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 gapswill 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	100% (0.2-0.4 (LOS 3))	2%
2	Available Pedestrian facilities- Percentage of City Covered (%) by footpaths	At least 50% of the city covered with footpath wider than 1.2m	40%
	Non Motorised Transport Facilities		
-	a) % of network covered	At least 25% of the network should be covered with NMT Network	0%
3	Encroachment on NMT roads by vehicle parking (%)	More than 30% NMV network to be free of encroachment	-
	NMT parking facilities at interchanges (%)	100% All terminals should	_
		be provided with NMT parking facilities	

SI. No	Benchmark	Levels of service as per SLB, MoUD	Present Service level
	Level of usage of Intelligent Transport System(ITS) Facilities		
4	a) Availability of Traffic Surveillance (%)	100% (all rapid transit stations, transit terminals and signalized intersectionsto be equipped with CCTVs)	-
	b) Passenger Information System (%)	100% (all rapid transit stations and all transit terminals will be equipped with PIS system)	-
	c) Global Positioning System (GPS)/ General Pocket Radio Service (GPRS) (%)	100%	-
5	Parking: Availability of On-street paid public parking spaces (%)	atanat a della a a della a	

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?

Yes, the City Mobility Plan for Panaji (2008) discusses about components such as NMT, ferries and waterways. CMP talks about introduction of an eco friendly public transport system such as trams and promoting pedestrianisation and the use of non motorized vehicles. CMP proposes to encourage NMV and pedestrians by introduction of dedicated cycle tracks, walkways, footover bridges, zebra crossings, footpath up gradation and pedestrian precincts. CMP included proposals to make major heritage, tourist and retail destinations as pedestrian friendly zones. There are also proposals to strengthen the ferry

system to allow cross movement of people as well as vehicles along with a cruise terminal near Fort Aguda, regulated by Panaji Port.

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

Yes, CMP has given adequate attention to Non - Motorized transport. Measures have been proposed to revive pedestrian and non-motorised vehicular movement in the city. The proposals given in the CMP to encourage NMT include dedicated cycle tracks, walkways, foot over bridges, zebra crossings, footpath up gradation and pedestrian precincts.

CMP states that Panjim being of a small and appropriate scale, a bicycle plan is a viable option to commute within the city for both the locals as well as the tourists. Dedicated cycle lanes along the primary roads would improve the access to public transport stations as well as interchange points. Provision of shade, drinking water and resting stations along the bicycle corridors is also required as per the CMP. A PBS system is also proposed under the revised CDP for Panjim. The recently prepared Holistic masterplan for Panjim (2013) also emphasizes the need for promoting NMT. Pedestrian network plan, Cycle network plan, parking strategies, introduction of ferry lines and linking of NMT with mass transit have been prepared as part of the document.

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

Distances in central Panaji are very suitable for walking. In 10 minutes it is possible to tour the centre from one end to another on foot. In spite of the built and natural features which support pedestrian movement in the core city, it has been highly affected by chaotic traffic pattern due to movement of vehicles all over, inadequate safety measures, noise and pollution due to vehicles etc all leading to unfriendly pedestrian environment.

Currently Panaji City Business District (CBD) is mainly used by motor vehicles. During peak hours, roads like 18th June Rd, Mahatma Gandhi Rd and A.B. Road, all being the core of the CBD area, suffer severe congestion. Most public space is occupied by private vehicles that are parked or circulating. Meanwhile the space used by pedestrians is residual. It is a hostile situation for pedestrians, particularly children and the elderly.

There is urgent need to formulate policies and plans towards the restriction of vehicular traffic within the core city area. It is a priority to create safe pedestrian routes where people can move freely.

Development of Pedestrian Plan under Holistic masterplan includes the following:

Pedestrian Promenade along Mandovi river, Dona –Paula road

- Panaji city centre sector
- Mala Patto sector
- What type of NMV infrastructure available in the city?
 - Lanes reserved for NMV
 - Footpath allocated for both pedestrian and NMV
 - Area allocated to NMV parking

NMV infrastructure is not available in the city, except for footpaths but those also have encroachments. There is lack of continuity of footpath or arcades to walk comfortably. The central city has some parts with arcaded walkways but the ground is uneven and there are too many level changes.

Future proposals for NMV infrastructure development have been outlined in the Holistic masterplan for Panjim, CDP and CMP.

- Whether parking supply inventory is available for the city including;
 - Types of on-road and off road parking
 - Parking restrictions (time of day, duration, private etc)

All the major roads have on-street parking but are highly irregular. The existing one-way lanes in most places in the CBD are being used for double parking. Presently no parking charges are levied by the CCP which has caused parking inadequacy and traffic blockages due to increased rate of parking along the roads.

Only Patto plaza offers the pay and park facility with very cheap fares. However, after introduction of the fares, the site remains under – utilised. Parking near the Market area is the most chaotic and needs to be addressed.

Structured on street and off street parking along with multi level parking lots that will be connected with public transportation are proposed for the future. Parking pricing strategies and have also been suggested in the Holistic Masterplan.

Whether parking facilities available for bicycles, auto rickshaw, goods delivery.

Parking facility is separate for autorickshaws and taxis. However, There is no separate infrastructure for bicycle parking or goods delivery vehicles within the city.

- Is private sector involved in parking?
 Yes, but in a very limited area in Patto.
- What is the average Travel Time to Work by Public Transit and Non Motorized Modes?

There is a considerable number of floating population that comes from neighbouring areas to Panjim for work. There has not been any survey to assess the travel time to work so far.

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

There is a considerable number of floating population that comes from neighbouring areas to Panjim for work. There has not been any survey to assess the travel distance to work so far.

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

 YES.
- Do you think there is adequate capacity in cities to implement Service Level Benchmarks concept?
 - YES. City has very well organized institutional mechanism to support and implement Service Level Benchmarks concept
- What are the challenges and opportunities associated with current performance level?

The State has a ratio of 613 motor vehicles per 1000 people, which is highest in the country. It can be seen that there is too much dependence on private vehicles for transport and they occupy excessive urban road space.

The current increasing motorization rate will augment urban congestion and produce degradation of quality of life in the city. In addition to promote sedentary and unhealthy lifestyles, cars have proved to be a very inefficient mode of transport. Their average occupancy rate is very low, and congestions increase immensely the time and cost for short trips.

The main challenge lies in rationalizing the role of private vehicles, limiting the urban space they occupy.

Distances are not excessive in Panaji, so non-motorized transport (NMT) modes can streamline a very important part of the trips, provided that attractive, enjoyable and safe routes are achieved. It is necessary to invest in public transport and pedestrian and bicycle mobility. Sustainable mobility behaviour should be promoted, as it contributes to depend less on private vehicles and to a better interaction with the environment.

Has budget provision for NMT included in the transportation projects in the city?

Yes, the budget provision for NMT has been included in the transportation projects in the city. Public Bike Sharing System, improving pedestrian facilities are some of the prominent projects mentioned under CDP.

- Have specific issues for the city been identified and addressed including issues with the existing traffic, NMT, parking / transport environment?
 Yes, specific issues for the city have been identified and addressed including issues with the existing traffic, NMT, parking / transport environment. Measures have been worked out in the CMP and CDP to address the same.
- What are major challenges facing achieving these service level benchmarks related to urban transport components including NMT?

Traffic congestion, parking deficiencies and under-resourced public transport in terms of routes and frequencies are regularly identified by the public and business as Panaji's most pressing mobility problems. The public transport system is struggling to compete with private modes such as cars, two wheelers and other intermediary modes, as they are unable to respond to the demand. Panaji's transport crisis harms business efficiency, threatens to undermine the city's competitive position and worsens the quality of life of Panaji-ites. Traffic congestion is such that roads are now approaching gridlock – polluting the city's air and causing misery to motorists, bus passengers and pedestrians alike.

The parking along the roads is not regularized and presently no parking charges are levied by the CCP which has caused parking inadequacy and traffic blockages due to increased rate of parking along the roads.

 What is the percentage of Intersections designed under Complete Streets Design standards

None at present. It is proposed to upgrade them in the future.

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

None at present. It is proposed to upgrade them in the future.

Whether adopted parking bans/restrictions in CBD and TOD districts

Not adopted at present. Despite the efforts of the Traffic Department to declare no-parking areas, they have not been followed in absence of due fines to discourage the same.

 Whether City has adopted the concept of parking maximums and zero parking minimums in DCRs for TODs Not applicable at present.

- Whether Provision of bicycle parking at transit stations and TOD developments
 Not there at present. Parking strategy identified in the CMP, CDP and Holistic Masterplan addresses these points. Linking of NMT with and city is willing to implement them in future.
- Bicycle sharing program in a city
 A PBS has now been proposed under the revised CDP
- What is the percentage of streets designated as pedestrian and bicycle/NMT only streets
 - No streets have been designated as pedestrian and bicycle/NMT only streets.
- Presence of UMTA with legislative, executive and financial commitments. Presence of an NMT program within the UMTA with budgetary commitments

UMTA is not present in Panaji. Currently the Kadamba Transport Corporation has been assigned the power to operate and maintain the public transport system in Panaji. Traffic management is assigned to the traffic police department. Operation, maintenance and asset management is also delegated to the traffic police department.

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

SI.No.	Agencies	Responsibilities				
1	Kadamba Transport Corporation	Operate and Maintain the public transport system in Panaji				
2	Traffic police department	Traffic management, Operation, maintenance and asset management				
3	City Corporation of Panaji	Main implementing agency for projects				

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

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

Who is responsible for management of urban transport in the city?
 Currently the Kadamba Transport Corporation has been assigned the power to operate and maintain the public transport system in Panaji. Traffic management is assigned to the traffic police department. Operation, maintenance and asset management is also delegated to the traffic police department.

 Is there enough provisions for enforcement of traffic rules for pedestrian safety on roads?

Yes

 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?

Yes CCP and KTC have technical staff and expert consultations capable to implement projects in 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

No ongoing projects at present. It is proposed to create NMT facility in the city under AMRUT scheme.

Table 3: Status of Ongoing Projects

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.
 - CMP, CDP, Holistic master plan documents have been prepared which have outlined proposals for NMT facilities in the city.
- Whether convergence with other ongoing Central and State and Local Government Programs/Schemes can be done at this stage.
 No, convergence is not possible.

 Whether ongoing scheme and projects has been critically reviewed? Please explain what is the extent of convergence to bridge the gaps?
 Not applicable.

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,
 - Promote non motorised modes such as walking and cycling within the city. Dedicated cycling tracks and walkways have been proposed. A PBS system is also required to promote cycling.
 - Improve last mile connectivity by linking public transport with non motorised modes.
 - Adequate parking policy needs to be implemented.
 - Traffic management measures such as road hierarchy, the establishment of a one-way circulation scheme and speed reduction as identified in the masterplan need to be implemented.
 - Public transport needs to be augmented.

Public transport

 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/T arget by 2021
1	Availability of public Transport	100% (0.2-0.4 (LOS 3))	2% (0.005- LOS4)	98%	-
2	Percentage of City Covered (%) by footpaths	At least 50% of the city covered with footpath wider than 1.2m	30%	20%	20%

SI. No	Bench mark	Levels of service as per SLB, MoUD	Present Service level	Current Gap	Demand/T arget by 2021
3	Non Motorised Transport Facilities including;				
	a) % of network covered,	At least 25% of the network should be covered with NMT Network	-	1	25%
	b) Encroachment on NMT roads by vehicle parking (%),	More than 30% NMV network to be free of encroachment	-	-	-
	c) NMT parking facilities at interchanges (%)	100%	-	-	100%
4	Availability of Traffic Surveillance (%)	100%	-	-	-
5	Passenger Information System (%)	100%	-	-	-
6	Global Positioning System (GPS)/ General Pocket Radio Service (GPRS) (%)	100%	-	-	-
7	Availability of On-street paid public parking spaces (%)	To cover at least 50% of on street public parking spaces under 'paid parking'	0%	50%	50%

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?

The overall goal is to achieve a new Mobility Model in order to improve accessibility and attain everyday welfare for the City. To achieve this model, it is proposed to cater to two different objectives; increasing the capacity of infrastructures and developing public transportation systems. Facilitate movement of people and not vehicles, promote walking and cycling and reduce traffic congestion.

 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?

The most important alternatives of transportation are walking and cycling. Currently, Cycling is not a preferred mode of transport in Panaji. It is used only by people who do not have alternate ways of transportation. It is proposed to have a cycling network that will join all parts of the city. The major hindrances such as safety, speed of traffic will be addressed while designing the network.

Promotion of walking and cycling will improve air quality and also improve quality of life of local citizens. Congestion at core city area will go down to a very big extend with Multi Level Parking and paid parking facilities, discouraging use of personal vehicles.

- How identified each objective can evolve considering bridging the gap with present level of services as to achieve SLB indicators.
 - The objectives are planned in a manner to overcome the existing problems and bridge the present level of services to achieve the SLB.
- How objectivescan beframed ensuring sustainable mobility solutions and creating city-wide NMT facilities for pedestrians and cyclists.
 - Bringing about a more equitable allocation of road space with people, rather than vehicles, as its main focus will help ensure sustainable mobility solutions and creation of city wide NMT facilities for pedestrians and cyclists. The focus is on planning for the people rather than vehicles by providing sustainable mobility and accessibility to all citizens. This is planned to be achieved by provision of pedestrian tracks, dedicated cycle tracks and a city wide PBS system.
- How objectives for improvement of NMT facilities integrate with other modes of transport.

Implementation strategies for NMT and public transport on the principle of integration will be prepared and implemented by using state funds, ULB funds and AMRUT mission grant. For example PBS in the city will be planned to integrate with the existing 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
	Promote Non	Pedestrian walkways/bridges	AMRUT/ Govt grant
1	Motorized	Dedicated Cycling Tracks	AMRUT/ Govt grant
	Transport	Public Bike Sharing System	AMRUT/ Govt grant

Table 6: Estimated Cost for various possible activities

No	Projects	Unit	Quantity	Total Cost (in Crore)
1	Development of Mandovi Promenade	km	1.5	11.53 CR
2	Development of pedestrian and NMV infrastructure along Miramar- Dona Paula road	km	1.8	13.24 CR
3	Street improvement project for pedestrian and NMV safety at City centre	km	0.5	8.21 CR
4	Improvement of existing pedestrian bridge from Mala to Patto	km	0.06	2.94 CR
5	Construction of new pedestrian bridge from Mala to Public Library	km	0.045	2.83 CR
6	Upgradation of road in Mala Area	Sq.km	5.590	3.60 CR
7	Upgradation of Stairs to Altinho	Sq.km	2.885	3.80CR
8	Boardwalk along mangroves	km	0.75	2.78 CR
	Total			48.93 CR

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

Multiple rounds of public consultations were conducted and proposals thereby finalized.

- 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,

- b. pathways,
- c. parking
- d. traffic management using ITS

Universal design principles to be followed for public buildings and transportation nodes, bus stops etc in the form of barrier free access, ramps and support structures.

• What strategic intervention is required in the implementation of above projects

Stimulation will be required in terms of investment in facilities for NMT, development of public transport infrastructure, awareness campaigns, strong policies as well as disincentives for use of private motorized vehicles. The proposals outlined in the Holistic masterplan, CMP documents should be implemented.

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

Yes cycling tracks can be provided at major roads, with respect of available space. Dedicated cycle tracks are already being planned along major roads along with a PBS system for the city.

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

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?

Currently we have city bus service on limited corridors. A city wide bus system and future plan for implementation of PBS combined together to provide innovative solution aimed to promote walk, cycle and public transport for better urban transportation system in the city. All the modes of transport have been planned in an integrated manner so as to address the overall transport issue of the city. Cycle tracks and pedestrian tracks will encourage use of NMT and thus reduce pollution levels as well the traffic congestion problem of the city.

What will be the source of funding for identified project?

Innovative financial mechanism, ULBs contribution, PPP modes, State and central Govt grant support will be sources of funding for identified projects.

 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.

Panaji is also one of the shortlisted Smart cities. The Smart City Proposal for Panaji is under preparation. Besides, it is also expected to get grant of Rs.XXXXXXX under 14th FC commission. Part of which will be utilized for urban transport project.

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?

Yes

Has alternate proposed crowd sourced?

Yes

What is feedback on the suggested alternatives and innovations?

Citizens have suggested having pedestrian and cycling tracks in all major roads and main markets. Demand for improving parking facilities and reducing traffic congestion were also suggested by the citizens.

 Has alternative taken up for discussions are prioritized on the basis of consultations?

Yes

What methodology adopted for prioritizing the alternatives?

Discussion with various stakeholders were undertaken to prioritize the alternatives proposed.

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

Citizens have been exposed to bestpractices and smart solutions in order to generate citizen-driven solutions for urban mobility by means of discussions and consultations.

Please examine whether identified solutions are addressing citizens requirement

Yes the identified solutions are addressing citizen's requirement.

 Whether ULB have adequate resources to implement prioritized alternate solutions?

Yes ULB have adequate resources.

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

Through ward consultation & citizens survey.

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?

Yes, the prioritization is based on the citizen consultation and suggestions. The available resources have also been taken into account while prioritizing the projects.

- Has source of funding considered while prioritizing the project?
 Yes
- Whether project has been prioritized considering last mile connectivity?
 Yes, dedicated cycle tracks, pedestrian tracks and PBS system have been given priority considering the last mile connectivity.

Table 8 Prioritization of Projects

Priority No.	Project	Cost (Rs Cr)	Financing Source
1	Development of Mandovi Promenade	11.53 CR	AMRUT
2	Development of pedestrian and NMV infrastructure along Miramar- Dona Paula road	13.24 CR	AMRUT
3	Street improvement project for pedestrian and NMV safety at City centre	8.21 CR	AMRUT

4	Improvement of existing pedestrian bridge from Mala to Patto	2.94 CR	AMRUT
5	Construction of new pedestrian bridge from Mala to Public Library	2.83 CR	AMRUT
6	Upgradation of road in Mala Area	3.60 CR	AMRUT
7	Upgradation of Stairs to Altinho	3.80CR	AMRUT
8	Boardwalk along mangroves	2.78 CR	AMRUT

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,

In order to provide citizen friendly pedestrian services, dedicated footpaths have been proposed. Walking is a zero-emission mode of transport that needs to be the primary focus of a sustainable habitat. For this encroachment free, dedicated footpaths with proper markings and signages are a must. Barrier free pedestrian facilitates will not only enhance urbanity, lifestyle, and health but will reduce vehicle use for short distance commuting.

b. pathways,

Dedicated cycle tracks have been proposed to promote cycling as a means of transport. Cycling contributes to improving air quality and mitigating climate change, noise reduction and improved physical health. Not only this, the reach and effectiveness of public transport can also be increased by promotion of cycling,

- c. parkingMulti Level Parking
- d. traffic management using ITS
- Whether solution provided to improve the safety of vulnerable groups such as old age/handicapped/children
 Yes

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?
 Yes land has been identified by CCP for multi level parking. For cycle tracks also land has been identified as per proposals in CDP and CMP.
- How these projects will be funded? Are projects being implemented through own sources or borrowing then which is the commitment in this regard.
 Project will be funded by government grants – AMRUT Scheme.
- Has environmental obligation such as clearances and NOC required? Please suggest action and initiatives need to be taken in this regards.
 No environmental permission is required for any of the proposed project.

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.

The project will be funded by Grants received from AMRUT project.

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

Yes financial plans have been prepared.

- What are the different sources of funding being tapped for this project.(75 words)
 - Funding from AMRUT Scheme All identified UT projects will be funded under AMRUT mission during 5 years of mission periods
- Is the proposed financial structure is sustainable? If so then whether project has been categorized based on financial considerations (100 words)

Yes the project will be financially sustainable except in case of footpath.

- Have the financial assumptions been listed out? Please provide the list. (100 words)
 - 1. Panaji will get about Rs.80 Crore as project funds and Rs.10 Crore as Reforms incentive during the next as CA under AMRUT
 - 2. Equal amount will be shared by the UT administration
 - 3. Partial Gap funding can be made under 14th FC or other options if requires
 - 4. PPP option will be explored

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.(AMRUTGuideline; Table 2.1, 2.2, 2.3., 2.4 and 2.5) and Annual Plan (AMRUT Guidelines; Annexure-2, 3, 4, 5& 6)

Table 1.8 Master Service Levels Improvements during Mission Period Urban Transport Name of City: Panaji (FYs 15-16 to 19-20)

(As per Table 2.2 of AMRUT guidelines)

			(Change in Ser	vice levels	Estimated Cost
Sr. No.	Project Name	Physical Components	Indicator	Existing (As-Is)	After (To-Be)	(Rs. in Cr.)
1	Development of Mandovi Promenade	Promenade development, sidewalk, benches, street lighting etc	% of network covered with NMT facilities	-	Use potential of the riverfront and turn the stretch into a landmark and tourist attraction	11.53 CR
2	Development of pedestrian and NMV infrastructure along Miramar- Dona Paula road	Sidewalk, street lighting, utility trench, bollards, etc		Only footpaths are existing which are not in good condition	NMT infrastructure along the most important stretch of the city will help the citizens and attract more tourists.	13.24 CR
3	Street improvement project for pedestrian and NMV safety at City centre	Sidewalk, street lighting, utility trench, bollards, etc		Not designed for NMT traffic	Will be pedestrian and NMT friendly	8.21 CR
4	Improvement of existing pedestrian bridge from Mala to Patto	Civil works for improvement of existing bridge		Urgent upgradatio n required as it is the only pedestrian connection to Patto	Will be upgraded to 100%	2.94 CR

5	Construction of new pedestrian bridge from Mala to Public Library	Pedestrian bridge connection	-		2.83 CR
6	Upgradation of road in Mala Area	Road surface improvement	Not designed for NMT traffic	Will be upgraded to 100%	3.60 CR
7	Upgradation of Stairs to Altinho		Requires immediate upgradatio n	Will be upgraded to 100%	3.80CR
8	Boardwalk along mangroves	Wooden walkway, pavements, kiosks etc	-		2.78 CR
	Grand Total				48.93 CR

Table1.9 Annual Fund Sharing Pattern for Urban Transport Projects

(As per Table 2.3.1of AMRUT guidelines)

Name of City : Panaji (FYs 15-16)

Sr	Sr. No.	Total Project			Share		
No.		Cost (Rs. in Cr.)	GOI	State	ULB	Others	Total
1	Development of Mandovi Promenade	11.53 CR	5.765	5.765			11.53 CR
2	Development of pedestrian and NMV infrastructure along Miramar- Dona Paula road	13.24 CR	6.62	6.62			13.24 CR
3	Street improvement project for pedestrian and NMV safety at City centre	8.21 CR	4.105	4.105			8.21 CR
4	Improvement of existing pedestrian bridge from Mala to Patto	2.94 CR	1.47	1.47			2.94 CR
5	Construction of new pedestrian bridge from Mala to Public Library	2.83 CR	1.415	1.415			2.83 CR
6	Upgradation of road in Mala Area	3.60 CR	1.8	1.8			3.60 CR
7	Upgradation of Stairs to Altinho	3.80CR	1.9	1.9			3.80CR
8	Boardwalk along mangroves	2.78 CR	1.39	1.39			2.78 CR
	Grand Total	48.93 CR	24.465	24.465			48.93 CR

Table 1.10 Annual Fund Sharing Break-up for Urban Transport Projects (As per Table 2.3.2 of AMRUT Guidelines) **Name of City: Panaji (FYs 15-16)**

Sr.			State			ULB			Converge	Othe	
No	Project	GOI	14 th FC	Others	Total	14 th FC	Others	Total	nce	rs	Total
1	Development of Mandovi Promenade	5.765		5.765	5.765						11.53 CR
2	Development of pedestrian and NMV infrastructure along Miramar- Dona Paula road	6.62		6.62	6.62						13.24 CR
3	Street improvement project for pedestrian and NMV safety at City centre	4.105		4.105	4.105						8.21 CR
4	Improvement of existing pedestrian bridge from Mala to Patto	1.47		1.47	1.47						2.94 CR
5	Construction of new pedestrian bridge from Mala to Public Library	1.415		1.415	1.415						2.83 CR
6	Upgradation of road in Mala Area	1.8		1.8	1.8						3.60 CR
7	Upgradation of Stairs to Altinho	1.9		1.9	1.9						3.80CR
8	Boardwalk along mangroves	1.39		1.39	1.39						2.78 CR
	Grand Total	24.465		24.465	24.465						48.93 CR

Table 1.11 Annual Fund Sharing Break-up for Urban Transport Projects

(As per Table 2.3.2 of AMRUT Guidelines)

Name of City : Panaji (FYs 15-16)

	Project Cost	Indicator	Basel ine	Annual Targets (Increment from the Baseline Value)					
Proposed Projects				FY 2016		FY	FY	FY	FY
				H1	H2	2017	2018	2019	2020
Urban Transport									
Development of Mandovi Promenade	11.53 CR	% of network covered with NMT facilities	Neglig ible						
Development of pedestrian and NMV infrastructure	13.24 CR								
along Miramar- Dona Paula road									
Street improvement project for pedestrian and NMV	8.21 CR				100%				
safety at City centre									
Improvement of existing pedestrian bridge from	2.94 CR					100%			
Mala to Patto									
Construction of new pedestrian bridge from Mala to	2.83 CR								
Public Library									
Upgradation of road in Mala Area	3.60 CR								
Upgradation of Stairs to Altinho	3.80CR								
Boardwalk along mangroves	2.78 CR								
	48.93 CR								