Knowledge Partner

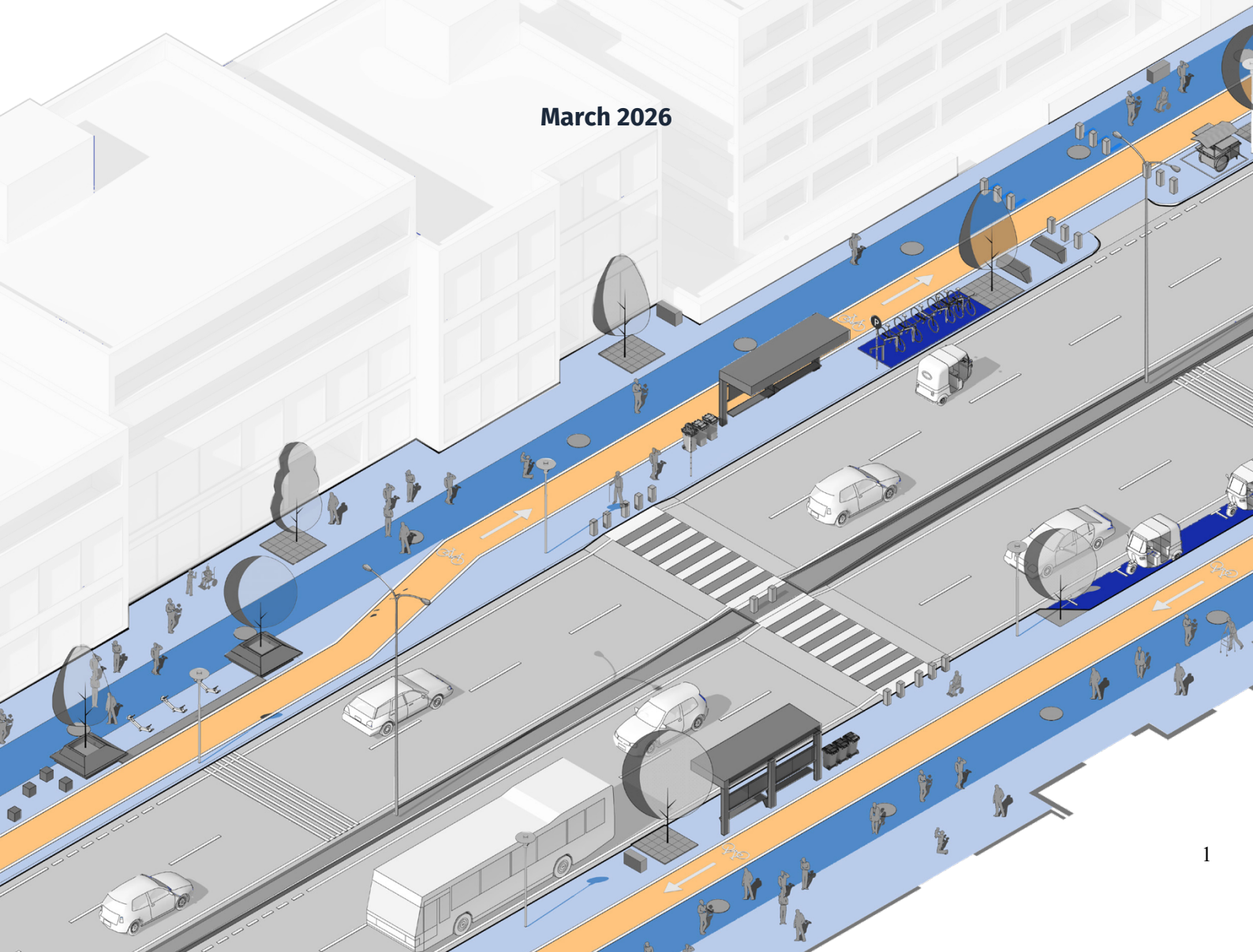
ITDP INDIA

PARKING POLICY, STRATEGY & ACTION PLAN

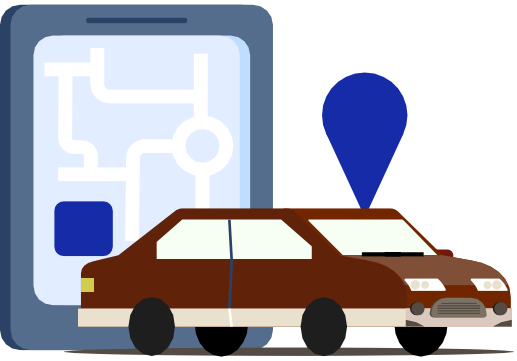
for

Madurai

March 2026



The Complete Street Policy, Comprehensive Road and Street Design Guidelines, and Parking Policy Strategy and Action Plan for Madurai were approved through Proceedings No. E1/014069/25, issued by the Madurai Municipal Commissioner on 12 March 2026. The policies were subsequently placed before the Madurai Corporation Council and approved vide Resolution No. 1403 dated 2 June 2026.



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PHILIPS
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Part 1

Parking Policy Vision & Principles



01

Introduction

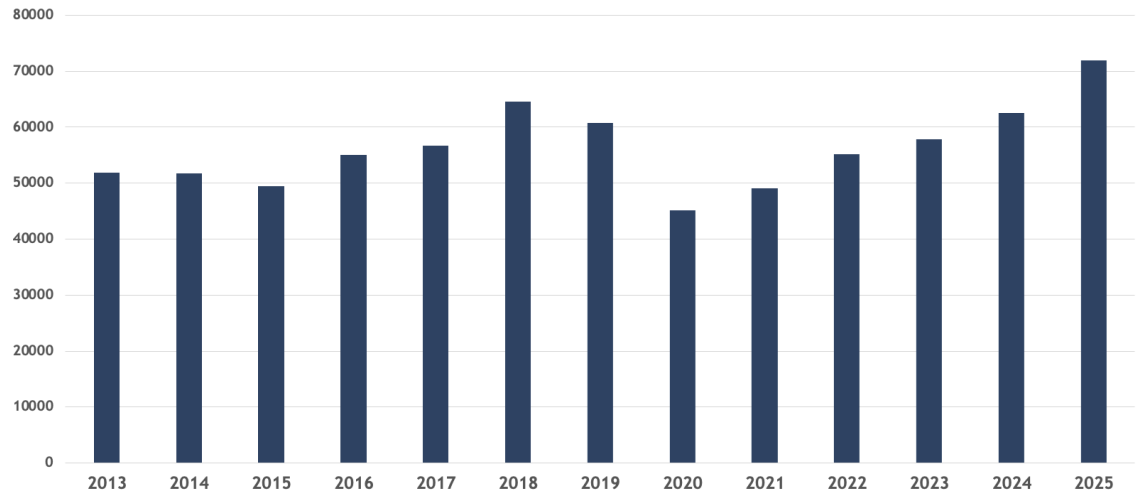


1 Introduction

Rapid urbanisation and increasing population have also resulted in the growing infrastructure requirements in most cities. When supply fails to meet the demand, it pressures the existing infrastructure. Gaps in the demand and supply of infrastructure create paths for unauthorised or unregulated activities, which makes urban management a challenging task in most cities in developing countries.

Transportation is a key sector where rapid vehicular growth has resulted in pollution, congestion and parking issues. The inadequate public transport supply in major cities results in the proliferation of private vehicles. This has caused immense pressure on parking spaces.

Total vehicles registered till 2013: 0.39 million



Total vehicles registered in last decade: 0.73 million

The Madurai Municipal Corporation (MMC) population is estimated to be 2.8 million in 2024 (as per Master Plan 2044) and the vehicle population exceeding 1.12 lakhs in 2025 (as E-Vahaan Portal). The ever-increasing demand for parking spaces has pushed parking to encroach on the limited road space, thus obstructing the traffic flow. Apart from the increase in personal motor vehicle use, particularly two-wheelers and cars, private cab aggregators, three-wheelers, and online delivery services have also seen a surge. The lack of effective on-street and off-street parking management has led to haphazard parking, vehicles encroaching on footpaths, unsafe road conditions, and inefficient traffic flow.

Resonance with Madurai Master Plan 2044:
9.6.4 Travel Demand Management (TDM)
9.6.4.1 Proposal for Parking Management
"....it is recommended for a parking policy to be developed for Madurai, which covers on-street and off-street parking, pricing, enforcement and management aspects."

9.6.5 Transport Strategies for core area
"....Area-level parking management plan: It is essential for on-street and off- street parking in the entire core area to be managed by a single operator, with strong enforcement. This is necessary to keep footpaths walkable and free of vehicles, and ensure that the limited street space is used efficiently."

02

Need for Parking Policy



2 Need for Parking Policy in MMC

The increasing number of private vehicles has led to a rise in parking demand. Efficient parking management is essential to disincentivise private vehicle trips and parking demand. The proliferation of private vehicles has led to increased demand for land for private vehicle parking. **This has resulted in the use of prime land for parking instead of other potential uses. Hence, parking supply must be recognised and regulated as a valuable real estate space.**



In view of the increased proliferation of electric vehicles in the future and the associated demand for charging infrastructure, parking spaces need to be reorganised and reallocated to facilitate this transition.

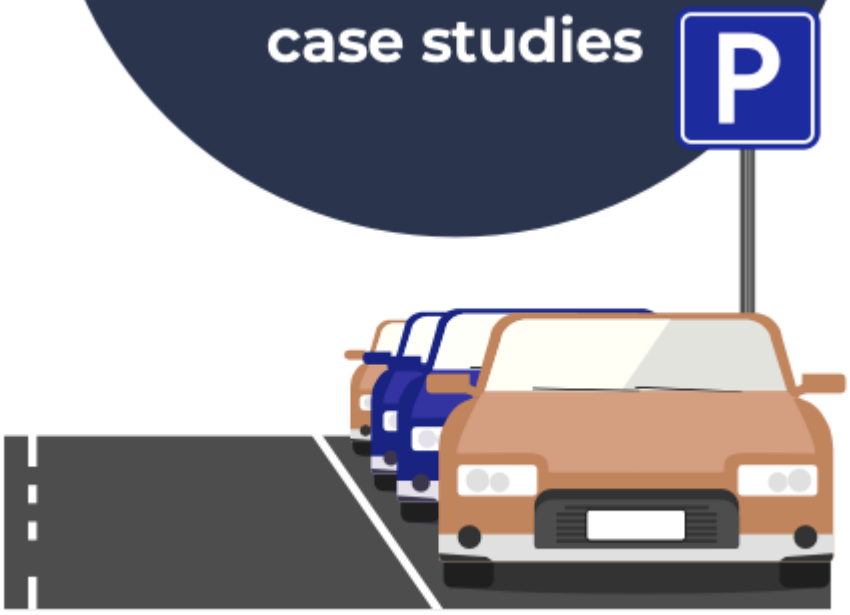
The lack of a data-driven approach and information on available parking spots leads to several unproductive detouring trips while searching for parking spots. Hence, a data-driven approach to parking management is the need of the hour. Since MMC encompasses various types of environments, such an approach will need to be tailored to reflect the specific characteristics of the area in question.

Managing parking will require the involvement and cooperation of various stakeholders, including the Madurai Municipal Corporation (MMC), Department of Highways, Directorate of Town and Country Planning (DTCP), Regional Transport Office (RTO), and the Police Department (Traffic).

A parking policy is essential for planning, implementing, and enforcing comprehensive parking management systems, embracing a model of shared responsibility.

03

Existing Literature & case studies



3 Existing Literature & Case Studies

In preparation for shaping the Madurai Parking Policy, extensive research has been conducted towards comprehending the prevailing literature regarding parking management case studies. Below, you'll find the key insights from this research.

3.1 Chennai Metropolitan Area

The CMA's parking policy was prepared by the Chennai Unified Metropolitan Transport Authority (CUMTA) and notified in 2025. The policy focuses on managing parking demand, introducing area-level management plans, promoting travel demand strategies, regulating residential permit parking, and adopting technology-based solutions for monitoring and enforcement. It mandates differential pricing between on-street and off-street parking, encourages proof of off-street parking for vehicle registrations, and establishes a Parking Management Unit under CUMTA to oversee planning, pricing, and implementation.



On-street parking management in Chennai| Source: ITDP India

3.2 Delhi

The comprehensive parking policy was prepared by the Transport Department of Delhi and notified in 2019. The policy focuses on meeting parking demands, flexibility in parking supply, funding, use of technology and implementation of area-wise parking management strategy. The Delhi government has notified the Delhi Parking Rules in 2019, according to which the State government has power to decide rules and fee structure.

3.3 Surat

The Surat Municipal Corporation prepared the Surat Parking Policy and Parking Control Regulations in 2018. The overarching principle for parking in Surat is "to progressively reduce the demand for parking and facilitate organised parking for all types of vehicles". This policy also intends to manage parking demand through pricing, reduce the use of personal vehicles and to encourage public transport

3.4 Bengaluru

The parking policy for Bengaluru was first prepared in 2012 and was adopted by the civic agency, Bruhat Bengaluru Mahanagara Palike (BBMP). The parking policy 2.0 was prepared by the Directorate of Urban Land Transport and approved by the Government of Karnataka in 2021. The key objectives of the policy is to ensure organised parking through market-driven supply, enforce paid parking and active management of parking demand.



On-street parking management in Bengaluru| Source: ITDP India

3.5 Pune

In 2016, Pune Municipal Corporation drafted the Parking Policy based on NUTP guidelines. The policy focuses on efficient parking operations, which will encourage citizens to use public transport. In line with the Comprehensive Mobility Plan, the policy looks at using parking as a travel demand management tool to make 80% of trips using public transport and reducing vehicle kilometres travelled by 50% by 2031. The policy also looks at transforming at least 10% of street parking space to public open space/ NMT infrastructure by rationalising parking.



On-street parking management in Pune| Source: ITDP India

The international case studies were also referred to understand the policy measures adopted to manage the traffic and travel demand effectively.

This section will examine four different cities based on the variety of measures they use to decrease vehicle kilometres travelled (VKT) and shift travel from car trips to other modes of transport.

Tools		Amsterdam	London	Copenhagen	Paris
Pricing Mechanisms	Curbside Charges	■	■	■	■
	Residential Permits	■	■		■
	Ring Fencing		■		
Regulatory Measures	Supply Caps	■			
	Minimums	■	■	■	■
	Maximums			■	
	Transit Based Min/Max Reductions	■	■		■
	Emissions Reduction Goals	■		■	■
	Public-Private Partnership		■		■
Advanced Technologies	Electronic Parking Guidance Systems				■
	Smart Meters				■
	Pay-by-Phone	■	■	■	■
	Scan Cars	■			

■ Parking Management Strategies applied through Parking Policy

Policies applied in European cities; Source: 'Europe's Parking U-Turn: From Accommodation to Regulation - ITDP ' by Michael Kodransky and Gabrielle Hermann (2011)

04

Relevant provisions of National and State Policies



4 Relevant provisions of National and State Policies

National Urban Transport Policy (NUTP) 2014
by the Ministry of Urban Development (MoUD)

8.4 - Parking

8.4.1 - Land is valuable in all urban areas. Parking places occupy large portions of such land. This fact should be recognised in determining the principles for allocation of parking space.

8.4.2- Levy of a high parking fee, that truly represents the value of the land occupied, should be used as a means to make the use of public transport more attractive..... Simultaneously, a graded scale of parking fee, that recovers the economic cost of the land used in such parking should be adopted.....

8.4.5 - Under the on-going reform process in India, cities are expected to make the transition from the conventional approach to using parking as a demand management tool..... Standards can vary from zone to zone or city to sub-urban areas within the city and may be reviewed periodically and revised if necessary.

National Transit-Oriented Development Policy 2014
by the Ministry of Urban Development (MoUD):

7.5 - Multi Modal Integration

7.5.5- To ensure that the area around the transit station remains congestion free and to facilitate easy transfers, it is important to provide adequate parking and pickup/ drop-off facilities for the above modes at suitable locations at the stations and in the influence zone.

7.8 - Managed Parking

7.8.1 - To discourage the use of private vehicles and to manage parking in TOD, it is essential that the supply of the parking is reduced and made expensive within the influence zone.

7.8.2 - On-street parking should be prohibited within 100 m of the transit station, except for freight delivery and pickup or drop-off of the differently abled.

7.8.3 - The use of parking spaces within the influence zone can be maximised by sharing of spaces between uses that have demand during different times of the day.

7.8.6 - Cities should have a parking policy with heavy penalty for unregulated parking in the influence zone and ensure that the same is implemented.

Principles of Parking Management Policy 2010
by the Unified Traffic and Transportation Infrastructure (Planning and Engineering) Centre (UTTIPEC), Delhi Development Authority

a. Private vehicles must be parked on 'a fully-paid rented or owned' private space.

b. Parking is a consumer commodity, not a legal right. No subsidised parking is to be provided in public spaces. User must pay full cost of parking facility based on land opportunity cost, capital cost, O&M costs and temporal demand.

National Urban Policy Framework 2020
by the Ministry of Housing and Urban Affairs (MoHUA):

Transport and Mobility (Rationale): Parking policies should allow for facilities for electric vehicle (EV) charging.

Tamil Nadu Electric Vehicle Policy 2023
by the Industries, Investment Promotion and Commerce Department, Government of Tamil Nadu

City Building Codes: The Government of Tamil Nadu is in the process of amending the Tamil Nadu Combined Development and Building Rules, in line with the Model Building Bylaws (MBBL) 2016 for EV Charging Infrastructure issued by the Government of India.



On-street parking management in T.Nagar Chennai
Source: ITDP India

05

Vision



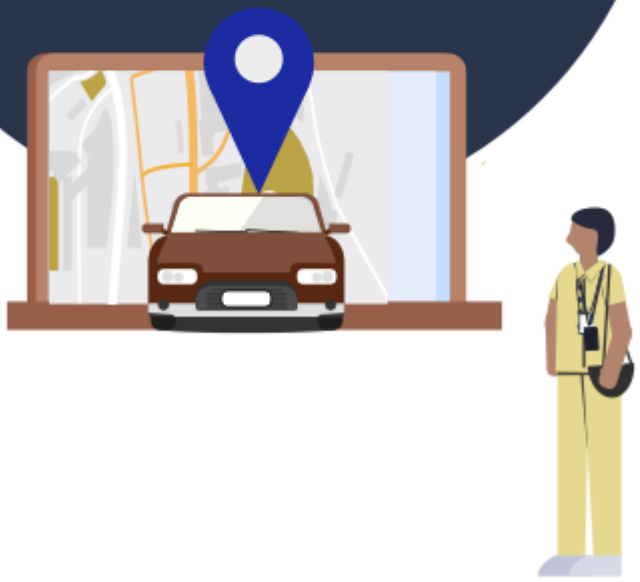
5 Vision

The parking policy aims to transform Madurai into an urban space where parking for motor vehicles is **organised, optimised, and managed to ensure that traffic management is smooth and public transport & other sustainable modes are encouraged,** so that the limited urban space is efficiently used for all road users.

Madurai is committed to establishing urban transportation systems that prioritise people's needs, with a focus on creating a liveable and inclusive community. This goal is to be achieved through an efficient and sustainable approach, providing integrated, safe, and convenient mobility options for individuals of all abilities, as well as for the transportation of goods. This will have a positive impact on the regeneration of urban spaces through influencing transport choices and mitigating congestion, emissions and climate change.

06

Guiding Principles



6 Guiding Principles

The Parking Policy for the MMC shall achieve the following objectives with the outlined principles.



Manage parking as a valuable real-estate space

In an urban scenario, where land is a scarce resource, parking should be recognised as a valuable real-estate space and not as a free right. Parking of private vehicles must be charged. Additionally, considering that freight and service vehicle movements are integral to economic activities, optimizing freight parking becomes imperative.



Create active streets

Designing footpaths in harmony with parking management enhances pedestrian safety and provides convenient opportunities for pick-up and drop-off. Well-planned street layouts with active street edges not only improve the livability of neighbourhoods but also maximize the utilization of street space.



Design inclusive and universally accessible parking

Implementing comprehensive planning and design strategies involves the thoughtful allocation and designation of parking lots to accommodate all user groups. By prioritizing inclusivity, efficiency, and universal accessibility, parking infrastructure can better serve the diverse needs of the community.



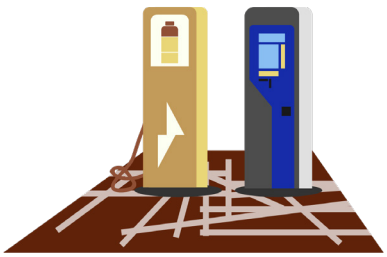
Ensure Curb Management and Optimise on-street parking

Emphasising the prioritisation of on-street parking allocation ensures that spaces are allocated first to bicycles, ride-sharing services (including IPT, taxis, and cab aggregators), and designated pick-up/drop-off points, ahead of private motor vehicles. This allocation strategy is informed by comprehensive parking surveys to accurately reflect usage patterns. The overarching goal is to allocate a higher proportion of parking spaces for two-wheelers compared to four-wheelers, particularly in densely congested areas, thereby encouraging the use of space-efficient vehicles.



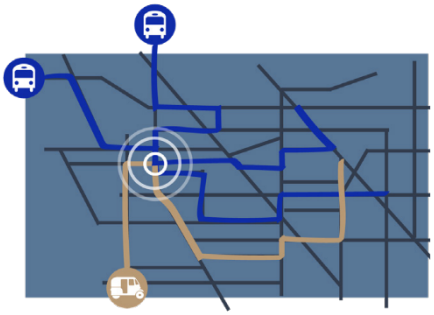
Leverage technology in parking management

Embracing technological advancements in parking management and enforcement to enhance efficiency and accuracy. Utilize innovative solutions to disseminate parking information directly to end-users, empowering them to plan their journeys effectively and navigate parking options with ease.



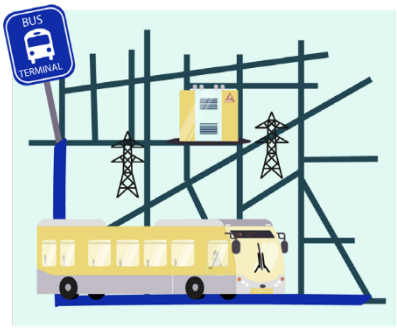
Facilitate the proliferation of EV

Establishing a comprehensive network of charging stations entails integrating essential regulatory support into policies and regulations. By fostering an environment conducive to the adoption and expansion of electric transportation, we can effectively facilitate the growth of sustainable mobility infrastructure.



Enhance last-mile connectivity around Public Transport stations/ access

Ensuring adequate parking facilities for two-wheelers, bicycles, and intermediate modes of transport at multimodal hubs is crucial, complemented by reliable first and last-mile feeder services. Additionally, promoting public transport and enhancing the capacity to supply, operate, and manage Integrated Public Transport (IPT) systems are vital steps in encouraging modal shifts and curbing the reliance on private vehicles. By doing so, pressure on parking infrastructure can be alleviated. Simultaneously, reducing parking availability around public transport stations/ access serves as a long-term behavioural nudge towards sustainable transportation choices.



Optimise parking at freight and bus terminals

Assessing parking demand and planning for efficient capacity at freight and bus terminals enhances functionality, reduces congestion, improves safety, and bolsters transportation network sustainability

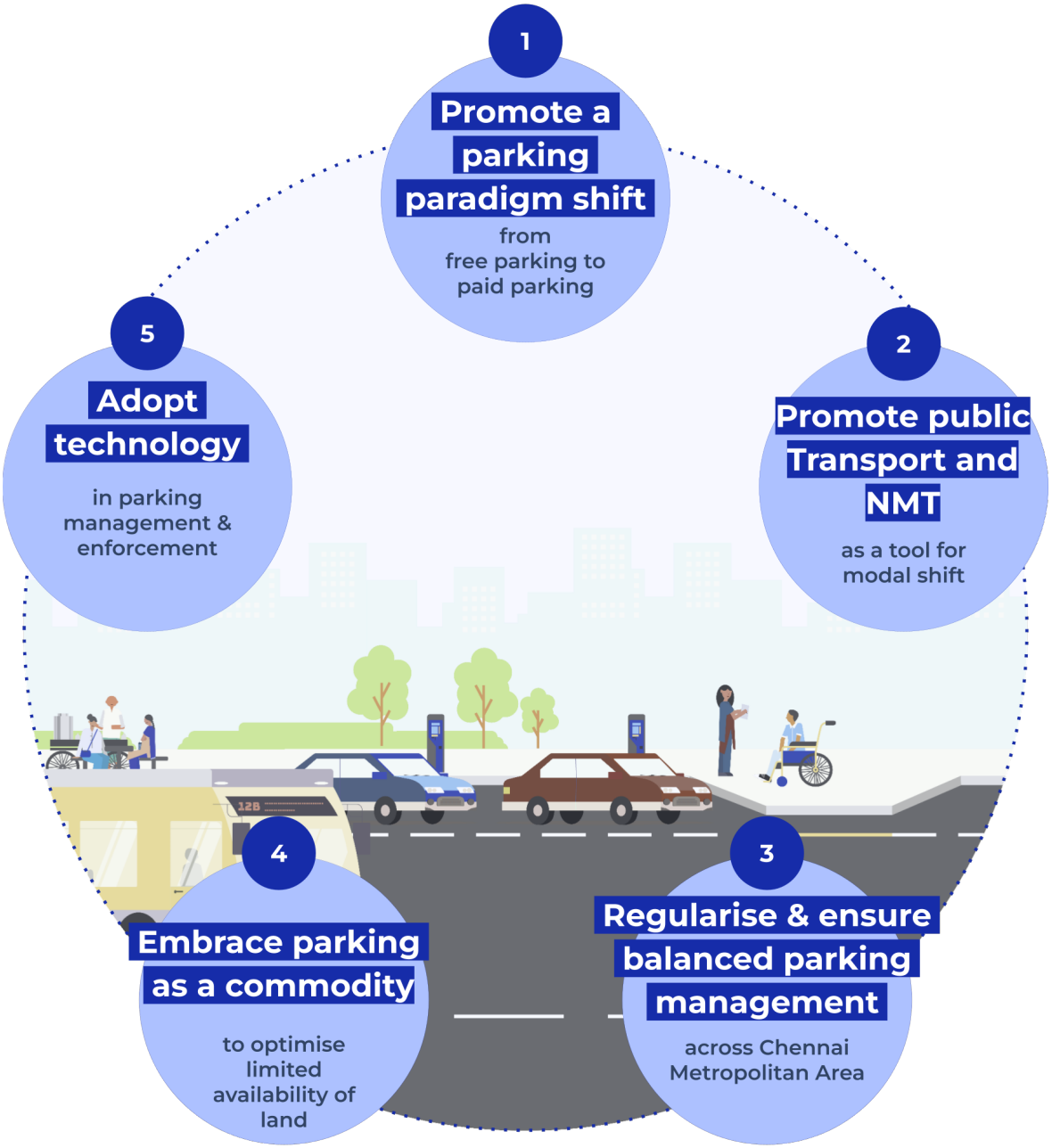
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Goals and Objectives



7 Goals and Objectives

The following overarching goals and objectives set forth the framework for realising the vision for the parking policy:



Goal 1

Promote a parking paradigm shift from free parking to paid parking

- Price parking based on demand, duration, time of the day, location and coverage of public transport
- Develop a business model to make parking financially self-sufficient.

Goal 2

Promote Public Transport and NMT as a tool for modal shift

- Foster modal shift to NMT and/or public transport

Goal 3

Regularise and ensure balanced parking management across MMC

- Manage on-street parking such that a smooth traffic flow is ensured.
- Design inclusive parking facilities
- Enable the private sector to invest, provide and manage parking
- Plan for the parking of urban freight and public and private buses.

Goal 4

Embrace Parking as a commodity to optimize limited availability of land

- Manage parking effectively through planning & design, pricing & enforcement, and reinvestment measures.
- Unbundle parking from real estate in Transit Oriented Development and other special zone areas.
- Bring private parking spaces into the public pool.

Goal 5

Adopt technology in parking management and enforcement

- Leverage technology to disseminate parking information, management and enforcement



On-street parking management in T.Nagar , Chennai
Source: ITDP India

Part 2

Parking Management Strategy & Action Plan



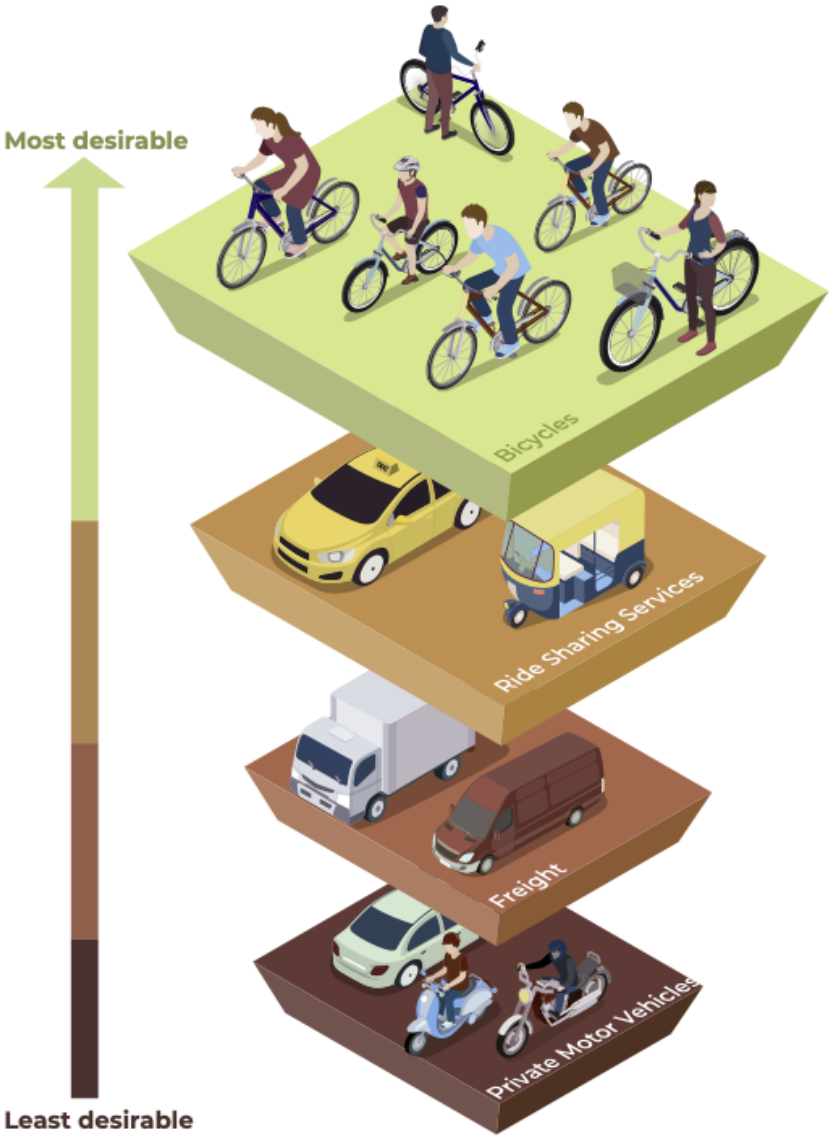
01

Introduction



1 Introduction

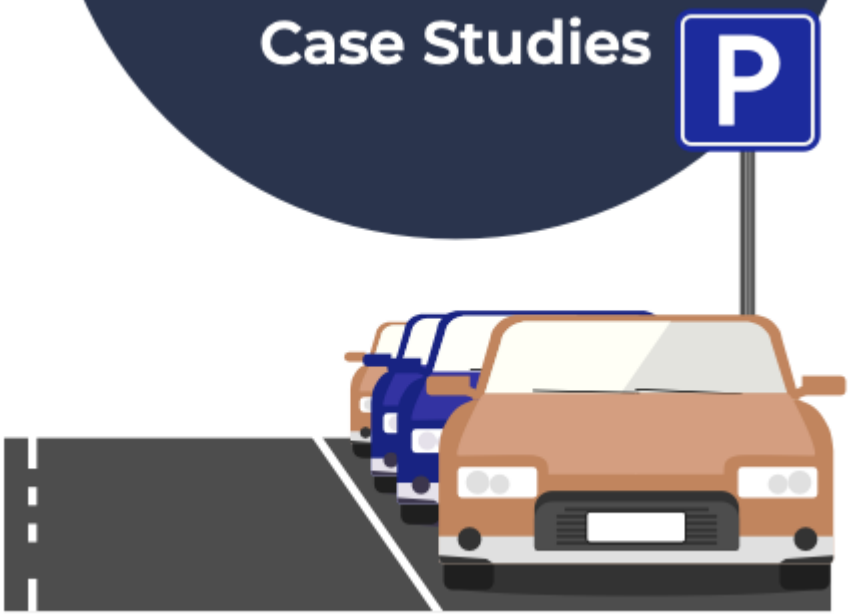
In the realm of urban planning, effective parking management is pivotal for addressing challenges like vehicular congestion and optimising urban spaces. This policy, integrates statutory and non- statutory processes, emphasising compliance with regulations and employing a nuanced strategy. It transcends boundaries by aligning with various urban initiatives, formulating meticulous parking plans, and incorporating innovative methodologies. Covering on-street/off-street parking, public/ private facilities, and regional freight management, the policy aims to enhance urban mobility, reduce congestion, and contribute to sustainable development in the Madurai Municipal Corporation (MMC) Area. Recognizing the challenges posed by urbanisation and a growing population, it addresses infrastructure demands and acknowledges the inadequacy of public transport options. In the critical transportation sector, it emphasises the surge in private vehicles, particularly in the MMC, urging efficient on-street/off-street parking management to rectify chaotic situations, enhance road safety, and optimise traffic flow.



Prioritization of on-street parking allocation will ensure bicycles, ride-sharing services (IPT, taxis, cab-aggregator), and pick-up/drop-off points over private motor vehicles.

02

Existing Literature and Case Studies



2 Existing Literature & Case Studies

In preparation for shaping the Madurai Parking Policy, extensive research has been conducted to understand the prevailing literature on parking management case studies. Below, you'll find the key insights from this research.

2.1 Case Studies on On-street Parking Management

Design of on-street parking management has a direct impact on the efficient use of the road space. It has been observed that many cities have adopted parallel parking orientation mainly for four wheelers for better discipline in parking. San Francisco and Seoul used striped lines for separation of parking bays while Singapore installed bollards to separate parking bays from footpaths/cycle tracks. Various design features were adopted to segregate parking and pedestrian pathways. In Taipei, various design measures were adopted to organise two-wheeler parking and considerable improvement was observed.

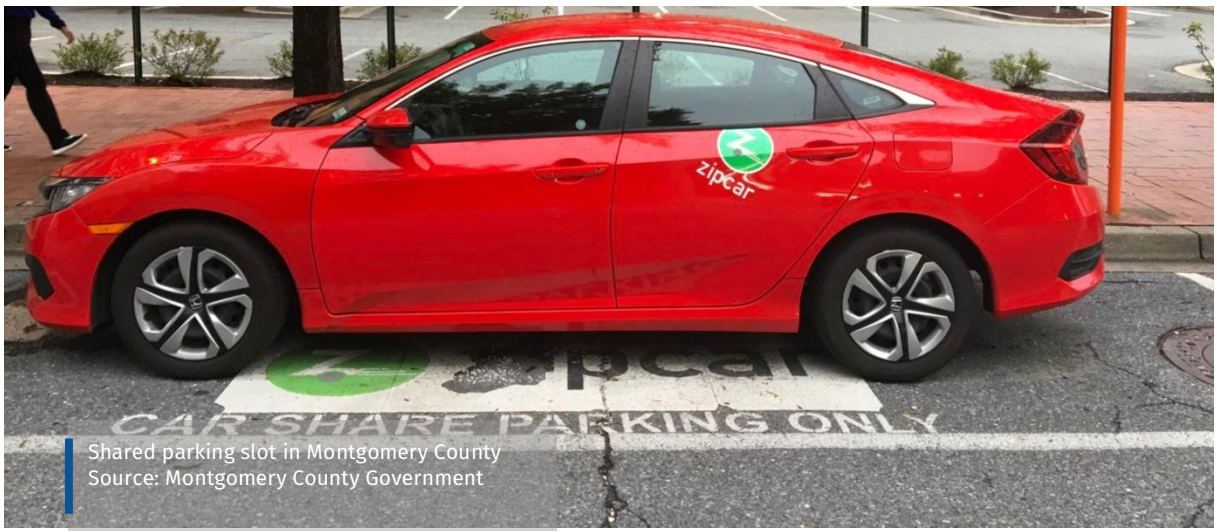


On-street parking management in San Francisco Source: SFMTA

2.2 Case Studies on Shared Parking

2.2.1 Montgomery County, Maryland, USA

The County has several parking management districts that correspond with central business districts in several cities, such as Bethesda and Silver Spring, where a shared parking program is part of a long-term strategy to offer parking as a shared resource. The program enables financial lenders to consider shared parking if they are likely to withhold financing due to lack of parking in a development on-site plan. This has helped promote mixed-uses around transit.



Shared parking slot in Montgomery County
Source: Montgomery County Government

2.2.2 Beijing, China

In early 2011, the Beijing government started promoting shared parking by encouraging and guiding institutions in opening their parking lots to the public after work hours. By the end of 2011, 61 parking lots were sharing 8,946 spaces in 6 central districts. Most of these shared parking lots are open to residents in the surroundings between 6pm and 8am. In late 2013, the Beijing government approved another policy on shared parking where more details of the mechanism were explained. Charging for parking must be within the parameters permitted by the Parking Price Bureau and registration must be completed with the Industrial & Commercial Bureau.

Source: 'Shared Parking' by Michael Kodransky, ITDP

2.3 Case Studies on Residential Parking Permits

Spillover from central business districts (CBDs) into residential areas prompts the need for residential parking permits. It is also a way to better manage the particular demands of residents, which differ from short-term visitor and commuter parking. Residents in the Camden and Islington boroughs of London pay for residential parking permits based on their vehicle's CO2 emission standards that are assessed at the time of registration, the most noxious cars pay a higher price. Residential parking permits in Munich helped reduce the share of car trips from 44% to 32%. Nearly 27% of car commuters switched to another mode of transport.Meanwhile, public transit ridership increased from 40% to 47%.

2.4 Case Studies on Earmarking/Ring Fencing

Barcelona, Strasbourg, Munich, and certain boroughs in London earmark revenue from parking funds to support sustainable transport. Public support for parking charges can be won when the surplus funds are used to improve public transit, walking, or cycling conditions. In the London borough of Kensington and Chelsea, 12% of parking revenue is used to fund Freedom Pass—a program that gives free transit tickets to the elderly (60+) and disabled. In Barcelona, 100% of parking fees are used to support Bicing—the city's bike sharing program arranged as a public-private partnership with ClearChannel.

2.5 Case Studies on Parking Caps & Maximums

2.5.1 Parking Maximums

Some cities in Europe have recognized the need to institute parking maximums, creating ceilings for the amount of parking included in new developments. Cities like Zurich, Amsterdam, and Strasbourg are leading the way in this initiative while most other cities are still following regulations for minimums based on antiquated building codes that have not been updated in decades. Switzerland, the United Kingdom, and Italy set maximums as national guidelines. The Milan metropolitan area tailors' national standards to the local context.

2.5.2 Parking Supply Caps

Hamburg, Zurich,and Budapest have instituted caps on the total parking supply in the city center, reforming the building codes to freeze the existing inventory and ban any further increase.

Source: 'Europe's Parking U-Turn: From Accommodation to Regulation - ITDP ' by Michael Kodransky and Gabrielle Hermann (2011)

2.6 National Case Studies

Many cities in India have adopted parking policies and various initiatives proposed under it and there are efforts for better parking management. Cities like Chennai, Delhi, Bengaluru, Surat, Pune have proposed on-street parking pricing based on duration, time, proximity to transit in the policies. Residential parking permits have been discussed in the parking policy of Bengaluru and Surat. For off-street parking, cities have proposed lower charges to promote the use of off-street facility and levy higher charges for on-street parking. In case of use of technology, Bengaluru has implemented smart parking meters and kiosk along 10 roads. Regarding on-street parking management, emphasis has been given to on-street parking delineation and street design in the policy and strategy document. Surat, Pune, Bengaluru, and Chennai have demarcated on-street parking spaces on some of the major streets of the city.



Smart on-street parking management in Bengaluru
Source: ITDP India

The below table gives a brief overview of how parking policies respond to the above parameters. 'Green' indicates that the policy mentions the parameter with recommendations, 'yellow' indicates that there is some mention in the policy but it does not provide clear directions or recommendations and 'red' indicates that the parameter is not mentioned in the policy.

	Price on-street parking	Shift on-street to off-street	Promote market driven off-street supply	Limit off-street parking supply	Promote shared parking	Surplus parking revenue to improve neighbourhood
New Delhi						
Bengaluru						
Pune						
Ranchi						
Pimpri Chinchwad						
Surat						
Ahmedabad						

03

Parking Management Strategies



3 Parking Management Strategies

The policy proposes parking management recommendations through statutory and non-statutory processes. The statutory process shall include the **integration of parking management** measures with the Master Plan/Development Plan and Building Control/Development Regulations. The non-statutory process is proposed as a four-fold approach: **Planning and Design, Pricing and Enforcement, and Reinvestment,** and the adoption of the following recommendations to manage parking in the MMC.



3.1 Integrating parking management measures with statutory planning processes



In accordance with the statutory framework (as mentioned in the Tamil Nadu Town and Country Planning Act–TN-TCP Act,1971) governing city-level planning, including the formulation of the Master Plans, Development Plans, and Regional Plans, shall integrate the city-level parking strategies. These strategies must seamlessly align with development patterns, road networks, and the public transportation system. Furthermore, it is essential to integrate neighbourhood parking management measures with a range of planning initiatives, encompassing neighbourhood plans, Local Area Plans (LAP), Transit-Oriented Development (TOD) plans, station area development plans, and other micro-planning tools, following the implementation of the Mass Transit Rapid Transit system Implementation.

As a Travel Demand Management measure, all new establishments (residential, commercial, institutional, industrial), with a FSI area of 10,000 sq.m and above, shall adhere to the Traffic Impact Assessment benchmarks to be set by the DTCP during the planning stage.

To execute this integration effectively, the Development Authority shall comprehensively integrate off-street parking management measures, as outlined in the TNCDBR of 2019, and any subsequent amendments thereto. (For a more detailed recommended off-street parking reforms, reference may be made to Section 3.2.3, 3.2.4 and 3.2.9).

3.2 Planning and Design

The planning and design approach for parking management measures is looked at in two-tiers

Parking Strategy and Action Plan

It is a city-level strategy document that outlines how urban development impacts parking supply and demand, within the MMC boundaries, with a range of possible solutions the city can undertake based on the baseline data for efficient parking infrastructure management.

Area-Level Parking Management Plan

It is a localized and detailed neighbourhood level-plan that addresses parking issues in the identified neighbourhood. This includes detailed assessments of demand and supply of parking, strategies for curbside management, and solutions to improve parking efficiency and accessibility in the designated area.

3.2.1 Parking Strategy and Action Plan for the MMC

The following are the components of the Parking Strategy and Action Plan

1. Identify Parking Management Clusters/neighbourhoods based on land use, traffic and parking patterns, existing road hierarchy, parking demand (by mode, public transport network and other regional characteristics. This shall also be done in alignment with the existing administrative boundaries of the ULBs, Traffic Police, Regional Transport Offices (RTOs), and Planning Authorities.
2. Propose a phasing plan and a five-year roadmap for implementing parking management measures.
3. Develop a methodology for creating parking management plans at appropriate scales (area-/ward-level, zonal-level, etc.) for all types of users (duration, type of vehicle, time of day and day of the week)
4. Explore business models to provide and manage parking and public e-charging infrastructure for top-ups with fast charging facilities in an integrated manner, with a critical focus on Public-Private Partnership (PPP).
5. Create key performance indicators (KPIs) to monitor and evaluate policy outcomes.

3.2.2 Prepare Area-Level Parking Management Plans

Prepare Area-Level Parking Management plans for an extent of around 3-5 sq.km within the Parking Management Cluster in the MMC, and periodically update them to implement context-specific parking rules and regulations. These plans shall guide the management of on-street and off-street parking comprehensively in alignment with the recommendations as laid out below:

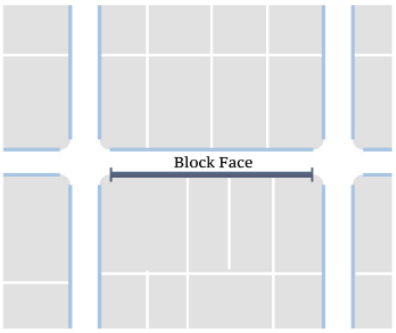


Figure 01 Block face

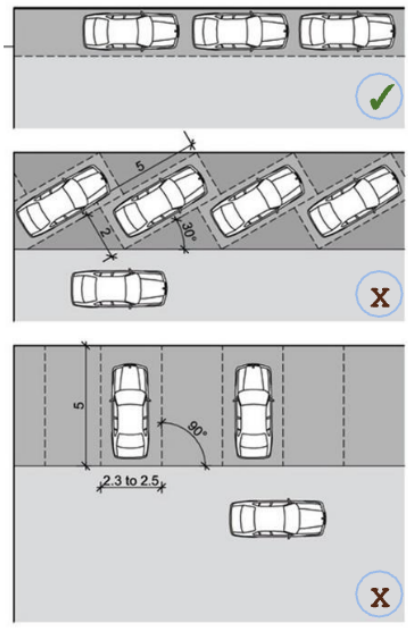


Figure 02 Parking slot configurations

1. The Area-Level Parking Management plans shall be delineated based on local landmarks, block size, land use, traffic and parking patterns, existing road hierarchy, public transport network and parking demand for the purpose of preparing area-level parking management plans.

3. Each block face—the stretch of any/all street between two intersections— may be designated as paid parking, free parking, or no parking, as shown in Figure 01.

   A block shall be defined as a plot(s) surrounded by public streets on all sides.

4. Demarcation of on-street parking shall be discouraged on all roads identified as Bus Routes Roads by the ULB. In case of higher demand, parking should be designed and provided so as it causes no hinderance to the movement of buses.

5. On-street parking shall be allowed/provided only on streets with right of way (ROW) 9 m and above. When provided, parking rules shall be defined for every 100m segment of the total block face length, as the parking scenario may vary.

6. For parking 3-wheelers and 4-wheelers on streets, parallel parking shall be preferred over angular or perpendicular parking (as shown in Figure 02) in consideration to the existing standards to ensure reduced conflict with traffic flow during parking-in and driving-out and efficient use of road space for all street users. Perpendicular parking configuration shall apply in the case of two-wheelers and cycles.

7. On-street parking shall be discouraged on arterial streets, except on service lanes, if present. This is to ensure a smooth flow of traffic. In case of higher demand streets, parking should be designed and provided so as it causes no hinderance to hinder traffic flow

8. Parking slots for 4-wheelers and 2-wheelers shall be demarcated on each block face only after providing the requisite on-street space for public utilities, footpaths, cycle tracks (where required), trees, bus-stops, rickshaw and taxi stands, seating, space for vending, and driveways. as shown in Figure 03

i. A few parking slots within each block side may be designated for cycles

ii. For PMVs, the proportion of parking slots for 2-wheelers shall reflect the share of those vehicle based on parking surveys and be more than 4-wheelers to encourage the use of space-efficient vehicles, especially in congested areas.

iii. On-street parking spaces shall not be provided within a 100m distance from public off-street parking facilities.

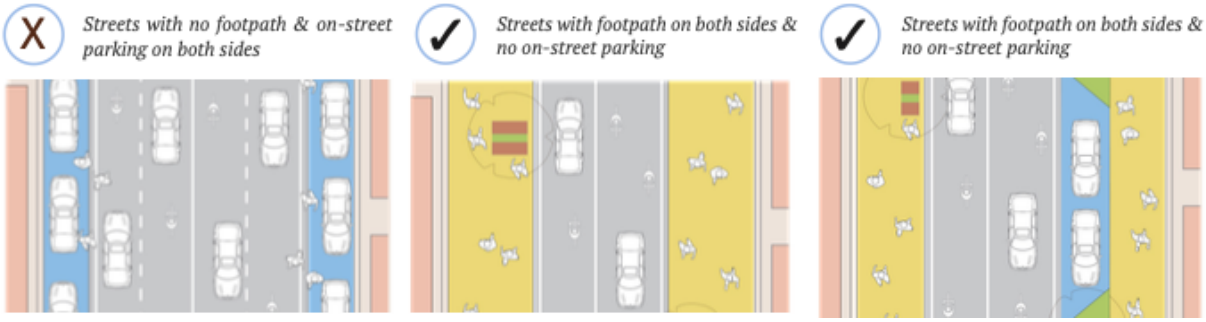


Figure 03 Streets prioritisation: footpaths are not optional, but parking is

9. Area-level parking management plans shall be reviewed annually (and more frequently if necessary) to assess the impact of development changes on parking demand. For example, a new supermarket on a low-parking-demand street may now attract more parking, requiring a revision in existing management rules. (Refer to 3.2.8 to consider the impact of any new establishments and the need for Traffic Impact assessment and off-street parking regulations.)

10. On-street parking in high-demand, congested areas (for 4-wheeler and 2-wheeler) shall be notified and enforced with a maximum allowable parking duration (not exceeding 2 hours) to encourage more people to share the limited street space efficiently.

11. In addition to the above-listed recommendations, area-level parking management plans shall also cover the following:

i. Measures for managing parking during special events such as festivals, local events, and sports events.

ii. Measures for managing parking in special zones including school zones, hospital zones, industrial parks, markets, transit hubs, terminals, and tourist destinations.

12. The area-level parking management plans shall be complemented with a detailed layout of static and dynamic signage to inform the users of parking rules, availability, rates, time limits, and other relevant information.

3.2.3 Manage Public Off-Street Parking Facilities

Manage public off-street parking facilities, including multi-level and surface parking, to ensure optimum utilisation of all available parking spaces.

1. The usage of existing public off-street parking facilities shall be improved by pricing on-street parking higher than the off-street parking facilities. This can be complemented by establishing no-parking zones around existing public off-street facilities and conducting strategic evaluations to optimize their security and accessibility. This may also encourage existing underutilised parking spaces within public and private buildings to be made available for public use and nudge long-duration parking activities to be shifted to off-street facilities.
2. Before building a new off-street parking facility, the usage of existing facilities (both public and private, if present) shall be assessed, and on-street parking shall be managed in order to validate the feasibility and need for new off-street parking facilities.
3. A market-driven and user-pay principle shall be adopted where the private sector finds building, operating, and maintaining a parking facility feasible. Private sector participation shall be encouraged by developing off-street parking through appropriate pricing, regulatory and enforcement mechanisms.
4. Off-street public parking facilities shall operate with night-time parking as well. These facilities may offer weekly or monthly parking options for regular users, accompanied by appropriate charges.
5. All multi-modal transport hubs shall be identified and allocated with a dedicated off-street parking area for autorickshaws and cab-aggregator services to encourage shared mobility. Any dedicated on-street parking for PMV shall be discouraged in the area within 50m of the major mass transit hubs and 20m from bus stops. Pick-up and drop-off points and IPT parking shall be provided within 20m from the transit stations/bus stops.
6. Park-and-ride facilities, when created, shall be prioritised for two-wheelers and notified with a maximum allowable parking duration of 12-14 hours.
7. Parking spaces may be reserved for differently abled as mentioned in the TNCDBR 2019 and the amendments thereto.

3.2.4 Manage Private Off-Street Parking

Manage private off-street parking in private premises and public buildings (whose parking is not open for public use) along with on-street parking and public parking facilities.

1. Residential, commercial, and institutional campuses shall be encouraged to open up unused off-street parking spaces for public use where there is potential for shared parking, with support from private parking aggregators.
2. Through revisions in the Tamil Nadu Combined Development and Building Rules (TNCDBR), 2019 and other relevant statutory documents, mandatory parking minimum requirements shall be reduced, parking maximum rules shall be introduced, and shared parking shall be promoted.

i. Transit-Oriented Development (TOD) policy shall be implemented with reduced parking requirements in areas with accessible and high-frequency public transport.

ii. Congestion-based zoning and parking requirements shall be embedded through the Master Plan/Development Plan and Building Control/ Development Regulations

iii. ULB/Zone-specific parking supply factors shall be introduced to address the varying demand across the Municipal Corporations, Municipalities, Town Panchayats, and other settlements under the MMC. The parking supply factor shall also be aligned with the sustainable mobility vision for the MMC set out by the Comprehensive Mobility Plan/ Master Plan/ Building Control/ Development Regulations.

iv. Off-street private parking facilities shall be encouraged to be open to public use to ensure efficient utilisation while addressing safety and security concerns resulting from such use.

3. A recurring parking development fee (for all forms of parking spaces, excluding cycle parking) that is equivalent to or more than the development fee charged for floor space shall be levied on private off-street parking facilities which are not shared for public use. This shall then be invested in public transport, walking, and cycling initiatives.
4. The planning and building approval requests within the MMC shall be scrutinised to match the parking requirements suggested by the TNCDBR 2019 and any amendments thereto. This shall also apply to development activities that involve/propose land/building use conversion.

3.2.5 Implement Regional-Level, and Area-Level Urban Freight Management Recommendations

Implement regional-level and area-level urban freight management recommendations to regulate freight-related parking issues within the MMC

Regional-Level Strategies

a. Truck terminals and warehousing facilities shall be set up in the city periphery for heavy vehicles/trucks (HCVs or MCVs) to park or load and unload as necessary. The concerned Development Authority shall take required efforts.
b. Shifting of strategic wholesale markets and interstate/ intercity bus terminals to other peripheral locations to decongest the city centre shall also be explored.

Area-Level Strategies

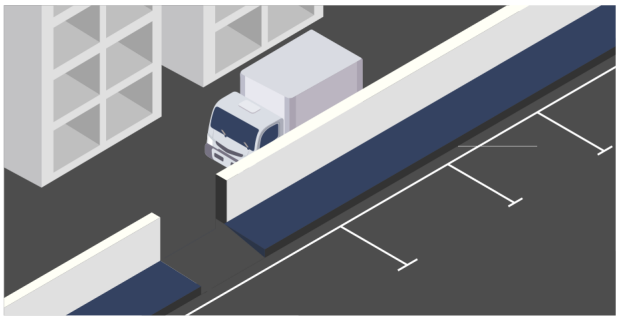
a. Heavy Commercial Vehicles (HCVs) and Medium Commercial Vehicles (MCVs) shall enter and ply within the city only during off-peak hours (as identified in the area-level parking management plan). Exemptions may be made for vehicles carrying essential commodities like water and medicine.

b. On-street parking of HCVs and MCVs (including construction vehicles) shall not be allowed, as it shall occupy a lot of road space and block the visibility of pedestrians on footpaths. They shall only use off-street parking spaces for loading and unloading activities.

c. Without off-street facilities, goods shall be distributed through LCVs (including construction vehicles), three-wheeler, two-wheelers, or cycles.

d. Dedicated on-street parking spaces shall be discouraged for LCVs. The area-level parking management plan will determine the necessity for accommodating LCVs parking spaces or designated loading/unloading zones near commercial land-uses.

Loading/unloading activities on off-street parking slot ✓



Loading/unloading activities on paid on-street parking slot X

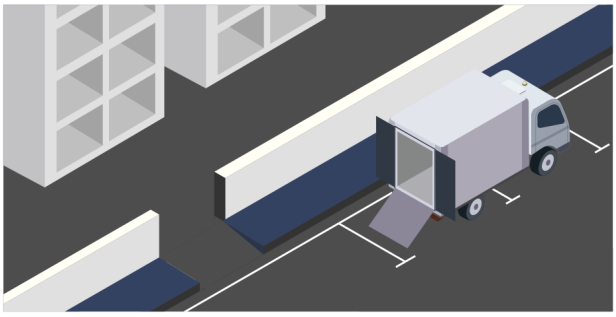


Figure 04 Parking Management for Urban Freight

e. If and when necessary, LCVs may use the on-street parking spaces designated for 4-wheelers/2-wheelers within the allowable short no-fee cushion time (a permissible time duration at the beginning of a parking activity—mostly set at 10-15 minutes—to allow for quick pick-up/drop-off,

3.2.6 Strategies for Travel Demand Management for Job Centres

Manage private off-street parking in private premises and public buildings (whose parking is not open for public use) along with on-street parking and public parking facilities.

1. All government/public sector undertakings and private organisations/institutions/industries with more than 100 employees shall introduce employee travel demand management measures to encourage shared mobility, public transport, and non-motorised transport within one year of policy adoption. The employee travel demand management measures may include

i. Collection and periodic updation of data on the employee's location of residence, mode of travel, vehicle type and ownership, time and frequency of travel, etc.

ii. Provision of staff shuttle services to ensure convenient access to one or more mass public transit stations, including railway stations, city bus terminus, or any public transport choice at that point in time etc.

iii. Provision of incentives for employees to commute by public and non-motorised transport modes.

iv. Provisions to introduce staggered office working hours /work-from-home opportunities to reduce trip generation and traffic congestion.

2. Staff buses/shuttle services owned or operated by these organisations/ institutions/industries shall be parked only in off-street parking locations and, if found parked on-street, especially during peak hours, shall be strictly penalised.

3.2.7 Strategies for Travel Demand Management for Schools & other Educational Institutions

1. Existing schools and other educational institutes may consider staggering the class timings of different standards so that the load experienced by roads during school opening and closing hours is distributed over a few off-peak hours. They also prepare a circulation plan and provide space for pick-up, drop-off, and bus parking within their premises or other private premises.
2. Any new school/ educational institutions coming up shall have the required space for pick-up, drop-off, and parking as per the TNCDBR or other regulations notified thereto.
3. All schools/ educational institutions shall also encourage their staff and students to commute by public transport or non-motorised transport by arranging pick-up and drop- off facilities to the nearest bus stop/public

transport station and/or hiring buses from the Tamil Nadu State Transport Corporation (TNSTC) or any other operator who runs buses throughout the day so that buses do not park on roads after dropping off students.

4. Any street with a school entry/exit shall not be designed with on-street parking for a distance of 100m on either side of the entry/exit, on both sides of the street.

3.2.8 Strategies for Travel Demand Management for Commercial Establishments

1. A city-wide integrated traffic management system shall be set up to monitor traffic congestion across the city and identify the existing traffic generator.
2. All commercial establishments shall include the following travel demand management measures to reduce the traffic congestion induced by the establishments and integrate them with public transit stations and non-motorised transport.

i. The DTCP shall collect traffic impact fees from developers/owners of the establishments, creating an impact higher than the set benchmarks. The collected impact fee shall be reinvested in improving the first-mile/last-mile connectivity from the establishments to the nearest transit station.

ii. The establishments shall have more than one ingress and egress point. The site plan shall accommodate sufficient queuing area for traffic inflow and streamline the exit movement to avoid direct egress from the premises to the access road.

iii. The opening and closing timings of the establishments in close proximity to educational institutions/ job centres (within 150-300m) may be staggered to distribute the traffic on roads over off-peak hours.

iv. All major commercial and special establishments shall have pick-up & drop-off and loading/unloading zones for all vehicles within the premises only.

v. On-street parking shall be restricted within 200m from the entry/exit access points.

vi. The establishments shall provide human resources to manage traffic generated by the particular establishment and also manage parking within the premises.

3.2.9 Integrate Electric Charging Infrastructure with Off-Street Parking Facilities

Madurai is one of the six EV cities identified under the Tamil Nadu EV Policy 2023. The parking strategy and action plan for the MMC shall be aligned with the targets and recommendations set by the policy to accelerate electrification by integrating parking management with the provision of public charging infrastructure.

Integration with Off- Street Parking Facilities

1. EV charging and battery-swapping facilities shall be installed in all existing and proposed off-street public parking spaces. The proportion of parking facilities to be integrated with public charging infrastructure shall be implemented as per the Charging Infrastructure of Electric Vehicle Guidelines of the Ministry of Power, Government of India.
2. Through revisions in the TNCDBR and other relevant statutory documents, the provision of charging infrastructure for 10-20% of the parking capacity in public and private off-street facilities shall be mandated.

Integration with On- Street Parking Facilities

1. No public charging infrastructure shall be installed within the right-of-way of streets or encroaching public open spaces. Exceptions may be made for approved and well- designed shared mobility stands on streets with service lanes. Nevertheless, public charging infrastructure should be integrated without hindering the movement of pedestrians, cyclists, and other vulnerable users.

When provided, on-street public charging infrastructure shall only be provisioned with fast charging stations (30 kWh or more) to deter longer parking durations. These chargers shall be generally used for top-ups rather than fully charging the vehicles.

2. EVs shall be priced at the same parking fee as fossil fuel vehicles. No incentives shall be offered, as the parking fee is determined by the space occupied by the parked vehicle, not the fuel type.
3. The measures for integrating public charging infrastructure with parking facilities shall be updated based on the periodical directions of the Tamil Nadu EV Steering Committee.

3.3 Pricing and Enforcement

3.3.1 Price Parking

Price parking is based on the following factors: vehicle size, parking duration, parking demand in the respective block faces, the time of the day (peak/non-peak hours), and the day of the week. The following pricing strategy supported by a scientific formula shall be adopted throughout the MMC.

$$T = p \times E \times d \times Df \times Tf$$

T Total minimum parking fees for the duration vehicle is parked

p Minimum Parking fees for one Equivalent Car Space (ECS)

Base fare, to be determined based on the existing market rates for parking or the government land value or any other parameter that represents the socio-economic cost of a parking activity. The base fare may vary across the parking management areas. The base parking fees shall be reviewed annually.

E ECS Factor for the respective vehicle type

d Duration in hours for which the vehicle is parked

Df Demand factor based on a block face where the vehicle is parked. It shall be
1.0 for off-street parking
1.5 for low-demand on-street block faces
2.0 for medium-demand on-street block faces
2.5 or higher for high-demand on-street block faces

Tf Time Factor
as 1.0 for non-peak hours and adopted as 1.5-2.5 for peak hours based on the area-level parking management plans.

Vehicle	Parking Slot Dimension	ECS
Car	5 m x 2 m	1.0
Two-wheelers	2 m x 1 m	0.2
Cycle	2 m x 0.5 m	0.1
Autorickshaw	3 m x 1.5-2 m	0.6
Cyclerickshaw	2.5 m x 1 m	0.5
Bus	15m x 2.6 m	3.9
Mini Bus	8 m x 2.6 m	1.5
Heavy Commercial Vehicle	9 m x 2.4 m	2.2
Light Commercial Vehicle	5 m x 2 m	1.0

Source: IRC SP012, URDPFI, 2014; ITDP

3.3.2 Price on-street parking based on parking demand levels

On-street pricing shall be set so that 15% of spaces are vacant at any given time.

1. Three types of on-street parking spots shall be determined in every area-level parking management plan:

i. High-demand block face ii. Medium-demand block face iii. Low-demand block face

Based on this category, the city will determine four price ranges: high, medium, low, and free. A street can have a mix of all four price ranges. For example, a 2km long street can have high and low prices based on the demand. The price ranges can vary across block faces to ensure that 15% of parking spaces are vacant at any given point.

2. Minimum Parking rates—Base fare (p) shall be reviewed annually based on changes in demand.

i. If the average occupancy on a block face during any hour of the day is more than 90%, the demand factor (Df) shall increase to 50% from the preceding quarter. For example, if a 200m high-demand block side with an assigned demand factor of 2.5 continues to have more than 90% occupancy, the demand factor shall be increased to 3.75.

ii. If the average occupancy on a block face during any hour of the day is below 60%, the demand factor shall be reduced up to 20% from the preceding quarter. For example, if a 200m high-demand block side with an assigned demand factor of 2.5 continues to have less than 60% occupancy, the demand factor shall be reduced to 2.0.

iii. If the average occupancy on a block face during any hour of the day remains in the 60-90% range, no changes shall be made.

3. Vehicles in official duty, cycles, and electric cycles (with a maximum speed limit of 25kmph) shall be exempted from parking fees. Personal Vehicles of any citizen shall not be exempted from parking fees.

4. Taxis, auto-rickshaws, and e-rickshaws shall be exempted from parking fees when parked in their approved stands. They shall pay applicable on-street parking fees on other parking spots. The area-level parking management plans shall identify stands, and necessary steps shall be taken for regularisation/approval.

5. Automobile businesses such as repair mechanics, driving schools, and retail showrooms selling automobiles and accessories that use street space to park vehicles shall arrange for appropriate parking spaces preferably off-street parking spaces. Similarly, hospitals, fire stations, and other public service and health care agencies should make parking arrangements for their service vehicles on their off-street premises. If they are parked on-street, they shall pay the applicable fee.

6. On-street parking activity may be covered with a short no- fee cushion time (10-15 mins) to accommodate the pick-up and drop-off needs of personal motor vehicles and delivery personnel.

3.3.3 Harmonise the On-Street and Off-Street Parking Prices

1. On-street parking shall be charged higher than off-street parking. This will be an impetus for properties to restore parking space (provided as per the TNCDBR) appropriated for other usages to its original intended use and propel the long-term shift from on-street to off-street parking.
2. Based on the proposed pricing formula, the comprehensive on-street and off-street pricing framework may be applied as follows

Type of vehicle	Base fare* (p)	Off-street parking p X 1.0	On-street parking (low-demand) p X 1.5	On-street parking (medium-demand) p X 2.0	On-street parking (high- demand) p X 2.5
Car (ECS = 1)	20	20	30	40	50
Bike (ECS = 0.2)		5	10	10	15

**The actual values will be based on the base fares fixed by the ULBs Note: The parking fee shall be rounded off to the nearest higher multiplier of 5. Incentives in parking fees shall be offered to promote digital payment.*

3. Parking services shall be changed from the current postpaid model to a prepaid one. This shall nudge users to plan their parking activity in advance and avoid long-duration parking on streets.

3.3.4 Enforce On-Street and Off-Street Parking

1. Enforce on-street and off-street parking for non-payment of parking fees, illegal parking encroachment on footpaths and cycle tracks, parking in no-parking zones, parking outside designated slots, double parking, parking on intersections, parking at bus stops, and parking in front of entry/exit gates.
2. The technology-based smart parking system shall be leveraged to continuously monitor parking activities during operational hours, identify parking violations, and coordinate communication between on-ground staff and vehicle owners to initiate first-hand verification and necessary parking violation protocols (as detailed in the institutional framework of Parking Policy).

3.3.5 Adopt Technology-Based Management Solutions

Adopt technology-based management solutions to enable parking as a service through data analytics and its application in providing ease of use to the consumer, monetising parking facilities, and optimising utilisation.

1. Parking Information and Management Systems (PIMS) A centralised data management system and digital architecture shall be developed to collect, compile, and manage parking data and periodically update area-level parking management plans, parking rates, and enforcement and communication strategies.
2. Competent technology service providers and on-ground management teams shall be hired to operate professional parking management services in the MMC.
3. A parking management portal—a mobile application and website—shall be launched to enable citizens to find real- time information on parking (parking slots availability, parking fee, shortest route to reach a parking lot, and other relevant information), book slots in off-street parking lots, make digital payments, and share feedback. This shall serve as a common digital aggregator and spatial inventory for on-street and public and private off-street parking facilities.
4. A technology-based smart parking management system shall also reduce revenue leakage and minimise manual interventions/human resource requirements.

Parking as a service is about data analytics and its application in providing ease of use to the consumer, monetising the parking facilities, and helping in optimum utilization.

1. Find your spot
Citizens find parking availability through PIS/ VMS signages
2. Park in the spot
Sensors fitted to the parking slot recognises parking activity
3. Record activity
Punch in the slot number and time in parking meter
4. Make payment
Promote digital transaction through E-wallet/UPI
5. Enforcement
In cases of parking violation, the vehicle shall be towed

Working mechanism of technology-based parking management services

3.3.6 Proof of Parking

Introduce Proof of Parking as a checkpoint to validate the availability of at least one off-street parking space for registering a vehicle. In the long term, this shall also serve as a tool to disincentivise vehicle ownership within the MMC.

1. Residential streets in neighbourhoods are meant for local movement and also serve as safe havens for light recreation by children and the elderly. The absence of any regulation of on-street parking in residential areas, coupled with violations of the TNCDBR, has resulted in narrow residential streets plagued with long-duration parking. In order to reduce the stress on streets and to nudge the vehicle owners to arrange off-street parking spaces, Residential Parking Permits (RPP) shall be piloted in notified continuous building areas based on the following principles:

i. The number of parking slots shall be determined based on the street capacity and availability of street width for circulation of emergency vehicles, not on the existing demand.

ii. No reserved parking slot for a permit holder.

iii. Holding a permit does not mean owning an on-street parking spot rather renting/leasing the spot for the specific time period.

iv. Households with off-street parking provisions shall not be eligible to receive an on-street parking permit.

v. The allotment shall be made on an open lottery system (e-auction system confined to the neighbourhood).

vi. RPP shall be charged on a monthly or annual basis.

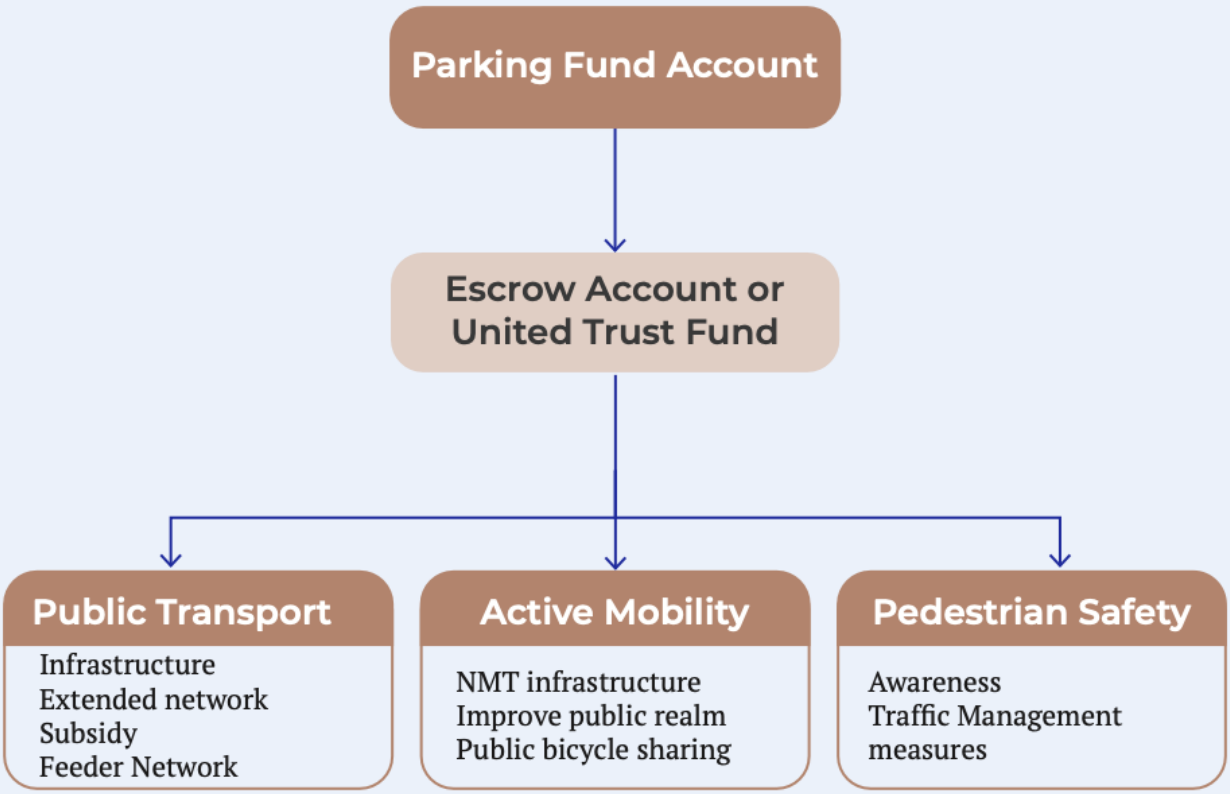
3.4 Reinvestment

3.4.1 Parking Revenue

Manage parking revenue to ensure that the surplus receipts (after paying for all operating expenses) are ring-fenced and utilised for local-area improvements such as better footpaths, cycling facilities, public spaces, road surfacing, and public transport services.

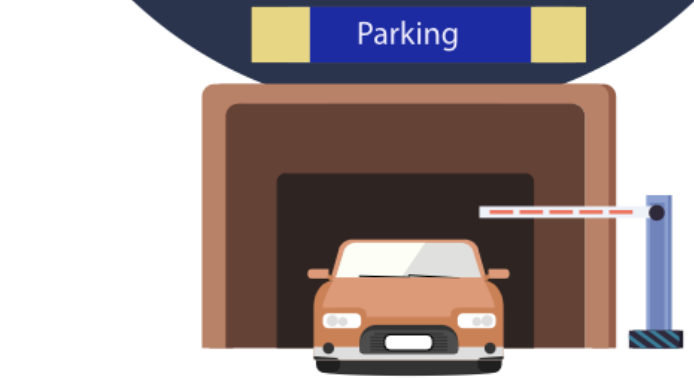
All parking revenue, including fines, shall be deposited directly in an Escrow Account/Urban Transport Fund (UTF)

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04

Incentives to Attract Private Entities in Off-Street Parking Management



4 Incentives to Attract Private Entities in Off-Street Parking Management

4.1 Develop Integrated Parking Management Contract of On-street & Off-street Parking Management

4.1.1 For an area-level planning (3-5 sq.km):

Integrating on-street and off-street public parking management under a single contract promotes efficiency, and improved coordination. It simplifies administrative processes, fosters unified strategies, and enables faster responses to issues. Moreover, this approach can result in cost savings and higher service quality due to economies of scale.

To incentivize private entities to undertake comprehensive parking management, the government may provide land for off-street parking development on a nominal lease basis, allowing the private entity to construct with the assistance of the Government through VGF (Viability Gap Funding) and operate facilities.

4.1.2 For stand alone off-street parking facility:

To encourage stand-alone parking facilities in the high-demand areas, the government may provide land for off-street parking development on a nominal lease basis, allowing the private entity to construct off-street parking facilities (Multi-Level Parking) with the assistance of the Government through VGF (Viability Gap Funding) and operate facilities. In such case, along with the MLPs, management of on-street parking in the catchment areas of 500m radius of road network shall also be assigned.

4.2 Enhancing the viability of Off-street Parking facility (MLCP/MLTP) through commercial development

Integrating commercial activities within off-street parking facilities offers a strategic approach to boost occupancy rates and improve the revenue streams. By incorporating retail, and service options, MLCPs become more attractive destinations, improving the viability of the facility. It is essential to establish a maximum limit for commercial development (not more than 25%) giving more priority for Parking spaces. The commercial space is in addition to the nominal land lease.

4.3 Provide other Incentives for Private Entities to Invest in Public Parking Facilities

The extent of Built up Area provided by the developer for developing a public parking infrastructure within their premises shall receive Transferable Development Rights (TDR).

05

Implementation Monitoring & Evaluation of Parking Policy



5 Implementation, Monitoring & Evaluation of Parking Policy

5.1 Implementation in Phases

The implementation of the policy shall be in phases to get effective results and a smooth transition from the current system to the expected. The following shall guide the phased implementation of certain policy aspects.

Phase 1

Area Level Parking Management Plan Preparation

- Preparation area level parking management plan/s
- Inter-departmental meetings/workshops with stakeholders (citizens & govt.)
- Raising awareness amongst citizens on parking management
- Base pricing of parking for pilot areas to be finalised

Phase 2

Implementing Parking Management Pilot

- Development of Technology interventions for parking management & enforcement
- Incorporation of Area Level Parking Management Plans and Parking Rules
- Enforcing parking bylaws for Buildings in CBD areas.
- Parking Rules and enforcement for illegal parking
- Making parking information available for citizens with marking & signage

Phase 3

Scaling up Parking Management & Demand Management Measures

- Capture learnings from pilot for city-wide parking management strategy
- Prepare area level plans across the city and initiate phase wise roll-out.
- Road user awareness activities
- Differential Parking Pricing is relatively based on area, duration, and PT connectivity.
- Congestion Pricing in CBD areas during peak hours
- Implementation of Proof of Parking.

5.2 Pilot Projects

Pilot projects shall be implemented first before implementing any strategy or recommendation of the action plan when they are being applied for the first time in the city.

Strategies or solutions should not be implemented in isolation but in an integrated way, as the success of one strategy depends on the success of the other associated strategy.

5.3 Monitoring Indicators

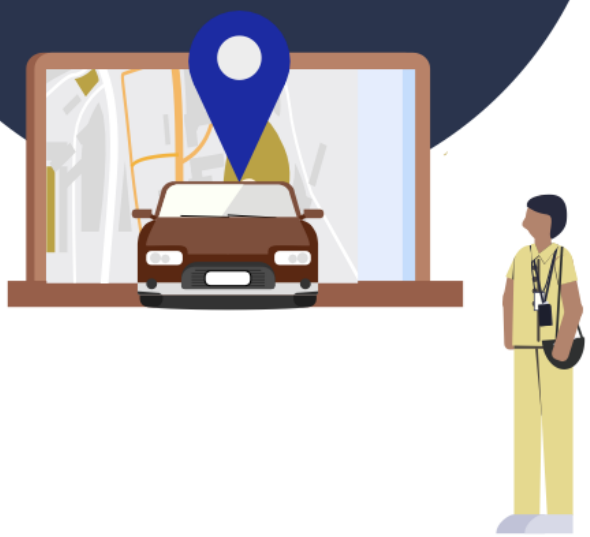
The status of execution of parking policy recommendations and their benefits shall be monitored and evaluated (M&E) periodically to check whether the objectives of the parking policy are achieved. The following indicators (qualitative and quantitative) shall be measured at frequent intervals.

1. Availability of parking master plan for the MMC Delay in execution of parking master plan
2. Public Transport Mode and NMT Mode Shares
3. Level of Congestion
4. Registered Vehicles (Mode-wise) and Vehicle Ownership
5. Level of user satisfaction at parking facilities
6. Availability and consistency in parking signs and user information
7. Parking Revenue
8. Parking Revenue to Cost Ratio
9. Parking Rates Structure and its adequacy to differential parking pricing
10. Intensity of Illegal Parking (Number of traffic violations due to illegal parking)
11. Occupancy of all parking facilities
12. Number of parking challans issued and amount of parking challans.
13. Level of capacity with the executing body
14. Share of private investments in developing and O&M of parking infrastructure.

The complete indicator set will be detailed out in the parking strategy and action plan which will be devised in alignment with the parking policy.

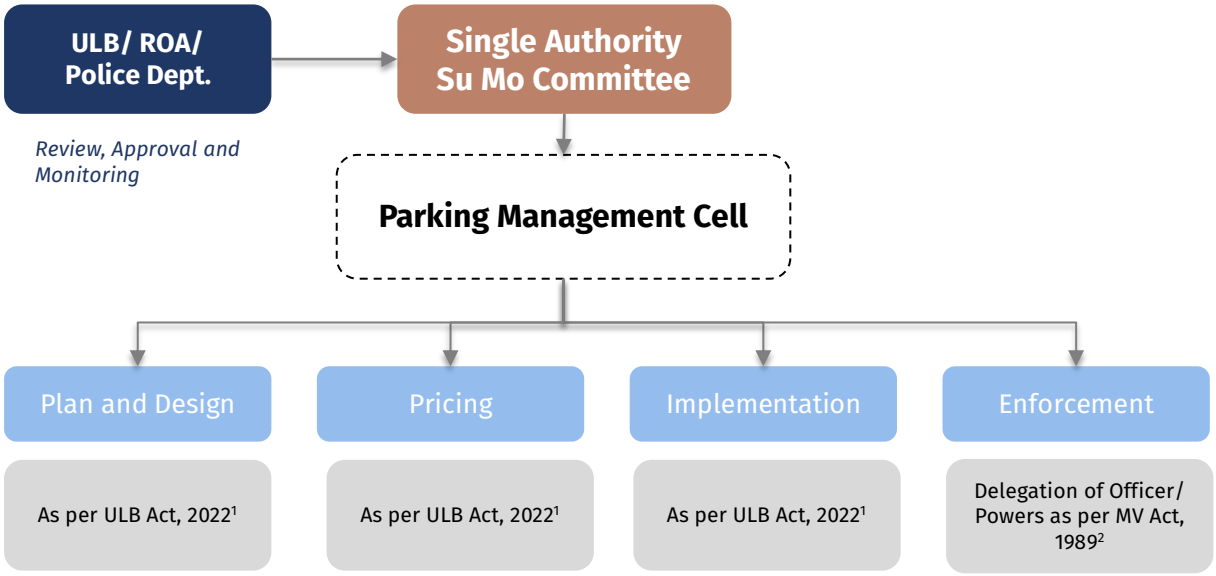
06

Institutional Framework



6 Institutional Framework

For the purpose of successfully implementing the Parking Policy for the MMC, the following institutional structure is proposed.



ULB – Urban Local Bodies i.e. MMC.
RoA – Road Owning Agency i.e Highways Dept etc.

[1] *Tamil Nadu Urban Local Body Act, 2022*
Section 40: Powers and functions of the council (xvi) providing parking places for vehicles including taxis and auto-rickshaws

Section 130: Collection of fees on parking vehicles — Subject to the approval of the council, the commissioner may reserve any portion of a public street or public place, and declare it as a parking area and collect parking fees from the owner of the vehicles at such rate for such period and in such manner as may be prescribed.

[2] *Tamil Nadu - Motor Vehicle Rules, 1989*
379: Parking places for motor vehicles in specific localities in Madurai City. — The Commissioner, Corporation of Madurai, shall apply to the Commissioner of Police, Madurai, for the approval of the proposed parking place for such vehicle. The application shall be accompanied by a sketch of the proposed parking place together.

6.1 Sustainable Mobility (SuMo) Committee

MMC shall establish an in-house SuMo Committee to manage all sustainable mobility initiatives undertaken by the ULB. It shall be chaired by the Municipal Commissioner and the Deputy Commissioner being the vice-chairperson. The staffing of the cell to include Chief Engineer, Traffic and Transport Engineer, Town Planner, Environment Engineer, and other support staff

6.2 Parking Management Cell (PMC)

A Parking Management Cell (PMC) shall be set-up, whose role is to plan, design, oversee operations, manage revenue, and undertake communication initiatives for parking

management in the city. The Cell shall have representation from the Traffic police, the Development authority, the Revenue department, the Town planning committee, and other relevant departments/government agencies, apart from the SuMo Committee members.

The Parking Management Cell will form a working team to:

a. Prepare a Parking Strategy and Action Plan.
b. Prepare and maintain the inventory of total parking spots (both on-street and off-street) available in every area considered for the area-level parking management plans.
c. Monitor and assess parking demand (both on-street and off-street) of the parking in the area, through regular surveys.
d. Develop area-level parking management plans in coordination with the Engineering/Roads/Transport Department, Traffic Police, Town Planning Committee, and other local stakeholders such as residents' welfare association, market association and others.
e. Determine parking fee structures and fines. Review parking rates periodically to ensure price structures reflect changing demand patterns.
f. Develop key performance indicators to monitor operator performance (eg. occupancy rates in paid parking areas, the number of parking violations etc.).
g. Develop an operations plan and roll out technology-based solutions to manage fee collection, enforce parking rules, and provide customer support services.
h. Hire competent third-party agencies for preparing area-level parking management plans, parking management service providers to manage parking fee collection and to enforce parking effectively.
i. Oversee the role of the service provider to ensure all contractual obligations are fulfilled.
j. Form zonal Parking Task Forces in collaboration with Traffic Police to monitor parking operations and enforce parking rules and regulations.
k. Train municipal traffic staff & other relevant public agencies of parking management on the various components of parking management such as planning, design, implementation, management, communications, and stakeholder engagement.
l. Organise coordination meetings to review plans, resolve conflicts, and enable a seamless implementation.
m. Develop a parking management portal—a mobile application and website.
n. Prepare a Standard Operating Procedure (SOP) for on-street parking enforcement and vehicle removal in coordination with the Traffic Police and the ULBs.
o. Prepare an annual reinvestment plan for parking revenue and implement the proposals on approval from Subcommittee
p. Conduct capacity-building programmes for the ULBs to prepare Area-level Parking Management Plans
q. Develop a communication and outreach strategy, roll out various campaigns, and conduct stakeholder meetings to bring awareness to the benefits of parking management and inspire behavioural change.
r. Monitor the performance of the ULBs/ Parking Task Force and the hired service providers (e.g. occupancy rates in paid parking areas, enforcing parking violations

etc.) and oversee their role to ensure all contractual obligations are fulfilled in implementing area-level parking management plans.

General Note:

- The parking management revenue shall be directly credited to an escrow account set up by the ULBs/ Road Owning Agency or agencies authorised by the ULBs (SuMo Committee).
- The primary accountability and responsibility towards implementing the parking management measures rests with the ULBs/ Road Owning Agency. The PMC shall plan, implement, and monitor parking management measures in coordination with the ULBs.
- The SuMo Committee shall review and monitor the Parking Management initiatives.

7 Other Measures

7.1. Develop communication strategy:

MMC shall develop and implement various campaigns and stakeholder meetings as identified in the communication strategy to bring awareness on the benefits of parking management and inspire behavioral change for citizens' support.

7.2. Removal of abandoned vehicles:

MMC in collaboration with City Traffic Police shall identify and remove abandoned vehicles to ensure space on the streets is available for public movement and well-being as per section 380 of TN Motor Vehicle Rules, 1989. A policy in this regard to be named as Vehicle Removal Policy, which would be a subset of the Parking Policy shall be prepared by the Parking Management Authority.

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This Policy shall be valid from the date of the Policy notification and extended to a period till a new Policy is announced



On-street parking management in NSC Bose Road Chennai Source: ITDP India

Appendix



Appendix - 1

In the context of this policy, the following terms are defined as hereunder

Definitions	
Roads	
Arterial street	A street primarily for through traffic, usually on a continuous route and/ or as notified in Master Plan/Comprehensive Mobility Plan (CMP) or other statutory plans.
Sub-arterial street	A street primarily for through traffic, usually on a continuous route but offering to lower level of traffic than the arterial and/or as notified in Master Plan/CMP or other statutory plans.
Collector street	A street collects and distributes traffic from and to local streets and provides access to arterial streets and/or as notified in Master Plan/CMP or other statutory plans.
Local street	A street primarily for access to residential, commercial, or other abutting property and/or as notified in Master Plan/CMP or other statutory plans.
Vehicles	
Abandoned vehicle	A motor vehicle left for more than a specified duration (period specified by the authorised agency) in a public or street space that may cause danger, obstruction, or inconvenience to other users of the space.
Commercial Motor Vehicle (CMV)	A vehicle licensed to be used for transporting goods or materials rather than passengers upon a charge paid directly or indirectly by a business owner or any other person. **Light Commercial Vehicles (LCV)** are used for the transport of goods that has a maximum mass not exceeding 3.5 tonnes **Intermediate Commercial Vehicles (ICV)** are used for the transport of goods with a mass of 8-10 tonnes **Medium Commercial Vehicle (MCV)** are used for the transport of goods with a mass of 10-15 tonnes **Heavy Commercial Vehicle (HCV)** are used for the transport of goods with a mass of more than 15 tonnes
E-rickshaws	A special purpose battery-powered vehicle for hire, of power not exceeding 4000 watts, having three wheels for carrying goods or passengers, as the case may be.
Personal Motor Vehicle (PMV)	A vehicle transporting persons where no charge is paid directly or indirectly by the passenger or any other person.
Public Transport	A vehicle used for transporting passengers on a scheduled route on an individual fare-paying basis.
Shared Mobility	A transport system where commuters share a vehicle either simultaneously as a group or over time as a personal rental, and in the process, share the cost of the journey. This may include public bicycle-sharing services, cab aggregators, auto-rickshaws, and shared auto-rickshaws, etc.

Definitions	
Parking	
Park-and-ride	A system in which people drive to a place where they can leave their personal motor vehicles and get on a bus or train.
Parking configurations	**Angular Parking** refers to the parking of a vehicle at an angle to the carriageway. **Parallel Parking** refers to the parking of a vehicle in such a way that the longer side of the vehicle is parallel to the carriageway. **Perpendicular parking** refers to the parking of a vehicle in such a way that the longer side of the vehicle is perpendicular to the carriageway.
Parking fee	Applicable rate a personal motor vehicle user pays to park their vehicle in a designated parking slot.
Parking fine / Parking violation charges	Applicable rate a personal motor vehicle user pays for any violations on the non-payment of parking fees and illegal parking encroachment on footpaths and cycle tracks. (or) Applicable rate a personal motor vehicle user pays as a repercussion of a parking violation that hinders traffic movement, such as parking in no-parking zones, parking outside designated slots, double parking, parking on intersections, parking at bus stops, and parking in front of entry/exit gates.
Parking Management Area	Area-level parking management plan is a localized and detailed neighbourhood level-plan that addresses parking issues in the identified neighbourhood. This includes detailed assessments of parking supply and demand, strategies for curb side management, and solutions to improve parking efficiency and accessibility in the designated area
Parking Management Cluster	The parking management clusters are identified in the city-level parking strategy and action plan. A demarcated boundary-based on land use, traffic patterns, existing transport network, parking demand, and other regional characteristics. This shall be proposed in alignment with the existing administrative boundaries of the Urban Local Bodies (ULB), the Traffic Police, and Planning Authorities.
Parking types	Based on the location of designated parking spaces, they shall be classified as **On-street parking** refers to demarcated parking spaces on the streets. **Private off-street parking** refers to parking spaces within a building or an open plot in private premises and is used exclusively by the property owners or personnel authorised by the owners. **Public off-street parking** refers to parking spaces within a building or an open plot (both multi-level and surface-level) which is accessible for public use.
Miscellaneous	
Market-based model	A model that operates on voluntary exchange in a free market, where a central governing authority does not control prices.
Service provider	An external agency hired by the ULB or agencies authorised by the ULBs for a specific period of time for parking management

Appendix – 2

Definitions	
ALP	Area Level Parking Management Plan
CBD	Central Business District
CMP	Comprehensive Mobility Plan
CW	Carriage Way
DTCP	Directorate of Town and Contry Planning
ECS	Equivalent Car Space
EV	Electric Vehicle
FSI	Floor Space Index
GO	Government Order
HCV	Heavy Commercial Vehicle
HUDD	Housing and Urban Development Department, Govt. of Tamil Nadu
IPT	Intermediate Public Transport
ITDP	Institute for Transportation and Development Policy
KPI	Key Performance Indicators
LAP	Local Area Plans
LCV	Light Commercial Vehicle
LPA	Local Planning Authority
M & E	Monitoring & Evaluation
MBBL	Model Building Bylaws
MCV	Medium Commercial Vehicle
MLCP	Multi Level Car Parking
MoHUA	Ministry of Housing and Urban Affairs
MoUD	Ministry of Urban Development
MV	Motor Vehicle
NMT	Non Motorized Transport

Definitions

NOC	No Objection Certificate
NUTP	National Urban Transport Policy
O&M	Operation and Maintenance
PIMS	Parking Information and Management System
PIS	Passenger Information System
PMC	Parking Management Cell
PMV	Personal Motor Vehicle
PPP	Public Private Partnership
PT	Public Transport
PTF	Parking Task Force
ROA	Road Owning Agency
ROW	Right of Way
RPP	Residential Parking Permit
RTO	Regional Transport Office
SOP	Standard Operating Procedure
SuMo	Sustainable Mobility
TDM	Travel Demand Measures
TDR	Transferable Development Rights
TN	Tamil Nadu
TNCDBR	Tamil Nadu Combined Development and Building Rules
TNSTC	Tamil Nadu State Transport Corporation
TOD	Transit Oriented Development
ULB	Urban Local Body
UPI	Unified Payment Interface
UTF	Urban Transport Fund
UTTIPEC	Unified Traffic and Transportation Infrastructure (Planning & Engineering) Center
VGF	Viability Gap Funding

Appendix – 3

Legal provisions for enabling parking management & proposed amendments

1. Plan and Design

i. **Motor Vehicle Act, 1988:**

- Section 215A. Power of Central Government and State Government to delegate. — Notwithstanding anything contained in this Act, (b) the State Government shall have the power to delegate any power or functions that have been conferred upon it by the Act to any public servant or public authority and authorise such public servant or public authority to discharge any of its powers, functions and duties under this Act.

The powers, functions and duties of following sections under MV act 1988 shall be delegated to MMC

- Section 117: Parking places and halting stations; The State Government or any authority authorised in this behalf by the State Government may, in consultation with the local authority having jurisdiction in the area concerned, determine places at which motor vehicles may stand either indefinitely or for a specified period of time, and may determine the places at which public vehicles may stop for a longer time than is necessary for taking up and setting down of passengers.

Penalty: Rs.100 for the first offence and Rs.300/- for the second or subsequent offence

ii.**TN Urban Local Body Act 1998 r/w Amendment 2022**

- Section 40: Powers and functions of the council.

(xvi) providing parking places for vehicles including taxis and auto-rickshaws.

- Section 118: Vesting of public streets and their appurtenance with municipality

All public streets with the pavements stones, and other materials thereof, and all works, materials and other things provided for such street, tunnel, sub-way, fly overs, squares, roads, road margins, pathway, culverts, parks, gardens and all other poramboke lands (not being the property of, and kept under the, control of the State Government or the Central Government) including the soil, sub-soil and the drains, sewers, culverts, footways, trees, stones and other materials,

implements and other things in such streets and other public places, which are situated within a municipal limit shall vest in that municipality.

iii. **Tamil Nadu Motor Vehicles Rules, 1989**

- Section 379: Parking places for motor vehicles in specific localities

1. The Commissioner of Police, may approve parking places within the City limits for purposes of parking motor vehicles other than public services vehicles and goods carriages.

2. The Commissioner of Corporation, shall apply to the Commissioner of Police, for the approval of the proposed parking place for such vehicle. The application shall be accompanied by a sketch of the proposed parking place together with the following particulars, namely:—

    i. the advantage of fixing the parking places;
    ii. the class of motor vehicles for which the parking place is to be fixed;
    iii. the extent of the place to be fixed and the nature of the roads in the locality;
    iv. the number of vehicles likely to use the parking places;
    v. the maximum number of vehicles that can be parked at any one time;
    vi. the particulars of the staff to be employed and the duties of such staff;
    vii. the arrangements to be made for maintenance of the parking place and to keep the place in clean condition;
    viii. the fee that will be charged for the use of the parking place; and any other matter relevant to the proposed parking places."

Proposed Amendment (Long term):

The Commissioner of the ULBs in consultation with the respective Commissioner/s of Police, may approve parking places within the the respective ULB jurisdiction and other Planning Areas of the state for purposes of parking motor vehicles. The approval notification shall be accompanied by an area-level parking management plan with the following particulars:

    i. the advantage of fixing the parking places;
    ii. the class of motor vehicles for which the parking place is to be fixed;
    iii. the extent of the place to be fixed and the nature of the roads in the locality;
    iv. the number of vehicles likely to use the parking places;
    v. the maximum number of vehicles that can be parked at any one time;

vi. the particulars of the staff to be employed and the duties of such staff;

vii. the arrangements to be made for maintenance of the parking place and to keep the place in clean condition;

viii. the fee that will be charged for the use of the parking place; and any other matter relevant to the proposed parking places.

- Section 380: Vehicle abandoned on the road — removal and custody.—

If any motor vehicle is allowed to stand in any place other than duly appointed parking place in such a way as to cause obstruction to traffic or danger to any person, a police officer in uniform having jurisdiction may—

i. forthwith cause the vehicle to be moved under its own power otherwise to the nearest place where the vehicle will not cause undue obstruction or danger;

ii. unless it is moved to a position where it will not cause obstruction or danger take all reasonable precautions to indicate the presence of the vehicles; and

iii. if the vehicle has been stationary in one place for a continuous period of ten hours and adequate steps have not been taken for its repair or removal by the owner or his representative, remove the vehicle and its contents to a place of safe custody.

Proposed Amendment (Long term):

If any motor vehicle is allowed to stand in any place other than duly appointed parking place in such a way as to cause obstruction to traffic or danger to any person, a police officer in uniform having jurisdiction or an agency/personnel authorised by the police officer having jurisdiction may —

i. forthwith cause the vehicle to be moved under its own power otherwise to the nearest place where the vehicle will not cause undue obstruction or danger;

ii. unless it is moved to a position where it will not cause obstruction or danger take all reasonable precautions to indicate the presence of the vehicles; and

iii. If the vehicle has been stationary in one place for a continuous period of ten hours and adequate steps have not been taken for its repair or removal by the owner or his representative, a police officer in uniform having jurisdiction may remove the vehicle and its contents to a place of safe custody.

2. Parking Management and Collection of Fees

i.TN Urban Local Body Act 1998 r/w Amendment 2022

- Section 130: Collection of Fees on Parking Vehicles: Subject to the approval of the council, the commissioner may reserve any portion of a public street or public place, and declare it as a parking area and collect parking fees from the owner of the vehicles....

- Section 130 (2), The commissioner may grant a license to any private person or organization or establishment for collecting parking fees in such manner as may be prescribed

ii.**TN Urban Local Body Rules 2023**

- Rule 294 Licensing of stand and shelter for vehicles.— (3)The council may arrange to collect the fees departmentally or may outsource the collection of such fees.

3. Enforcement and Penalty

i.**Motor Vehicle Act, 1988:**

- Section 201:

1. Whoever keeps a disabled vehicle on any public place, in such a manner, so as to cause impediment to the free flow of traffic, shall be liable for penalty up to fifty rupees per hour, so long as it remains in that position:

   Provided that the vehicle involved in accidents shall be liable for penalty only from the time of completion of inspection formalities under the law.

   [Provided further that where the vehicle is removed by [an agency authorised by the Central Government or State Government, removal charges] shall be recovered from the vehicle owner or person in charge of such vehicle.]

2. Penalties or [removal charges] under this section shall be recovered by such officer or authority as the State Government may, by notification in the Official Gazette, authorise

3. sub-section (1) shall not apply where the motor vehicle has suffered an unforeseen breakdown and is in the process of being removed.]

[Explanation.—For the purposes of this section, "removal charges" includes any costs involved in the removal of the motor vehicle from one location to another and also includes any costs related to storage of such motor vehicle.]

- Section 127: Removal of motor Vehicles abandoned or left unattended on a public place:

a. Where any motor vehicle is abandoned, or left unattended, on a public place for ten hours or more or is parked in a place where parking is legally prohibited, its removal by a towing service or its immobilisations by any means including wheel clamping may be authorised by a police officer in uniform having jurisdiction.

b. Where an abandoned, unattended, wrecked, burnt or partially dismantled vehicle is creating a traffic hazard, because of its position in relation to the 74 [public place], or its physical appearance is causing the impediment to the traffic, its immediate removal from the 75 [public place] by a towing service may be authorised by a Police Officer having jurisdiction.

c. Where a vehicle is authorised to be removed under sub- section(1) or sub-section (2) by a police officer,

- Section 122: Leaving vehicle in dangerous position:

a. No person in charge of a motor vehicle shall cause or allow the vehicle or any trailer to be abandoned or to remain at rest on any public place in such a position or in such circumstances as to cause or likely to cause danger, obstruction or undue inconvenience to other users of the public place or to the passengers.

b. Penalty: Rs.100 for the first offence and Rs.300/- for the second or subsequent offence.

ii.**Tamil Nadu Motor Vehicles Rules, 1989**

- 381: Vehicles in parking place — removal.— If a motor vehicle has been stationary in a duly appointed parking place or a period exceeding the period specified by a competent authority in respect of the said place or if no such period has been specified, for a period exceeding six hours, any Police Officer

or any inspecting officer of the Transport Department may remove the vehicle to a place of safe custody.

Proposed Amendment (Long term):

If a motor vehicle has been stationary in a duly appointed parking place or a period exceeding the period specified by a competent authority in respect of the said place or if no such period has been specified, for a period exceeding six hours, any Police Officer or any inspecting officer of the Transport Department or an agencies/personnel authorised by the Policy Officer may clamp the vehicle, following which any police officer may remove the vehicle to a place of safe custody.

- 382: Payment for removal — Notwithstanding any fine or penalty .... the owner of the motor vehicle or his heirs or assigns shall be liable to make good the expense/incurred by any Police Officer or any inspecting officer of the Transport Department in connection with the moving, lighting, watching or removal of a vehicle or its content in accordance with rules 379 and 381 and any Police Officer or any inspecting officer of the Transport Department or any person into whose custody the vehicle has been entrusted by any Police Officer or any inspecting officer of the Transport Department shall be entitled to detain the vehicle until he has received payment accordingly and shall, upon receiving such payment, give a receipt to the person making payment.

