



**GOVERNMENT OF TAMIL NADU
HIGHWAYS AND MINOR PORTS DEPARTMENT**

DEMAND NO. 21

PERFORMANCE BUDGET

2021-2022

PERFORMANCE OF HIGHWAYS AND MINOR PORTS DEPARTMENT DURING 2021-2022

I.HIGHWAYS DEPARTMENT

1. INTRODUCTION

Roads are the economic arteries of India and it serves as a life line of Indian trade. They play an important role in socio-economic development of the country by providing transportation to 85% of passengers and 70% of freight through roadways. Availability of adequate and quality infrastructure is required for rapid industrial development, which in turn creates employment for the people thereby uplifting social development. To provide reliable, safe and social-wellbeing of the State infrastructural facilities like construction of High Level Bridges, Railway Over Bridges (ROB) / Railway Under Bridges (RUB), Grade Separator, Elevated Corridor, formation of Bypasses and Ring Roads are carried out by the Highways Department.

Also, with the increased vehicular population and traffic intensity the road surface gets deteriorated which needs maintenance of existing roads and bridges as per IRC norms for smooth flow of traffic. It reduces construction cost and enhances the life span of these structures. It enhances the asset value of the State.

The detailed physical and financial performance of the department during 2021-22 is given below:-

1.1 ASSETS MAINTAINED BY HIGHWAYS DEPARTMENT

Highways Department maintains 70562 km length of roads. The classification of roads, their lengths and the type of existing bridges and their numbers are tabulated in Table 1 and Table 2 respectively. The surface-wise details and lane-wise details of the roads are tabulated in Table 3 and Table 4 respectively.

TABLE 1: CLASSIFICATION OF ROADS

length in km

Sl. No.	Classification of Road		Length
1	National Highways (NH)	State NH	1511
		NHAI	5095
		NH RoadsTotal	6606
2	State Highways (SH)		11279
3	Major District Roads (MDR)		11625
4	Other District Roads (ODR)		41052
	Total length of roads other than NH		63956
	Overall Total		70562

TABLE 2: TYPES OF BRIDGES AND THEIR NUMBERS

Sl. No.	Types of Bridges	Nos.
1	Major Bridges and Minor Bridges*	9179
2	Culverts	126318
3	Road Over Bridges at Railway level crossing(ROB)	136
4	Road Under Bridges at Railway level crossing (RUB)	58
5	Pedestrian Sub Way/ Limited Use Subway	15
6	Grade Separator	72
	Total	135778

* includes bridges with Linear Waterway of 6-60m and more than 60m

TABLE 3: SURFACE-WISE LENGTH

length in km

Sl. No.	Category of Roads	Cement Concrete (C.C)	Black Topped (B.T)	Metaled	Total
1	National Highways	29	6577	-	6606
2	State Highways	28	11251	-	11279
3	Major District Roads	31	11594	-	11625
4	Other District Roads	110	40942	-	41052
	Total	198	70364	-	70562

TABLE 4: LANE-WISE DETAILS OF ROADS

length in km

Sl. No.	Classification of Road	Single lane	Intermediate lane	Double lane	Two lane with paved shoulders	Four lane	Six lane	Total
1	National Highways							
	National Highways	-	-	1892	2127	2263	324	6606
	Percentage of lane-wise width of roads	-	-	29%	32.19%	34.25%	5%	
2	State Highways	33	207	7961	1830	1017	231	11279
	Percentage of lane-wise width of roads	0.29%	1.84%	70.58%	16.22%	9.02%	2.05%	
3	Major District Roads	315	6243	4669	294	101	3	11625
	Percentage of lane-wise width of roads	2.71%	53.70%	40.17%	2.53%	0.86%	0.03%	
4	Other District Roads	33066	6567	1331	76	12	0	41052
	Percentage of lane-wise width of roads	80.55%	16.00%	3.24%	0.18%	0.03%	0%	
	Total	33414	13017	15853	4327	3393	558	70562
	Percentage of lane width to the total length of roads	47.35%	18.45%	22.47%	6.13%	4.81%	0.79%	

1.2 PERFORMANCE UNDER PLAN SCHEMES

1.2.1 FINANCIAL PERFORMANCE

The financial performance under the plan schemes for the year 2021-22 and Budget Estimate for the year 2022-23 are given in **Table 5**.

TABLE 5: FINANCIAL PERFORMANCE

Rs.in lakh

Sl. No.	Name of Scheme	Revised Budget Estimate	Expenditure upto March 2022	Budget Estimate 2022-23
		2021-22		
Construction and Maintenance				
State Highways				
1	Bridges (Original works)-JA	977.00	2255.18	477.01
2	Roads (Land Acquisition)-JA	0.01	0.00	0.00
3	416 major works-JF	100.00	93.70	150.00
	Sub-Total	1077.01	2348.88	627.02
Major District Roads				
4	416 major works-JG	100.00	87.17	150.00
Other District Roads				
5	416 major works-JH	100.00	97.13	150.00
Rehabilitation of Distressed Bridges				
6	Rehabilitation of Distressed Bridges-JJ	0.01	0.00	0.01
7	416 major works-JB	100.00	89.73	150.00
	Sub-Total	100.01	89.73	150.01
Comprehensive Road Infrastructure Development Programme				
8	CRIDP – SH-JI	115732.00	102716.30	165000.00
9	CRIDP – MDR-JT	80916.00	69649.70	110000.00
10	CRIDP – ODR-JU	148875.00	111756.75	145000.00
11	CRIDP – SCP-JC	15420.00	9433.68	19700.00
	Sub-Total	360943.00	293556.43	439700.00
12	CRIDP IRQP-KF	72055.00	42798.30	55000.00
13	CRIDP-PBMC-JN	102638.00	102566.44	73777.00
14	Acquisition of lands for bypasses-JK			
	lands	29534.35	30763.38	17983.76

Rs.in lakh

Sl. No.	Name of Scheme	Revised Budget Estimate	Expenditure upto March 2022	Budget Estimate 2022-23
		2021-22		
15	Acquisition of lands for bypasses-KC			
	(a) works	13377.93	6455.48	14976.33
	(b) lands	36674.30	35082.48	14345.75
	Sub- total-KC	50052.23	41537.96	29322.08
16	Construction of Buildings-KT	0.01	17.00	0.01
17	Schemes implemented under State Infrastructure and Amenities fund - Controlled by Chief Engineer (Construction and Maintenance) Highways-KB	96.86	96.43	0.01
18	Special Project for attending Road Safety-KO	10000.00	12464.48	23100.00
19	City Traffic Improvement Works-JD	6508.59	9246.33	17906.76
20	High Density Corridor-JE	143.50	172.90	85.59
21	Construction of flyover at Salem junction - Yercaud Road-JF	0.01	300.00	0.01
22	Widening and Improving the road to Industries -KH	6014.42	2918.47	2854.11
23	Permanent Flood Restoration works-KI	4192.01	4124.16	10000.01
24	Widening from Intermediate lane to four lane and Strengthening of Pudevoyal-Pulicat road with JICA Assistance -TNIPP Phase 2-PB	1627.03	483.75	2000.00
25	Improvement to Chennai Radial Roads -JP	0.01	0.00	0.01
	C & M Total	645182.04	543668.94	672806.38

Sl. No.	Name of Scheme	Revised Budget Estimate	Expenditure upto March 2022	Budget Estimate 2022-23
		2021-22		
26	Improvement of vital roads in developing industrial areas through Tamil Nadu Road Infrastructure Development Corporation - JJ			
	(a) Works	3791.71	600.00	4312.85
	(b) Lands	1.01	0.00	1.00
	Sub- total-JJ	3792.72	600.00	4313.85
27	Widening to four lane of Madurai Ring Road through TNRIDC-JM			
	(i) works	0.00	2915.52	0.70
	(ii) lands	0.00	265.57	0.00
	Sub- total-JM	0.00	3181.09	0.70
	TNRIDC Total	3792.72	3781.09	4314.55
28	Chennai Outer Ring Road (Phase-I)-JK			
	(a) Works	16985.82	16999.16	12675.80
	(b) Lands	0.01	0.00	0.01
	Sub-Total	16985.83	16999.16	12675.81
29	Chennai Outer Ring Road (Phase-II)-KI			
	(a) Works	19227.06	28924.52	24308.46
	(b) Lands	0.01	0.00	0.01
	Sub-Total	19227.07	28924.52	24308.47
30	Bye-pass to Kelambakkam and Thiruporur in Rajiv Gandhi Salai with JICA assistance - TNIPP Phase 2 - PA	0.01	0.00	0.00

Rs.in lakh

Sl. No.	Name of Scheme	Revised Budget Estimate	Expenditure upto March 2022	Budget Estimate 2022-23
		2021-22		
31	Upgradation of IT highway in Chennai City-JX	4000.00	4000.00	4813.00
	TNRDC -Total	40212.91	49923.68	41797.28
32	Development of Northern Port Access Road Project - KN			
	(a) Works	0.00	0.00	0.00
	(b) Lands	10000.00	10000.00	24850.00
	Sub-Total KN	10000.00	10000.00	24850.00
33	Acquisition of Lands for formation of CPRR with JICA assistance-PC	70000.00	70000.00	50000.00
34	Project for the Construction of Chennai Peripheral Ring Road (CPRR) with JICA assistance-KG	60000.00	59990.53	90000.00
35	Project for the formation of Chennai Peripheral Ring Road (CPRR) with AIIB and OFID assistance - JP	45000.00	19790.00	85000.00
	CPRR Total	185000.00	159780.53	249850.00
36	Asian Development Bank assistance Chennai - Kanyakumari Industrial Corridor Project-PB			
	Works	64000.00	64000.00	120000.00
	Lands	44000.00	44000.00	10000.00
	CKICP-Total	108000.00	108000.00	130000.00
	Plan - Total	982187.67	865154.24	1098768.20
	Highways Research Station			

Rs.in lakh

Sl. No.	Name of Scheme	Revised Budget Estimate	Expenditure upto March 2022	Budget Estimate 2022-23
		2021-22		
37	Tamil Nadu Innovation Initiatives Fund (TANII) for 2017-18 JI and JK	0.02	0.00	0.00
38	Operation and Maintenance of Advanced Data Collection Equipments - JM	16.08	5.06	13.82
	Total	16.10	5.06	13.82
NABARD and Rural Roads Wing				
39	Construction/Reconstruction of Bridges with loan assistance from NABARD -JZ	39494.31	18944.05	51611.32
40	Improvements to Rural Roads with loan assistance from NABARD -JI	0.02	0	0
41	Construction / Re-construction of Bridges under State Fund -KJ	3061.50	1041.27	1649.71
42	Construction of bridges under Tsunami Emergency Assistance Project (TEAP) with loan assistance from Asian Development Bank - Highways-RN	1.57	1.05	1.05
43	By-pass works -KA	20858.46	16669.48	11229.01
44	Upgradation of Panchayat Union Roads / Panchayat Roads -KD	210000.00	194926.70	103200.00
	Total	273415.86	231582.55	167691.09
Projects Wing				
45	Construction of over and under bridges in lieu of existing level crossings-JJ	31694.19	9994.95	14963.29

Rs.in lakh

Sl. No.	Name of Scheme	Revised Budget Estimate	Expenditure upto March 2022	Budget Estimate 2022-23
		2021-22		
46	Construction of ROB in Chennai Metro Area for Traffic Management-JD	0.03	11.64	200.01
47	Construction/ Reconstruction of bridges-JE	8439.40	3431.18	5361.34
48	Construction/ Reconstruction of bridges and improvement of roads with loan assistance from NABARD-JQ	0.52	0	0.52
49	Provision for road works-JN	4962.96	65.56	1963.10
50	Construction of Railway Over Bridge/Railway Under Bridges-JT	41952.53	13780.31	26804.17
51	Construction of over and under bridges in lieu of existing level crossings-JG	16516.09	5854.04	13231.33
52	Construction of Bridges with loan assistance from HUDCO (Land acquisition payment) - JB	0.01	0	0.01
53	Comprehensive Road Infrastructure Development Programme (CRIDP) - Formation of Bypasses -JO	6505.02	633.17	12434.61
54	Construction/ Reconstruction of Elevated Highways -JJ	45834.47	16605.38	64500.00
	Total	155905.22	50376.23	139458.38
	Metro Wing			
55	Chennai Metropolitan Development Plan -Traffic and Transport Improvement in Chennai - JW	13419.18	32700.53	43483.99

Rs.in lakh

Sl. No.	Name of Scheme	Revised Budget Estimate	Expenditure upto March 2022	Budget Estimate 2022-23
		2021-22		
56	Works executed by Chief Engineer(H), Metro, Highways from State Infrastructure and Amenities fund For works - KJ	8587.40	1526.28	2942.87
57	Chennai Metropolitan Development Plan - Traffic and Transport Improvement in Chennai City -JH	602.79	375.15	59.77
58	Construction of Bridges and Roads under Chennai City Traffic Decongestion Projects (CCTDP) - JI	33178.91	33160.68	39250.12
	Total	55788.28	67762.65	85736.75
National Highways				
59	Revamped Central Road Fund - SA	45800.00	30100.00	41500.00
60	Bharat Nirman Scheme (Maintenance borne by State Government) - JS	230.00	248.64	176.73
	Total	46030.00	30348.64	41676.73
Tamil Nadu Road Sector Project (TNRSP)				
61	TNRSP-PC	66300.29	65332.75	62696.92
	Total	66300.29	65332.75	62696.92
	Overall Total	1579643.42	1310562.11	1596041.89

1.2.2 PHYSICAL PERFORMANCE

The physical achievements under the plan schemes for the year 2021-22 and targets for the year 2022-23 are given in **Table 6**.

TABLE 6: PHYSICAL PERFORMANCE

Bridges/Culverts in nos., length in km

Sl. No.	Name of Scheme	Achievements (2021-22)		Targets (2022-23)	
		Bridges/Culverts in nos.	Roads length in km	Bridges/Culverts in nos.	Roads length in km
Construction and Maintenance Wing					
1	Comprehensive Road Infrastructure Development Programme				
	State Highways	0/73	313	0/35	350
	Major District Roads	5/85	457	3/104	266
	Other District Roads	4/400	926	9/435	1274
	Other District Roads (Special Component Plan)	0/4	129	0/6	167
	Sub-Total	9/562	1825	12/580	2057
	IRQP	-	1562	-	1800
	Roads/ Bridges	9/562	3387	12/580	3857
	Buildings	-	-	-	-
	Tsunami – Rehabilitation Scheme (Centrally assisted)	-	-	-	-
NABARD and Rural Roads Wing					
2	Construction / Reconstruction of Bridges with loan assistance from NABARD-JZ	73	-	159	-
3	Improvements to Rural Roads with loan assistance from NABARD-JI	-	-	-	-

Sl. No.	Name of Scheme	Achievements (2021-22)		Targets (2022-23)	
		Bridges/ Culverts in nos.	Roads length in km	Bridges/ Culverts in nos.	Roads length in km
4	Construction/ Reconstruction of Bridges under State Fund-KJ	2	-	3	-
5	Upgradation of Panchayat Union Roads / Panchayat Roads -KD	-	2140.84	-	345.20
6	Railway Works Programme	1	-	4	-
	Total	76	2140.84	166	345.20
Projects Wing					
7	Road over/ under bridges in lieu of existing Level Crossings -JJ	6	0	8	0
8	Construction of Over Bridges/ Under Bridges in lieu of level crossings -JT	2	0	1	0
9	Construction / Reconstruction of bridges JE	3	2.00	6	0
10	Construction of over and under bridges in lieu of existing level crossings - JG	1	0	5	0

Sl. No.	Name of Scheme	Achievements (2021-22)		Targets (2022-23)	
		Bridges/ Culverts in nos.	Roads length in km	Bridges/ Culverts in nos.	Roads length in km
11	Comprehensive Road Infrastructure Development Programme (CRIDP) - Formation of Bypasses – JO	0	0	0	8.90
12	Comprehensive Road Infrastructure Development Programme (CRIDP)				
(a)	State Highways (JI – CRIDP)	0	0	0	8.31
(b)	Major District Roads (JT - CRIDP)	0	0	6	0
(c)	Other District Roads (JU - CRIDP)	0	0	6	0
	Total	12	2.00	32	17.21
13	Chennai Metropolitan Development Plan				
(a)	ROB/RUBs	0	0	2	0
(b)	Grade Separators	2	0	2	0
(c)	River Bridges	0	0	2	0
(d)	Foot over bridges with Escalators	0	0	1	0
(e)	Roads	0	0	0	4.64
	Total	2	0	7	4.64
	National Highways Wing				

Sl. No.	Name of Scheme	Achievements (2021-22)		Targets (2022-23)	
		Bridges/ Culverts in nos.	Roads length in km	Bridges/ Culverts in nos.	Roads length in km
14	Revamped Central Road Fund Scheme	4	47.57	1	19.15
15	Inter State Connectivity scheme	-	17.90	-	-
	Total	4	65.47	1	19.15
Chennai Kanyakumari Industrial Corridor Project					
16	Chennai Kanyakumari Industrial Corridor Project	278	73	374	210
	Total	278	73	374	210

1.3 PERFORMANCE UNDER NON-PLAN SCHEMES

1.3.1 FINANCIAL PERFORMANCE

The financial performance indicating the details of expenditure incurred during 2021-22 under various heads of Maintenance /Renewal and allocation for 2022-23 is given in **Table 7**.

TABLE 7: NON PLAN-FINANCIAL ALLOCATION AND EXPENDITURE

Rs.in lakh

Sl. No.	Name of Scheme	Budget Estimate	Expenditure upto March 2022	Budget Estimate 2022-23
		2021-22		
1	National Highways Urban	281.94	281.94	281.94
2	Maintenance of Certain important Roads in the City of Chennai	2940.00	2500.00	2500.00
3	State Highways	15365.61	13799.35	14043.58

Sl. No.	Name of Scheme	Budget Estimate	Expenditure upto March 2022	Budget Estimate 2022-23
		2021-22		
4	Major District Roads	12546.53	11481.26	12613.54
5	Other District Roads	44788.01	39333.89	44996.59
6	Sugarcane Roads	2350.16	1966.97	2000.00
7	Improvements to Nilgiris Ghat Roads	151.71	100.00	100.00
	Total	78423.96	69463.41	76535.65

1.3.2 PHYSICAL PERFORMANCE

The length of roads renewed under Maintenance / Renewal during 2021-22 and the target for 2022-23 is given in **Table-8**.

TABLE 8: PHYSICAL PERFORMANCE OF NON PLAN SCHEMES

Length in km

S. No.	Name of wing	Achievement 2021-22	Target 2022-23
1.	Construction and Maintenance	2434	2500

2. PERFORMANCE UNDER MAJOR SCHEMES AND DETAILS OF KEY PROJECTS

An amount of Rs.15796.43 Crore was provided in the Budget Estimate for Highways Department for the year 2021-22, and the expenditure incurred under Plan Schemes is Rs.13105.62 Crore.

2.1 MAJOR INITIATIVES

2.1.1 CHIEF MINISTER ROAD DEVELOPMENT PROGRAM (CMRDP)

During Budget Session 2021-22, it has been announced that **important State Highways connecting District and Taluk headquarters will be**

widened to 4-lane to a length of 2200km and 6700km will be widened to 2-lane in the next 10 years based on the traffic intensity under “Chief Minister Road Development Program”.

It is a newly implemented pioneer program for widening the road based on District Connectivity, traffic intensity and connectivity as the traffic is ever increasing in all the roads.

The road infrastructure is to be developed in such a way of connecting National Highways, Industrial areas, ports, tourist spots and religious centers. With the development of the State the vehicle population demands more augmentation is district/ village roads too. Hence it is necessary to upgrade Intermediate lane to two lane.

By widening, the capacity of road is augmented, facilitates faster and safe transportation. Also, the fuel cost is reduced, Uninterrupted flow reduces wear and tear of vehicle, reduction of vehicle operation cost and increases the user satisfaction. By increasing the lanes according to traffic count the destination could be reached in shorter time resulting in Road User Satisfaction.

In the year 2021-22, widening of 255.02 km important State Highways (SH) to four lane has been taken up at a cost of Rs.2123.64 Crore and 639.10 km important State Highways (SH), Major District Roads (MDR) and Other District Roads (ODR) to double lane at a cost of Rs.865.35 Crore has been taken up under Comprehensive Road Infrastructure Development Program (CRIDP -2021-22) based on the traffic intensity and connectivity. These works are in different stage of implementation. CMDRP has been taken up as a part of CRIDP Scheme.

2.1.2 UPGRADATION OF BED LEVEL CAUSEWAYS INTO HIGH LEVEL BRIDGES

During flood time, water overflows on the causeways for few days, which affects the movement of traffic through certain route and people nearby the villages are disconnected. This will affect the movement of important goods transport through villages, marketing centers and day to day activities of people. School going children are affected.

During the Budget 2021-22 session, it has been announced that **“in lieu of existing Causeways, High level Bridges will be constructed in identified 1281 locations”**. In this financial year, 648 causeways with inundation period for more than 3 days and Linear Water Way less than 30m involving minor structures were taken up at a cost of Rs.551.23 Crore under CRIDP 2021-22 scheme, these works are in progress and remaining causeways will be taken up in a phased manner.

2.1.3 DEVELOPMENT WORKS IN URBAN AREAS

Urban roads in Tamil Nadu have a heterogeneous mix of traffic as the local traffic is very high. Hence, special attention for these roads is carefully ensured to achieve a smooth and safe flow of traffic.

The type and character of each urban road needs to be carefully detailed to respond the functions it performs, i.e. providing mobility or access or both. Safety of road users is a major concern now because the number of traffic accidents and fatalities on urban roads is in increasing trend in the past few years.

During the Budget 2021-22 meeting, it has been announced that **“State Highways and Major district Roads in Corporation, Municipality, and Town Panchayat areas will be widened as four lane with paved shoulders based on the availability of Land”**.

Considering Urban Development in State Highways and Major District Roads in Corporation, Municipality and Town Panchayat will be widened to four lane with paved shoulder, if required land is available and if there is no land available for four lane, then the road will be widened up to Right Of Way (ROW) to cater the increased traffic. In order to avoid stagnation of rain water, drains with footpath will be constructed.

Government have issued approval of adopting the policy of allocating 10% of CRIDP fund for taking up the widening and strengthening/Improvements of roads in Corporation, Municipality and Town Panchayat areas.

Accordingly, Government have sanctioned an amount of Rs.412.69 Crore for urban Improvement of roads for a length of 96.27 km. These works are in progress.

2.2 STATE FUNDED SCHEMES

2.2.1 COMPREHENSIVE ROAD INFRASTRUCTURE DEVELOPMENT PROGRAMME (CRIDP)

The Comprehensive Road Infrastructure Development Program is a flagship scheme of Government of Tamil Nadu whereby large scale widening and improvements of roads are being taken up. The CRIDP scheme has developed infrastructural facilities through capacity augmentation of the State Highways, Major District Roads and Other District Roads and strengthening of roads cater smooth and safe riding surface to the increasing vehicular movement thereby ensuring enhanced service levels.

CRIDP helps to attain the SDG goals and 10 years long term vision and to provide quality, reliable, sustainable and resilient infrastructure, and to support economic development.

Under CRIDP, works like widening, strengthening, improving the riding condition, construction of bypasses, bridges, culverts and road safety works etc., are being undertaken in a comprehensive and holistic manner.

2.2.1.1 CRIDP – STATE HIGHWAYS

Widening and improvements of 362.32 km length of roads and construction of 35 bridges/culverts were sanctioned in 2021-22 and are in progress at a cost of Rs.675.69 Crore.

In addition, widening/ improvements to 398.94 km length of roads and construction of 82 bridges /culverts were also taken up as spill-over works at a cost of Rs.1573.59 Crore.

Widening / improvements to 313 km length of roads and 73 construction of bridges/culverts have been completed at an expenditure of Rs.1027.16 Crore.

In Projects wing, Reconstruction of High Level Bridge at km.0/2 of Mulluvadi Road – across Vasista River in Salem District is in progress at a cost of Rs.9.58 Crore.

2.2.1.2 CRIDP –MAJOR DISTRICT ROADS

Widening and improvements to 266.91 km length of roads, construction of 58 bridges/culverts were sanctioned in 2021-22 and are in progress at a cost of Rs.326.16 Crore.

In addition, widening/ improvements to 629.27 km length of roads and construction of 107 bridges/ culverts were also taken up as spill-over works at a cost of Rs.1050.16 Crore.

Widening / improvements to 457 km length of roads and 90 bridges / Culverts have been completed at an expenditure of Rs.696.50 Crore.

In Construction and Maintenance wing, under CRIDP 2021-22, construction of High Level Bridge between Mannadimangalam at km 27/10 of Mellakkal – Peranai Road (MD262) and Irumbadi at km 2/2 of Sholavandhan-Karuppatti road across Vaigai river at a cost of Rs.19.00 Crore is in progress.

Reconstruction of bridge at km 17/10 of Puliyampatti – Bhavani Sagar – Bannari road (M-889) across Bhavaniriver at a cost of Rs.7.98 Crore is in progress.

In Projects wing, High level bridges taken-up under CRIDP – MDR scheme. The total sanctioned cost of these works is Rs.48.67 Crore and the works are in progress as detailed below:

1. Construction of High Level Bridge across surplus canal of Wellington reservoir at km 3/8 of Thittakudi – Sirupakkam road at a cost of Rs.11.85 Crore in Cuddalore District.
2. Major Bridge at km 4/10 of Kalagam – Avudaiyarkovil road (MDR-603) across Ponaikuthi River at a cost of Rs.8.07 Crore in Thanjavur District.
3. Major Bridge at km 10/2 of Kalagam – Avudaiyarkovil road (MDR – 603) across Ambuliyar branch river at a cost of Rs.9.64 Crore in Thanjavur District.
4. Major Bridge at km 10/6 of Kalagam – Avudaiyarkovil road (MDR – 603) across Ambuliyar branch river at a cost of Rs.8.05 Crore in Thanjavur District.

5. Major Bridge at km 12/4 of Kalagam – Avudaiyarkoil road (MDR-603) across Maruthangudi River at a cost of Rs.11.06 Crore in Thanjavur District.

2.2.1.3 CRIDP –OTHER DISTRICT ROADS

In 2021-22, Widening and improvements to 1133.61 km length of roads, construction of 159 bridges/culverts were sanctioned in 2021-22 and are in progress at a cost of Rs.1146.37 Crore.

In addition, widening/ improvements to 1274.27 km length of roads and construction of 454 bridges/culverts were also taken up as spill-over works at a cost of Rs.1679.88 Crore.

Widening / improvements to 926 km length of roads and 404 bridges / Culverts have been completed at an expenditure of Rs 1117.57 Crore.

In Projects wing, Six High level bridges were taken-up under CRIDP – ODR scheme. The total sanctioned cost of these works is Rs.78.08 Crore and works are in progress as detailed below:

1. High Level Bridge across the river Thondiayar at km 5/4 of Alagramam Thenputhur road branching at km 21/0 of Vellimedupettai - Mailam Road in Villupuram District at a cost of Rs.8.65 Crore.
2. High Level Bridge across the river Gedilam at km 5/0 of Arungkurukkai Road branching at km 59/10 of Cuddalore - Chittoor road in Villupuram District at a cost of Rs.10.05 Crore.
3. High Level Bridge across the river Vaigai connecting Paravai in SHU-100 and Thuvariman in Madurai- Melakkal road in Madurai District at a cost of Rs.16.13 Crore.
4. High Level Bridge across River Pennaiyar connecting Mettupalayam village of Villupuram District and Melkumaramangalam village in Cuddalore District at a cost of Rs.27.92 Crore.
5. Major Bridge at km 6/8 of Perumagalure – Athani road (ODR) across Mudiyanar River at a cost of Rs.9.29 Crore in Thanjavur District.
6. Major Bridge at km 4/6 of Vallam-Kallaperumbur Road (ODR) across Mudalamuthuvari drain at a cost of Rs.6.04 Crore in Thanjavur District.

2.2.1.4 CRIDP - OTHER DISTRICT ROADS – SPECIAL COMPONENT PLAN

Widening and improvements to 140.39 km length of roads, were sanctioned in 2021-22 at a cost of Rs.146.47 Crore and are in progress.

In addition, widening/improvements to 167.39 km length of roads and construction of 6 bridges/culverts were also taken up as spill-over works at a cost of Rs.183.00 Crore and are in progress.

Widening / improvements to 129 km length of roads and 4 bridges / Culverts have been completed at an expenditure of Rs 93.34 Crore.

2.2.1.5 CRIDP - IMPROVEMENTS TO RIDING QUALITY PROGRAM (IRQP)

Widening and improvements to 2386.60 km length of roads were sanctioned in 2021-22 and are in progress at a cost of Rs.768.91 Crore.

In addition, widening/ improvements to 1805.66 km length of roads were also taken up as spill-over works at a cost of Rs.619.63 Crore.

Road works to a length of 1562 km were completed at an expenditure of Rs.427.98 Crore.

2.2.2 EXTENDED GREATER CHENNAI CORPORATION AREA

Development of road infrastructure in extended Chennai Corporation area is being carried out in phased manner. 20 numbers of spill works at a cost of Rs.367.31 Crore have been sanctioned in Chennai and Thiruvallur Divisions. Out of which 10 works have been completed and the remaining 10 works are in progress.

2.2.3 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 at a cost of Rs.165.06 Crore and works are in progress. Totally 9 number of works have been sanctioned. Out of this, one work has been completed remaining 8 works are in progress.

2.2.4 ROAD SAFETY WORKS

In 2021-22, 401 numbers of works have been sanctioned at a cost of Rs.200.00 Crore for Road Safety under CRIDP scheme and under Road Safety Fund 99 numbers of works to a tune of Rs.100 Crore has been sanctioned and these works are in various stage of progress.

2.2.5 PERMANENT FLOOD RESTORATION WORKS

Spill over works like construction of new storm water drains and culverts to prevent flooding to a value of Rs.352.41 Crore have been taken up and works are in progress.

During 2021-22, Permanent restoration works such as construction of additional bridges, additional vent ways, Minor CD works, Replacing Pipe Culverts, Construction of Drains/ Macro Drains, Reconstruction of Damaged protective works and capacity augmentation such as purchasing new machineries, pump sets and generators were sanctioned for a value of Rs.392.16 Crore and being implemented.

2.2.6 ELEVATED CORRIDORS AND FLYOVERS

The growing traffic congestion in Cities demands elevated corridors as there is no further space available for widening of roads in commercial stretches.

In Construction and Maintenance wing, Preparation of Detailed Project Report (DPR) at a cost of Rs.2.80 Crore for the following Elevated Corridors are sanctioned during the financial Year 2021-22. Works are taken up:

1. Construction of Elevated Corridor from Gandhi Statue and Mutharaiyar Statue to Trichy Court Roundana in Trichy City.
2. Construction of Elevated Corridor from Nelpettai Junction to Avaniyapuram Junction in Madurai City.

Apart from this, the Detailed Project Report for the following Elevated corridor are under Progress:

1. Anna Statue to Trichy Railway Junction (5400 m)
2. Madurai -Thondi Road KM 0/0 -1/8 at Apollo Hospital Junction (1800 m)

3. Madurai -Natham Road KM 0/0 -1/8 (1800 m)
4. Periyar to Eyanakal via Meenakshi bazaar (2400 m)

The DPR for Elevated Corridor from Chennai Airport to Chennai Bypass is proposed to be taken up.

In Projects wing, the work of construction of Elevated Highway along Avinashi road in Coimbatore City from Goldwins to Uppilipalayam km 147/100 - 157/200 of SHU-52 at a cost of Rs.1621.30 Crore is in progress.

DPR work is in progress for 3 Elevated Corridors at a total cost of Rs.4.33 crore.

1. Construction of Elevated Bridge for a length of 5.40 Km from KalinkarayanIllam to Thindalmedu (Km.2/0-7/4 of Erode-Perundurai-Kangeyam road).
2. Construction of Flyover from km 0/0 to 6/2 of Tiruppur – Perumanallur – Kunnathur – Perundurai road (SH-196) (Pushpa Theatre to Pandian Nagar)
3. Construction of Elevated Corridor from Odathurai Cauvery Bridge (at Km 316/4 of SHU-9) through Anna statue and KalaignarArivalayam to Mallachipuram (at Km 142/6 of SHU-153) in Trichy City.

2.2.7 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 local traffic from through traffic.

In Construction and Maintenance wings, Construction of Flyover at Athupalam - Ukkadam is in progress in Coimbatore. Land acquisition for Goripalayam Grade Separator in Madurai city is in progress.

Government have sanctioned preparation of DPR for the work of construction of High Level Flyover at km 18/4 of Madurai- Pandikovil – Kappalur road (Trichy- Aruppukottai – Thoothukudi Junction of NH 45B) at a cost of Rs.28.77 Lakhs. Detailed Project Report preparation is under progress.

In projects wing, Detailed Project Report preparation is under progress for the following two Grade Separators:

1. Construction of Grade Separator at Km 5/0 of Madurai – Dhanuskodi Road (NH 49) and at Km 5/6 of Madurai Ring Road Junction (Viraganur Junction) at a cost of 43.00 lakhs

2. Construction of Grade Separator at Km6/6 of Tirunelveli Bye Pass Road (SH75A) near Veeramanickapuram at a cost of 56.00 lakhs.

2.2.8 MAINTENANCE / RENEWAL WORKS

Due to increased vehicular population and traffic intensity, the road surface gets deteriorated which needs maintenance for smooth flow of traffic. Renewal of 2434 km length of roads has been completed at an expenditure of Rs.694.63 Crore.

2.2.9 CONSTRUCTION OF RIVER BRIDGES IN GOVERNMENT & PANCHAYAT UNION ROADS UNDER STATE FUND

Under this scheme, during 2021-22, 5 bridges have been taken up with a Spill over cost of Rs.33.65 Crore. Out of which 2 Bridge works have been completed. An expenditure of Rs.10.41 Crore has been incurred.

2.2.10 UPGRADATION OF PANCHAYAT UNION ROADS / PANCHAYAT ROADS TO ODR STANDARD BY STATE FUND

Under this scheme, during 2021-22, 1078 road works to a length of 2486.04 km at a Spill over cost of Rs.2512.97 Crore were taken up for execution. Out of which 942 road works to a length of 2140.84 km have been completed. An expenditure of Rs.1949.27 Crore has been incurred.

2.2.11 RIVER BRIDGE WORKS

The following works are completed under Projects wing:

1. High Level Bridge across the River Coleroon at Kallanai connecting Thiruvanaikoil Road and Grand Anaicut Road at a cost of Rs.90.96 Crore in Thanjavur District.
2. High level bridge across the river Cheyyar at Km 0/8 of Thandarai – Eraiyyur road in Thiruvannamalai District at a cost of Rs.17.04 Crore.

The following river bridges are being implemented under Projects wing:

1. Reconstructing High Level Bridge at km 0/4 of Ayyampettai - Ganapathyagraharam road across river Kudamuruti at a cost of Rs.12.16 crore in Thanjavur District.
2. High Level Bridge across Vellar River connecting Kotttaikadu in Ariyalur District and Pennadam in Cuddalore District at a cost of Rs.11.51 Crore.
3. High Level Bridge at Km 6/10-7/2 of Villupuram – Kavanipakkam across Malatar River at a cost of Rs.16.51 Crore in Villupuram District.
4. High Level Bridge across Varagha Nadhi at Km 7/2 of Gingee-Vadapalai road (MDR-719) for existing Bed Level Cause way at a cost of Rs.6.10 Crore in Villupuram District.
5. High Level Bridge across the river Kosathalaiyar at km 11/7 of Tiruttani - Nagalapuram Road (MDR-719) in lieu of existing vented causeway at a cost of Rs.18.57 Crore in Thiruvallur District.
6. Construction of High Level Bridge across Cheyyar River at Km 11/2 of Uthiramerur - Kancheepuram road at a cost of Rs. 21.56 Crore in Kanchipuram District.

2.2.12 LAND ACQUISITIONWORKS

In projects wing, to carry out Land Acquisition for 6 works including 3 ROB works and 3 River Bridges for Rs.62.15 Crore has been sanctioned during 2021-22. For these works Land Acquisition is under progress.

2.2.13 CHENNAI METROPOLITAN DEVELOPMENT PLAN (CMDP)

The major projects identified under Comprehensive Traffic and Transportation Study (CTTS), and second Master plan developed by CMDA are being implemented under the Chennai Metropolitan Development Plan (CMDP) on priority basis.

2.2.13.1 GRADE SEPARATORS

- The Grade Separator work at Koyambedu junction at a cost of Rs.93.50 Crore and Taramani to Velachery Bypass arm in the Grade Separator work at Velachery junction at a cost of Rs.67.00 Crore were completed and opened to public.

- In the Grade Separator work at Medavakkam, Tambaram – Velachery Arm at a cost of Rs.95.21 Crore and in the Grade Separator work at Velachery junction, Velachery Bypass to Tambaram arm at a cost of Rs.78.49 Crore are in progress and will be opened to public use shortly.
- Land acquisition is in progress for Grade Separator at Thiruvanmiyur junction
- For Grade Separator at Madhya Kailash junction, sanction has been accorded for Rs.46.54 Crore and construction will be taken up shortly.
- For Grade Separator on Mount-Poonamallee-Avadi road from MIOT Hospital to Mugalivakkam and Vehicular Under Pass at Madipakkam, sanction has been accorded for Rs.314.48 Crore and Rs.45.50 Crore respectively. These works are being executed by Chennai Metro Rail Limited (CMRL) integrated with Metro Rail projects.
- Further, 11 Grade Separators are in Detailed Project Report Stage and simultaneously Land acquisition is in progress for 10 works for an amount of Rs.983.32 Crore.

2.2.13.2 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.

2.2.13.3 FORMATION OF NEW LINK / WIDENING OF ROAD WORKS

- 3 road works for an amount of Rs.72.54 Crore at Neelangarai, Palavakkam in East Coast Road and Nedungundram in Tambaram Eastern bypass are in progress.
- Land Acquisition is in progress for formation of road in Puthur stretch in Tambaram Eastern Bypass and the work will be taken up shortly.

- For widening of East Coast Road to six lane in Kottivakkam, sanction has been accorded for Rs.17.16 Crore and the work will be taken up shortly.
- Land acquisition for the balance stretches in the above three road works is in progress for an amount of Rs.995.50 Crore.

2.2.13.4 PEDESTRIAN INFRASTRUCTURE FACILITIES - FOOT OVER BRIDGES WITH ESCALATORS

- Construction in railway portion is under progress in the work of construction of Foot Over Bridge with escalator connecting the Tambaram Railway station & bus stand in GST Road, Tambaram.
- Detailed Project Report is under preparation for 2 Foot Over Bridges works near Kendriya Vidyalaya School, Thirumangalam and near DAV & Velammal School, Mugappair.
- For the work of Providing Foot over bridge with Escalator for connecting East Tambaram and West Tambaram, Detailed Project Report and Land acquisition are in progress.

2.2.13.5 DETAILED FEASIBILITY REPORTWORKS

- 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 CMA.
- A sum of Rs.677.63 Crore has been spent under this scheme during 2021-22.

2.2.14 BYPASSES

Bypasses ensure hassle-free through traffic relieving congestion, reducing the vehicle operating cost and saving the commuting time considerably.

In Construction and Maintenance wing, Formation of bypass in Thiruthani, Illupur and Rasipuram Phase-I Part-II are in progress. Thiruthuraipoondi phase-I, Parthibanur and Cunnor bypass are in tender stage. The Land Acquisition is in progress for 15 bypasses at a cost of Rs.934.36 Crore.

During 2021-22, DPR for 8 bypasses namely R.K.Pet, Pallikonda, Manachanallur Phase II, Manaparai, Thiruthuraipoondi Phase II, Nannilam, Ariyalur Phase II and Sholingur have been sanctioned at a cost of Rs.2.45 Crore under TNIDB Funds and works are under progress. DPR preparation for formation of bypass in Ooty is also under progress.

During 2021-22, Detailed Project Report for 14 bypasses namely Aranthangi, Trichy(Half Ring Road), Alangudi,Gudalur, Mayiladuthurai, Musiri, Vellakovil, Tiruppur, Kangeyam, Pennadam, Sendurai, Chengam, Melkachirapattu - Kelkachirapattu and Pudevoyal are sanctioned for an amount of Rs.8.29 Crore. Preparation of DPR for these bypasses are in progress.

In NABARD and Rural Roads wing, Land Acquisition works for the formation of Bypasses in 12 major towns at a spill over cost of Rs.192.12 Crore, out of which Land Acquisition completed for Bhavani Bypass and for the remaining 11 Bypasses Land Acquisition works are in progress. For another Bypass namely, Koothanallur Bypass, preparation of DPR is in progress for an amount of Rs.18.00 Lakhs. An expenditure of Rs.166.69 Crore has been incurred.

In Projects wing, Work is in progress for Western Bypass to Pollachi.

Land Acquisition is process for 1. Thiruvallur Bypass, 2. Uthiramerur Bypass, 3. Shoolagiri Bypass, 4. Thuraiyur Bypass (Phase 2), 5. Rasipuram Bypass (Phase 2), 6. Alternate Route To Pollachi via Chettipalayam, 7.Jalakandapuram Bypass, 8. Bodinayakkanur Bypass (Phase 1), 9.KamuthiBypass, 10. Sivagangai Bypass, 11. Tirunelveli Western Bypass and 12. Aruppukottai Western Bypass.

Preparation of Detailed Project Report is Under Progress for 1. Kallakurichi Bypass, 2. Avalurpettai Bypass, 3. Perambalur Bypass (Phase 3), 4. Pattukottai Bypass (Phase 3), 5. Thuraiyur Bypass (Phase 3), 6.Thittakkudi Bypass, 7.Viruthachalam Bypass (Phase 2), 8. Gobichettipalayam Bypass, 9.Dharmapuri Bypass, 10. Gangavalli Bypass, 11. Eastern Bypass to Karamadai, 12.Western Bypass to Karamadai, 13. Northern Bypass to Avinasi, 14. Batlakundu Bypass, 15. Bodinayakkanur Bypass(Phase2), 16. Sathankulam Bypass and 17. Elayirampannai Bypass.

2.2.15 RESEARCH WORKS UNDER TANII SCHEME

Highways Research Station has taken-up the research study titled "Study on the technology of long lasting pavement with aid of Circular Test Track" under Tamil Nadu Innovation Initiatives funds (TANII) during the financial year 2017-2018 for an amount of Rs.199.34 lakhs is in progress.

TABLE 9: DETAILS OF FUND SANCTIONED

Rs in Lakhs

Sl. No.	Name of scheme	Funds sanctioned					Remarks
		2017 - 18	2018 -19	2019- 20	2020- 21	Total	
1.	Study on the technology of longlasting pavement with aid of Circular Test Track	9.89	120.02	30.94	38.49	199.34	Research study is in progress
	Total	9.89	120.02	30.94	38.49	199.34	

In the above work, an expenditure of Rs.199.33 lakhs out of Rs.199.34 lakhs has been made.

2.3 GOVERNMENT OF INDIA (GoI) FUNDED SCHEMES

2.3.1 NATIONAL HIGHWAYS WORKS

Tamil Nadu State has 6606 km length of National Highway network. The State Government undertakes maintenance of 1511 km and the remaining 5095 km is maintained by NHAI. National Highways are being developed and maintained with the funds allocated by the Ministry of Road Transport and Highways (MoRT&H), New Delhi.

2.3.1.1 NATIONAL HIGHWAYS ORIGINAL WORKS(ANNUAL PLAN)

During 2021-22, 53 road works and 18 Bridge works for a length of 267.35 Km at a cost of Rs.2167.03 Crore, have been taken-up as spill-over works. During this year 170.85 km of Road works and 3 Bridge works were completed and balance works are in progress. In addition, for works sanctioned under Annual plan 2021-22, 14.30 km of road works have been

completed and an expenditure of Rs.1150.89 Crore has been incurred under this scheme.

2.3.1.1.1 Sethu Bharatam Scheme- Construction of ROB / RUBs in lieu of Existing Level Crossings on NHs

Ministry of Road Transport and Highways aims at replacing all Level crossings in National Highways with construction of ROB/RUBs.

6 ROBs (LC-17 Chekkanurani (Madurai), LC-68 Theni (Theni), LC-85 Bodinayakanur (Theni), LC-109A Kannamangalam (Vellore), LC-86 Ettivadi (Thiruvannamalai) and LC-503 Tenkasi (Tenkasi) at a cost of Rs.402.70 Crore has been sanctioned under Annual Plan by MoRTH for replacing Level crossing in the NH stretches entrusted to State National Highways. Out of these 6 ROBs, 5 ROB works are in progress and 1 ROB Land acquisition is in advanced stage and is to be taken up early.

2.3.1.2 Schemes sponsored by Government of India

2.3.1.2.1 Central Road and Infrastructure Fund Scheme (CRIF) Works taken up in SH,MDR and ODR

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. Out of this, 10 road works of 47.57 km length and 4 Bridge works have been completed and the balance works are in progress.

CRIF Proposal for the year 2021-22 comprising 23 Road works of 102.93 km and 24 Bridges for Rs 582.30 Crore has been sent to Ministry for approval.

Expenditure in the Financial year 2021 -22 is Rs.301.00 Crore under this scheme. A Budget provision of Rs.415.00 Crore has been made for the financial year 2022-23 by the State Government under this scheme.

2.3.1.2.2 Pradhan Mantri Gram Sadak Yojana (PMGSY)

PMGSY was launched by the Government of India for upgrading rural roads providing connectivity to unconnected habitations as part of poverty reduction strategy. The Government of India provides funds for upgrading

“Other District Roads” under this scheme in which the maintenance fund allocated from Government of Tamil Nadu.

The maintenance expenditure in the financial year 2021 -22 is Rs 2.48 Crore under this scheme.

A Budget provision of Rs.1.77 Crore has been made for the financial year 2022-23 towards maintenance by the State Government under this scheme.

2.3.1.3 OTHER SCHEMES

2.3.1.3.1 Works Entrusted from NHA I Roads to State NH Wing as Deposit Work

The following works have been taken up under deposit work from NHA I.

TABLE 10: Works Entrusted from NHA I Roads

Name of Work	Length in km	Cost Rs. In Crore	Work Status
Widening of NH-45 from 4 Lane to 8 Lane between Vandalur to Chettipunniyam Mahindra City	18.60	275.17	5.30 km work completed and balance works are in progress.
Widening of NH-4 from 4 Lane to 6 Lane between Maduravoyal By-pass to Sriperumpudur Toll Gate	23.20	428.95	Cross drainage works, Road side drain and Widening work under progress.
Widening of NH 544 H Thoppur – Mettur – Bhavani – Erode Road to 2 Lane with Paved Shoulders	76.75	183.47	To be taken up

2.4 NABARD LOAN ASSISTANCE SCHEMES

2.4.1 CONSTRUCTION OF RIVER BRIDGES IN GOVERNMENT & PANCHAYAT UNION ROADS

Under this scheme, during 2021-22, Spill over works of 182 Bridges and Newly sanctioned 93 Bridges with a total cost of Rs.1108.13 Crore have been taken up for execution. Out of which 73 Bridge works were completed. An expenditure of Rs.189.44 Crore has been incurred.

2.5 CONSTRUCTION OF ROB/RUB

2.5.1 CONSTRUCTION OF ROAD OVER / UNDER BRIDGES AT RAILWAY LEVEL CROSSINGS IN CO-ORDINATION WITH RAILWAYS

The Construction of Road Over Bridges/ Road Under Bridges in lieu of existing Level Crossings are being undertaken on 50:50 cost sharing basis under Railway Works Programme when Train Vehicle Unit (TVU) exceeds One Lakh. Road Over Bridges/ Road Under Bridges are taken up to eliminate waiting time, hinderance of traffic flow and to prevent accidents due to frequent closures Level Crossings.

In Projects wing, 89 spillover ROB/ RUB works were taken up in coordination with Railways during 2021-22.

- 44 construction works
- 32 works sanctioned for both LA and DPR
- 13 works sanctioned only for LA

Out of the above 89 works 44 works were sanctioned for construction, out of this 9 works were completed at a cost of Rs.287.47 Crore, 15 works are in progress at a cost of Rs.505.94 Crore. And remaining 20 works are in various stages of implementation at a cost of Rs.562.55 crore.

Out of 32 works sanctioned for both DPR and LA, DPR has been completed for 10 works and LA is in process at a cost of Rs.121.46 Crore. For remaining 22 works, both DPR and LA works are in progress at a cost of Rs.272.16 Crore.

Out of 13 works sanctioned only for DPR, for 2 works DPR has been completed at a cost of Rs.0.43 Crore and DPR is in progress for remaining 11 works at a cost of Rs.3.60 Crore.

During 2021-22, the Government have accorded Administrative Sanction at a cost of Rs.32.00 Lakh for preparation of Detailed Project Report for 1 Road Over Bridge. The DPR work is in progress.

2.5.2 CONSTRUCTION OF ROAD OVER BRIDGES / ROAD UNDER BRIDGES

In NABARD and Rural Roadswing, 10 Road Over Bridges and 1 Road Under Bridge at a spill over cost of Rs.165.55 Crore were taken up for execution under the Railway Works Programme. Of these, one ROB at LC 7 – Annanur in Thiruvallur district have been completed. An expenditure of Rs.58.02 Crore has been incurred.

2.5.3 ROB/ RUBS WITHIN CHENNAI METROPOLITAN AREA

The following works are being implemented under Metro wing:

- 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, Land Acquisition is under progress.
- For 3 Road Under Bridges at LC 22 Tirusulam, LC 4 Thiruvotriyur 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.
- Widening of the existing Road Over Bridge at Avadi and Construction of Road Over Bridge at Ambattur near TI cycles factory have been sponsored for inclusion in Railway Works Programme. Detailed Project Report and Land acquisition is in progress for these works.

2.6 EXTERNALLY AIDED PROJECTS

2.6.1 TAMIL NADU ROAD SECTOR PROJECT (TNRSP)

Tamil Nadu Road Sector Project –II, have been formed for upgrading high traffic road corridors in the State under World Bank Loan assistance and Project Agreement for US\$300 Million (reimbursed as Rs. 2122.90 Crore) executed with the World Bank.

2.6.1.1 Upgradation and maintenance through (EPC) contracts

Out of 16 packages taken up under Engineering Procurement & Construction Contract (EPC) for a length of 535.346 Km, 10 packages have been completed for a length of 427.967 km and now the works are under 5 years maintenance period. EPC 11 to EPC 16 works are in progress.

2.6.1.2 Upgradation and maintenance through Public Private Partnership (PPP)

70.20 km length of PPP 02 package Four laning of Oddanchatram-Dharapuram – Avinashipalayam Road (SH 37) has been completed and 2nd year annual maintenance is in progress.

2.6.1.3 Funded by Tamil Nadu Infrastructure Development Board TNIDB

Preparation of Detailed Project Reports for a length of 3319 km for an amount of Rs.132.76 Crore has been sanctioned under TNIDB fund. In the first phase, 987 km length of roads have been taken up in 5 packages and DPR work is in progress.

2.6.1.4 Land Acquisition (LA) and Resettlement and Rehabilitation (R&R)

An extent of 177.19 Ha of patta lands have been acquired as per the provisions of Tamil Nadu Highways Act-2001 for the Project by paying compensation in line with the 'Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013.

As per the Resettlement Policy Framework, an amount of Rs.53.17 Crore was paid to 5272 PAPs consisting of Title holders, Non Title holders, kiosks towards Rehabilitation and Resettlement Assistance and for reconstruction of 298 affected Common Property Resources (CPR) upto 31.03.2022.

2.6.1.5 Institutional Capacity Enhancement and Road Safety

Institutional Capacity Enhancement & Road Safety component works are taken up under TNRSP-II. Under this component,

- Procurement of laptops, desktops and UPS through Electronics Corporation of Tamil Nadu (ELCOT) was taken up and completed in 2nd & 3rd packages and progress in 1st package.
- Procurement of equipment for "Trauma Care Centre" at Kanchipuram Head Quarters hospital has been completed.
- Procurement of enforcement equipment for Police Department in Kancheepuram & Tiruvannamalai has been completed.
- Providing Training for Doctors & Nurses in "Advance Trauma Life Support" through Tamil Nadu Health Sector Project (TNHSP) was completed.

2.6.2 CHENNAI KANYAKUMARI INDUSTRIAL CORRIDOR PROJECT (CKICP)

The Government has established Chennai Kanyakumari Industrial Corridor Project to implement the Industrial Connectivity Project in the influence zone of Chennai Kanyakumari Industrial Corridor, conceptualized under the East Coast Economic Corridor with Asian Development Loan Assistance. Development of Roads, Long Term Maintenance, Road Safety measures are envisaged in this project.

2.6.2.1 Upgradation and maintenance through (EPC) contracts

Under Engineering Procurement Construction Contract (EPC) 589 Km of 16 corridors (State Highways) are to be widened to two lane/ four lane carriageway with paved shoulders. Out of the 16 EPC packages works under 15 EPC packages spanning 557.22 km are in progress.

Remaining 1 work is in bidding stage.

In this project, Residential buildings, Anganvadi, Community Hall, Temple, Over Head Water Tank, and Cement concrete pavement are to be constructed to resettle 41 families of Indigenous People affected in the land acquisition for the formation of Arakkonam bypass. The work is in agreement stage and will be commenced shortly.

2.6.2.2 Land acquisition (LA) and Resettlement and Rehabilitation (R&R)

A Resettlement Plan (RP) is being prepared for the project in line with the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (RFCTLARR) ACT 2013 and the Asian Development Bank's Social Safeguards Policy. The approval of Asian Development Bank has been obtained. About 438 hectares of private land is required from 348 villages. Of this, 422 hectares have been acquired. Remaining area to be acquired are in award enquiry and final award stages.

2.6.3 CHENNAI PERIPHERAL RING ROAD

The Chennai Peripheral Ring Road of length of 132.87 Km starts at Ennore Port and ends at Poonjeri Junction near Mamallapuram and is being executed in 5 sections at a total cost of **Rs.13,812.82 Crore**.

2.6.3.1 Section-I (Ennore Port to Thatchur)

The Government has accorded administrative sanction for the land acquisition of Section-I (Ennore Port-Thatchur) to the extent of **245.25 hectares** at a cost of **Rs.951 Crore** and has also accorded administrative sanction for a sum of **Rs.2673.42 Crore** for the civil works of Section I of this project. A Loan Agreement has been signed with JICA for **40074 Million** Japanese Yen (**Rs.2473.70 Crore**). This section-I is being executed through Tamil Nadu Road Development Company. Consultant for Land Acquisition, Resettlement & Rehabilitation Implementation and Construction Supervision has been appointed. The civil works contract Agreement has been signed and the works commenced.

2.6.3.2 Section II, III & V (Thatchur to Poonjeri Junction near Mamallapuram)

For Section II, III and V of Chennai Peripheral Ring Road, the Government has accorded administrative sanction for the land acquisition of **558.53 hectares** at cost of **Rs.2603.32 Crore** and has also accorded administrative sanction for a sum of **Rs.4899.00 Crore** for the civil works of Section-II and III.

The AIIB (Asian Infrastructure Investment Bank) and OFID (OPEC Fund for International Development) has been approached for funding assistance

of **478.07 Million USD** (Rs.3346.49 Crore) implementation of Section II & III. The Department of Economics Affairs, New Delhi has approved the proposal. The Loan Agreement is likely to be signed in first quarter of **Financial Year 2022-23**. The work is being executed by Tamil Nadu Road Infrastructure Development Corporation.

For section II & III Consultants for Implementation of Land Acquisition Resettlement & Rehabilitation, Monitoring of Land Acquisition, Resettlement & Rehabilitation and Project Management have been appointed. Environmental & Social External Monitoring Consultant is under progress.

For Section II the Construction Supervision Consultant has been appointed and for Section III, the procurement of Construction Supervision Consultant is in progress.

Tender for Civil Works in Section II has been invited in 2 EPC Packages (EPC-01 & EPC-02) and the status is as follows:-

- **EPC-01:** Contract agreement has been signed. The civil works have been commenced in January 2022.
- **EPC-02:** The Notification of Intention to Award has been issued and the agreement is to be signed in first quarter of FY 2022-23.

It is planned to execute civil works in section III in 3 EPC packages (EPC-03, EPC-04 & EPC-05) and the status is as follows:-

- **EPC-03& 04:** Tender received and Technical Tender Evaluation is in Progress.
- **EPC-05:** No Objection to the tender document has been obtained from AIIB and the tender is to be called.

The construction work for Section -IV has been already completed. Up-gradation of Section IV to the CPRR standards at a cost of Rs.584 Crore is under consideration of the Government. It is planned to include the upgradation cost in the Loan Assistance being sought from the AIIB for Section II & III.

Land Acquisition in Section-V is in progress. The funding agency for the implementation of Section V is being identified.

2.7 TAMIL NADU ROAD DEVELOPMENT COMPANY

2.7.1 CHENNAI OUTER RING ROAD

Chennai Outer Ring Road from NH 32 at Vandalur to Minjur crossing over at NH16, NH716 for a length of 60.15 km has been completed at a cost of Rs.2156.40 Crore under DBFOT and put to public use.

User Fee Collection is commenced from 19.01.2022 onwards.

2.7.2 CHENNAI PERIPHERAL RING ROAD (CPRR), SECTION-I (NORTHERN PORT ACCESS ROAD) FROM ENNORE PORT TO THATCHUR ON NH-16 AND CORR LINK ROAD

Chennai Peripheral Ring Road Section-I from Ennore Port to Thatchur and link road by extension of Chennai Outer Ring Road to this Road totalling 25.40 km under JICA Loan Assistance has been taken up for execution by Tamil Nadu Road Development Company.

The Project envisages dual 6 lane carriageway with Two lane service road on both sides. Under this 8 nos. of Major Bridges, 7 nos. of Minor Bridges, 4 nos. of Vehicular Under Pass, 1 No. of Over pass, 2 ROBs, 4 nos. of Truck Lay Bys etc., are envisaged. Intelligent Transport System is also contemplated. The Total Project cost is Rs.3312.50 Crore and the Land Acquisition cost is Rs.951 Crore.

98% of Land Acquisition works are completed. The road construction works are commenced on 27.01.2022.

2.7.3 RAJIV GANDHI SALAI (IT CORRIDOR)

2.7.3.1 Phase I

The Old Mahabalipuram Road from Chennai Madhya Kailash to Siruseri for 20.10 km, IT Expressway, Phase-I including the 2.15 km link to ECR, is under operation and maintenance as a Toll road.

The user fee collection was stopped from 30.08.2021 at four Toll Plazas in OMR namely Perungudi, Thoraipakkam, Medavakkam and Kalaignar Karunanidhi Salai. Presently, user fee is collected at only one Toll Plaza located at Navallur in OMR.

2.7.3.2 Phase II

An amount of Rs.465.13 Crore has been sanctioned for acquisition of land to an extent of 88.62 ha. in 13 villages for widening the road stretch to six lane from Siruseri to Mamallapuram. Land acquisition works are nearing completion.

An amount of Rs.243.70 Crore has been sanctioned for forming two bypasses at Kelambakkam (4.675 km) & Tiruporur (7.45 km) under TNIPP-II as a first stage work. 70% of works completed and further work is in progress. Thiruporur Bypass is planned for completion by June 2022 and Kelambakkam Bypass by December 2022.

2.7.4 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, TIDEL Park Junction, Minor Bridge across Buckingham Canal and Foot Over Bridge across ECR in Rajiv Gandhi Salai at an estimated cost of Rs.108.13 Crore is in progress. About 38% work completed. Flyover at Indira Nagar Junction is planned for completion by May 2022. Flyover at TIDEL Park Junction and other works are planned for completion by October 2022.

2.8 TAMIL NADU ROAD INFRASTRUCTURE DEVELOPMENT CORPORATION

2.8.1 ORAGADAM INDUSTRIAL CORRIDOR PROJECT(OICP)

In first phase, 57.40 km road has been widened from Two lane / Intermediate lane to Four lane at a Revised Estimate cost of Rs.612.82 Crore. Further, in phase-II, III, IV& V Four lane to Six lane has been taken up at cost of Rs.593.56 Crore and work is nearing completion.

An expenditure of Rs.1014.83 Crore has been incurred.

2.8.2 FOUR LANING OF MADURAI RINGROAD

The work of Widening the Madurai Ring Road from double lane to four lane from Km 0/0 – 27/2 has been taken up for implementation under BOT Toll basis at a cost of Rs.200.00 Crore with the Viable GAP Funding (VGF) from the State at Rs.80 Crore. Concession Agreement for this work has been

entered for a Concession period of 20 years including the Construction Period of 2 Years. All the works have been completed and put into public use under commercial operation.

VGF of Rs.80.00 Crore, have been released by the Government.

2.8.3 PERFORMANCE

In Tamil Nadu Road Infrastructure Development Corporation, works have been executed during 2021 – 22 for Rs.40.81 Crore. Balance works are in progress.

II. MINOR PORTS WING

3.TAMIL NADU MARITIME BOARD

Tamil Nadu State has the second longest coastline of 1076 Kms in India. The coastline consists of three Major Ports, namely, Chennai Port, Kamarajar Port (Ennore) and V.O.C. Port (Thoothukudi) and 17 declared / Notified Minor Ports. The major ports are controlled by the Government of India and the Minor Ports are under the control of the Government of Tamil Nadu.

M/s. Chemplast Cuddalore Vinyls Ltd., import Vinyl Chloride Monomer (VCM) for their P.V.C. factory established at Cuddalore SIPCOT Complex through their Captive Marine Terminal Facility (MTF) located within the port limits of Cuddalore Minor port.

At Nagapattinam Port, Edible oil is imported through barges from ships anchored at sea.

Small ships are piloted through Pamban Channel. Kanyakumari and Rameswaram ports are used for short trip passenger ferry service.

Liquid Ammonia is imported through Multiple Buoy Mooring system at Ennore Minor Port.

Iron, Machineries, Minerals, Granite, Petroleum Products, Containers and General Cargo are handled at Kattupalli Port. Shipbuilding, Ship repairs and Modular Fabrication works are carried out.

Natural Gas is imported through pipelines at Thirukkadaiyur port.

Machinery/ Over Dimensional Cargo required for Kudankulam Nuclear Power Project Units 3, 4, 5 & 6 are handled at Koodankulam Port.

3.1 COMMODITIES HANDLED IN MINOR PORTS

Table 11:COMMODITIES HANDLED IN MINOR PORTS

In Metric Tonnes

Sl.No	Name of the Port	Import / Export	No.of Ship	Commodities	Quantity of cargo	Total
1.	Ennore Minor Port	Import	10	Liquid Ammonia	44,050	44,050
2.	Kattupalli Port	Import	29	Steel / Iron	2,04,496	7,68,150
			12	Machineries	933	
			1	Minerals	33,000	
			24	Petroleum Product	3,82,172	
			7	Miscellaneous	1,47,549	
		Export	35	Machineries	31,886	3,08,435
			21	Granite	2,65,765	
3	Steel		10,784			
3.	Cuddalore Port	Import	40	Vinyl Chloride Monomer	3,02,582	3,02,589
			-	Machineries	2	
			-	Miscellaneous	5	
		Export	-	Petroleum Products	51	1,701
			-	Miscellaneous	1,641	
			-	Machineries	9	
4.	Nagapattinam Port	Import	10	Edible Oil	47,000	47,000
		Export	-	Petroleum Products	7	47
				Miscellaneous	40	
5.	Thirukkadaiyur Port	Import	-	Natural Gas	1,891	1,891
6.	Kudankulam	Import	2	Machineries	1,278	1,278
Total		Import	135		11,64,958	1475141
		Export	59		3,10,183	
Grand Total			194			14,75,141

Table 12: COMMODITIES HANDLED IN MINOR PORTS

In **TEUs**

Sl.No	Name of the Port	Import / Export	No.of Ship	Commodity/ Container	Quantity of cargo	Total
1.	Kattupalli Port	Import	341	20 Ft Loaded	56,616	1,89,773
				40 Ft Loaded	1,11,730	
				20 Ft Empty Container	1,515	
				40 Ft Empty Container	19,912	
		Export		20 Ft Loaded	65,909	2,43,365
				40 Ft Loaded	1,00,070	
				20 Ft Empty Container	19,096	
				40 Ft Empty Container	58,290	
Total		Import	341		1,89,773	4,33,138
		Export			2,43,365	
Grand Total			341		4,33,138	4,33,138

3.2 PAMBAN PORT

The activity at this port is to pilot small drafted vessels passing through Pamban Channel. 186 smaller craft were piloted at this port during the year 2021-2022.

3.3 RAMESWARAM PORT

A passenger ferry service near Agnitheertham in Rameswaram is operated and 97,588passengers were ferried during the year 2021-2022.

3.4 KANYAKUMARI PORT

Ferry service is operated by Poompuhar Shipping Corporation Limited from sea-shore to Vivekananda Rock Memorial and Ayyan Thiruvalluvar Statue. Tamil Nadu Maritime Board is supervising the ferry service and collects establishment charges from the Corporation and 5,53,708 passengers were ferried during the year 2021-2022.

3.5 CARGO TRAFFIC

In the year 2021-2022, about 14,75,141 MT of cargo and 4,33,138 (TEU - Twenty Equivalent Unit) of containers have been handled through 535 vessels in the Minor Ports.

4. POOMPUHAR SHIPPING CORPORATION LIMITED

Poompuhar Shipping Corporation Limited (PSC) was created on 11.04.1974 under the companies Act, 1956 to transport coal required for Tamil Nadu Generation and Distribution Corporation Ltd., (TANGEDCO) for the generation of electricity. The coal required by TANGEDCO was transported from the load ports at Haldia, Paradip, Dhamra and Vishakapattinam to discharge ports at Ennore, Karaikal and Tuticorin.

The corporation is now transporting coal through chartered vessels for NTPC Tamil Nadu Energy Company Ltd., (NTECL), a joint venture Company of TANGEDCO and NTPC, from the load ports of Paradip and Dhamra to Ennore for their three Units of 500 MW thermal power stations at Vallur, North Chennai, as per the Memorandum of Understanding.

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

The performance of the corporation depends on the number of vessels chartered, International chartering rate and the quantity of coal moved. The performance of the corporation in various fold are given as follows:

4.1 COAL MOVEMENT FOR LAST THREE YEARS

Table 13: COAL MOVEMENT

Year	(In lakh Metric Tonnes)				Achievements
	Coal arrived at load ports	Coal moved by chartered vessels	Coal moved by own vessels	Total coal moved	
2019-2020	165.00	138.97	-	138.97	84.20%
2020-2021	164.00	92.90	-	92.90	56.60%
2021-2022	62.86	58.73	-	58.73	93.42%

4.2 PHYSICAL PERFORMANCE

Physical performance for chartered vessels for the period 2020-2021 and 2021-2022 are as follows:

Table 14: PHYSICAL PERFORMANCE

	2020-2021	2021-2022
Chartered Vessels		
No. of Vessels	07	03
No. of voyages	139	80
Average quantity of coal moved per voyage (in MT)	66838	73,438
Total quantity moved (in lakh MT)	92.90	58.73

4.3 FINANCIAL PERFORMANCE

Poompuhar Shipping Corporation coal transporting business to TANGEDCO/NTECL was affected due to Covid-19 lockdown periods. Poompuhar Shipping Corporation's Kanniyakumari Ferry Service revenue was also affected and service was stopped at the time of Covid-19 lockdown period as per Government order. The overall financial performances of the corporation during the last three financial years are as follows:

TABLE 15: FINANCIAL PERFORMANCE

Rs.in lakhs

Year	Turn Over	Profit	Dividend
2019-2020	65493.85	443.85	132.15
2020-2021	26362.96	-178.86	---
2021-2022	29910.00	---	---

4.4 KANNIYAKUMARI FERRY SERVICE

The physical and financial performances of the ferry service for the last three years are given below:

Table 16: PHYSICAL & FINANCIAL PERFORMANCE OF FERRY SERVICE

	2019-20	2020-21	2021-22
No. of Ferry in service	3	3	3
No. of Passengers ferried (In lakh)	19.74	3.01	5.47
Fare collection (Rs.in lakh)	1234.03	158.01	313.47
Operational Profit (Rs.in lakh)	193.41	-276.73	-179.63

E.V.Velu

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