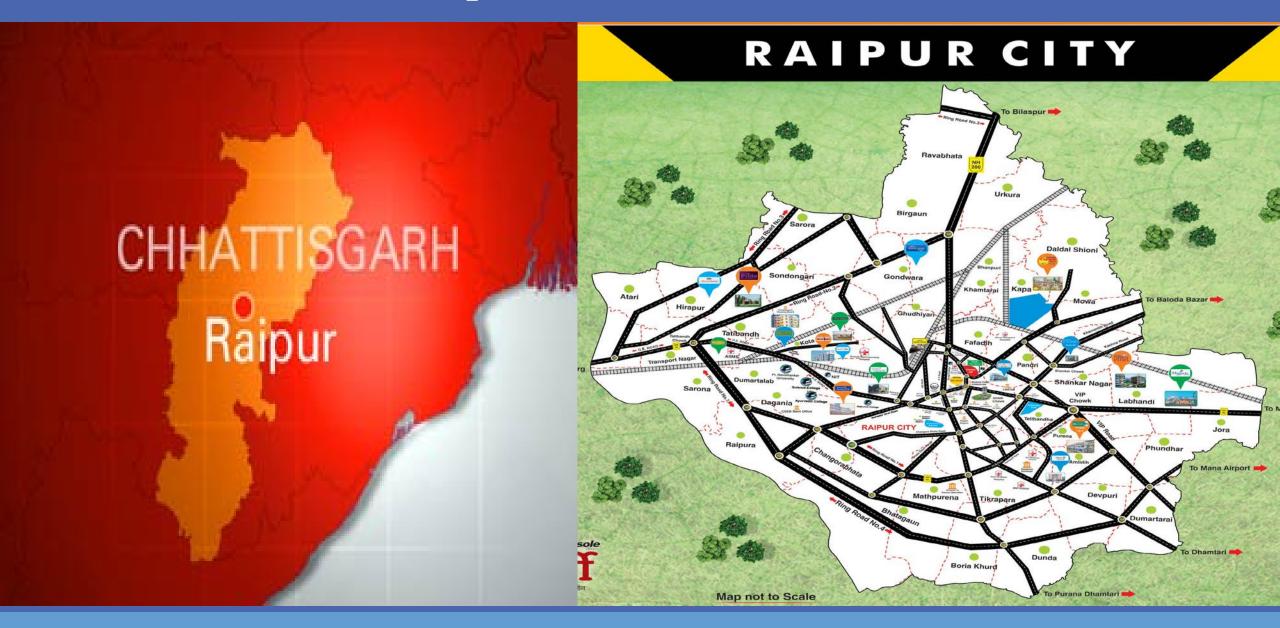
### Draft Parking Policy For Raipur, Chhattisgarh



Presented by:Abhinav Agrawal
Addl Director, Urban Administration & Development
Department, Chhattisgarh

### **Raipur – An Introduction**



### **Raipur – An Introduction**

- 1. Raipur is the capital City of the newly established State of Chhattisgarh.
- 2. The city is administered by the Raipur Municipal Corporation sprawling over an area of 140 square kilometers.
- 3. Static Population: 14 lakhs, Floating Population: 6 Lakhs.
- 4. Biggest Commercial Centre of Chhattisgarh and Commercially Caters to adjoining States of Odisha, MP and Maharashtra
- 5. One of the most industrialized district in India.

### **Parking Scenario in Raipur**

- 1. Total number of registered vehicles in Raipur as per record is 5,44,275 and increasing at exponential rate
- Study says that at least 30% of the vehicle running on road look for parking.
- 3. Only 12 Parking Lots are owned by RMC with a capacity of 600 four wheelers and 550 two wheelers. Few parking lots are available in Malls and large shopping complex as well.
- 4. Due to lack of parking infrastructure, most of the vehicles are parked on road sides especially in market areas hampering free flow of traffic.
- 5. The traffic enforcement rules are not actively followed allowing users to park their vehicles anywhere.



### The Global Parking Problem

O1 Congestion

Abrupt On-Street
Parking leads to traffic

congestion

02 Pollution

Vehicle Hoping from one to Other place in search of Parking

104 Lack of Parking

Lack of Sufficient Smart
Parking Spaces

Enforce ment

Lack of Enforcement for Abrupt Parking



### **Need to Address the Parking Problem**

- 1. With increase in standard of living comes the urge to acquire a personal vehicle resulting in increased vehicle density.
- 2. Rapid increase in vehicle count creates inconvenience to traffic flow
- 3. Lack of adequate space within the city.
- 4. Typically vehicle runs for one hour and is parked for remaining 23 hours.

Parking policy has emerged as an effective tool worldwide to address the parking problems of the city. Currently in India very few Cities have good parking policies. Few among them are Pune & Delhi.

### **Objective of Parking Policy**

"The overarching objective for parking policy is to progressively reduce the demand for parking and facilitate organized parking for all types of vehicles"

# Broad Goals of the Parking Policy

- Parking policy should act as a travel demand management tool to reduce dependency on personal vehicles thereby reducing congestion, accidents, pollution etc
- 2. Parking Policy should effectively manage parking demand.
- 3. Policy Policy should prescribe efficient management strategies for existing parking.
- 4. Parking Policy should lead to a shift towards common, priced and shared parking and should optimize parking revenue.
- 5. Parking Policy should address the parking needs of the public transport buses, non-motorized transport and freight transport in a city.
- 6. Parking Policy should prevent diversion of open (Public) utilitarian spaces for parking
- 7. Parking Policy should aim at regulating the growth of vehicle numbers.
- 8. Parking policy should aim at Safety of pedestrians.

## Broad Goals of the Parking Policy

- 8. Parking Policy should promote establishment of safe, secure and smart parking spaces.
- 9. Parking Policy should promote private participation in building and management of parking spaces.
- 10. Parking policy should promote the transit oriented development design principles that provides for sufficient parking spaces at intermodal hubs so as to promote use of Public Transport. (Park & Ride)

### Policy Components- Classification of Parking Spaces based on Vicinity

Parking Spaces can be classified into 5 broad categories based on the vicinity:-

- 1. Parking near residential areas
- 2. Parking near commercial and office areas
- 3. Parking near hospitals
- 4. Parking near educational institutions
- 5. Parking near recreation centers, markets and shopping areas

### Policy Components – Policy Prescription for various categories of Parking spaces

#### 1. Residential Areas:-

- Norms for the number of parking spaces based on residential areas.
  - For high income areas minimum 2 car spaces per residence
  - Middle income group minimum 1 car space per residence
  - Low income colonies to have certain minimum parking spaces for two wheelers and bicycles.
- Parking space should be available within a distance of about 300-500 meters of each household in case it is not part of the residence.
- Residents would be required to pay a discounted monthly fee for use of parking complexes

#### 2. Commercial and office areas:-

- Locations well connected by Public Transport should have restricted parking availability, have a high parking fee and good law enforcement for abrupt parking.
- Locations yet to be connected with good public transport should have sufficeint space for long duration parking.

#### 3. Hospitals:-

Locations with hospitals and other medical establishments should have a reasonable amount of off-street parking/Multi-Level Parking

#### 4. School:-

School children should be encouraged to use school buses therefore parking not required.

#### 5. Recreation Centers, Markets & Shopping areas:-

Locations with recreation centers, markets & shopping areas should have a reasonable amount of off-street parking/Multi-Level Parking

### Policy Components- Classification of Parking Spaces based on duration

Parking Spaces can be classified into 4 broad categories based on the duration:-

- 1. Short duration parking, generally less than half an hour.
- 2. Medium duration parking from half an hour to about 4 hours.
- 3. Long duration day time parking of up to 4 to 12 hours.
- 4. Overnight parking.

#### **Planning:-**

- Integrate the land use and transportation at planning and implementation levels.
- Commercial business areas, Mixed land use developments, high intensity land uses are to be centered around the transportation hubs with adequate parking.
- Areas with high density of population must be serviced with public transportation.
- Adequate Parking facilities shall be provided at Local Bus Terminus, Interstate Bus terminus and Railway Stations etc.
- Those building renewal projects which cannot accommodate parking in their plans due to the constraints of space within the site. In such cases, equivalent parking impact fee based on the intensity of the use shall be levied and authorities will facilitate common parking infrastructure.
- The old areas of the city do not have enough open spaces for accommodating parking. Vehicle free zones may be planned in consultation with different stakeholders. Wherever feasible multi level parking /underground parking can be created.
- All new developments by govt and private developers shall make necessary plans for the parking infrastructure and management.

#### **Transportation:-**

- Upgrade the existing sub-optimal Public Transport System.
- Contain and regulate the addition and growth of vehicular traffic to the city by Legislation, fiscal disincentives and traffic management measures.
- Limit the upper cap of vehicles that can ply in the city.
- Phase out old vehicles which are more than 15 year old and non compliance to pollution norms.
- Levy of fees for deterring vehicles entering/exiting the city.
- Introduce area licensing schemes where vehicles other than public transport vehicles are charged for entry into the area.
- Earmarking the areas of the city into zones and restricting the entry and exit of vehicles into these zones during specific hours of the day.
- Introduce congestion tax for vehicles traversing through commercial areas during peak hours.

#### **Engineering & Technology:-**

- Segregation of parking spaces for two wheelers and other vehicles in order to avoid congestion and minimise suboptimal use of space due to overlapping.
- Building of boundary walls and other permanent structures for the parking space to insulate the parking space from regular traffic and unauthorised parking movements.
- Depending on the space available and the capacity required, decisions should be taken with regard to the technology to be used for on and off street parking.
- Technology Options:- Hand held parking ticket dispensing machine, Stack Parking, Automatic toll collection and parking entry boom, Automatic parking meters, Parking Coupons (display & park), Intelligent traffic control & parking system with real time information on parking, e-parking, Road markings & Signage, Multilevel fully automatic parking system

#### **Awareness & Sensitization:-**

- Create a few zero tolerance zones with all infrastructure such that no violations in terms of pedestrian, parking and traffic occur. Such zones will serve as "model". These zones can be expanded to the entire city in the due course.
- Conducting education and awareness programmes to spread the benefits of organised parking and avoiding road space for parking (resultant increased speed of vehicles and increase in productivity)
- Awareness building and facilitation for enabling the shift from the use of private vehicles to Public transport.
- Awareness on Car-pooling and sharing of vehicle facilities.

#### On Street Parking:-

- The On -street parking will be allowed on some important roads wherever there is adequate road width and approvals of expert panel comprising of the traffic police. As a policy, the management of road side parking will be assigned to the "shop keepers association" of the respective road where Street parking is being promoted. 50% of income earned from shopping will be given back to the associations to pay for the facilities created and the surplus if any will be used for the development of the road on which on street shopping has been provided.
- While deciding the specific locations for on-street parking and the number of parking spaces to be provided, due consideration will be given to loss in road capacity in permitting parking.
- As far as the arterial and sub arterial roads are concerned, priority will be accorded for traffic movement and elimination of parking at all times will be considered as a long-term strategy.
- On street parking in residential areas will be provided only on cross roads and conservancy lanes which are wider than
   12 meters. However, this is to be done with consultation of the residents.
- No on-street parking would be permitted at locations on primary and secondary road network where carriageway width is less than 6 meters.
- On-street parking would not be allowed on roads where V/C (volume/capacity) ratio is more than 0.8 or speeds less than 15km/hr.
- Provision of sidewalks will be considered as an integral activity, while planning for on-street parking. This is proposed to eliminate conflicts between pedestrians and vehicles on movement.

#### **Heavy Vehicle Parking:-**

- Overnight parking of buses, trucks, tourist buses, vans, water tankers, container Lorries etc along major roads will be discouraged.
- Specific off-street parking facilities will be made available by the owners/operators of the vehicle for night-time parking or when the vehicles are not in use. Such vehicles will be discouraged from occupying the road space of the major roads for long-stay parking.
- The Vehicle Parking Certificate (VPC) to be made mandatory for all vehicles in the future.

#### Parking, Loading, Unloading Area:-

- Minimum parking area per car to be 13.75 Sqm, per scooter to be 1.25 Sqm and per bicycle to be 1.00 Sqm.
- For buildings used for commercial, industrial and storage purposes an area of 1000 Sqm. should be kept vacant for the purpose of material loading and unloading.

#### Taxi, Auto parking:-

Sufficient Pickup points and convenient parking for autos and taxis shall be provided within the city.

### **Policy Components- General Policy prescriptions**

#### **Underground parking:-**

- Investigate feasibility of parking areas under open spaces thereby avoiding disturbance of green area
- Make basement Parking Compulsory in certain areas such as malls, complexes etc.
- At least two ramps should be provided in case of parking provided in basement.

#### **Private Sector Participation:-**

Private participation in building and management of parking spaces should be encouraged for optimizing parking revenue

#### Vehicle Registration to be linked with owners parking availability in future

#### **Parking Policy Enforcement:-**

- Remove encroachments at all public parking land.
- Illegal parking spaces without the authority of City Administration should be removed or legalized by bringing them into legal fold
- Unauthorized/Abrupt parking should be dealt severely by removing the parked vehicle and towed away.

#### Multi-level parking:-

- Minimum plot size-1000 Sqm (smaller plots could be considered by the relevant authority)
- FAR conditions can be relaxed for Multi-level parking
- Should be developed in all congested areas

### **Policy Components- General Policy prescriptions**

#### **Buses:-**

- Buses shall not be parked on roadside or along major roads.
- Buses shall stop and pick up passengers only at designated bus stops and bus terminals.
- Buses shall be parked only in designated bus parking zones/garages for purpose of maintenance, parking etc.
- Any illegal parking of buses shall be liable to be fined.
- Bus bays should be compulsory at bus stops & suitable curbside lengths to be kept clear of parked vehicles near bus bays

#### Intersections, Junctions:-

 Areas up to 100m from intersections on all arms and other critical locations would be kept free from parking and other encroachments

#### **Pedestrians:-**

- No parking would be allowed on raised footpaths or other corridors meant exclusively for pedestrians.
- There should be clear demarcation between footpaths & parking spaces so as to avoid any inconvenience to pedestrians.

#### **Alternate Parking Spaces:-**

 Suitable Large public spaces such as Parks, Race Course, Play grounds, stadium and underutilized public amenities and land at select localities can be utilized for off-street parking through use of basements, underground parking structures. Care must be taken not to disturb the functioning of the space above.

### **Policy Components- Parking Fees & Rates**

#### The parking rates to be fixed considering the following:

- 1. For areas with good public transport facility, the parking rates should be higher.
- 2. Parking rates should be reflective of rentals of the area, the size of the vehicle and the levels of congestion in the area.
- 3. Parking rates shall be based on vehicle size and the amount of space it occupies.
- 4. Paring rate should vary with the duration depending on whether it is on-street or off-street parking
- 5. Parking rates may vary on peak hours and off-peak hours.
- 6. Parking rates may vary on weekday and weekends (Saturday-Sunday) as weekends draw more vehicles in commercial, entertainment and such other areas.
- 7. Night parking charges may be kept at discounted rates.
- 8. As a general Rule of thumb Parking fee for On-street to be more than Off-street
- 9. Hourly Parking fee for On-street
- 10. Revision of Parking fee at regular intervals
- 11. On street and off street parking management in one parking district shall be given to one private operator.
- 12. Parking rates may vary in different areas of the city. High parking rates shall be levied in high demand areas.
- 13. All types of parking may include use of prepaid smart cards, which may directly be linked to the person's bank account. 10% discount may be given to the person using such card.
- 14. Differential parking rates for private vehicles and taxis.

### **Policy Components- Exemption**

The following types of vehicles shall be exempt from parking fees when parked in designated slots during certain periods:

- 1. Passenger auto rickshaws and taxis when parked in designated slots meant for their parking.
- 2. LCVs used for delivery in specified duration during off-peak hours.
- 3. Ambulances
- 4. Vehicles of differently-abled people
- 5. Bicycles parking shall be free of charge at all times.

### Benefits envisaged out of Implementation of Parking Policy

- 1. Enhanced quality of life for the citizen.
- 2. Improvement in their parking experience & satisfaction
- 3. More efficient use of parking and increased revenue
- 4. Reduced illegal parking
- 5. Reduced revenue leakages
- 6. Reduced man power cost in operation.
- 7. Reduced travel time and traffic congestion
- 8. Easy & Fast location of parking slot
- 9. Multiple modes of payments with simple process
- 10. Assured parking with pre booking facility

# Thank You