



HIGHWAYS AND MINOR PORTS DEPARTMENT

**Policy Note
2021 - 2022**

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Highways and Minor Ports Department**

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**Government of Tamil Nadu
2021**

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HIGHWAYS AND MINOR PORTS DEPARTMENT POLICY NOTE 2021-22

1. INTRODUCTION

The growth and prosperity of the country depends on its infrastructure. The growth of each and every sector like Agriculture, Industry, Production and Marketing, Ports, Mining, Health and Tourism depends on the development of the roads with quality. Therefore good road infrastructure is essential to get the safe movement across the country.

Minor Ports are another important infrastructure for the development of the country.

1.1 HIGHWAYS

Road network is an important infrastructure for the connectivity of various places. The better the connectivity, the better is pace of overall economic development of people in a particular Geographical area. Hence it is necessary to

develop the quality road infrastructure at a faster pace.

Tamil Nadu has an extensive road network which covers about 2076 km per 1000 sq.km area which is higher than the national average road network coverage of 1890 km per 1000 sq.km area. This is an indicator of very good road infrastructure facilities in Tamil Nadu. Total length of roads in the State is 2.70 Lakh km which are maintained by Highways Department, local bodies and other Departments.

According to the traffic intensity, connectivity and importance of the roads 70556 km length of roads under highways are classified in the following categories.

National Highways (NH)

- Main highways connecting State capitals, Major ports, large industrial areas and tourist centres.

State Highways (SH)

- Roads that link District headquarters, important cities and towns within the state

and connect them with National Highways or State Highways of the neighbouring States.

Major District Roads (MDR)

- Roads that connect production and marketing centre with the State and National highways and connect towns and villages with district headquarters.

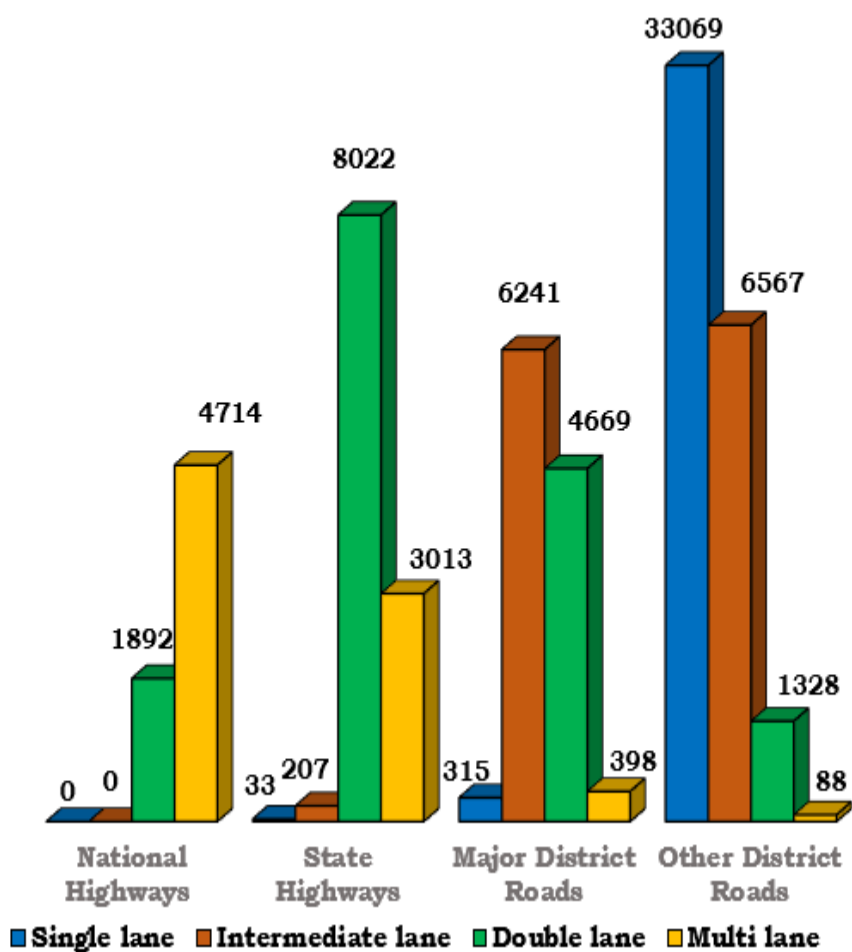
Other District Roads (ODR)

- Roads serving rural areas of production and marketing centre, education centre, health centre, Taluk headquarters and other main roads nearby.

Length of roads under
Highways Department (in km)

Classification of Road	Length
State NH wing	1472
NHAI	5134
NH Total	6606
State Highways (SH)	11275
Major District Roads (MDR)	11623
Other District Roads (ODR)	41052
Total length of roads other than NH	63950
Overall Total	70556

Lane wise configuration Details of Length (in KM)



- Upgradation / improvement of the National Highways are done by the funds allotted by Ministry of Road Transport and Highways (MoRTH), Government of India.
- State Highways, Major District Roads, Other District Roads are maintained by State Government.

1.2 TAMIL NADU MARITIME BOARD (TNMB)

Tamil Nadu has 1076 km long coastline spanning across its Eastern border. There are 3 major ports under the control of Government of India viz., Chennai, Ennore and Thoothukudi and 17 declared Minor ports under the control of Government of Tamil Nadu.

Tamil Nadu Maritime Board was created for the Administration, Control and Management of Minor ports in the state of Tamil Nadu.

1.3 POOMPUHAR SHIPPING CORPORATION (PSC)

The Poompuhar Shipping Corporation Limited (PSC) was created on 11.04.1974 under the

Companies Act, 1956 to transport the coal required for the Tamil Nadu Generation and Distribution Corporation Ltd., (TANGEDCO) for the generation of electricity.

The corporation is operating ferry service in Kanyakumari from the shore to Vivekananda Rock Memorial and the Ayyan Thiruvalluvar statue for the tourists. Presently, three ferries namely M.L.Guhan, M.L.Pothigai and M.L.Vivekananda with a seating capacity of 150 each are being operated since 11.08.1984.



The Hon'ble Chief Minister of Tamil Nadu distributed Laptops to Engineers and Officials of Highways Department on 08.07.2021.

2. POLICY OUTLINE

Economical growth of state depends upon transport facilities like Air transport, Water transport, Rail transport and all these transport needs better road connectivity. Road improvement works to be taken-up in such a way to increase the connectivity to the Village roads to meet the basic needs of the citizen.

Hence considering the increasing vehicular traffic and demands of the road users, Government of Tamil Nadu has evolved the following long term vision for the next 10 years to develop the road network by providing the quality, efficient and safe roads connecting all parts of the state for improving the living standards of the people.

- All State Highways fulfilling the traffic intensity shall be upgraded to four lanes.
- All Major District roads connecting taluk headquarters, National Highways and State Highways shall be upgraded to two lanes depending up on the traffic intensity.

- Bypasses will be formed for the municipalities along the State Highways to decongest the traffic.
- Upgradation of Panchayat / Panchayat Union Roads.
- Railway Level crossings along State Highways and Major district roads shall be converted to Railway over bridge.
- Elevated Highways to be constructed in the most traffic congested areas in the cities.
- All causeways along State Highways and important causeways along Major District Roads and Other District Roads shall be converted to High Level Bridge.
- To incorporate the innovative technologies in the highway construction.
- To increase the efficiency, action will be initiated to reorganise the department.
- To enhance the cargo handling capacity of Tamil Nadu Maritime Board from 1.5 million metric ton to 10 million metric ton.

The Vision Plans of Chief Minister will be implemented in phased manner by various wings of the Department.

- Action will be taken to expedite the State Level Projects of Government of India.
 - Elevated corridor from Chennai Port to Maduravoyal.
 - Four laning of Vikravandi- Kumbakonam-Thanjavur Road.
 - Upgradation of the East Coast Road from Chennai to Kanyakumari to four lane.
 - Upgradation of road from Chennai to Kanyakumari via Trichy, Madurai from four lane to six lane.
 - Form sea bridge from Chennai Port to Manali - Thiruvottiyur junction to decongest the traffic.



The Hon'ble Chief Minister of Tamil Nadu reviewed the Department activities on 12.07.2021.

3. SCHEMES IMPLEMENTED BY HIGHWAYS DEPARTMENT

3.1 STATE FUNDED SCHEMES

3.1.1 Comprehensive Road Infrastructure Development Programme (CRIDP)

This is an important scheme to achieve the visionary plans of the Government and to achieve the Sustainable Development Goals.

The objective of this scheme is to meet the infrastructure needs in State Highways, Major District Roads and Other District Roads. Under this scheme widening, strengthening and improvements of existing roads to maintain the service level, construction of bridges, culverts, protective works, storm water drains are undertaken.

3.1.2 Road Safety Programme

The identification, analysis and treatment of road accident black spots are widely regarded as one of the most effective approaches to mitigate road accidents. It is well established that considerable safety benefits may accrue from the

application of appropriate road engineering or traffic management measures at hazardous road locations. Results from such applications at “black spots” demonstrate high returns from relatively low-cost measures.

To reduce road accident rate and improve safety measures, Road safety programme has been undertaken as a special project to attend the black spot in highly accident-prone areas including urban roads.

Under this scheme the following Engineering Road safety measures are implemented to reduce road accidents and improve road safety.

1. Widening / Reconstruction of Narrow Culvert / Minor Bridge/ Causeways.
2. Realignment of 'S' curve / Acute curve.
3. Construction of Retaining wall / Metal Crash barrier along High embankment / Hill road.
4. Junction Improvements.
5. Standardizing and Providing of Speed breakers in cross roads.

6. Providing protective works for Open well nearby the roads.
7. Providing Road furniture, signages, centerline marking and road studs.
8. Construction of Centre median.

3.1.3 Chennai Metropolitan Development Plan

For improvement of the transport infrastructure facilities in Chennai Metropolitan Area (CMA), major infrastructure projects identified under Comprehensive Traffic and Transportation Study (CTTS) developed by Chennai Metropolitan Development Authority (CMDA) are being executed with the State funds on priority basis under Chennai Metropolitan Development Plan (CMDP) scheme since 2003-04.

3.1.4 Formation of Bypasses

Bypasses avoid high built up area, town or village and allow through traffic without interference from local traffic, to reduce congestion in the built-up areas and to improve road safety.

The department has proposed to take-up the formation of bypasses in two phases viz, Land acquisition in the first phase and formation of road works in the second phase.

3.1.5 High Level Bridges

Construction of bridges across waterways in lieu of causeways, unbridged crossings at vital locations, reconstruction of existing dilapidated and narrow bridge to enable uninterrupted traffic flow.

3.1.6 Grade Separator / Elevated Highways

Grade Separators / Elevated Highways are constructed based on the traffic intensity at major intersections of roads to ease the traffic at the grade level.

3.1.7 Rural Road Development

Upgradation of Panchayat / Panchayat Union Roads to Other District Road (ODR) standard are being executed under State fund.

3.1.8 Maintenance works

Timely maintenance of roads is essential for the hassle-free movement of traffic and avoid

further damages of roads. Maintenance works of roads and bridges such as special repairs and periodical renewal works are taken-up under this scheme.

Periodical maintenance of Roads and Bridges decreases the construction cost and increases the life span of these structures.

3.2 GOVERNMENT OF INDIA (GOI) FUNDED SCHEMES

3.2.1 Annual Plan

The National Highway development works viz., improvements, widening, strengthening of roads and construction / reconstruction / rehabilitation of bridges are being carried out in this scheme by the funds approved by GOI every year.

3.2.2 Central Road and Infrastructure Fund (CRIF)

The Ministry of Road Transport & Highways, GOI allocates the fund to the states out of the cess/tax imposed on the consumption of petrol and diesel for the development of road infrastructure. Improvements to State Highways,

Major District Roads and Other District Roads are taken-up under this fund.

Roads which connect adjacent States and areas of economic importance are proposed under Inter State Connectivity (ISC) / Economic Importance (EI) are also included in CRIF scheme.

3.3 OTHER SCHEMES

3.3.1 National Bank For Agriculture And Rural Development (NABARD) Loan Assistance Scheme

Construction of River Bridges are being taken-up with 20% State Government contribution and 80% NABARD loan assistance.

3.3.2 Railway Works Programme (RWP)

To reduce the detention time, traffic congestion and fatal accidents at Level Crossings, the Road Over Bridges/ Road Under Bridges (ROB/ RUB) are being constructed.

The Construction of ROB/ RUB are undertaken by eliminating the level crossings having more

than 1 Lakh Train Vehicle Unit (TVU) under Railway Works Programme, in joint venture with the Railways Department on 50:50 cost sharing basis.

3.4 PROJECTS UNDER EXTERNAL FUNDING

3.4.1 Tamil Nadu Road Sector Project - II (TNRSP-II)

This project involves upgrading high intensity corridors of around 1185.089 km in the State. The loan and project agreement have been signed with the World Bank for US\$300 Million (Rs.1800 Crore) with the State share of Rs.3371 Crore.

The project covers upgradation and maintenance of corridors, Institutional Capacity Enhancement and Road Safety measures.

3.4.2 Chennai Kanyakumari Industrial Corridor Project (CKICP)

It has been planned to upgrade 16 linking corridors spread over 20 Districts under Asian Development Bank loan assistance in the influence area of Chennai Kanyakumari Industrial Corridor.

3.4.3 Chennai Peripheral Ring Road (CPRR)

Chennai Peripheral Ring Road Project is proposed to provide better connectivity to Ennore and Kattupalli ports and to provide better connectivity around the Chennai with provisions for Intelligent Transport System (ITS) to enhance the efficiency and road safety.

This Project road for a length of 132.87 km starts at Ennore Port and ends at Poonjeri Junction near Mahabalipuram.

3.5 PROJECT IMPLEMENTED BY COMPANY/BOARD

3.5.1 Tamil Nadu Road Development Company (TNRDC)

This company is engaged in multi various activities such as Concessionaire (Contractor), Project Management Associate, Supervision Consultant.

3.5.2 Tamil Nadu Road Infrastructure Development Corporation (TNRIDC)

This corporation has been formulated to implement, upgrade and maintain the road infrastructure under State Government.

3.5.3 Sustainable Development Goals (SDG)

The United Nations have set up the Sustainable Development Goal (SDG) with 17 goals and 169 targets of which the goal and targets linked to Highways Department. The country has set up its own India Index and Indicators for measuring its progress in this aspect.

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

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

GOAL 9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE

**BUILD RESILIENT INFRASTRUCTURE,
PROMOTE INCLUSIVE AND SUSTAINABLE
INDUSTRIALIZATION AND FOSTER
INNOVATION.**

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

The Road safety schemes and programmes are implemented by the Highways Department which has reduced road accidents and fatalities in Tamil Nadu. The Chennai Peripheral Ring Road Project, Tamil Nadu Road Sector Project-II, Comprehensive Road Infrastructure Development Programme, Chennai Kanyakumari Industrial Corridor Project all of which deliver quality road network.

The Highways Department is constructing Ring roads, Bypasses, Flyovers, Bridges etc., to improve the quality in vehicle traffic system.

The specific indicators are linked with schemes and programmes of Highways Department for regular monitoring and up-dating of data as ready reckoner in terms of SDG 2030 bench mark and future based yardstick.

3.6 OVERALL EXPENDITURE (2020-21) AND ALLOTMENT FOR 2021-22

During 2020-21, Rs.13879 Crore had been allotted for plan works. Out of this, expenditure of Rs.12576 Crore has been incurred.

Revised Budget allotment for Rs.15796.43 Crore has been made for implementation of various schemes for the financial year 2021-22.

4. ORGANISATIONAL STRUCTURE

For executing these works, Highways Department function under the overall coordination of the Director General. There are seven wings for executing the projects. In addition to that there is a wing for Planning, Designs & Investigation, another for Research, testing of materials and monitoring of Quality control activities.

Apart from these, there are 4 Company / Board / Corporations are functioning under the control of this department as below,

ORGANISATION STRUCTURE	
WINGS	COMPANIES / CORPORATIONS / BOARDS
<ul style="list-style-type: none"> ▪ Office of the Director General ▪ Construction and Maintenance ▪ National Highways ▪ NABARD and Rural Roads ▪ Projects ▪ Metro ▪ Tamil Nadu Road Sector Project-II ▪ Chennai Kanyakumari Industrial Corridor Project ▪ Highways Research Station ▪ Planning, Designs and Investigation 	<ul style="list-style-type: none"> ▪ Tamil Nadu Road Development Company Limited ▪ Tamil Nadu Road Infrastructure Development Corporation ▪ Tamil Nadu Maritime Board ▪ Poompuhar Shipping Corporation Limited

5. OFFICE OF THE DIRECTOR GENERAL

The Director General wing is responsible for overall administration and coordination of work related activities of all wings of the Department.

5.1 ADMINISTRATION

The Administration and Establishment of all the cadres of the Department is vested with the Director General wing.

5.1.1 Human Resources

This department functions with a cadre strength of 6863 and details are as follows,

- Director General / Chief Engineer 10
- Superintending Engineer 35
- Divisional Engineer 169
- Assistant Divisional Engineer 538
- Assistant Engineer / Junior Engineer 1091
- Technical Staffs 843
- Accounts Branch 199
- Administrative Branch and others 3978

5.1.2 Appointments

Vacancies raised due to promotion, retirement strength of the different cadre every year. These, vacancies are filled-up through Tamil Nadu Public Service Commission (TNPSC), Compassionate grounds and Promotions.

During 2020-21, 105 Junior Assistants, 94 Typists were recruited through Tamil Nadu Public Service Commission. Also, 7 Junior Assistants, 2 Typists, 3 Record Clerks and were filled through Compassionate Grounds.

5.1.3 Training

Training is an essential element of Capacity Building of an organisation. The officials are deputed to undergo training in the reputed national training institutes continually.

During 2020-21, 570 officials were deputed for various training programs in the National Institutes like Indian Academy of Highway Engineers (IAHE), Noida through online, Anna Institute of Management (AIM), Chennai. Also, 4 engineers were nominated to the technical

committees of the Indian Road Congress (IRC) for the period 2021-23.

5.2 INFORMATION TECHNOLOGY (IT) CELL

The Information Technology Cell has been functioning with the objectives of developing and upgrading various Highways related software systems.

The major applications are :

1. Road Maintenance and Management System (RMMS) is a web based software application developed with the aim of managing entire road network by capturing all details related to roads.

2. Geographical Information System (GIS) enables to view the details of RMMS in a spatial form.

3. Integrated Project, Human Resource & Finance Management System (P&FMS) is a application developed with automation of the existing manual procedures and process followed in the Project Management. At present, P&FMS

application is in the process of revamping and updating with World Bank fund.

4. IT Cell has developed and maintaining the following websites of Highways Department

<https://www.tnhighways.tn.gov.in>

<https://www.tnrsp.tn.gov.in>

<https://www.ckicp.tn.gov.in>

5. Tamil Nadu Highways Project Monitoring System (TNHPMS) is a web based system facilitates to monitor the progress and status of the works of all the wings of Highways Department.

5.3 TECHNICAL COMMITTEES

➤ Board of Engineers (BOE)

- To take decision on technical matter and other important issues.
- Comprises of all the Chief Engineers, headed by Director General of the Department.

➤ **Commissionerate Of Tenders (COT)**

- To stream line the tender acceptance procedure.
- Director General, as Chairman, the Secretary, Finance or his / her Representative, the Chief Engineer, Construction and Maintenance, the Chief Engineer, NABARD and Rural Roads as members and also the Chief Engineer of the concerned work.

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

- Quick processing of RAS proposals and recommends to the Government for the works involving price variation, change in design and additional items.
- Comprises of the Director General, the Chief Engineer of the concerned work, the Chief Engineer (Planning, Designs and investigation), Additional / Deputy Secretary to Government (Highways and Minor Ports Department) and Deputy

Secretary to Government (Finance Department).

➤ **Technical Audit Committee (TAC)**

- To execute the works economically and provide technical guidance for the bridge works costing more than 5.00 Crore and road works costing more than 10.00 Crore.
- Comprises of Director General, Director, HRS and all the Chief Engineers as its members.

5.4 SPECIAL LAND ACQUISITION UNIT

Land acquisition to an extent of 1853 hectare of land in 588 villages for 203 works has to be carried out for executing new bypasses, widening of roads, construction of grade separators and Road over bridges / under bridges.

Special Land Acquisition Unit in Chennai, Villupuram, Trichy, Madurai, Salem, Tiruppur, Coimbatore and Thirunelveli Circles are functioning through outsourcing mode under the head of District Revenue Officer.

5.5 SPECIAL UNIT FOR LEGAL ASSISTANCE

The Department on every day need to handle large number of court cases related to technical, Land acquisition and personnel administration.

Hence, to assist the department staff in all court cases, a legal officer has been outsourced.

6. CONSTRUCTION AND MAINTENANCE

Roads to a length of 63950 km categorized as State Highways, Major District Roads and Other District roads are maintained by Construction & Maintenance wing. Major road infrastructure development projects like Widening, Strengthening, Improvement and Improvement of Riding Quality (IRQP), construction of Grade separators, bridges, culverts, formation of bypasses and Road Safety works are being implemented by this wing.

The details of various schemes are summarized below.

6.1 CAPITAL WORKS

6.1.1 Comprehensive Road Infrastructure Development Programme (CRIDP)

Under Comprehensive Road Infrastructure Development Programme various infrastructural development works are implemented in this state.

Works like widening, strengthening, improving the riding condition, construction of bypasses,

culverts, bridges, road safety works etc., are being under taken in a comprehensive and holistic manner. Increase in service levels is targeted to meet the Sustainable Development Goals and Hon'ble Chief Minister vision for 10 years.

6.1.1.1 CRIDP - State Highways

In the year 2021-22, 174.185 km length of roads works and 726 bridges / culverts / protective works are in progress at a cost of Rs.735.66 Crore.

Widening / improvements to 87 km length of roads and 13 bridges / Culverts have been completed at a cost of Rs.260.69 Crore.

Some of the major ongoing works in State Highways are listed below:

1. In Kanchipuram District, construction of Macro Drain in Pallavaram - Thoraipakkam Road (SH 109) at a cost of Rs.52.69 Crore.
2. In Madurai District, upgradation of Corporation Roads and Highways Roads

in Madurai Corporation limit at a cost of Rs.47.50 Crore.

3. In Krishnagiri District, widening and Rebuilding of Hosur Inner Ring Road at a cost of Rs.47.50 Crore.
4. In Coimbatore District, widening and Ground level improvements at major junction in Pollachi town at a cost of Rs.34.51 Crore.
5. In Madurai District, providing Junction Improvements and approaches of Vaigai River in North Bank road including Land Acquisition at a cost of Rs.19.00 Crore.
6. In Namakkal District, widening and strengthening of Trichy - Namakkal road (SH 25) at a cost of Rs.17.10 Crore.
7. In Madurai District, widening and Rebuild to Madurai-Airport road at a cost of Rs.11.40 Crore.
8. In Madurai District, providing Additional Arm in Sellur Railway Over Bridge at a cost of Rs.9.50 Crore.

Revised Budget provision of Rs.1157.32 Crore has been provided for the year 2021-22.

6.1.1.2 CRIDP - Major District Roads

During 2021-22, 629.27 km length of roads works and 540 bridges/ culverts/ protective works are in progress at a cost of Rs.596.56 Crore.

Widening/ improvements to 331 km length of roads and 34 bridges / Culverts have been completed at a cost of Rs.187.20 Crore.

Some of the major ongoing works in Major District Roads are listed below:

1. In Kallakurichi district, Widening and Strengthening of Kachirapalayam - Vellimalai Road at a cost of Rs.7.60 Crore.
2. In Madurai district, land acquisition for Vaigai River North Bank road at a cost of Rs.26.60 Crore.
3. In Madurai district, Construction of High Level Bridge across Vaigai River at a cost of Rs.19.00 Crore.

4. In Pudukottai district, Widening and Improvements of Viralimalai - Kalamavur road at a cost of Rs.2.00 Crore.
5. In Tiruppur district, Improvements of Sivagiri - Nathakadaiyur - Muthur road (MD 688) at a cost of Rs.1.93 Crore.
6. In Kanchipuram district, Widening and Improvements of Acharapakkam-Periyakalakadi Road (MD 565) at a cost of Rs.1.90 Crore.
7. In Thiruvannamalai district, Reconstruction of Minor Bridge at km 17/4 of Thavasivallam road (MD 709) at a cost of Rs.1.90 Crore.
8. In Tiruvarur district, Improvements of Koothanallur - Adichapuram - Kandamangalam - Vedapuram - Kalappal - Thiruthuraipoondi road at a cost of Rs.1.90 Crore.

Revised Budget provision of Rs.809.16 Crore has been provided for the year 2021-22.

6.1.1.3 CRIDP - Other District Roads

During 2021-22, 1274.27 km length of roads works and 1170 bridges/ culverts/ protective works are in progress at a cost of Rs.1657.93 Crore.

Widening / improvements to 716 km length of roads and 81 bridges / Culverts have been completed at an expenditure of Rs.337.08 Crore.

Some of the major ongoing works in Other District Roads are listed below:

1. In Dharmapuri district, Widening and Improvements of Chinnar Reservoir Project Road at a cost of Rs.4.65 Crore.
2. In Kanchipuram district, Widening and Improvements of MBI Road to S. Kollathur Road at a cost of Rs.3.90 Crore.
3. In Trichy district, Improvements of Karuppampatty -Vannanthurai Road at a cost of Rs.2.00 Crore.
4. In Thanjavur district, Widening and Strengthening of Road branching from

Thanjavur - Budalur road to joint Thanjavur
- Vallam road at a cost of Rs.2.00 Crore.

5. In Madurai district, Widening and
Strengthening of Varichiyur-Edayapatti road
at a cost of Rs.2.00 Crore.

6. In Krishnagiri district, Widening and
Strengthening of Kamandotti road to
Perandapalli - Athimugam road at a cost of
Rs.1.95 Crore.

7. In Kallakurichi district, Widening and
Strengthening of Devapandalam -
Rangappanur Road at a cost of
Rs.1.90 Crore.

Revised Budget provision of Rs.1488.75 Crore
has been made for the year 2021-22.

6.1.1.4 CRIDP - Other District Roads - Special Component Plan

During 2021-22, 167.39 km length of roads
works and 8 bridges/ culverts/ protective works
are in progress at a cost of Rs.190.74 Crore.

Widening / improvements to 58 km length of roads and 10 bridges / Culverts have been completed at a cost of Rs.22.87 Crore.

Some of the major ongoing works in ODR - Special Component Plan are listed below:

1. In Thiruvanamalai district, Widening and Improvements of Chengampoondi - Parasur Road at a cost of Rs.1.90 Crore.
2. In Kallakurichi district, Widening and Improvements of A.Kumaramangalam-Neivinai Road at a cost of Rs.1.90 Crore.
3. In Pudukottai district, Widening and Improvements of Kulathur - Pakudy road at a cost of Rs.1.90 Crore.

Revised Budget provision of Rs.154.20 Crore has been allotted for the year 2021-22.

6.1.1.5 Improvements of Riding Quality Programme (IRQP)

During 2021-22, 1805.66 km length of roads works are in progress at a cost of Rs.810.94 Crore.

Road works to a length of 268 km were completed at an expenditure of Rs.85.07 Crore.

Revised Budget provision of Rs.720.55 Crore has been allotted for the year 2021-22.

6.1.2 Extended Greater Chennai Corporation Area Development

In order to enhance the road infrastructure facilities within the Extended Chennai Corporation area, 3 works are in progress.

Revised Budget provision of Rs.66.52 Crore has been allotted for the year 2021-22.

6.1.3 Upgradation of Chennai Core Road Network

Considering the urbanization and the Industrial Development in and around Chennai city improvement of 40.25 km roads in Core Road Network Phase-II was sanctioned under CRIDP 2020-21 at a cost of Rs.165.06 Crore and works in progress.

6.1.4 Formation of Road Grids along Chennai Outer Ring Road (Road Grids)

For the effective dispersal of traffic emanating from the Chennai Outer Ring Road (CORR), the preparation of Detailed Project report for the Development of Road Grids was taken-up at a cost of Rs.5.22 Crore.

The DPR work has been completed for 14 Road Grids covering 25 roads. The 4 Lane / 2 Lane / single lane roads are proposed for widening to 6 Lane/ 4 Lane/ 2 Lane with Paved Shoulders respectively. Land Acquisition and road works will be considered in a phased manner.

6.1.5 Formation of Bypasses

Bypasses help in decongestion of highly populated cities and towns. Bypasses ensure free flow of traffic and help in saving vehicle operation cost.

Formation of bypass in Thiruthani, Illupur and Rasipuram (Phase –I Part- II) are in progress. The Land Acquisition is in progress for 18 bypasses at a cost of Rs.1035.63 Crore.

Preparation of Detailed Project Report (DPR) with Tamil Nadu Infrastructure Development Board (TNIDB) funds for 8 bypasses namely R.K.Pet, Pallikonda, Manachanallur Phase-II, Manaparai, Thiruthuraipoondi Phase II, Nannilam, Ariyalur Phase II and Sholingur and DPR works are in progress.

6.1.6 Road Safety Works

During 2019-20, 1072 numbers of works at a cost of Rs.100 Crore in Road Safety scheme and under CRIDP 2020-21, 1343 numbers of works at a cost of Rs.342.28 Crore have been sanctioned. All works are in progress.

Also, during the year 2020-21, 1502 works have been sanctioned at a cost of Rs.150 Crore in Road Safety scheme.

Revised Budget provision of Rs.100 Crore has been allotted for the year 2021-22.

6.1.7 Construction of Grade Separators

Increasing vehicular volume in the towns and cities causes traffic congestion. In order to avoid time delay and to reduce vehicle operating cost at

intersections, Grade Separators have been constructed in major cities, so as to ease the traffic congestion.

Construction of Flyover at Ukkadam - Athupalam is in progress in Coimbatore. Land Acquisition for Goripalayam Grade Separator in Madurai city is in progress.

6.1.8 Elevated Corridor

Preparation of Detailed Project Report for construction of 3 elevated Corridors in Trichy, Madurai and Coimbatore districts is in progress.

Elevated corridor from Chennai Airport to Chennai Bypass is proposed as an integrated road and rail project and DPR is being prepared by CMRL for better integration. DPR for elevated Corridor for Madurai -Thondi Road at km 0/0 - 1/8 and Madurai -Natham Road at km 0/0 - 1/8 are also in progress.

6.1.9 High Level Bridges

Reconstruction of bridge at km 17/10 of Puliyampatti – Bhavani Sagar – Bannari road

(M-889) across Bhavani river has been sanctioned for Rs.7.98 Crore and is in progress.

Preparation of Detailed Project Report for construction of High Level Bridges in Trichy, Karur and Theni districts is in progress.

6.1.10 Improvement Works in Corporation Limits

Preparation of Detailed Project Report for enhancing the infrastructure facilities in city road network lying within the Corporation limits was sanctioned for an amount of Rs.252.73 Lakhs in Madurai, Dindigul, Thanjavur, Thoothukudi, and Trichy. DPR works are in progress. Based on the DPR study, necessary steps will be taken-up to enhance the service level of roads. In Thanjavur District, the works have been taken-up.

6.1.11 Permanent Flood Restoration Works

Permanent mitigation, flood restoration works like construction of new storm water drains and culverts to prevent flooding in urban and metropolitan areas in Chennai and Thiruvallur district at a cost of Rs.260.80 Crore, works in Udagai and Pollachi divisions at a cost of

Rs.42.92 Crore and Restoration works in Kodaikanal Hill station at a cost of Rs.48.69 Crore are in progress.

6.2 MAINTENANCE / RENEWAL WORKS

6.2.1 Maintenance Works

Maintenance works are taken-up in roads with State Government Funds.

Revised Budget provision of Rs.784.23 Crore has been made for 2021-22.

6.3 OVERALL EXPENDITURE 2020-21 AND ALLOTMENT FOR 2021-22

Overall expenditure of Rs.8318.29 Crore has been incurred during 2020-21.

For 2021-22, a total Revised Budget provision of Rs.9821.87 Crore has been earmarked.



Meeting with Contractors chaired by Hon'ble Minister for Public Works, Highways and Minor Ports Department on 30.06.2021.

7. NATIONAL HIGHWAYS

National Highways are primary Highways enabling movements of goods and passengers, connecting State capitals, major ports, industries, important tourist centres including strategically important locations for the defence of the nation.

Tamil Nadu State has 6606 km length of National Highway network, the State Government undertakes improvements / maintenance works for 1472 km length under the National Highways wing with the funds allocated by the Ministry of Road Transport and Highways. The remaining 5134 km is maintained by National Highways Authority of India.

7.1 CORE ACTIVITIES

In the National Highways entrusted to State NH wing, all works like the improvement, strengthening and upgradation of Roads and Rehabilitation / Construction / Reconstruction of Bridges, Flood damage Repair works and maintenance works are carried out by this wing.

7.2 ANNUAL PLAN

The original works of National Highways are executed under this scheme by the funds allocated by GOI every year.

7.2.1 Plan Works - National Highways (Original works)

During 2021-22, 53 road works for a length of 267.35 km and 18 Bridge works at a cost of Rs.2167.03 Crore, have been taken-up as spill-over works. Out of this 26.99 km of Road works have been completed. The balance works are in progress. The target of completion for the year 2021-22 is 210 km.

Further, in 2021-22, the following works are approved with a sanction ceiling of Rs.2892.00 Crore by MoRTH in Annual plan.

- **Land acquisition works:**

4 Bypasses at a cost of Rs.208.00 Crore (Vellore, Vettavalam, Harur Town, Varatanapalli).

- **Construction of Bypass:**

4 Bypass works at a cost of Rs.535.00 Crore (Bagalur, Achampathu (Madurai), Gudiyatham and Thiruvaiyaru).

- **2 lane with paved shoulders:**

Widening of 12 two lane road works for a length of 142.00 km, costing Rs.576.00 Crore.

- **Bridge Work:**

19 bridge works costing Rs.866.00 crore.

- **Strengthening work:**

18 roads for a length of 266.00 km costing Rs.479.00 Crore.

- **Black Spot:**

Permanent rectification of 51 Black spots, costing Rs.228.00 Crore.

7.2.2 Road Safety Works

Road Safety is considered as priority by MoRTH, GoI and Black spots are identified based on the accident data occurring in 3 years.

748 locations are identified as black spots in Tamil Nadu. Out of this, 199 no. of black spots are in the National Highway entrusted to State NH Wing.

Of the above 199 Black Spots, permanent rectification measures in 60 Black Spots at a cost of Rs.69.95 Crore have been completed in Road safety annual plan and other Annual plan schemes. Permanent rectification of 82 Nos of Black Spots at a cost of Rs.302.64 Crore are in progress.

57 Nos of Black Spots rectification works will be taken-up under Annual Plan 2021-22.

7.2.3 Non Plan Works

Non-Plan works include periodical renewal and improvements to the riding quality of road surface.

During 2021-2022, 2 road works for a length of 26.23 km at a cost of Rs.26.22 Crore have been taken up as spill-over works. 6 works, for a length of 104.89 km, costing Rs.118.00 Crore have been proposed to be taken-up during 2021 - 22.

7.3 CENTRALLY SPONSORED SCHEMES

7.3.1 Central Road Infrastructure Fund(CRIF)

During 2021-22, 15 road works of 66.72 km length and 5 Nos. of Bridge works at a cost of Rs 476.02 Crore are taken-up as spill over works. Of this 4 road works of 14.90 km length have been completed and the balance works are in progress. 14 works will be completed during this Financial year.

In one Road work sanctioned under Inter State Connectivity Scheme, balance 17.90 km has been taken-up as spill over and will be completed during this year.

Budget provision of Rs.458.00 Crore has been made under CRIF.

7.3.2 Pradhan Mantri Gram Sadak Yojana (PMGSY)

PMGSY has been launched by the GOI for upgrading Rural roads providing connectivity to unconnected habitations as part of poverty reduction strategy. The GoI provides funds for upgrading “Other District Roads” under this scheme.

Budget provision of Rs.2.30 Crore has been made for 2021-22 for maintenance of the already completed roads under this scheme.

7.4 IMPROVEMENT OF NHAI ROADS BY THE STATE NH WING AS DEPOSIT WORK

7.4.1 Widening of NH-45 to 8 Lane from Vandalur to Chettipunniyam

In order to address the huge traffic congestion in Chennai sub-urban areas, the work of widening from 4 lane to 8 – Lane standards (4 works) from Vandalur to Chettipunniyam (18.60 km) at a cost of Rs.275.17 Crore and the works are in progress.

7.4.2 Widening of NH-4 from Madhuravoyal Bypass to Sriperumbudur Toll Gate

In order to reduce the traffic congestion and enhance the safety of road commuters, the work of widening of NH-4 from 4 Lane to 6 Lane from Madhuravoyal bypass to Sriperumbudur Toll Gate (23.20 km) at a cost of Rs.428.95 Crore is approved by NHA. The work will be taken-up for during 2021-22.

7.5 SETU BHARATAM SCHEME- CONSTRUCTION OF ROAD OVER BRIDGES (ROB) / ROAD UNDER BRIDGES (RUB) IN NH

Replacing Level crossings with ROB / RUB in National Highways has been taken-up by MoRTH under Setu Bharatham Scheme.

Under this Scheme, for the construction of 6 ROB has been sanctioned at a cost of Rs.402.70 Crore under Annual Plan by MoRTH. Of this 4 ROB works are in progress, 1 work is in tender stage. Remaining 1 ROB will be taken-up for execution under Annual Plan of 2021-22.

7.6 UPGRADATION AS NATIONAL HIGHWAYS

7.6.1 State Highways declared In-Principle as National Highways

8 State Highway of 500 km length have been declared "In-Principle" NH by the MoRTH. Ministry has been requested for issuance of notification as National Highways.

Proposal for declaring another 15 State roads of 990.00 km length as National Highways sent to the Ministry.

7.7 BUS PORTS

The development of Bus ports with modern amenities are proposed as sub-component of National Corridor Efficiency Program of Bharat Mala Pariyojana Scheme of Government of India.

Tamil Nadu Highways and Minor Ports Department is the Nodal Agency for the Project.

National Highways and Infrastructure Development Corporation Limited (NHIDCL), New Delhi has been fixed as the Central Executing Agency.

7.8 E-GOVERNANCE

MoRT&H have implemented the following portals for effective functioning and monitoring of Projects.

- BOOMI RASHI portal for LA process of all National Highway projects

This portal is being utilized for uploading details of LA villages, e-verification by Competent Authority for Land Acquisition (CALA) and for notification by the Ministry.

- Project Monitoring Information System (PMIS) e-disha

A real time project tracking and monitoring system for the effective monitoring of all ongoing projects, key issues and interventions required at all levels.

Ministry of Road Transport and Highways conduct monthly / quarterly reviews of active projects across different stages of execution, viz., i) To be awarded ii) Under

implementation & iii) Detailed Project Report stage based on PMIS report.

- MoRTH has recently launched Blackspot MIS Portal for monitoring Blackspot rectification works.

7.9 OVERALL EXPENDITURE 2020-21 AND ALLOTMENT FOR 2021-22

An expenditure of Rs.714.31 Crore has been incurred during 2020-21 under Annual Plan, Periodical Renewal scheme and Inter State Connectivity scheme of Ministry of Road Transport and Highways for widening, improvements and construction of bridges of National Highways under NH wing.

In regard to CRIF and PMGSY scheme, an expenditure of Rs.985.52 Crore has been incurred during 2020-21.

The Revised Budgetary Allocation of Rs.460.30 Crore has been made for works under Central Road Infrastructure Fund and Bharat Nirman scheme in 2021-22.

7.10 PROJECTS EXECUTED BY NATIONAL HIGHWAYS AUTHORITY OF INDIA (NHAI)

The National Highways Authority of India was constituted by an Act of Parliament (NHAI Act 1988) and operationalised in the year 1995. NHAI is implementing National Highways Development Programme (NHDP) / Bharatmala Pariyojana. Since its inception, 2995 km of roads have been upgraded to six/ four/ two-lane with paved shoulder configuration at a cost of Rs.22484 Crore.

The State extends co-operation and assistance to NHAI in all pre-construction activities viz., LA, shifting of utilities, etc.

7.10.1 Works Under Implementation

During the year 2021-22, 25 projects of six / four / two-lane roads with paved shoulder for a total length of 1145 km at a cost of Rs.22745 Crore, are in progress. Of this, 475 km has been completed and the remaining works are in various stages of progress.

7.10.2 Projects To Be Commenced

23 nos of projects for a length of 1149 km at a cost of Rs.37359 Crore has been targeted for construction. The works will be commenced on completion of Land Acquisition.

7.11 ELIMINATION OF ACCIDENT BLACK SPOTS

Based on the accident data MoRT&H has identified 78 black-spots in the NH stretches falling under NHAI in the State. As an immediate step temporary measures, like information / warning sign board, rumble strips, cautionary blinkers etc., have been completed. Permanent measures, viz. construction of Flyovers, Underpasses, Service Road, Foot Over Bridges, junction improvements, including lighting facilities, etc., are completed in 35 locations and are in progress in remaining locations.

Further 500 additional Black Spots have been identified and temporary measures are provided in all locations. In continuation, 157 black spots are considered as part of development of project and rectification works at 113 locations are under

implementation. Detailed study for rectification is being carried out in remaining locations.

7.12 IMPLEMENTATION OF 100% ETC AT THE TOLL PLAZAS

Ministry of Road Transport and Highways has directed for user-fee collection through FASTag (Electronic Toll Collection (ETC)). NHAI has implemented ETC at all 48 Toll Plazas on National Highways in the State.

7.13 HANDING OVER OF THE NH STRETCHES DEVELOPED BY STATE NH WING TO NHAI FOR COLLECTION OF USER-FEE

311.542 km length of roads were developed with the funds provided by MoRT&H. Cuddalore - Salem section of NH 532, Avinashi - Avinashi Palayam section of NH 381, Vellore - Villuppuram section of NH 234, Perambalur - Thanjavur section of NH 226E are being transferred to NHAI for further maintenance and collection of user-fee.

8. NABARD AND RURAL ROADS

In Rural areas, better infrastructure is necessary to improve their Socio-economy by marketing the Agricultural commodities. Considering this aspect to create better road network in rural areas by improving Rural Roads and constructing bridges across rivers, NABARD and Rural Roads wing is established.

Under State fund, the major Panchayat Union Roads / Panchayat Roads on handover by the Rural Development & Panchayat Raj Department, have been taken-up for upgradation by NABARD & Rural Roads wing.

Moreover, Construction of Bridge works both with NABARD loan assistance and under State fund, Construction of Road over Bridges / Road under Bridges under railway works programme and Forming of Bypasses for major towns under State fund are also being carried out by this wing.

8.1 CONSTRUCTION OF RIVER BRIDGES IN GOVERNMENT AND PANCHAYAT UNION ROADS UNDER NABARD LOAN ASSISTANCE

During 2021-22, out of 182 spill-over Bridge works at a cost of Rs.687.69 Crore, 19 works were completed. 91 works are in progress, 34 works are in tender stage and 38 works are in estimate stage under this scheme.

For the Financial year 2021-22, an allotment of Rs.394.94 Crore has been made in the Revised Budget Estimate.

8.2 CONSTRUCTION OF RIVER BRIDGES ON GOVERNMENT AND PANCHAYAT UNION ROADS UNDER STATE FUND

During 2021-22, out of 5 spill-over bridge works at a cost of Rs.33.65 Crore, 3 works are in progress, 1 work is in tender stage and 1 work is in estimate stage under this scheme.

For the Financial year 2021-22, an allotment of Rs.30.62 Crore has been made in the Revised Budget Estimate.

8.3 UPGRADATION OF PANCHAYAT UNION ROADS / PANCHAYAT ROADS UNDER STATE FUND

During 2021-22, out of 1078 spill over road works to a length of 2486 km at a cost of Rs.2512.97 Crore, 268 works to a length of 614.71 km has been completed with an expenditure of Rs.685.65 Crore. In the balance works, 686 works to a length 1549.22 km are in progress, 111 works to a length of 275.63 km are in tender stage and 13 works to a length of 46.48 km are in estimate stage under this scheme.

For the Financial year 2021-22, an allotment of Rs.2100.00 Crore has been made in the Revised Budget Estimate.

8.4 CONSTRUCTION OF ROAD OVER BRIDGES / ROAD UNDER BRIDGES UNDER RAILWAY WORKS PROGRAMME

Under the Railway Works Programme during 2021-22, out of 10 spill-over Road Over Bridge / Road Under Bridge works, 9 works are in progress and 1 work is in land acquisition stage.

8.5 BYPASSES

Among the land acquisition for formation of 12 Bypasses in major towns, land acquisition for 1 Bypass namely Bhavani Bypass is completed with an expenditure of Rs.48.02 Crore. For the remaining 11 Bypasses, land acquisition works are in progress for an amount of Rs.408.55 Crore.

Further preparation of DPR is in progress for the work of formation of Bypass to Koothanallur Town for an amount of Rs.18.00 Lakhs.

For the Financial year 2021-22, Rs.208.58 Crore has been allotted as Revised Budget Estimate.

8.6 OVERALL EXPENDITURE (2020-21) AND ALLOCATION FOR 2021-22

During 2020-21, an expenditure of Rs.1706.18 Crore was incurred for all Plan schemes.

For the Financial year 2021-22, total allocation of Rs.2734.16 Crore has been made in the Revised Budget Estimate.

9. PROJECTS

The prime function of the projects wing is to construct Road Over Bridge / Road Under Bridges (ROB / RUBs) in lieu of existing Level Crossings in coordination with Railways under Railway Works Programme on 50:50 cost sharing basis to eliminate the vehicle retention time and ensure the safety of the public during train movement across Level Crossings.

In addition to this, construction of High Level Bridges (HLB), reconstruction of narrow and dilapidated bridges, construction of Grade Separators, construction of Elevated Highways in metro cities, Formation of Bypasses and Ring roads are also taken-up by this wing under various state funded schemes.

9.1 STATE FUNDED SCHEMES

Totally 118 spill-over works are taken-up under various State funded schemes. Of which, approval has been accorded for 31 works for construction of High Level Bridge, Railway Over Bridge / Railway Under Bridge etc., at a cost of Rs.2211.03 Crore. Administrative sanction has

been accorded to undertake the remaining 87 works for preparation of Detailed Project Report (DPR) / Preliminary works such as Land Acquisition, Shifting of utilities at a cost of Rs.308.20 Crore.

9.1.1 Works Sanctioned for construction

In the 31 works sanctioned for construction, 25 works are in progress in the following Districts at a cost of Rs.2066.31 Crore.

- One High Level Bridge work each in Ariyalur, Madurai, Thiruvallur, Tiruppur and Thiruvanamalai Districts.
- 3 High Level Bridge works each in Cuddalore and Villupuram Districts.
- 8 High Level Bridge works in Thanjavur District.
- 1 Railway Over Bridge in Tiruppur District.
- 1 Bypass in Coimbatore District.
- 1 Road works each in Cuddalore and Erode District.

- 1 Grade Separator in Madurai District and one Elevated Corridor in Coimbatore District.

Remaining 6 works at a cost of Rs.144.72 Crore are in various preconstruction stages such as tender, estimate and design stages.

9.1.2 Works Sanctioned for DPR, Land Acquisition, Utility Shifting

Under this scheme, 7 Railway Over Bridges, 53 High Level Bridges,

21 Bypasses, 4 Road works, 1 Flyover and 1 Elevated Highway are in preliminary stages such as Land Acquisition, Shifting of utilities and Preparation of DPR at a cost of Rs.308.20 Crore.

9.2 `RAILWAY WORKS PROGRAMME

Under Railway Works Programme, 89 works are taken-up as spill-over works. Out of this, 44 works were sanctioned for construction at a cost of Rs.1345.75 Crore and remaining 45 works were sanctioned for preparation of Detailed Project Report (DPR) / Preliminary works such as

Land Acquisition, Shifting of utilities at a cost of Rs.338.50 Crore.

9.2.1 Works Sanctioned for construction

Out of 44 works sanctioned for construction, 27 works are in progress in the following Districts at a cost of Rs.862.77 Crore.

- One ROB / RUB each in Ariyalur, Chengalpet, Coimbatore, Dharmapuri, Kancheepuram, Madurai, Ramanathapuram, Vellore and Virudhunagar Districts.
- Two ROB / RUBs each in Dindigul, Tirunelveli, Thiruppattur, Thiruvannamalai and Villupuram Districts.
- Three ROBs in Thiruvallur District and Five ROBs in Salem District.

Remaining 17 works at a cost of Rs.482.98 Crore are in various preconstruction stages such as tender, estimate and design stages.

9.3 TAMIL NADU INFRASTRUCTURE DEVELOPMENT BOARD (TNIDB)- PROJECTS PREPARATION FUND

The Tamil Nadu Infrastructure Development Board has sanctioned Rs.6.88 Crore under Project Preparation Fund for preparation of Detailed Project Report for 14 Railway Over Bridge / Railway Under Bridges, 9 High Level Bridges and 2 Bypasses through Project Wing.

9.4 OVERALL EXPENDITURE (2020-21) AND ALLOCATION FOR 2021-22

During 2020-21, an expenditure of Rs.636.48 Crore was incurred.

Revised Budget allotment of Rs.1559.05 Crore has been provided for the year 2021-22.

10. METRO

The wing was exclusively established to execute the projects for the improvement of transport network in and around Chennai City, as recommended in the Comprehensive Traffic and Transportation (CTTS) and the second Master Plan developed by Chennai Metropolitan Development Authority (CMDA) under the Chennai Metropolitan Development Plan (CMDP) Scheme.

To enhance safe and sustainable urban transport system, Grade-separators, High level bridges, Widening of roads / bridges, Formation of new link roads, Bypasses, Foot Over Bridges (FOB) with Escalators, etc are being taken-up.

Construction / Widening of Road Over Bridges / Road under Bridges within the CMA, under Railway Works Programme (RWP) on cost sharing basis (50:50) are also taken-up.

10.1 STATE FUNDED SCHEMES

10.1.1 Chennai Metropolitan Development Plan (CMDP)

10.1.1.1 Grade Separators

Grade separators are provided at major road intersections to avoid vehicular conflicts and for free flow of traffic.

- During 2021-22, Grade separators at Medavakkam (Tambaram – Velachery Arm) and Velachery for an amount of Rs.203.21 Crore are in progress.
- Grade Separator at Koyambedu for an amount of Rs.93.50 Crore is in progress.
- Administrative sanction for Rs.219.92 Crore has been accorded for Grade Separator at Thiruvanmiyur junction and Land acquisition for an amount of Rs.58.00 Crore is in progress.
- Further, 14 Grade Separators are in Detailed Project Report stage and simultaneously Land acquisition is in

progress for 13 works for an amount of Rs.1100.07 Crore.

- Detailed Project Report for construction of elevated highway in EVR salai from Raja Muthiah junction to Pulla avenue junction is completed and is under consideration.
- For the work of construction of Grade Separator from Anna Nagar 3rd avenue to EVR salai a comprehensive study to decongest the traffic from Razak Garden junction to Koyambedu is in progress, as recommended by the Steering Committee.

10.1.1.2 River Bridges

- Two river bridges at a cost of Rs.77.01 Crore are in progress across Buckingham canal in Thiruvotriyur & across coovam river in Paruthipattu.
- Land Acquisition is in progress for the construction of bridge across coovam river at Nolambur for Rs.36.00 Crore.

- Land acquisition and Detailed Project Report is in progress for construction of Bridge across coovam river at Padikuppam.

10.1.1.3 Formation Of New Link / Widening Of Road Works

To increase the capacity of roads, widening of roads become essential.

New link roads are formed to reduce the detouring of traffic.

- During 2021-22, 3 road works for an amount of Rs.104.12 Crore at Thoraipakkam in Thoraipakkam - Neelangerai road, Palavakkam in East Coast Road and Nedungundram in Tambaram Eastern bypass are in progress.
- Administrative sanction has been accorded for Puthur stretch in Tambaram Eastern bypass and the road work will be taken-up at a cost of Rs.52.61 Crore.

- Land acquisition for the balance stretches in the above three roads is in progress for an amount of Rs.995.50 Crore.
- Land alienation is in progress for the work of forming link road near Music College and the work will be taken-up at a cost of Rs.22.84 Crore.

10.1.1.4 Pedestrian Infrastructure Facilities - Foot Over Bridges With Escalators

To provide safe crossing for Pedestrians for ensuring uninterrupted traffic, Foot Over Bridges with escalators are taken-up.

- FOB portion across GST road has been completed and put to public use in the work of construction of Foot Over Bridge with escalator connecting the Tambaram Railway station & bus stand in GST Road, Tambaram for Rs.19.75 Crore. Construction of railway portion is under progress.

- Detailed Project Report is under preparation for 2 Foot Over Bridge works near Kendriya Vidyalaya School, Thirumangalam and near DAV & Velammal School, Mugappair.
- Detailed Project Report and Land Acquisition are in progress for the work of Providing Foot Over Bridge with Escalator for connecting East Tambaram and West Tambaram.
- Detailed Project Report will be prepared to provide Foot Over Bridge in Anna Salai near Chinnamalai AG Church in lieu of pedestrian subway.

10.1.1.5 Works In Preparation Of Detailed Feasibility Report Stage

- Preparation of Detailed Feasibility Report for 9 works for an amount of Rs.1.96 Crore is in progress for decongesting the traffic in major roads within Chennai Metropolitan Area.

10.2 RAILWAY WORKS PROGRAMME (RWP)

10.2.1 ROB / ROBs within Chennai Metropolitan Area

- During 2021-22, Road Over Bridge at Perungalathur and Limited Use Subway at Chrompet Radha Nagar at a cost of Rs.263.36 Crore are in progress.
- For Road Over Bridge at LC 14, Veppampattu, action is being taken to complete the work.
- For 2 Road Under Bridges at LC 22 Tirusulam and LC 6 Wimco Nagar, works in Highways portion will be taken-up after the completion of Railway portion.
- Land acquisition is in progress for Road Over Bridge at LC 16 Minjur and for Road Under Bridge at LC 4 Thiruvotriyur.
- Road Over Bridge at Ambattur near TI cycles factory is under consideration for inclusion in Railway Works Programme.

Detailed Project Report and Land acquisition is in progress.

- Widening of the existing Road Over Bridge at Avadi for a cost of Rs.11.03 Crore is under consideration for inclusion in Railway Works Programme. The work will be taken-up after inclusion in Railway Works Programme.

10.3 OVERALL EXPENDITURE FOR THE YEAR 2020-21 AND ALLOCATION FOR 2021-22

During the financial year 2020-21, an expenditure of Rs.597.17 Crore was incurred in Metro wing.

Revised Budget allotment of Rs.557.88 Crore has been allocated for the year 2021-22.



The Hon'ble Minister for Public Works, Highways and Minor Ports Department inspected the work of Koyambedu Grade Separator.

11. TAMIL NADU ROAD SECTOR PROJECT-II

TNRSP-II has been formed for upgrading important road corridors to cater to high density traffic within the State, funded by the World Bank.

11.1 UPGRADING WORKS

11.1.1 Funded By World Bank

An Agreement was signed with the World Bank for the loan assistance of (US\$300 Million) Rs.1800 Crore with the State share of Rs.3371 Crore at a total cost of Rs.5171 Crore.

11.1.2 Works taken-up

Sl. No	Components	Number of Packages	Project Cost in Crore
1	Engineering, Procurement and Construction Mode (EPC)	10	2414.28
2	Output and Performance Based Road Contracts Mode (OPRC)	2	239.00

3	Public Private Partnership Mode (PPP)	3	1499.06
4	Consulting Services		132.71
5	Road Safety		120.00
6	Institutional Capacity Enhancement		66.00
7	Miscellaneous services		6.95
8	LA and R&R		693.00
	Total		5171.00

Out of 10 packages taken-up in Engineering, Procurement and Construction Mode (EPC), 9 package were completed and presently they are under 5 years maintenance period. Balance works (EPC-04) (Upgrading Vridhachalam - Parangipettai Road (SH-70) km 0/000 to km 35/800) is in progress.

Two packages taken-up under Output and Performance Based Road Contracts Mode (OPRC) have been completed and the roads were handed over to the concerned C&M divisions.

PPP-02 work having length of 70.2 km has been completed and presently it is under 8 years maintenance period.

The packages PPP-01 (Public Private Partnership-01) and PPP-03 (Public Private Partnership-03) have been converted into EPC-16 & EPC-14, EPC-15 respectively and works are under progress.

11.1.3 Additional Works

By utilizing front loaded fund sanctioned by the World Bank and State's own fund, three additional works EPC-11, EPC-12 and EPC-13 have been taken-up and the works are under progress.

List of ongoing Works is tabulated below

Package	Name of the Road	Length in km	Contract Price in Cr	Status
Two-lane with paved shoulders				
EPC 04	Upgrading Vridhachalam - Parangipettai Road (SH-70)	35.800	129.94	Work is in progress.

	km 0/000 to km 35/800 (Balance Works).			
EPC 12	Strengthening and Widening of Malliyakarai – Attur road of SH-30 (km 81/125 - 91/200)	9.884	95.14	Work is in progress.
	Sub Total (A)	45.684	225.08	
Four Lane Road				
EPC 11	Four Laning of Omalur to Mecheri Section of SH 222 From Existing km 1.150 To Existing km 14.300	13.170	144.64	Work is in progress.
EPC 13	Four Laning of Chithode to Erode Section of SH 15 from	8.125	104.70	Work is in progress.

	Existing km 153.500 To Existing km 161.625 (Design km 153+600 To Design km 161+725)			
EPC 14	Strengthening and Widening (Four Lane) of Tirunelveli – Sengottai – Kollam Road of SH-39 from km 5+000 to km 27+700 (package I)	22.700	176.58	Work is in progress.
EPC 15	Strengthening and Widening (Four Lane) of Tirunelveli – Sengottai – Kollam Road (SH 39) km 27+700 to km 50+600	22.900	254.13	Work is in progress.

	(package II)			
EPC 16	Four Laning of Gobi - Erode Section of SH- 15 from km 123+000 to km 153+600	30.600	272.53	Work is in progress.
	Sub Total (B)	97.495	952.58	
	Grand Total (A+B)	143.179	1177.66	

11.2 TAMIL NADU INFRASTRUCTURE DEVELOPMENT BOARD (TNIDB)

An amount of 132.76 Crore has been sanctioned for Preparation of Detailed Project Reports for a length of 3319 km roads under TNIDB fund. Out of this 3319 km, 1226.579 km length of roads have been taken-up in first phase, by engaging Project Preparation Consultants in 5 packages.

11.3 LAND ACQUISITION (LA), RESETTLEMENT AND REHABILITATION (R&R) ACTIVITIES

In line with the new "Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement - RFCTLARR Act, 2013", Resettlement Policy Framework (RPF) for giving compensation and resettlement of the Project Affected People have been approved by the Government.

The Principles and objectives of resettlement, process for conducting census survey of Project Affected People (PAP), Socio-economic surveys and Preparation of Entitlement Matrix (EM) are covered in Resettlement Policy Framework (RPF). Based on the Entitlement Matrix approved, Resettlement Action Plan is prepared individually for the Project roads. Following the above, final awards are being passed by the TNRSP II.

11.4 INSTITUTIONAL CAPACITY ENHANCEMENT AND ROAD SAFETY (ICERS)

11.4.1 Institutional Capacity Enhancement (ICE)

Institutional Capacity Enhancement works are taken-up at a cost of Rs.66.00 Crore under World Bank Funded TNRSP II. The main components are:

- Procurement of laptops and desktops through Electronics Corporation of Tamil Nadu (ELCOT).
- Development of “Computerized Management Information System (CMIS)” for land acquisition through National Informatics Centre (NIC).
- Development of “Works Management System (WMS)” for automation of key activities of the department through National Informatics Centre.

11.4.2 Road Safety (RS)

Road Safety component works are taken-up at a cost of Rs.120 Crore under World Bank Funded TNRSP II.

- Road safety improvement works in “Safe Demonstration Corridor” for a length of 95.60 km (Kanchipuram & Tiruvannamalai Districts) including Intelligent Transport System (ITS) is in progress.
- This Demonstration Corridor work includes various support to the other stakeholders in road safety activity.

11.5 OVERALL EXPENDITURE FOR THE YEAR 2020-21 AND ALLOCATION FOR 2021-22

During the financial year 2020-21, an expenditure of Rs.331.90 Crore was incurred.

For the financial year of 2021-2022 a total revised budgetary allocation of Rs.663 Crore has been obtained from the Government.

12. CHENNAI KANYAKUMARI INDUSTRIAL CORRIDOR PROJECT (CKICP)

12.1 PROJECT FORMATION

East Coast Economic Corridor (ECEC) is one among the 5 corridors announced by the Department of Industrial Policy and Promotion. Chennai Kanyakumari Industrial Corridor project is a part of the East Coast Economic Corridor (ECEC).

Comprehensive development plan prepared by Asian Development Bank for Chennai Kanyakumari Industrial Corridor Project, is aimed at encouraging the state's Industrial development. Under the road sector, 13 Coastal Districts, 11 Interior Districts in the area of Chennai Kanyakumari Industrial Corridor Project for a total length of 8047 km road stretches comprising 4318 km of National Highways and 3729 km of State Highways have been identified. It has been planned to develop these roads in six phases.

To develop the road infrastructure in the Chennai Kanyakumari Industrial Corridor

Influence area, 16 state Highways have been taken-up for upgradation under Tamil Nadu Industrial Connectivity Project with Asian Development Bank (ADB) loan assistance. These roads connect 12 National Highways and various State Highways that are spread over 20 Districts. The loan and project agreements were signed with Asian Development Bank (ADB) on 16.06.2021.

12.2 ROADS TO BE IMPROVED

In this project, the following 16 Project roads have been taken-up.

S. No	EPC No.	Project Road	Total Length (in km)	Improvement Proposed
1	EPC -01	Cheyur (ECR) to Polur (SH115) including ECR link	109.273	2 lane + Paved Shoulders
2	EPC -02	Kanchipuram-Arakkonam - Tiruthani Road (SH 58-2)	41.779	2 lane + Paved Shoulders
3	EPC -03	Chengelpet to Kancheepuram Road (SH 58-1) including Military Road	39.786	4 lane / 2 lane+ Paved Shoulders

S. No	EPC No.	Project Road	Total Length (in km)	Improvement Proposed
4	EPC -04	Tiruchendur to Ambasamudram via Palayamkottai (SH 40-1)	50.590	2 lane+ Paved Shoulders
5	EPC -05	Melur to Tirupattur Road (SH 191)	30.485	2 lane+ Paved Shoulders
6	EPC -06	Thanjavur to Mannargudi (SH 63)	29.435	2 lane+ Paved Shoulders
7	EPC -07	Kumbakonam to Mannargudy (SH 66)	14.900	2 lane+ Paved Shoulders
8	EPC -08	Kumbakonam to Sirkazhi (SH 64)	36.779	2 lane+ Paved Shoulders / 4 lane
9	EPC -09	Mayiladuthurai to Thiruvarur (SH 23)	29.882	2 lane+ Paved Shoulders
10	EPC -10	Thuraiyur to Perambalur (SH 142)	30.057	2 lane+ Paved Shoulders
11	EPC -11	Virudhachalam to Ulundurpettai (SH 69)	22.855	2 lane+ Paved Shoulders
12	EPC -12	Cuddalore to Madapattu Junction (SH 9)	37.360	2 lane+ Paved Shoulders

S. No	EPC No.	Project Road	Total Length (in km)	Improvement Proposed
13	EPC -13	Mohanur – Namakkal – Senthamangalam-Rasipuram Road (SH 95)	31.500	2 lane+ Paved Shoulders
14	EPC -14	Tiruchengode to Erode (SH 79)	11.153	4 lane
15	EPC -15	Omalar to Tiruchengode via Sankakiri including Tiruchengode Bypass (SH 86)	51.715	4 lane / 2 lane+ Paved Shoulders
16	EPC -16	Palayamkottai to Ambasamudram Road (SH 40-2)	21.400	2 lane+ Paved Shoulders
		TOTAL	588.949	

The total project cost including cost of land acquisition is Rs.6448 Crore.

Cost of land acquisition will be borne by the State Government. Of the total Construction cost 484 million US dollars (Rs.3554 Crore) will be supported by Asian Development Bank through

loan assistance and the remaining cost would be borne by the State Government.

Under this project it has been proposed to develop 22 Bypass Roads (109 km), 13 Major Bridges, 10 ROBs, 2 Grade Separator, 1 Limited Use Subway, 1 Pedestrian Underpass, 2 Vehicular Under Pass, 120 Minor Bridges and 1285 Culverts.

12.3 PROJECT IMPLEMENTATION

12.3.1 Implementation Unit

A Project Implementation Unit (PIU), headed by the Project Director, has been created for execution of the project.

As per the Asian Development Bank guidelines, e-procurement procedure to be followed for the Road Upgradation works under EPC mode of contract.

12.3.2 Progress of Construction Works

Tender for all the 16 EPC packages have been invited. Among these, Works under 12 EPC (EPC-01, 02, 03, 04, 05, 10, 11, 12, 13, 14, 15 & 16) packages spanning 382.75 km are in progress.

Bids for remaining 4 packages (Multiple Contract Package:4) were called for. In which bids were received for 3 packages (EPC 06, 07 & 08) only and Financial Proposals are under evaluation. There was no response for 1 package (EPC 09) in the first call and retendered on 28.07.2021.

12.3.3 Land Acquisition Works

Land Acquisition works pertaining to the project roads are being expedited. It has been proposed to Rehabilitate and Resettle the Project Affected Persons (PAP), as per the social safeguards norms of the Asian Development Bank and is being implemented. The land acquisition by private negotiation procedure is also adopted for providing compensation to the Project Affected Persons (PAP) to speed up the process of Land Acquisition.

From 320 villages, 450 land parts amounting to 438 hectare of land area has been proposed to be acquired. Among this, Award Enquiry has been completed for 396 land parts amounting to 364.587 hectare of land area. All the land acquisition process will be completed in the year 2021-22.

12.4 EXPENDITURE OF 2020-21 AND ALLOCATION FOR 2021-22

An expenditure of Rs.592.45 Crore has been incurred for the year 2020-21.

A Revised Budget Allocation of Rs.1080 Crore has been made for the year 2021-22.

13. CHENNAI PERIPHERAL RING ROAD (CPRR) PROJECT

The formation of Chennai Peripheral Ring Road (CPRR) is conceptualized to enhance the highway capacity, provide better transport connectivity and provide efficient commercial transportation to ports by linking 4 principal radial arterials, viz. NH 16 (Chennai - Kolkatta National Highway), NH 716 (Chennai - Tirupathi National Highway), NH 48 (Chennai - Bangalore National Highway) and NH 32 (Chennai - Trichy National Highway).

132.87 km of Chennai Peripheral Ring Road is taken-up as 5 Sections:

Section	Starting from	End at	Length (km)	Project Cost (Rs. Crore)
I	Ennore Port	Thatchur at NH 16 (Chennai to Kolkatta National Highway)	25.40	3624.42
II	Thatchur at NH-16 (Chennai	Start of Thiruvallur Bypass at NH-716	26.10	6754.40 (For Section II and III)

	to Kolkatta National Highway)	(Chennai – Tirupathi National Highway)		
III	Start of Thiruvallur Bypass at NH-716 (Chennai – Tirupathi National Highway)	Sriperumpudur at NH48 (Chennai-Bangalore National Highway)	30.10	
IV	Sriperumpudur at NH -48 (Chennai-Bangalore National Highway)	Singaperumalkoil at NH 32 (Chennai-Trichy National Highway)	23.80	575.00
V	Singaperumalkoil at NH- 32 (Chennai-Trichy National Highway)	Poonjeri Junction near Mamallapuram at East Coast Road (ECR)	27.47	747.92 (land acquisition work only)

The Section I of this project is being implemented with the external funding Assistance of Japan International Cooperation Agency (JICA) to the tune of 40,074 Million Japanese Yen

(Rs.2,473.70 Crore) through Tamil Nadu Road Development Company (TNRDC).

The Section II & III of CPRR is being implemented by Tamil Nadu Road Infrastructure Development Corporation (TNRIDC).

The loan agreement for the external funding Assistance of AIIB (Asian Infrastructure Investment Bank) and OFID (OPEC Fund for International Development) to a tune of 478.07 Million USD (Rs.3346.49 Crore) is likely to be signed in the Fourth Quarter of 2021.

Administrative Sanction for the execution of Civil Works in Section-II & III (Thatchur to Sriperumpudur), at a cost of Rs.4899.00 Crore has been accorded. The Civil Works in Section II is to be commenced by fourth Quarter of 2021. The Civil works in Section III is planned to be commenced in first quarter of 2022.

Section IV extending from Sriperumbudur to Singaperumal Kovil road has already laid out as part of Orgadam Industrial Corridor Project. However, this stretch would require improvement at a cost of Rs.531.00 Crore.

For Section V, land acquisition of 162.83 hectare of land at a cost of Rs.747.92 Crore is in progress.

13.1 OVERALL EXPENDITURE FOR THE YEAR 2020-21 AND BUDGET ALLOCATION FOR THE YEAR 2021-22

During the Financial Year 2020-21, an expenditure of Rs.634.06 Crore has been incurred.

Revised Budget allotment of Rs.1850.00 Crore has been allotted for the year 2021-22.

14. HIGHWAYS RESEARCH STATION

Highways Research Station is headed by the Director and functioning with 2 Joint Directors, 1 Superintending Engineer, 6 Deputy Directors and 16 Divisional Engineers.

The primary objective of the Highways Research Station is improving roads to enable all categories of traffic to move safely, expeditiously, economically and comfortably. The main functions are:

- Researches on construction materials and technology.
- Testing on materials of roads and bridges
- Collection of road data such as roughness index, road geometry, CBR of soil, Characteristic Deflection of pavement, etc.
- Offering technical solutions for field issues

- Ensuring quality of works in several stages
- Capacity building of the Highways staff through training
- Exercising Road safety measures for ensuring safe and seamless traffic

14.1 RESEARCH WORKS

From 1957 to 2021, research works had been carried out, 37 in Bitumen Lab, 51 in Soil Lab, 43 in Concrete lab and 30 in Traffic Lab.

Research works in progress:

- Study on the technology of long lasting pavement with aid of Circular Test Track.
- Bridge Instrumentation for Structural Health Monitoring System in Highways Department.
- Study on performance of jute fibre reinforced cold bituminous mixes.
- Study on the effectiveness of curing compounds on concrete pavements.

14.2 LABORATORIES

Highways Research Station is functioning with 4 Laboratories viz., Bitumen, Soil, Concrete and Traffic at Chennai.

For testing construction materials, laboratories are established in regional level at Villupuram, Trichy, Thanjavur, Madurai, Tirunelveli, Salem, Tirupur and Coimbatore.

14.3 QUALITY CONTROL

Well equipped quality control laboratories are functioning at 8 Quality Control divisions to monitor the quality of works in several stages of construction of roads and bridges as per the codal provisions.

14.4 TRAINING CENTRE

An exclusive Training Centre is functioning with the following facilities:

- 4 Lecture Halls
- Mini Conference Hall
- Computer Laboratory

- e-Library
- State-of-the-art Auditorium
- Hostel with 32 double bedded rooms & 8 triple bedded rooms
- Recreation, Gymnasium, Indoor & Outdoor games

To update the knowledge and best practice, training programs are conducted to departmental engineers and other staff.

14.5 ROAD SAFETY WING

- Road safety wing was formed based on the direction of the Hon'ble Supreme court.
- To coordinate with various department officers and NGO's on issues of Road Safety.
- To carry out the junction improvements and other road safety works as per standards.

14.6 COORDINATION WITH NATIONAL INSTITUTIONS

Member of Accreditation of New Materials & Techniques Committee of Indian Road Congress (IRC).

Every year, at the Annual sessions conducted by the Indian Road Congress, the technical presentations are made by the Engineers of the Highways Research Station.

14.7 FUTURE PLANS

14.7.1 RESEARCH

Researches will be taken in the following areas

- Soil stabilization
- High performance concrete
- Traffic forecasting
- Urban Road Safety
- Modified bitumen

14.7.2 TRAINING

- To conduct online Training Programmes.

- To offer Training to other Departmental Staff.

14.7.3 ROAD SAFETY

- To minimize the accidents and fatalities through comprehensive analysis on 5E's (Engineering, Education, Enforcement, Emergency care & Environment) as per guidance of International Road Federation.
- Capacity building through Road Safety Audit training.

14.8 REVENUE

During the year 2020-21, 14,444 tests have been performed and a revenue of Rs.14.73 crores earned.

15. PLANNING, DESIGNS AND INVESTIGATION

The Planning, Designs and Investigation wing is entrusted with field investigation and preparation of Detailed Project Report for River Bridges, Grade Separators, Elevated Corridors, Road Over Bridges (ROB) / Road Under Bridges (RUB), Foot Over Bridges (FOB) proposed to be executed by various wings of the Highways Department.

15.1 ACTIVITIES OF THE WING

15.1.1 Investigation Divisions

- Collecting field data by conducting detailed investigation at the proposed bridge site.
- Sub-soil investigation through exploratory bores to ascertain the bearing capacity of the sub-soil and to decide the type of foundation of the bridges.

15.1.2 Design Divisions

- The designs, drawings and quantity estimates are prepared for river bridges, ROBs, RUBs, grade separators and other highway structures.
- Proof checking the alternative designs furnished by the bidders and according approval.
- Proof checking the Detailed Project Reports prepared by the consultants engaged by various wings of the department.
- Giving recommendations for the transportation of Over Dimensional Cargo (ODC) in roads and bridges.

15.2 PROGRAMME OF WORK IN 2021-22

In 2021-22, Design for 45 bridge works are in progress and 20 works have been completed.

16. TAMIL NADU ROAD DEVELOPMENT COMPANY LTD

In the year 1998, TNRDC was formed as Joint Venture of 50:50 shareholding of TIDCO and IL&FS Private Company to execute, manage and maintain the Major Infrastructure Projects.

After the exit of IL&FS Private Company during the year 2009 and the purchase of their Shares by TIDEL Park Ltd (TIDEL), the TNRDC became a Joint Venture Company with 50:50 shareholding of TIDCO and TIDEL.

M/s.Information Technology Expressway Ltd (ITEL) with a Shareholding pattern of 77% by TNRDC and 23% by TIDCO, was established in the year 2004 to develop I.T. Expressway as TNRDC's subsidiary company.

These two Companies are managed by the Board of Directors under the Chairmanship of Secretary to Government, Highways Department.

16.1 FUNCTIONS OF TAMIL NADU ROAD DEVELOPMENT COMPANY

This company is engaged in activities such as Concessionaire (Contractor), Project Management Associate & Supervision Consultant.

M/s.Information Technology Expressway Company (IT Expressway) has developed and maintaining Rajiv Gandhi Salai as Toll Road.

Tamil Nadu Road Development Company Ltd., is managing the stretch of East Coast Road (ECR) from Akkarai to Puducherry and also this company is managing the following projects.

16.1.1 Chennai Outer Ring Road

This Green field project road work from Vandalur in NH-32 to Tiruvottiyur – Ponneri - Pancheti Road in Minjur for a length of 60.15 km has been designed and completed in two phases.

In Phase-I from Vandalur to Nemilicherry in NH-716 for a length of 29.65 km has been completed at a cost of Rs.1081.40 Crore and put to use.

The Main Carriageway from Nemilicehry in NH-716 to Tiruvottiyur – Ponneri - Pancheti Road in Minjur for a length of 30.50 km at a cost of Rs.1075.00 Crore has been completed and put to use.

16.1.2 Construction Of 'U' Shaped Flyovers At Indira Nagar Junction and Tidel Park Junction In Rajiv Gandhi Salai

The construction work of 'U' Shaped Flyovers at Indira Nagar Junction and TIDEL Park Junction and a Foot Over Bridge across ECR in Rajiv Gandhi Salai and a Minor Bridge across Buckingham Canal are being executed at an estimated cost of Rs.108.13 Crore. About 23% work is completed. This work is planned to be completed before October 2022.

16.1.3 Chennai Peripheral Ring Road Section-I

This section from Ennore Port to Thatchur is being developed by TNRDC with JICA funds.

16.1.4 Bypass to Kelambakkam and Thiruporur

These two bypasses are being developed by IT Expressway Ltd (ITEL) in Old Mahabalipuram Road.

17. TAMIL NADU ROAD INFRASTRUCTURE DEVELOPMENT CORPORATION

The Tamil Nadu Road Infrastructure Development Corporation (TNRIDC) was instituted in the year 2005. The Principal Secretary to Government, Highways and Minor Ports Department is the Chairman cum Managing Director of Tamil Nadu Road Infrastructure Development Corporation and the Board of Directors are the representatives from various Departments of Government of Tamil Nadu.

The unit is a non-profitable organization implementing road infrastructure projects and is solely owned by the Government.

17.1 PROJECTS IMPLEMENTED BY TNRIDC

17.1.1 Oragadam Industrial Corridor Project

Due to liberalization in industrial policies, there is fast development in major manufacturing and engineering industrial units. Many of the industries are in collaboration with national and international organizations.

The industrialization of this zone has increased the intensity of traffic flow which needed better road infrastructure. Considering the traffic flow, Oragadam Industrial Corridor Project was taken-up in phased manner. Phase 1 to 4 work has been completed, in Phase 5 work is in progress.

17.1.2 Chennai Peripheral Ring Road – Section II & III

These two sections are being developed with the external funding.

17.2 OVERALL EXPENDITURE (2020-21) AND ALLOCATION FOR 2021-22.

During 2020-21, an expenditure of Rs.43.89 Crore have been incurred for implementation of the aforesaid schemes.

For 2021-22, Revised Budgetary allocation of Rs.37.92 Crore has been made.

18. TAMIL NADU MARITIME BOARD

Tamil Nadu State has the second longest coastline of 1076 kms in India. The coastline consists of Three Major Ports and notified 17 Minor (Non-Major) ports.

MAJOR PORTS

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

MINOR PORTS IN TAMIL NADU

The following are the declared minor ports in Tamil Nadu:

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

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

18.1 TAMIL NADU MARITIME BOARD ACT, 1995

Tamil Nadu Maritime Board (TNMB) was established under the Tamil Nadu Maritime Board Act, 1995 (4/1996) for the purpose of administration, management and control of Minor Ports in the State of Tamil Nadu.

18.2 MINOR PORTS DEVELOPMENT POLICY

Minor Ports along the Coast of Tamil Nadu are developed as per the Minor Ports Development Policy of Government of Tamil Nadu.

The Policy encourages Private Participation, Flexible Approach, Institutional Co-ordination and Backup. Tamil Nadu Maritime Board is a statutory body and is functioning with enough freedom and operational flexibility for rapid development of the Minor Ports in the State but with commercial prudence and responsibility.

18.3 ACTIVITIES OF OPERATIONAL MINOR PORTS

18.3.1 Government Ports

Cuddalore Port: This port is an open sea anchorage port and is being developed with the Financial Assistance of Government of India (Sagarmala / Coastal Berth Scheme), into a Direct Berthing port for small / medium size ships.

Nagapattinam Port: An open sea anchorage port handling import of Edible Oil through barges.

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

Rameswaram Port: A short trip passenger ferry is operated near Agnitheertham area.

Kanyakumari Port: A Passenger ferry port providing ferry services to Vivekananda Rock Memorial and Ayyan Thiruvalluvar Statue, operated by Poompuhar Shipping Corporation Limited.

18.3.2 Captive Ports / Terminals

Kattupalli Port: Ship building, Ship repairs and Modlar Fabrication works are carried out by Larsen & Toubro Limited. Export / Import of cargoes are handled by Marine Infrastructure Developer Private Limited.

Ennore Minor Port: Imports Liquid Ammonia through Multiple Buoy Mooring system.

Chemplast Marine Terminal within Cuddalore Port limit: An Island Jetty facility used to Import Vinyl Chloride Monomer.

Thirukkadaiyur Port: Imports Naphtha through Single Point Mooring as required by Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO).

Koodankulam Port: Import of Machinery / Over Dimensional Cargo are handled through Roll on – Roll off Jetty for Kudankulam Nuclear Power Project Units 3 & 4.

The other 8 declared minor ports are under various stages of obtaining statutory clearances, under development, etc.,

18.4 INITIATIVES OF THE BOARD IN DEVELOPMENT OF PORTS

18.4.1 Development of Cuddalore port

Cuddalore Port is being developed at a cost of Rs.135 Crore under Sagarmala / Coastal Berth Scheme with 50% financial assistance from Government of India and 50% from Tamil Nadu Maritime Board own funds which include extension of Breakwaters, Construction of Berths, Capital Dredging of the Channel.

18.4.2 Development of Kanyakumari Port:

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

Extension of Jetty at Vivekananda Rock Memorial is to be constructed at a cost of Rs.20 Crore under Sagarmala / Coastal Berth Scheme with 50% financial assistance from Government of India to attract more tourists / passengers to visit Vivekananda Rock Memorial and Ayyan Thiruvalluvar Statue. Construction works will commence soon after following due procedures.

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

Construction of Marine Bridge connecting Vivekananda Rock Memorial and Ayyan Thiruvalluvar Statue for a length of about 140 metres is to be taken-up at a cost of Rs.37 Crore under Sagarmala / Coastal Berth Scheme with 50% financial assistance from Government of India and 50% from Tamil Nadu Maritime Board own funds. Works will be executed by Construction and Maintenance Wing of Highways Department after completing tender procedures.

18.4.3 Udangudi Port:

This port was declared in the year 2010 for TANGEDCO for establishing an open sea jetty to receive coal for their 1320 MW Udangudi Super Critical Thermal Power Project. The construction works for Trestle Jetty and Thermal Power Plant commenced by TANGEDCO in June 2018 and expected to be completed by December 2022.

18.5 TAMIL NADU MARITIME ACADEMY

The Tamil Nadu Maritime Academy functioning at Thoothukudi is under the control of Tamil Nadu Maritime Board. The Academy is conducting pre-sea General Purpose rating residential course of 6 months duration with 40 trainees per batch and 1480 students have been trained so far. The 36th batch of General Purpose rating course has commenced from July 2021.

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

- I. Personal Survival Techniques
- II. Elementary First Aid
- III. Personal Safety and Social Responsibility
- IV. Oil and Chemical Tanker Cargo Operations
- V. Fire Prevention and Fire Fighting
- VI. Security Training for Seafarers

The above courses are approved by Director General of Shipping, Government of India and on completion of the above courses, the candidates

avail employment opportunities in Indian and Foreign flag vessels.

18.6 CARGO HANDLED AND REVENUE OF THE BOARD FOR 2020-2021

12,63,827 MT of cargo and 535460 (TEU) of containers have been handled through the Minor Ports and Tamil Nadu Maritime Board earned a Gross Revenue of Rs.41.57 Crore in Financial Year 2020-2021.

19. POOMPUHAR SHIPPING CORPORATION LIMITED

The Government of Tamil Nadu formed Poompuhar Shipping Corporation Limited on 11.04.1974 under the companies Act, 1956 with the main objective of transporting the Indian coal, required for the Tamil Nadu Generation and Distribution Corporation Ltd., (TANGEDCO) for the generation of electricity.

- This Corporation has sold the own ships namely M.V.Tamil Anna, M.V.Tamil Periyar and M.V.Tamil Kamaraj during the year 2017 and 2018 due to wear and tear and increase in maintenance cost.
- Poompuhar Shipping Corporation Limited has transported coal for Tamil Nadu Generation and Distribution Corporation Limited upto 31.03.2021.
- From 01.04.2021, Tamil Nadu Generation and Distribution Corporation Limited is transporting the coal by themselves instead of Poompuhar Shipping Corporation Limited.

- Presently, the Corporation is transporting the coal for NTPC Tamil Nadu Energy Company Ltd., (NTECL) through 3 chartered ships.
- The Corporation operates Ferry services from the shore of Kanyakumari to Vivekananda Rock Memorial and the Ayyan Thiruvalluvar statue for the benefits of passengers with three ferries namely M.L.Guhan, M.L.Pothigai and M.L.Vivekananda.
- Further, this Corporation is taking efforts to operate the two new ferries viz. M.L.Tamirabarani and M.L.Thiruvalluvar from the shore of Kanyakumari to Vattakottai.
- Due to COVID-19 pandemic and directives of the Government, the ferry operation stopped from 18.03.2020 to 24.11.2020 and from 20.04.2021 to till date.
- Presently, 60 permanent employees are working in this corporation.

- Since the transportation of coal is being carried out by Tamil Nadu Generation and Distribution Corporation Limited instead of Poompuhar Shipping Corporation Limited and stoppage of Ferry operation due to COVID-19 pandemic, this Corporation is incurring loss.
- This Corporation had earned net profit of Rs.5.29 Crore for the year 2019-20. It is expected to incur a loss of Rs.2 crore approximately for the year 2020-21. For the year 2021-22, this corporation is expected to incur more losses.
- Corporation is exploring the possibility to workout a model to increase its coal and other cargo transportation and thereby become a profitable organisation.

E.V.Velu

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

