

PARKING POLICY 2.0 & PARKING MANAGEMENT PLAN

Bengaluru



shaping the way cities move

**Directorate of
Urban Land Transport**
Urban Development Department, Govt. of Karnataka.

Parking Policy, 2012

BBMP adopted DULT's Parking Policy in March 2012 where parking is no longer a free service.

Detailed Parking Action Plan prepared by the DULT for core Bengaluru area – covering 20 sq. km.

- 85 roads in CBD proposed to include smart parking
- BBMP implemented it on some key roads



PARKING POLICY 2.0

FOR BENGALURU

Final – December, 2020



Directorate of Urban Land Transport

Urban Development Department, Government of Karnataka

Parking Policy 2.0

Since the policy adoption in 2012, changes in demand for parking:

- Vehicle numbers have doubled in the last 10 years
- Operations of Namma metro
- TOD zones in the masterplan
- Rapid conversion of residential to commercial use without compliance with parking norms

4 Main Objectives

Parking Policy 2.0

#1

Move from chaotic parking to well organized parking

#2

Move from free parking to paid parking

#3

From government driven parking supply and management to market driven parking

#4

From passive enforcement of parking regulations to active management of parking demand

Streamlining Commercial On-street Parking

- **Promoting NMT** –Space for 10 bicycles in each parking lot.
- Prioritizing **pick-up/drop-off, loading/un-loading**
- Prevent **long term on-street parking through pricing mechanism**
- On-street **parking restricted** close to junctions, pedestrian crossings & high traffic roads
- On-street **parking prohibited** around transit nodes and MLCPs

Restriction on Residential On-street Parking

- Permit for residents to park for a fee in a designates area/ street
- Permit **does not guarantee a parking spot**
- Permits not issued to applicants in **buildings violating Zonal Regulations**

Area Parking Plans
(instrument for systemic planning for area-wide parking)

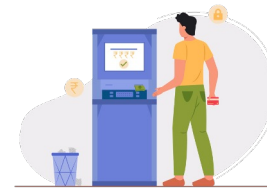
Parking regulations for TOD influence zone

- **Reduced building parking** norms in TOD Zones
 - Residential use buildings
 - a. **One parking per two dwellings**, for DU < 50 sq.m
 - b. **One parking per Dwelling Unit** for DU > 50 sq.m.
 - c. **10% of total parking as visitor parking**
 - d. Additional parking shall be **included in the FAR** & a part of it may be handed over for **public use**
 - Multi Sectoral Industrial parks
 - a. Provision of **bus-stops** within the premises
 - b. Facilitate **common parking** facilities

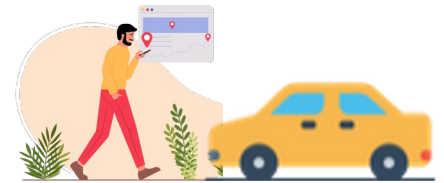
Adoption of Technology for Parking Management

- Public parking related information to be integrated in **Central Parking Portal**.
- Private players/operators/start-ups may be encouraged to provide innovative **technology solution** for parking

*Central Parking Portal
(Interface between User and Civic body)*



Parking Meters for Management



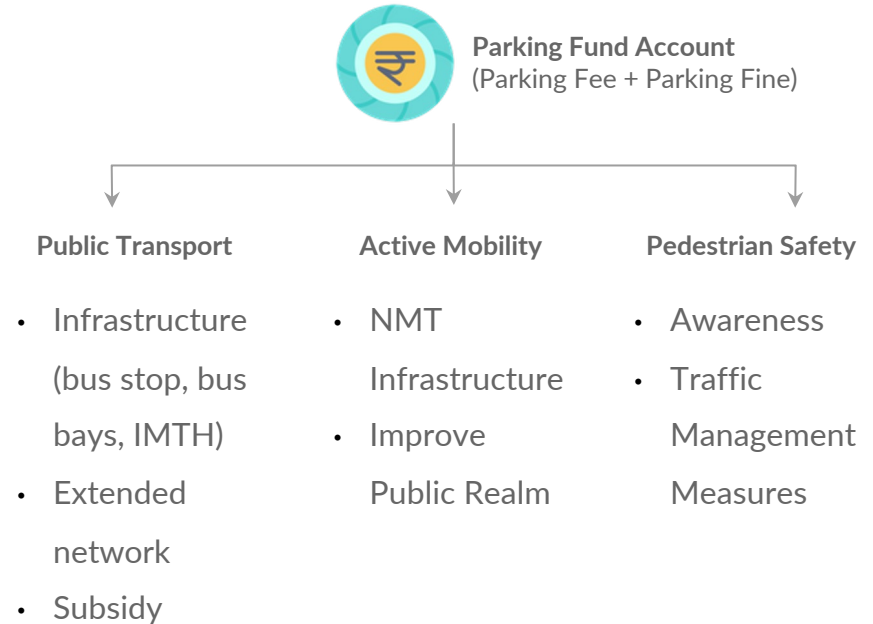
Smart Parking using Apps – Find a spot

Parking Pricing Strategy

- Base parking fee greater than public transport fare
- Higher pricing for on-street
- Differential pricing based on land-use
- Free bicycle parking
- Charges for other vehicles determined **based on PCE**
- **Bulk parking fee mechanism** for shared mobility and e-commerce vehicles



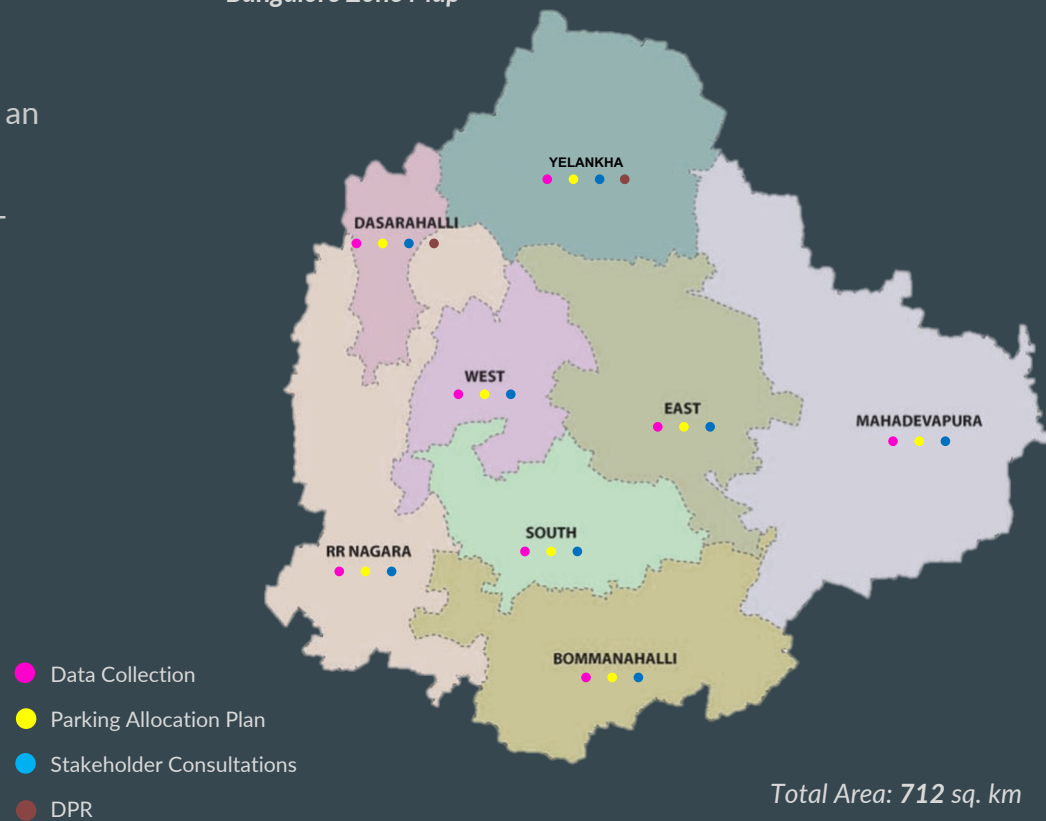
Parking Revenue Utilization



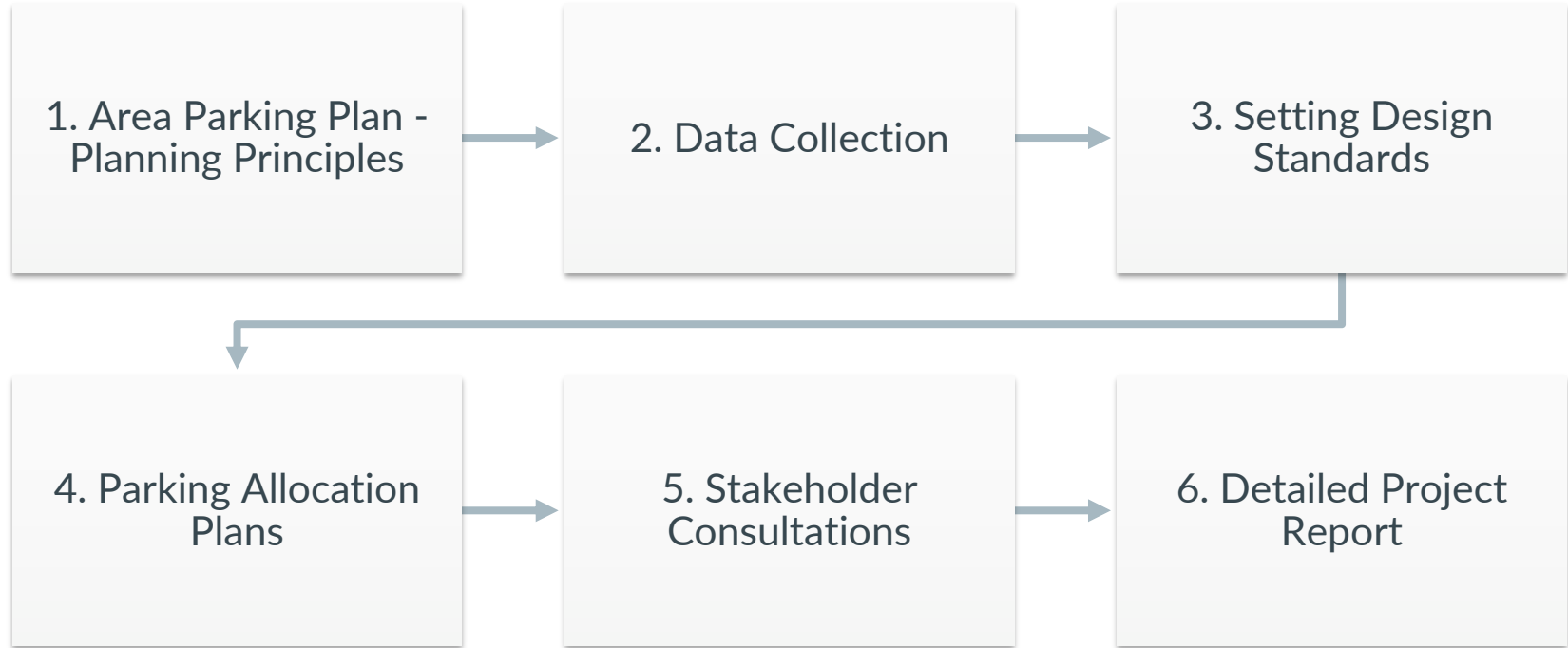
Area Parking Plans

- Policy recommends preparation of parking plans at an area level
- Area Parking Plans to be prepared initially by DULT
- Implementation by BBMP
- Zonal Task Force with BBMP, Traffic Police and Transport Department representatives to review, approve and implement.
- Area Parking Plans being prepared for 8 zones of Bangalore.

Bangalore Zone Map



Approach and Methodology



Step 1: Planning Principles

Parking has been provisioned for



Cycle/ SMMS stands at every 200-250 m/ on major roads and close to junctions



Pick-up & drop-off (PND) bays at mid-blocks (centrally located)



Parking spots for people with disability (PWD) near junctions



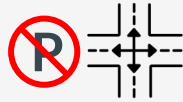
Loading- unloading bays as required in market areas



Auto-stands on roads adjacent to major roads

Step 1: Planning Principles

Parking has not been provided on



10m / 25m buffer from minor /
major junctions



250m radius from MLCP /
Transit Nodes



On High Density Corridors &
major bus routes with high
frequency



20m on either side of bus-stops

Step 2: Data Collection



ArcGIS Collector app used for data collection

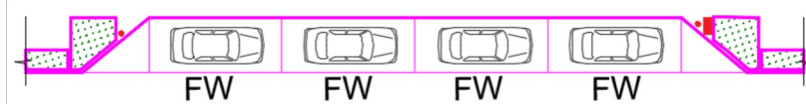
| | | | |
|--------------------|---------------|--------------------|------------------|
| OBJECTID | 995 | Landuse_RHS | |
| Status | New | Landmark_RHS | open space |
| Surveyor_Name | C,N | CW_RHS | 3.5 |
| Road_Name | 1st main Road | FP_RHS | 1 |
| Traffic_Movement | TwoWay | Shoulder_RHS | 1.5 |
| LandUse_LHS | Commerci | ParkingType_RHS | Parallel |
| LanduseRemark_LHS | open space | Legality_RHS | Authorised |
| LandMark_LHS | open space | Car_RHS | 4 |
| CW_LHS | 3.5 | Bike_RHS | 12 |
| FP_LHS | 2 | PBS_Cycle_RHS | 3 |
| Median | 0 | Cycle_RHS | 15 |
| Shoulder_LHS | 0.75 | LanduseRemarkRHS | Restaurant |
| ParkingType_LHS | Parallel | PrivateBus_RHS | 0 |
| Legality_LHS | Authorised | SchoolBus_RHS | 1 |
| Car_LHS | 6 | RTC_RHS | |
| Bike_LHS | 40 | Auto_RHS | 8 |
| PBS_Cycle_LHS | 0 | LCV_RHS | 1 |
| Cycle_LHS | 10 | HCV_RHS | 1 |
| PrivateBus_LHS | 0 | TractorTrailor_RHS | 0 |
| SchoolBus_LHS | 1 | Ambulance_RHS | 1 |
| RTC_LHS | 0 | Others_Specify_RHS | - |
| Auto_LHS | 13 | TSS | No |
| LCV_LHS | 0 | DemandSurvey | |
| HCV_LHS | 0 | Remarks | |
| TractorTrailor_LHS | 0 | Shape__Length | 217.110827176484 |
| Ambulance_LHS | 1 | date_ | 10/11/2021 |
| Others_Specify_LHS | | | 12:20:18 PM |
| | | CreationDate | 10/11/2021 |
| | | | 12:18:13 PM |
| | | EditDate | 10/11/2021 |
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Total Road Length Surveyed: **1089 km**

Step 3: Setting Design Standards

Parking Bay Type

Four Wheeler



Two Wheeler space



SMMS + Cycle + Two Wheeler



Auto



Parking Space Dimensions

1 Four Wheeler space- 2.5m x 5.5m

1 Two Wheeler space- 1m x 2m

1 SMMS- 1m x 2m
1 Cycle- 1m x 2m

1Auto- 2m x 3m

- Parking in modules of minimum 2 ECS & maximum 4 ECS (in continuity)
- After every 4 ECS, a break in the parking - physical/ notional - in order to avoid a wall of vehicles
- Each break will be a furnishing zone. Can have landscaping/ signages/ parking meters/ street furniture etc.

Step 4: Allocation Plans

Factors considered before allocation of parking



Land-Use



Existing Parking



Roads with Commercial Activity



Roads with Bus movement



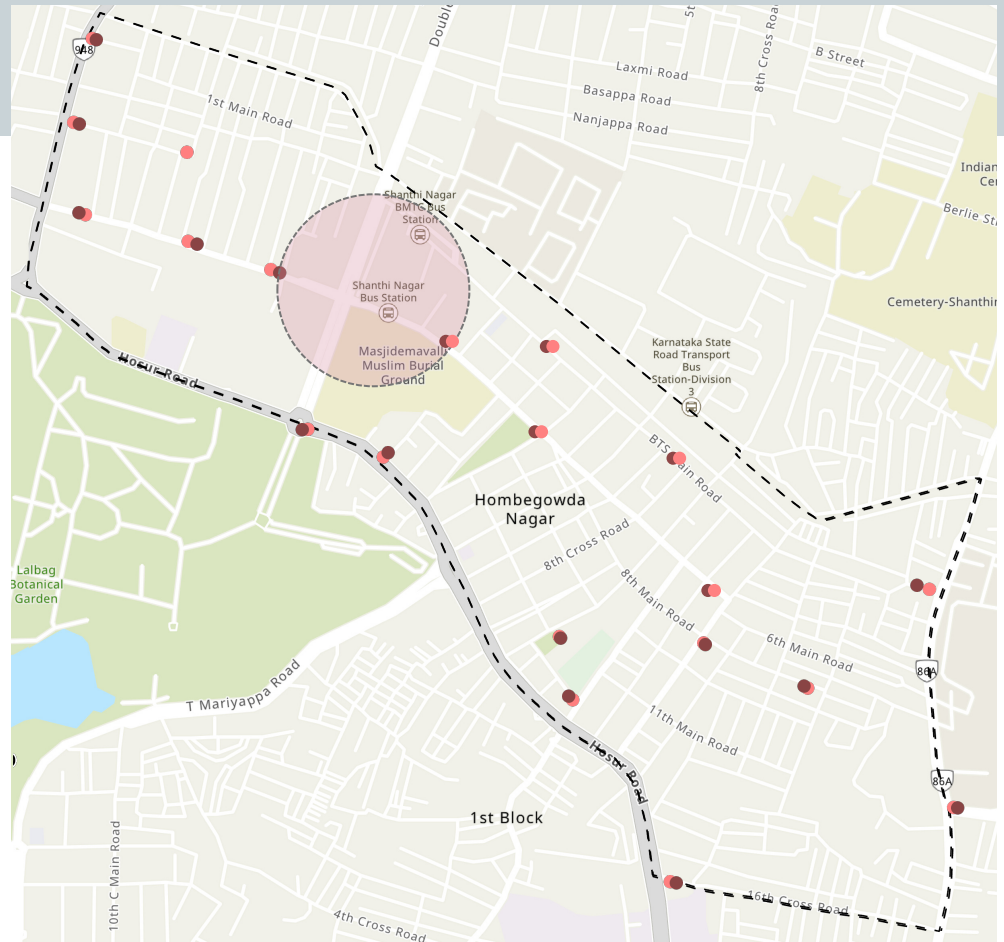
Roads with High Traffic movement

Other factors considered:

- Road width
- Cycle Network
- Presence of Transit Nodes
- Presence of MLCP
- Distance from junctions

Layer

- Cycle
- Shared Micro Mobility



Step 4: Allocation Plans

Factors considered before allocation of parking



Land-Use

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- Distance from junctions



Existing Parking



Roads with Commercial Activity

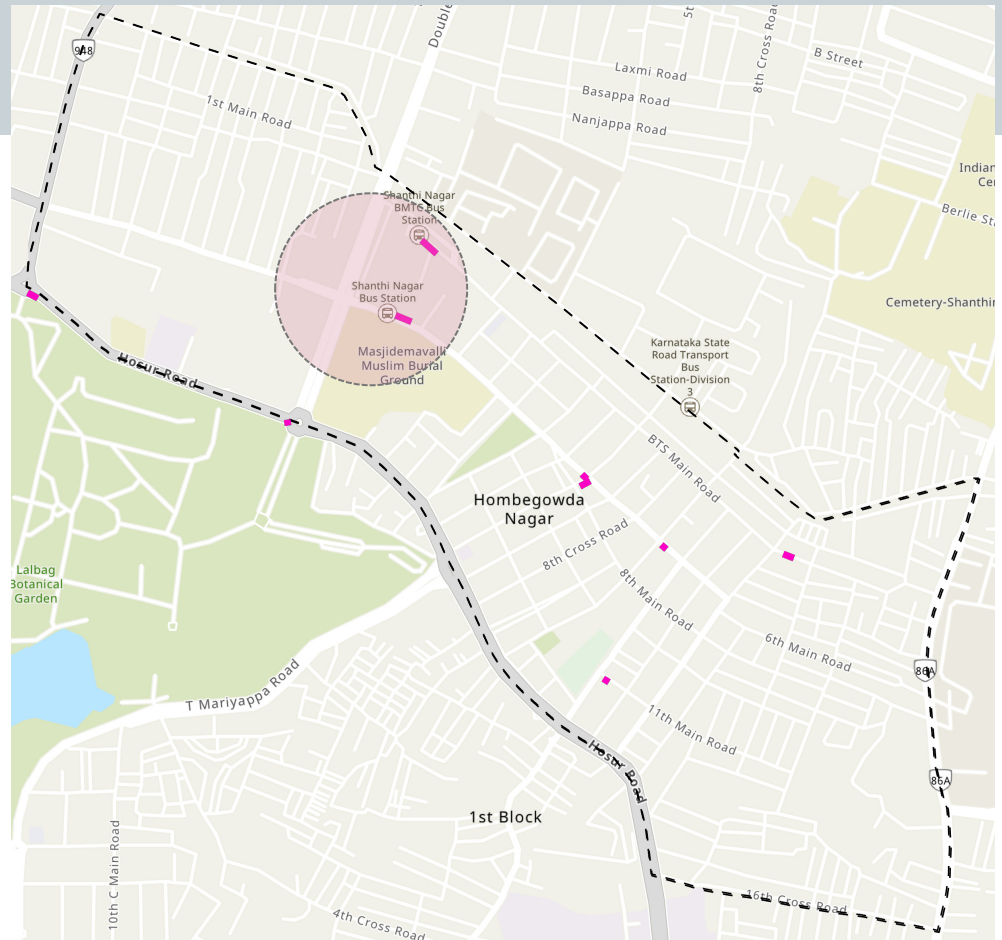


Roads with Bus movement



Roads with High Traffic movement

 Autorickshaw (IPT)



Step 4: Allocation Plans

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Land-Use

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Existing Parking



Roads with Commercial Activity

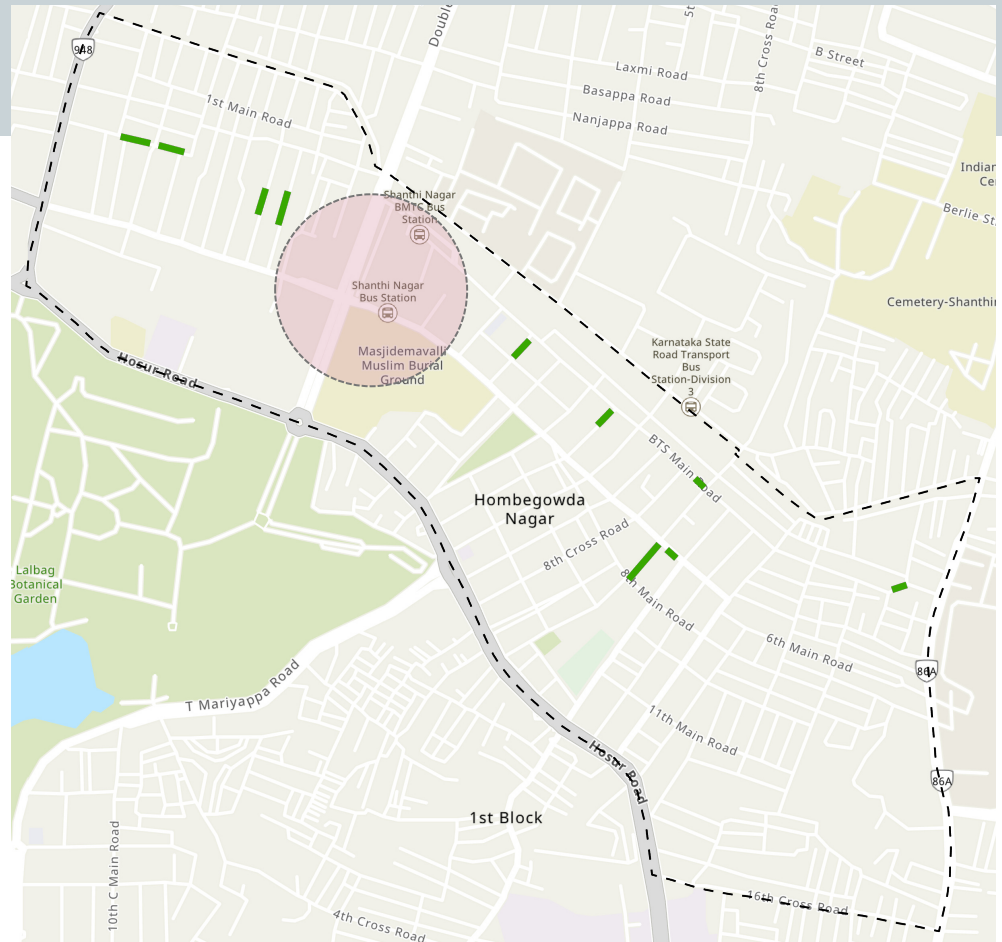


Roads with Bus movement



Roads with High Traffic movement

 Loading
 Unloading



Step 4: Allocation Plans

Factors considered before allocation of parking



Land-Use



Existing Parking



Roads with Commercial Activity



Roads with Bus movement

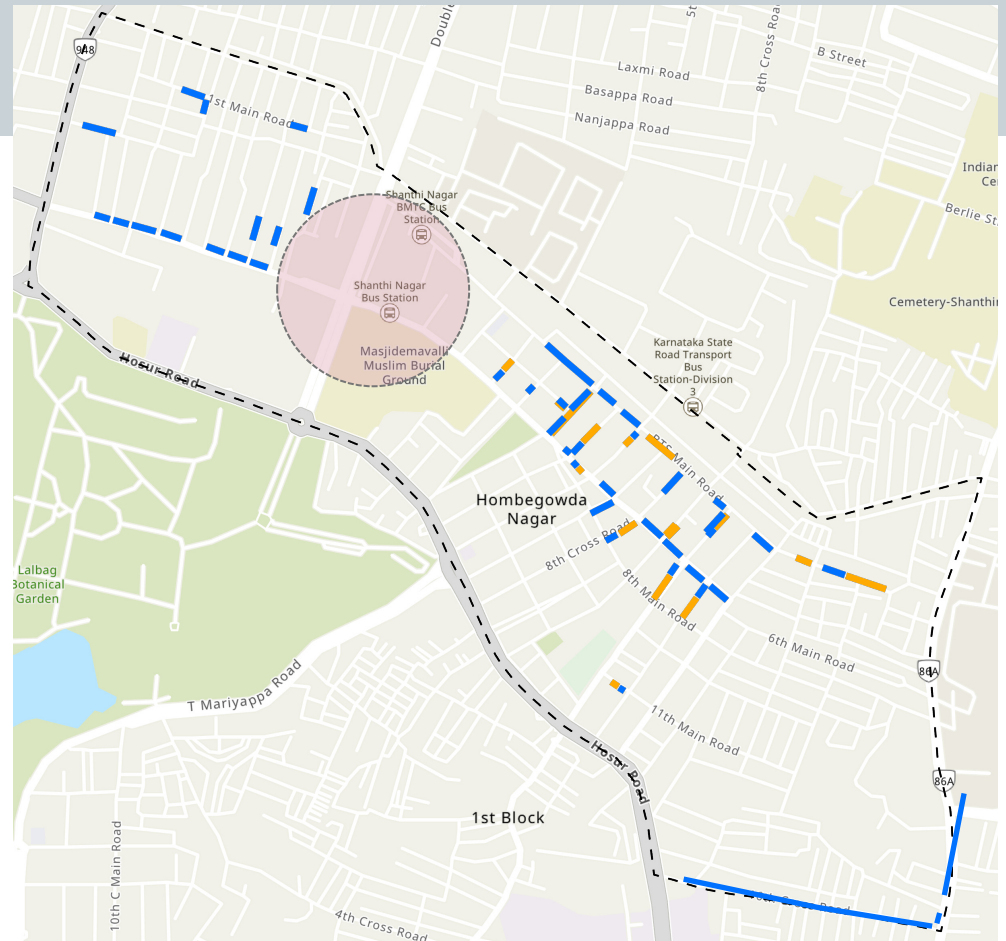


Roads with High Traffic movement













Other factors considered:

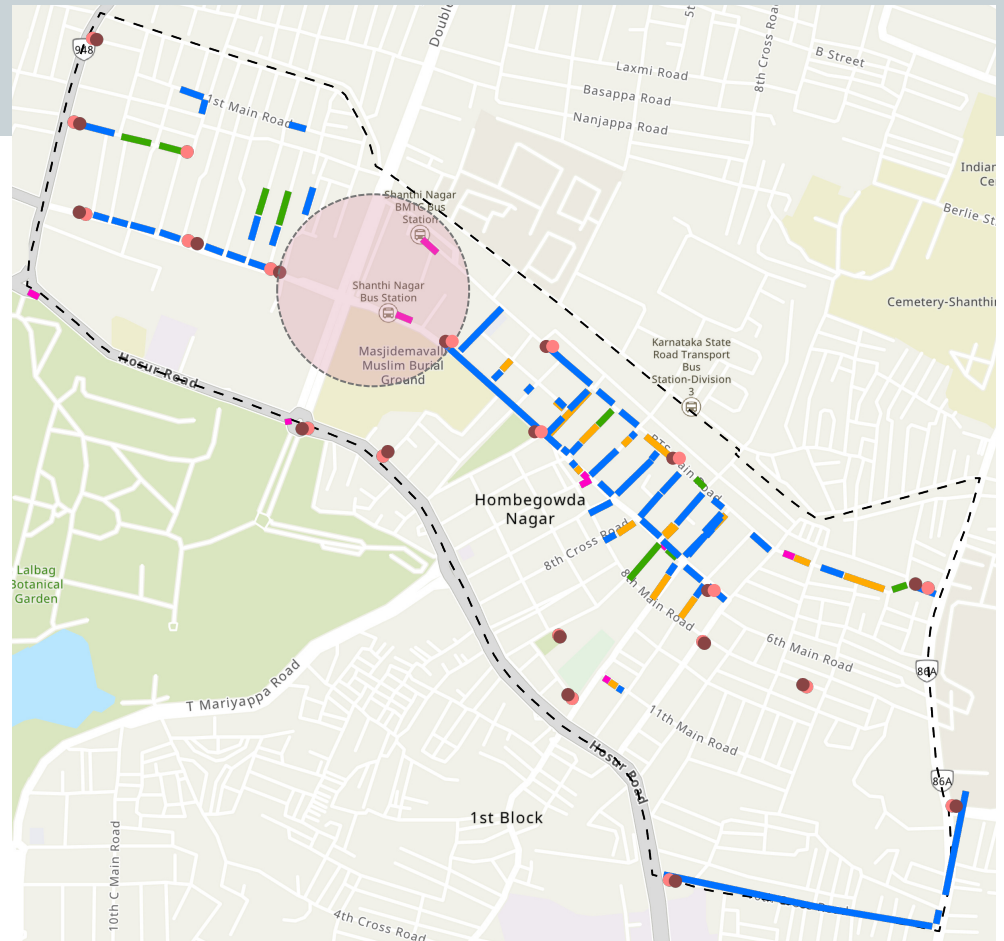
- Road width
- Cycle Network
- Presence of Transit Nodes
- Presence of MLCP
- Distance from junctions

- Four Wheeler
- Two Wheeler



Step 4: Allocation Plans

| Vehicle Type | Existing Parking | Proposed Parking |
|---|------------------|--|
|  Cycle | 17 | 180  |
|  SMMS | 8 | 135  |
|  Four-Wheeler | 435 | 93  |
|  Two-Wheeler | 1647 | 1027  |
|  Loading/ Unloading | - | 20  |
|  Autorickshaw | 44 | 33  |



Step 5: Stakeholder Consultations

Preliminary Task Force Meeting for overview of Parking Policy and Draft Allocation Plans
(Task Force – Zonal JC, BBMP officials, Traffic Police, RTO)



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Ward-wise Consultations and Joint Site Inspections
(with jurisdictional BBMP & BTP officers)



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Revision of Parking Allocation Plans by DULT as per feedback received from stakeholders

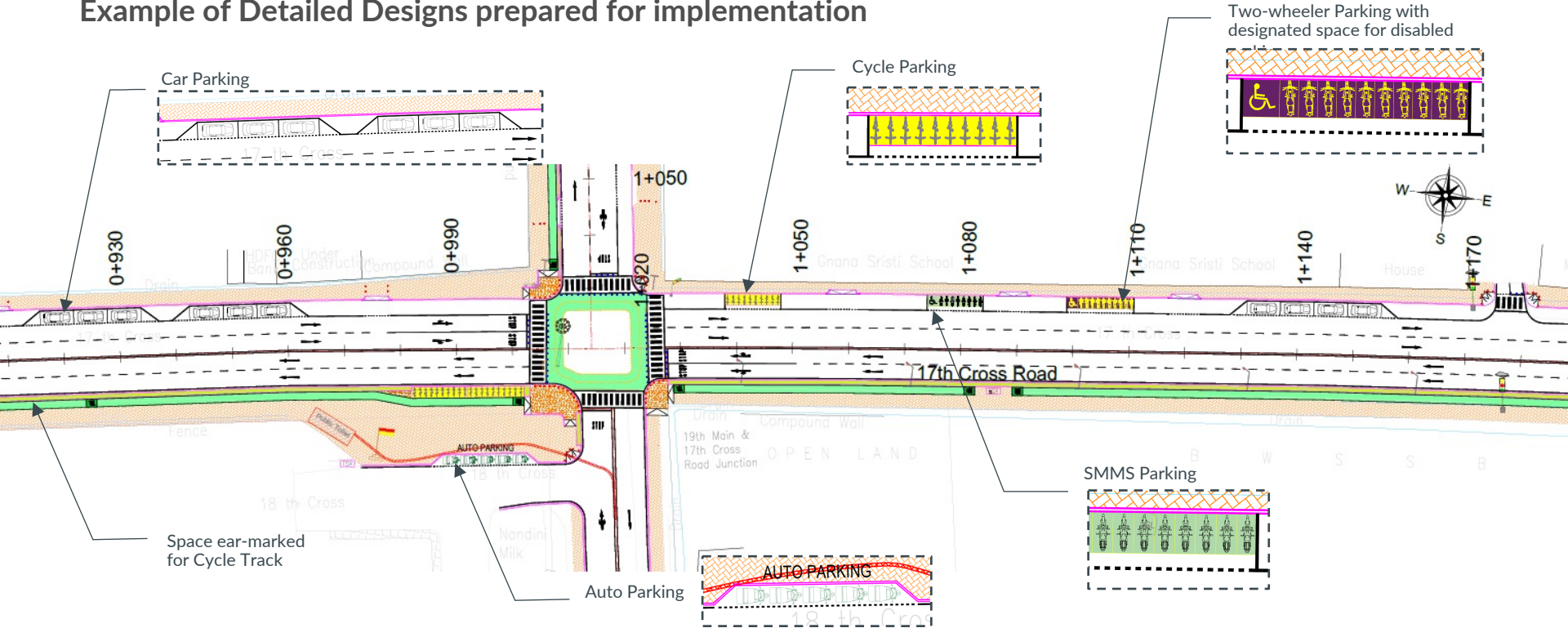


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Final Task Force meeting chaired by Zonal JC for appraising on the revised parking allocation plan and obtain concurrence of stakeholders

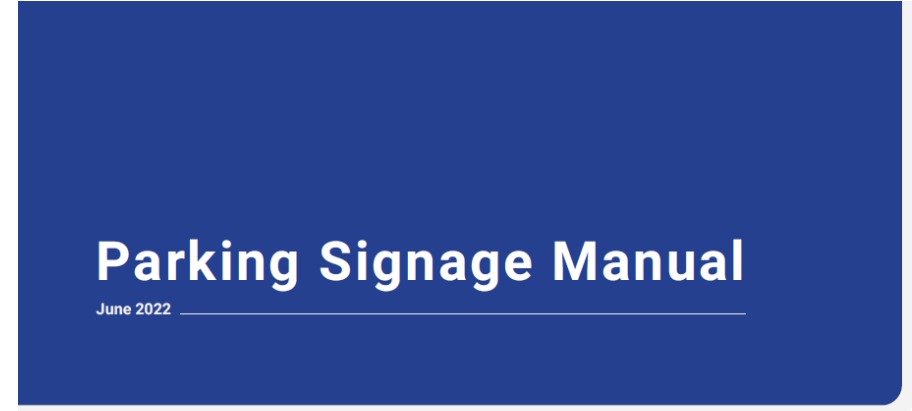
Step 6: Detailed Project Report

Example of Detailed Designs prepared for implementation



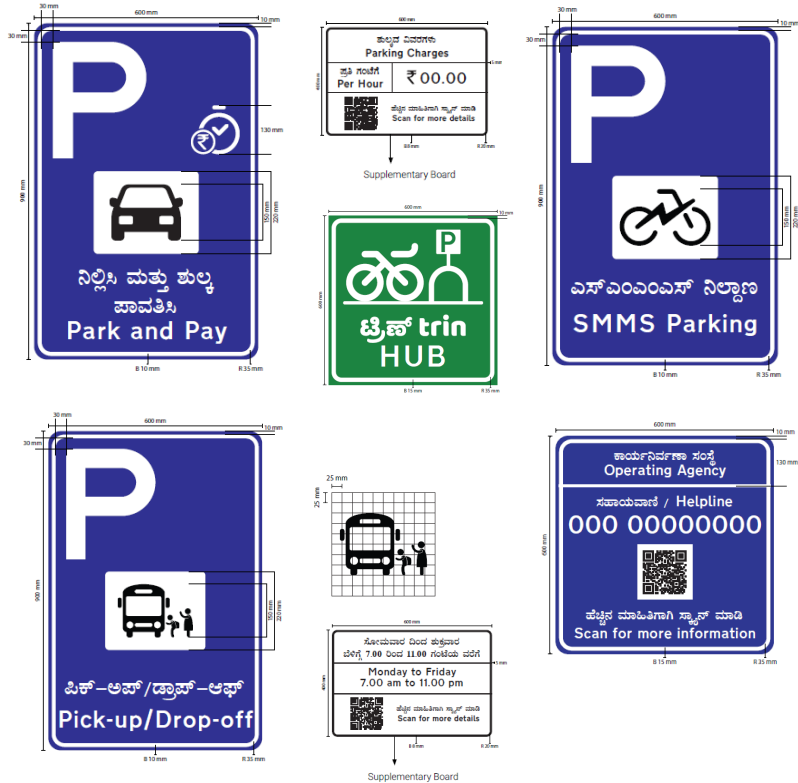
Parking Signage Manual

- Parking Signage Manual has been prepared for aiding implementation of Parking Plans
- On approval, it will be uniformly applied throughout the state
- 3 categories of parking signage

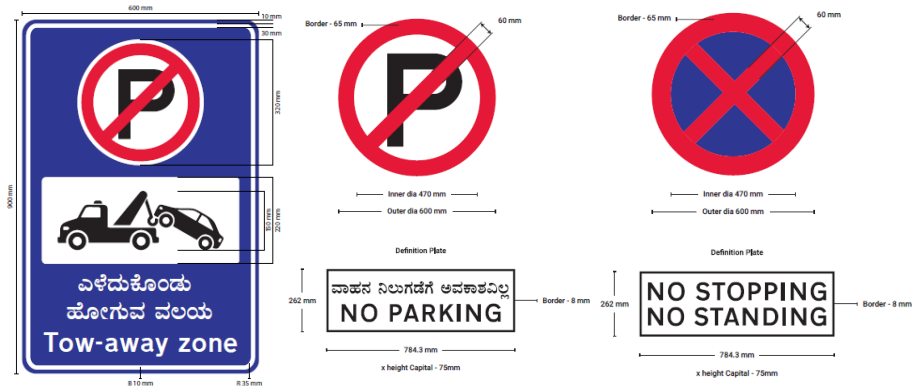


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Informatory Signage



Regulatory Signage



Parking Permits*





shaping the way cities move



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