PARKING STRATEGY FOR THR WALLED CITY OF JAIPUR

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OBJECTIVE AND SCOPE OF THE PROJECT

The study aims at creating a feasible PARKING STRATEGY for the currently congested Walled City of Jaipur.

To achieve the aim the objectives of the study underhand are enumerated below:

- Identification of the present parking problems in the Walled City of Jaipur

- Studying the causes of the parking problems and

- Eventually developing strategies for mitigating and managing the present parking issues and thus decongesting the city roads.
METHODOLOGY FOR PROJECT

The methodology that would be followed for achieving the above said aims and objectives has been divided into three main stages:

Stage 1: Assessment of the existing parking scenario

This stage would entail the study of firstly the character of the Walled City in terms of aspects of land use, circulation, transport networks etc.

Secondly, existing scenario of parking would be studied in great detail with respect to the aforesaid aspects and a correlation matrix evolved to bring forth the relation between these aspects and parking.

In addition, various international and national best practices would be studied for having an in-depth knowledge of how parking issues of Core areas/walled cities were resolved globally.
Stage 2: Identification of parking related problems and issues

In stage 2 i.e. the identification of the problems and issues related to parking in the Walled City of Jaipur would be done on the basis of the study carried out in Stage 1.

Stage 3: Formulation of strategies for eradicating the identified parking problems

After the identification of the parking related problems, various strategies and development options would be worked out based on international and national best practices studied in Stage 1.
IMPLEMENTATION STRATEGY AND CONTRIBUTION TO CITY

➢ Negative impact of traffic congestion
  • Pollution caused by slow moving traffic. This is exacerbated if heavy diesel vehicles are part of the traffic flow.
  • Wasted fuel increasing air pollution and carbon dioxide emissions (which may contribute to global warming) owing to increased idling, acceleration and braking. Increased fuel use may also in theory cause a rise in fuel costs.
  • Wear and tear on vehicles as a result of idling in traffic and frequent acceleration and braking, leading to more frequent repairs and replacements.
  • Delays, which may result in personal losses.
  • Stressed and frustrated motorists, encouraging road rage.
  • Late response in Emergencies: blocked traffic may interfere with the passage of emergency vehicles traveling to their destinations where they are urgently needed.
Implementation Strategy

• To overcome the problems arising out of on-street parking there is two fold strategy –
  1. Parking facility for residents and shopkeepers – for residents available vacant / open sites may be identified and formal parking may be developed within the walled city area whereas parking for shopkeepers may be organised by identifying vacant/open areas available in the periphery of walled city and they can be provided with shuttle service from parking lot to the respective market area.

  2. Parking facility for shoppers / tourists / other visitors – for shoppers/tourists/other visitors parking is required for short duration hence they can be facilitated by providing on-street parking facility for a limited period maximum duration for such parking cannot be more than half an hour after this duration the parking fee may be fixed at a higher rate to discourage on-street parking for longer duration.
Jaipur City was built by Sawai Jai Singh in Nov. 1727 for a Population of 50,000 only. Today it has population to the tune of 5.5 Lacs.
PHYSICAL STRUCTURE - Rooted in the Centric Indian Philosophy, with the temple of Govind Devji defining the centre of the city plan.

A complete Matrix of Subcentres by locating other temples at strategic point in a hierarchical manner.

Walled city of Jaipur has Seven city gates

The main markets, shops, havelis and temples on the main streets were constructed with a uniform street facade

Walled city has sectors 800m x 800m in size, which makes them ideally suited to predominantly pedestrian modes
Densely built residential complexes with larger streets is known as “mohalla”

Mohalla; in addition to dwellings, it contains a number of artisan workshops, a temple or two and perhaps a mosque.

Each *mohalla* typically accommodates about 40 to 50 residential plots, which makes them a cohesive social and cultural subgroup.

The Renaissance approach of the 18th century walled city of Jaipur is reflected not only in its exclusive and innovative planning but also in the conception of the city as a thriving trade and commerce hub.
continuous growth in population and unregulated commercial activities in areas inside the walled city have led to an increasing transformation of the urban fabric today and resulting increasing demand for travel pattern, increasing trips and availability of multiple means of travel as well as increasing parking demand.

So in preview of above there is an urgent need to arrest this process as well as to readdress the present situation in lieu of the parking reform initiatives.
Wide open public space at Badi Chaupar, characterised by a well in the centre and shops around it.

Chaos and congestion at Chaupar in recent times.
WALLED CITY CHARACTERISTICS & ITS CONSEQUENCES AND RESULTS

Walled City Characteristics
- Traditional Retail & Wholesale Markets
- Mixed Use Development
- Informal Activity
- Tourism Destination
- Mixed Traffic
- On Street Parking

Consequences
- Parking Demand for:
  - Residents
  - Shopkeepers
  - Shoppers
- Intense Freight Activity
- Regional through-traffic movement

Results
- On-Street Parking
- Encroachment on Public Space (ROW/Footpath)
- Traffic Congestion & Increasing Jams
To appreciate traffic and parking characteristics a number of field surveys has been carried out.

They include:

- Road Network Inventory Survey
- Classified Traffic Volume Count Surveys
- Speed and Delays Surveys
- Parking Surveys
- Opinion surveys
- Willingness to pay Surveys
- Shop inventory Surveys
THE SALIENT FINDINGS OF THE SURVEY ARE:

- The variation in traffic between the working day and holiday is only 0.5%.

- Two wheelers have maximum share varying from 39-47% followed by cycles which is from 17-35%. Cars have share of 5-11% while the transport mode (tourists buses etc) share is approx. 2% only.

- Parking duration results indicate that on-street parking duration for about 50% of vehicles is only for 30 minutes, 15-25% vehicles are parked for one hour duration and the rest of the vehicles for more than one hour. At off-street parking sites parking duration vary from 30 minutes to 12 hours.
EXISTING PARKING SCENARIO

- Under the provision of Rajasthan Motor Vehicle Rules, Rule 8.1(iii) Jaipur Nagar Nigam has assigned on-street parking spaces parallel to the shops in Jauhari Bazaar and Bapu Bazaar.

- Different parking spaces are allocated for two-wheelers, four-wheelers, rickshaws and auto-rickshaws on-street as per the rule.

- All these parking spaces are free parking spaces.

- Most of the on-street parking is haphazard and inefficiently utilised.

- Both the customers and the shopkeepers complained about a wrongly parked vehicle behind their vehicle.

- Roads in both the markets lack proper lining demarcating road lines and parking lines.

Note:- Actual demand for parking for the residents/shopkeepers is to be identified.
Peak parking demand is found in the evening between 4-8pm.

54% of the respondents visit these areas between these times.
Around 45% of the shopkeepers in the survey answered that approx 60-90% of the parked on-street vehicles belonged to the shopkeepers themselves pointing towards the long term use of these parking areas.

**Issues:**

- On-street parking spaces is pre-dominantly utilised by the shopkeepers during 10 a.m to 8 p.m.

- The current demand and supply analysis reveals the **hidden fact** of supply is on street parking which consumes right of way leading to traffic congestion

- Whatever parking is available it is unorganized & inefficient
Fact is these parking spaces are not efficiently utilised and therefore there is need to address this matter.

*On-street parking in Jauhari Bazaar*

*Picture showing the inefficient utilisation of parking spaces.*
Another issue of parking is due to extremely high density and the wholesale business centre.
In order to address the problems occur by traffic congestion & jams there is a need to discourage the present practice by following major ways:

- Pedestrianization of the Walled City
- Provision of Public transport
- Proposed Locations for Parking on the Periphery by putting Park & Ride in
  - Ramleela Maidan,
  - Old Aatish Market campus
  - Chaura Rasta behind Hind Hotel
  - Site of old grain mandi at Chandpole Gate

- Decentralization of Wholesale activities
- Restrictions on Land use change specially for commercial activities
- Public Participation by involving the stakeholders
- Traffic management plan for walled city. (one-way/ no traffic zones)
CONCEPT FOR PLANNED PARKING & STRATEGY FOR DECONGESTION
THANK YOU