Chennai Unified Metropolitan Transport Authority (CUMTA)

(An Authority under Government of Tamil Nadu)

Comprehensive Mobility Plan

for Chennai Metropolitan Area (5,904 sq.km)

Executive Version

2023-2048

Approved in CUMTA's 2nd Authority Meeting held on 22nd Sept *2025 [under Section 10(c), of CUMTA (Amendment Act) 2024]*
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ABOUT

CUMTA

The Chennai Unified Metropolitan Transport Authority (CUMTA) was established in November 2010 by the Government of Tamil Nadu through a Statutory Act. CUMTA Act was amended in January 2020, making the Hon'ble Chief Minister of Tamil Nadu the Chairperson. The Act was further amended in February 2025, creating an Executive Committee, chaired by the Chief Secretary to the Government.

CUMTA's jurisdiction covers the entire Chennai Metropolitan Area (CMA), spanning 5,904 sq.km. CUMTA is an institutional coordination mechanism among various agencies and departments involved in urban transport within the CMA, facilitating seamless, safe & sustainable mobility services across all transport modes.

CUMTA has taken various initiatives, including the preparation of the Comprehensive Mobility Plan (CMP), Parking Policy, Strategy & Action Plan, Street & Junction Improvements, Multi-Modal Integration (MMI), Digital Chennai, Road Safety Initiatives, and the Implementation of Common Mobility Ticketing Systems.

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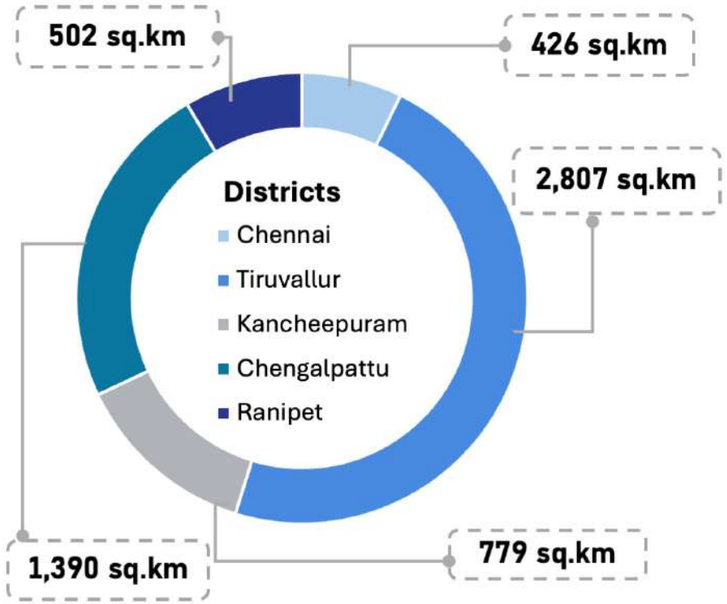
PART 1

INTRODUCTION

- Overview of CMA
- What is CMP?
- How does this CMP differ from previous ones?

Overview of

Chennai Metropolitan Area (5,904 Sq.Km): 2023



**The area mentioned is the proportionate area of district falling in CMA*

Population
145 lakh

Vehicle Population
93 lakh

Employment
54 lakh

Total Road Network
24,097 km

Transportation Statistics - CMA

5,174
Road Network RoW >9m- km

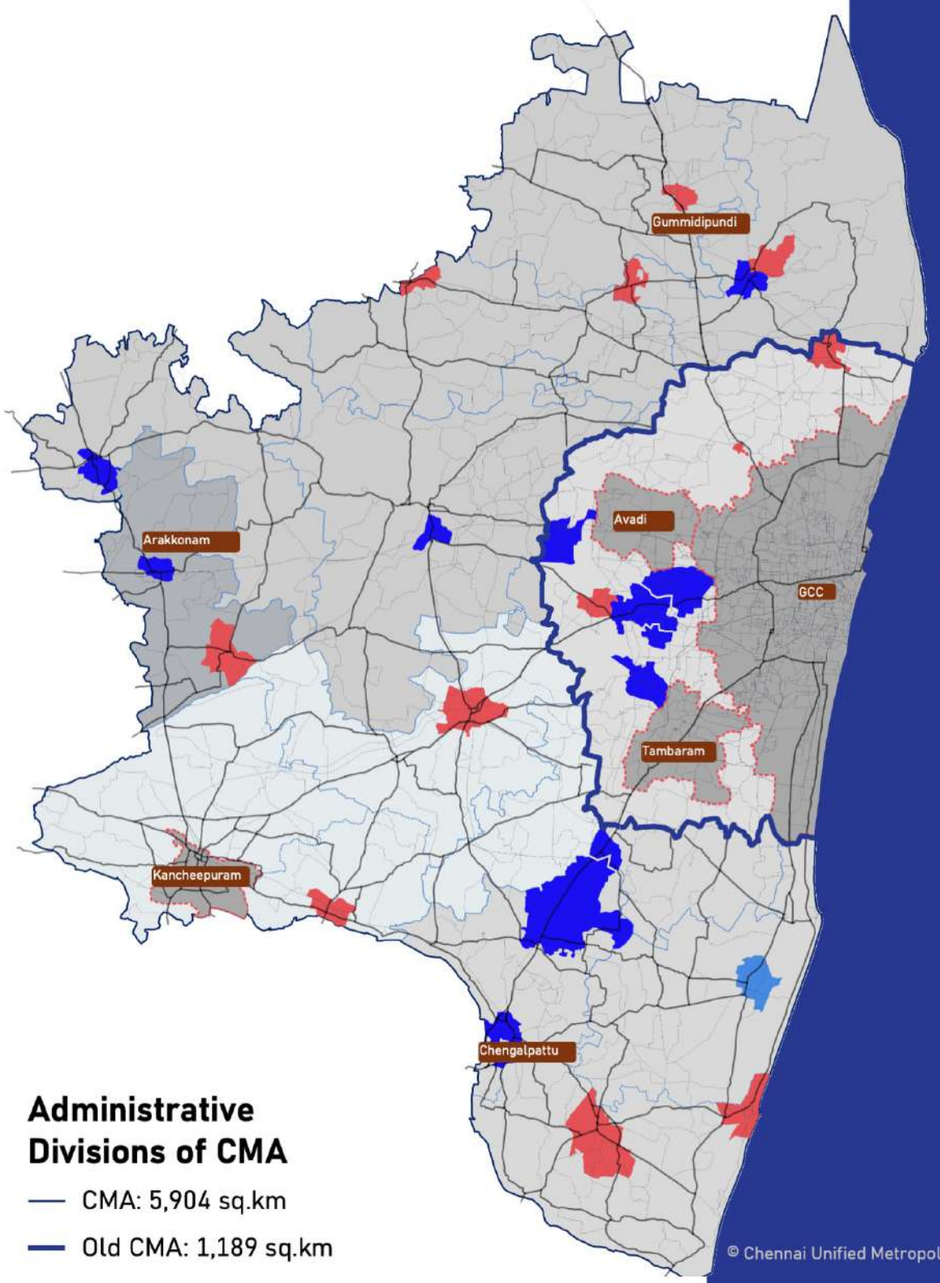
3,481
MTC-buses

946
Mofussil & Private -buses

258
Suburban Rail-km

54
Metro Rail-km

**all data points as per CMA Base year*



Administrative Divisions of CMA

- CMA: 5,904 sq.km
- Old CMA: 1,189 sq.km

Corporations
4

Municipalities
12

Town Panchayats
13

Special Grade TP
1

Panchayat Union
22

What is

Comprehensive Mobility Plan (CMP)?

The Comprehensive Mobility Plan (CMP) is a strategic vision document for mobility in the CMA, integrating land use and urban transport for the next 25 years.

What does the CMP focus on?

1

Facilitate Movement of People and Goods

2

Promote Public Transport and Non-Motorised Transport

3

Integrate Land Use and Transport

4

Optimise Freight Movement

5

Encourage Low-Carbon Mobility

6

Develop Travel Demand Management Strategies

How does this

CMP differ from previous ones?

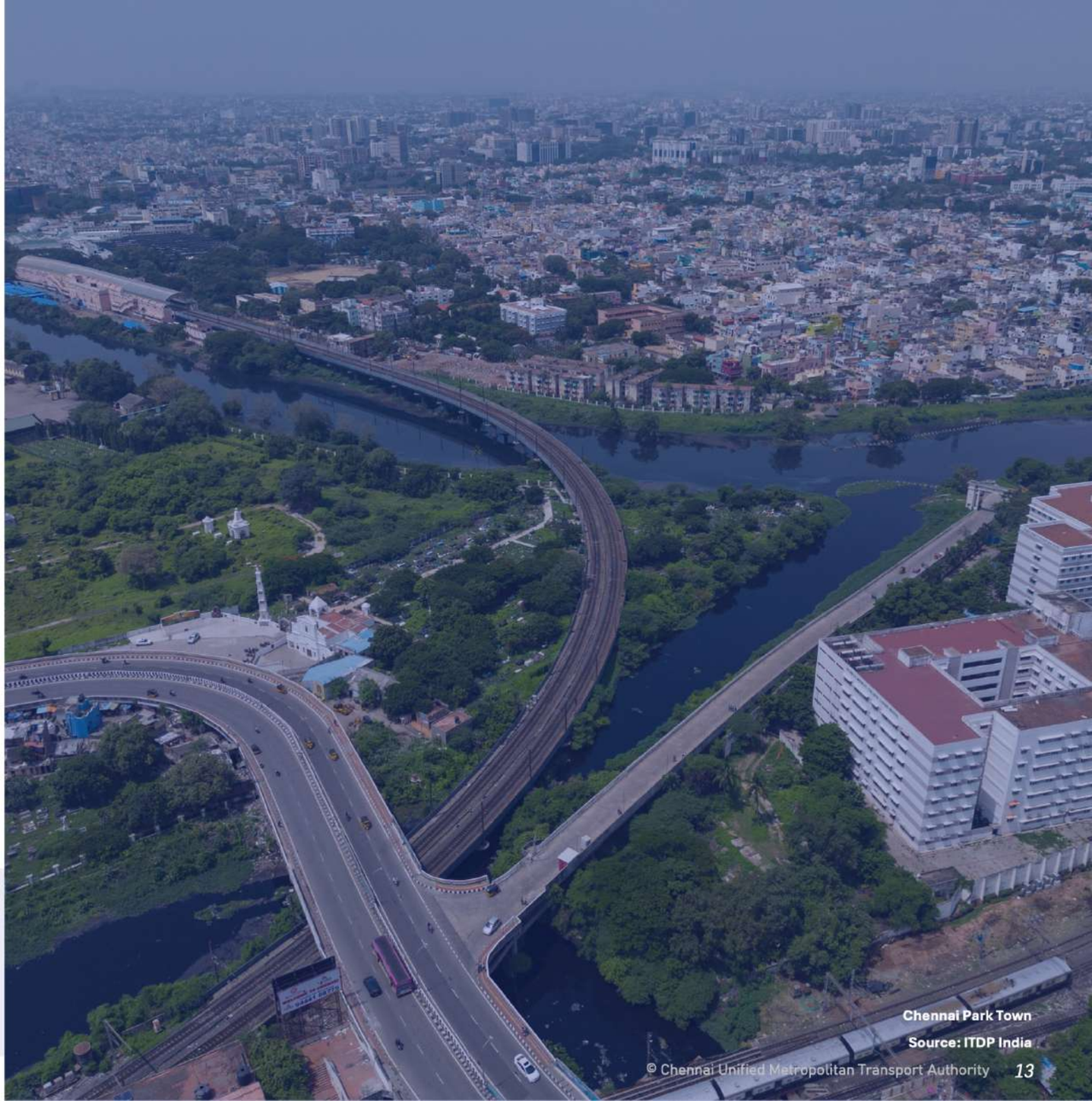
Adopting innovative data collection technique and developing a digital data repository

Adopting GRIDS framework in CMP preparation

Robust monitoring and evaluation framework with key performance indicators

Integrating CMP outcome in Digital Chennai Integrated Urban Data Platform (IUDP)

16	**51,337**	**Secondary Data Collection**
Primary surveys	Households (HHs) **Surveyed**	



Chennai Park Town
Source: ITDP India

PART 2

URBAN TRANSPORT LANDSCAPE & VISION

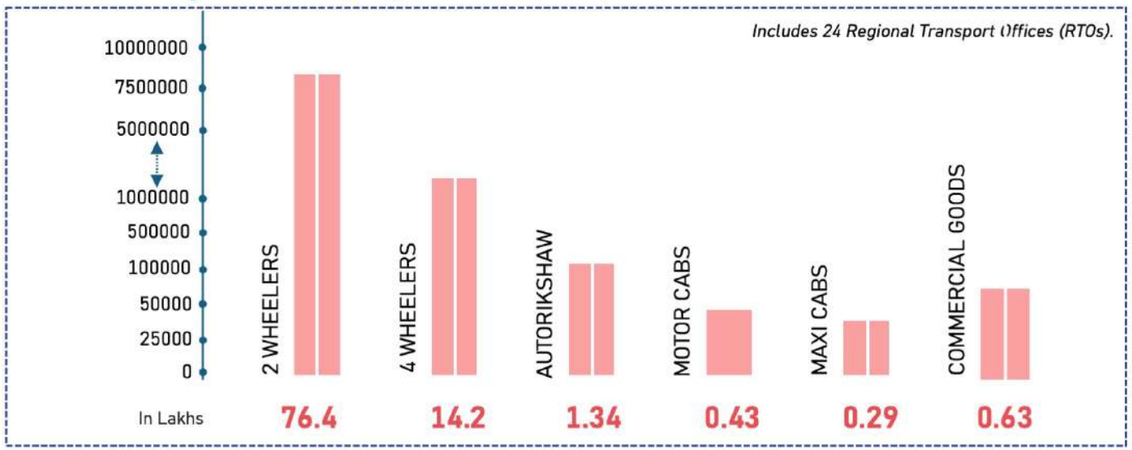
- Key Mobility Statistics
- Urban Transport Challenges
- Vision
- Outcome of CMP
- How we will do this

Key Mobility Statistics: 2023

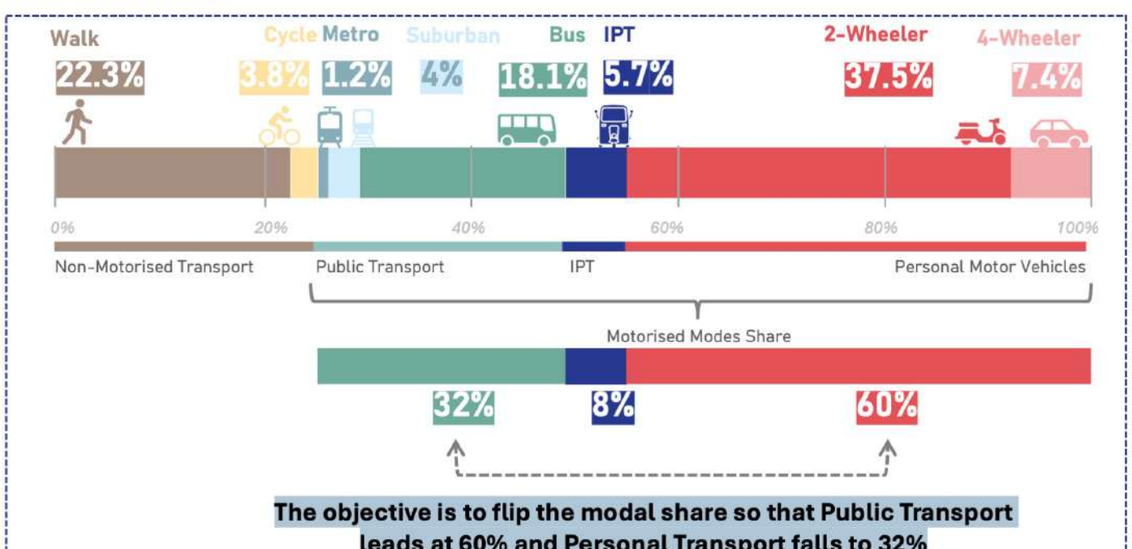
These parameters provide critical insights into population characteristics, income levels, and travel behaviour, forming the foundation for effective transport planning and policy decisions.

15.77 km **Average Motorised Trip Length**	**1.08** **Per Capita Motorised Trip Rate**	**158 lakh** **Total Motorised Trips per day**
12.01 km **Average Trip Length**	**1.50** **Per Capita Trip Rate**	**214 lakh** **Total trips per day**
15% **Expenditure on Transport** of average HH income	**3.20** **Average HH size** CMA	**14 km/h** **Average peak-hour Journey Speed** (Old CMA)

Vehicle Population (Registered in CMA)



Modal Share



The objective is to flip the modal share so that Public Transport leads at 60% and Personal Transport falls to 32%

Urban Transport

Challenges

01 Increasing Personal Vehicle Mode Share

The mode share of cars and 2-wheelers has increased from **31% in 2008 to 43% in 2023.** The growth of 2-wheelers is significantly high, resulting in competition for the limited road space.

02 Road Network

Inadequate and non-uniform carriageway widths lead to lower journey speeds and congestion. **Road space allocation is inequitable against pedestrians** with significant road safety issues.

03 Non-Motorised Transport

Only 36% of roads in GCC, Avadi, Tambaram corporations have footpaths. Of the available footpaths, 85% are narrower than 1.5m, and 75% are encroached.

04 Bus Services

Since 2011, there has been no increase in the bus fleet (Only 30 buses for one lakh population against 50 buses as per MoHUA standards). As on date, 20% of this fleet is over-aged.

Meanwhile, the population in the 500m bus catchment area grew by 18% since 2011, forcing **commuters to shift to personal vehicles.**

05 Suburban Rail

Since 2020, there has been a reduction in the **number of EMU trains by 7%** even though the population in the catchment area (within 2km radius) is growing at 1.33% per annum.

Poor accessibility and reduction in suburban services are major reasons for commuters to shift to personal vehicles.

06 Metro Rail

Overcrowding during peak hour on the Blue Line approaching crush load conditions. Hence, **6-car services** are required to augment capacity.

54% of passengers walk to and from metro stations highlighting the need for high quality footpaths.

07 Intermediate Public Transport

There are **more than 1.35 lakh autos, 200 authorised shared autos and 12,000+ unauthorised shared autos.**

Auto charges are exorbitant due to non-revision of fares over the decade and lack of enforcement.

ROAD

NMT

BUS

IPT

Metro

© Chennai Unified Metropolitan Transport Authority

Vision

Moving people and goods seamlessly through an integrated, sustainable, safe and resilient transport ecosystem.

Principles

Reduce travel time and cost

Reliable and faster public transport

Improve multimodal connectivity

Universal accessibility and inclusivity

Make roads safe

URBAN TRANSPORT

Outcome of CMP

Faster Commute

Reduction in average journey time from 60 mins to **40 mins** in old CMA and from 90 mins to **60 mins** in CMA during peak hours.

Affordable Travel

Reduction in average transport expenditure from 15% of income **to 10%**

Better Public Transport

Every Household (100%) in old CMA will be within 500m walking distance of frequent public transport from the present 64%.

Cleaner and Greener Chennai

Reduction in transport emissions **by 45%** from 8,118 MT CO_2 e per day

Safe and Inclusive Chennai

Zero fatalities | Safe, Universally Accessible streets & transport systems

URBAN TRANSPORT

How we will do this

1. Enhance Public Transport Network
2. Add more Buses and Trains/ Metro.
3. Integrate PT modes seamlessly.
4. Improve Existing Roads and Develop New Roads
5. Enhance First & Last-mile Connectivity
6. Increase Greenery/ Trees along Streets
7. Develop Continuous and Unobstructed Footpaths
8. Make Streets and Transport Systems Universally Accessible
9. Design Safe Streets and Transport Systems
10. Shift to Cleaner Fuel
11. Introduce Parking Management
12. Introduce Intelligent Transport Systems

Alandur, Chennai
Source: CMRL

PART 3

Strategy, Action Plan & Proposals

- Public Transport
- Intermediate Public Transport (IPT)
- Multi-Modal Integration (MMI)
- Road Network
- Non-Motorised Transport (NMT)
- Parking Management
- Freight Management
- Special Recommendations
- Other Features of the Plan
- Other Studies/Plans/Policies that align with the CMP

Objective #1

Public Transport

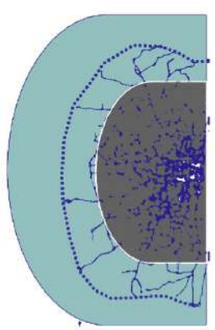
> Improving the **modal share of public transport** by increasing the availability and accessibility of public transport to all social groups of the CMA.

TARGETS

Achieve a **mode shift towards public transport**, increasing its share in **motorised trips from 32%** to a **target of 60% by 2048.**

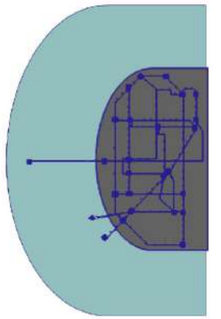
BUS - MTC

MTC as primary and feeder service for other transit modes up to the Chennai Peripheral Ring Road (CPRR).

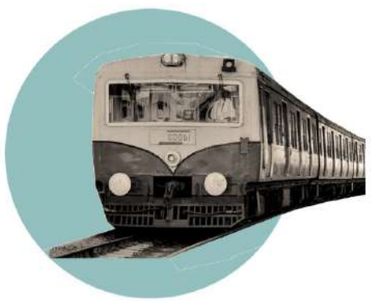


MASS RAPID TRANSIT (MRT) SYSTEMS

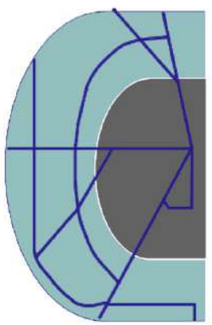
Dense Network of **MRT Systems** in the Old CMA.



SUBURBAN RAIL

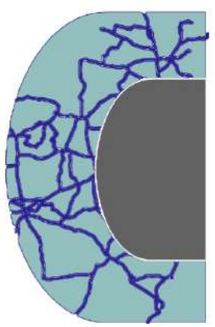


Strengthened **Suburban/ RRTS** connectivity to all new towns and expanded areas.



BUS - MOFUSSIL

Mofussil services for connectivity to interior towns.



Action Plan for Public Transport

Buses – City & Mofussil

> City buses to act as primary and feeder service up to CPRR. Mofussil services for connectivity to interior towns.

TARGETS

Achieve 50 buses for every one lakh population and Increase the ridership from 39 lakh daily passengers to 51 lakh by 2030, 56 lakh by 2040 and 65 lakh by 2048.

Source: ITDP India

	Action Plan	Targets for 2048	Stakeholders Involved
A. Strengthening Network Coverage and Optimising Routes	- Increase the bus coverage area - Identify routes to serve underserved areas	From **50% of population** to **85% of population** within **500m** of bus stops by 2048.	**Primary Stakeholder:** MTC, TNSTC **Secondary Stakeholder:** CMDA, CUMTA, Transport Dept.
B. Improving Service Frequency	- Deploy more buses to achieve high frequency	From 30 **buses per lakh population** to **50 buses per lakh population** (as per MoHUA Standards). Improved access to high-frequency routes (≤10 minutes) from **50%** of the population to **85%.**	**Primary Stakeholder:** MTC, TNSTC **Secondary Stakeholder:** CUMTA, Transport Dept.
C. Providing Safe and Accessible Transit Stations	- Provide and upgrade bus shelters/stops - Ensure uniform bus stops across CMA as per design standards	**100% of bus stops** in CMA to have shaded, accessible, and **standardised shelters** by 2033.	**Primary Stakeholder:** MTC, ULB, DoH **Secondary Stakeholder:** CMDA, CUMTA
D. Reducing Emission by Shifting to Clean Energy	- Procure clean energy buses (CNG/ E-buses/ any other cleaner fuel)	**100% of bus fleet** to be transitioned to clean energy.	**Primary Stakeholder:** MTC, TNSTC **Secondary Stakeholder:** CUMTA, Transport Dept.

	Action Plan	Targets	Stakeholders Involved
E. Leveraging Technology for System Reliability and User Information	- Implement Automatic Vehicle Location System(AVLS) - Deploy Passenger Information Systems (PIS) at terminals, stops, and inside buses	• **100% bus fleet** to be equipped with GPS, AVLS, and PIS.	**Primary Stakeholder:** MTC, TNSTC **Secondary Stakeholder:** CUMTA, RTO, Transport Dept.
F. Enhancing User Comfort, Convenience, and Inclusiveness	- Deployment of AC and low-floor buses - Driver training for proper docking and passenger service	• 100% of fleet to be Air Conditioned buses • 100% low-floor buses	**Primary Stakeholder:** MTC, TNSTC **Secondary Stakeholder:** CUMTA, Transport Dept.
G. Strengthening Passenger Safety on Public Transport Systems	- CCTV installation in buses and terminals	• CCTV coverage in all buses and terminals.	**Primary Stakeholders:** MTC, TNSTC **Secondary Stakeholders:** CUMTA, Transport Dept.

Buses: Projects

a. Total Bus Fleet Requirements in CMA

Mode	Existing	Short-Term (2030)	Medium-Term (2040)	Long-Term (2048)
MTC	3,481	6,495	7,445	8,533
Mofussil	946	1,267	1,431	1,618
Grand Total	**4,427**	**7,762**	**8,876**	**10,151**

A minimum of 1,000 new buses shall be added annually until 2030 to expand the fleet. In subsequent years, fleet augmentation must account both for new deployments and the phasing out of condemned vehicles.

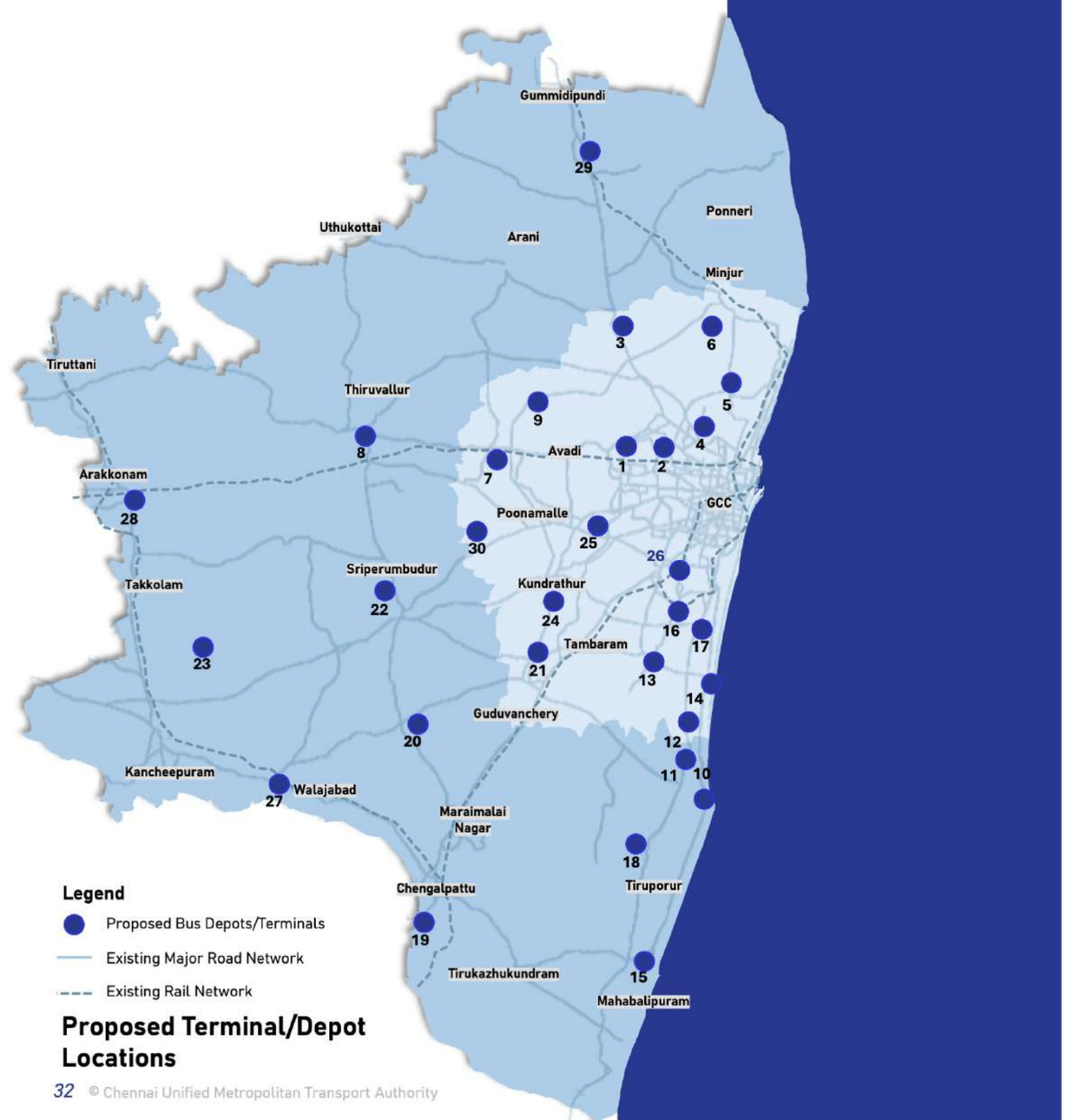
b. Bus Depot and Bus Stop Improvement/Upgradation in CMA

S.No	Projects	Short-Term (2030)	Medium-Term (2040)	Total no of Bus Stops Identified
1	Development of New Bus Stops	225	121	346
2	Upgradation of existing Bus Stops	497	267	764
3	Upgradation of Bus Stops with Bus lay bye	78	42	120

Every year 200 bus stops shall be improved—ensuring an equal focus on installing new shelters and upgrading existing ones to meet universal design standards

c. Passenger Information Systems at Bus Stops in CMA

S.No	Region	Short-Term (2030)	Medium-Term (2040)	Long-Term (2048)	Total No of Bus Stops with PIS
1	GCC	2470	-	-	2470
2	Tambaram	315	-	-	315
3	Avadi	161	-	-	161
4	Old CMA	-	1222	-	1222
5	Expanded CMA	351	-	1000	1351



d. Depot Requirements

Modes	Existing	Short-Term (2030)	Medium-Term (2040)	Long-Term (2048)	Total Depots*
MTC	31	12	7	7	57
Mofussil	7	2	1	1	11
Grand Total	38	14	8	8	68

** Depots with average parking capacity of 150 buses*

List of Proposed Terminal/Depot Locations

S. No	Proposed Depot/ terminal
1	Pudur
2	Kolathur
3	Karanodai
4	Madhavaram Milk Colony
5	Manali New Town
6	Seemavaram
7	Thirunindravur
8	Tiruvallur
9	Morai
10	Kovalam

S. No	Proposed Depot/ terminal
11	Siruseri
12	Semmancheri
13	Medavakkam
14	Akkarai
15	Mahabalipuram
16	Velachery
17	Thoraipakkam
18	Thaiyur-2
19	Mamandur
20	Oragadam

S. No	Proposed Depot/ terminal
21	Varadarajapuram
22	Sriperumbudur
23	Parandur
24	Thirumudivakkam
25	Thamaraipakkam
26	Race Course
27	Walajabad
28	Arakkonam
29	Gummidipundi
30	Kuthambakkam

Vyasarpadi E-Bus Depot

Source: ITDP India

Buses: Costing and Phasing

	Action Items	Short-Term (2030) in Cr.	Medium-Term (2040) in Cr.	Long-Term (2048) in Cr.	Total cost in Cr.
a	Total Bus Fleet Requirements in CMA	12,786	18,286	20,286	51,358
b	Bus Stop Improvement/ Upgradation	57	31	87	175
c	Bus Stops with PIS Implementation	66	24	20	110
d	Depot Requirements*	815	305	200	1,320
	Total	**13,724**	**18,646**	**20,593**	**52,963**

- *Bus cost estimate (includes CAPEX only, and not operational cost) assumes all the new buses to be procured are Air-Conditioned, low floor electric buses*
- *Land Cost is not considered in the estimation*

Stakeholder Consultations

Stakeholder consultation meetings were held with the Managing Director of MTC, and focus group discussions (FGDs) were conducted with Public Transport Operators, CSOs, NGOs and RWAs. The following key suggestions were shared and have been incorporated into the plan.

1. Service and fleet expansion, including feeders and private operators
2. Infrastructure upgrades: stops, terminals, depots
3. Dedicated bays, lanes, & BRT corridors
4. Enhanced frequency, coverage, and quality
5. Last-mile connectivity and accessibility
6. Low-emission zones & tourist bus parking

Discussion with Metropolitan Transport Corporation

Action Plan for Public Transport

Metro/LRT/BRT

> “Establish a dense and well-connected Metro/LRT/BRT network in the Old CMA to enhance PT mode share.”

TARGETS

Increase the ridership from 3.20 lakh daily passengers to 17 lakh by 2030, 27 lakh by 2040 and 45 lakh by 2048.

Guindy, Chennai
Source: The Hindu

	Action Plan	Targets for 2048	Stakeholders Involved
A. Strengthening Network Coverage and optimising Routes	- Expand network up to Outer Ring Road (ORR) - Introduce new corridors (Metro/ LRT/ BRT/ Tram) based on PHPDT	From 35% of population to **80% of population within 2km** of transit station.	**Primary Stakeholder:** CMRL, MTC **Secondary Stakeholder:** CUMTA, CMDA, Transport Dept
B. Improving Service Frequency	- Deploy additional rolling stock (6-car rakes) - Improve peak hour headway	Achieve **2.5-3 min peak-hour** headway on all lines.	**Primary Stakeholder:** CMRL **Secondary Stakeholder:** CUMTA
C. Providing Safe and Accessible Transit Stations	- Improve first/last mile connectivity - Design all transit stations with universally accessible and passenger safety.	**All MRT stations to have continuous footpath network within 500m** radius and universally accessible. CMRL/MTC to run last-mile connectivity services (12+1 capacity) in all stations on Gross Cost Contract model in 5 km radius Feeder Buses (Beyond 5 km radius) by MTC	**Primary Stakeholder:** ULB, DoH, CMRL, MTC **Secondary Stakeholder:** CUMTA, Transport Dept

Special Note:

1. Elevated Metro/ LRT network has to be planned with the minimum road width (RoW) of 30m.
2. CMRL /MTC to operate last-mile connectivity services at all transit stations.
3. CMRL to develop station areas holistically, including footpaths within a 500 m radius.
4. All Metro UG/ Elevated stations to provide public pedestrian crossings from one side of road to other side.

Action Plan for Public Transport

Metro

Short-Term (2030)

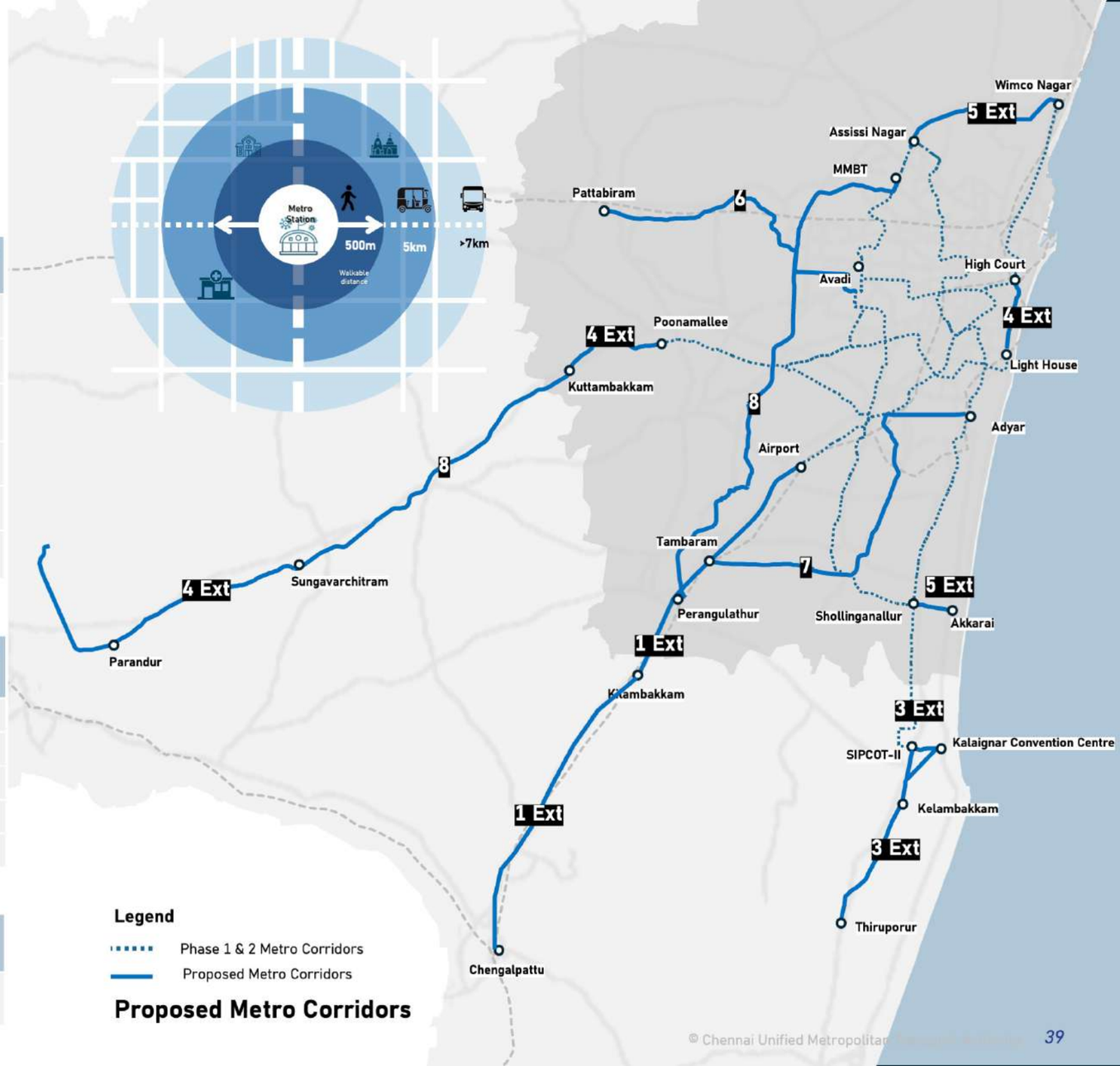
Details	Corridor	PHPDT 2048	Corridor Length in Km
Corridor 6 New	Koyambedu to Pattabiram (Via Avadi)	15,635	20.8
Corridor 1 Ext	Airport –Kilambakkam-Chengalpattu	12,471	42.4
Corridor 4 Ext	Poonamallee - Kuthambakkam terminal - Sunguvachatram (Phase 1 of line to Parandur)	10,307	27.9
Corridor 5 Ext.	Assisi Nagar to Wimco Nagar	10,647	11.0
Corridor 4 Ext	Light House to High court	7,539	4.7
Corridor 3 Ext	SIPCOT-II to Kalaignar Convention Centre/ Muttukadu	Connectivity to Convention Centre	2.0

Medium-Term (2040)

Details	Corridor	PHPDT 2048	Corridor Length in Km
Corridor 4 Ext	Sungavarchatram – Parandur (Phase 2 of Parandur line)	8,940	25.0
Corridor 3 Ext	Kalaignar Convention Centre to Kelambakkam	Network Synergy	4.7
Corridor 5 Ext	Sholinganallur to Akkarai		2.0
Corridor 7 New	Tambaram to Adyar (Via Guindy-Velachery)	11,328	25
Corridor 8 New	Perungalathur to MMBT along Bypass*	11,002	34.6

Long-Term (2048)

Details	Corridor	PHPDT 2048	Corridor Length in Km
Corridor 3 Ext	Kelambakkam to Thiruporur	Connectivity to Thiruporur Town	8.0



LRT/Metro Neo

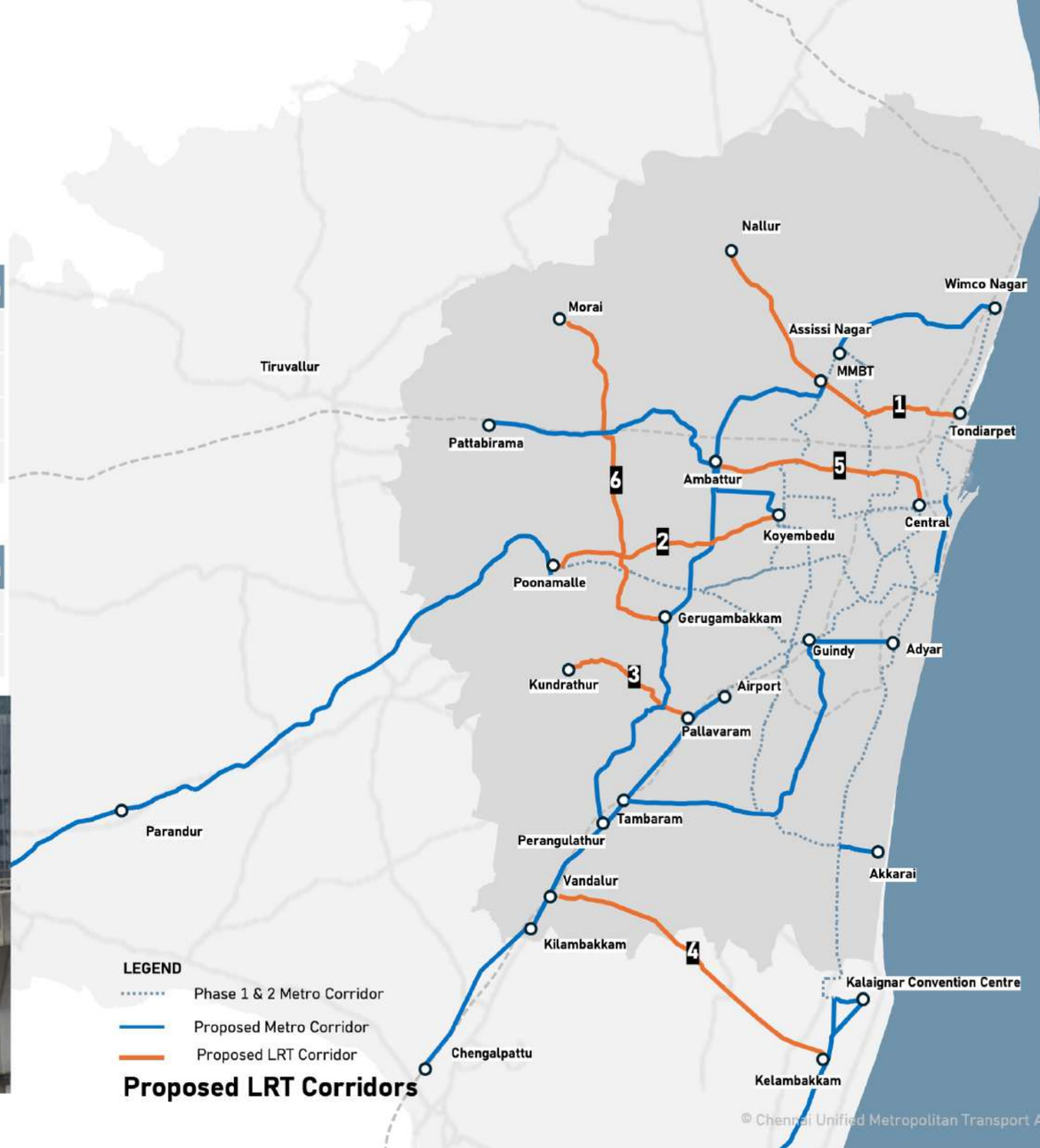
LRT - Medium-Term (2040)

S.No	LRT Corridor	PHPDT 2048	Corridor Length in Km
1	Tondiarpet to Nallur via MMBT	9,595	18.4
2	Koyambedu to Poonamallee	9,476	12.9
3	Pallavaram to Kundrathur	7,765	7.5
4	Vandalur to Kelambakkam	3,804	18.7

LRT - Long-Term (2048)

S.No	LRT Corridor	PHPDT 2048	Corridor Length in Km
5	Central to Ambattur (via New Avadi Road)	8,073	13.5
6	Gerugambakkam to Morai via Avadi	5,775	21.5

LRT Kuala Lumpur
Source: Altiff MR



Proposed LRT Corridors

Bus Rapid Transit (BRT)/Bus Priority

Short-Term (2030)

S.No	BRT Corridor	PHPDT 2048	Corridor Length in Km	ROW in m	
				Existing	Proposed
1	Broadway to Poonamallee	9,476	23.0	20-45	30-36
2	Neelankarai (ECR) to Pallavaram	7,765	12.0	60	60

Medium-Term (2040)

S.No	BRT Corridor	PHPDT 2048	Corridor Length in Km	ROW in m	
				Existing	Proposed
3	Outer Ring Road – Vandalur to Minjur	8,624	62.0	70	70

Note: BRT to be proposed on minimum RoW of 30m and above

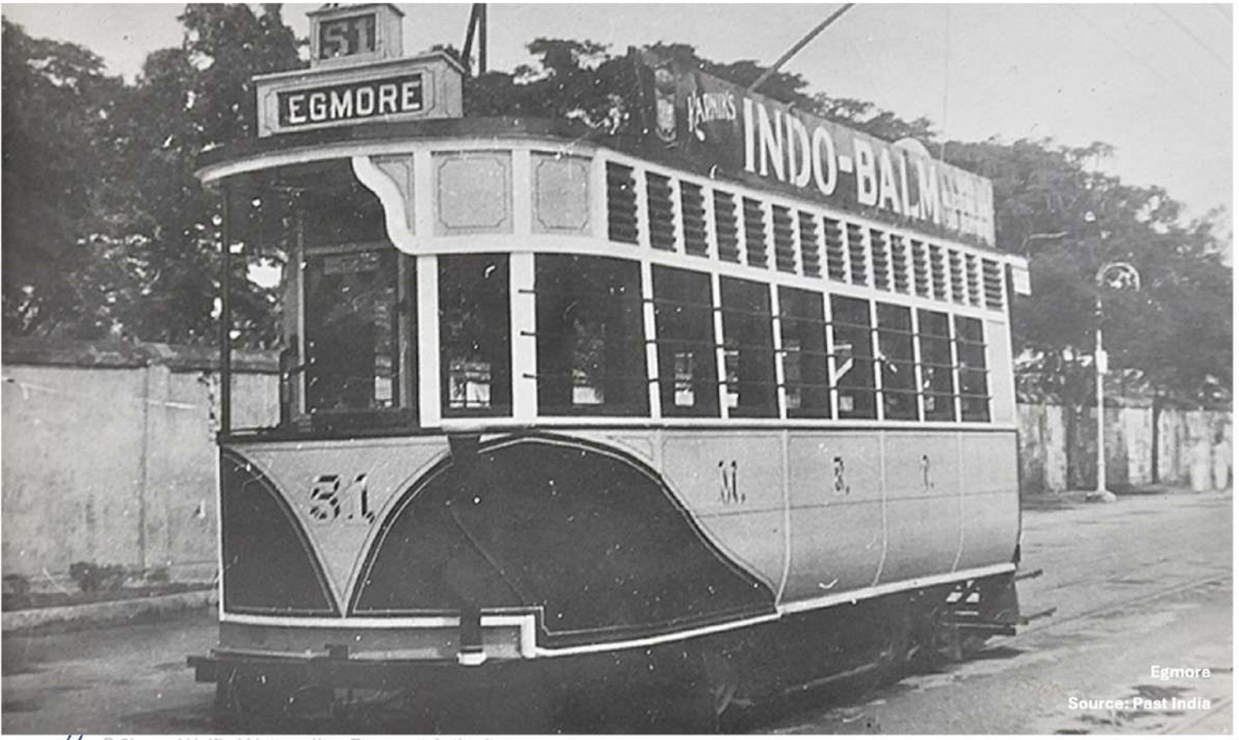
Action Plan for Public Transport

Tramway

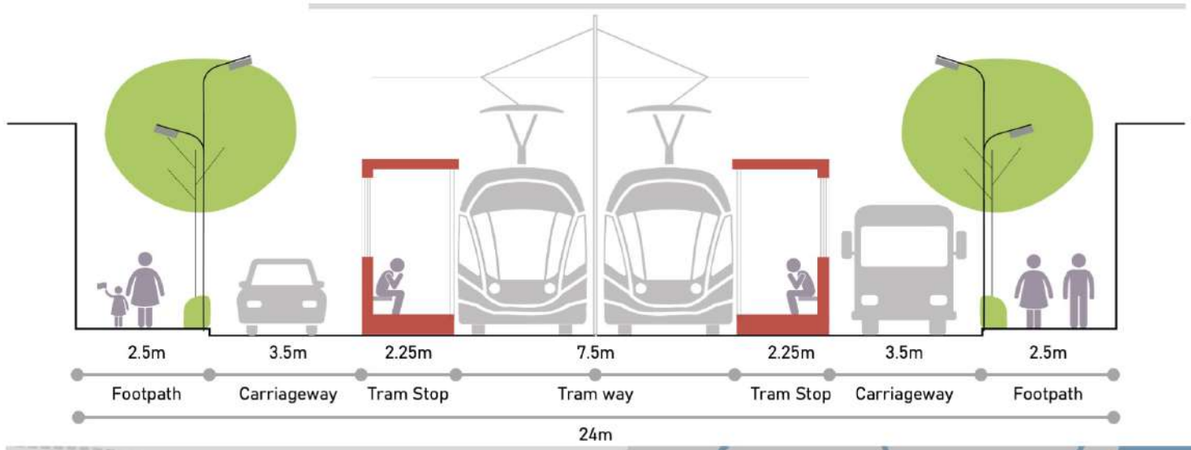
Long-Term (2048)

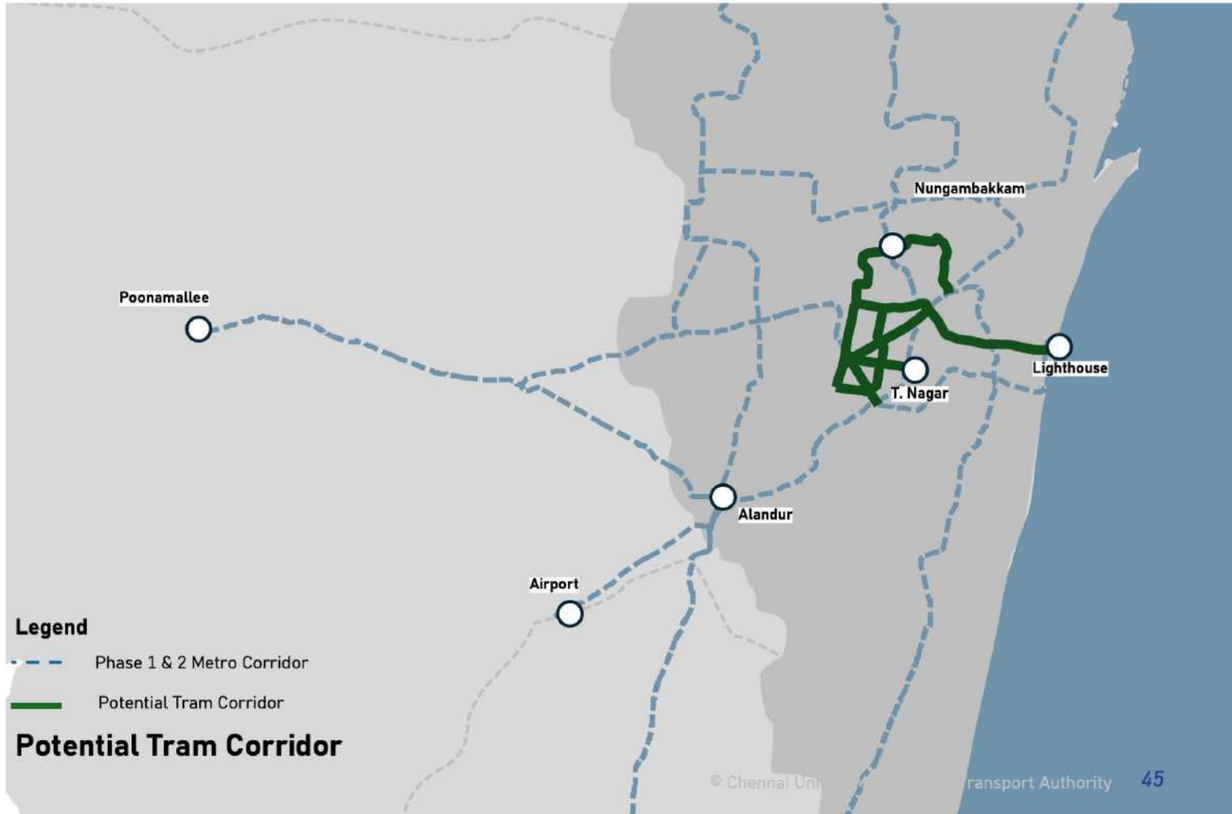
S.No	Description	Details
1	Corridor: T. Nagar, Nungambakkam, Nandanam, Light House	Length: 15.4 km
2	Tram depot	Area: 3 acres

** The identified corridor is tentative. Tram corridor and depot details to be finalised through a detailed feasibility study*



Egmore
Source: Past India





Mass Rapid Transit: Costing and Phasing

S.No	Action Items	Short-Term (2030) in Cr.	Medium-Term (2040) in Cr.	Long-Term (2048) in Cr.	Total cost in Cr.
1	Metro*	42,587	35,737	3,131	81,456
2	LRT *		14,457	8,800	23,257
3	BRT	525	2,790	-	3,315
4	Tram	-	-	1,155	1,155
	Total	**43,112**	**52,984**	**13,086**	**1,09,182**

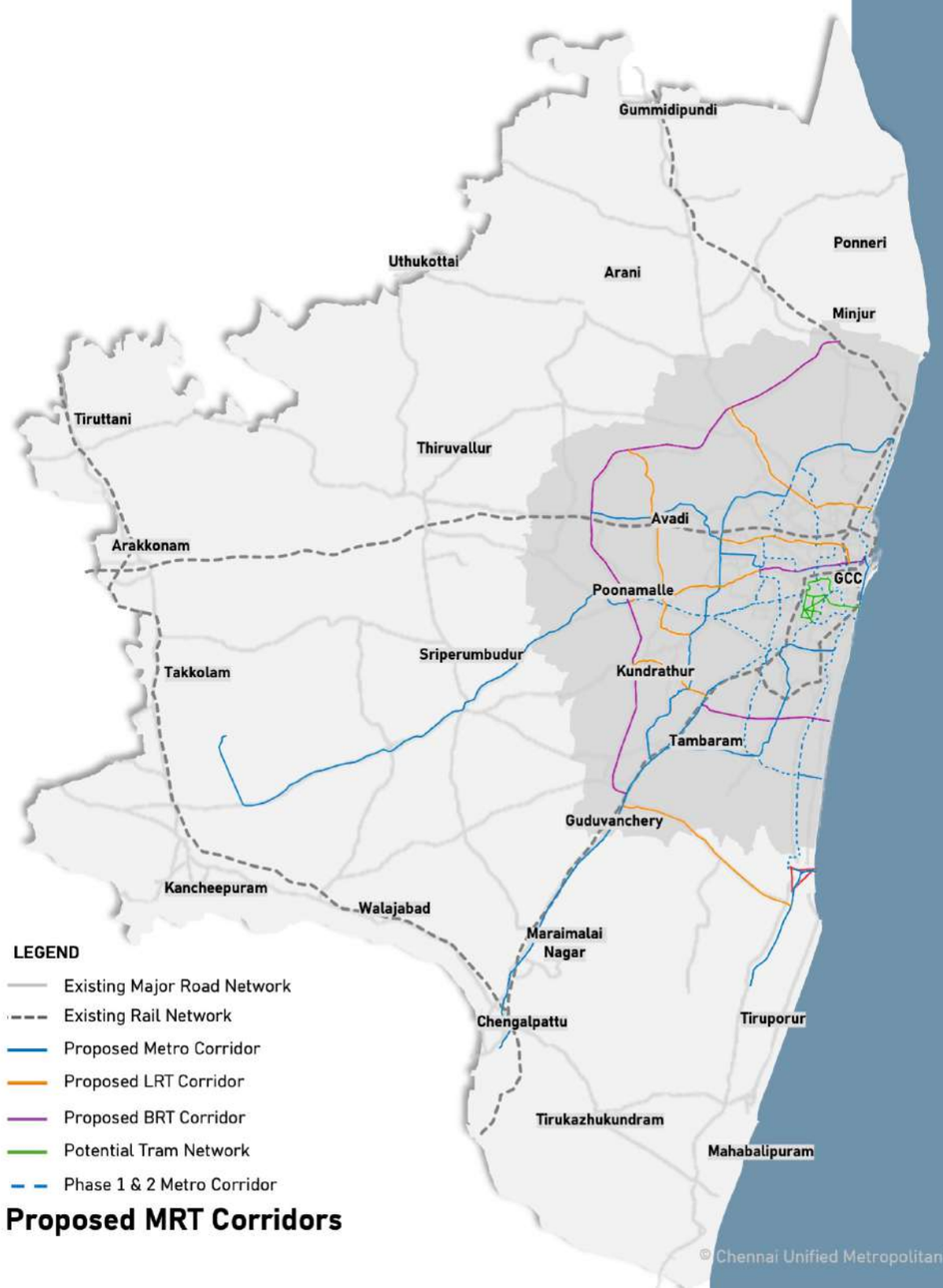
** LMC cost and NMT cost for 500m radius around station are included for Metro & LRT considering 10 vehicles per station*

Stakeholder Consultations

Stakeholder consultation meetings were held with the Managing Director of CMRL, and focus group discussions (FGDs) were conducted with Public Transport Operators, CSOs, NGOs, & RWAs. The following key suggestions were shared and have been incorporated into the plan.

1. Radial connectivity enhancements
2. Multi-modal integration enhancement
3. Proposed lines for evaluation in CMP
4. Public transport fares
5. Flood resilience
6. Integrated planning and TOD
7. Feasibility for LRT, BRT, Tram etc.

Discussion with Chennai Metro Rail Limited



Proposed MRT Corridors

Action Plan for Public Transport

Regional Rapid Transit System

RRTS is crucial to strengthen regional connectivity to neighbouring towns and hubs like Nellore, Vellore, Villupuram and Puducherry.

Corridor	Direction	Length in Km	Cost in Cr.
PHASE 1: Alandur/ Tambaram – Parandur – Kancheepuram	**Towards West**	42	9,240
PHASE 2: Kancheepuram – Ranipet – Vellore	**Towards West**	66	14,520
Alandur/ Tambaram – Chengalpattu – Tindivanam – Villupuram/ Pondicherry/ Cuddalore	Towards South	141	31,020
Chennai Central – Gummidipundi – Sricity – Nellore	Towards North	190	41,800
	Total	**439**	**96,580***

** The cost doesn't include land cost. These proposals are indicative and to be finalized through detailed study*

Old-Mahabalipuram Road
Source: ITDP India

Action Plan for Public Transport

Suburban Rail System

> "To strengthen suburban rail connectivity to all new towns and expanded areas of CMA"

TARGETS

Increase Suburban Rail ridership from 9.4 lakh daily passengers to 16 lakh by 2030, 22 lakh by 2040 and 35 lakh by 2048.

Source: Simply CVR, Flickr

	Action Plan	Targets for 2048	Stakeholders Involved
A. Strengthening Network Coverage and Optimising Routes	• Extend existing rail lines and develop new lines to improve intra-city and regional connectivity.	Service coverage from 44% of population to **60% of population within 2km** of a Suburban Station	**Primary Stakeholder:** Southern Railways **Secondary Stakeholder:** CUMTA, CMDA
B. Improving Service Frequency	• Introduce dedicated suburban tracks • Deploy more rakes. • Improve signaling systems to accommodate more services. • Improve speed at junction stations.	Achieve **5 min peak-hour headway** on high-demand corridors. Increase **crossover speed** from **15 to 30 km/h at all stations**	**Primary Stakeholder:** Southern Railways **Secondary Stakeholder:** CUMTA
C. Providing Safe and Accessible Transit Stations	- Improve first/last mile connectivity through NMT networks, feeder buses and IPT services. - Design all suburban stations with universal accessibility, passenger safety and wayfinding.	All suburban stations to have **continuous footpath network** within 500m radius All stations to be universally accessible. **Level boarding** to be ensured	**Primary Stakeholder:** Southern Railways, ULBs, DoH **Secondary Stakeholder:** CUMTA

Special Note:

1. Road-owning agencies to prioritise developing a footpath network within 500 m of station areas.
2. ULBs to ensure integration of bus stops within 50 m of suburban stations.

Suburban: Projects

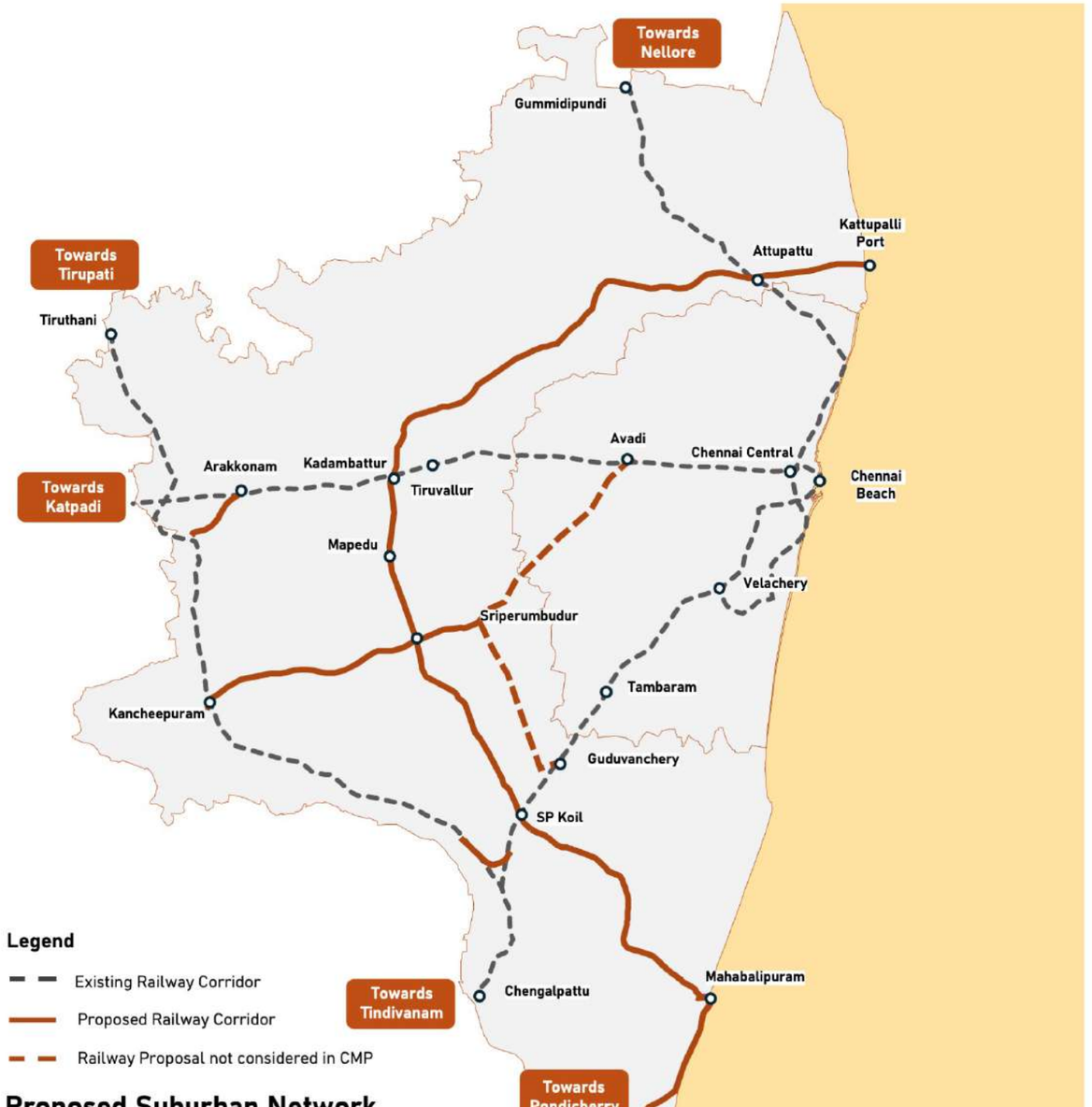
a. Proposed Headway in Minutes

Corridor	Existing no. of services (one-way)	Peak Hour Headway (minutes)			
		Current	Short-Term (2030)	Medium-Term (2040)	Long-Term (2048)
Chennai Beach (MSB) – Tambaram (TBM)	85	8	6	5	4
Tambaram(TBM) – Chengalpattu (CGL)	38	20	15	10	6
Chennai Central (MASS) – Avadi (AVD)	92	10	8	7	5
Avadi (AVD) to Tiruvallur (TRL)	75	15	10	8	7
Tiruvallur (TRL) to Arakkonam (AJJ)	38	30	20	15	10
Chennai Central (MASS) – Gummidipundi (GPD)	27	25	20	15	10
Chennai Beach (MSB) – Velachery (VLCY)	43	20	10	7	5

b. Rake Requirements

Existing Rakes (2024)	Cumulative Rake Requirement		
	Short-Term (2030)	Medium-Term (2040)	Long-Term (2048)
77	**104**	**135**	**190**

Proportionate additional crew shall be planned well in advance since lead time for crew induction is more than 2 years



Proposed Suburban Network

c. New Corridors

Corridor	Short-Term (2030)	Medium-Term (2040)	Long-Term (2048)
Ennore/Kattupalli Port - SP Koil - Mahabalipuram (towards Pondicherry, Cuddalore) along CPRR	-	149 km (within CMA)	-
Sriperumbudur to Kancheepuram	-	-	32.6 km

d. Corridor Upgrade

Corridor	Short-Term (2030)	Medium-Term (2040)	Long-Term (2048)
4th line from Tambaram To Chengalpattu	33 km	-	-
2nd line from Chengalpattu to Arakkonam	65 km	-	-
3rd & 4th line from Athipattu to Gummidipundi	-	28 km	-

e. New EMU Depots

Location	Short-Term (2030)	Medium-Term (2040)	Long-Term (2048)
Melmaruvathur, and Arakkonam duly phasing out Tambaram and Avadi	-	2	-

f. Long-distance Terminal Development

Category	Short-Term (2030)	Medium-Term (2040)	Long-Term (2048)
Mail/Express Terminals	Perambur	-	Parandur
Freight Terminals	Potheri	Sriperumbudur	-

Suburban: Costing and Phasing

Ref	Action Items	Short-Term (2030)	Medium-Term (2040)	Long-Term (2048)	Total Cost
b	Rake Requirement	1,555	2,232	3,960	7,747
c	New Corridor*	-	7,450	1,630	9,080
d	Corridor Upgrade*	2,450	700	-	3,150
e	New EMU Depots	-	2,000	-	2,000
f	Mail/Express Terminal	750	-	2,000	2,750
	Freight Terminal	50	50	-	100
	Total	**4,805**	**12,432**	**7,590**	**24,827**

* The costing excludes land acquisition cost

Stakeholder Consultation

Stakeholder consultation meetings were held with the Divisional Railway Manager(DRM) of Southern Railways and focus group discussions (FGDs) were conducted with Public Transport Operators, CSOs, NGOs, & RWAs. The following key suggestions were shared and have been incorporated into the plan.

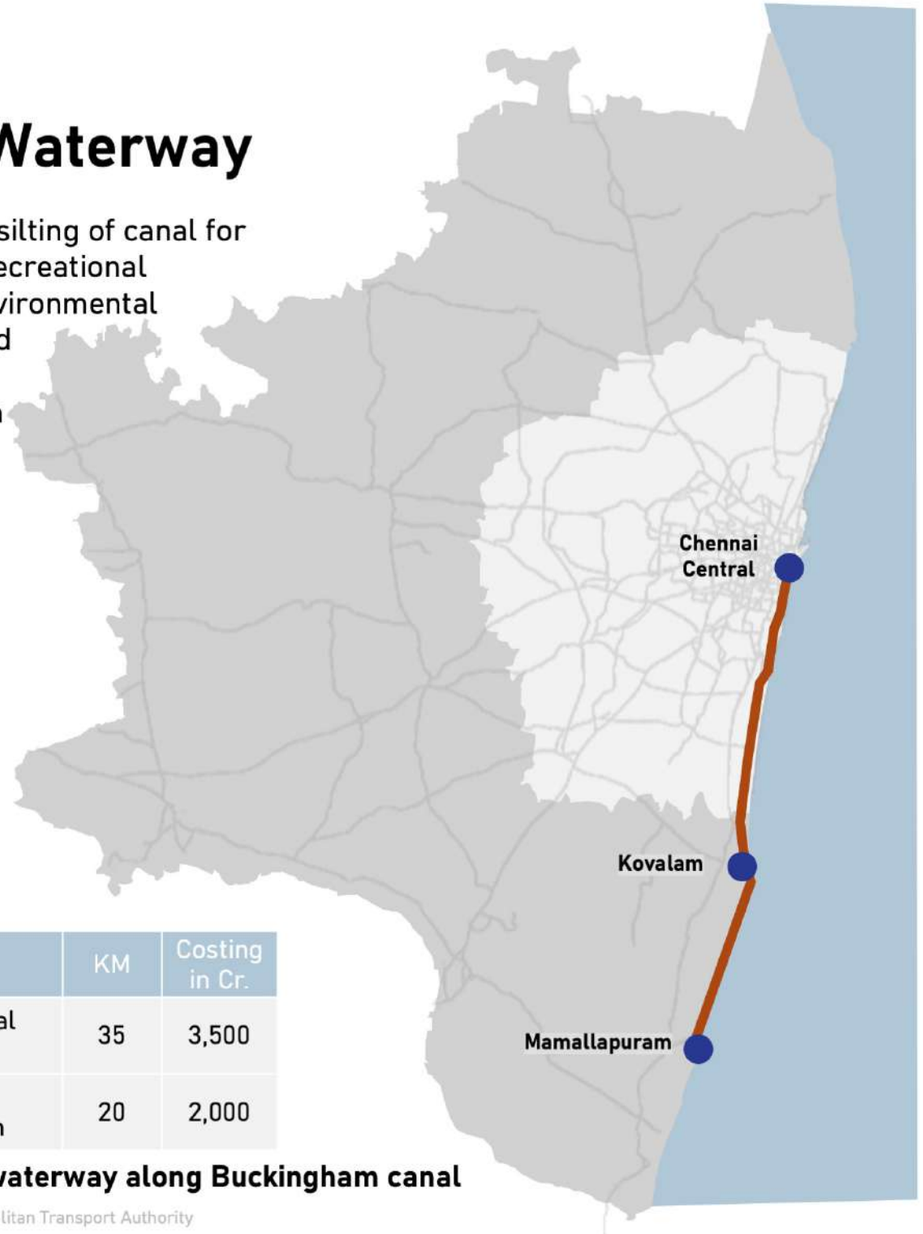
1. Land ownership & infra responsibilities
2. Feeder & last-mile connectivity
3. Land Use Transport Integration
4. Infrastructure cost sharing
5. Institutional setup & governance
6. Suburban rail frequency enhancement
7. Limited-stop train operations

Discussion with Southern Railways

Action Plan for

Inland Waterway

Restoration & desilting of canal for transportation, recreational purposes and environmental benefits like flood mitigation, and prevention of sea water intrusion.

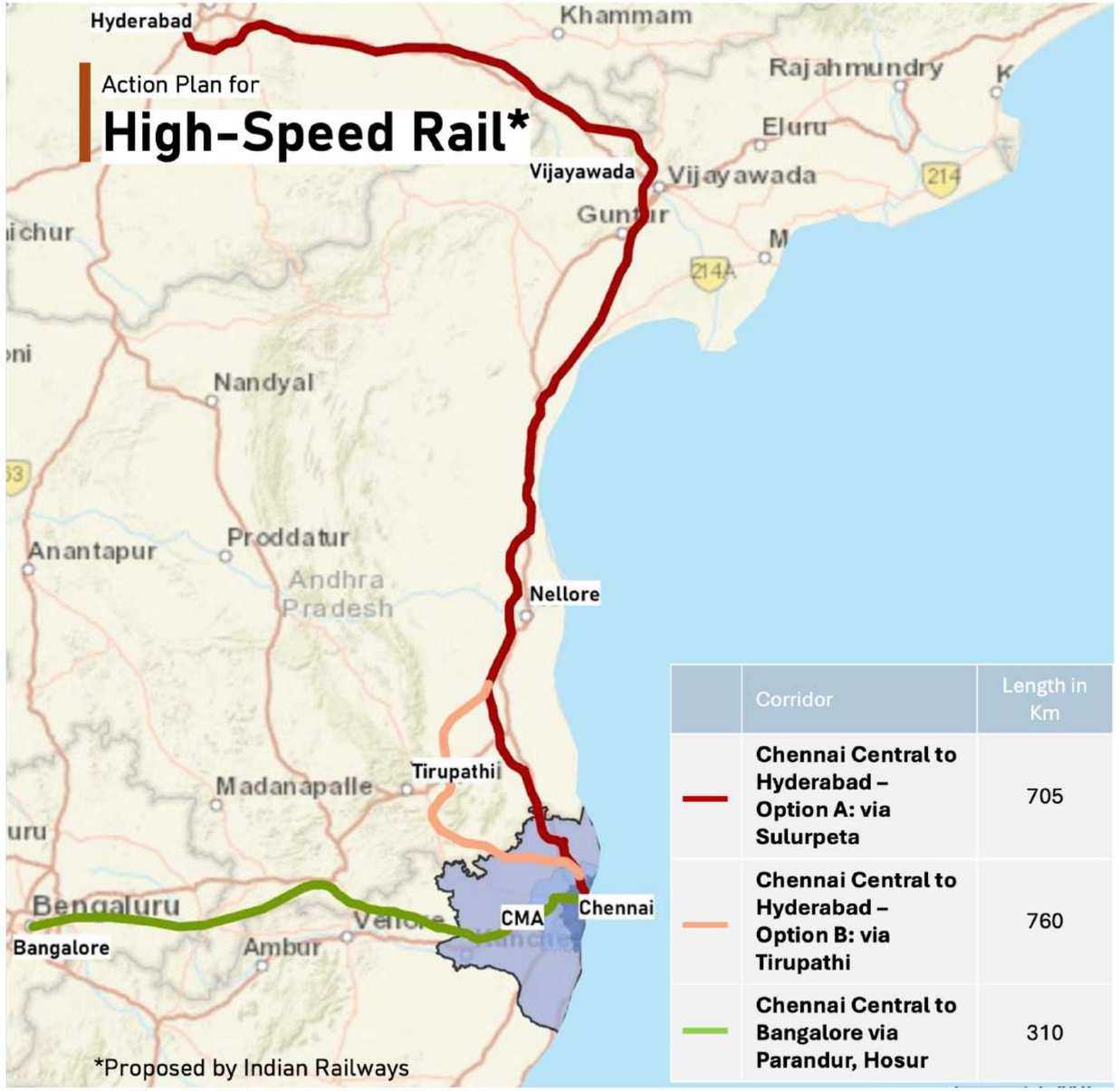


S.n	Route	KM	Costing in Cr.
1	Chennai Central to Kovalam	35	3,500
2	Kovalam to Mamallapuram	20	2,000

Proposed Inland waterway along Buckingham canal

Action Plan for

High-Speed Rail*



	Corridor	Length in Km
	Chennai Central to Hyderabad – Option A: via Sulurpeta	705
	Chennai Central to Hyderabad – Option B: via Tirupathi	760
	Chennai Central to Bangalore via Parandur, Hosur	310

*Proposed by Indian Railways

Objective #2

Intermediate Public Transport

> To regulate and optimise the use of Intermediate Public Transport (IPT) to strengthen and enhance the overall public transport network.

Chennai Central Railway Station
Source: Praveen Devaraj

	Strategies	Targets	Stakeholders Involved
A	Periodic review and enforcement of IPT fares.	**Annual review of IPT fares** Ensure 100% of IPT services charge government-fixed fares.	**Primary:** Transport Dept, CUMTA, Police Department
B	Regulate and rationalize shared IPT by defining vehicle type, capacity, legal operation zones and routes.	**100% of shared IPT** services to operate under legal permits.	**Primary:** Transport Dept. **Secondary:** CUMTA
C	Enhance IPT to function as first/last-mile connectivity for PT.	IPT to connect major transit stations and underserved areas.	**Primary:** MTC, CMRL, Southern Railways, Transport Dept. **Secondary:** CUMTA
D	Transition IPT fleet to clean fuel.	100% of IPT vehicles to operate on clean fuel by 2040.	**Primary:** Transport Dept. **Secondary:** CUMTA

IPT: Policies and Plans

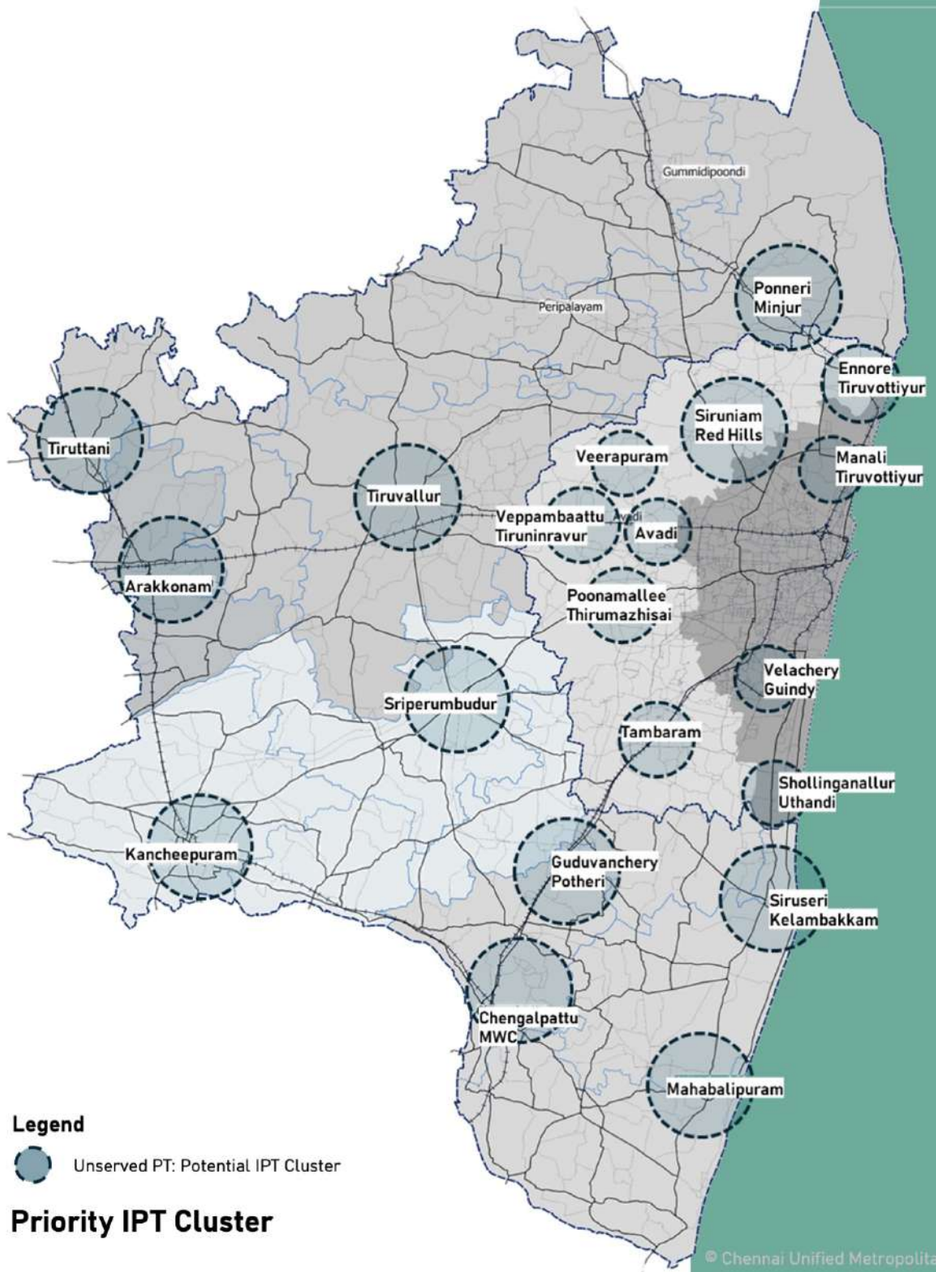
Policies, Schemes and Plans
Preparation of IPT policy for CMA
Identify First & Last mile connectivity routes for transit stations
Replacement of older IPT with clean fuel vehicles
Regulation of shared IPTs and issue of permits in CMA
Periodic fare revision to be ensured by statutory authorities
Adopt digital auto meter for fare and journey monitoring

Stakeholder Consultation

Stakeholder consultation meetings were held with the various government departments and focus group discussions (FGDs) were conducted with Public Transport Operators, CSOs, NGOs, & RWAs. The following key suggestions were shared and have been incorporated into the plan.

1. GPS-based monitoring by RTO for service reliability
2. Standardised vehicle quality and fare regulation for shared autos
3. Identified locations for auto/share-auto stands with designated pick-up/drop-off zones
4. IPT parking access needed in large campuses like General Hospital
5. Share-autos are preferred for last-mile connectivity

Discussion with IPT Operators



Objective #3

Multi-Modal Integration

> To ensure safe, accessible, and well-integrated multimodal transit with a high-quality pedestrian experience, clear information, and unified ticketing.

TARGETS

Reduce transfer time between modes at intermodal stations **by 75% by 2048** (reducing from 20 min to 5 min).

Chennai Central Railway Station
Source: IITDP India

	Strategies	Targets for 2048	Stakeholders Involved
A	Develop Seamless Multimodal Integration*	**MMI at 47 key locations by 2040**; <50m access to bus stops; NMT & IPT integration from the transit node.	**Primary Stakeholder:** Southern Railways, MTC, CMRL, ULB, DoH. **Secondary Stakeholder:** CUMTA, CMDA
B	Enable Operational Integration	Align service schedules across modes at all MMI locations.	
C	Implement and operate Integrated Ticketing	Develop an integrated digital ticketing platform covering all PT modes by 2025. Upgrade the platform as a Service (MaaS) ecosystem by 2030	**Primary Stakeholder:** CUMTA **Secondary Stakeholder:** Railways, MTC, CMRL, Transport Dept.
D	Improve the information integration*	Implement standardised way finding and information signages at all MMI locations.	**Primary Stakeholder:** CUMTA **Secondary Stakeholder:** Southern Railways, MTC, CMRL, ULB, Transport Dept

***Special Note:**

1. Adopt design and implementation as per the recommended guidelines by MoHUA/CUMTA.
2. Wherever integration with railway stations is proposed, Railways may consider this as a public utility and not bring it under the Railway Land Management Policy, while the land ownership shall be retained with the railways

MMI: Projects

Short-term – 2030

S.No	MMI Locations	Level
1	Central	L1
2	Kilambakkam	L1
3	Tambaram	L1
4	Poonamallee	L1
5	Egmore	L1
6	Broadway	L1
7	Thiruvanmiyur	L2
8	Guindy	L2
9	Vadapalani	L2
10	Chengalpet	L2
11	Velachery	L2
12	Perambur	L2
13	Tiruvallur	L2
14	Koyembedu	L2
15	Chennai Beach	L2
16	Kuthumbakkam	L3
17	Saidapet	L3
18	CMBT	L3
19	Tiruvottiur	L3
20	MMBT	L3
21	Pallavaram	L3
22	Villivakkam	L3
23	Mandaiveli	L3
24	Washermanpet	L3
25	St Thomas Mount	L3
26	Sanitorium	L3
27	Wimco Nagar	L3
28	Lighthouse	L3
29	Medavakkam	L3
30	Sholinganallur	L3

Medium-term – 2040

S.No	MMI Locations	Level
1	Parandur	L1
2	Sriperumbudur	L3
3	Chromepet	L3
4	Ambattur	L3
5	Kodambakkam	L3
6	Guduvancheri	L3
7	Arakkonam	L3
8	Tollgate	L3
9	Walajabad	L3
10	Minjur	L3
11	Indira Nagar	L3
12	Vandalur	L3
13	Ayanavaram	L3
14	Tondiarpet	L3
15	Nungambakkam	L3
16	Perungalathur	L3
17	Iyappanthangal Bus Depot	L3

a. MMI Locations Phasing

S.No	Action Items	Short-Term (2030)	Medium-Term (2040)	Total MMI Locations
1	MMI locations	30	17	47

b. Bus Stop and IPT Integration (Short Term 2030)

S.No	Transit Station Details	Total number of Stations	Existing stations with Bus Stops within 100m	Proposal to be integrated with Bus Stops
1	Suburban stations (Except MRTS)	83	22	61
2	MRTS Stations	18	6	12
	Total	**101**	**28**	**73**

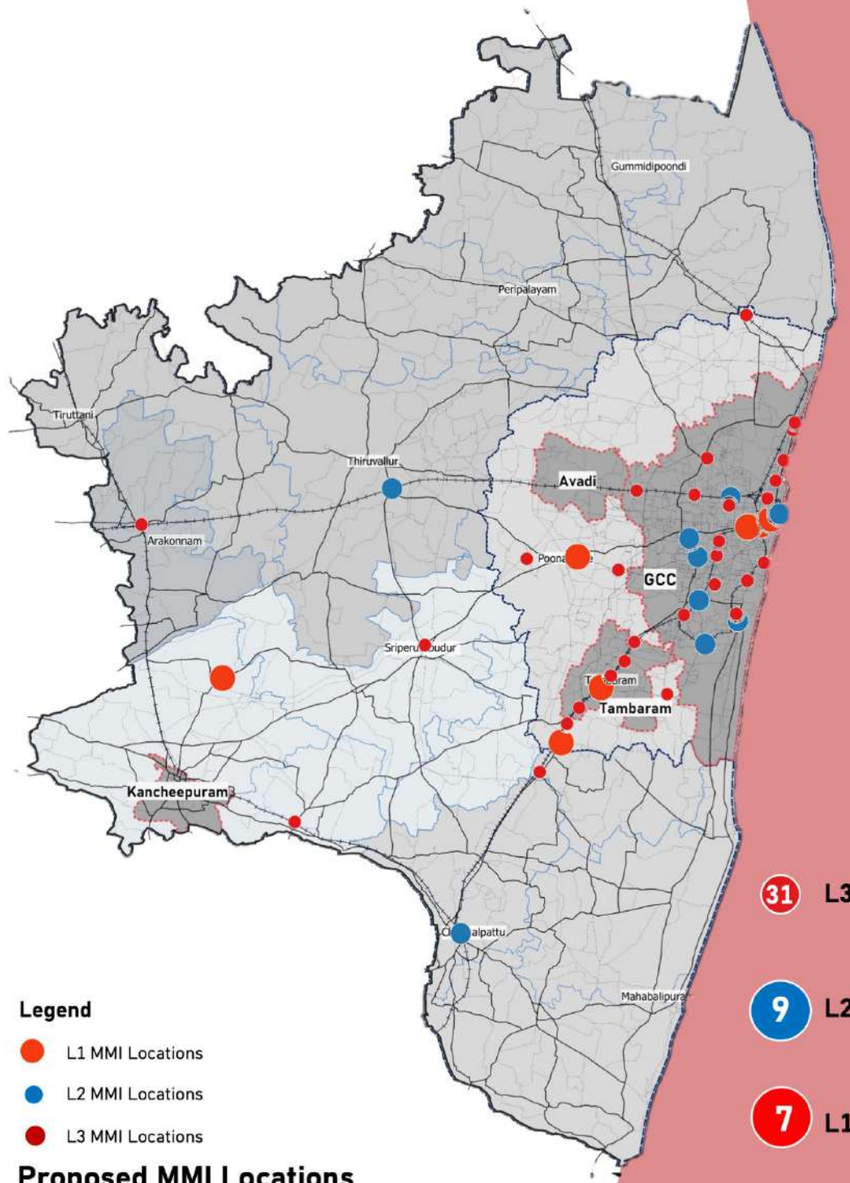
All existing and proposed transit stations should be integrated with bus and IPT services as per the recommended MMI and Comprehensive Street guidelines.

Guidelines

S.No	Description
1	Multi-Modal Integration guidelines for Physical and informational integration
2	SoP for Operational Integration for all Public Transport Operators

App development

S.No	Description
1	Integrated ticketing – single ticket system app development
2	Upgrade the app as MaaS



Proposed MMI Locations

31 **L3** Trips between 10,000 to 50,000 & access to 5 modes

9 **L2** Trips > 50,000 & < 1,00,000 with access of 5 modes

7 **L1** Trips > 1,00,000 & above with availability of all modes

MMI: Costing and Phasing

S.No	Action Items	Short-Term (2030) in Cr.	Medium-Term (2040) in Cr.	Total cost in Cr.
1	MMI Hubs	900	510	1,410
2	Bus Stop and IPT Integration	61	12	73
	Total	**961**	**522**	**1,483**

** Land Acquisition Cost and Street Improvement costs are not considered in the estimation.*

As MRTS lines and bus routes are implemented in phases, MMI integration should be planned and executed accordingly.

Stakeholder Consultation

Stakeholder consultation meetings were held with the various government departments and focus group discussions (FGDs) were conducted with Public Transport Operators, CSOs, NGOs, & RWAs. The following key suggestions were shared and have been incorporated into the plan.

1. Promote 15-minute city concept with walkable, self-sufficient neighborhoods
2. Ensure integrated planning across master plans for urban and transport alignment
3. Strengthen coordination between planning departments and transport authorities
4. Prioritise seamless connectivity between modes (e.g., metro, bus, IPT, walking)
5. Allocate space near transit hubs for safe pedestrian access and last-mile services
6. Integrate ticketing and fare systems across modes
7. Involve local communities and transport operators in MMI design and implementation

Objective #4

Road Network

> To develop a sustainable, safe, and efficient road network to enhance connectivity, accessibility for all user groups, achieve uniform design standards, and resilience.

TARGETS

100% of arterial & sub-arterial roads to operate at Level of Service (LoC) C or better at design travel speeds.

Indira Nagar MRTS Station
Source: ITDP India

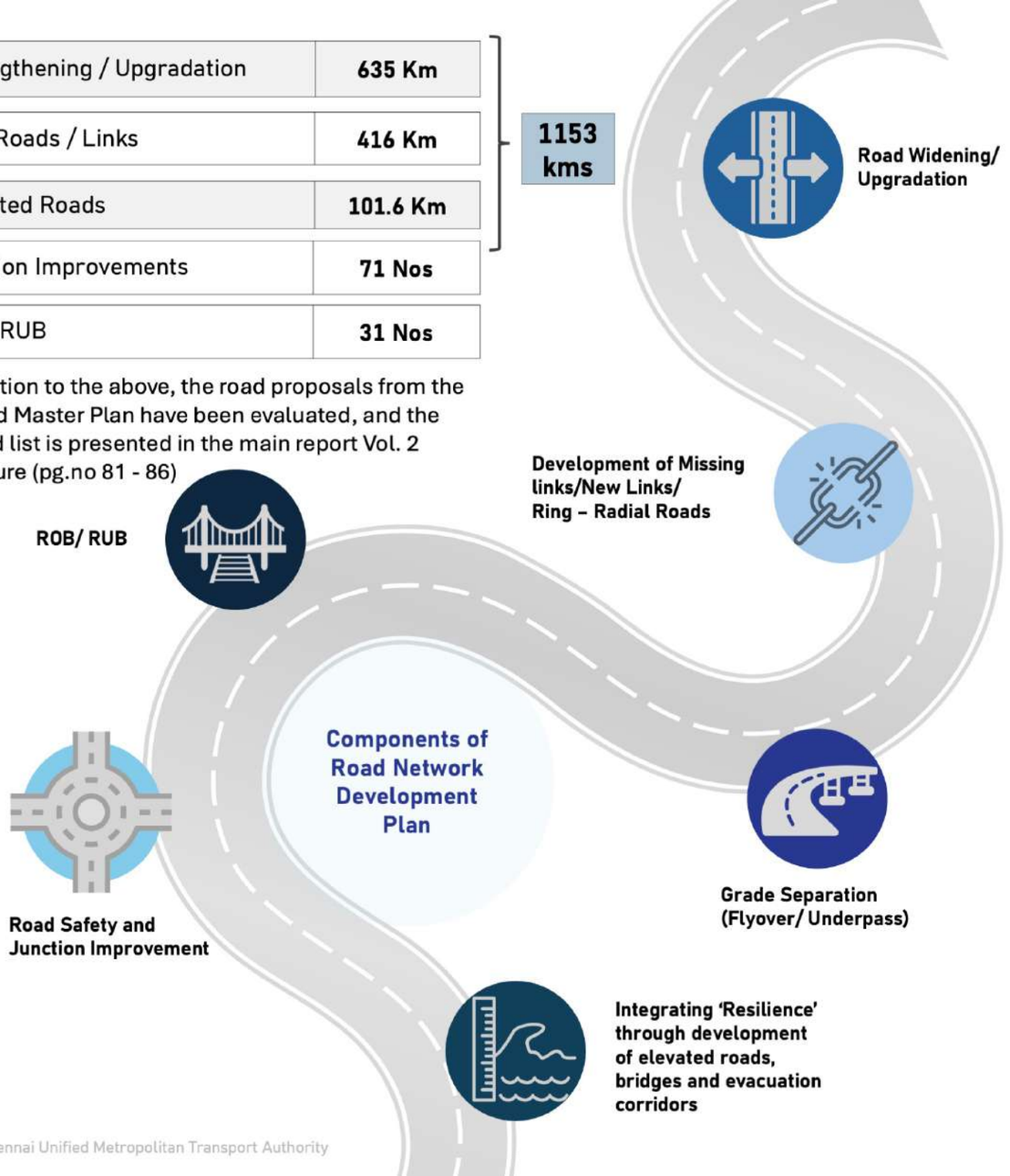
	Strategies	Targets by 2048	Stakeholders Involved
A	**Improved Connectivity** Enhance connectivity across CMA with well-distributed arterial and sub-arterial road networks.	**Establish a robust hierarchy** of the **road network** in the CMA.	**Primary:** DoH, ULBs. **Secondary:** CUMTA, CMDA
B	**Reduced Traffic Congestion** Improve traffic flow and encourage shift to sustainable modes to ease congestion.	**45% reduction in transport emissions** from existing 8,118 MT CO_2e per day	**Primary:** DoH, ULBs **Secondary:** CUMTA, CMDA
C	**Safe Roads** Design and manage roads for safety to reduce crashes and severe injuries.	**100% reduction in road Fatalities from 1500 in 2024 in Chennai, Avadi and Tambaram Commissionerate.**	**Primary:** ULBs, DoH **Secondary:** CUMTA, Home Dept. (Police & TC)
D	**Maintain & Update Road Register** in digital format.	**100% of road register record** to be maintained and updated in digital format.	**Primary:** DoH, ULBs, **Secondary:** CUMTA
E	**Green Roads** Design roads with green canopy and tree corridor.	**100% of all roads** to be integrated with tree corridor.	**Primary:** DoH, ULBs, **Secondary:** CUMTA, TNGCC, Environment Dept.

The details of the committed road projects (573 km) have been considered in the travel demand model and are presented in the main report.

Strengthening / Upgradation	**635 Km**
New Roads / Links	**416 Km**
Elevated Roads	**101.6 Km**
Junction Improvements	**71 Nos**
ROB/ RUB	**31 Nos**

1153 kms

In addition to the above, the road proposals from the Second Master Plan have been evaluated, and the revised list is presented in the main report Vol. 2 Annexure (pg.no 81 - 86)



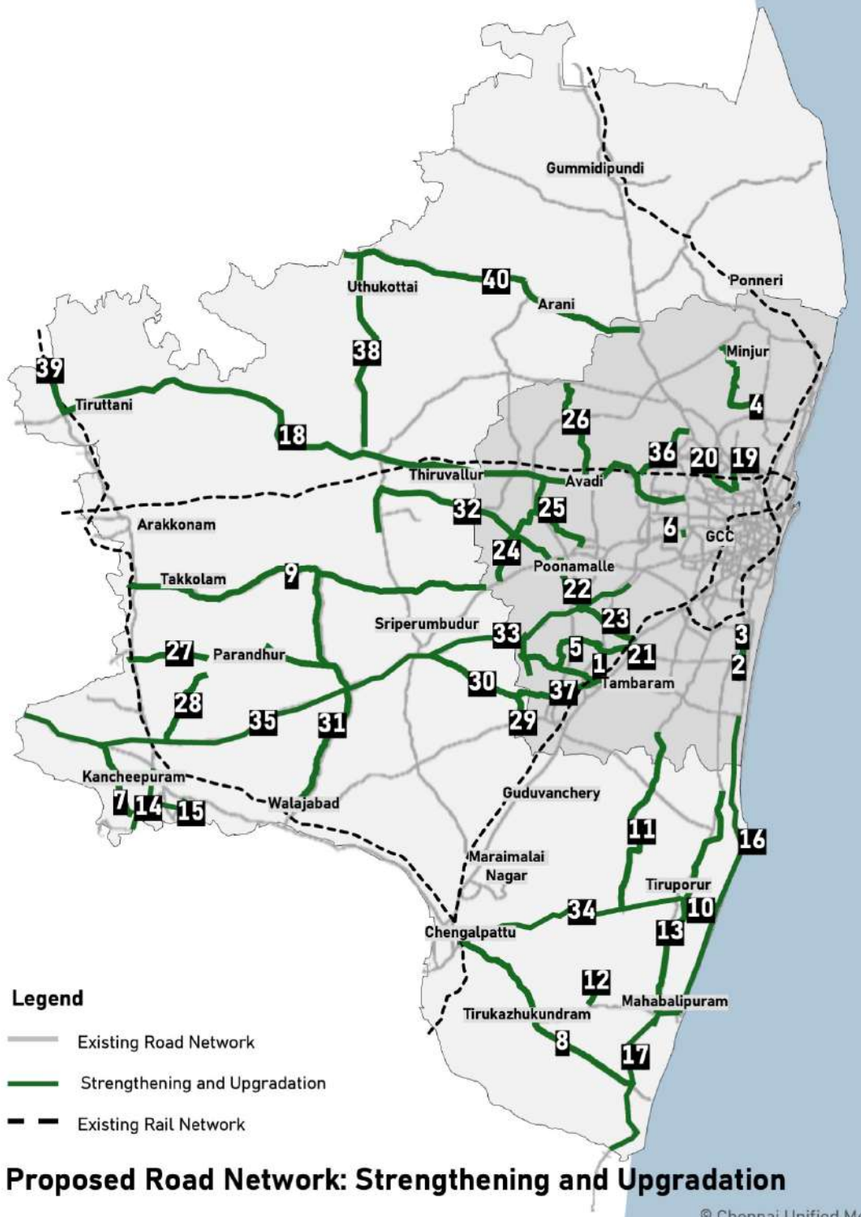
Road Network: Projects

a. Strengthening/ Upgradation - Short-Term (2030)

S. n	Road No.	Road Name	Length in Km	Existing		Targeted		Agency
				ROW	Lanes	ROW	Lanes	
1		Thiruneermalai Road (MEPZ connection)	2.5	12	2	36	4	DoH
2	SH49A	Link Road along B. Canal	7.1	6	2	24	4	GCC/ WRD
3		Veeramani Salai and Periyar Salai with elevated roundabout (access from OMR to ECR) (Perungudi-Palavakkam Section)	1.1	6	2	24	4	GCC/ WRD
4	MDR610	SH56 to ORR : Ariyalur-Vilankattupakkam Road (ODR) & MDR 610 Kodungaiyur-Vazhudhugaimedu Road	11.2	15-18	2	45	4	DoH
5	MDR1163	Thiruneermalai Main Road (Pallavaram-Chennai Bypass)	3.0	9	2	30	4	DoH
6		Koyambedu-Poonamallee High Road Connection (Nerkundram)	0.8	7-10	1,2	24	4	DoH
7	MDR143	Kancheepuram West Bypass	8.7	25	2	45	6	DoH
8	SH58	Sadras - Chengalpattu	26.8	20	2/4	45	6	DoH
9	SH50B	Thandalam-Perambakkam-Thakkolam-Arugilpadi Road	39.5	18-22	2/4	45	6	DoH
10		Tiruporur-Temple to Nemmeli (ODR)	4.4	10	1	36	4	DoH
11	SH110A	Medavakkam-Mambakkam-Sembakkam-Manamathi (CPRR)	21.8	18	2	45	4	DoH
12	MDR 581	Echoor – Thiruporur road	3.3	22	2/4	45	4	DoH
13	SH 49A	OMR: Siruseri - Mamallapuram	26.2	45	4	45	6	DoH
14	SH 116	Kanchipuram - Vandavasi road	5.9	10	2	30	4	DoH
15		Military road - Kanchipuram	6.4	12	2	30	4	DoH
16	SH 49	Akkarai - Mamallapuram	31.3	24-45	4	45	6	DoH
17	NH 332A	ECR: Mahabalipuram-CMA Boundary	19.6	45	2	60	4,6	NHAI
18	SHU148	Chennai – Tiruttani – Renigunta Road	17.7	25	4	45	6	DoH

a. Strengthening/ Upgradation - Medium-Term (2040)

S.n	Road No.	Road Name	Length in Km	Existing		Targeted		Agency
				ROW	Lanes	ROW	Lanes	
19		Madhavaram High Road	2.3	12.5	2	24	4	GCC
20		Paper Mills Road	6.3	8.5	2	24	4	GCC
21	MDR 1164	Tambaram - Somangalam Link	13.5	9-20	2	36	4	DoH
22	SH113A	Pallavaram Nazarathpet Link	14.5	13-21	2	36	4	DoH
23	MDR 1163	Thiruneermalai Main Road-Thirumudivakkam High Road-Palanthandalam Road	10.4	12	2	36	4	DoH
24	MDR 1165	Chettipedu-Namam Road	10	13	1/2	36	4,2	DoH
25	SH 206	Pattabiram KTP road	11.6	8-16	2	45	4	DoH
26	MDR 575	Avadi Vaniyanchathiram Road	12.2	13-20	2	36	4	DoH
27	MDR 651	Palur to Parandur Airport to Sogandy	15.1	15-23	2	45	6	DoH
28	MDR 1024	Ponnerikarai Parandhur Road	8.7	12	2	45	4	DoH
29	MDR 781	Karasangal Thiruvallur Road Connecting SH 48 with SH 110 and OCIC new link	2.8	10	2	45	4	DoH
30	SH110	Tambaram-Mudichur-Sriperumbudur Road	17.3	9-22	2/4	45	6	DoH
31	SH120	Walajabad - Keelachery	28.7	22	2	45	6	DoH
32	SH50	Thirumazhisai to Manavazhanagar	24.3	20	4	45	6	DoH
33	SH113	Kodambakkam-Sriperumbudur Road from Chennai Bypass to Sriperumbudur	23	10-22	2/4	45	6	DoH
34	MDR 581	Chengalpattu - Thiruporur road	21.9	22	2/4	45	4	DoH
35	NH48	Chennai - Bangalore Highway: Sriperumbudur to CMA boundary	46	60	6	60	8	NHAI
36	SH205	Vanagaram-Ambattur-Puzhal Road	7.9	20-30	4	45	6	DoH
37	SH110	Tambaram-Mudichur-Sriperumbudur - Chennai Bypass to Tambaram flyover	1.4	15-22	4	30	4	DoH



Proposed Road Network: Strengthening and Upgradation

a. Strengthening/ Upgradation - Long-Term (2048)

S.n	Road No.	Road Name	Length in Km	Existing		Targeted		Agency
				ROW	Lanes	ROW	Lanes	
38	SH50	Tiruvallur-Uthukottai	25.3	18	4	45	6	DoH
39	NH716	Chennai-Tirupati Highway	62.5	60	4	60	6	NHAI
40	NH716A	Karanodai to Uthukottai	33.0	18-20	2/4	45	6	DoH

b. Elevated Corridors

Short-Term (2030)

S.n	Road No.	Road Name	Length in Km	Targeted Lanes	Agency
1		Meenambakkam Airport to Chennai Bypass	5.4	4	DoH
2	MDR1163	Thiruneermalai Road: Pallavaram-Bypass Connection	3.0	4	DoH

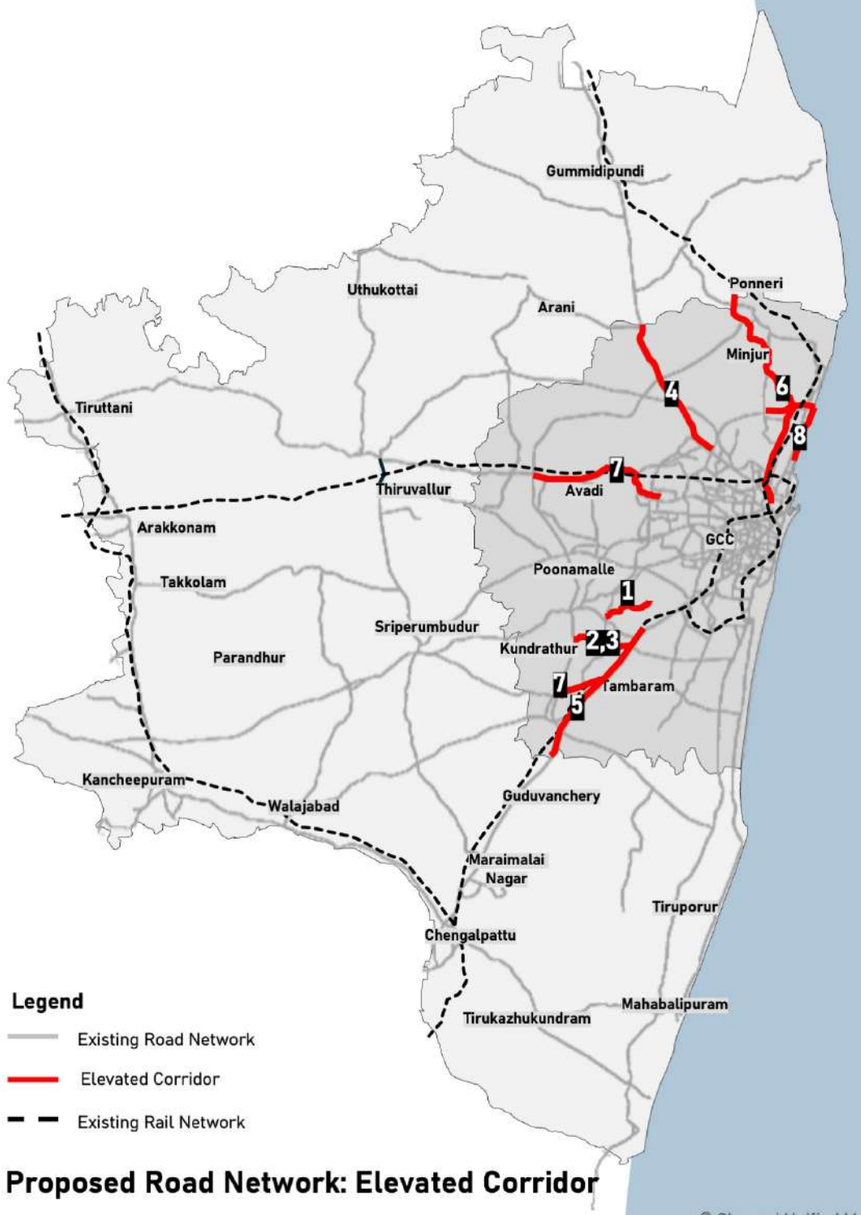
Medium-Term (2040)

S.n	Road No.	Road Name	Length in Km	Targeted Lanes	Agency
3	MDR 1163	Thirumudivakkam High Road: Bypass to Thirumudivakkam Connection	5.4	4	DoH
4	NH 16	Madhavaram-Sholavaram Corridor	15.5	4	NHAI
5	SHU88 & NH 179 B	Airport-Kilambakkam Corridor	14.5	4	DoH

Long-Term (2048)

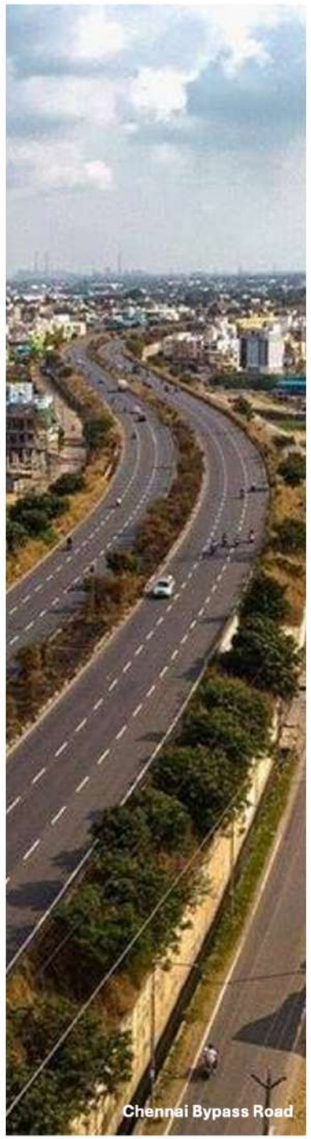
S.n	Road No.	Road Name	Length in Km	Targeted Lanes	Agency
6		Central to CPRR (Nallur)	26.5	4	DoH
7	SHU148	Ambattur Estate to Nemilichery	15.7	4	DoH
8		Chennai Port to MFL Junction	11.2	4	DoH
9	SH110	Tambaram-Mudichur-Sriperumbudur Road (Tambaram to ORR connection)	4.4	4	DoH

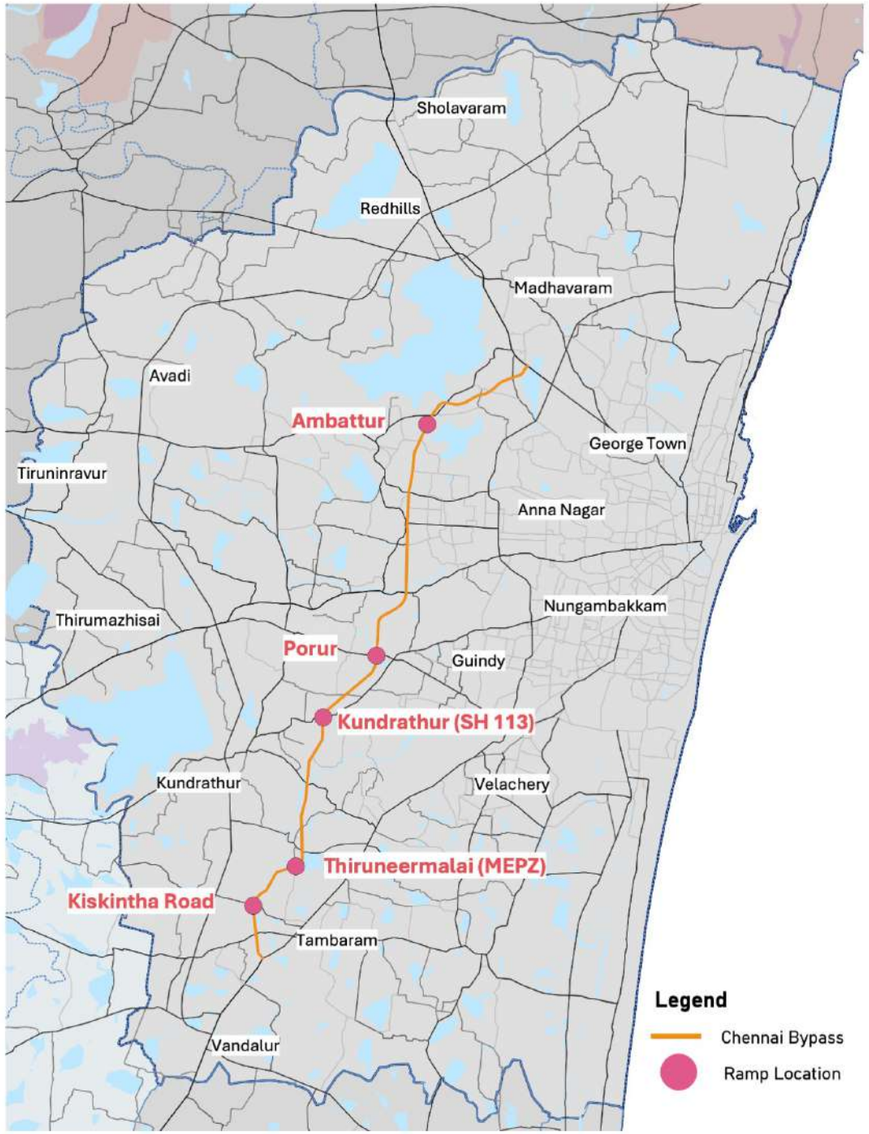
In addition, Department of Highways has proposed a Sea Link road connecting Ennore Port to Poonjeri. Consideration of the project shall be contingent on technical feasibility and economic benefits.



Proposed Road Network: Elevated Corridor

c. Proposed Ramps on Chennai Bypass - Short term (2030)





d. New roads at-grade - Short-Term (2030)

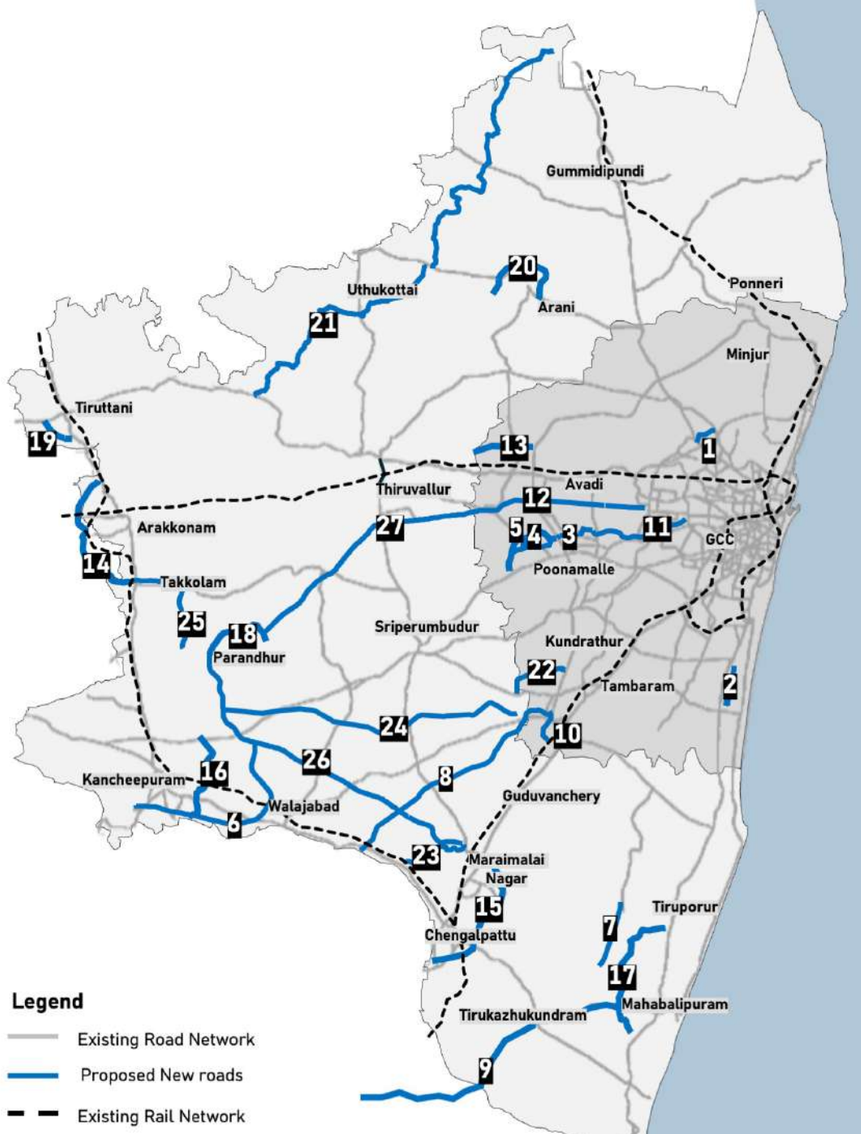
S.n	Road Name	Length in Km	Targeted		Agency
			RoW	Lanes	
1	Puzhal to IRR (Extension of the NH bypass to Inner Ring Road - SH2)	2.7	60	6	DoH
2	Construction of Canal Bank Road on the Eastern and western side of the Buckingham Canal (in continuation with existing road)	7.7	24	4	GCC/PWD
3	Thirumazhasai to Thiruverkadu	10	45	4	DoH
4	Kuthambakkam to Thirumazhisai Old Town	1.9	45	4	GCC/PWD
5	Thirumazhisai Loop Road	7.8	60	6	DoH
6	Kanchipuram Bypass (Orikkai side) Connecting SH 116 & MDR 143 with SH 58 at Walajabad Bypass End	22.1	60	6	DoH
7	Extension of Medavakkam-Mambakkam-Sembakkam Road to connect to CPRR	7.2	45	4	DoH
8	Mannivakkam-Manampathy (OCIC)	26	60	6	DoH
9	Karunghuzhi to Pooncheri (GST -ECR)	32.5	60	6	DoH
10	Adhanur Road	3.0	45	4	DoH
11	Upgradation/Improvement of road along Coovum river from Koyembedu till SH-55	9.2	12	2	DoH

d. New Roads at-grade - Medium-Term (2040)

S.n	Road Name	Length in Km	Targeted		Agency
			RoW	Lanes	
12	Ambattur Estate to ORR (SH 205) (via Paruthipattu)	11.8	60	6	DoH
13	NH716 to ORR Link Road (Thiruninravur Bypass)	4.9	60	4	DoH
14	Arakkonam Loop Road	15.6	60	6	DoH
15	Chengalpattu Loop Road	24	60	6	DoH
16	Kanchipuram Loop Road	10.9	60	6	DoH
17	Mahabalipuram Loop Road	15.3	60	6	DoH
18	Parandur Loop Road	8.2	60	6	DoH
19	Tirutani Loop Road	3.8	60	6	DoH
20	Periyapalayam/Tiruvallur Loop Road	10.6	60	6	DoH
21	Arambakkam to Chennai - Tiruttani Highway at Ramanjery (New Partial Ring Road)	63.8	60	6	DoH
22	Link Road from Varadharajapuram (ORR) to Manimangalam (SH 110)	5.9	45	4	DoH
23	Extension of MDR781 to connect Karasangal to OCIC	1.5	45	4	DoH

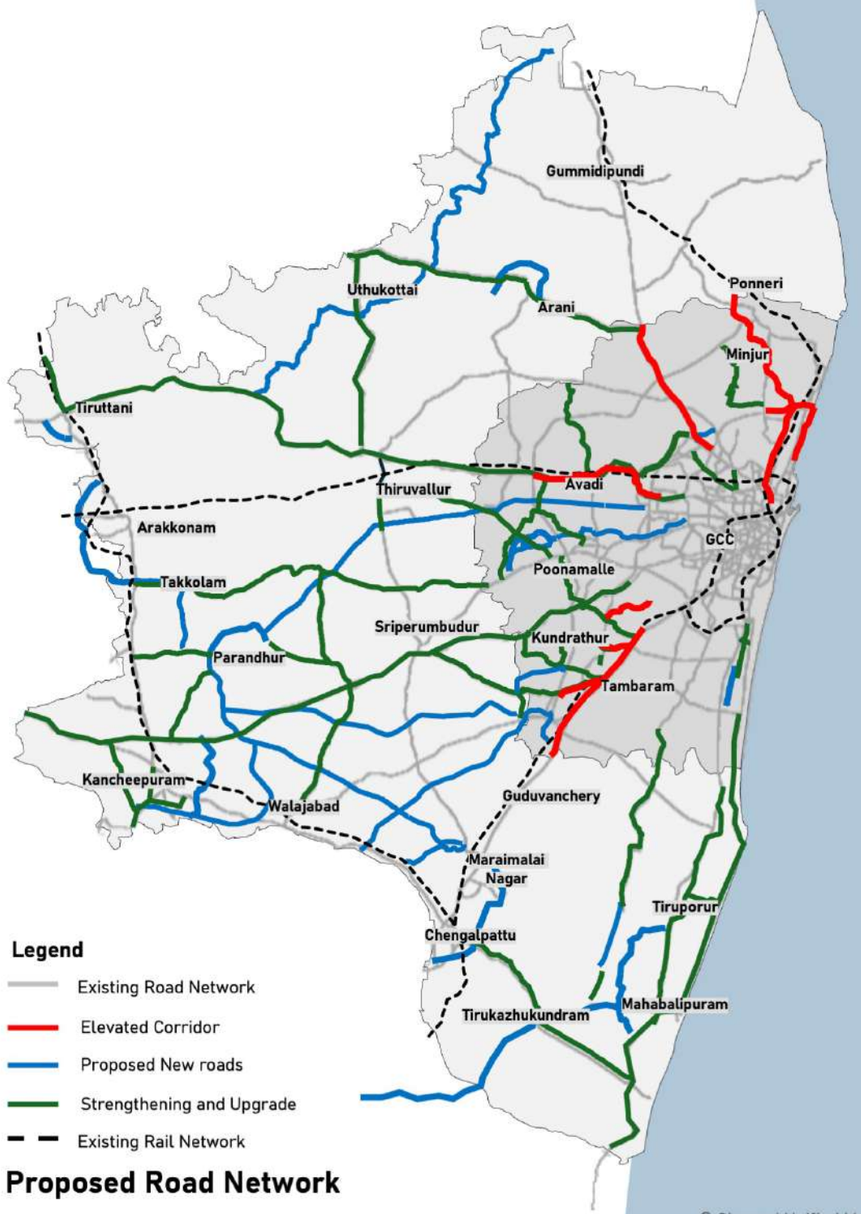
d. New Roads at-grade - Long-Term (2048)

S.n	Road Name	Length in Km	Targeted		Agency
			RoW	Lanes	
24	Padappai to Parandur via Vallakottai	32.2	60	6	DoH
25	Link road from SH 50B (Arugilapadi to Thakkolam) to Parandur Airport	8.6	60	6	DoH
26	Dedicated Airport Corridor SP Koil to Parandur via SH 58	36.5	60	6	DoH
27	Link Road: Karunagarachery (ORR) to Airport	32.5	60	6	DoH



Proposed Road Network: New Roads (at-grade)

Kathipara, Chennai
Source: CMRL



Proposed Road Network

e. Proposed ROB/RUB in Short Term (2030)

Sl. No	Location
1	ROB at Chettipuniyam road
2	Thiruvottiyur High Road near pencil factory bus stop
3	Theyagappa Street near Korukkupet Railway Station
4	Manicka Jalaganda St near Vandalur zoo bus stop to Vandalur NH32
5	Nehru Bazzar Road Near Avadi Railway Station
6	DGQA Rd in Meenambakkam
7	Jayaram St towards Meenambakkam Metro
8	North of Tiruvottiyur Rly Stn. - Manickam St.
9	South of Nandhiambakkam Stn.
10	South of Anuppampattu Stn.
11	Senji Panambakkam
12	Thiruvalangadu Stn. - East
13	SH126 x Arakonam Ocheri Road
14	SH 58 x Attupakkam Road
15	Nemili Senthamangalam Road x SH 58
16	Opposite Ford, Maraimalai Nagar
17	Peramanur Union Road

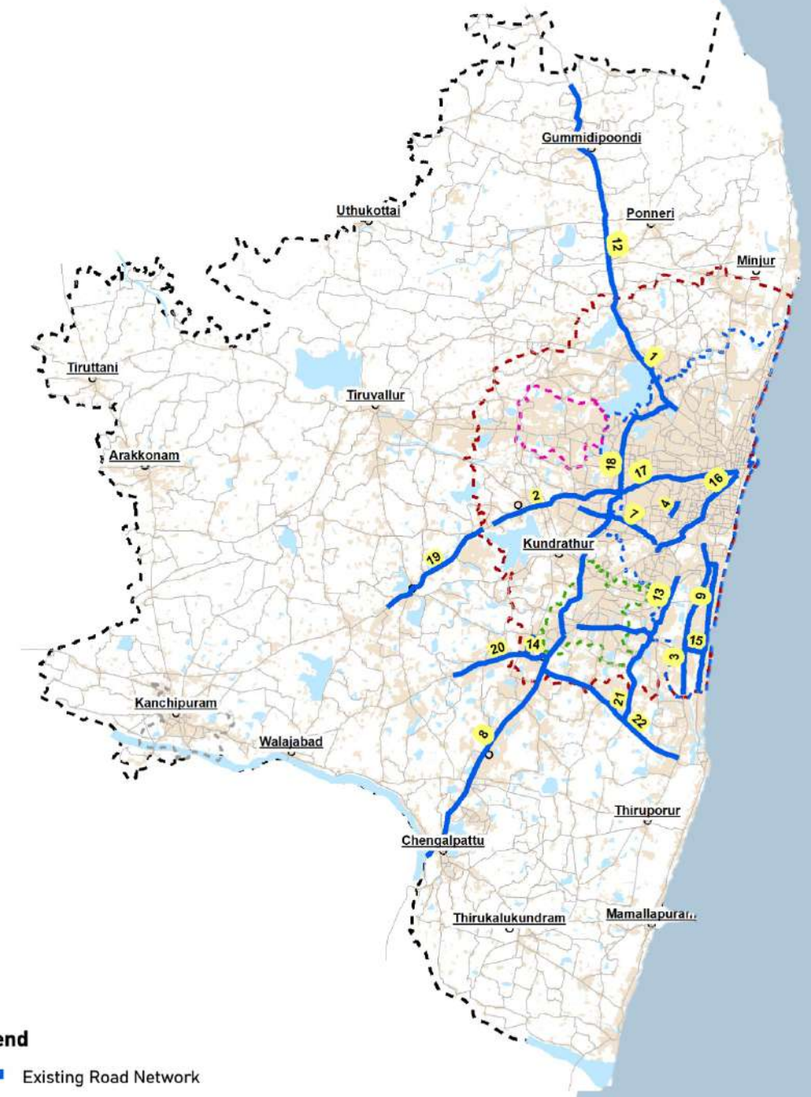
Sl. No	Location
18	Konathi Village Main Road
19	Near Tirusulam Railway Station
20	Nathapettai-Kaliyanoor Road
21	Sivankulam, Teachers Colony Thiruvallur
22	Chennai - Thiruttani- Renigunta Road (SHU148)
23	Widening existing ROB on IRR
24	Vysarpadi Jeeva Railway Station
25	Velachery Road in Alandur (Near officer's Colony)
26	North of Ponneri Stn. - Hariharan Bazaar St
27	Ambattur - East of Stn
28	Nemilichery Stn. (west of Stn.)
29	Manavur Stn. - East
30	Arakonam Stn. - East
31	Widening of Existing RUB: SH58 X MDR 793

Proposed ROB Locations

f. Road Safety Audit in Short Term (2030)

S.n	List of Roads	Fatalities per Km	Total Fatalities	Length
1	Old Grand Northern Trunk Road (old GNT)	5.34	11	2.11
2	Vellore-Chennai Road (Chennai Bangalore Highway)	3.80	83	21.86
3	Old Mahabalipuram Road (OMR)	3.77	67	17.77
4	Dr. Ambedkar College Road	3.68	6	1.63
5	South Bound Grand Northern Trunk Road (GNT)	3.67	33	9.00
6	Sathyamoorthy Nagar Main Road	3.27	5	1.53
7	Mount Poonamallee Road	3.07	31	10.10
8	Grand Southern Trunk Road (GST)	2.88	89	30.87
9	East Coast Road (ECR)	2.84	41	14.43
10	Poonamallee High Road (Central to Kilpauk)	2.71	13	4.79
11	Anna Main Road/Ashok Pillar Main Road	2.55	5	1.96
12	Grand Northern Trunk Road (GNT) Beyond ORR	2.50	64	25.62
13	Velachery – Tambaram Main Road	2.43	40	16.43
14	Vandalur – Oragadam – Walajabad Road	2.33	7	3.01
15	Kalaignar Karunanidhi Road/Perumbakkam Main Road	2.27	5	2.20
16	Anna Salai	2.14	27	12.64
17	EVR Road (Maduravoyal to Kilpauk)	2.13	20	9.40
18	Chennai Bypass	2.06	68	32.96
19	Vellore-Chennai (Chennai-Bengaluru Highway)	2.52	38	15.09
20	Vandalur-Mudichur, Oragadam-Walajabad Road	2.55	36	14.10
21	Medavakkam-Mambakkam-Sembakkam Road	2.04	24	11.74
22	Vandalur-Mambakkam-Kelambakkam Road	1.92	36	18.76

The above roads shall be taken up on priority and additional roads for audit are listed in the detailed CMP report.

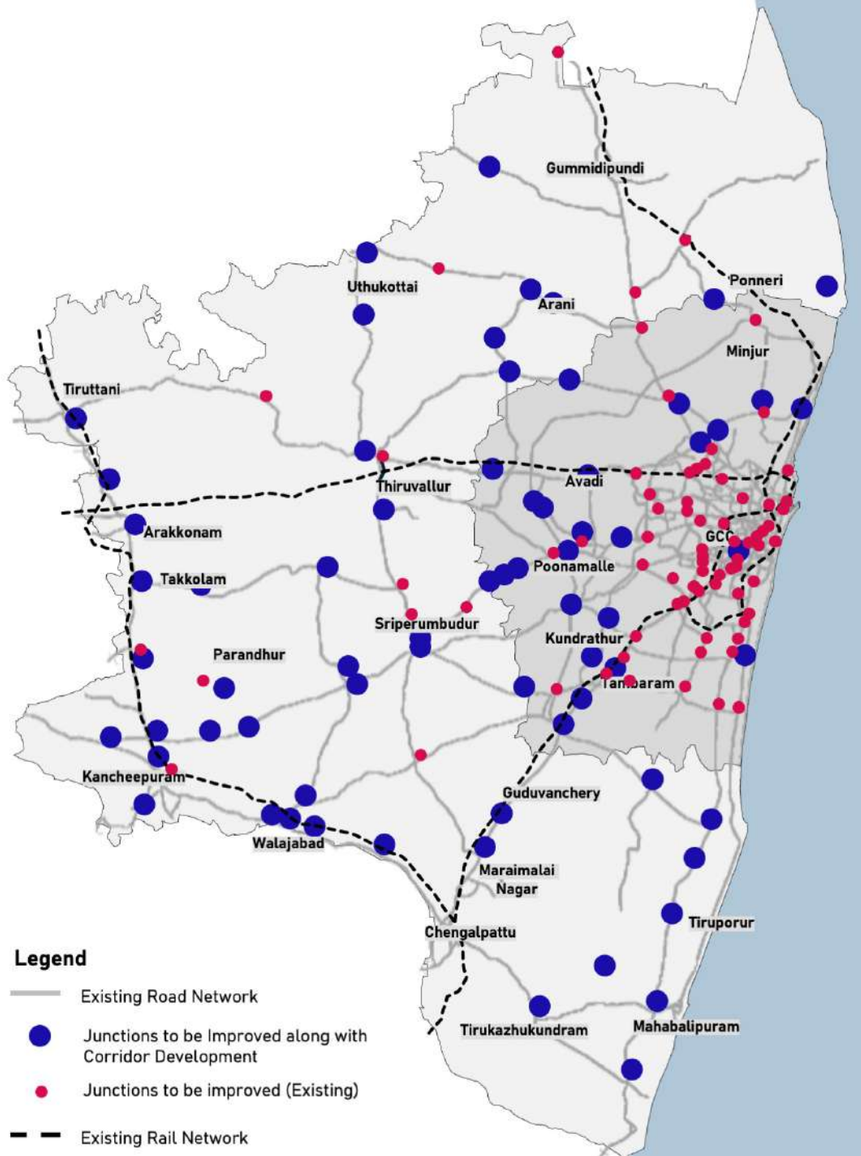


Roads to be taken for Road Safety Audit

g. Junction Improvements in Short Term (2030)

S.n	Area	Locations (Road)	Hotspot
1	Arumbakkam	Grand Western Trunk Road (GWT):SHU 86	Moderate
2	Ashok Pillar (10th Avenue)	Inner Ring Road (IRR): SH 2	Moderate
3	Ashok Pillar 2 (11th Avenue)	11th Avenue, Inner Ring Road (IRR): SH 2 (one way)	Moderate
4	ECR (Bilal Junction - Sholinganallur Road)	East Coast Road(ECR):SH 49	Moderate
5	Government Estate Junction - (Blackers Road, Anna Salai, Walajah Road)	Grand Southern Trunk Road (GST): SHU 88	Severe
6	Kaiveli (Bazaar Main road, Velachery-Tambaram Main Road)	Marmalong Bridge Irumbuiyur Road (MBI): SH 48	Moderate
7	Kilpauk (New Avadi Road, EVR Periyar Salai)	Grand Western Trunk Road :SHU 86	Moderate
8	Kolathur Main Road Junction (1st Main Road & Inner Ring Road)	Inner Ring Road (IRR): SH 2	Moderate
9	Medavakkam Semmozhisalai (Velachery road &Perumbakkam Main Road)	Marmalong Bridge Irumbuiyur Road (MBI): SH 48	Moderate
10	Mogappair Junction (Kambar St, Ambattur Estate Road, 2nd Main Road, Ambattur Industrail Estate Road)	Thirumangalam - Mogappair Road: SH - 112	Moderate
11	Porur junction (Kundrathur Main Road, Arcot Road, Mount Poonamallee Road)	Poonamallee - Avadi Road: SH55	Severe
12	Retteri Junction (Paper Mills Road-Perambur Red Hills High Road, 100 Feet Road)	Inner Ring Road (IRR): SH 2	Severe
13	SIDCO (Near Kuthambakkam Bus Terminal)	Chennai - Bangalore Road:NH 48	Moderate
14	Vadapalani (Arcot Road & IRR)	Inner Ring Road (IRR): SH 2	Moderate
15	Velachery - Tambaram Road (Camp Road jn-Velachery -Tambaram Main Road& Agaram Main Road)	Marmalong Bridge Irumbuiyur Road (MBI): SH 48	Moderate

For prioritisation, 15 junctions are listed, while over 56 additional junctions are identified for later phases. New roads should be constructed in line with the proposed junction designs.



Proposed Junctions Locations for Improvements

Road Network: Costing and Phasing

	Action Items	Short-Term (2030)	Medium-Term (2040)	Long-Term (2048)	Total cost in Cr.
a	Strengthening & Upgradation	1,605	1,643	544	3791
b	New Roads	1,286	1,902	1,208	4,396
c	Elevated Corridor	1,008	4,248	6,936	12,192
d	Proposed Ramps on Chennai Bypass	75	50	-	125
e	Proposed RoB/ RUB	1,560	-	-	1,560
f	Junction Improvement	338	20	100	458
	Total	**5,872**	**7,863**	**8,787**	**22,522**

Stakeholder Consultation

Stakeholder consultation meetings were held at the Secretary-level and department-level with the road-owning agencies, including ULBs, Department of Highways, NHAI, other collectorates, and focus group discussions (FGDs) were conducted with Public Transport Operators, CSOs, NGOs, & RWAs. The following key suggestions were shared and have been incorporated into the plan.

1. Upgrade all two-lane NH/SH roads to four-lane with improved carriageways
2. Address land acquisition bottlenecks for road widening projects
3. Standard road hierarchy system to be followed
4. Strengthen the ring-radial road structure
5. Strengthen lane discipline and traffic signal enforcement on arterial roads
6. Enhance regional connectivity (e.g., Mappedu) and add Coovum River bridges


Discussion with Highways Secretary


Discussion with Highways Department


Discussion with MAWS Secretary and ULBs


Discussion with Tiruvallur Collector and Public


Focus- Group Discussion with Public Transport Operator


Discussion with Kancheepuram Collector and Public


Discussion with Chengalpet Collector and Public

Objective #5

Non-Motorised Transport – Footpath

> To enhance safe, continuous, and accessible footpaths (min 2m) that improve pedestrian connectivity and seamlessly integrate with the public transport network.

TARGETS

Achieve 100% coverage of connected and dedicated pedestrian pathways along all arterial, sub-arterial roads and BRR in the CMA by 2048.

Gopalapuram
Source: ITDP India

	Strategies	Targets by 2048	Stakeholders Involved
A	Improve the footpath network around transit stations, schools, key facilities and high accident spots.	75% of the transit stops to have connected NMT networks within 500m catchment. Develop the area around schools as recommended in comprehensive street design guidelines.	**Primary:** ULBs, DoH, ROA **Utilities:** TNEB, CMWSSB, ULB, TWAD **Secondary:** CUMTA, CMDA
B	Develop footpath network along Blue-green Infrastructure.	Adyar, Coovum and Buckingham Canal to be developed with NMT corridors.	
C	Provide safe streets and crossings.	100% of streets with NMT infrastructure are safe for all user groups.	
D	Ensure regular maintenance of footpaths.	All built footpaths are 100% maintained with no encroachment.	
E	Integrate utility implementation with footpath.	Prepare Utility Management Plan. 100% greenfield roads and All major corridors in brownfield are to be planned with utilities.	
F	Ensure all roads/ streets have green canopy.	All streets to have green cover and strategy.	

Footpath: Projects

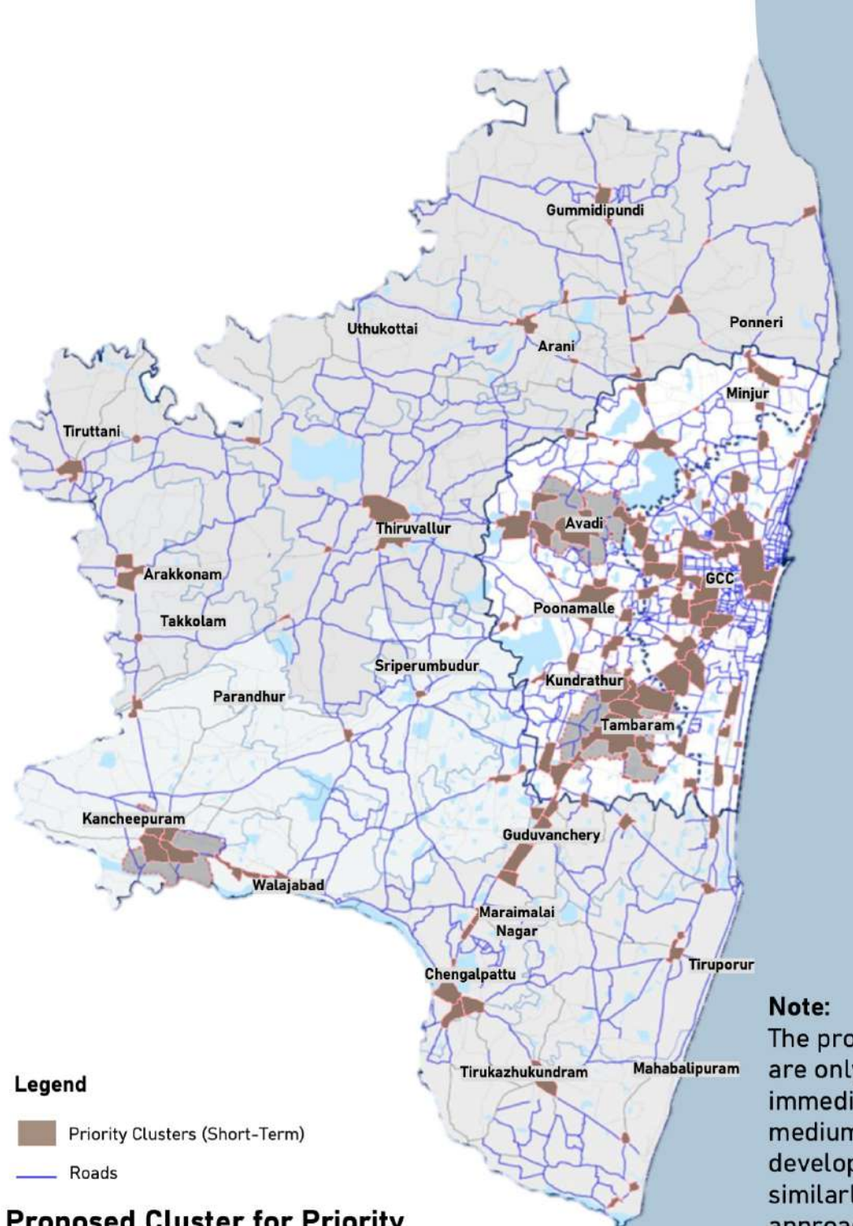
a. Length of Roads to be developed with footpath intervention

NMT within Identified Cluster – Short Term (2030)

S.n	Area	Network for Existing Footpath Improvement (in Km)	Network for New Footpaths (in Km)	Total Network Length (in Km)
1	GCC	257	171	428
2	Avadi	0	39	39
3	Tambaram	9	89	98
4	Rest of Old CMA	22	146	168
5	Expanded CMA	12	227	239
	Total	**300**	**672**	**972**

NMT Outside Identified Clusters – Medium and Long Term (2030 - 2048)

S.n	Area	Network for Existing Footpath Improvement (in Km)	Network for New Footpaths (in Km)	Total Network Length (in Km)
1	GCC	269	180	449
2	Avadi	0	17	17
3	Tambaram	1	12	13
4	Rest of Old CMA	45	296	341
5	Expanded CMA	79	1496	1575
	Total	**394**	**2001**	**2395**



Proposed Cluster for Priority Footpath Development

Note:
The proposed NMT clusters here are only for prioritisation for the immediate short-term. In the medium and long-term, footpath development is to be taken up similarly on cluster-based approach

c. Pedestrian Grade Separators

New Pedestrian Grade Separator

S.no	Location
1	TKS Nagar
2	Kathirvedu Bypass
3	Aminjikarai
4	Arumbakkam PH Road
5	Avadi bus Terminal
6	Tambaram Madras Christian College
7	Sriram Gate - GST
8	Bharat Engineering College Or Balaji Nagar
9	Prince College
10	Saravana Store Chromepet
11	Little Mount
12	Irumbuliyur
13	Near Egmore Railway station – EVR Salai
14	Madhavaram

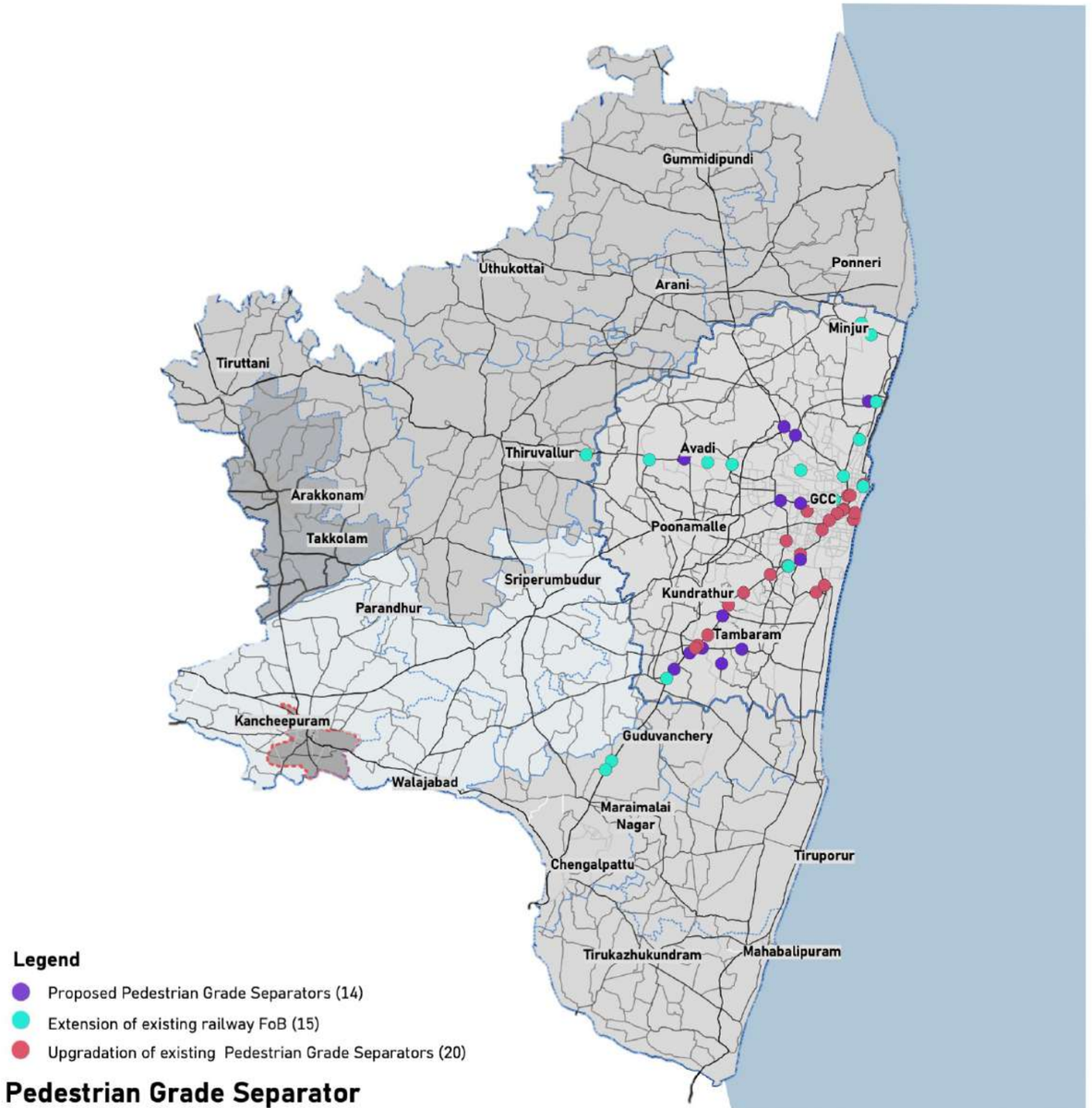
Extension of Railway FoB

S.no	Location
1	Chennai Beach
2	VOC Nagar
3	Wimco Nagar
4	Athipattu Pudu Nagar
5	Athipattu
6	Basin Bridge
7	Perambur Loco Works
8	Ambattur
9	Annanur
10	Pattabiram
11	Veppampattu
12	Guindy
13	Vandalur
14	Kattankolathur
15	Maraimalai Nagar

Upgradation of Pedestrian Grade Separator

S.no	Location
1	Chennai Beach Station Subway
2	Chennai Central Station Subway 1 & 2
3	Tirusulam Subway
4	Beach Road - Kannagi statue
5	Beach Road - Ezhilagam Subway
6	Anna Salai - Wallajah Road
7	Anna Salai - Post Office
8	Anna Salai - Electricity Board
9	Thousand Lights
10	AG-DMS Subway

S.no	Location
11	Nungambakkam FoB
12	Saidapet Subway
13	Guindy Subway
14	Tambaram Railway Station Subway I & 2
15	Pallavaram Subway
16	OTA Nanganallur Subway
17	Taramani Link Road FOB
18	Tambaram Sanitorium FOB (MEPZ)
19	Tiruvanmiyur MRTS Station
20	Ashok Pillar Metro Station FOB



Pedestrian Grade Separator

Action Plan for Non-Motorised Transport

Cycling Network

> “To ensure safe, accessible, and convenient cycling infrastructure by developing a connected, closed-loop network on streets with sufficient ROW.”

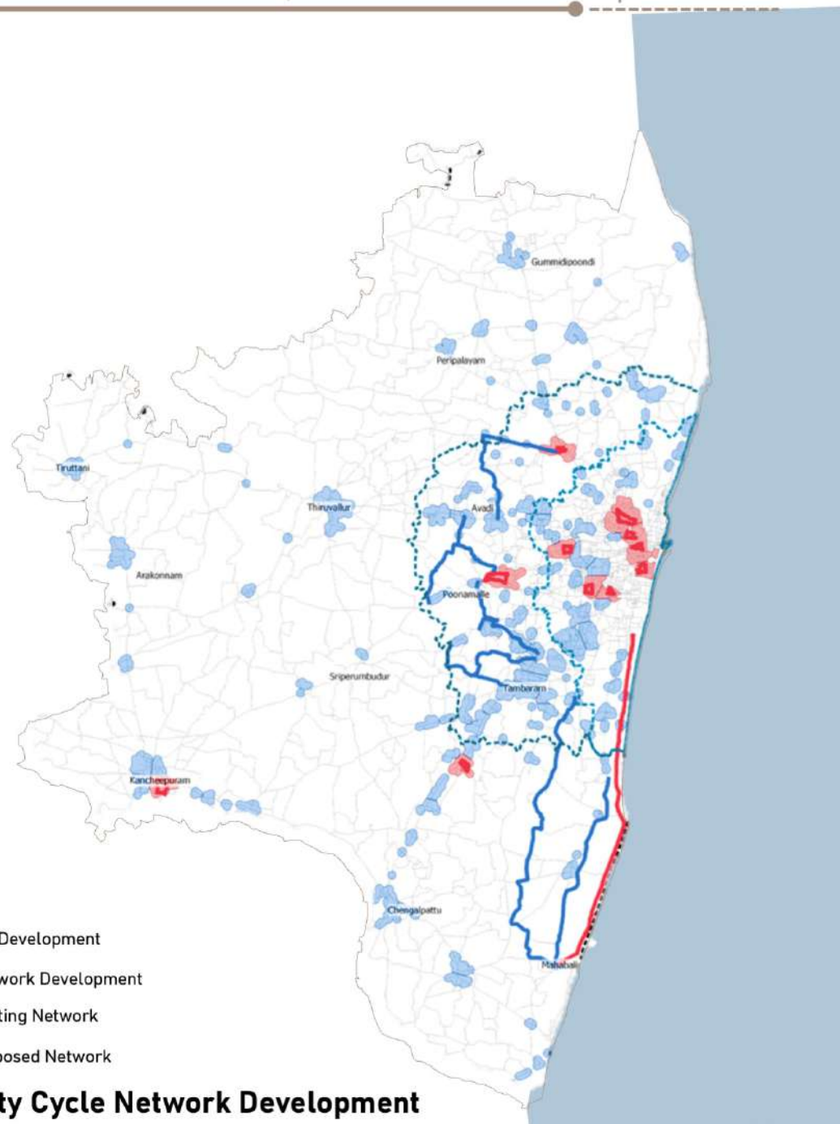
Strategy
Prioritise clusters with educational institutions.
Develop cycle network to support last-mile connectivity around Transit stations.
Develop cycle network along Blue-green Infrastructure.

KK Nagar

Source: ITDP India

Cycle: Projects (Short Term-2030)

Component	Length (Km)
Cycling network identified within clusters	45.8
Dedicated cycle tracks on ECR	44.4
Dedicated cycle tracks on proposed roads	156.4
Total Cycling Network identified within CMA	**246.6**



Proposed Cluster for Priority Cycle Network Development

NMT: Costing and Phasing

S.No	Action Items	Short-Term (2030)	Medium-Term (2040)	Long-Term (2048)	Total cost in Cr.
1	**Footpath**	**1,944**	**1,798**	**2,992**	**6,734**
a	Streets within GCC	856	898	-	**1,754**
b	Streets within Avadi	78	34	-	**112**
c	Streets within Tambaram	196	26	-	**222**
d	Rest of Old CMA	336	682	-	**1,018**
e	Expanded CMA	478	158	2992	**3,628**
2	**Cycle Track**	**251**	-	**-**	**251**
3	**Pedestrian Grade Separators**	**350**	-	**-**	**350**
	Total	**2,545**	**1,798**	**2,992**	**7,335**

Harrington Road
Source: ITDP India

Stakeholder Consultation

Stakeholder consultation meetings were held with the Road Owning Agencies, including ULBs, Department of Highways, NHAI, other collectorates, and focus group discussions (FGDs) were conducted with Public Transport Operators, CSOs, NGOs, & RWAs. The following key suggestions were shared and have been incorporated into the plan.

1. Prioritise footpath improvements in North Chennai
2. Ensure regular maintenance and management of existing footpaths
3. Install pedestrian signals to improve road crossing safety
4. Expand dedicated cycling tracks and secure bicycle parking
5. Equip all arterial and bus route roads with footpaths by 2048
6. Improve access with well-lit walkways (e.g., Vanagaram–Apollo Hospital) and pedestrian-friendly Cooum bridges

Focus-Group Discussion with NGOs, CSOs and experts

Discussion with RWAs

Focus-Group Discussion with RWAs

Discussion with NGOs, CSOs and experts

Objective #6

Parking Management

> To manage on-street and off-street parking by regulating demand, improving efficiency, ensuring equitable road space distribution, and promoting sustainable transport choices.

TARGETS

By 2048, implement regulated and priced parking across 100% of high-demand areas and key off-street locations in the CMA, ensuring digital enforcement, and integration with public transport and NMT infrastructure.

Besant Nagar 2nd Avenue

Source: ITDP India

	Strategies	Targets	Stakeholders Involved
A	**Area-Level Parking Plans** Prepare detailed parking management plans for core and high-demand areas to manage on-street and off-street parking.	100% high-demand areas covered with area-level parking plans and all on-street parking shall be priced. On-street parking shall be allowed only for roads with ROW 9m and above.	ULBs, CUMTA
B	**Restrict On-Street Parking** Reduce supply through design and promote shift to off-street parking.	50% reduction in on-street parking in identified parking management clusters	ULBs, CUMTA
C	**Setting up centralised command centre:** Create a unified parking database and operational system.	Integrated system operational in all key commercial and transit areas.	ULBs, CUMTA, CMDA
D	**Enforcement** Use sensors, apps, and ANPR cameras for management and enforcement.	100% of regulated on-street parking digitally enforced in high-demand zones.	ULBs, Traffic Police, CUMTA
E	**Permit Systems & Proof-of-Parking** Issue residential/ commercial parking permits; link to vehicle registration.	Permit system implemented city-wide. No unregulated on-street parking	ULBs, Home Department, CUMTA, Transport Department
F	**Enforce Off-Street Parking Supply** Monitor and enforce private and institutional parking provision strictly.	100% compliance with building-level parking norms in identified areas.	ULBs, CMDA,CUMTA

a. On-street Parking Cluster

S.no	Location	S.no	Location
1	Anna Nagar	19	Purasaiwakkam
2	Nungambakkam	20	Egmore, Chetpet
3	Adyar	21	Triplicane + Marina
4	KK Nagar	22	Kotturpuram
5	T Nagar	23	Teynampet
6	Besant Nagar	24	RA Puram
7	Velachery	25	Adambakkam
8	Taramani	26	Vadapalani
9	West Mambalam	27	Meenambakkam
10	Padi, Mogappair	28	Madipakkam
11	Shenoy Nagar	29	Chrompet
12	Saidapet	30	Tambaram
13	Ashok Nagar	31	Avadi
14	Kilpauk	32	Kancheepuram
15	Periyamedu	33	Chengalpattu
16	Mylapore	34	Thirumazhisai
17	Perambur	35	Tiruvallur
18	Thiruvottriyur	36	Thiruttani

Note: The identified parking cluster shall have a clearly delineated boundary during the area-level parking planning stage. Multi-Level Parking (MLPs) Facilities within the respective clusters should be proposed based on a demand assessment and implemented in the same phase, wherever feasible.

Stakeholder Consultation

Stakeholder consultation meetings were held with the various government departments, especially Road Owning Agencies, Police Department and focus group discussions (FGDs)were conducted with Public Transport Operators, CSOs, NGOs, & RWAs. The following key suggestions were shared and have been incorporated into the plan.

1. Address unorganised on-street parking and encroachments on footpaths
2. Prevent conversion of building parking spaces for commercial use
3. Promote shared parking solutions (e.g., institutions for overnight parking)
4. Improve omni/private bus terminals and resolve bus parking congestion
5. Implement smart parking systems with digital payment options
6. Enforce parking availability checks before approving new car purchases
7. Encourage corporate shuttle services to reduce private vehicle use

Pondy bazaar

Source: ITDP India

Objective #7

Freight Management

> “To streamline freight movement in the Chennai Metropolitan Area by integrating advanced technologies, robust infrastructure, and green practices for efficient and sustainable logistics.”

TARGETS

By 2048, reduce freight-related emissions by 40%, and restrict 100% of heavy goods vehicle movement within the core city during peak hours.

Ennore Port
Source: TOI

	Strategies	Action Plan	Stakeholders Involved
A	Develop Integrated Logistics Plan	- Prepare a city-wide freight and logistics master plan. - Identify freight movement patterns, demand centres, and key bottlenecks.	**Primary:** CMDA, CUMTA **Secondary:** Transport Dept, Industries Dept, DoH
B	Strengthen Industrial Corridors (ICs)	- Enhance road, rail, and utility access to major industrial corridors. - Decongest urban freight routes by diverting long-haul freight to ICs.	**Primary:** SIPCOT, TIDCO, Industries Dept **Secondary:** DoH, CMDA, NHAI, SR
C	Rail Freight Corridors	- Strengthen connectivity between major industrial hubs and freight terminals. - Coordinate with national freight corridor plans to reduce road dependence.	**Primary:** Southern Railways **Secondary:** DoH, NHAI, CMDA, Industries Dept
D	Enhancing connectivity and optimising freight routes (road-based)	- Create dedicated freight lanes along key arterial roads. - Rationalise freight timing restrictions based on congestion patterns.	**Primary:** GCC, DoH, NHAI **Secondary:** Traffic Police, CUMTA
E	Improving operational efficiency through technology	- Implement digital freight monitoring, scheduling, and permit systems. - Use GPS and GIS for freight routing and real-time tracking.	**Primary:** Transport Dept **Secondary:** NIC, CUMTA
F	Strengthen Logistics Infrastructure	- Develop and upgrade ULCC, Truck Holding Yard, Freight Processing centre etc. - Integrate logistics parks with multi-modal freight nodes.	**Primary:** NHAI, DoH, CMDA, Industries Dept **Secondary:** CUMTA

Freight: Projects

a. Enhancing Port/ Rail Connectivity in Short Term – 2030

S.n	List of Roads	Length
1	Sea Port Connectivity Enhancement: Gate 0 to Gate 10	13-15km
2	Korukupet Good Shed Connectivity - North and South Spurs	1.7km

b. Truck Holding Yard in Short Term – 2030

S.n	Location	Requirement
1	MFL Junction. - Port Gate 10	80-100 acres

c. Urban Logistic Consolidation Centers (ULCC) in Short Term – 2030

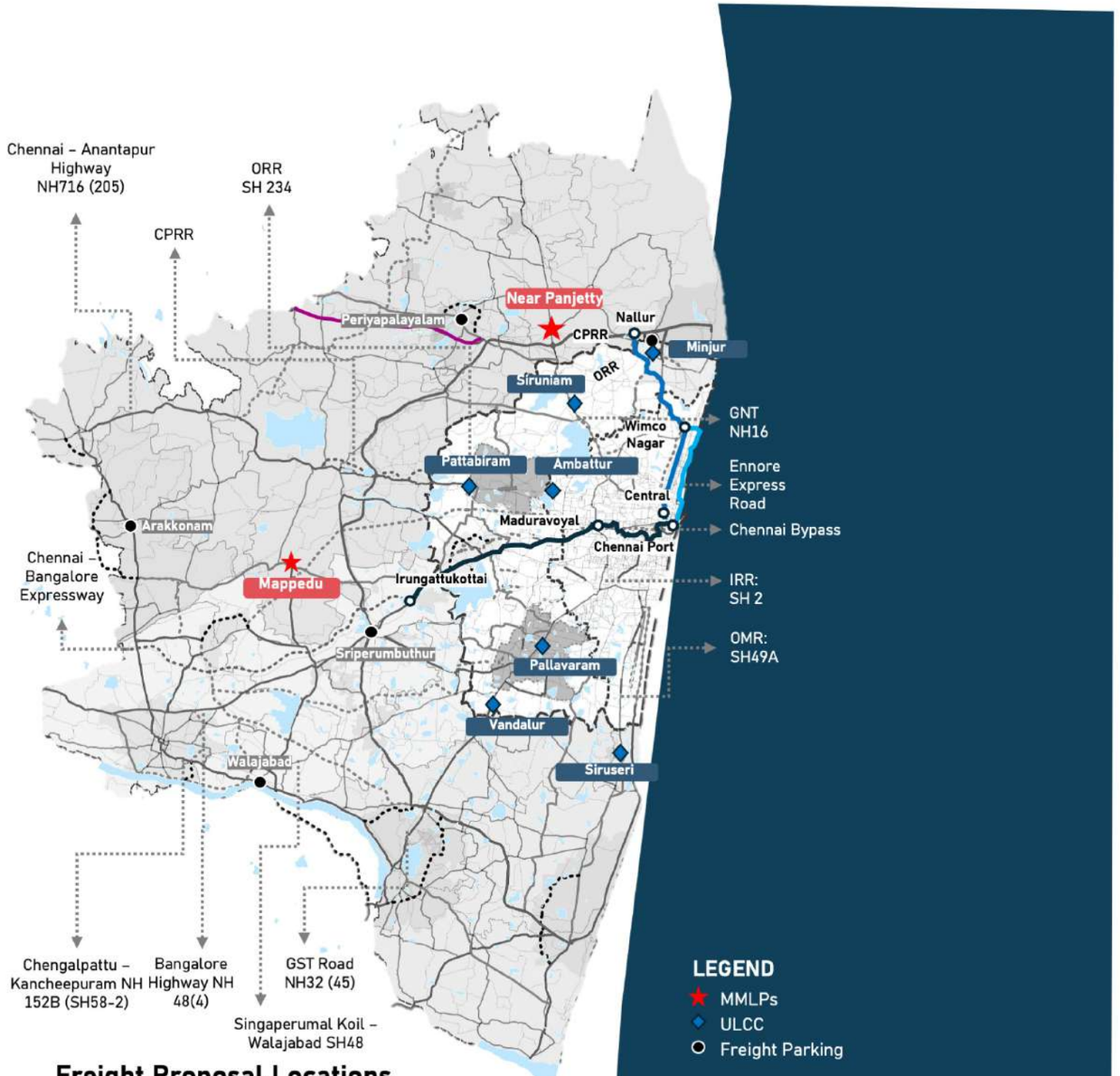
S.n	Location	Requirement
1	Siruseri	100-130 acres

d. Freight Parking in Short Term – 2030

S.n	Location	Requirement
1	Panjetty near CPRR	40-50 acres
2	Minjur near CPRR	80-100 acres

e. Multi-Modal Logistics Park (MMLP) – Long Term 2048

S.n	Location	Requirement
1	Near Panjetty (Location to be identified)	1000 acres



Freight Proposal Locations

f. Perishable Market Development in Short-term (2030)

S.n	Location	Requirement
1	Thirumazhisai (Near ORR)	25-30 acres
2	Tambaram (Near ORR)	65-75 acres

g. Air Cargo

S.no	Location	Requirement
1	Truck Holding Yard at Meenambakkam (Short-term)	8-10 Acres
2	Freight Processing Centre – Air Cargo Village at Parandur (Long-term)	

h. Rail Parcel Terminal

S.n	Location
1	Gummidipundi (Short Term)
2	Ponneri
3	Attipattu

Freight: Costing and Phasing

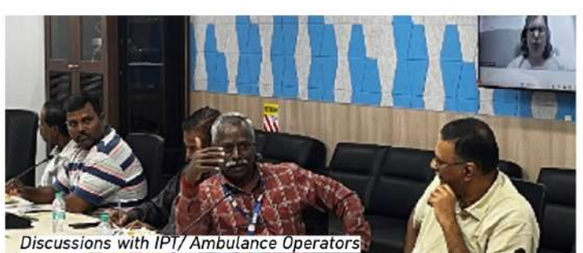
Ref	Action Items	Short-Term (2030) in Cr.	Long-Term (2048) Cr.	Total cost in Cr.
a	Enhancing Port/ Rail Connectivity	1,000	-	1,000
b	Truck Holding Yard	150	-	150
c	ULCC	1,000	-	1000
d	Freight Parking	220	-	220
e	MMLP	-	750	750
f	Perishable Market Development	140	-	140
g	Air Cargo	30	-	30
h	Rail Parcel Terminal	-	75	75
	Total	**2,540**	**825**	**3,365**

Stakeholder Consultation

Stakeholder consultation meetings were held with the various government departments, especially Road Owning Agencies, Police Department, Industries Department & Organisation and focus group discussions (FGDs) were conducted with Public Transport Operators, CSOs, NGOs, & RWAs. The following key suggestions were shared and have been incorporated into the plan.

1. Upgrade freight infrastructure: streamline toll plazas, maintain road conditions.
2. Develop Air Freight Stations (AFS), prioritizing Mappedu over Parandur.
3. Integrate drone stations and Digipin tech into logistics systems.
4. Establish EV charging and battery-swapping for freight trucks.
5. Improve rail-road freight connectivity (Tambaram, Andal Kuppam, Meenambakkam).
6. Propose new rail line: Gummidipundi – Sricity – Kancheepuram – Ranipet for industrial linkage
7. Develop dedicated freight corridors along GST, GNT, and Bangalore Highways to separate freight and passenger traffic


Discussions with Freight Operators

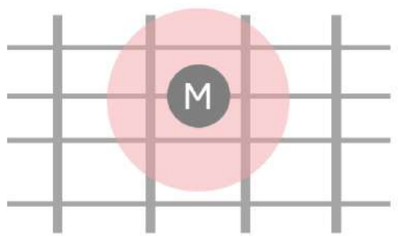

Discussions with IPT/ Ambulance Operators


Focus-Group Discussion with Private Operators

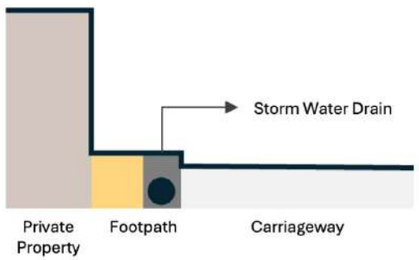

Focus-Group Discussion with Private Operators

Special Recommendations

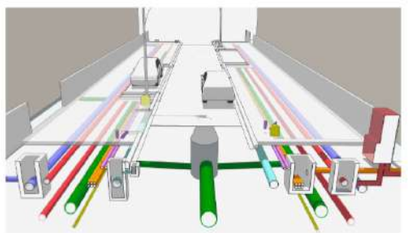
Footpath Management
Road Owning Agencies to have a dedicated Operations & Maintenance (O&M) contract for footpath upkeep and to curb the encroachments.



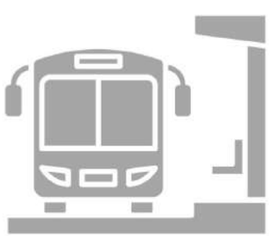
Metro Station Area Improvement – Chennai Metro Rail Limited (CMRL) to implement street improvement works within a 500 m radius of all metro stations.



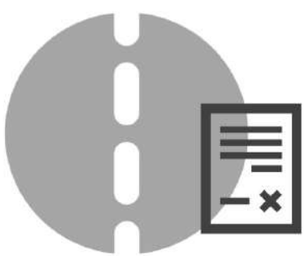
Stormwater Drain Placement
Stormwater drains should be avoided along the property edge to prevent access and utility issues.



Utility Alignment
All utilities to be placed along the property edge line for better accessibility and reduced disruption to carriageways.



Bus Stop Location
Bus stops should not be provided on the carriageway to ensure smooth traffic flow.



Road Cut & Cover Contracts
Introduce regional-level annual contracts for road cut and cover works, rather than street-level piecemeal contracts, for better coordination, efficiency and quality.

Pedestrian Grade Separator Accessibility
All pedestrian grade separators should be equipped with both escalators and lifts to ensure universal accessibility. O&M shall be done by ULBs.

New Road Construction (Phasing)
For newly proposed corridors, space for future expansion should be reserved within the **median** rather than along the **property edges**, discouraging encroachment issues.

Recommended Right of Way for Existing & Proposed Roads

S.no	Category	RoW	No of Lanes	Footpath	Cycle Track	Tree Corridor	Median	Service Lane	Bus Priority Lane/ BRTS	Metro	Road Elements Corridor	Parking
1 (a)	Arterial Road	60 m	8	●		●	●	●	●		●	●
1(b)	Arterial Road	60 m	6	●	●	●	●	●		●	●	●
1(c)	Arterial Road	45 m	6	●		●	●	●	●		●	●
1(d)	Arterial Road	45 m	4	●	●	●	●	●		●	●	●
2(a)	Sub-Arterial Road	36 m	6	●		●	●		●		●	●
2(b)	Sub-Arterial Road	36 m	4	●	●	●	●			●	●	●
2(c)	Sub-Arterial Road	30 m	4	●		●	●			●	●	●
2(d)	Sub-Arterial Road	30 m	4	●		●	●				●	●
2(e)	Sub-Arterial Road	30 m	4	●	●	●	●				●	●
3(a)	Collector Street	24 m	4	●		●	●				●	●
3(b)	Collector Street	24 m	2	●	●	●					●	●
3(c)	Collector Street	18 m	2	●		●					●	●
4(a)	Local Street	12 m	2	●		●						
4(b)	Local Street	9m	2	●							●	

Note:

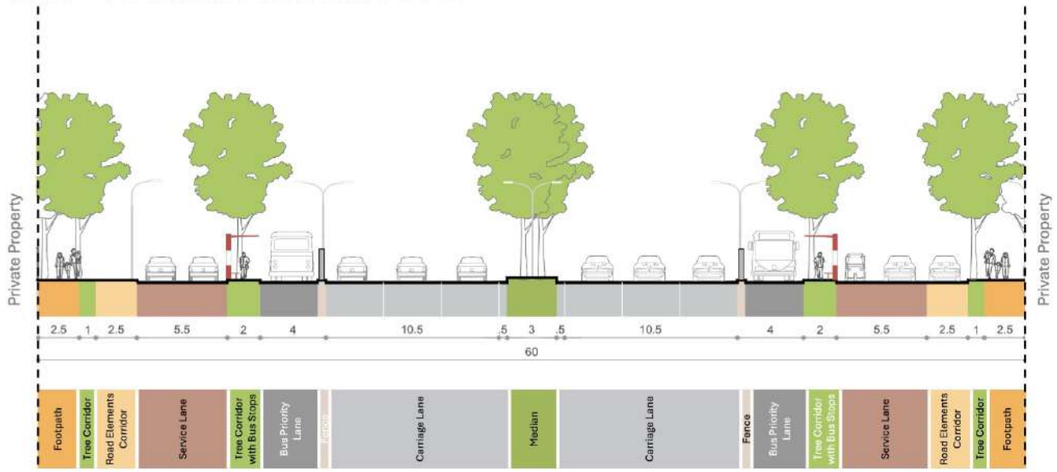
In the targeted Right of Way (RoW), the following shall be considered as minimum standards:

Footpath	Minimum 2m width unobstructed and continuous on both sides of the road.
Cycle Track	If the street is part of the cycle network, a 2-3m cycle track shall be provided based on RoW.
Carriageway Lanes	Maintain a width of 3-3.5 m per lane, based on the road hierarchy.
Road Elements Corridor (REC)	Minimum 2.5 m width throughout the corridor. The REC includes provision of bus stops, parking, streetlights, placement of dustbins, designated vendor zone etc. Where there is no parking/bus stop, REC will be designed as an extended footpath.
Tree Corridor	Provide at least 1 m width for tree planting, free from utility conflicts.
Medians	Provide medians of 1.5–3 m width to accommodate greenery or provisions for future mass rapid transit system construction.
Lane Reduction for context	Reduce the number of lanes where appropriate; in high-footfall areas, reallocate lane space to footpaths.
Special Cross Section	Incorporate features such as tramways or fully pedestrianised streets, based on local context.

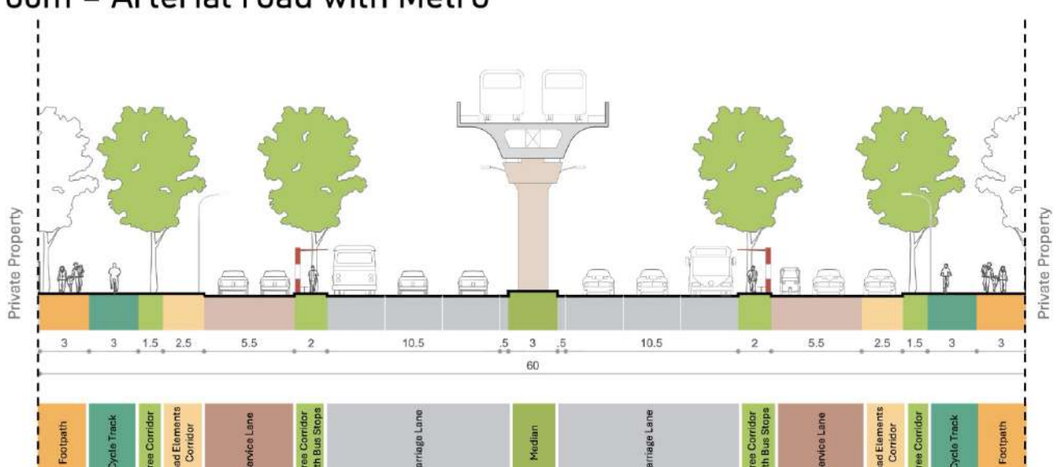
Pondy Bazaar, T. Nagar
Source: ITDP India

Cross Sections

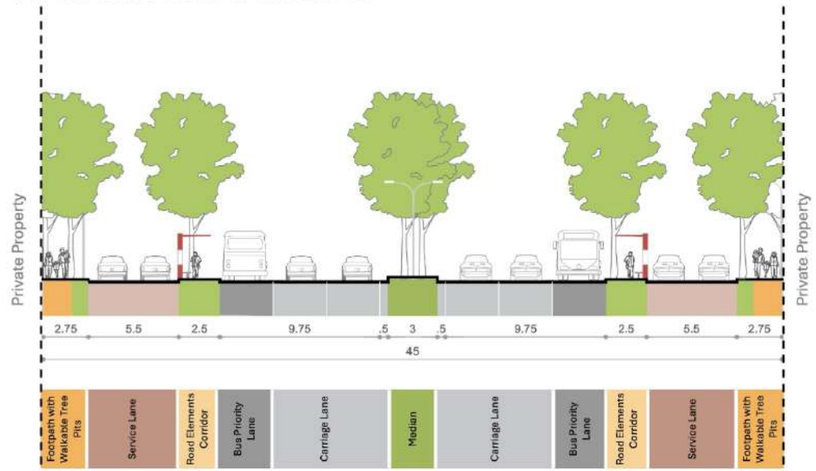
1(a) 60m – Arterial road with BPL



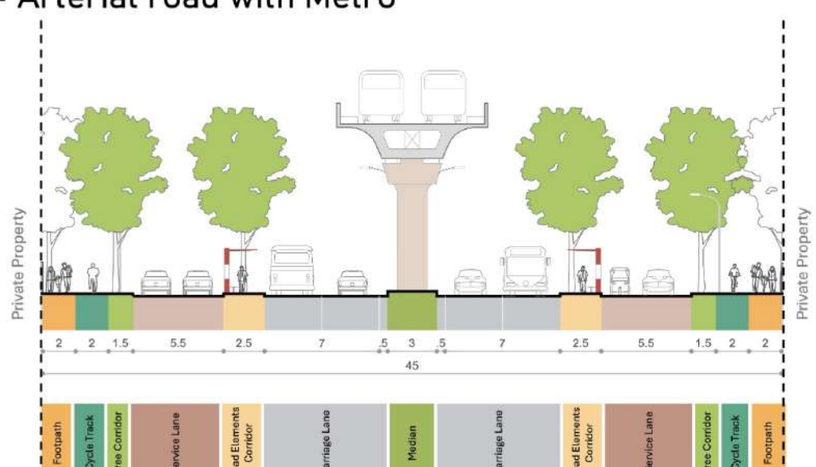
1(b) 60m – Arterial road with Metro



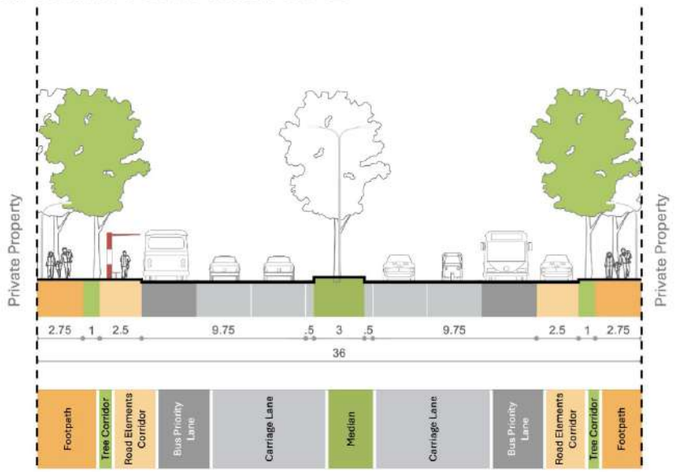
1(c) 45m – Arterial road with BPL



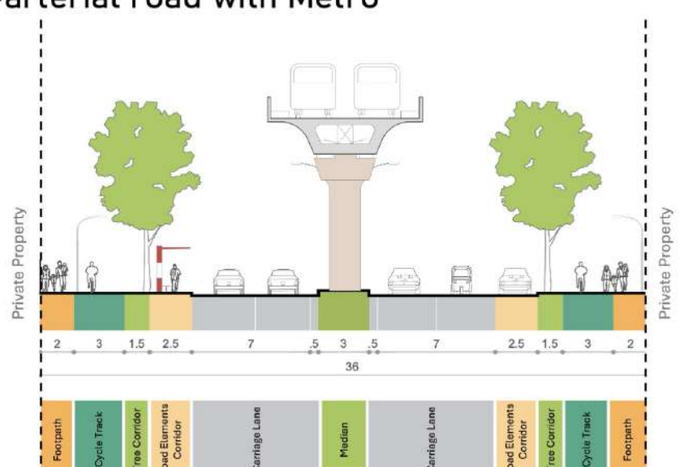
1(d) 45m – Arterial road with Metro



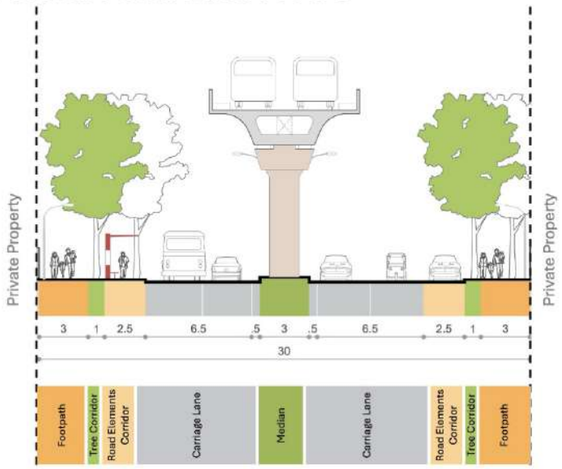
2(a) 36m – Sub-arterial road with BPL



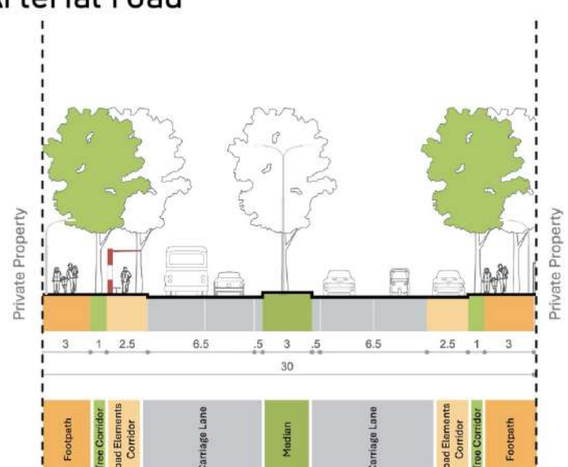
2(b) 36m – Sub-arterial road with Metro



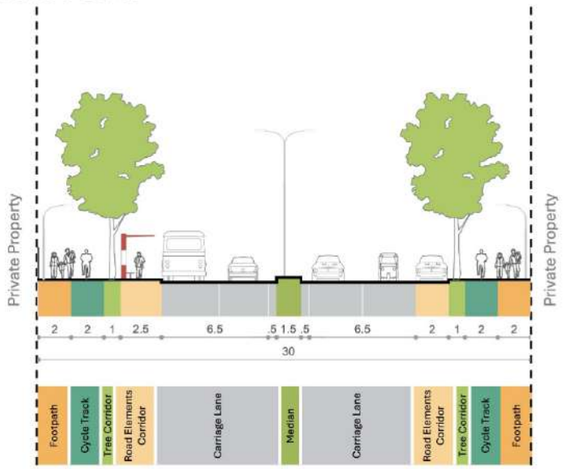
2(c) 30 m – Sub-Arterial road with Metro



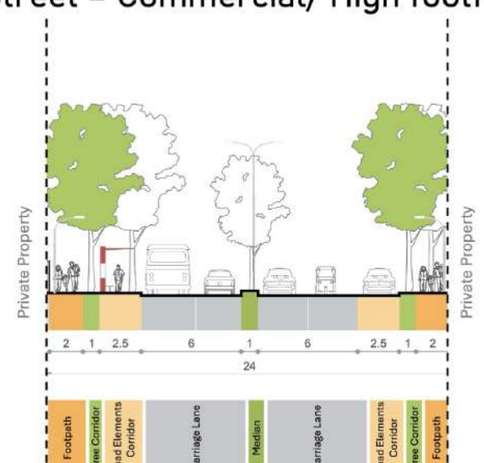
2(d) 30 m – Sub-Arterial road



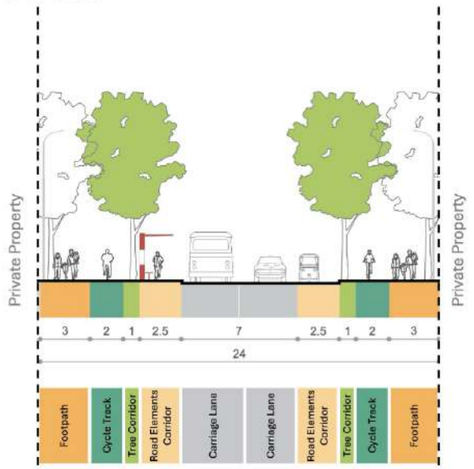
2(e) 30m – Sub-arterial road



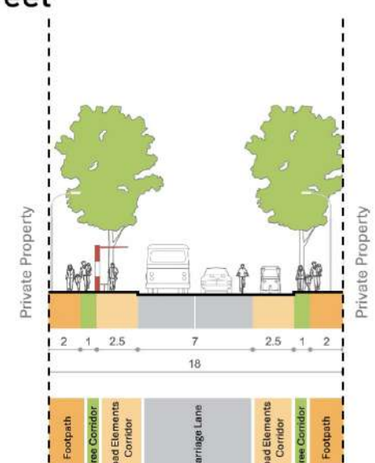
3(a) 24m – Collector Street – Commercial/ High footfall street



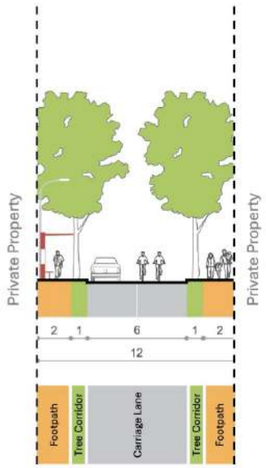
3(b) 24m – Collector Street



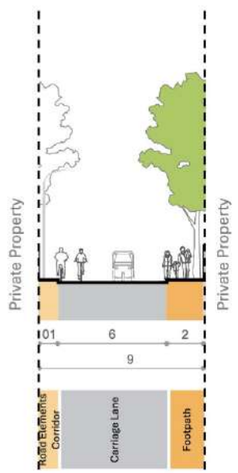
3(c) 18m – Collector Street



4(a) 12m – Local Street



4(b) 9m – Local Street



Harrington Road
Source: ITDP India

Other Features of the Plan

Integrated Planning (Land-Use and Transport Integration)

Climate-resistant and sustainable planning

Inclusive Planning for all users

Flood Resilient Planning

Travel Demand Management

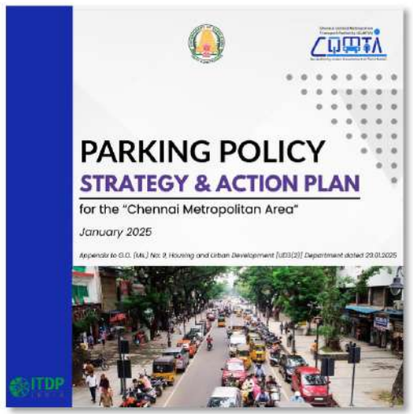
Electrification Strategy—LEZ/EV Policy

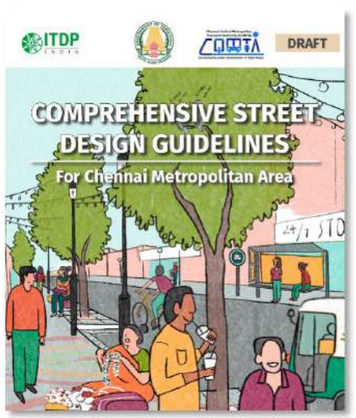
Discussions with DTCP & CMDA

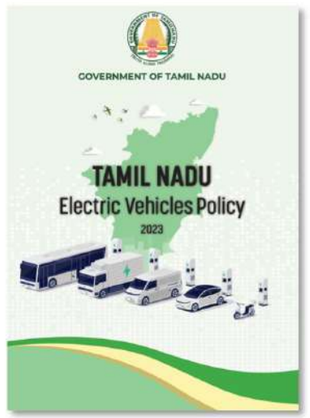
Discussions with DRA Representatives

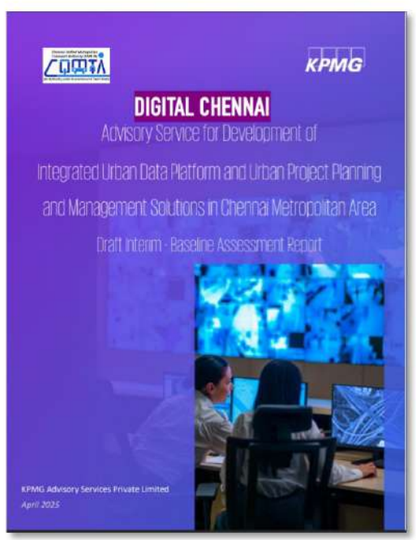
Discussions with Police Department

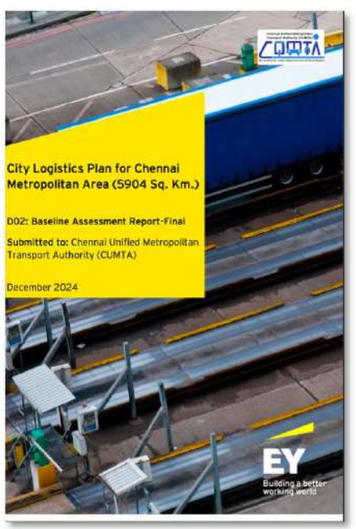
Other Studies/Policies/Plans that align with CMP

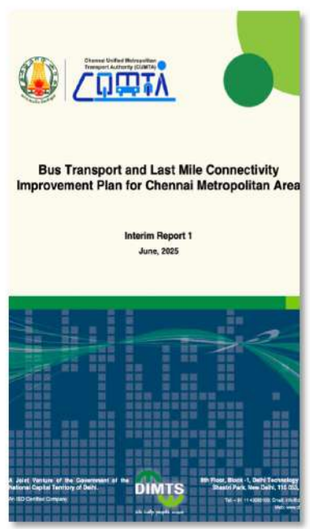










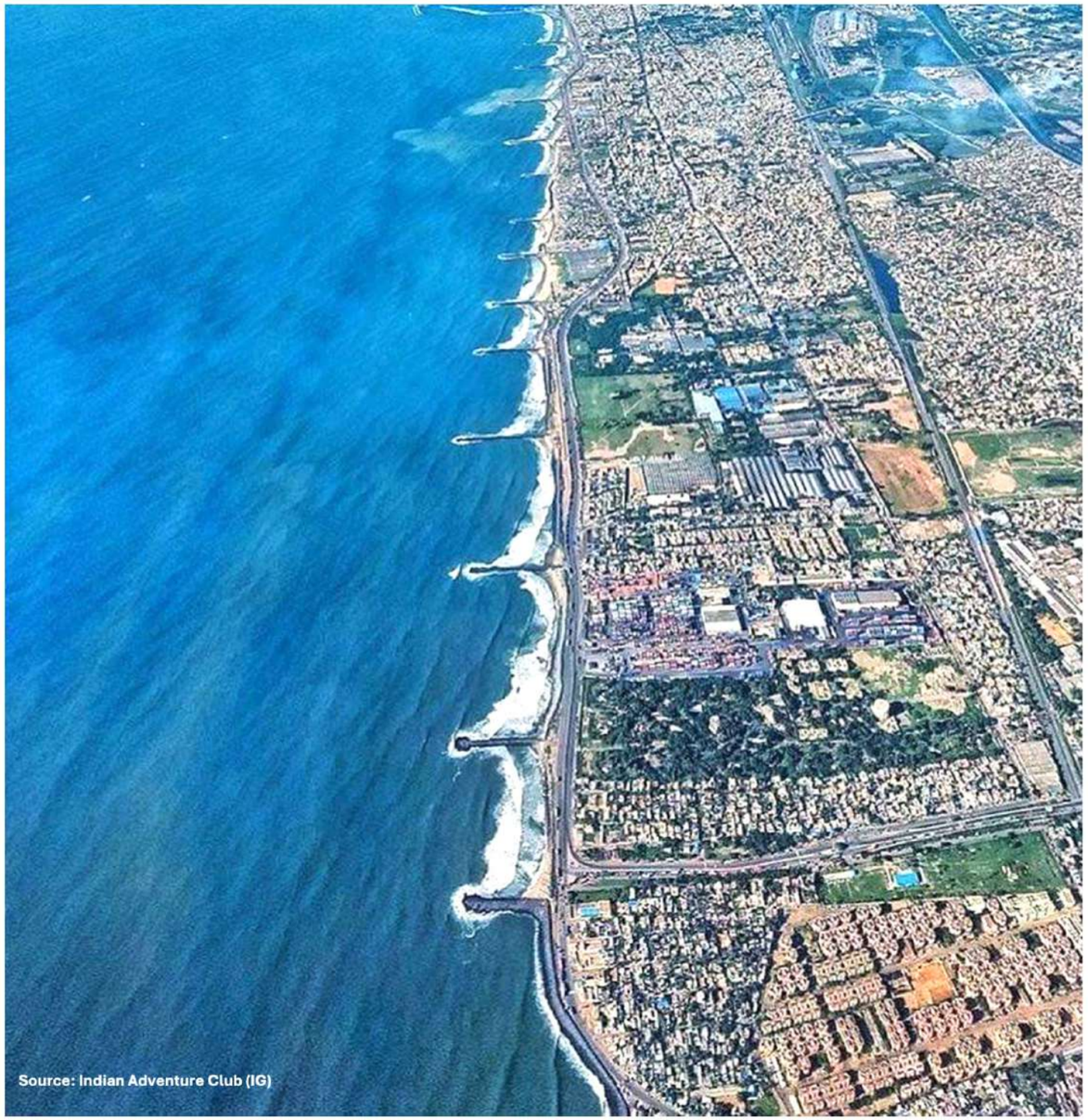


Central Area
Source: ITDP India

PART 4

INVESTMENT PLAN & IMPLEMENTATION FRAMEWORK

- Costing
- Institutional Framework



Source: Indian Adventure Club (IG)

INVESTMENT PLAN

COSTING

The total capital investment required over the next 25 years to implement the mobility projects identified under CMP is **INR 2.27 Lakh Crore.**

Sector Wise (CAPEX)	Short Term (2030)	Medium Term (2040)	Long Term (2048)	Total*	% of Share
Public Transport	61,641	84,062	46,770	**1,92,472**	84.7%
MMI	961	522	-	1,483	0.7%
Road Network	5,872	7,863	8,787	22,522	9.9%
Non-Motorised Transport	2,545	1,798	2,992	7,335	3.2%
Freight Management	2,540	-	825	3,365	1.5%
Total	**73,559**	**94,245**	**59,374**	**2,27,178**	100%

Public Transport	Short Term (2030)	Medium Term (2040)	Long Term (2048)	Total*
Bus Infrastructure	13,724	18,646	20,593	52,963
Metro	42,587	35,737	3,131	81,456
LRT	-	14,457	8,800	23,257
BRT	525	2,790	-	3,315
Tram	-	-	1,155	1,155
Inland Waterway	-	-	5,500	5,500
Suburban Rail	4,805	12,432	7,590	24,827
Total	**61,641**	**84,062**	**46,770**	**1,92,472**

1. *CAPEX has been considered for cost estimation at the base year price*
2. *An additional cost of approximately ₹20,000 crore must be earmarked for the O&M of buses, and ~₹20,000 crore for Metro, LRT systems for O&M.*
3. *RRTS & High-Speed rail costs are not considered as they are regional transit systems*

GOVERNANCE

INSTITUTIONAL FRAMEWORK

Empower CUMTA

- ✓ All urban mobility project proposals shall be aligned with CMP
- ✓ The project proposal shall be routed through the CUMTA's Empowered Committee chaired by the Finance Secretary, right at the planning stage.
- ✓ Creation of Urban Transport Fund (UTF) under CUMTA to allocate funds to various agencies for urban mobility projects

Pedestrian Centric Planning

- ✓ Adoption of **'Pedestrian First'** principle across all urban roads.
- ✓ Footpath development included in the project cost for all new roads, road widening, and MRT corridors
- ✓ O&M contracts to ensure footpath maintenance and removal of encroachments by road-owning agencies..

Formation of SPVs for Rail & Feeder Services

- ✓ Takeover of MRTS by State Government and management by CMRL.
- ✓ Tamil Nadu Rail Development Corporation (TN-Rail) for rail infra planning and operations may be set-up
- ✓ A separate Division under CMRL for **"Metro to the Doorstep"** services, including Last-mile connectivity (5km radius) and cycle sharing.

Digital Platform Integration

- ✓ Creation and management of Unified Databases for mobility (e.g., Digital Chennai).
- ✓ Road registers to be maintained by all road-owning agencies.
- ✓ Departmental data to be shared with CUMTA for centralized planning and monitoring.

Infrastructure Planning & Future Growth

- ✓ **Implementation of a Grid of Roads** to support accessibility and traffic decongestion in expanding urban areas by CMDA/ DTCP.
- ✓ Roads to be categorized in hierarchy and to follow the template design provided (Refer Pg 114).
- ✓ Handing over NHAI roads to State Highways within Urban jurisdiction

Parking Management

- ✓ Set-up Parking Management Unit (PMU) in CUMTA
- ✓ GCC/ ULBs to set-up Parking Management Cell (PMC)
- ✓ Adopt cluster-based Smart Parking Management system
- ✓ GCC/ ULBs to use Universal Parking App developed by CUMTA
- ✓ Discourage parking along transit corridors and arterial roads

PART 5

PROJECT MONITORING

- GRIDS Framework and Key Performance Indicator

MONITORING FRAMEWORK FOR CMP

GRIDS FRAMEWORK and KPIs

Green Mobility with a low carbon footprint, air and noise pollution

S.No	Index
1	% electrification of passenger vehicles
2	% mode share for PT
	a. % increase in bus ridership
	b. % increase in Suburban ridership
	c. % increase in Metro ridership
3	% of buses which are clean energy (EV, CNG etc)
4	% of passenger vehicles (cars, 2W, , IPT) which are clean energy (EV, CNG etc)
5	% of freight vehicles which are clean energy (EV, CNG etc)
6	AQI at locations with high traffic.
7	Emission by vehicles (all categories) in city area and expanded area. (CO_2 emissions per day

Resilient A system resilient to natural hazards

S.No	Index
1	No. of Metro stations operational and accessible during extreme rainfall event
2	No. of Suburban stations operational and accessible during extreme rainfall event
3	No. of Bus Terminal/Depots operational and accessible during extreme rainfall event
4	Km of Arterial Roads that are free from flooding during extreme rainfall event

Inclusive & Innovate A sustainable people-centric mobility & a data-driven system fostering innovation

S.No	Index
1	% of road network (9m and above) with footpath / pedestrian pathways
2	% of PT stops (bus, suburban. Metro) having dedicated barrier free footpath connectivity up to 500m from the stops
3	Percentage of public transport trips using digital payment

Efficient Development An efficient and well-performing system

S.No	Index
1	Peak period travel speed vs free flow travel speed on main corridors - arterial roads
2	Ratio of operating expenses/revenue per vehicle km (for bus, suburban, metro)
3	Percentage of number of PT trips started on time to Total number of Trips operated
4	Total km operated to the total no. of breakdowns

Safe environment for all

S.No	Index
1	Reduction in road crashes leading to non-fatal severe injuries. (breakdown for pedestrian and 2 wheelers).
2	% reduction in registered security cases (snatching, harrassment, theft etc.) on roads, PT stops and vehicles (breakdown by gender)
3	No. of Violations of traffic rules (challans generated).

Abbreviations

AFS	Air Freight Station
ANPR	Automatic Number Plate Recognition
AQI	Air Quality Index
AVLS	Automatic Vehicle Location System
BRR	Bus Route Roads
BRT	Bus Rapid Transit
CMA	Chennai Metropolitan Area
CMBT	Chennai Mofussil Bus Terminus
CMDA	Chennai Metropolitan Development Authority
CMP	Comprehensive Mobility Plan
CMRL	Chennai Metro Rail Limited
CMWSSB	Chennai Metropolitan Water Supply and Sewerage Board
CNG	Compressed Natural Gas
CPRR	Chennai Peripheral Ring Road
CSO	Civil Society Organisation
CUMTA	Chennai Unified Metropolitan Transport Authority
DOH	Department of Highways and Minor Ports
DRA	Disability Rights Alliance
DTCP	Directorate of Town and Country Planning
ECR	East Coast Road
EMU	Electric Multiple Unit
FGD	Focus Group Discussion
GCC	Greater Chennai Corporation
GHG	Green House Gas
GIS	Geographic Information System
GNT	Grand Northern Trunk
GPS	Global Positioning System
GRIDS	Green, Resilient, Inclusive, efficient Development, Safe
GST	Grand Southern Trunk
GWT	Grand Western Trunk
HH	Household
IC	Industrial Corridor
IPT	Intermediate Public Transport
IRR	Inner Ring Road
IUDP	Integrated Urban Data Platform
LMC	Last-Mile Connectivity
LOS	Level of Service
LRT	Light Rail Transit
MAWS	Municipal Administration and Water Supply
MDR	Major District Road
MLP	Multi-Level Parking
MMBT	Madhavaram Mofussil Bus Terminus
MMI	Multi Modal Integration
MMLP	Multi Modal Logistics Park
MOHUA	Ministry of Housing and Urban Affairs
MRT	Mass Rapid Transit
MRTS	Mass Rapid Transit System (Suburban)
MT CO2 e	Metric Tonnes of Carbon Dioxide equivalent
MTC	Metropolitan Transport Corporation
MUZ	Multi Utility Zone
NGO	Non-Governmental Organisation
NH	National Highways
NHAI	National Highways Authority of India
NMT	Non-Motorised Transport
O&M	Operation and Maintenance
OCIC	Oragadam-Cheyyar Industrial Corridor
ODR	Other District Road
OMR	Old Mahabalipuram Road
ORR	Outer Ring Road
PHPDT	Peak Hour Peak Direction Traffic
PIS	Passenger Information System
PMC	Parking Management Cell
PMU	Parking Management Unit
PT	Public Transport
ROA	Road Owning Agency
ROB	Road Over Bridge
ROW	Right of Way
RRTS	Regional Rapid Transit System
RTO	Regional Transport Office
RUB	Road Under Bridge
RWA	Resident Welfare Association
SIPCOT	State Industries Promotion Corporation of Tamil Nadu
SOP	Standard Operating Procedures
TC	Transport Commissioner
TIDCO	Tamil Nadu Industrial Development Corporation
TNEB	Tamil Nadu Electricity Board
TNGCC	Tamil Nadu Green Climate Company
TNSTC	Tamil Nadu State Transport Corporation
TOD	Transit Oriented Development
TP	Town Panchayat
TWAD	Tamil Nadu Water Supply and Drainage Board
ULB	Urban Local Body
ULCC	Urban Logistics Consolidation Centres
UTF	Urban Transport Fund
WRD	Water Resources Department

First Authority Meeting (2022)

Second Authority Meeting (2025)

Executive Committee Meetings

CMP Launch and Household Survey Outreach

For more details, visit the website
cumta.tn.gov.in

#transportforchennai

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