# Municipal Corporation, Raipur (C.G.)

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# **URBAN TRANSPORT** (Non-Motorised, Ferries, Waterways)

## 1. SERVICE LEVEL GAPS ASSESSMENT

Under this section, assess the existing situation and service levels gaps for Urban Transport including Non-motorized transport (NMT), Ferries and Waterways. (AMRUT Guidelines; para 3 & 6). Service Level gaps will be analyzed as per indicators prescribed in Service Level Benchmarks (SLBs) for urban transport of MoUD, Gol.

#### 1.1 Service Level Status

There are four Levels of Services (LOS) which will be calculated considering various indicators as LOS1, LOS2, LOS3 and LOS4 correspond to adequacy and quality of city's available transportation services. The summary of the service level gap and performance should be presented as per illustrative Table 1.

**Table 1: Service level Benchmark** 

SI.	Benchmark	Levels	of	Present
No		service as	per	Service level
		SLB, MoUD		
1	Availability of public transport			25%
2	Available Pedestrian facilities- Percentage of City Covered (%) by Footpaths			1.34%
	Non Motorised Transport Facilities  a) % of network covered			0
3	b) Encroachment on NMT roads by vehicle parking (%) c) NMT parking facilities at interchanges			NA
	(%)			NA
	Level of usage of Intelligent Transport System(ITS) Facilities			NA

4	a) Availability of Traffic Surveillance (%)	0
	b) Passenger Information System (%)	0
	c) Global Positioning System (GPS)/ General Pocket Radio Service (GPRS) (%)	0
5	Parking: Availability of On-street paid public parking spaces (%)	

While assessing present service level gaps, please provide information in 500 words responding to the following questions;

 Does City Mobility Plan have introduced components such as NMT, Ferries, Waterways?

Ans-Yes, LONG TERM TRAFFIC AND SHORT TERM TRAFFIC & TRANSPORTATION PLAN FOR RAIPUR URBAN AGGLOMERATION by RITES(a govt. Of india enterprise) has introduced component for MNT and ferries.

 Does Comprehensive Mobility Plan prepared have given adequate attention to Non -Motorized transport?

**Ans-Yes** 

• Do you think city roads are safe for pedestrians? If no then, which section needs immediate attention?

Ans-No. Every heavy traffic roads need separate footways for pedestrians.

- What type of NMV infrastructure available in the city?
  - Lanes reserved for NMV-Only In few locations
  - o Footpath allocated for both pedestrian and NMV- Only In few locations

Area allocated to NMV parking- Only In few locations

- Whether parking supply inventory is available for the city including;
  - Types of on-road and off road parking-Yes
  - Parking restrictions (time of day, duration, private etc)- Yes
- Whether parking facilities available for bicycles, auto rickshaw, goods delivery.
   Ans-Yes
- Is private sector involved in parking?

What is the average Travel Time to Work by Public Transit and Non Motorized Modes

Ans-NA

 What is average Travel Distance to Work by Public Transit and Non Motorized Modes

Ans- For cycle and rickshaw it is 2.50 km. For bus it is 17.19 km.(as per RITES report)

- Have level of services (LOS) been calculated based on the indicators prescribed in the SLB for urban transport by Ministry of Urban Development?

  Ans-NA
- Do you think there is adequate capacity in cities to implement Service Level Benchmarks concept?

#### Ans-No

• What are the challenges and opportunities associated with current performance level?

Ans- 1)Road network capacity is inadequate,

2)traffic composition on roads indicates very high share of two wheelers and auto rickshaw on most roads

3)Many junction particularly Shastri chowk and ghadi chowk etc have very high approach traffic volume.

While planning for the transport system the above problems and issues need to be kept in consideration.

- Has budget provision for NMT included in the transportation projects in the city?
   Ans-NA
- Have specific issues for the city been identified and addressed including issues with the existing traffic, NMT, parking / transport environment?
   Ans-Yes
- What are major challenges facing achieving these service level benchmarks related to urban transport components including NMT?
   Ans- in the absence of adequate and quality mass transport system, people are using personalised modes which is not only leading to congestion on road network but also increasing environmental pollution.
- What is the percentage of Intersections designed under Complete Streets Design standards

Ans-

 What is the percentage of City footpaths designed with accessibility and urban design norms

Ans- About 3%

- Whether adopted parking bans/restrictions in CBD and TOD districts
   Ans- Yes
- Whether City has adopted the concept of parking maximums and zero parking minimums in DCRs for TODs

**Ans-Yes** 

- Whether Provision of bicycle parking at transit stations and TOD developments
   Ans- NA
- Bicycle sharing program in a city
   Ans- NA
- What is the percentage of streets designated as pedestrian and bicycle/NMT only streets

**Ans-4%** 

 Presence of UMTA with legislative, executive and financial commitments. Presence of an NMT program within the UMTA with budgetary commitments
 Ans- NA

# 1.2 Institutional Set Up

Describe the institutional framework including role and responsibilities in terms; administration and Policy making, planning, Vehicle Registration, public transportation operators including Private operators and overall traffic management.

Role and Responsibilities of all the agencies shall be provided in the illustrative table No. 2

Table 2: Role and responsibility of agencies involved in management of City transport

SI.No.	Agencies	Responsibilities
1)	PWD	Road work
2)	RMC	Road work
3)	Traffic Police	Route map & traffic controlling

Please provide information in 200 words responding to the following questions;

- Who is responsible for management of urban transport in the city?
   Ans- Raipur Municipal Corporation(RMC),traffic police department, Raipur Development Athuority(RDA) share the primary responsibility for urban transport and planning
- Is there enough provisions for enforcement of traffic rules for pedestrian safety on roads?

**Ans-Yes (proposed in RITES report)** 

• How are you planning for execution of transport related projects for AMRUT,

whether, present role and responsibilities lying with these organizations is capable to implement projects under AMRUT?.

Ans- We are planning to execute our master plan of transport prepared by RITES under Amrut.

Existing organisations is capable implement projects under AMRUT.

# 1.3 Status of On-going Projects

Critically examine the existing and ongoing projects for improvement of urban transport as to be filled in illustrative Table No.3

**Table 3: Status of Ongoing Projects** 

Project/Sector	Approved Cost	Status of	Expenditure	Scheme
	(Rs. lakhs)	projects (till May 13)	(Rs. Lakhs)	
City Bus	1188			JnNURM Scheme

Please provide information in 200 words responding to the following questions;

• Which are the initiatives taken for implementation of NMT facilities in the city? Please list out initiatives undertaken in different ongoing programs and projects to address these gaps.

Ans-there is a proposal for NMT in RITES transportation plan which indicated cycle tracks with a minimum width of 2.0 m on both sides of the road adjacent to footpath are recommended.

- Whether convergence with other ongoing Central and State and Local Government Programs/Schemes can be done at this stage.
   Ans-Yes
- Whether ongoing scheme and projects has been critically reviewed? Please explain what is the extent of convergence to bridge the gaps?
   Ans-Yes,

#### 2. BRIDGING THE GAP

# 2.1 Demand Gap Assessment

Despite the fact, non-motorized modes and public transit account for a significant proportion of travel activity of a city. The city needs to pursue different strategies and programs for bridging the gap on transportation facilities where the city is and where it wishes to go in future.

Please provide information in 200 words responding to the following questions;

 What steps can be taken to bridge these gaps? Please explain in 200 words, Ans- improving primary, arterial and other important roads by providing grade separation, junction improvement, adding missing links, widening and other road side facilities wherever necessary. For road system flyover or underpass may be provided at critical junctions. Planning of these facility is in

# transportation plan of Raipur by RITES.

• Whether present level gaps as identified through SLB indicators will be achievable by 2021 as compare with the present level of gap and demand?. (Table No.4)

Table 4; Bridging the gap- Demand Assessment

SI. No	Bench mark	Levels of service as per SLB, MoUD	Present Service level	Current Gap	Demand / Target by 2021
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SI. No	Bench mark	Levels of service as per SLB, MoUD	Present Service level	Current Gap	Demand / Target by 2021
1	Availability of public Transport		25%		
2	Percentage of City Covered (%) by footpaths		1.34%		
3	Non Motorised Transport Facilities including; a) % of network covered, b) encroachment on NMT roads by vehicle parking (%), c) NMT parking facilities at interchanges (%)		0		
4	Availability of Traffic Surveillance (%)		0		
5	Passenger Information System (%)		0		
6	Global Positioning System (GPS)/ General Pocket Radio Service (GPRS) (%)		0		
7	Availability of On-street paid public parking spaces (%)		4 places		

#### 3. OBJECTIVES

The objective will lead to explore and examine viable alternatives options available to address these gaps. These will include out of box approaches. (AMRUT Guidelines; para 6.4 & 6.8 & 6.9). Please provide information in 200 words responding to the following questions;

- How will you define your overall goal to improve city transport?
   Ans- We have a transportation plan which includes all the aspects to improve city transportation
- How well does goals and objective for developing efficient urban transportation facilities can articulate the use of NMT options and parking facilities to improve the quality of life of local citizens?
  - Ans-In transportation plan there is options for NMT and parkings, which surely improve the quality of life of local citizens.
- How identified each objective can evolve considering bridging the gap with present

level of services as to achieve SLB indicators. **Ans-NA** 

 How objectives can be framed ensuring sustainable mobility solutions and creating city-wide NMT facilities for pedestrians and cyclists.

Ans-keeping in consideration the transport strategy evolved for the city, the immediate need is to optimise the use of available transport infrastructure by short term traffic engineering/management measures.

Traffic engineering and management measures have been finalised in the light of problem identification and included in Tansportation Reports (RITES).

 How objectives for improvement of NMT facilities integrate with other modes of transport.

Ans-Transportation plan has facilities which integrate with both NMT and other modes of transport.

## 4. ALTERNATE ACTIVITIES TO MEET OBJECTIVES

Evolve overall objective is to ensure that mobility solutions for the city that are sustainable and create city-wide NMT facilities for pedestrians and cyclists and integrate them with other modes of transport. Suggest possible strategies and options to achieve each objective with estimate cost of alternate solutions as per table 5 & Table 6

Table 5: Possible Strategies to meet objectives

SI.No	Objectives	Possible Activities	Financing Source
1)		Footpath, Underpass, FOB, etc.	AMRUT,State Govt.,PPP

Table 6: Estimated Cost for various possible activities

No	Projects	Unit	Quantity	Total Cost (ir
				Crore
1)	Low floor buses			<b>47</b>
2)	Inter state bus terminal			<b>67</b>
3)	Integrated freight complex			127
4)	parking			238
4) 5)	foot over bridge			38
6)	junction improvement			17
6) 7)	median			5
8)	footpaths			15
9)	relocation of bus stop			2
10)	rob/rub			180
11)	flyovers			54
12)	road widening			69
	Total phase 1 cost			860

Phase	2( sub system)	
1)	LRT	4275
2)	BRT	1030
3)	Low floor buses	227
4)	Inter state bus terminal	60
5)	Integrated freight complex	60
	Flyovers	
6)	Road improvement	48
7)	New road links	225
8)	Commuter	428
9)	rail(upgradation of existing track)	555
40)	Regional roads(upgradation and widening)	400
10)	Regional roads(proposed by passes)	180
11)		900
	Total phase 2 cost	7988

Phase 3(sub system)				
1)	BRT	720		
2)	Low floor buses	257		
3)	Integrated freight complex	60		

	Total cost for phase1+phase2+phase	e3 14043
	Total phase 3 cost	5195
5)	Regional roads(proposed regional bypass)	4050
4)	New road links	108

While addressing alternate solution to achieve these objects, please provide information in 500 words responding to the following questions;

- How realistic and feasible urban transport strategies are to be evolved to address key challenges, priorities as an outcome of the citizen consultation Ans-NA
- What alternative innovative solution can be adopted for improving the service delivery by creating;
  - a. Citizen friendly provision of barrier free pedestrian facilities including, footpaths, road marking and signages,
     Ans-Yes
  - b. pathways,

**Ans-Yes** 

c. parking

Ans-Yes

d. traffic management using ITS

Ans-NA

What strategic intervention is required in the implementation of above projects

 Whether alternative modes of transport such as cycling can be provided in major roads

Ans-Yes

• Whether non-Motorised Transport (NMT) facilities corridor suggested with dedicated NMV, Cycle track and Signalized Intersection count.

**Ans-Yes** 

 How innovative solutions for alternative modes of transport including NMT such as cycling, pedestrian and public transportation system will address the overall transportation issue of the city?

Ans-NA

• What will be the source of funding for identified project? **Ans-AMRUT, State govt. And PPP modes.** 

 Whether convergence with other scheme has been made. Please explain each identified projects and their source of funding such as AMRUT, 14th FC and also converge with other schemes.

Ans-NA

#### 5. CITIZEN ENGAGEMENT

Each alternative will be discussed with citizens and activities to be taken up will be prioritized to meet the service level gaps. The section will summarize the Citizens priorities for adoption of alternate solution of urban mobility, drawing on SLIP preparation.

Please provide information in 200 words responding to the following questions;

 Have all stakeholders including residents (RWAs), Transporters, RTOs, Traffic Police attended the citizen consultation?

**Ans-Yes** 

• Has alternate proposed crowd sourced?

Ans-Ves

- What is feedback on the suggested alternatives and innovations?
- Has alternative taken up for discussions are prioritized on the basis of consultations?

Ans-Yes

What methodology adopted for prioritizing the alternatives?

 How citizen has been exposed best practices and smart solutions in order to generate citizen-driven solutions for urban mobility?

Please examine whether identified solutions are addressing citizens requirement
 Ans-Yes

• Whether ULB have adequate resources to implement prioritized alternate solutions?

**Ans-Yes** 

• How innovative alternate options of NMT facilities examined and shared with citizens?

Ans-NA

# 6. PRIORITIZATION OF PROJECTS

Based on the citizen engagement, ULB will prioritize these activities and their scaling up based on the available resources to meet the respective objective. (AMRUT Guidelines;

para 6.6, 6.7 & 7.2). Please provide information in 200 words responding to the following questions;

 Are innovative solution prioritized based on the available resources and demand of citizens?

Ans-Yes

Has source of funding considered while prioritizing the project?
 Ans-Yes

Whether project has been prioritized considering last mile connectivity?

Table 8	Prioritization	of	Projects

Priority No.	Project	Cost	Financing Source
		(Rs Cr)	
	Footpaths	15	
	Parking	238	
	ROB/RUB	180	AMRUT, state govt. PPP
	Road widening	69	
	Flyovers	54	

## 7. OUT OF BOX SOLUTION USED

Please provide information in 200 words responding to the following questions;

- What are the out of box thinking on alternative and new innovative solutions for the following;
  - a. Citizen friendly provision of barrier free pedestrian facilities including, footpaths, road marking and signages,
  - b. pathways,
  - c. parking
  - d. traffic management using ITS

Ans- City should have separate footpath on every busy road, should have pathway, and parking, and this is done with creativity and in constructive manner.

 Whether solution provided to improve the safety of vulnerable groups such as old age/handicapped/children Ans-NA

# 8. CONDITIONALITIES FULFILLED AND RESILIENCE BUILT-IN

First and foremost condition is to identify the availability of land for projects such as parking, widening of roads for pedestrian, cycle tracks and hawkers zone. Further, agencies need to be brought on board for any new initiatives as part of convergence

process and necessary approval and permissions.

Please provide information in 200 words responding to the following questions;

 Whether described the conditionalities of each project in terms of availability of land parking, widening of roads for pedestrian, cycle tracks and hawkers zone?
 Ans- Transportation plan for Raipur (RITES) describes all the condition of each projects.

- How these projects will be funded? Are projects being implemented through own sources or borrowing then which is the commitment in this regard.
   Ans-Projects will be funded by AMRUT mission, State Govt. And by PPP modes.
- Has environmental obligation such as clearances and NOC required? Please suggest action and initiatives need to be taken in this regards.
   Ans-No

#### 9. FINANCIAL PLAN

Prepare Financial Plan for the complete life cycle of the prioritized development. The financial plan will include percentage share of different stakeholders (Centre, State, ULBs and) including financial convergence with various ongoing projects. Describe briefly the institutional arrangement), leveraging potential partnerships, convergence with other Government Schemes, monitoring and evaluation and also provide year-wise milestones and outcomes.

• How the proposed finance plan is structured for transforming and creating infrastructure projects? Explain in 200 words how these institutional arrangements are leveraging partnership and converge with government scheme and provide list of individual projects which is being financed by various stakeholders.

## Ans- explained in table 5

- Has financial plan prepared for identified projects based on financial convergence and consultation with funding partners?

  Ans-Yes
- What are the different sources of funding being tapped for this project.(75 words) **Ans-AMRUT, State Govt.**
- Is the proposed financial structure is sustainable? If so then whether project has been categorized based on financial considerations (100 words)
   Ans-Yes.
- Have the financial assumptions been listed out? Please provide the list. (100 words)
   Ans-Yes(according RITES plan)

#### 10. FINALIZATION OF MASTER SERVICE LEVEL IMPROVEMENT PLAN

Discuss Draft Master Service Level Improvement Plan with citizen. Based on the final citizen consultations, prepare final Master Service Level Improvement Plan. Annual Plan will be prepared as an application for monitoring the improvement in achieving the service level indicators as targeted in the Service level improvement plan. (AMRUT Guideline; Table 2.1, 2.2, 2.3., 2.4 and 2.5) and Annual Plan (AMRUT Guidelines; Annexure-2, 3, 4, 5& 6)