quality control is achieved by way of testing the required materials by Highways Research Station (HRS) and its Regional Laboratories for ascertaining the strength of subgrade before laying pavement, design mix for concrete, bituminous and non-bituminous layers, testing steel for its strength, ensuring the load carrying

capacity of the piles by conducting initial and routine load tests.

During execution of the work, the Quality control Engineers conduct necessary field and laboratory tests such as test on aggregates/ bitumen/ cement, field density, thickness, mix temperature, binder content, slump and cube test for concrete to ensure quality of bituminous/ non-bituminous layers and concrete works.

9 Quality Control Divisions with 42 Sub Divisions of HRS are functioning in the field to ensure the quality of works in Construction & Maintenance wing, NABARD & Rural Roads wing and Metro wing. Further, 4 Quality Control Divisions with 13 Sub Divisions under National Highways wing and 5 Sub Divisions of Projects wing are functioning to achieve the quality as per standards in their wings. Quality control consultants are also engaged for the works executed in externally aided projects.



## **6.2 RESEARCH**

Research works are being undertaken for promoting innovative and cost effective technologies to improve the durability of pavements. Researches were earlier taken up under Part – II scheme. Now, these are being carried out under Tamil Nadu Innovative Initiatives (TANII) scheme and 9 Research studies have been carried out so far. Some of the studies are as follows;

- Bridge Instrumentation for Structural Health Monitoring System in Highways Department.
- Study on the performance of Jute fibre reinforced cold Bituminous mixes.

### **6.2.1 *Research on Innovative Materials***

Several innovative techniques have been studied and recommended to execution wings for adoption. Some of the recommendations are as follows;

- Partial replacement of natural coarse aggregate with Recycled Coarse

Aggregate (RCA) in concrete is used to minimize the environmental impact, energy consumption and CO<sub>2</sub> emission and depletion of natural aggregate resources.

- Properties of the bitumen are modified by adding optimum percentage of nano clay. The laboratory study shows that this mix gives lesser deformation and thereby reduces the surface defects and enhances the life of pavement resulting in less maintenance cost.
- Use of innovative materials like RBI-Grade 81 as soil stabilizer & Geotextile gives considerable advantages over conventional methods of pavement construction. These innovative materials reduce the pavement construction cost, improve the pavement performance, increase pavement life and minimize the maintenance cost. Further, adopting these technologies reduces the carbon

footprint and makes the construction of pavement eco-friendly.

Necessary steps are being taken to scale up the implementation of these innovations at field level.

### **6.2.2 *Innovative Techniques in Field***

- In Nilgiris district, a new technique viz soil nailing, hydro seeding and hill slope geogrid reinforcement have been adopted to prevent soil erosion and landslides on the steep slopes of Ooty - Kothagiri - Mettupalayam Road.
- The technology using Coir mat grass blanket fixed with steel 'U pins' supported by concrete blocks was adopted to control soil erosion and to protect the slope of the high embankment of Ariyalur Bypass, NH 226 Extn (New NH No:136).

### **6.2.3 *Indian Roads Congress***

- Director, Highways Research Station is a member of Accreditation of New

Materials & Techniques committee and Human Resource Development Committee (G – 2).

- In every IRC Annual Sessions, technical paper presentations are being made by the Engineers of Highways department. In the 81<sup>st</sup> Annual Session of Indian Roads Congress held at Lucknow during October -2022, 3 research papers were presented by the Engineers of the Highways Research Station.

### **6.3 TESTING FACILITIES**

Material testing is conducted at four laboratories in Chennai viz., Bitumen, Soil, Concrete and Traffic. In addition, eight Regional Laboratories at Villupuram, Trichy, Thanjavur, Madurai, Tirunelveli, Salem, Tirupur and Coimbatore also conduct testing of materials. The tests include Soil testing, Steel testing, Concrete Mix Design, Pile load test, Bituminous Job Mix Formula, Vehicle Axle Load Survey and Roughness Index test. During the financial year 2022-23, 23,400 tests have been conducted till

20.03.2023, resulting in realisation of revenue of Rs.19.28 crore.

Latest scientific equipments are being procured for Rs.3.95 crore through Chennai Kanyakumari Industrial Corridor Projects (CKICP) as a part of upgradation of Highways Research Station to International Standards.

#### **6.4 TECHNICAL GUIDANCE**

- Rehabilitation measures were suggested for the Cauvery Bridge at Pallipalayam on 12.05.2022.
- Methodology for improving the strength of existing soil (CBR) in Runway Basic Strips was recommended to Chennai airport.
- For Indian Space Research Organisation, Satish Dhawan Space Centre, remedial measures were recommended for the Sriharikota – Sullurpeta road to prevent submergence and erosion of road.

## **6.5 TRAINING**

### **6.5.1 *Training Centre***

Training Centre is organising various training programmes for enhancing the performance of Engineers and other officials of the Department. Training Centre has the following facilities:

- State-of-the-art Auditorium with 250 seating capacity.
- Classrooms 4 numbers with 40 seating capacity each.
- Mini conference hall.
- Computer Laboratory.
- Library.
- Hostel with 32 double-bedded rooms & 8 triple-bedded rooms.
- Gymnasium, Indoor & Outdoor games facilities.

### **6.5.2 Comprehensive Training Programme(CTP)**

A Comprehensive Training Programme to cover all Engineers and Staff of the department over a span of 5 years was inaugurated by the Hon'ble Minister of Highways & Minor Ports Department on 25.04.2022. During 2022-23, 577 Engineers and 27 Non – Technical officers have been trained so far on various topics. Also, 150 Junior Drafting Officers appointed in August 2022 have been given Induction cum Foundation Training. During all training programs, Yoga and Meditation classes are conducted in the early morning by eminent yoga teachers.

### **6.5.3 Other Training Activities**

Departmental training for 23 Deputy Collectors and 110 Section Officers of Secretariat has been imparted. Students from various Engineering colleges and Polytechnic colleges have attended training at laboratories of HRS. Necessary assistances are rendered to the students for doing project works in Highways subjects.

Highways officials are nominated to attend the training programmes arranged by Indian Academy of Highway Engineers (IAHE), New Delhi, Anna University and Anna Administrative Staff College (AASC), Chennai.

A team of officials from Highways Department will be undertaking an exposure visit to Australia under CKICP funding, which will give impetus for capacity building.





Andipatti - Jayamangalam Road, Theni District  
Road quality Inspected by Hon'ble Minister

(6A)

## **7. TAMIL NADU ROAD DEVELOPMENT COMPANY LTD**

**Tamil Nadu Road Development Company (TNRDC)**, formed in the year 1998, is a Joint Venture Company, registered under the Company Act with 50:50 shareholding of Tamil Nadu Industrial Development Corporation Limited (**TIDCO**) & TIDEL Park Ltd.

### **7.1 FUNCTIONS:**

TNRDC is primarily engaged in the activities of Concessionaire, Project Management Associate & Toll Management Services.

#### **7.1.1 Information Technology Expressway Ltd. (ITEL)**

ITEL is a subsidiary company of TNRDC. **Rajiv Gandhi Salai (I.T. Expressway)** from Madhya Kailash to Siruseri is being maintained as Toll Road by **M/s. ITEL**. Toll was collected at 5 Toll plazas in the above stretch. Of these, collection of toll user fee has been stopped in 4 places. At present, toll is being collected in Siruseri Only. This road, which is running through the I.T. Hub of Chennai City, is provided

with divided six lane main carriageway, service road on both sides and 15 nos of Foot over Bridges for the pedestrian movements.

### **7.1.2 Projects Executed**

- i. TNRDC was the concessionaire for the stretch of **East Coast Road (ECR)** from Akkarai to Puducherry as Toll Road. Now the stretch from Akkarai to Mamallapuram of East Coast Road is under the control of TNRDC. The stretch from Mamallapuram to Puducherry has been transferred to NHAI.
  
- ii. TNRDC is the Project Management Associate for **Chennai Outer Ring Road (CORR)**, a Green field project, which starts from Vandalur in NH 32 and ends at Tiruvortiyur-Ponneri-Pancheti Road, Minjur. This Project was taken up in two phases on DBFOT Annuity basis under Public Private Partnership mode and completed. Under Phase-I, a total length of 29.65 km from Vandalur on NH-32 to Nemilicheri on NH 716 was taken up at a cost of Rs.1081.40 crore. Under Phase-II, a total length of 30.50 km from Nemilicheri on NH 716 to Thiruvottriyur-

Ponneri-Pancheti Road on Minjur was taken up at a cost of Rs.1075.00 crore. From 19.01.2022 onwards, user fee is being collected. During this year, the Government is also contemplating monetization of Toll Revenue in CORR.

## **7.2 MAJOR PROJECTS TAKEN UP**

### **7.2.1 State Funded Projects**

#### **i. Construction of 'U' Shaped Flyovers at Indira Nagar Junction and Tidel Park Junction on Rajiv Gandhi Salai**

Development of comprehensive traffic infrastructure including two 'U' shaped Flyovers at Indira Nagar Junction and TIDEL Park Junction on Rajiv Gandhi Salai with an administrative sanction of Rs.108.13 crore has been taken up by TNRDC as Managing Associate to implement the project, and the works are in progress.

#### **ii. Bypasses to Kelambakkam and Thiruporur**

These two divided six-lane Bypasses are being formed by TNRDC in Old Mamallapuram Road. Works on Thiruporur Bypass (7.45 km)

and Kelambakkam Bypass (4.68 km) are at advanced stages of completion.

### **iii. Chennai Peripheral Ring Road (CPRR)**

TNRDC is the Managing Associate for Section I and Section V of CPRR. Section-I of this project is being carried out with the funding assistance from Japan International Co-operation Agency (JICA). This section starts from Ennore Port and connects with NH-16 at Thatchur near Ponneri. It is also proposed to form a link road to Chennai Outer Ring Road. The total length of Section-I is 25.38 km. The construction work has commenced from 27.01.2022 with a project completion period of 3 years.

Section - V of CPRR starts from Singaperumal kovil and ends at Poonjeri near Mamallapuram. It connects NH-32 with NH-332 A (ECR). The total length of this proposed section is 26.3 km. Administrative Sanction for Land Acquisition has been accorded by the Government for Rs.747.92 crore and Land Acquisition works are in progress.

### **7.3 EXPENDITURE IN THE YEAR 2022-23**

During 2022-23, an expenditure of Rs.1155.64 crore was incurred upto 20.03.2023.

## **8. TAMIL NADU ROAD INFRASTRUCTURE DEVELOPMENT CORPORATION**

Tamil Nadu Road Infrastructure Development Corporation (TNRIDC) was formed in the year 2005. The unit is solely owned by the Government of Tamil Nadu and is a non-profitable organization implementing road infrastructure projects.

### **8.1 PROJECTS IMPLEMENTED BY TNRIDC**

#### **8.1.1 *Oragadam Industrial Corridor Project***

The work of 'Improvements from Four laning to Six laning of Vandalur – Wallajabad Road from km 47/0 – 63/8 has been taken up at a cost of Rs.180.09 Crore. The work is nearing completion. As a part of Phase V of Oragadam Industrial Corridor Project, construction of Grade Separator at Km 37/6 – 38/4 of Vandalur Wallajabad road has been taken up at a cost of Rs.26.65 crore and the work is in progress.

### **8.1.2 Four Laning Of Madurai Ring Road**

Widening of Madurai Ring Road from two lane to four lane from Km 0/0 – 27/2 was completed under BOT (Toll basis). The road has been put into public use under commercial operation. Due to expansion of Madurai Airport, alternate road to Madurai Ring Road for a length of 8.00 km is to be formed. For which, Rs.40.50 crore have been sanctioned towards Land Acquisition, which is in progress.

### **8.1.3 Chennai Peripheral Ring Road**

TNRIDC is the Project Implementation Unit for Section II, III & IV of Chennai Peripheral Ring Road Project.

- Section II:
- Length 26.10 km
  - From Thatchur on NH16 to starting point of Thiruvallur By Pass. Work is in progress.

- Section III:
- Length 30.10 km
  - From starting of Thiruvallur By Pass to Sriperumbudur on NH 48. Land Acquisition is in progress.



- Section IV:
- Length 23.80 km
  - From Sriperumbudur on NH48 to Singaperumalkoil on NH 32.
  - To be upgraded as access-controlled road, in line with CPRR.

#### **8.1.4 Construction of ROB in lieu of LC 47 in between Guduvancherry and Singaperumalkoil Railway Stations.**

This ROB will act as connectivity between Section IV & Section V of CPRR and the work is in progress.

## **9. TAMIL NADU MARITIME BOARD**

Tamil Nadu Maritime Board (TNMB) was established under the Tamil Nadu Maritime Board Act 1995 (Act 4 of 1996) on 18.03.1997 for the purpose of administration, management and control of Minor Ports in the State of Tamil Nadu. The main objectives and functions of TNMB are detailed below:-

- To provide port facilities to promote export-oriented industries and port-based industries along the coastal districts of Tamil Nadu.
- To cater to the needs of the increasing traffic of Southern States by providing efficient facilities and services to support domestic and International Trade.
- To create sufficient port related infrastructure facilities.
- To promote port-based Thermal Power plants by providing exclusive port

facilities to import different type of fuels.

- To facilitate optimum utilization of port infrastructure developed in the State.
- To increase the share of Tamil Nadu State in the Export and Import Sector.

### **9.1 COASTLINE AND PORTS**

Tamil Nadu State has the second longest coastline of 1076 kms in India. The coastline has three Major Ports namely

- 1) Chennai Port
- 2) Kamarajar Port (Ennore)
- 3) V.O.Chidambaranar Port (Thoothukudi)

The following are the declared / notified Minor ports in Tamil Nadu:-

<b>Government Ports</b>	<b>Captive ports</b>
1) Cuddalore	1) Kattupalli
2) Nagapattinam	2) Ennore Minor port
3) Pamban	3) Panaiyur
4) Rameswaram	4) Thiruchopuram
5) Kanyakumari	5) Silambingalam
6) Colachel	6) Parangipettai

Government Ports	Captive ports
	7) PY-03 Oil Field 8) Thirukkadaiyur 9) Thirukkuvalai 10) Udangudi 11) Koodankulam

The Major Ports are controlled by Government of India and the Minor Ports are under the control of Government of Tamil Nadu.

## **9.2 MINOR PORTS DEVELOPMENT POLICY**

Minor Ports along the coast of Tamil Nadu are developed as per the Minor Ports Development Policy of the Government of Tamil Nadu. The Policy encourages Private Participation, Flexible Approach, Institutional Co-ordination and Backup. Tamil Nadu Maritime Board is a statutory body and is functioning with enough autonomy and operational flexibility for rapid development of the Minor Ports in the State.

The thrust of the Policy is to encourage effective private participation and speedy implementation of the projects.

## **9.3 ACTIVITIES OF OPERATIONAL MINOR PORTS**

### **9.3.1 Government Ports**

**Cuddalore Port:** An Open Sea Anchorage port has been developed with own funds of Tamil Nadu Maritime Board and with the financial assistance of Government of India (Sagarmala Scheme), into a deep water port for small / medium size ships. Necessary steps are being taken for operationalizing the Port with Private Port Operator to market and handle commercial cargo.

**Nagapattinam Port:** An Open Sea anchorage port for handling import of Edible Oil through barges.

**Pamban Port:** Pilotage services are provided in the Pamban channel, which enable East-West sea-borne connectivity for smaller vessels / crafts.

**Rameswaram Port:** A short trip passenger ferry is operating near Agnitheertham area. Resumption of Passenger ferry service between Rameswaram (India) and Thalaimannar

(Srilanka) is being explored by creating additional infrastructure facilities.

**Kanyakumari Port:** A passenger ferry port providing ferry services to Vivekananda Rock Memorial and Ayyan Thiruvalluvar Statue, operated by Poompuhar Shipping Corporation Limited. Extension of Berthing Facilities at Vivekananda Rock Memorial and Pedestrian Bridge connecting Vivekananda Rock and Ayyan Thiruvalluvar Statue have been taken up.

### **9.3.2 Captive Ports / Terminals:**

#### **Kattupalli Port:**

Shipbuilding, Ship repairs and Modular Fabrication works are carried out by Larsen & Toubro Limited. Export / Import of cargoes are handled by Marine Infrastructure Developer Private Limited.

#### **Ennore Minor Port:**

For imports of Liquid Ammonia through Multiple Buoy Mooring system.

**Chemplast Marine Terminal within Cuddalore Port limit:**

For import of Vinyl Chloride Monomer from Ships through an Island Jetty facility.

**Thirukkadaiyur Port:**

For imports of Naphtha through Single Point Mooring for 330 MW Power Plant, as required by Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO).

**Koodankulam Port:**

For import of Machinery/ Over Dimensional Cargo through Roll on – Roll off Jetty for Kudankulam Nuclear Power Project Units 3, 4,5 and 6.

The other declared Minor ports are under various stages of obtaining statutory clearances and development.

## 9.4 COMMODITIES HANDLED IN MINOR PORTS

Sl. No	Port		Export	Import
1.	Cuddalore		-	Vinyl Chloride Monomer
2.	Nagapattinam		-	Edible Oil
3.	Kattupalli Port		Containers, General Cargo & Machineries	Containers & General cargo
4.	Ennore Minor Port		-	Liquid Ammonia
5.	Thirukkadaiyur		-	Natural Gas

## 9.5 DEVELOPMENT INITIATIVES OF THE BOARD

### 9.5.1 *Development of Cuddalore port*

Cuddalore Port is an intermediates anchorage port. The Port is being developed as Deep water, Direct Berthing, All weather port to handle small & medium size vessels, coastal vessels etc., with own funds of Tamil Nadu Maritime Board and also with the financial assistance from Ministry of Ports, Shipping &



Waterways, New Delhi under Sagarmala Scheme.

In order to operationalize the Cuddalore Port after a gap of 3 decades, selection process of a Port operator for marketing, operation and maintenance through competitive bidding is on. Bids have been invited.

### **9.5.2 Kanyakumari Port:**

M/s.Poompuhar Shipping Corporation Limited is operating ferry service between Shore and Vivekananda Rock Memorial/Ayyan Thiruvalluvar Statue. Tamil Nadu Maritime Board is supervising the ferry service.

#### **(i) Extension of Jetty at Vivekananda Rock Memorial at Kanyakumari:-**

Extension of Jetty at Vivekananda Rock Memorial for berthing 3 ferries simultaneously is taken up under Sagarmala Programme with 50% financial assistance from Government of India to attract more tourists / passengers at a cost of Rs.20 crore. Public Works Department is carrying out the construction works and it is expected to be completed by January 2024.

**(ii) Pedestrian Marine Bridge connecting Vivekananda Rock Memorial and Ayyan Thiruvalluvar Statue Rock:**

An Iconic Modern Pedestrian Marine Bridge connecting Vivekananda Rock Memorial and Ayyan Thiruvalluvar Statue at a Project Cost of Rs.37 crore has been taken up under Sagarmala Scheme with 50% financial assistance from Government of India. Highways Department has been entrusted to execute the work. Preliminary works have commenced, and completion of work is expected by January 2024.

**9.5.3 *Udangudi Port:***

This port was declared in the year 2010 for establishing an open sea jetty (length – 8 km) to receive coal for 1320 MW Udangudi Super Critical Thermal Power Project. Tamil Nadu Generation and Distribution Corporation (TANGEDCO) has commenced construction of port infrastructure (trestle jetty) works in June, 2018 and about 83% of physical works have been completed. All the works are expected to be completed by December 2023.

#### **9.5.4 *Floating Jetties at Various Locations:***

Tamil Nadu Maritime Board has identified suitable locations in Rameswaram, Kanyakumari & Cuddalore for erection of Floating Jetties & for operation of passenger ferries in and around the coast, with the assistance of Indian Institute of Technology (IIT) Madras. Based on the Detailed Project Reports, Government of India has approved the proposal under Sagarmala Scheme and assured 100% financial assistance of Rs.26.34 crore.

#### **9.5.5 *Promotion of Passenger Ferry Service and Sea Water Sports***

A Technical Feasibility & Detailed Project Report is under preparation for identifying the potential sites and for exploring the methodology of commencing safe short distance passenger ferry service and sea water sports along the 1076 km long coastline.

### **9.6 TAMIL NADU MARITIME ACADEMY**

The Tamil Nadu Maritime Academy, functioning at Thoothukudi, is under the control

of Tamil Nadu Maritime Board. The Academy is conducting pre-sea General Purpose (GP) rating residential course of 6 months duration with 40 trainees per batch. 1520 students have been trained so far. The 39<sup>th</sup> batch of GP rating course has commenced from January 2023.

The Academy also provides training to candidates on the following STCW-2010 courses.

- (i) Personal Survival Techniques
- (ii) Elementary First Aid
- (iii) Personal Safety and Social Responsibility
- (iv) Oil and Chemical Tanker Cargo Operations
- (v) Fire Prevention and Fire Fighting
- (vi) Security Training for Seafarers

The above courses are approved by Directorate General of Shipping, Government of India. On completion of the courses, the candidates are eligible to get employment in Indian and Foreign flag vessels. It is planned to upgrade infrastructure facilities at Tamil Nadu Maritime Academy

## **9.7 CARGO HANDLED AND REVENUE OF THE BOARD FOR 2022-2023**

90,45,296 MT of cargo has been handled through the Minor Ports and Tamil Nadu Maritime Board earned a gross revenue of about Rs.55.95 crore in FY 2022-2023 (up to February 2023).

## **10. POOMPUHAR SHIPPING CORPORATION LIMITED**

Poompuhar Shipping Corporation Limited (PSCL) is a Government of Tamil Nadu owned undertaking. It was established under the Companies Act, 1956 on 11.04.1974. The main objective of the PSCL is to transport coal for TANGEDCO, for generation of electricity. Apart from this, PSCL also runs boats to ferry passengers/tourists in Kanyakumari.

PSCL is governed by the Board of Directors comprising Directors including Chairman and Managing Director. At present, there is only one independent Director in the Board. The present employee strength is 48.

### **10.1 CORE ACTIVITIES**

The core activities of the corporation are;

- (1) Transportation of thermal coal along the East Coast of India.

- (2) Ferrying passengers from the shore of Kanniyakumari to Vivekananda Rock Memorial and Ayyan Thiruvalluvar statue.

## **10.2 COAL MOVEMENT FOR NTECL**

Presently, the Corporation is transporting the entire domestic coal from the load ports of Paradip and Dhamra to Kamarajar Port, Ennore for NTECL (Tamil Nadu Energy Company Ltd), which is a joint venture of the TANGEDCO and National Thermal Power Corporation (NTPC). NTECL runs 3 thermal power stations with 500 MW each at Vallur, Chennai.

## **10.3 COAL TRANSPORT AND PERFORMANCE**

The quantity of coal moved to Tamil Nadu Energy Company Limited (NTECL) varies depending on the allocation of coal for the generation of electricity. Based on the need and necessity, PSCL chartered vessels for the year 2022-23 for transportation of coal for NTECL.

The physical performance of the corporation for the two financial year is given below:

## Physical performance (in lakh MT)

Year	Quantity of coal received at load ports	Quantity transported
2021-2022	62.86	58.74
2022-2023	77.43	72.17

### 10.4 SERVICE CHARGE

The transportation of coal for NTECL is undertaken with service charges of 5% on charter hire charges of the vessels chartered for their operations.

### 10.5 KANNIYAKUMARI FERRY SERVICE

The Corporation is engaged in ferrying tourists from the Kanniyakumari shore to Vivekananda Rock Memorial and the Ayyan Thiruvalluvar Statue. Presently, three ferries namely M.L. Guhan, M.L. Pothigai and M.L. Vivekananda with a seating capacity of 150 each are being operated since 11.08.1984.



## **Physical and Financial Performance of Kanniyakumari ferry service**

<b>Year</b>	<b>No. of tourists (in Lakh)</b>	<b>(Rs. In Lakh)</b>	
		<b>Gross earnings</b>	<b>Profit</b>
2020- 2021	3.01	158.01	(-)360.67
2021- 2022	5.47	265.64	(-)144.80
2022- 2023	21.24	1247.00	200.00

### **10.6 FINANCIAL PERFORMANCE OF THE CORPORATION**

Coal transporting business for TANGEDCO/NTECL suffered set back due to COVID -19 lockdowns. Ferrying Service revenue was also adversely affected as service had to be stopped at the time of COVID -19 lockdown as per Government order.

The overall financial performance of the corporation during the last three financial years is as follows:

### **Financial Performance (Rs in lakh)**

<b>Year</b>	<b>Turn Over</b>	<b>Net operating profit</b>	<b>Dividend declared</b>
2020-2021	26362.96	-178.86	---
2021-2022	29226.38	68.47	20.54
2022-2023*	37000.00	300.00	---

**\* Provisional**

### **10.7 PLAN FOR 2023-24**

The Corporation proposes to transport 73.00 Lakh Metric Tonne of coal through chartered vessels for NTECL, during the year 2023-24

## **11. OTHER INITIATIVES**

The department has taken many initiatives to augment capacity of road infrastructure, which is essential for propelling economic growth. In order to expedite execution of projects, several initiatives in terms of strengthening institutional arrangements have been taken. Some of the initiatives are listed below:-

### **11.1 MAJOR PROJECTS IN PIPELINE**

#### **i. Elevated Corridor from Teynampet to Saidapet.**

Construction of elevated corridor at the estimated cost of Rs.621 crore from Teynampet to Saidapet will be taken up. Constructing elevated corridor on road with underground tunnels of Chennai Metro Rail Project will be a challenging task for the department. All possible measures to ensure safety of underground tunnels have to be taken while executing this project.

**ii. Elevated corridor from Chennai Port to Maduravoyal.**

MOU has been signed by all stakeholders and Bids have been invited by NHAI 4 Packages. State Government has extended all possible support to ensure completion of project at fast pace.

**iii. Upgradation of the East Coast Road from Chennai to Kanyakumari to four lane.**

- From Chennai to Mamallapuram & Nagapattinam to Tuticorin DPR work is in progress- National Highways Authority of India (NHAI)
- From Mamallapuram to Mugaiyur & Puduchery to Nagapattinam 4 laning work is in progress – NHAI
- From Mugaiyur to Puduchery 4 laning work to be started – NHAI
- Tuticorin - Kanyakumari - NH 32 – Preparation of DPR is in progress & Land Acquisition estimate sent to

Ministry for approval- State National Highways wing

**iv. Upgradation of road from Chennai to Kanyakumari via Trichy, Madurai from four lane to six lane.**

DPR for widening to six/eight lane from Chengalpattu to Tindivanam is being prepared by NHA, for which Alignment has been in-principally approved by GoTN.

**v. Formation of Sea Bridge from Chennai Port to Manali – Thiruvottriyur junction to decongest the traffic.**

DPR preparation has been taken up by National Highways Authority of India.

**vi. Four laning of Coimbatore – Sathyamangalam and 2 laning with / without paved shoulder from Sathyamanglam to TN/Karnataka Border Section of Old NH-209.**

The preparation of DPR is in progress. Land Acquisition estimate sent to Ministry for approval.

**vii. 4-laning of Ramanathapuram - Rameswaram - Dhanushkodi section of NH 49.**

The preparation of DPR for the work including construction of Pamban Bridge is in progress. Land Acquisition estimate for Ramanathapuram – Mandapam has been sent to Ministry of Road Transport and Highways for approval.

**11.2 INITIATIVES TO EXPEDITE EXECUTION OF PROJECTS**

The Government of Tamil Nadu has taken major initiatives in the last two years to ensure timely completion of the projects. Some of the notable initiatives are as follows:-

- **Special Land Acquisition and Management Units**

Five special Land Acquisition and Management Units have been formed to expedite the land acquisition process as many projects were badly delayed in the past for want of land. After formation of these dedicated units, many projects have been either completed or are in progress.

- **Governing Committee for Highways Research Station**

A Governing Committee has been constituted on 28.03.2022 under the chairmanship of **Hon'ble Minister for Public Works, Highways and Minor Ports** to enhance the functional efficiency and autonomy of the Highways Research station in the research and training activities.

- **Internal Audit System**

The Government for the first time, introduced Internal Audit Inspection System for the verification of works and related documents, during the month of May every year vide G.O(D)No.69 Highways and Minor Ports (HK2) Department, Dated: 29.04.2022.

- **Creation of Revolving Fund**

Revolving fund of Rs.20 crore has been created for sanctioning of 'Preparation of Detailed Project Report (DPR)' and a committee has been constituted vide G.O.(Ms)No.174 Highways and Minor Ports(HN2) Department, Dated: 27.08.2022 to sanction the preparation

of Detailed Project Report (DPR). This will help in preparation of shelf of feasible projects.

- **High Level Dispute Resolution Committee**

A High-Level Dispute Resolution committee with guidelines for dispute resolution has been created vide G.O. (Ms)No.17 Highways and Minor Ports(HN2) Department, Dated: 06.03.2023 by the Government to expedite resolution of the contractual disputes that arise in execution of the contracts. This will ensure amicable settlement and speedy disposal of pending /new disputes.

- **High Power Committee**

To ensure timely completion of the projects, a High Power committee under the chairmanship of Chief secretary to Government has been constituted vide G.O.(Ms) No.232 Highways and Minor Ports(HN2) Department dated:19.12.2022 with powers and procedures to sort out the issues related to land acquisition, transfer of lands, shifting of utilities and structures,



rehabilitation of project affected people(PAP),  
inter departmental issues , statutory clearances.



Two - tier elevated corridor from Chennai port to Maduravoyal-  
Memorandum of Understanding signed in the presence of  
Hon'ble Chief Minister on 16.05.2022

## 12. BUDGETARY ALLOCATION

The Highways and Minor Ports Department is striving hard to increase capacity, connectivity and efficiency of road networks. It aims at maximizing satisfaction of road users by providing smooth and safe riding surface.

During 2022-23, Rs.15960.42 crore had been allotted for Plan works. Out of this, expenditure of Rs.12371.51 crore has been incurred upto 20.03.2023.

The budgetary allocations for the year 2023-24 are as follows;

<b>Sl.No</b>	<b>SCHEMES/PROJECTS</b>	<b>Budget Estimate 2023-24 (Rs.in Crore)</b>
<b>(A)</b>	<b>Capital Head</b>	
<b>1</b>	<b>National Highways</b>	
	Revamped Central Road Fund	250.00

<b>Sl.No</b>	<b>SCHEMES/PROJECTS</b>	<b>Budget Estimate 2023-24 (Rs.in Crore)</b>
<b>2</b>	<b>Construction and Maintenance</b>	
	Comprehensive Road Infrastructure Development Programme	7355.97
	Road Safety	50.00
	Permanent Flood Restoration	45.00
	By-Pass formation and Land Acquisition	229.03
	Other works	250.51
	Tamil Nadu Road Infrastructure Development Corporation	63.14
	Tamil Nadu Road Development Company	441.03
	Chennai Peripheral Ring Road	1847.27
	Chennai Kanyakumari Industrial Corridor Project	1500.00
<b>3</b>	<b>Projects</b>	
	High Level Bridges/River Bridges/By-Pass Works	185.62
	ROBs/Elevated Highways	1265.49
	Other Works	0.81
<b>4</b>	<b>TNRSP-II</b>	645.00

<b>Sl.No</b>	<b>SCHEMES/PROJECTS</b>	<b>Budget Estimate 2023-24 (Rs.in Crore)</b>
<b>5</b>	<b>NABARD &amp; Rural Roads</b>	
	Upgradation to ODR Standard	1707.79
	High Level Bridges/River Bridges under NABARD Loan Assistance Scheme	600.56
	High Level Bridges/River Bridges under State Fund/ By-Pass Works	52.31
<b>6</b>	<b>Chennai Metropolitan Development Plan works</b>	501.41
	<b>Others</b>	
	Investigation /Estimation of Project work under Roads and Bridges	37.59
	Revolving Fund for preparation of DPR	20.00
	Inter Account Transfers	386.95
	<b>Capital Head Total</b>	<b>17435.47</b>
<b>(B)</b>	<b>Revenue Head</b>	<b>2028.88</b>
	<b>Total</b>	<b>19464.35</b>

A safe and sound road infrastructure will enable balanced socio-economic growth and expeditious transport of passengers and goods within the State. Hence, the Government of Tamil Nadu attaches high priority to road infrastructure projects

**E.V.Velu**

**Minister for Public Works,  
Highways and Minor Ports  
Department**

