

# HIGHWAYS AND MINOR PORTS DEPARTMENT

**Policy Note** 

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**Demand No.21** 

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#### 1. INTRODUCTION

Road Infrastructure is the key enabler in facilitating development of the State. Safe, reliable and efficient road infrastructure for transportation of goods and commodities is an pre-requisite for economic essential growth. Road networks, apart from triggering economic growth, significantly contribute to inclusive social development. Vital sectors, particularly Agriculture, Industry and Tourism predominantly depend on the road network for healthy growth. Standard of living, growth indices, overall development of the State - all stand a testimony to the keen interest evinced in developing road infrastructure by the Government.

Tamil Nadu boasts the second longest coastline in the Country with a length of 1076 km. With 3 major ports and 17 minor ports, the State has the potential to evolve as a hub for trade,

both in the domestic and international arena. There is a huge potential to promote the export and port-based industrial sectors.

#### 1.1 HIGHWAYS AND MINOR PORTS

The department caters to the demand of road network based on the increasing traffic intensity. The objectives are to provide resilient, safe, reliable and efficient road infrastructure. The core activity is to provide all-weather well-connected and robust roads and bridges throughout the State. Upgradation of roads based on traffic intensity, bridging across water bodies, Road Over Bridges / Road Under Bridges (ROB/RUBs) across separators level crossings, arade Elevated corridors in congested locations in towns and cities, ring roads, bypasses around towns and cities, maintaining the existing road network to better service conditions are the primary mandates given to the department. These apart, safety and providing green highways, road

capacity augmentation of human resources are the key focus areas of the department.

Based on the connectivity, traffic intensity, places of importance, roads are classified into different categories. National Highways and Highways normally connect State State headquarters, District headquarters, cities, major tourist places, industrial hubs etc., Major District Roads (MDRs) and Other District Roads (ODRs) normally provide connectivity to marketing centres, production centres, Taluk or Block headquarters etc.,

The different categories of roads within the state are as follows;

Class	Length in km.	
National	State National Highways Wing	1677
Highways (NH)	National Highway Authority of India 5128 (NHAI)	
	Sub-Total	6805
State High	12349	
Major Distr	12034	
Other Distr	42833	
	67216	
	74021	

State Highways (SH), Major District Roads (MDR) and Other District Roads (ODR) of 67216 km length are under the control of the State Government. National Highways (NH) of 6805 km are being maintained by the Ministry of Road Transport and Highways (MoRTH), Government of India. As the traffic flow increases, roads are upgraded to the next higher category with the provision of additional lanes, if required. The details of roads, lane configuration-wise under different categories, are as follows;

Category	Single Lane	Intermediate lane	Double Lane	Two Lane with Paved Shoulder	Four Lane	Six Lane	Eight Lane	Total
			(Le	ngth in k	m.)			
National Highways (NH)	-	-	1282	2383	2735	384	21	6805
State Highways (SH)	37	315	6810	3124	1804	259	-	12349
Major District Roads (MDR)	679	4880	5939	452	76	8	-	12034
Other District Roads (ODR)	33541	7606	1569	96	17	4	-	42833
Total	34257	12801	15600	6055	4632	655	21	74021

The details of structures maintained by Highways department are as follows;

SI. No.	Types of Structures	Nos.	
1	Culverts	1,33,949	
2	Major Bridges and Minor Bridges*	9,183	
3	Grade Separators	76	
4	ROBs at Railway level crossing	150	
5	RUBs at Railway level crossing	70	
6	Pedestrian Sub Ways/ Limited Use Subways	15	
	Total	1,43,443	

<sup>\*</sup> Linear waterway of minor bridges is between 6 and 60m, whereas for major bridges it is more than 60m.

Three major ports are under the control of the Government of India. 17 Minor Ports, which are mostly captive ports are under the control of the Government of Tamil Nadu.

# 1.2 SUSTAINABLE DEVELOPMENT GOALS (SDGs)

United Nations during the summit held in 2015 set the agenda with goals to better peoples' lives, promote prosperity and well-being of all the people, set-up 17 Sustainable Development Goals (SDGs) to be achieved by the year 2030. The State-specific indicators have been assigned for all sectors to monitor the State level performance related to SDGs. The specific indicators related to the following goals have been assigned to the department.

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

The specific objective related to this goal is to reduce the number of deaths and injuries due to road crashes. The reduction in crashes is achieved through integrated and comprehensive action-plan by key stakeholders, viz., Enforcement, Engineering, Emergency Care, Transport and Education agencies (awareness related to road rules).

Safe Engineering practices at all stages of a project, ie., planning, design, construction, maintenance enhance safety resulting reduction in road crashes. With this background, special focus is bestowed on preventing road crashes through better Engineering of road infrastructure. Identification of Black-spots and improving them continually through temporary and permanent measures, curve improvements, junction design to proper standards, Road Safety Audit, awareness programs, coordinated efforts with other stakeholder departments, institutional set-up such as an exclusive Road Safety Wing (RSW) in the department - are some of the major initiatives aimed at minimising the road crashes and thereby reducing loss of lives.

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 objective of this goal is to develop better infrastructure to ensure the social and economic equitability and prosperity of the Nation. This department develops the road infrastructure for enhancing connectivity and capacity through various schemes. The performance of the above indicator is as follows;

		Year			
SI. No	Indicators	2015 (Base Year)	2022	2023	
1	9.1.1b - Length of SH road network (km)	12,093	12,291	12,349	
2	9.1.1b.1 - Length of 4 lane to SH (Proportion in %)	-	13.96	16.70	
3	9.1.1c - Length of MDR (km)	11,617	12,034	12,034	
4	9.1.1c.1 - Length of Two lane to MDR (%)	27.23	48.80	53.81	
5	9.1.1d – Length of ODR (km)	33,756	42,057	42,833	
6	9.1.1d.1 - Length of Two lane to ODR (%)	2.51	3.62	3.94	
7	9.1.1d.2 - Length of Single Lane to ODR (%)	88.01	79.67	78.30	

Capacity augmentation of roads through upgradation in category is a continued effort by the department.

#### 2. ORGANIZATIONAL STRUCTURE

Tamil Nadu is the only State in the Country with an exclusive Department for Highways infrastructure, since 1946. Prior to this it remained under the folds of the Public Works Department. The post of Secretary to Government for Highways Department was created in 1996. Minor ports were later brought under the control of the department and was renamed as Highways and Minor Ports department in the year 2008.

The department completed 75 years of its functioning in the year 2022 and it celebrated its Platinum Jubilee in the presence of Hon'ble Chief Minister. The department has many achievements and laurels to its credit. Road network of various categories, to a length of 67216 km, spread across the entire length and breadth of the State, is maintained by the department.

The normal phases of maintaining road infrastructure are planning, design, construction, quality control and maintenance. Road safety and greenery are also important elements of road infrastructure. Based on the traffic intensity and local conditions, roads, bridges, ROB/RUBs, grade separators, elevated corridors, bypasses, ring roads, vehicular under passes (VUPs), pedestrian under passes, foot-over bridges (FOBs) etc., are constructed either in isolation or combination. There are several wings / organisations, which are involved in the construction and maintenance of the above.

The organisational structure and functions of the department are as follows;

#### **Highways and Minor Ports Department**

#### Wings



- The Director General
- Construction and Maintenance
- National Highways
- NABARD and Rural Roads
- Projects
- Metro
- Highways Research
   Station
- Planning, Designs and Investigation
- Tamil Nadu Road Sector Project-II
- Chennai Kanniyakumari Industrial Corridor Project / Chennai Peripheral Ring Road

# Companies / Corporations/ Boards



- Tamil Nadu Road
   Development
   Company
- Tamil Nadu Road Infrastructure Development Corporation
- Tamil Nadu Maritime
   Board
- Poompuhar Shipping Corporation Limited

#### 2.1 FUNCTIONS

#### 2.1.1 Office of the Director General

The Director General co-ordinates the activities of all the wings of the department. The Director General also heads all technical committees. The functions of the wing are;

- Administration.
- Inter & Intra Departmental coordination.
- Follow-up and monitoring of appeals, complaints related to service matters.
- Monitoring of service matters related court cases.
- Monitoring IT initiatives such as maintenance of department's websites,
   PMIS (Project Monitoring Information

System) and other application tools for monitoring & maintenance.

- Works entrusted by the Government.
- Coordinating activities of the following technical committees, as a permanent member.

#### **Board of Engineers (BoE)**

Apex technical body for taking policy decisions on technical and other important issues, BoE, headed by the Director General, comprises all Chief Engineers and Director, Highways Research Station (HRS) as its members.

#### **Commissionerate of Tenders (CoT)**

With the Director General as its Chairman, the CoT comprising - the Secretary to Govt., Finance department or his representative, the Chief Engineer, Construction and Maintenance, the Chief Engineer, NABARD and Rural Roads and the Chief Engineer of work concerned, offers recommendations on tender acceptance procedures.

# 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). The committee scrutinizes the deviations involved in the works requiring RAS and recommends the same to the Government.

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

Expert technical opinion on project proposals is offered by this committee. The Director General, the Director, HRS and all the Chief Engineers are its members.

During the year 2023-24, 32 Assistant Engineers, 233 Junior Draughting Officers, 66 Junior Assistants, 6 Steno Typist Grade-III and 49 Typists have been recruited through Tamil Nadu Public Service Commission and 5 Junior Assistants and 9 Office Assistants have been appointed on Compassionate Grounds.

Led by the Director General, the wing comprises 3 Joint Directors and Chief Officer (Information Technology) in the cadre of Divisional Engineer.

#### 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 bypasses and major structures.
- improvements of stretches in urban areas.
- Construction of Elevated Corridors / Grade Separators.
- Construction of High-Level Bridges (HLB).

The wing is headed by a Chief Engineer, supported by 9 Superintending Engineers, 56 Divisional Engineers (including 2 Deputy Chief Engineers and 9 Deputy Superintending Engineers).

#### 2.1.3 National Highways Wing

- Upgradation of National Highways including widening and strengthening.
- Road safety works.
- Formation of bypasses.
- Construction of HLBs, fly-overs, VUPs, ROB/RUBs.
- Maintenance through Short-term
   Maintenance Contract (STMC),
   Performance Based Maintenance
   Contract (PBMC), Periodical Renewal.
- Flood damage repair works.

The wing is headed by a Chief Engineer, supported by 5 Superintending Engineers (including 1 Superintending Engineer for Road Safety and Procurement) and 22 Divisional Engineers (including 4 Quality control Divisional Engineers, 4 Deputy Superintending Engineers, 2 Deputy Chief Engineers).

#### 2.1.4 NABARD and Rural Roads Wing

- Upgradation of Panchayat Union roads and Panchayat roads to Other District Roads (ODR) standards with State fund and NABARD loan assistance.
- Construction of river bridges with loan assistance from National Bank for Agriculture and Rural Development (NABARD) and State fund.
- Construction of ROB/RUBs under Railway Works Programme (RWP).

Formation of bypasses in major towns.

The wing is headed by a Chief Engineer, supported by 4 Superintending Engineers and 19 Divisional Engineers including 4 Deputy Superintending Engineers and 1 Deputy Chief Engineer.

#### 2.1.5 Projects Wing

- Construction of ROB/RUBs under RWP and State-funded Schemes.
- Construction/Re-Construction of HLBs.
- Construction of grade separators and elevated corridors to ease traffic congestion.
- Formation of bypasses/link roads to facilitate smooth traffic movement.

The wing is headed by a Chief Engineer, supported by 4 Superintending Engineers

and 16 Divisional Engineers including4 Deputy Superintending Engineers and1 Deputy Chief Engineer.

#### 2.1.6 Metro Wing

- Construction of grade separators / VUPs.
- Construction of HLBs.
- Widening of roads/ bridges.
- Formation of new link roads and bypasses.
- Construction of foot over bridges.
- Construction of ROB/RUBs/Limited Use Subways (LUSs).

Above works within the Chennai Metropolitan Area (CMA) are executed by the Metro wing, which is headed by a Chief Engineer, supported by 1 Superintending

Engineer and 7 Divisional Engineers including 1 Deputy Superintending Engineer and 1 Deputy Chief Engineer.

#### 2.1.7 Highways Research Station

- Conducting research on use of new materials.
- Testing on highway construction materials.
- Providing technical guidance.
- · Quality Control.
- Training.
- Road safety.

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

1 Joint Director, HRS and 4 DeputyDirectors for testing and research,9 Divisional Engineers for Quality Control

- 1 Joint Director, Training Centre and2 Deputy Directors for training
- 1 Superintending Engineer, Road Safety wing and 8 Divisional Engineers for road safety.

# 2.1.8 Planning, Designs and investigation wing

- Preparation of design, drawings and quantity estimates for major river bridges, ROBs, RUBs, grade separators, FOBs and other highway structures.
- Proof-checking of design and drawing prepared by consultants and other Government departments.
- Technical suggestions for the issuance of permit for non-standard heavy motor vehicles to ply on bridges.

As a special task, the wing has standardized the design for the bridge

superstructure in 16 categories of structures and prepared relevant drawings in booklet form, for uploading in website as ready-reckoner for easy adoption.

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

- To improve riding quality of roads to optimize travel time and vehicle operating expenses.
- To encourage other methods of contracting such as Public Private Partnership (PPP), Engineering, Procurement and Construction (EPC) and Output and Performance based Road Contract (OPRC).
- Multi-stakeholder interventions to enhance road safety scenario at the

District and State levels in order to reduce the number of road crashes.

The project is headed by a Project Director, supported by a Chief Engineer, a Superintending Engineer, 8 Divisional Engineers and 3 Special District Revenue Officers.

# 2.1.10 Chennai Kanniyakumari Industrial Corridor Project

The main activity is to develop roads connecting industrial hubs in the influence zone of the Chennai Kanniyakumari Industrial Corridor. Presently, 589 km of 16 State highways are being upgraded with loan assistance from the Asian Development Bank (ADB).

This project is headed by a Project Director, supported by a Chief Engineer, 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) which is a Toll road.
- Managing Associate for
  - Operation and Maintenance of Chennai Outer Ring Road (CORR).
  - Construction of Chennai Peripheral Ring Road Project, Section-I (Northern Port Access Road) and Section-V (Singaperumal koil to Poonjeri junction near Mamallapuram - (NH332A)).

- Construction of 2 bypasses, one at Kelambakkam and other at Tiruporur along Phase II of OMR.
- 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).

Development Tamil Nadu Road Company (TNRDC) and Information Technology Expressway Ltd., (ITEL) are being managed by the Board of Directors the members from Tamil with Nadu Industrial Development Corporation (TIDCO), TIDEL, nominees from Government and Independent Directors under the chairmanship of the Additional Chief Secretary, Highways and Minor Ports Department. Both TNRDC and ITEL companies are managed by the Managing Director, supported by the Chief General Manager, General Manager, Divisional Engineer, Assistant Divisional Engineers, Engineers and Staff.

# 2.1.12 Tamil Nadu Road Infrastructure Development Corporation (TNRIDC)

TNRIDC, a non-profitable company is Implementing Agency / Managing Associate for the following projects with funding from the State Government or External Agencies;

- Construction of Chennai Peripheral Ring Road Project (CPRR) - Section II, III & IV.
- Operation and Maintenance of Madurai Ring Road.
- Construction of ROB in lieu of LC 47 near Singaperumal koil.

 Construction of Oragadam Industrial Corridor including construction of grade separator at Padappai Junction.

The Additional Chief Secretary to Government, Highways and Minor Ports Department is the Chairman and Managing Director. The Company is managed by an Executive Director in the rank of Chief Engineer with the support of 1 Superintending Engineer and 3 Divisional Engineers.

#### 3. MAJOR SCHEMES/PROJECTS

The objective of the department is to provide better connectivity, quality and safe travel and efficient road network. All the schemes/projects are devised and taken-up to suit the above objective.

#### 3.1 STATE FUNDED SCHEMES/PROJECTS

# 3.1.1 Comprehensive Road Infrastructure Development Programme

Comprehensive Road Infrastructure Development Programme (CRIDP) is a major scheme under which capacity augmentation of road infrastructure is taken-up. Improvement of road surface not only benefits the road users through reduced wear and tear of vehicles but also provides safe and comfortable riding experience to road users. While widening caters to the increased traffic intensity, strengthening

increases life of the pavements thereby enhancing the utility of assets.

In the last three years, works pertaining to widening/ improvements of 7966.11 km length of roads and construction of 1841 bridges / culverts at a cost of Rs.14,980.65 Cr and improvements to Riding Quality of 5715.62 km at the cost of Rs.1678.07 Cr have been completed.

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

The Hon'ble Minister for Public Works, Highways and Minor Ports Department had announced during the demand session 2021-22 that important State Highways connecting District and Taluk headquarters will be widened to fourlane for a length of 2200 km and other roads will be widened to two-lane for a length of 6700 km in the next 10 years. The candidate roads are selected and prioritized based on traffic intensity.

In all, for the past three years, under this flag-ship programme, 576.94 km length of roads have been taken-up for conversion to four-lane at a cost of Rs.4984.22 Cr and 1709.98 km for conversion to two-lane at the cost of Rs.2464.82 Cr have been taken-up. Of which, 215.47 km under four-lane conversion and 1406.74 km under two-lane conversion have been completed.

Some of the roads taken-up for widening to four-lane under CMRDP are listed below;

- In Kallakurichi District, widening from Two Lane to Four Lane and strengthening at km 0/0 - 6/6 & 8/2 -15/8 of Kallakurichi - Tiruvannamalai Road (SH6) at a cost of Rs.126 Cr.
- 2. In Dindigul District, widening from Two Lane to Four Lane and strengthening at

- km 4/0 -17/4 of Palani Dharapuram Road (SH83) at a cost of Rs.106 Cr.
- In Tiruvallur District, widening from Two Lane to Four Lane and strengthening in km 7/0 - 16/2 of Tiruvallur - Arakkonam Road at a cost of Rs.80 Cr.
- 4. In Tiruvannamalai District, widening from Two lane to Four Lane and strengthening at km 61/2 - 72/2 of Arcot - Tindivanam Road (SH5) at a cost of Rs.95 Cr.
- 5. In Sivagangai District, widening from Two Lane to Four Lane and strengthening at km 78/4 89/9 of Ramanathapuram- Nainarkoil- Andakudi- Elayankudi- Sivagangai Melur Road (SH34) at a cost of Rs.81 Cr.

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

- In Nagapattinam District, widening from Intermediate Lane to Two Lane With Paved Shoulder and improvements to Pappakoil - Karunkanni Road from km 0/0 - 1/650 at a cost of Rs.26 Cr.
- 2. In Krishnagiri District, widening from Intermediate Lane to Two Lane and strengthening at km 0/0 3/6, 5/0- 10/0 of Kurubarapalli Kothakrishnapalli road at a cost of Rs.11 Cr.
- 3. In Trichy District, widening from Intermediate Lane to Two Lane and strengthening at km 30/0 34/0 of Keelapalur Pullambady (via) Thirumalappady Road at a cost of Rs.8 Cr.
- In Cuddalore District, widening from Intermediate Lane to Two Lane and strengthening at km 11/0 - 12/0 of

Bhuvanagiri - Kurinjipady road at a cost of Rs.7 Cr.

5. In Dharmapuri District, widening from Intermediate Lane to Two Lane and strengthening at km 0/4 - 5/6, strengthening at km 0/0 - 0/4 of Bommidi RS - Thoppaiyar road at a cost of Rs.6.95 Cr.

### 3.1.1.2 State Highways (SH)

The State Highways to the State are akin to veins carrying blood and oxygen to a Human body. These stretches draw priority and attention owing to heavy traffic intensity. In the year 2023-24, administrative sanction has been accorded for widening, strengthening and improvements of 547.12 km length of roads and construction of 8 bridges / culverts at a cost of Rs.2671.48 Cr.

Some of the major works taken-up are as follows;

- In Tiruppur District, widening from Two lane to Four lane and improvements at km 24/8 29/4 of Palladam Dharapuram road (SH174A) at a cost of Rs.43.08 Cr.
- In Coimbatore District, widening from Two Lane to Four Lane and strengthening of Avinashi - Tiruppur -Palladam - Pollachi - Cochin (via) Meenkarai Road at km 92/750 - 98/2 at a cost of Rs.42 Cr
- In Pudukottai District, widening from Two Lane to Four Lane and strengthening at km 52/0 52/4 & 52/6 57/0 of Trichy Pudukkottai Aranthangi Mimisal Road (SH26) at a cost of Rs.44 Cr.
- 4. In Karur District, widening from Two lane to Four lane and improvements at km

46/8 - 47/2 and 53/0 - 54/2 of Erode - Karur Road (SH84) at a cost of Rs.10.50 Cr.

5. In Madurai District, widening from Multilane to Four Lane with Paved Shoulder and strengthening in km 7/6 - 8/8 of Madurai - Thoothukudi Road (SH32) at a cost of Rs.12 Cr.

In addition, spill-over works of widening / improvements to 720.62 km length of roads and construction of 61 bridges / culverts at a cost of Rs.4610.17 Cr were closely followed-up for execution. Widening / improvements of 723.49 km length of roads and construction of 61 bridges / culverts have been completed at a cost of Rs.3311.63 Cr in the year 2023-24.

### 3.1.1.3 Major District Roads (MDRs)

Major District roads are next in the hierarchy to State Highways carrying intense traffic. In the year 2023-24, administrative sanction has been accorded for widening, strengthening and improvements to 546.15 km length of roads and construction of 34 bridges/ culverts at a cost of Rs.990.12 Cr.

Some of the works taken-up are as follows;

- 1. In Chengalpattu District, widening from Two Lane to Two Lane with Paved Shoulders and strengthening at km 7/8 9/6 and 14/0 15/4 of Mudukarai Kadalore Road at a cost of Rs.6.90 Cr.
- In Vellore District, widening from Two Lane with Paved Shoulders to Four Lane and strengthening at km 0/0 - 1/9 of Gandhi Nagar Main Road at a cost of Rs.6.62 Cr.
- 3. In Tirupattur District, widening from Intermediate Lane to Two Lane and strengthening at km 5/2 6/8 and 7/0 -

10/2 of Nayanacheruvu - Andhra Pradesh Border Road at a cost of Rs.5.50 Cr.

- 4. In Villupuram District, strengthening at km 0/0 3/0 of Chunampet road at a cost of Rs.2.50 Cr.
- In Perambalur District, widening from Intermediate Lane to Two Lane and strengthening at km 34/0 - 36/0 of Sendurai - Anganur - Agaram - Seegore - Thirumandurai road at a cost of Rs.3.40 Cr.

Widening/improvements to 705.44 Km length of roads and construction of 73 bridges/culverts at a cost of Rs.1550 Cr as spill over works were intensely followed up for completion. Widening / improvements to 934.49 km length of roads and construction of 82 bridges/culverts have been

completed at an expenditure of Rs.1577.34 Cr in the year 2023-24.

### 3.1.1.4 Other District Roads (ODRs)

Other District Roads are the backbone of rural economy. During 2023-24, administrative sanction has been accorded for widening and improvements to 849.02 km length of roads and construction of 168 bridges / culverts at a cost of Rs.1433.88 Cr.

Some of the works taken-up are as follows;

- In Kancheepuram District, widening from Single Lane to Intermediate Lane and strengthening at km 2/0 - 3/4 of Arasanimangalam Road at a cost of Rs.6.85 Cr.
- 2. In Ranipet District, widening from Single Lane to Intermediate Lane and strengthening at km 0/0 4/0 of

- Peruvalayam Karnavur Mahendravadi Road at a cost of Rs.5.25 Cr.
- 3. In Ariyalur District, widening from Single Lane to Intermediate Lane and strengthening at km 9/0 12/6 of Unjini Variyankaval road at a cost of Rs.6.97 Cr.
- 4. In Namakkal District, widening from Intermediate Lane to Two Lane and strengthening at km 0/0 - 2/8 of Molasi road at a cost of Rs.4.66 Cr.
- 5. In Erode District, widening from Single Lane to Intermediate Lane and strengthening at km 0/0 3/6, 5/0 6/0 of Palayam Sothanpuram road at a cost of Rs.6.50 Cr.
- 6. **Road to Jallikattu Arangam:** Jallikattu is an age-old traditional game of the State, having glorious historic past.

Hon'ble Chief Minister announced that a new Jallikattu stadium with world class facilities will he constructed at Alankanallur and an exhibition centre will set up near the stadium. also be Following this, the Hon'ble Minister for Public works, Highways and Minor Ports announced on 18.9.2022 that a two-lane road with hard shoulders will constructed from Vadipatti - Tamaraipati road to the world-class complex, at a of Rs 21.70 Cr. Accordingly, cost widenina of Kuttimeikipatti Adhagaraipalam road (Other District Road) to Jallikattu Arangam from single lane to two lane with hard shoulder (10 meter width) for a length of 3.30 km including land acquisition of 8.10 ha for uniform width of 25 meter has been completed within record time of 4 months and inaugurated by Hon'ble Chief Minister on 24.1.2024.

In addition, efforts were made to complete spill over works of widening/ improvements to 1091.81 km length of roads and construction of 298 bridges / culverts at a cost of Rs.2036.06 Cr. Widening / improvements to 1515.75 km length of roads and construction of 354 bridges / Culverts have been completed at a cost of Rs.2010.25 Cr in the year 2023-24.

# 3.1.1.5 Other District Roads – Special Component Plan (ODR-SCP)

Under this Scheme, roads connecting habitation with more than 40% of SC/ST population are taken-up for improvements. In the year 2023-24, administrative sanction has been accorded for widening, strengthening and improvements to 221.74 km length of roads and

construction of 10 bridges / culverts at a cost of Rs.290.81 Cr.

Some of the works taken-up are as follows;

- 1. In Salem District, widening from Single Lane to Intermediate Lane and strengthening at km 0/0 3/0 of Mamamji road at a cost of Rs.3.80 Cr.
- 2. In Nilgiris District, strengthening at km 0/0 1/4 of Kattery Yellanhalli road at a cost of Rs.2.50 Cr.
- 3. In Mayiladuthurai District, strengthening at km 2/6 3/8 of Enankudy Pattavilagam Road at a cost of Rs.1.31 Cr.
- 4. In Theni District, widening from Intermediate Lane to Two Lane and strengthening at km 3/0 4/2 of

Chinnamanur - A.Alagapuri road at a cost of Rs.2.20 Cr.

5. In Ramanathapuram District, widening from Single Lane to Intermediate Lane and strengthening at km 1/0 - 4/0 of Chathirakudi - Pooseri Road at a cost of Rs.4.50 Cr.

In addition, on-going spill over works of widening/ improvements extending to 153.87 km length of roads at a cost of Rs.175.98 Cr were also closely followed up for completion. Widening /improvements of 289.41 km length of roads and 1 bridge have been completed at a cost of Rs.229.86 Cr in the year 2023-24.

## 3.1.1.6 Improvements of Riding Quality Programme (IRQP)

Top surface of road is normally designed for a life-time of 5 years and the roads are to be maintained in better condition for continued

serviceability, increased mobility, reduced vehicle operating costs (VOC) and road crashes. Regular maintenance ensures pot-hole free roads, restricts surface deterioration, thereby lowering wear and tear of vehicular components.

In the year 2023-24, roads with 1046.45 km length have been sanctioned at the cost of Rs.406.14 Cr and works are in progress. Spillover of 747.22 km length of road surface improvements for Rs.510.94 Cr were being followed-up for completion. Road works to a length of 1699.77 km have been completed at an expenditure of Rs.469.83 Cr in the year 2023-24.

### 3.1.1.7 Improvement of stretches in Urban areas

Urban areas are characterized by commercial activities, busy commuters movement, increased local traffic and high demand for parking facilities. To enable a permanent solution and to aid

unhindered traffic movement on State Highways, the Department is poised for developing roads end to end in urban limits. The Hon'ble Minister for Public works, Highways and Minor Ports Department, during the Budget session 2021-22, had announced that roads in urban areas will be improved continuously. To be widened to fourlane, the urban stretches will be provided with paved shoulders and drains depending on availability of lands. If sufficient land is not available, roads will be widened up to the end of Right of Way (ROW).

In the year 2023-24, 24 works for a length of 29.40 km have been taken-up at a cost of Rs.104.62 Cr. In addition, works for a length of 83.68 km were in progress as spill-over at various stages. 175 works for a length of 131.59 km length of roads at a cost of Rs.578.76 Cr have been completed in the last three years.

#### 3.1.1.8 Flood Permanent Restoration Works

In the Year 2023-24, Under CRIDP Flood Permanent Restoration, 46 Works including 14,744 m drain work, 9 culverts and 1,28,266 m long silt catch pits have been taken-up at a cost of Rs.105.68 Cr. Of which, 14,329 m drain work, 7 Culverts and 60,710 m long silt Catch pits have been completed at an expenditure of Rs.68.05 Cr. Dr.V.Thirupugazh Based Committee's on recommendation, 13 works at the cost of Rs.91.73 Cr were taken up and critical works from the point of view of preventing flood in Chennai Metropolitan Area have been completed priority.

# 3.1.2 Chief Minister's All Season Uninterrupted Connectivity Scheme

During monsoon, huge volume of rainwater flowing over the causeways hinders the free flow of traffic across channels and rivers. As a result, the livelihood of the people in the neighbourhood of such waterbodies and channels get adversely affected. To alleviate this problem, an announcement during the Budget session 2021-22, was made to the effect 'that in lieu of existing causeways, High Level Bridges will be constructed by the year 2026', under "Chief Minister's All Season Uninterrupted Connectivity Scheme".

During the year 2023-24, 272 causeways have been taken-up for conversion into HLBs under various schemes, at a cost of Rs.758.82 Cr. Apart, spill-over works of 283 causeways for conversion into HLB have been closely monitored, out of which, 169 causeways have been completed. In the past three financial years, 1113 causeways were taken-up. So far, 795 causeways have been converted into HLBs.

## 3.1.3 Ungal Thoguthiyil Mudalamaichar (UTM)

One of the stellar schemes announced by the Hon'ble Chief Minister, "Ungal Thoguthiyil Mudalamaichar" addresses major un-fulfilled demands from every constituency recommended by people representatives. Under this programme, 14 road works at a cost of Rs.113.48 Cr, 4 Bridge works for Rs.29.70 Cr, 1 Bypass (Namakkal Bypass) for Rs.194 Cr, 12 culverts & construction of storm water drains at 9 locations at Rs.73.48 Cr were taken-up in which 7 road works and 1 culvert work were completed at a cost of Rs.23.05 Cr and other works are in progress.

#### 3.1.4 AVENUE PLANTATION

In line with the objective of the Government to increase the green cover to 33 percent, the Highways Department provides

safer and greener roads to the road users. As part of the centenary celebrations of Muthamizh Arignar Kalaignar, a programme to plant 5 lakh saplings on highways across Tamil Nadu has been launched. So far, in the year 2023-24, 3,75,000 trees have been planted.

### 3.1.5 Disaster Management Activities

Tamil Nadu receives most of its rainfall from northeast monsoon during the month of November and December every year. Highways department undertakes pre-monsoon activities in month of August every year, which include removal of shrubs, creepers, vegetation, plants, obstructions and blockages in the culverts /bridge portions to facilitate uninterrupted flow of water during rainy season.

In the year 2023, cyclonic storm "Michaung" formed in the Bay of Bengal caused havoc in Chennai, Tiruvallur, Kancheepuram and

Chengalpattu Districts on 3.12.2023 and 4.12.2023. Unprecedented torrential rains were experienced in southern districts particularly in Tirunelveli, Thoothukudi, Tenkasi, Virudhunagar and Kanniyakumari Districts on 17.12.2023 and 18.12.2023, unleashing untold miseries and losses to the public.

### \* Cyclonic Storm- MICHAUNG

As a part of relief works taken-up on warfooting, the Hon'ble Minister for Public Works,
Highways and Minor Ports camped in stormaffected areas. 300 Gang Mazdoors from the
affected areas and 500 Gang Mazdoors mobilized
from adjoining districts, were pressed into service
to tackle the crisis. A team of 15 Engineers from
adjoining districts, was constituted to monitor the
relief works. A control room, on 24/7 basis, was
established to monitor and co-ordinate the
immediate response to the damages. Mammoth
efforts were made to drain water out from the

flood affected areas, using pumps and generators. 26 nos. of JCB, 30 nos. of Power saws, 3 nos. of tractor-mounted breakers and 8 nos. of tippers were engaged at 116 locations. Post-incident studies revealed important locations for temporary and permanent restoration under Phase – I. In the Year 2023-24, temporary restoration works at a cost of Rs.65.28 Cr and permanent restoration of flood damaged roads, culverts / causeways, drain / median during Michaung Cyclone at a cost Rs.248.40 Cr have been taken-up.

### Unprecedented Heavy Rains in Southern Districts

The heavy downpour in Southern districts particularly in Tirunelveli, Thoothukudi, Tenkasi, Virudhunagar and Kanniyakumari Districts caused severe unprecedented flooding leading to damages to roads and culverts. Because of continuous rainfall, riding surfaces were severely

damaged. The week-long stagnation of rainwater to a depth of a few metres caused huge and widespread damage to roads and bridges. Several major tanks in Tamirabarani basin got breached. One such road i.e. Thiruchendur – Palayamkottai - Ambasamudram, taken-up under the Asian Development Bank Loan Assistance, got breached at 10 locations, for a length varying between 60 and 300 m including damages to the approach of bridge / culvert causing traffic interruption. Plugging of such large breaches during flooding was a major challenge. Temporary restoration works on the above road were done on warfooting day and night, utilizing 8 nos. of earth mover, 5 nos. of JCB, 35 Tipper, 60 manpower from 21.12.2023 to 24.12.2023. Due to the tireless efforts, traffic was restored in a record time. Responsive to the natural disasters, the department is adept to utilize the available manand machinery, in rising-up to occasion, within the shortest time-frame. In the

Year 2023-24, temporary restoration work at a cost of Rs.184.72 Cr and permanent restoration of flood damaged roads culverts / causeways, drain / median at a cost of Rs.226.60 Cr in the Southern districts of Tamil Nadu have been taken-up.

# 3.1.6 Chennai Metropolitan Development Plan (CMDP)

Under Chennai Metropolitan Development Plan (CMDP), projects for improving highways infrastructure are taken-up to ensure seamless, safe traffic and pedestrian movement within Chennai Metropolitan Area (CMA). In the past 3 years, the following works have been completed under the CMDP Scheme and opened for public use;

 Four-Lane grade separator at Koyambedu at a cost of Rs.93.50 Cr on 1.11.2021.

- 2. Two-Laned Tambaram Velachery arm in the Medavakkam grade separator at a cost of Rs.95.21 Cr on 13.5.2022.
- 3. Two-Level grade separator at Velachery Vijayanagaram junction at a cost of Rs.145.49 Cr on 1.11.2021 and 17.9.2022.
- 4. Foot-over bridge with escalator to cross GST road and to connect the existing foot-over bridge of Railways with ticket counter at Tambaram Railway station at a cost of Rs.6.29 Cr on 26.4.2023.
- 5. High level bridge across Buckingham canal at Thiruvottiyur near Manali Oil Refinery Plant at a cost of Rs.58.64 Cr on 7.9.2023.

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

### 1. Grade Separators / Vehicular Under Passes

- Two-lane grade separator from Sardar Patel Road to Rajiv Gandhi Salai (OMR) at Madhya Kailash junction at a cost of Rs.60.69 Cr is in progress.
- ii. Four-Lane grade separator on Mount –
  Poonamallee Avadi road from MIOT
  Hospital to Mugalivakkam at a cost of
  Rs.314.48 Cr and vehicular under
  pass at Madipakkam at a cost of
  Rs.45.50 Cr are being executed by
  Chennai Metro Rail Limited (CMRL)
  integrated with Metro Rail project
  since the alignment for the projects
  proposed by the Metro Wing

synchronises with the alignment proposed for Chennai Metro Rail project.

- iii. Construction of four-lane grade separator at Kattupakkam junction a portion of the work is being executed by Chennai Metro Rail Limited (CMRL) integrated with Metro Rail projects.
- Preparation of Detailed Project Report iv. for 6 works at a cost of Rs.3.70 Cr and Land Acquisition for 5 works at a cost of Rs.536.68 Cr are in progress for the construction of arade at i) Avadi Junction separators ii) Kundrathur Junction iii) Kaiveli Junction in Velachery-Tambaram road iv) Korattur Junction v) Vanagaram Junction vi) Ambattur Estate Depot (DPR Only).

### 2. High Level Bridges

- i. HLB across Coovam river at Paruthipattu at a cost of Rs.18.37 Cr is nearing completion.
- ii. Construction of HLBs viz., a) across Coovam river at Padikuppam, DPR and LA works are completed and the work is to be taken-up, b) across Coovam river at Nolambur, LA work is in progress at a cost of Rs.87.77 Cr.
- iii. HLB across Rajakizhpakkam lake near Selaiyur; DPR and LA are in progress.

### 3. Road Works

i. The work of widening and strengthening the existing four lane East Coast Road to six lane carriageway for a length of 0.935 km in Kottivakkam Stretch at a cost of Rs.18.86 Cr, for a length of 1.15 km in Palavakkam Stretch at a cost of Rs.17.43 Cr and for a length of 6.60 km in Neelangarai, Injambakkam and Sholinganallur stretch of East Coast Road at a cost of Rs.134.58 Cr are in progress.

- ii. Formation of new link road connecting OMR and ECR at Neelangarai; the stretch from OMR to Buckingham canal is completed at a cost of Rs.18.25 Cr. LA is in progress for the remaining connectivity between Buckingham canal to ECR.
- iii. For connecting GST road from
  Perungalathur to VelacheryTambaram road at Madambakkam,
  six-lane Tambaram Eastern Bypass is
  being formed for a length of 9.30 km,
  the work in Mappedu stretch for a

length 3.05 km has already been completed at a cost of Rs.25 Cr and the works in Nedungundram stretch for a length of 2.63 Km at a cost of Rs.36.69 Cr and in Puthur stretch for a length of 1.55 km at a cost of Rs.55.77 Cr are in progress. For the remaining stretches, Land Acquisition including transfer of forest land is in progress.

# Pedestrian Infrastructure Facilities Foot Over Bridges (FOBs) with Escalators

During 2023-24, the work of construction of 2 FOBs, one near Nelson Manickam Road junction on Grand Western Trunk (GWT) Road and the other at Senthil Nagar junction on Inner Ring Road, at a cost Rs.30.67 Cr has been commenced. Further, the preparation of DPR is in

progress for construction of FOB near DAV & Velammal School, Mogappair.

### 5. Construction of Road Over Bridges

During 2023-24, widening the existing Road Over Bridge near Padi flyover in Inner Ring Road at a cost of Rs.139.17 Cr in Highways portion has been commenced.

### 3.1.6.1 Expenditure in the year 2023-24 Under CMDP Scheme

An expenditure of Rs.405.29 Cr has been incurred in the year 2023-24.

# 3.2 UPGRADATION OF PANCHAYAT UNION ROADS / PANCHAYAT ROADS TO OTHER DISTRICT ROADS STANDARDS:

In line with the Budget announcement made during 2021-22, 10,000 km of Panchayat Union/Panchayat Roads are to be upgraded to Other District Roads (ODRs) standards. The

Government has accorded top priority to this scheme, as the upgradation of rural roads would pave way for uplifting of rural economy. Rural Development and Panchayat Raj Department has, so far, handed over 4110 km of Panchayat Union / Panchayat Roads for upgradation. Of which, 2786.58 km length at a cost of Rs.3056.01 Cr has been taken-up for upgradation and out of which, 1657 km length at a cost of Rs.1784.89 Cr has been completed so far.

In addition, in the year 2021-22, 1078 nos. of works to a length of 2486.04 km at a cost of Rs.2120.74 Cr were taken over as spill over. Of which, 1066 nos of works to a length of 2447.82 km at a cost of Rs.2072.06 Cr have been completed.

In total, from 2021-22 to 2023-24, 4104.82 km length of 1823 Panchayat Union Roads / Panchayat Roads have been upgraded as ODR at a total cost of Rs.3856.95 Cr. During

2023-24, an expenditure of Rs.1823.59 Cr has been incurred.

### 3.3 FORMATION OF BYPASSES/LINK ROADS

#### **\* BYPASSES**

Traffic flow in busy towns/cities experiences congestion, leading to increased journey time. Apart from the time consumed, vehicle operating costs which includes fuel costs is additional burden on road users. To mitigate such hardships, bypasses are alternate routes/solutions. Bypasses have two critical components, viz., a) Land-Acquisition and b) formation of bypass.

In the year 2023-24, 3 bypasses i.e. in Thuraiyur, Namakkal (Phase I, II & III) and Tirupathur have been taken-up at a cost of Rs.283 Cr. In addition, works on 18 spill-over Bypasses were closely monitored. Out of which, 4 bypasses viz., Rasipuram (Phase-I Part-2),

Thiruthuraipoondi-I, Parthibanoor and Bhavani (Phase-II) have been completed at a cost of works Rs.113.98 Cr and on remaining 14 bypasses i.e. Ambasamudram, Bhavani (Phase I), Coonor, Pollachi western bypass, Tiruchengode, Tiruthani, Aruppukottai western bypass, Coimbatore western ring road, Kamudhi, Kelambakkam, Tiruporur, Muthukulathur, Jalakandapuram and Sivagangai-I are in progress. Further, preparatory works for 61 bypasses are at various stages such as preparation of DPR and land acquisition.

### **\* LINK ROADS**

The work on link road at Pasumalai near Thiruparankundram at a cost of Rs.41.89 Cr is in progress and land acquisition is in progress for Rajapalayam link road. Widening and improving the road connecting Erode - Perundurai - Kangeyam road (SH96) to Ooty - Kothagiri - Mettupalayam - Sathy - Gobi - Erode road

(SH15) near Kaniravutharkulam via Vilarasampatty, has been completed at a cost of Rs.20.85 Cr.

#### 3.4 CONSTRUCTION OF HIGH-LEVEL BRIDGES

Bridges across water bodies especially rivers ensure unhindered flow of traffic providing connectivity on either side of river banks. In all, 277 HLBs have been constructed and put into public use, in the past three years.

#### State Funded HLBs

In the year 2023-24, 13 HLBs have been taken-up at a cost of Rs.399.82 Cr and the works are in various stages of implementation. A few of the newly sanctioned works are as follows;

1. Formation of High-level bridge of 3.2 km length across Palar River from Kangeyanallur to Sathuvachari at a cost of Rs.90.66 Cr.

- 2. Reconstruction of High-level Bridge across Palar River at km 0/4 -1/0 of Nerumbur-Pudupattinam Road to Edayathur road (via) Irumbulicherry at a cost of Rs.51.87 Cr.
- Construction of High-Level Bridge across
   Vellar river connecting Kallipadi Kavanur
   village at a cost of Rs.27.18 Cr.

In addition, works on 33 spill-over works at a cost of Rs.443.73 Cr were closely monitored. In the last three years, 31 nos. of HLB have been completed at a cost of Rs.359.78 Cr. Some of the completed works are as follows;

Construction of High-Level Bridge at km 4/6
 of Vallam - Kallaperambur Road (ODR)
 across Mudalamuthuvari drain at a cost of
 Rs.6.04 Cr.

- Construction of High Level Bridge in lieu of existing old narrow bridge across lower Bhavani canal at km 4/2 of Kurumandur -Kadathur road at a cost of Rs.3.33 Cr.
- Construction of High Level Bridge across
   Cheyyar River at km 11/2 of Uthiramerur Kancheepuram road at a cost of Rs.21.56 Cr.

#### ❖ NABARD Loan Assistance

Under Rural Infrastructure Development Fund (RIDF), NABARD, construction of High-level Bridges in lieu of causeways / weak bridges / narrow bridges have been taken up. The loan assistance of NABARD is 80% and balance 20% is met out from State Fund. In the year 2023-24, 4 HLB works have been taken-up at a cost of Rs.52 Cr under NABARD loan assistance. In addition, 153 HLB works at a cost of Rs.979.28 Cr

were closely monitored. As a result, 99 HLB works have been completed at a cost of Rs.399.13 Cr. In the last three years, 246 nos. of HLB funded at a cost of Rs.833.39 Cr have been brought to public use.

# 3.5 CONSTRUCTION OF ROAD OVER BRIDGES / ROAD UNDER BRIDGES / LIMITED USE SUBWAY

#### Railway Works Programme (RWP)

ROB/RUBs are being constructed to ensure the safety of the public as well as hassle-free vehicular traffic at level crossings. The construction of ROB/RUBs in lieu of existing level crossings is undertaken on priority basis when Train Vehicle Units (TVUs) exceed 1 lakh per day. Four new ROB/RUBs works have been sanctioned at a cost of Rs.143.22 Cr in the year 2023-24. The works on 59 ROB/RUBs as spill-over works at a cost of Rs.2607.35 Cr were closely monitored.

Out of which, 9 works have been completed at a cost of Rs.426.06 Cr, and 34 works are in progress at a cost of Rs.1638.99 Cr and remaining 16 works are in pre-construction stage. In the last three years, 22 nos. of ROB/ RUBs at a cost of Rs.836.20 Cr have been completed and in use.

#### **State Funded**

Some of the ROB/RUBs are not eligible for cost-sharing under RWP due to low TVU i.e., less than 1 lakh per day. However, owing to the importance of the location or corridor, such places require construction of ROB/RUBs. Such works could be taken up under State funding only. ROB at Chickanna College near Tiruppur is in progress at a cost of Rs.42.76 Cr.

## Central Road and Infrastructure Fund(CRIF)-Setu Bandhan

During 2023-24, administrative approval and financial sanction was accorded by the Government for the work of construction of Road Over Bridge at Needamangalam (LC 20 & LC 1) at a cost of Rs.170 Cr and the work is in Progress.

#### 3.6 GRADE SEPARATORS

Grade separators are warranted in urban situations where the existing roads are to be crossed over through an elevated structure, for enabling easy movement of traffic across a busy junction/location. It is a cost-sensitive, long-term measure. Certain iconic grade separators taken-up by the department are;

 Ukkadam - Athupalam in Coimbatore city have been completed at a cost of Rs.140.49 Cr and the extension of the

- above bridge work is in progress at a cost of Rs.265.44 Cr.
- Flyover at Goripalayam Junction in Madurai City from km 440/100-441/0 of Varanasi- Kanniyakumari Road (SHU73) and km 0/0-0/6 of Madurai -Alagarkoil - Melur Road (SH72A) for Rs.190.04 Cr - in progress.
- Grade separator at km 1/2 of Madurai-Thondi road (Apollo Hospital Junction) at a cost of Rs.150.28 Cr in progress.
- Construction of grade separator at km 37/6-38/4 of Vandalur – Walajabad road (Padappai) at a cost of Rs.26.65 Cr - in progress.

#### 3.7 CONSTRUCTION OF ELEVATED CORRIDOR

Elevated corridors ensure uninterrupted smooth traffic flow in major cities. Some of the elevated corridors taken up by the Government are mentioned below;

- Construction of elevated corridor along Avinashi road in Coimbatore City from Goldwins to Uppilipalayam for 10.10 km at a cost of Rs.1621.30 Cr - in progress.
- Construction of elevated corridor from Teynampet to Saidapet at a cost of Rs.621 Cr - in progress.

#### 3.8 MAINTENANCE WORKS

Maintenance is an important component for enhancing the life cycle of roads and enriching experience of road users. Maintenance activities involve;

- Renewal/Special repairs to roads/bridges.
- Pot-hole free roads.
- Shoulders to the required specification.
- Jungle clearance and cleaning vegetation in channels and culverts and desilting of drains.
- Maintenance of Kilometer/Hectometer stones, kerbs, center medians and crash barriers.
- Prevention and removal of encroachments.
- Planting of avenue trees and maintenance.

In the last 3 years, maintenance and renewal of 9304.66 km length of roads at the cost of Rs.1777.26 Cr have been done. The works of

rehabilitation of bridge across Cauvery river at a cost of Rs.6.51 Cr and ROB in Tindivanam town at a cost of Rs.8.17 Cr have been taken up in the year 2022-23 to enhance the riding comfort and durability of the bridges and the works are in progress. During 2023-24, Rehabilitation of ROB at km 32/2 of Kumbakonam - Sirkazhi road at a cost of Rs.6.95 Cr have been taken-up and the work is in tender stage.

## 3.9 GOVERNMENT OF INDIA (GOI) FUNDED SCHEMES

## 3.9.1 Annual Plan (For National Highways)

Every year upgradation / improvements are carried out under 'Annual Plan', funded by Government of India, Ministry of Road Transport and Highways (MORT&H). During the year 2023-24, following works have been sanctioned;

i. Land Acquisition for 4-Laning / 2 lane with paved shoulder of NH209 - Coimbatore - Sathyamangalam – TN/KNT Border Road (NH181) at a cost of Rs. 639.18 Cr.

2 Upgradation works costing Rs.18.36 Cr,
 viz., widening and strengthening of
 NH381A and protective works in NH85.

Spill over works such as 49 road works of including construction 4 bypasses (Thiruvaiyaru, Bagalur, Madurai Achampathu-Viratipathu, Gudiyatham) of 435.85 km at the cost of Rs.2761.09 Cr and 28 Bridge works of value Rs.951.89 Cr were closely monitored to ensure early completion. Out of these, road works for a length of 236.97 km and 7 bridge works (Fly over-2 nos, HLB- 2 nos, Minor Bridge- 1 no, Rehabilitation -2 nos) have been completed in FY Major projects completed during 2023-24. 2023-24 are as follows;

S. No	Name of work	Amount in Cr.
1	High Level Bridge across Thenpennai River at km 59/8- 59/10 (Cuddalore Town) of Villupuram – Puducherry – Nagapattinam Road (NH45A)	26.80
2	Flyover at km 362/790-364/555 (Periyanaickenpalayam Junction) of Coimbatore – Mettupalayam – Ooty – TN/KNT Border road (NH181)	115.57
3	Grade separator at Kochadai junction at km 5/10 of Madurai – Cochin road (NH49Extn.)	53.95
4	Additional Two lane bridge across Bhavani river at km 229/2-4 of NH209	11.74

S.	Name of work	Amount	
No	Name of Work	in Cr.	
	Widening 2 Lane to 4 Lane with		
	Paved Shoulders from		
5	A.Pallipatti to Uthangarai	320.00	
	section of Salem – Tirupathur –		
	Vaniyambadi Road (NH179A)		
	for a length of 44 km		
	Widening to 4 Lane with Paved		
	Shoulders from Trichy to Mathur		
6	of Trichy - Ramanathapuram	68.00	
	Section (NH336) for a length of		
	10 km		
	Widening to 2/4 Lane with		
7	Paved Shoulders of Musiri –	184.15	
'	Namakkal road (NH381B) for a		
	length of 26.89 km		

S. No	Name of work	Amount in Cr.
8	Rectification of Blackspots in 7 locations (Ramayanpatty, Palamrajakkapatty, Edaiyapatty, Muthanampatty, PSNA College, Kathirayankulam	62.17
	and Mangarai Pirivu) of Dindigul  - Ottanchatram –  Madathukulam – Pollachi Section (NH83)	

Land Acquisition for 4 laning of Thoothukudi

- Thiruchendur – Kanniyakumari Road and for
3 bypasses (Vellore, Vettavalam, Thiruvaiyaru)
costing Rs.559.87 Cr is in progress. Preparation of
Detailed Project Report for 9 works has also been
initiated to create a shelf of projects.

#### 3.9.2 SETU BHARATHAM SCHEME

To replace level crossings on NHs by ROB/RUBs, under "SETU BHARATHAM" scheme, sanction has been accorded for the construction of 6 ROBs amounting to Rs.412.11 Cr.

## 3.9.3 Centrally Sponsored Schemes

## Central Road and Infrastructure Fund (CRIF) (For State Roads)

Roads for widening and strengthening and bridges for rehabilitation / construction / re-construction, under the control of the Department, are taken up under CRIF scheme with the funding by Government of India. MoRT&H has approved the list of 23 Road works covering a length of 102.935 km costing Rs.342.41 Cr and 24 Bridge works costing Rs.313.35 Cr, totalling to Rs.655.76 Cr in the year 2022-23. Out of which, 7 road works to a length of 25.41 km costing Rs.131.58 Cr are in progress

and preparation of Detailed Project Report for 19 bridge works are in progress.

## Pradhan Mantri Gram Sadak Yojana (PMGSY)

The Government of India provide funds for upgrading the "Other District Roads" under this scheme. Out of 4 works for a total length of 31.98 km sanctioned for Rs.34.16 Cr in the year 2021-22, 3 works have been completed and 1 work is in progress.

#### 3.10 DEPOSIT WORKS

The Construction and Maintenace wing and National Highways wing take up a few works as deposit works, which are funded by other agencies. Construction and Maintenance wing normally takes up approach roads to industrial hubs.

Some of the works taken up as deposit works by Construction and Maintenance wing are as follows;

- Formation of Approach Road from Kavarapettai - Sathyavedu Road (SH52) to SIPCOT Industrial Park, Mannallur from km 0/0 - 4/110 for Rs.54.41 Cr -Work in progress.
- Formation of Panapakkam SIPCOT Approach Road km 0/0 - 0/800 for Rs.26.50 Cr -Work in progress.
- Widening from 2 lane with paved shoulder to 4 - lane and strengthening at km 0/0-1/550 of connecting road between SIPCOT and Pochampalli - Kodamandapatti road for Rs.8.40 Cr -Tender stage

The following road improvement works have been taken up as deposit works of National

Highways Authority of India (NHAI) by State NH wing.

- Widening of NH45 from 4 Lane to 8 Lane between Guduvanchery to Chettipunniyam (Mahindra City) of 13.30 km for Rs.230.69 Cr in 3 Packages- completed
- Widening of NH4 from 4 Lane to 6 Lane between Maduravoyal bypass to Sriperumpudur of 23.20 km for Rs.428.95 Cr in 6 packages. Out of which, 5 packages are completed and 1 package is nearing completion.
- Widening of NH544H Thoppur Mettur Bhavani – Erode Road to 2 Lane with paved shoulders of 85 km for Rs.186.50 Cr in 4 packages. Out of which, 1 package is completed and 3 packages are in progress.

#### 3.11 e-INITIATIVES

part of computerization initiative, required hardware and software have heen procured to strengthen the functioning of the department. Presently, the department is using advanced application software and in-house tools for analysis, design and preparation of drawings and estimates of all bridge structures, flexible and rigid road pavements. The Highways Department has also been using Road Maintenance and Management System (RMMS) web application to efficiently manage the entire road network of the State.A robust Project Management Information System (PMIS) for monitoring the progress of works on a real time basis has been developed and is being used by all the field officials. In the august presence of Hon'ble Minister for Public Works, Highways & Minor Ports, the Hon'ble Minister for Youth Welfare and Sports Mobile Development launched the app 'Namma Saalai' on 1.11.2023 as an interface with public for capturing grievances of public and effective redressal of grievances. The work on digitisation of assets and assessing Passenger Carrying Units (PCUs) with the help of AI tools is going on.

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

#### e-procurement:

The Highway department has been doing online procurement since August,2019 through electronic mode (e-Tenders) on the portal www.tntenders.gov.in.

## 4. EXTERNALLY AIDED PROJECTS

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

Nadu Road Sector Project -II an Tamil Externally Aided project, is being executed at a total cost of Rs.5171 Cr with World Bank loan amount of Rs.2122.90 Cr (USD 300 Million) to upgrade roads with high traffic intensity. The Project involves a) upgradation and maintenance of roads covering a length of 1187.04 km across and b) Tamil Nadu Institutional Capacity Enhancement of the department and sensitisation on Road Safety.

## 4.1.1 Completed Works

Under the EPC mode of contract, 471.96 km of roads across the State have been widened, in which 427.96 km of roads have been widened to two-lane with paved shoulders and 44 km to

4 lane. Taken-up for construction under Public Private Partnership mode (PPP), with 8 years of maintenance, 70.20 km of Four-laned Oddanchatram – Dharapuram – Avinashipalayam Road (SH37) is currently in 4<sup>th</sup> year of maintenance.

### 4.1.2 Works in Progress

The following 3 works for a length of 63.384 km at a cost of Rs. 621.80 Cr are in progress, under EPC mode;

- Strengthening and widening of Malliyakarai – Attur road of SH30 (km 81/125 - 91/200)
- Strengthening and widening (4 Lane) of Tirunelveli – Sengottai – Kollam Road (SH39) km 27+700 to km 50+600 (package II)

 Four Laning of Gobi - Erode Section of SH15 from km 123+000 to km 153+600

## 4.1.3 Road Safety

Road Safety component has been taken-up under TNRSP II Project at an estimated cost of Rs.120 Cr. Under this,

- Road Safety improvement works including Intelligent Transport System (ITS) for a length of 95.60 km in Kancheepuram and Tiruvannamalai Districts have been taken-up.
- Specific support to the Stakeholders viz.,
   Transport, Police, Health and Education
   Department has been extended under Road safety initiatives.
- Road Safety awareness campaigns in 36 schools of Kancheepuram and Chengalpattu Districts as Pilot completed

under Phase-I and the same will be extended to 261 schools under Phase-II.

## 4.1.4 Preparation of Detailed Project Reports (DPR):

With Tamil Nadu Infrastructure Development Board (TNIDB) funding, preparation of DPRs for widening and strengthening of 3319 km roads at the cost of Rs.132.76 Cr has been taken up. Out of these roads, in the first phase, 718.71 km length of roads has been proposed under TNRSP – III with External Loan Assistance.

#### 4.1.5 Expenditure in the year 2023-24

During 2023-24, an expenditure of Rs.533.99 Cr has been incurred.

## 4.2 CHENNAI KANNIYAKUMARI INDUSTRIAL CORRIDOR PROJECT

16 State Highway corridors for a length of 589 km have been taken-up for upgradation with the financial support of USD 484 million from the Asian Development Bank (ADB) under Tamil Nadu Industrial Connectivity Project. These works are being executed on EPC mode of contract. The roads taken up for upgradation are as indicated below.

S.	EPC	Project Corridor	Length
No	No.		in km
1	EPC	Cheyyur - Polur Road	109.27
1	-01	(SH115) including ECR link	
2	EPC	Kancheepuram-Arakkonam	41.78
	-02	-Tiruthani Road (SH58-2)	

S.	EPC	Duningt Couridou	Length
No	No.	Project Corridor	in km
		Chengalpattu -	
		Kancheepuram Road	
3	EPC	(SH58-1) including Military	39.79
3	-03	Road	
		(Of this, 26 km are of Four-	
		lane with paved shoulders)	
	EPC	Thiruchendur –	
4	-04	Palayamkottai Road	50.59
	-04	(SH40-1)	
5	EPC	Melur – Tirupattur Road	30.49
)	-05	(SH191)	
6	EPC	Thanjavur – Mannargudi	29.44
	-06	Road (SH63)	
7	EPC	Kumbakonam – Mannargudi	14.90
/	-07	Road (SH66)	
8	EPC	Kumbakonam – Sirkazhi	36.78
0	-08	Road (SH64)	
9	EPC	Mayiladuthurai – Thiruvarur	29.88
,	-09	Road (SH23)	

S.	EPC	Project Corridor	Length
No	No.		in km
10	EPC	Thuraiyur – Perambalur	30.06
	-10	Road (SH142)	
11	EPC	Virudhachalam –	22.86
11	-11	Ulundurpettai Road (SH69)	
12	EPC	Cuddalore - Madapattu	37.36
12	-12	Road (SH9)	
	EPC	Mohanur – Namakkal –	
13	-13	Senthamangalam -	31.50
		Rasipuram Road (SH95)	
		Tiruchengode - Erode Road	
14	EPC	(SH79)	11.15
14	-14	(Of this, 7 Km are Four-lane	
		with paved shoulders)	
		Omalur to Tiruchengode via	
		Sankakiri Road including	
15	EPC	Tiruchengode Bypass	51.72
	-15	(SH86)	
		(Of this, 39.43 km are Four-	
		lane with paved shoulder)	

S. No	EPC No.	Project Corridor	Length in km
16	EPC -16	Palayamkottai - Ambasamudram Road (SH40-2)	21.40
		Total	588.97

Amongst these, 72.43 km of roads are being upgraded from two-lane to four-lane with paved shoulders and the remaining 516.57 km of roads are being upgraded from two-lane to two-lane with paved shoulders.

## 4.2.1 Project Cost

The total cost of the project, including land acquisition is Rs.7847.49 Cr. Of the construction cost, 80% is funded through loans from the ADB and remaining 20% is funded by the State Government.

## 4.2.2 Project Features

construction project includes of The 22 bypasses, 13 major bridges, 9 ROBs, 1 RUB, Grade Separators, 1 Pedestrian underpass, LUS, 2 VUPs, 120 Minor Bridges, and 1 1285 Culverts. To enhance road safety, adequate signages, gantry boards, streetlights and other road furniture are being installed. As a part of surveillance mechanism, incidence monitoring cameras are also being installed at accident-prone spots and major junctions. Drinking water, toilet facilities are provided at Bus-shelters to facilitate Road-Users.

## 4.2.3 Land Acquisition

Land acquisition is an inevitable part of such a major road infrastructure project. The project warrants acquisition to the tune of 445 hectares in 349 villages, out of which, 437 hectares of private lands have already been acquired. Remaining extent is in award enquiry / final award stages. The indigenous families, 41 in number, displaced in Melpakkam Village near Arakkonam, due to the project alignment, are being resettled following the ADB's Social Safeguards Policy. Residential buildings, Anganvadi, Community Hall, Temple, Over-Head Water Tank with water supply facility, pump room and cement concrete pavement are being constructed under this aegis.

## 4.2.4 Progress of Works

Out of total 16 road development works, 5 roads (EPC-05, EPC-06, EPC-10, EPC-11 and EPC-13) with a project value of Rs.1,112.61 Cr have been completed and work is in progress on the remaining 11 roads which are planned for completion by 2024-25.

### 4.2.5 Expenditure in the Year 2023-24

During 2023-24, an expenditure of Rs.1766.50 Cr has been incurred.

## 4.3 CHENNAI PERIPHERAL RING ROAD (CPRR)

To ensure quick movement of commercial goods and commodities from southern parts of the State to Ennore, Kattupalli Ports at northern corner of the State and to neighbouring States completely bypassing the city's traffic congestion, CPRR project is being implemented. The reduction in journey time accrues direct and indirect benefits. The corridor is access-controlled six-lane dual carriageway with two-laned service roads on either sides. The entire 132.87 km long corridor is being developed at the total cost of Rs.15,626 Cr. CPRR comprises 5 sections and is being executed with the external loan assistance of the Multi-lateral and Bilateral funding agencies.

#### 4.3.1 Section I of CPRR

Starting from Ennore port to Thatchur with a link road to Chennai Outer Ring Road, the Section-I of CPRR, for a length of 25.40 km, is being executed at the cost of Rs.3339 Cr through TNRDC, as a managing associate. The project is financially assisted by Japanese International Cooperation Agency (JICA), with an assistance of 40,074 Million Japanese Yen (Rs.2473.70 Cr). The project is scheduled to be completed by 2025.

#### 4.3.2 Section II & III of CPRR

Starting from Thatchur, Section II and III of CPRR, traverses through Tiruvallur bypass, ends at Sriperumbudur, for a total length of 56.20 km. Section-II and Section-III are being formed for a length of 26.10 km and 30.10 km, respectively. These portions are being constructed at a cost of Rs.4899 Cr through TNRIDC as a managing

associate. The Financial assistance for Section II & III is being provided by Asian Infrastructure Investment Bank (AIIB) for USD 378 Million and OPEC Fund for International Development for USD 100 Million. For Civil Works in Section III under 3 EPC Packages, viz., EPC-03, EPC-04 & EPC-05, tender evaluation is in progress. The construction works in section II are being carried-out through the following EPC Packages;

- EPC-01: The civil works are scheduled to be completed by 2025, at a contract value of Rs.820.59 Cr.
- **EPC-02:** The civil works are scheduled to be completed by 2025, at a contract value of Rs.719.10 Cr.

#### 4.3.3 Section IV of CPRR

The Section-IV of CPRR starts from Sriperumbudur and ends at Singaperumal Koil, with a length of 23.80 km. The works have

already been completed with State funds. The preparation of DPR is underway for making this stretch access-controlled, through Tamil Nadu Road Infrastructure Development Corporation (TNRIDC).

#### 4.3.4 Section V of CPRR

The Section V of CPRR starts from Singaperumal Koil and ends at Poonjeri Junction, near Mamallapuram (NH332A), for a length of 27.47 km. The Land Acquisition at the cost of Rs.747.92 Cr for an extent of 126.84 hectares, is at an advanced stages. The fund assistance is sought through JICA loan assistance for 49,847 Million Japanese Yen (Rs.2784 Cr).

## 4.3.5 Expenditure in the Year 2023-24

During 2023-24, an expenditure of Rs.663.18 Cr has been incurred.

## **5. ROAD SAFETY**

Increasing vehicular population, quality roads, over-speeding and non-observance of rules and regulations mostly contribute to road crashes. Road traffic crashes are of great concern, as they result in loss of lives, limbs and property.

As per World Health Organization (WHO) report (2022), road traffic crashes result in the death of approximately 11.90 lakh people around the world every year. About 1,68,000 number of fatalities in India and 17,884 in the State were reported during 2022. (Source: 'Road Accidents in India 2022', MoRT&H (Transport Research Wing), New Delhi). The victim age group is predominantly between 18 and 45, the most productive one, affecting the Country's GDP.

Crash data analysis indicates that overspeeding results in 71.20% fatalities (Source: 'Road Accidents in India 2022'). The remaining 28.80% of fatalities occur due to a variety of reasons such as violation of rules, distracted driving, lack of awareness, geometric deficiencies of the road etc., pointing to the fact that Road Safety is a multi-sectoral issue.

#### **5.1 INITIATIVES OF GOVERNMENT**

Given the severity of the issue on hand, the State Government has adopted multi-pronged strategy to improve road safety. With a focus to reduce loss of lives in road crashes, the Hon'ble Chief Minister of Tamil Nadu announced Seerana Salaigal ie., Fatality Accident Incident Reduction (FAIR), under "Innuyir Kappom Thittam" (IKT) during the Road Safety meeting held on 18.11.2021.

### 5.1.1 Special Task Force- Road safety

To implement FAIR, a Special Task Force on Road Safety (STF-RS) was constituted on 15.3.2022 under the Chairmanship of the Additional Director General of Police, State Crime Records Bureau, in which, the Chief Engineer (H), Construction and Maintenance is one of the members. The STF is mandated to identify short-term and long-term solutions for reducing fatalities and injuries in road accidents. The implementation of the recommendations is also being monitored by STF. An allotment of Rs.90.37 Cr has been made in the year 2023-24 for short-term measures and works are in progress.

## 5.1.2 'Guide for Road Safety Awareness'

The Hon'ble Chief Minister of Tamil Nadu released a 'Guide for Road Safety Awareness' on 22.8.2022 as a part of creating awareness on Road Safety.

### 5.1.3 District-Level Road Safety Review Meeting:

The Hon'ble Chief Minister of Tamil Nadu has advised to conduct district-wise review meeting to emphasize road safety and create awareness. The Hon'ble Minister for Public Works, Highways and Minor Ports has been conducting Road Safety District level review meetings to sensitize all stakeholders. So far, meetings have been conducted in 22 districts viz., Namakkal, Chengalpattu, The Nilgiris, Theni, Madurai, Thoothukudi, Sivagangai, Ramanathapuram, Erode, Coimbatore, Virudhunagar, Karur, Tiruppur, Thiruvarur, Nagapattinam, Tenkasi, Tirunelveli, Kanniyakumari, Cuddalore, Dindigul, Trichy and Mayiladuthurai. In these meetings, stakeholders including representatives of vehicleowner associations and NGOs have actively participated.

#### 5.2 BLACK SPOT RECTIFICATION

Ministry of Road Transport and Highways, Government of India had identified 1208 blackspot locations in Tamil Nadu based on the data collected during the years 2015-18. Subsequently, 131 blackspot locations on NHAI and NH roads were also identified. The long-term rectification measures have been completed for 781 black spots and works on remaining blackspots are in various stages of implementation.

#### **5.3 ROAD SAFETY WORKS**

As short term road safety measures, junction improvement, provision of speed breakers, signboards, and protective works are being taken up to reduce accidents, under the guidance provided by the Road Safety Wing of the department. Long-term measures such as construction of grade separators, VUP, widening

of road, straightening of curves etc., are also being undertaken under the regular schemes.

#### 5.3.1 Road Safety Works under CRIDP

In the financial year 2021-22, 401 works were taken-up in CRIDP under Road safety at a cost of Rs.200 Cr. 398 works at a cost of Rs.171.63 Cr have been completed. In the financial year 2022-23, 532 works were taken-up in CRIDP under Road safety at a cost of Rs.191.37 Cr and 519 works at a cost of Rs.145.86 Cr have been completed. In the financial year 2023-24, 165 works have been taken-up in CRIDP under Road Safety works for Rs.134.65 Cr out of which 89 works have been completed at a cost of Rs.5.61 Cr.

During Budget session 2023-24, the Hon'ble Minister for Public Works, Highways and Minor Ports has announced that immediate rectification measures required on State Highways will be

taken up at a cost of Rs.150 Cr based on a 'Road Safety Audit' (RSA) conducted using the services of trained Road Safety Engineers. Accordingly, sanction has been accorded for 555 road safety works at a cost of Rs.149.88 Cr and all these works will be completed shortly.

#### 5.3.2 Junction Improvement works

Junctions are vulnerable locations that cause accidents. 72 numbers of accident-prone junctions have been identified and taken-up at a cost of Rs.110.26 Cr during 2023-24. The works are in progress.

#### 5.4 ROAD SAFETY TRAINING

Training and capacity building on road safety is vital in achieving the targeted reduction in road crashes. The Training programme on 'Road Safety Engineering' was inaugurated at Training Centre, HRS, by the Hon'ble Minister for Public Works, Highways and Minor Ports Department on

15.12.2021. So far, 554 Engineers in 15 batches have been trained. Key elements in Road Safety Engineering with practical sessions at site were explained to the trainees.

#### 5.4.1 Road Safety Awareness Programmes:

The Engineers of Road Safety Wing and the Construction and Maintenance Wing regularly conduct awareness programmes at schools, colleges and public places on road safety. Officials from the Traffic Police, Transport Department and Public representatives also join in creating awareness. So far, 236 such awareness programs have been conducted.

# 6. RESEARCH, TESTING, QUALITY CONTROL AND TRAINING

#### 6.1 RESEARCH

Enhancing pavement longevity and innovating cost-effective technologies are the prime focus of the research works undertaken at Highways Research Station (HRS). The on-going research works by HRS are;

- To study the effectiveness of curing compounds on concrete pavement-under Tamil Nadu Innovative Initiatives (TANII), State Planning Commission funding.
- Study the performance of Glass fibre in hot bituminous mixes.
- Comparative study on the properties of clay soil stabilized with Sodium Hydroxide and Nano-stabilizer.

The use of glass fibres on hot bituminous mixes and use of Nano stabilisers on clay have been found to be effective in improving the strength. Steps are being taken to implement the results of the research in field.

#### 6.2 TESTING

Tests for assessing suitability and quality of construction materials ie., bitumen, soil and concrete mixes are conducted in laboratories in Chennai and eight regional laboratories at Villupuram, Trichy, Thanjavur, Madurai, Tirunelveli, Salem, Tirupur and Coimbatore. The tests include soil, steel, concrete mix design, pile load, bituminous job-mix formula etc.,. Vehicle Axle Load Survey and Roughness Index tests are conducted only by Traffic Laboratory, HRS, Chennai. During the financial year 2023-24, 24,108 tests have been conducted at laboratories, earning a total revenue of Rs.20.36 Cr.

#### **6.3 TECHNICAL GUIDANCE**

- Rehabilitation measures were suggested for the Maanavamani Thiyagi Sarangapani (Mayuram) ROB at km 32/2 of Kumbakonam – Sirkali Road (SH64) in July, 2023.
- ii) Soil parameters and surface conditions of the pavement were studied by conducting BBD test and Roughness index test for the work of "Chennai Outer Ring Road from Vandalur – Minjur Phase-I & Phase-II".

#### **6.4 QUALITY CONTROL**

The quality at all stages of execution of roads and bridges is ensured by conducting relevant tests at every stage. Accordingly, quality control laboratories have been established at Divisional levels. 9 Quality Control Divisions with 43 Sub-Divisions are functioning to ensure the quality of works at all stages.

#### 6.5 TRAINING

#### 6.5.1 Training Centre

Training is vital ingredient for a growing organization. An exclusive Training Centre at Highways Research Station premises is imparting residential training to the Engineers and staff. For the year 2023-24, under Comprehensive Training Programme (CTP), 1150 Engineers and 646 staff have been trained. This apart, 15 Deputy Collectors (Trainees) and 24 Section Officers of Secretariat have also been trained by the Centre.

Highways Research Station, during 2023-24, imparted training to 368 Engineers of Greater Chennai Corporation (GCC) and 40 Engineers of District Rural Development Agency (DRDA). 101 students from various Engineering colleges and Polytechnics have undergone in-plant training at the laboratories of HRS.

#### 6.5.2 Technical Lectures

Technical Lectures are being organised in Highways Research Station for better exposure to innovative ideas and advancements in the field of Highways Engineering. Some of the lectures organised are;

- Safer Roads and Safer mobility.
- Vehicle mounted falling weight deflectometer.
- Advantages and use of crumb rubber from waste tyres in construction of durable and long-lasting Roads.
- Green products and innovative solutions in flexible and rigid pavement.
- Use of polymer fibre in flexible pavements.
- Micro Silica in rigid pavements.

 AI enabled structural health monitoring systems for sustainable infrastructure.

#### 6.6 INDIAN ROADS CONGRESS

Director, Highways Research Station is a Council Member of Indian Roads Congress and a member of Accreditation of New Materials & Techniques Committee and Human Resource Development Committee (G-2). So far, technical remarks have been offered in 11 Accreditation Committee meetings and six G-2 Committee meetings. Normally the outcomes of the In-house research works are presented during every Annual sessions. The Government of Tamil nominated a delegation of 10 Engineers of all cadres led by the Director, HRS to participate in the 82<sup>nd</sup> Annual Session of IRC held Gandhinagar, Ahmedabad, Gujarat during December 2023. Such nominations to sessions are beneficial, as the best practises from

all over the Country are discussed during the sessions for replication.

# 7. TAMIL NADU ROAD DEVELOPMENT COMPANY LTD

Started in the year 1998, Tamil Nadu Road Development Company (TNRDC) is a joint venture between Tamil Nadu Industrial Development Corporation (TIDCO) and TIDEL Park Ltd., with 50:50 shareholding and registered under the Companies Act. Basically, functioning as a concessionaire, TNRDC is also engaged as a Managing Associate for projects and toll services.

### 7.1 INFORMATION TECHNOLOGY EXPRESSWAY LTD. (ITEL)

A subsidiary of TNRDC, ITEL maintains Rajiv Gandhi Salai (I.T. Expressway) from Madhya Kailash to Siruseri. This road, running through the I.T. Hub of Chennai City, is a divided six lane carriageway with service road on both sides. To enable pedestrian to cross the carriageway, FOBs at 15 locations have been provided.

#### 7.2 PROJECTS EXECUTED

- i. The stretch from Akkarai to Mamallapuram of ECR is under the maintenance of TNRDC.
- ii. TNRDC is 'Management Associate' for Chennai Outer Ring Road (CORR), a Greenfield project, which starts from Vandalur on NH32 and ends at Thiruvottiyur –Ponneri-Panchetti Road, Minjur. This Project was executed in two phases on Design Build Finance Operate Transfer (DBFOT) Annuity basis under PPP mode.
  - a. **Phase-I**: from Vandalur on NH32 to Nemilicheri on NH716, a length of 29.65 km for Rs.1081.40 Cr.
  - b. Phase-II: from Nemilicheri on NH716 to Thiruvottiyur –Ponneri-Panchetti Road at Minjur, a length of 30.50 km for Rs.1075 Cr.

From 19.1.2022 onwards, road user fees are being collected at 4 Toll Plazas on CORR.

#### 7.3 MAJOR PROJECTS TAKEN UP

#### 7.3.1 State Funded Projects

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

As a part of traffic de-congestion drive and to enable smooth flow of traffic along IT corridor, two 'U' shaped Flyovers, one at Indira Nagar Junction and other at TIDEL Park Junction, at a cost of Rs.108.13 Cr were taken up for execution by TNRDC as Managing Associate. Of the above, the Indira Nagar Flyover has been opened for public use by the Hon'ble Chief Minister on 23.11.2023. The flyover at TIDEL Park junction is at advanced stages of completion.

#### ii. Bypasses to Kelambakkam and Tiruporur

Bypasses with six-lane configuration at Tiruporur (7.45 km long) and Kelambakkam (4.68 km long) taken up at the cost of Rs.314.73 Cr are nearing completion

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

As a managing associate, TNRDC is executing CPRR Section- I (Ennore port to Thatchur) and Section-V (Singaperumal koil to Poonjeri). While the construction works are in progress at Section-I, land acquisition is at an advanced stage for Section-V.

#### 7.4 EXPENDITURE IN THE YEAR 2023-24

During 2023-24, an expenditure of Rs.743.96 Cr has been incurred.

# 8. TAMIL NADU ROAD INFRASTRUCTURE DEVELOPMENT CORPORATION

Formed in the year 2005, Tamil Nadu Road Infrastructure Development Corporation (TNRIDC), a non-profitable company, solely owned by the Government of Tamil Nadu, is involved in executing road infrastructure projects.

### 8.1 PROJECTS BEING IMPLEMENTED BY TNRIDC

- i. Improvements from Four laning to Six laning of Vandalur Walajabad Road from km 47/0 63/8 at the cost of Rs.180.09 Cr nearing completion.
- ii. Construction of grade separator at Km37/6 38/4 of Vandalur Walajabad roadat Rs.26.65 Cr nearing completion.

iii. **Madurai Ring Road:** 4 - laning of Madurai Ring Road has been completed and the road has been put to public use. Due to expansion of Madurai Airport, it is proposed to form a diversion road to Madurai Ring Road, for a length of 8.00 km. Land acquisition, sanctioned for Rs.40.50 Cr, is in progress.

#### iv. Chennai Peripheral Ring Road:

TNRIDC is the Managing Associate for Sections II, III & IV of Chennai Peripheral Ring Road Project.

Section II: From Thatchur on NH16 to starting point of Tiruvallur Bypass, for a length 26.10 km- Work is in progress.

Section III: From starting point of Tiruvallur Bypass to Sriperumbudur (NH48), for a length 30.10 km - Technical tender evaluation is in progress.

Section IV: From Sriperumbudur (NH48) to Singaperumal koil (NH32), six-laned carriageway for a length 23.80 km - DPR is in progress for proposing access-controlled stretch.

### Construction of ROB in lieu of LC - 47 in between Guduvancherry and Singaperumal koil 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 18.3.1997 for the purpose of administration, management and control of State ports. The main objectives and functions of TNMB are detailed below

- To encourage competition and transparency in ports development.
- To encourage participation by private sector.
- To enable commercial viability of port projects.
- To offer easy access for the maritime sector development in Tamil Nadu, streamline clearances and encourage ease of doing business.

 To facilitate integrated development of port facilities for port-based industries promotion.

#### 9.1 COASTLINE AND PORTS

Tamil Nadu has the second longest coastline of 1076 km with Bay of Bengal and Arabian Sea on the east and western sides, respectively. The coastline also boasts of 3 Major Ports operated by Government of India namely;

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

#### 9.2 STATE PORTS IN TAMIL NADU

The following are the declared / notified State ports (Minor Ports) under the control of the Government of Tamil Nadu:-

<b>Government Ports</b>	Captive ports
1. Cuddalore	1. Kattupalli
2. Nagapattinam	2. Ennore Minor port
3. Pamban	3. Panaiyur
4. Rameswaram	4. Thiruchopuram
5. Kanniyakumari	5. Silambimangalam
6. Colachel	6. Parangipettai
	7. PY-03 Oil Field
	8. Thirukkadaiyur
	9. Thirukkuvalai
	10. Udangudi
	11. Koodankulam

## 9.3 TAMIL NADU STATE PORTS DEVELOPMENT POLICY, 2023

Minor Ports along the coast of Tamil Nadu were developed as per the Minor Ports Development Policy of the Government of Tamil Nadu, which was issued in the year 2007. In the last 2 decades, various innovative methods of port development have evolved in other coastal

states. In order to attract Public-Private Partnership (PPP) in port development and execution of projects in the State, there was an imminent need for amendment to the Port Policy. 15.11.2023, the updated State Ports On Development Policy by incorporating the best practices was notified by the Government as "Tamil Nadu State Ports Development Policy, 2023". The New Policy incorporates flexible approach to PPP Projects, easier access for port development and recognizes the potential of adventurous water sports, coastal shipping, skill development and sustainable port development.

### 9.4 ACTIVITIES OF OPERATIONAL MINOR PORTS

#### 9.4.1 Government Ports

S. No	Port	Activity			
1.	Cuddalore Port	Developed as an open sea			
		anchorage port with TNMB and			
		GoI's Sagarmala Scheme			
		funding.			
2.	Nagapattinam	i) An open sea anchorage port to			
	Port	handle the edible oil import.			
		ii) International Passenger Ferry			
		Service from Nagapattinam,			
		India, to Kankesanthurai, Sri			
		Lanka, has been commenced on			
		14.10.2023, operated by the			
		Shipping Corporation of India			
		Ltd.			
3.	Pamban Port	East-West sea-borne			
		connectivity for smaller vessels /			
		crafts provided with pilotage			
		services in Pamban channel.			

S. No	Port	Activity		
4.	Rameswaram	i) A short trip domestic passenger ferry is operated near Agnitheertham area.  ii)DPR for creation of Port and Passenger Terminal infrastructures at Rameswaram for passenger ferry service between Rameswaram (India) and Thalaimannar (Srilanka), is being prepared by IIT-M.		
5.	Kanniyakumari Port	Ferry services to Vivekananda Rock Memorial and Ayyan Thiruvalluvar Statue, operated by PSC is provided at this Passenger ferry port.		

### 9.4.2 Captive Ports / Terminals

SI. No	Port	Activity		
1.	Kattupalli Port	Ship building, repairs and modular fabrication works carried-out by Larsen & Toubro Limited.  Export / Import of cargoes handled by Marine Infrastructure Developer Private Limited.		
2.	Ennore Minor Port	Imports Liquid Ammonia through Multiple Buoy Mooring system.		
3.	Chemplast Marine Terminal within Cuddalore Port limit	Import of Vinyl Chloride  Monomer through an Island  Jetty facility.		

SI. No	Port	Activity
4.	Thirukkadaiyur Port	Import of Naphtha through Single Point Mooring for 330 MW Power Plant of TANGEDCO.
5.	Kudankulam Port	Import of machinery/ over dimensional cargo through Roll on – Roll off Jetty for Kudankulam Nuclear Power Project Units 3, 4, 5 & 6.

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

### 9.5 DEVELOPMENT INITIATIVES OF THE BOARD

#### 9.5.1 Development of Cuddalore port

Cuddalore Port is provided with infrastructure such as extended breakwaters, ship berths, dredged channel etc. Tenders for identifying the operator have been floated for operating and developing brownfield and greenfield facilities.

#### 9.5.2 Kanniyakumari Port:

M/s.Poompuhar Shipping Corporation Limited (PSC) 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 Kanniyakumari:

With a view to increase capacity to handle tourists, the extension of Jetty at Vivekananda

Rock Memorial by 100 metres for berthing 3 ferries simultaneously is being executed by the Public Works Department (PWD), with funding by the Government of India of Rs.10 Cr and the work is at an advanced stage of completion.

# (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 cost of Rs.37 Cr has been taken up by the Highways Department under Sagarmala Scheme with 50% financial assistance from Government of India. The work is at an advanced stage of completion.

#### 9.5.3 Udangudi Port:

An open sea trestle jetty (length – 8 km) is being constructed by Tamil Nadu Generation and Distribution Corporation (TANGEDCO) to receive coal for their 1320 MW Udangudi Super Critical Thermal Power Project. The work is expected to be completed by December 2024.

#### 9.5.4 Floating Jetties at Various Locations:

TNMB is in the process of constructing floating jetties at Rameswaram, Kanniyakumari & Cuddalore Ports. Based on the DPR by Indian Institute of Technology (IIT-M), Chennai and with 100% financial assistance from GoI under the Sagarmala Scheme, the works have been taken-up.

#### 9.6 TAMIL NADU MARITIME ACADEMY

Maritime Academy at Thoothukudi is conducting a 6 month pre-sea general purpose rating residential course. So far, 41 batches, consisting of a total of 1600 students, have been benefitted. The Directorate General of Shipping accredited courses as mentioned below are also

conducted, which have higher potential of employment in Indian and Foreign flag vessels.

- (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.

### 9.7 CARGO HANDLED AND REVENUE OF THE BOARD FOR 2023-2024

1,01,22,679 MT of cargo was handled through the State Ports and Tamil Nadu Maritime Board earned a gross revenue of about Rs.62.25 Cr (approximately).

# 10. POOMPUHAR SHIPPING CORPORATION LIMITED

#### 10.1 INTRODUCTION

Poompuhar Shipping Corporation (PSC) was formed on 11.4.1974 under the Companies Act, 1956 to transport the entire coal required by Tamil Nadu Generation and Distribution Corporation Ltd., (TANGEDCO) erstwhile Tamil Nadu Electricity Board. Besides, PSC is also operating ferry services at Kanniyakumari for tourists.

#### 10.2 ADMINISTRATION.

The corporation is headed by the Chairman and Managing Director. The affairs of the corporation are managed by the Board of Directors primarily consisting of officers nominated by the Government of Tamil Nadu. The day-to-day activities are executed by various

wings such as technical, operation, finance and personnel administration headed by qualified persons in the respective fields.

#### 10.3 CORE ACTIVITIES

The core activities of the PSC are transportation of thermal coal along the East Coast of India and transportation of passengers from the boat jetty at Kanniyakumari to Vivekananda Rock Memorial and Ayyan Thiruvalluvar Statue. The PSC has also started operating ferry service to Vattakottai.

### 10.3.1 TRANSPORTATION OF COAL FOR NTECL

Domestic coal from the load ports of Paradip / Kakinada / Dhamra Ports is transported to Kamarajar Port, Ennore for M/s. NTPC Tamil Nadu Energy Company Ltd., (NTECL), a joint venture company of TANGEDCO and NTPC, for their 3 x 500 MW thermal power stations at Vallur, North Chennai. The transportation of coal for

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

#### 10.3.2 FERRY SERVICE AT KANNIYAKUMARI

The corporation is operating passenger ferry service from the shore of Kanniyakumari to the Rock Memorial Vivekananda and Avvan statue. For transporting the Thiruvalluvar passengers, three ferries namely ML Guhan, ML Pothigai and ML Vivekananda with a seating capacity of 150 passengers each are being used. Two ferries new MΙ Thamirabarani ML Thiruvalluvar are also operating to Vattakottai.

#### **10.4 PERFORMANCE**

#### 10.4.1 COAL TRANSPORTATION

The physical and overall financial performance of the corporation during the last three financial years are given below;

#### **Physical and Overall Financial Performances**

Year	Quantity of Coal received at Load Ports	Quanti ty of Turn Coal over		Divide nd	
	(in Lakh MT) (Rs. in Lakh )				
2021- 2022	62.86	58.74	29226.38	68.47	20.54
2022- 2023	79.36	75.39	42121.52	(-) 2867.33	_
2023- 2024*	65.72	61.79	35000.00	200.00	_

<sup>\*</sup> Estimated

#### 10.4.2 PASSENGER TRANSPORTATION

The ferry service has earned a profit of Rs. 333.47 lakh during 2022-2023. The physical and financial performance of Kanniyakumari ferry service during the last three financial years are given below;

# Physical and Financial Performance of Kanniyakumari Ferry Service

Year	No. of Tourists (In Lakh)	Fare Collection (Rs. In Lakh)	Profit (Rs. In Lakh)
2021-2022	5.47	265.64	(- )144.80
2022-2023	21.36	1591.18	333.47
2023-2024*	21.31	2365.94	940.54

<sup>\*</sup> Estimated

#### 10.5 PLAN FOR 2024-25

The Corporation proposes to transport approximately 65.00 Lakh Metric Tonne of coal through charted vessels for NTECL during the year 2024–25.

#### 11. INITIATIVES

The Government accords high priority for the creation of road infrastructure to sustain the pace of growth in the State. The Government has also been extending full co-operation and support towards implementation of any major project by the Government of India. The department has taken several special initiatives in the recent past for efficient functioning and timely completion of the projects.

#### 11.1 MAJOR PROJECTS IN PIPELINE

### i. Elevated corridor from Chennai Port to Maduravoyal

The work commenced on 23.11.2023 for all 4 Packages by National Highways Authority of India (NHAI). All possible assistance for

early completion of project is being rendered by the State.

- ii. Upgradation of the East Coast Road from Chennai to Kanniyakumari as 4 lane (NHAI & State NH wing).
  - From Mamallapuram to Marakkanam and Puducherry to Nagapattinam -4 laning works are in progress (NHAI)
  - From Marakkanam to Puducherry -4 laning work to be started (NHAI)
  - Nagapattinam to Thoothukudi DPR work is in progress (NHAI)
  - Thoothukudi Kanniyakumari DPR work is in progress and MoRTH has accorded approval for Land Acquisition amounting to Rs.392.33 Cr (State NH wing)

iii. Upgradation of road from Chengalpattu to Tindivanam from 4 lane to 6 lane (NHAI).

The preparation of Detailed Project Report (DPR) for widening from 4 to 6 lane from Chengalpattu to Tindivanam is in progress.

4-laning Coimbatore iv. οf Sathyamangalam and 2 laning with / paved shoulder without Sathyamanglam TN/Karnataka to Section of Old Border NH209 (State NH wing).

The Ministry of Road Transport and Highways (MoRT&H) has accorded approval for land acquisition for Rs.639.18 Cr and preliminary work for land acquisition will commence soon.

# v. 4-laning of Ramanathapuram Rameswaram - Dhanushkodi section of NH49 (State NH wing).

The preparation of DPR for this stretch including construction of Pamban Bridge is in progress.

#### 11.2 INNOVATIVE TECHNIQUES IN FIELD

The Nilgiris witnesses frequent landslides, disrupting traffic flow and causing damages to road infrastructure. Landslide incidences and trends were closely analysed. Suitable methods to mitigate severity of landslides due to road expansion activities through increased stability of the soil during construction by deploying innovative techniques such as soil-nailing, hydroseeding, geo-grids and gabions etc., are being studied.

An Expert committee has been constituted with the Principal Scientist and Head, ICAR, as the

lead and the Assistant Professor, Civil Engineering Department, NIT, Trichy, District Revenue Officer (DRO), The Nilgiris, the Deputy Director (Soils), HRS, District Forest Officer, The Nilgiris, the C&M, Engineer, Highways Divisional Udagamandhalam, Divisional Engineer NH, Gobi, Engineer, Agri Engineering, the Executive The Nilgiris and Assistant Director, Geology and Mines Department, The Nilgiris as members. This committee has been constituted in consonance with the section 28 of the Disaster Management Act, 2005. In ghat sections, soil-nailing technique, slope stabilization techniques have been adopted in 6 Districts at a cost of Rs.420 Lakh under CRIDP.

#### 11.3 SPECIAL INITIATIVES

# Muthamizh Arignar Kalaignar Centenary Celebration

The followings events have been planned by the Department as part of Muthamizh Arignar Kalaignar Centenary Celebration:

- 100 Road Safety Awareness Camps.
- Inauguration of 100 new bridges.
- Renovation of 100 old bridges.
- Plantation of trees at 100 stretches.

### Project Monitoring Information System (PMIS):

The department takes up numerous road infrastructure projects every year involving huge capital expenditure. The execution of the project involves procurement, pre-construction and construction activities. Delay at any stage not

only adversely impacts progress in completion of works but also affects timely delivery of service to the public. In addition, time and cost over-runs cause huge avoidable financial burden.

To complete the projects in time, to monitor the activities at various stages and to manage the projects effectively, an announcement was made Hon'ble Minister for Public Works, by the Highways and Minor Ports Department during the budget session for the year 2023-24 to evolve a web-based solution to ensure real time monitoring of works. Following this, the department has developed a web-based and mobile compatible, Project Monitoring Information System (PMIS). With the help of this web enabled application, the officials implementing the projects field can upload relevant documents and update the progress of works, which can be viewed by the Superior Officers, at any point of time. Execution of projects can be monitored on a real time basis

and delay in activities at various stages can be captured for timely intervention to remove obstacles. This monitoring tool has helped in identifying critical issues and resolving the same in time. As a result, it was possible to commence almost all the works in the same financial year, which was an unique achievement.

#### Namma Saalai App:

As a part of response to the grievances of public regarding condition of road and related issues, a mobile based application has been developed. "Namma Saalai" is a web-based tool for reporting bad patches/potholes/any other grievances in roads owned by the department. In the august presence of Hon'ble Minister for Public Works, Highways & Minor Ports, the Hon'ble Minister for Youth Welfare and Sports Development launched this app on 1.11.2023. The potholes, reported through 'Namma Saalai' are rectified within 24 hours on State Highways

and within 72 hours in Major District Roads and Other District Roads. The image of the rectified road patch is uploaded on the mobile app immediately for view by the complainant. In the 2023-24, 2129 complaints have been resolved to the satisfaction of the public within the time prescribed.

## Digitization of roads and Monitoring Passenger Car Units (PCUs) for road expansion

During Budget session 2023-24, Hon'ble Minister for Public Works, Highways and Minor Ports, announced that digitization of road assets and traffic intensity will be carried out by the Department. Enumeration of vehicular flow and quantifying PCUs is essential for capacity augmentation of roads. The work has commenced on a 'Proof of Concept' (PoC) for AI-based analytics for assessing the count and classification of vehicles on road corridors from

the video feeds. It has also been decided to digitize the road boundaries and assets to enable easy access to information for planning future development of road infrastructure.

With this background, M/s. TANSAM, a Centre of Excellence, promoted by TIDCO, has been engaged for developing the PoC under the expert guidance of Indian Institute of Technology, Madras. The methodology involves capturing video feeds on 24/7 basis at important sample locations through advanced cameras. Accordingly, data collection is being done throughout the important corridors of the State Road network.

#### Closed User Group Numbers

The Engineers of Highways Department have been provided with Closed User Group (CUG) Numbers to enable the public and officials of other departments to communicate easily with the department Officials regarding maintenance of roads, particularly during emergency arising out of natural disasters or calamities.

#### 11.4 OTHER INITIATIVES

#### Internal Audit System

The Internal Audit system for the verification of works and related documents has been initiated in the department and officials from the neighboring districts/ circles are deputed to conduct surprise inspections every year. The observations made by the Internal Audit Team are being scrupulously addressed and compliance reported.

#### Revolving Fund

The proposals for the preparation of DPRs from revolving fund of Rs.20 Cr are being approved by the Committee consisting of the Additional Chief Secretary, Highways and Minor Ports department, an Officer from the Finance

department and the Chief Engineers concerned. Under this umbrella, shelf of projects is prepared well in advance, for taking up works for execution. The amount meant for preparation of DPR in the estimates is reimbursed to the revolving fund at the time of execution of works. 175 projects have been sanctioned so far and preparation of DPRs is in progress.

# High Level Dispute Resolution Committee

A High Level Dispute Resolution Committee (HLDRC) has been constituted to resolve contractual disputes that might arise in execution of the contracts. The committee is empowered to evolve guidelines for dispute resolution amicably. Amicable settlement has been achieved with the intervention of this Committee.

#### High Power Committee

A High Power committee under the Chairmanship of Chief Secretary to Government has been constituted 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 to ensure timely completion of the projects.

#### 12. BUDGETARY ALLOCATION

The Highways and Minor Ports Department is striving hard to provide all-weather quality road infrastructure. Based on the need for development and maintenance of road infrastructure, budgetary allocations are made every year.

In the year 2023-24, Rs.16,990.92 Cr was allotted for Plan works. Out of this, expenditure of Rs.16,624.88 Cr has been incurred.

The budgetary allocations for the year 2024-25 are as follows;

SI. No	SCHEMES/PROJECTS	Budget Estimate 2024-25 (Rs.in Cr)			
(A)	Capital Head				
1	National Highways				
	Revamped Central Road Fund	208.00			
	Chennai Port- Maduravoyal Elevated Corridor	36.34			
2	Construction and Maintenance				
	Comprehensive Road Infrastructure Development Programme	8297.52			
	Road Safety	4.15			
	Permanent Flood Restoration works	37.04			
	Bypass formation and Land Acquisition	108.60			
	Other works	281.01			
	Tamil Nadu Road Infrastructure Development Corporation	20.00			
	Tamil Nadu Road Development Company	834.63			

SI. No	SCHEMES/PROJECTS	Budget Estimate 2024-25 (Rs.in Cr)			
	Chennai Peripheral Ring Road	2267.02			
	Chennai Kanniyakumari Industrial Corridor Project	907.85			
3	Projects				
	Comprehensive Road Infrastructure Development Programme	67.80			
	High Level Bridges/River Bridges/bypass works	5.67			
	ROB/RUBs/Elevated Corridor	1242.02			
	Road Works	49.98			
4	Tamil Nadu Road Sector Project-II	275.92			
5	NABARD & Rural Roads				
	Upgradation of Panchayat Union Roads /Panchayat roads to ODR Standard	1600.00			

	SCHEMES/PROJECTS	Budget	
SI. No		<b>Estimate</b>	
		2024-25	
		(Rs.in Cr)	
	High Level Bridges/River Bridges		
	under NABARD Loan Assistance	754.37	
	Scheme		
	High Level Bridges/River Bridges	26.84	
	/ bypass Works under State Fund	20.04	
6	Chennai Metropolitan	400.48	
	Development Plan works	700.70	
7	Others		
	Investigation /Estimation of	4	
	Project work under Roads and	17.75	
	Project work under Roads and Bridges		
	Project work under Roads and	17.75 20.00	
	Project work under Roads and Bridges Revolving Fund for preparation		
	Project work under Roads and Bridges Revolving Fund for preparation of DPR	20.00	
(B)	Project work under Roads and Bridges Revolving Fund for preparation of DPR Inter Account Transfers	20.00	

#### Conclusion

The road network is the backbone of the economy and is an irreplaceable item in the development agenda. The Road and Bridge infrastructure ably support all-round growth of the State. The department of Highways strives hard to provide, safe, comfortable, and efficient mobility solution and pledges to continually update its knowledge and potential, to serve the State and its subjects better.

#### E.V.Velu

Minister for Public Works, Highways and Minor Ports Department



Hon'ble Chief Minister inaugurated the 5 lakh tree saplings planting Ceremony at HRS campus, Chennai on 7.6.2023.



In the presence of Hon'ble Minister for Public Works, Highways and Minor Ports, Hon'ble Minister for Youth Welfare and Sports Development launched the "Namma Saalai app" for Highways Department on 1.11.2023



Hon'ble Chief Minister handed over Appointment orders to Junior Drafting Officers on 8.3.2024.



Hon'ble Chief Minister laid Foundation stone for the Construction of Elevated Corridor from Teynampet - Saidapet at Anna Salai, Chennai on 19.1.2024.



Hon'ble Chief Minister inaugurated High Level Bridge across Buckingham canal at Thiruvottiyur-Ponneri-Panchetti road, Tiruvallur District through Video Conference on 7.9.2023.



Hon'ble Minister for Municipal Administration, Urban and Water Supply and Hon'ble Minister for Public Works, Highways and Minor Ports conducted a Road safety review meeting on 8.7.2023 in Trichy District.



Hon'ble Minister for Public Works, Highways and Minor Ports inspected the flood affected GST road at Chromepet near Government General Hospital- Chengalpattu District



Hon'ble Minister for Public Works, Highways and Minor Ports inspected the quality of Chinna Coonoor- Ebbanad road-The Nilgiris District



Tree saplings planted along Vadamadurai-Ottanchathiram road



Four laning of Cuddalore - Chittoor road.



Road over Bridge in lieu of LC-7 at Omalur-Muthunaickenpatti-Salem District



Four-laning of Tirunelveli – Sengottai – Kollam road.



Hon'ble Chief Minister inaugurated Indira Nagar 'U' Shaped fly over at Rajiv Gandhi Salai (OMR), Chennai on 23.11.2023.



(Before Improvement)

(After Improvement)

Road safety works

Junction improvements carried out in
Erode-Perundurai-Kangeyam road.