





GOVERNMENT OF INDIA MINISTRY OF HOUSING AND URBAN AFFAIRS





Parking Management Guidelines for Small & Medium Cities (Research Study of MoHUA)

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Need

- Conventional parking policies focused towards increasing parking supply in urban areas
- □ Need for parking policies focusing on:
 - Parking demand management

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Encourage people to shift from private mode to public mode of transport



Objectives

- To frame guidelines for encouraging parking management in small & medium cities.
- To identify the implementation mechanism of the guidelines for different land uses as well as different modes.
- To enable suggestive measures for improving

public transport & non-motorised transport,

thereby ensuring parking management.





Methodology





Summary from National Case Studies

- Increase PT Share & reduce vehicle km travelled
- Provision of facilities for all modes
- Effective management of parking demand
- Avoid utilization of open (public) spaces for parking & reducing the vehicle growth
- Utilization of alternate mode of transport to decrease congestion due to parking
- Proper utilization of land & incentivizing use of green mobility measures





Summary from International Case Studies

 Eliminate curb side parking by high parking fees comparative to off street parking

- Incentivizing residents for leasing their private parking space for others.
- CO2 emission based parking fees that vary based on a vehicle's engine standards.
- Develop an integrated transport system to ensure balance between parking supply and demand.
- Fixing the scale, location and parking fees according to road and transit capacities.





City Selection Criteria

- Population size
 - <10 lakhs = small cities</p>
 - 10 30 lakhs = medium cities
- Geographical spread
- Geographical characteristics including plain terrain, hilly terrain, tourism and smart cities.



Criteria for Identifying Survey Locations within City

	Commercial	Institutional	Residential	Transport
City centre with PT	CC1	IC1	RC1	TC
City centre without PT	CC2	IC2	RC2	
Periphery with PT	CP1	IP1	RP1	ТР
Periphery without PT	CP2	IP2	RP2	

- Location of areas within city (with exceptions in Thane & Nainital): City Centre (CBD), Periphery (Within Municipal Limits)
- Areas accessible by public transport (with exception in Chandigarh): < 500 m PT Accessible
 >500 m – PT Not Accessible

>500 m – PT Not Accessible

- Considering residential areas require parking mostly during night
- 10 types of locations are considered for survey
- A demarcated area has been segregated with distinct entry / exit points for conducting

the survey for the cities visited so far.





DATA ANALYSIS

Parking Accumulation & Index



- The highest parking accumulation is at transport nodes & lowest at CP1 in medium cities
- In small cities transport in city center & CC2 have high parking accumulation whereas CP1 has low

- The parking index is high at IP1 & TP whereas CP1 has low parking index in medium cities
- In small cities TC has high parking index whereas TP & CP1 has low parking index

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Parking Tunover



- The parking turnover is high at IP1 & TP whereas IP2 has low parking turnover in medium cities
- In small cities TC has high parking turnover whereas
 IP2 has low parking turnover



Criteria	Average Parking Split (%)			Criteria	Average P	arking Split (%)
CC1	Long	23.47		IC1	Long	14.58
	Medium	69.57]		Medium	71.68
	Short	6.96			Short	13.74
CC2	Long	15.35	IC2	IC2	Long	16.32
	Medium	74.29			Medium	69.41
	Short	10.36			Short	14.27
CP1	Long	15.05		IP1	Long	9.22
	Medium	70.48			Medium	78.68
	Short	14.46			Short	12.10
CP2	Long	13.69		IP2	Long	11
	Medium	72.67			Medium	82
	Short	13.64			Short	10
Criteria	Average Parking Split (%)			Criteria	Average Parking Split (%)	
TC	Long	6.70	TP		Long	5,93
	Medium	82.71		ТР	Medium	81.80
	Short	10.59		Short	12.27	





DEMAND & SUPPLY





landuse across different tier cities



The demand & supply is more than 50% at transport nodes across different tier cities





Inferences

- High parking accumulation **irrespective of availability** of Public Transport
- Though parking is available within the premises, there is a **spillover on roads**
- Lack of public transport in small cities & higher egress distance in case of medium cities leading to usage of private modes.
- Due to less RoW even city centre irrespective of landuse has low accumulation
- Availability of alternates with better connectivity
- Parking accumulation at major transport nodes is high.

12th Medium Term Parking Duration is observed in all cities

Way Forward

Data Analysis of remaining 3 small cities

Comparing the existing scenario with the existing

guidelines

□ Formulation of guidelines for curbing on-street

parking

