



## Vijayawada Municipal Corporation

# REQUEST FOR PROPOSALS FOR PREPARATION OF "COMPREHENSIVE MOBILITY PLAN IN AND AROUND VIJAYAWADA CITY"

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PREPARATION OF COMPREHENSIVE MOBILITY PLAN FOR **VIJAYAWADA URBAN AREA** 

**SECTION 1: LETTER OF INVITATION** 

Dear Sir/Madam:

The Vijayawada Municipal Corporation with an intention to address the transport problems in the

city now invites proposals to provide the following consulting services: Consultancy assignment

for preparation of a Traffic and Transportation study (comprehensive mobility plan (CMP)) in

and around Vijayawada City. More details on the services are provided in the terms of reference.

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## INFORMATION TO CONSULTANTS

#### **SECTION 2: INFORMATION TO CONSULTANTS**

#### 2.1 ABBREVATIONS

#### 2.2 **DEFINITIONS**

- i. "Employer / Client' means Vijayawada Municipal Corporation (VMC) and its Representatives.
- ii. "Consultant" means any entity or person that may provide or provides the Services to the Client under the Contract.
- iii. "Contract" means the Contract signed by the Parties and all the attached documents listed in its Clause 1, that is, the General Conditions (GC), the Special Conditions (SC), and the Appendices.
- iv. "Data Sheet' means such part of the Instructions to Consultants used to reflect specific assignment conditions.
- v. "Employer's Representative" means the person / personnel of consultant appointed by the client to act as the Employer's representative to oversee the activities of consultant from time to time and as directed by the client.
- vi. "Day" means calendar day.
- vii. "Government" means the Government of Andhra Pradesh.
- viii. "Information to Consultants" (Section 3 of the RFP) means the document which provides Consultants with all information needed to prepare their Proposals.
- ix. "LOI" means the Letter of Invitation sent by the Client to the short listed Consultant.
- x. "Personnel" means professionals and support staff provided by the Consultant Associate(s) and their associates and assigned to perform the Services or any part thereof. "Local Personnel" means such professionals and support staff who at the time of being so provided had their domicile inside the Government's country.
- xi. "RFP" means the Request For Proposal prepared by the Client for the selection of Consultants.
- xii. "Services" means the work to be performed by the Consultant pursuant to the Contract.
- xiii. "Associate(s)" means any person(s) or entity with whom the Consultant delivers/provides any part of the Services.
- xiv. "Terms of Reference" (TOR) means the document included in the RFP as Section 5 which explains the objectives, scope of work, activities, tasks to be performed, respective responsibilities of the Client and the Consultant, and expected results and deliverables of the assignment.
- 2.2.1 The proposal will be rejected for award if it determines that the Consultant recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the contract in question;
- 2.2.2 A firm will be declared ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for or in executing, a contract; and
- 2.2.4 Consultants and their associates shall not be under a declaration of ineligibility for corrupt and fraudulent practices. Furthermore, the Consultants shall be aware of the provisions on fraud and corruption stated in the specific clauses in the General Conditions of Contract.
- 2.2.5 Consultants shall furnish information on commissions and gratuities, if any, paid or to be paid to agents relating to this proposal and during execution of the assignment if the Consultant is awarded the Contract, in the Financial Proposal.

- 2.2.6 The Data Sheet indicates how long Consultants' Proposals must remain valid after the submission date. During this period, Consultants shall maintain the availability of Professional staff nominated in the Proposal. The Client will make its best effort to complete negotiations within this period.
  Should the need arise; however, the Client may request Consultants to extend the validity period of their proposals.
- 2.2.7 Consultants who agree to such extension shall confirm that they maintain the availability of the Professional staff nominated in the Proposal, or in their confirmation of extension of validity of the Proposal, Consultants could submit CV of new staff, being proposed in replacement, who would be considered in the final contract, after the evaluation of the CV. Consultants who do not agree have the right to refuse to extend the validity of their Proposals.

#### 2.3 SALE OF RFP DOCUMENTS

#### 2.4 CLARIFICATIONS AND AMENDMENT OF RFP DOCUMENTS

- 2.4.1 Consultants may request clarification on any of the points contained in RFP documents up to the number of days indicated in the Data Sheet before the Proposal submission date. Any request for clarification must be sent in writing by paper mail, cable, telex, facsimile, or electronic mail to the Client's address indicated in the Data Sheet. The Client will respond by cable, telex, facsimile, or electronic mail to such requests and will send copies of the response (including an explanation of the query but without identifying the source of inquiry) to all invited consultants who intend to submit proposals.
- 2.4.2 At any time before the submission of Proposals, the Client may for any reason, whether at its own initiative or in response to a clarification requested by an invited firm, modify the RFP documents by amendment. Any such amendment shall be issued in writing through addenda. Addenda shall be sent by mail, cable, telex, facsimile or electronic mail to all invited consultants and will be binding on them. The Client may at its discretion extend the deadline for the submission of Proposals.

#### 2.5 PREPARATION OF PROPOSAL

2.5.1 You are requested to submit your proposal in Two Parts in 2 separate envelopes / packages and put together in one single outer envelope/package. The two parts shall be captioned as follows on the respective envelopes:

Part 1: Technical Proposal and

Part 2: Financial Proposal.

The proposal shall be written in English only. The Part-I submission (Cover – I) shall contain the following information as described in ensuing sections.

#### **TECHNICAL PROPOSAL**

#### **PART 1. TECHNICAL PROPOSAL**

- 2.5.2 In preparing the technical proposal, consultants are expected to examine the submission documents / format / enclosures etc., comprising this RFP in detail. Material deficiencies in providing the information requested may result in rejection of the proposal.
- 2.5.3 The consultants who satisfy the minimum eligibility criteria (as mentioned in data sheet) shall qualify.
- 2.5.4 During preparation of the technical proposal, consultants must give particular attention to the following:
  - i. The estimated man months for the assignment are stated in the Data Sheet and in the Terms of Reference for information. The proposal evaluation shall however be based on the number of professional staff months estimated by the firm.
  - ii. It is desirable that the majority of the key professional staff proposed should preferably be permanent staff.
  - iii. Alternative professional staff shall not be proposed and only one Curriculum Vitae (CV) must be submitted for each position, and proposed professional staff must, have the minimum experience indicated in the data sheet.. Reports must be in English language only.
- 2.5.5 The technical proposal must provide the following information, using but not limited to the formats Form TECH 1 to TECH 8.
  - i. Any comments or suggestions on the ToR
  - ii. Appreciation of City Region and Study Perspective
  - iii. The description of the approach and methodology including extent surveys and studies proposed to be undertaken
  - iv. Presentation of work plan for performing the services, illustrated with bar charts of activities.
  - v. Composition of the proposed team, tasks assigned to each professional and the duration of their input.
  - vi. Project Management and Team Organization to deliver high quality study
  - vii. Recently signed CVs in blue ink on each page by the individual key personnel or by the authorized representative submitting the proposal. Key information should include years with the firm and degree of responsibility held in various assignments. Photocopy or unsigned CVs shall not be evaluated.
  - viii. Time Estimates of the total staff inputs (professional and other support staff) for the services, supported by bar chart diagrams showing the time proposed by each professional staff member.
  - ix. Any other information requested in data sheet and/or consultants' desires provide relevant to proposed study.
- 2.5.6 The technical proposal must not include any financial information.

#### **PART 2: FINANCIAL PROPOSAL**

- 2.5.7 In preparing the Financial Proposal, consultants are expected to take into account the requirements and conditions of the RFP documents. The preparation of Financial Proposal should follow Standard Forms. It should list all costs associated with the Assignment, including (a) remuneration to the staff and (b) rentals/fixed rates/reimbursable such as subsistence (per diem, housing), transportation, services and equipment (vehicles and supplies), insurance, printing of documents, and surveys, skill and Technology Transfer (Training, Software's, etc), etc as components of this assignment.
- 2.5.8 The Financial Proposal should clearly identify and include all the taxes, duties, fees, levies and other charges imposed under the applicable law, on the consultants, and

- their personnel, and include as part of their offer, and show only Service Tax separately.
- 2.5.9 Consultants have to express the price of their services in the Local currency (Indian Rupees) only. For the purpose of conversion of any foreign currency to INR, the rates as specified in the Data Sheet should be used.

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#### 2.6 SUBMISSION, RECEIPT AND OPENING OF PROPOSALS

- 2.6.1 The original proposal shall be prepared in indelible ink. It shall contain no interlineation or overwriting, except as necessary to correct errors made by the firm itself. Any such corrections must be initiated by the person who signs the Proposals.
- 2.6.2 An authorized representative of the firm shall initial all pages of original Technical and Financial Proposals. The representative's authorization shall be in the form of a written power of attorney accompanying the Proposal, or in any other form demonstrating that the representative has been duly authorized to sign. The (original) signed Technical and financial proposals shall be marked "ORIGINAL".
- 2.6.3 Consultant must submit one original and 1 copy of technical and one original Financial proposal only. The Technical Proposal (1 original + 1 copy) must be in one envelop while the Financial Proposal in original will be in a separate cover and sealed. The envelopes must be clearly marked on top as 'Part-1: Technical Proposal' and 'Part-II: Financial Proposal'.
- 2.6.4 The two separate envelopes containing the technical and financial proposals should be placed in one cover and addressed to Client (as per the detailed address given in Data Sheet) and labeled "Proposal for Consultancy Services for Preparation of Comprehensive Mobility Plan for Vijayawada".
- 2.6.5 The completed proposals must be delivered / submitted on or before the submission time and date as stated in the data sheet. The client shall not be responsible for misplacement, losing or premature opening, if the outer envelope is not sealed and / or marked as stipulated.
- 2.6.7 After the deadline for submission of proposals, the outer envelope & cover 1 marked as ", "Part- 1: Technical Proposal" shall be opened in the presence of the consultants / their Authorized Representatives who choose to attend on the date and time indicated in the data sheet. The financial proposals shall remain sealed and deposited separately.

#### 2.7 PROPOSAL EVALUATION

2.7.1 The following procedure shall be adopted in evaluating the proposals:

#### **Technical Proposal:**

2.7.2 The Evaluation Committee appointed by the VMC shall carry out evaluation of Technical Proposals. The evaluation criterion is point / marks system based as specified in the data sheet. Each responsive proposal shall be attributed a technical score. The technical proposal should score at least 70% to be considered responsive for financial evaluation.

#### **Financial Proposal:**

- 2.7.3 After the evaluation of technical proposal is completed, the Client may notify those consultants whose Technical proposals were considered non-responsive / not qualifying as per RFP Terms of Reference, indicating that their Financial Proposals will be returned unopened after completing the selection process.
- 2.7.4 The Client shall simultaneously notify the consultants that have secured the minimum qualifying mark, indicating the date and time set for opening the Financial Proposals. The opening date should allow Consultants sufficient time to make arrangements for

- attending the financial bid opening meeting. The notification may be sent by registered letter, facsimile, or electronic mail.
- 2.7.5 The Financial Proposals shall be opened in the presence of the consultants / authorized representatives who choose to attend. The name of the consultant, the technical scores, and the proposed prices shall be read aloud and recorded when the Financial Proposals are opened. The Client shall prepare minutes of the financial bid opening.
- 2.7.6 The Evaluation Committee will correct any computational errors, if exist in the financial proposals. When correcting computational errors, in case of discrepancy between a total and partial amount and or between word and figures the formers will prevail.
- 2.7.7 The committee will determine whether the financial proposals are complete and correct; or if there are any computational errors, will correct the same. It is expected that consultants shall determine the costs appropriately and shall take necessary care in allocating budgets adequately by major components of study. If committee determines that cost indicated are not appropriate, then it may take a view to load and/or unload on to the given financial proposal, as is deemed appropriate. In addition to these corrections if the activities and items described in the Technical Proposal and in the RFP but not priced and further, if the consultant unfairly quotes any of the unit prices against any of the items, evaluation committee at its sole discretion may load and/or unload costs and shall also correct the quantification indicated in the Financial Proposal so as to make it consistent with that indicated in the Technical Proposal and RFP, by applying the relevant unit price to arrive at corrected quantity and correct the total Proposal cost to do a high quality study.
- 2.7.8 The price bid to be considered for evaluation shall exclude Service Tax, but shall include all the other taxes, if any.
- 2.7.9 The Evaluation Committee shall consider the evaluated financial offer and/or total proposal cost and the score on price quote will be calculated in the following manner. Sf = 100 \* Fm/F
  - Sf = the financial score of the Financial proposal being evaluated.
  - Fm= the computed lowest financial proposal (inclusive of all taxes but excluding Service Tax).
  - F = Computed Price of the bidder under evaluation (inclusive of all taxes but excluding Service Tax).
- 2.7.10 The percentage marks allocated to the lowest evaluated financial proposal will be 100 and to the other bids will be as calculated as above. .
- 2.7.11 On completion of Evaluation of Technical and Financial Proposals, final ranking of the proposals will be determined by giving weight age to Technical and Financial Proposal, as specified in the Data Sheet. The firms will be ranked based on their weighted score. The firm achieving the highest combined technical & financial score will be invited for the contract negotiations.

#### 2.8 NEGOTIATIONS

- 2.8.1 Prior to the expiration of period of validity of proposal, the Client shall notify the successful firm who submitted the highest scoring proposal in writing through registered letter, facsimile or email and invite them to negotiate the contract.
- 2.8.2 Negotiations normally take two to five days. The invited consultant will, as a pre-requisite for attending negotiations, confirm availability of all nominated experts / key personnel and satisfy other pre negotiation requirements as the Client may specify. The aim is to reach agreement on all points, and initial a draft contract by the conclusion of negotiations.
- 2.8.3 Negotiations shall commence with a presentation on Technical proposal on the proposed methodology (work plan), staffing and any suggestions, which may have been made to improve the ToR.

These will be discussed. Agreement must then be reached on the final TOR, the staffing which shall indicate staff months, logistics and reporting. These documents then can be incorporated in the contract as "description of services". Special attention shall be paid to clearly defining the required inputs and facilities required from the client to ensure satisfactory implementation of the assignment. The client shall prepare minutes of negotiations, which will be signed by the client and consultant.

- 2.8.4 It is the responsibility of the Consultant, before starting financial negotiations, to contact the local tax authorities to determine the local tax amount to be paid by the Consultant under the Contract. The financial negotiations will include a clarification (if any) of the firm's tax liability in the Client's country, and the manner in which it will be reflected in the Contract; and will reflect the agreed technical modifications in the cost of the services. Unless there are exceptional reasons, the financial negotiations will not involve any discussions on either the remuneration rates for staff or other proposed unit rates.
- 2.8.5 Changes agreed upon shall then be reflected in the financial proposal, using proposed unit rates (no negotiation of the unit rates, including the man month rates).
- 2.8.6 The negotiations shall be concluded with a review of the draft Contract. The Client and the firm will finalize the agreed contract.
- 2.8.7 If negotiations fail, the Client will invite the second ranked consultant, whose proposal received the second highest score, to negotiate the contract.

#### 2.9 AWARD OF CONTRACT

- 2.9.1 After completion of negotiations with the consultants, the Client shall award the Contract to the selected Consultant by Issuing a Letter of Intent. .
- 2.9.2 The successful firm with whom the contract is signed is expected to commence the assignment on the date and at the location specified in the data sheet.

#### 2.10 CONFIDENTIALITY

2.10.1 Information relating to evaluation of proposals and recommendations concerning awards shall not be disclosed to the consultants who submitted the proposals or to other persons not officially concerned with the process, until the winning firm has been notified that it has been awarded the contract.

#### 2.11 RIGHT OF REJECTION

2.11.1 The Client reserves right to reject any or all proposals, to waive any informality in such proposals, to request new proposals, to revise the RFP prior to, and including, the pre-proposal meeting date, to proceed to do the work otherwise, withdraw this RFP, not award the work, or not award a portion of work at any time. The receipt of proposals shall not in any way, obligate the Client to enter into a consultancy agreement, or any other contract of any kind with the consultant. All submitted copies of the proposals shall become the property of Client.

#### **DATA SHEET**

#### 2.12 DATA SHEET

2.12 DA	Name of the Client: Vijayawada Municipal Corporation				
2.11.1	Method of Selection: Quality cum Cost Based Selection (QCBS)				
2.11.2	Proposals Requested: Technical Proposals (1 original + 1copy) and Financial Proposal (1 original) are requested.				
2.11.2	Name of the Assignment: "Consultancy Services for Preparation of Comprehensive Mobility Plan in and around Vijayawada City"				
	Eligibility Criteria:				
	<ul> <li>The consultant shall have prepared at least one mobility plan for a city with more than 10 lakh population as per the guidelines of MOUD.</li> </ul>				
2.11.3	<ul> <li>Must have prepared at least two Planning work in Urban transportation planning in the field of public transport, regional transport, for a city in India in last ten years by their own capacity (documents to be supported by client certificate)</li> </ul>				
	iii. The average financial turnover of the firm for last three years should be minimum Rs.10 crore (Rupees 10 crore)				
	The Consultants may obtain Request for Proposal (RFP) by paying Rs.10,000/- towards the cost of				
	RFP document by way of Demand Draft (Non refundable) drawn in favour of the Commissioner,				
2.11.4	Vijayawada Municipal Corporation payable at Vijayawada and another Demand Draft for Rs.1,500/-				
2.11.4	in favour of Commercial Tax Officer payable at Vijayawada. If the proposal is downloaded from our				
	website, the above said two Demand Drafts are to be submitted in a separate cover. No other				
	document can be enclosed in this cover.				
	2.5% on their quoted amount as <b>EMD</b> by means of either Demand Draft or Bank Guarantee from				
2.11.1.4.a	nationalized bank has to be furnished by the successful bidder at the time of concluding the				
	agreement.				
	Last Data for receiving queries/clarifications for pre proposal conference:				
	Pre proposal Conference:				
2.11.5	The name(s), address(s), and telephone/ numbers of the Employer's Officials(s) are:				
	Tele/Fax. No.: <b>0866-2423022 / 2424338</b>				
	E-mail: ourvmc@yahoo.com				
	Proposal Due Date : 29.11.2016 up to 3.00 p.m				
	Opening of Technical Proposal : 29.11.2016 @ 4.00 pm				
	Opening of Financial Proposal : Will intimate later				
2.11.6	The Language of documents and correspondence will be: <b>English</b>				
2.11.7	Training is a specific component of this assignment: Yes.				
2.11.8	Validity of Proposal – Proposals must remain valid for 90 days from the date of submission. During this period consultants are expected to keep available the professional staff / Key staff proposed for the assignment. The client will make best efforts to complete negotiation within this period				
2.11.9	The consultants to state all the local costs in Indian Rupees (INR) and Foreign Currency				

	(maximum of one currency), if required. But will have to quote Total Fee in INR Consultants are requested to consult tax consultant for details						
	The two separate sealed envelopes containing the technical and financial proposals should be placed in one sealed cover and labeled.						
2.11.10	Proposals must be submitted no later than the following date and time:  The proposal submission address is: Municipal Corporation Office, Jawaharlal Nehru Buildings, I-Town, VIJAYAWADA – 520001, Andhra Pradesh						
2.11.11	The si	ngle currency for price c	onversions is: <b>Indiar</b>	n Rupees			
				ndia [SBI] B.C. Selling rate of Exchange. The date f proposals mentioned in Data Sheet.			
2.11.12	Expec	ted date for commencer	nent of consulting se	rvices:			
	Locati	on of Services: Vijayawa	ada , India				
	All the Englis		orking knowledge of	English and all the reports shall be written in			
	san		by two firms, the CV	ith only one consultant/ consortium/ JV and if the of the person so proposed will not be considered			
	II. Ass	ociation of two short liste	ed firms/ entity is not	permitted.			
	III. The	e estimated number of p	rofessional staff-mon	ths required for the assignment:			
	iv. Local Language is Telugu/Hindi						
	The minimum required credential/experience of proposed key staff is:						
	SN	Position	Professional Experience	Qualifications			
2.11.13	1.	Team Leader	Minimum 20 years	Bachelors/Masters degree in Transportation Engineering/Planning from an accredited college or university.     Experience as Team Leader in CMP project in at least 1 consultancy assignments.     Worked in at least two transport planning assignments of similar nature.			
	2.	Land-use Planner	Minimum 10 years	Masters Degree in Urban     Planning from an accredited     college or university.     Worked for at least one CMP     Project/similar nature of work.     Experience as Land-use     Planner or in similar capacity in     at least two (2) transport     planning assignments of similar     nature.			
	3.	Transport Demand Modeler	Minimum 10 years	Masters Degree in     Transportation Engineering from     an accredited college or     university.     Worked in similar capacity for at     least 1 CMP/similar nature of     Consultancy assignment.     Experience in similar capacity in			

	1		
4.	NMT Planning and Traffic Management Specialist.	Minimum 5 years	carrying out Travel Demand Modeling studies for construction of MRTS /LRTS/Mono/Urban Transport planning for at least 2 assignments.  1. Post graduation in Transportation planning/engineering. 2. Experience in similar capacity in at-least 1 CMP/ similar nature projects.
			Experience in at-least 2 transport planning assignments.
5.	Public Transport Expert	Minimum 5 years	<ol> <li>Post graduation in Transportation planning/engineering.</li> <li>Experience in similar capacity in at-least 1 CMP/ similar nature projects. Should possess experience in multi-modal integration aspects of transportation projects, including physical and operational integration, route planning of public transport, fare integration etc.</li> <li>Experience in at-least 2 transport planning assignments.</li> </ol>
6.	Transport Economist	Minimum 10 years	1. Masters Degree in Engineering/Planning/Economic s or equivalent. 2. Experience as transport economist in at least 1 consultancy assignment of CMP/Similar nature. 3. Experience in at least 2 transportation planning projects in similar kind of assignment in urban area.
7.	PPP Expert/Financial Analyst	Minimum 10 years	1. Masters degree in Engineering/finance/business administration, or related field or should be a chartered accountant with at least 5 years of PPP experience on Transportation project in Urban area.  2. Worked in similar capacity for at least 1 consultancy assignment of CMP/Similar nature.  3. Should also have experience in Financial analysis, project structuring, bid process management of urban & Regional Transport systems.

	8.	Energy and Environme	d ntal Expert	Minimum 10 years	<ol> <li>Masters degree         Planning/Engine         from any accree         university.</li> <li>Experience as E         Environmental E         similar capacity         CMP/Similar na         assignment.</li> <li>Experience in E         evaluation and p         EIA reports with         reference to Urb         Transportation p         least for two Traprojects.</li> </ol>	eering/Science lited college or Energy and Expert or in for at least 1 ture of  nvironmental preparation of special pan projects for at	
	Criteri	a, sub-criteri	ia, and point	system for the evalua	ation of Technical Prop	oosals are:	
	SN			Parameters		Marks	]
	*	Delevent I		of the Firm			
	1 a		Experience ve prepared	or tne Firm at least one mobility ព	olan for a city with	10	
	-	more than	10 lakh popi	ulation(More than one	preferred)		
	b			at least two Planning		10	
				in the field of public t ndia/abroad in last te			
		capacity			, ca. c b,c c		
	С	five years i		urnover of the firm in cure of consultancy wo		5	
					marks allocation is as follows:		
	Eligibility Ma		Marks				
		a	Evnerience	in preparation of Cit	Allotted v 10		
		Mobility Plans,					
				s as follows:			
2.11.14				port submitted stage	6		
				of Satisfactory certificate issued by th	8		
			Client.	certificate issued by the	ie		
		1	More than 1	mobility plan prepare	d 10		
				Planning work in	10		
				on planning in the			
				lic transport s as follows:			
			2 planning w		6		
			3 planning w		8		
			More than 3		10		
				age turnover of Rs.			
				last three preceding	9		
			years of marks is	s as follows:			
		7.11041110111		Rs.2.00 cr.	3		
			Rs.2.0	00 crRs10.00 cr.	4		
				>Rs.10 cr.	5		
	2		oftware capa	ability for carrying out	travel demand	5	
	3	modeling Adequacy	of the propo	sed work plan and Inc	novative Approach	20	
		Adequacy of the proposed work plan and Innovative Approach &methodology in responding to the TOR					

Work plan/Time Schedule		Innovative approach and method and for comments on TOR		-10 marks			
4 Minimum time required for completion of the project Deleted  5 For completion of the projects within agreement period for the projects shown in (1)  *** Qualifications and Competence of the key staff/personnel for 6 this  1. Team Leader 10 The number of points to be assigned to each of the Management Specialist 5. Public Transport Expert 6 Management Specialist 5. Public Transport Expert 6 Management Specialist 5. Public Transport Expert 6 Management Specialist 5. Perperty Financial Analyst 5 Management Specialist 5. Perperty Financial Analyst 5 Management Specialist 6 Management Specialist 7. PPP Experty Financial Analyst 5 Mased on below noted sub-criteria and relevant Expert 10 Mark 10 Ma		Work plan/Time Schedule	-3-	5 marks			
S   For completion of the projects within agreement period for the projects shown in (1)   S   Por completion of the projects within agreement period for the projects shown in (1)   S   Por completion of this		Task assignment and manning s	chedule -3-	5 marks			
projects shown in (1)  "** Qualifications and Competence of the key staff/personnel for 50 this  1. Team Leader 10 2. Land-use Planner 7 3. Transport Demand Modeler 6 4. NMT Planning and Traffic 6 Management Specialist 5. Public Transport Expert 6 6. Transport Expert 6 6. Transport Expert 6 8. Energy and Environmental 5 8. Energy and Environmental 5 Expert    Criteria   Weight		William and time required for completion of			Deleted		
1. Team Leader			reement per	riod for the	Deleted		
2. Land-use Planner 7 3. Transport Demand Modeler 6 4. NMT Planning and Traffic 6 Management Specialist 5. Public Transport Expert 6 6. Transport Economist 5 7. PPP Expert/Financial Analyst 5 8. Energy and Environmental 5 Expert 6 Over all professional Experience 10 Experience for the relevant post for the CMP assignment Experience in transport planning 25 assignments  2.11.15 The technical proposal scoring at least 70 points shall only be considered responsive for financial evaluation.  The weight age given to technical proposal is 70%. The weight age given to financial proposal will be 30%.  The formula for determining the financial scores is the following:  [Sf = 100 x Fm/F, in which Sf is the financial score, Fm is the lowest price, and F the price of the proposal under consideration] The total points obtained by the firm will be determined by the formula: Total points = Technical score (Points) X 0.70 + Financial score (Sf) X 0.30  The address for negotiations is: Negotiations will be held in Vijayawada. The team leader along with key personnel's will make a presentation of their Technical proposal at the time of negotiations.		· · · · · · · · · · · · · · · · · ·	ey staff/pers	sonnel for	50		
2. Land-use Planner 3. Transport Demand Modeler 6. NMT Planning and Traffic Management Specialist 5. Public Transport Expert 6. Transport Economist 7. PPP Expert/Financial Analyst 8. Energy and Environmental Expert  Criteria Expert  Criteria Educational Qualifications Over all professional Experience Experience for the relevant post for the CMP assignment Experience in transport planning assignments  2.11.15  The technical proposal scoring at least 70 points shall only be considered responsive for financial evaluation.  The weight age given to technical proposal is 70%. The weight age given to financial proposal will be 30%.  The formula for determining the financial scores is the following: [Sf = 100 x Fm/F, in which Sf is the financial score, Fm is the lowest price, and F the price of the proposal under consideration] The total points obtained by the firm will be determined by the formula: Total points = Technical score (Points) X 0.70 + Financial score (Sf) X 0.30  The address for negotiations is: Negotiations will be held in Vijayawada. The team leader along with key personnel's will make a presentation of their Technical proposal at the time of negotiations.		Team Leader	10		The number of		
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- \* Proof of completion certificates or having submitted the draft final reports issued by the departmental officers for the projects mentioned at (1) is to be submitted.
- \*\* The Consultants are informed that marks are allotted in eligibility criteria. A minimum of 60% marks will be allotted to the consultant who fulfils the qualification criteria as mentioned in table of clause 2.11.13 and full marks will be allotted for the consultant who crosses the minimum qualification.
- \*\* The firm has to furnish the required information as above along with duly filled CVs.

# TERMS OF REFERENCE (TOR) FOR PREPARATION OF CMP

## SECTION 3: TERMS OF REFERENCE (TOR) FOR PREPARATION OF CMP

#### 1. BACKGROUND

Study is to develop Comprehensive Mobility Plan for Vijayawada City spreading across 61.88 Sq.Km

#### 2. OBJECTIVE

The objective of carrying out the study is to develop Comprehensive Mobility Plan for Vijayawada City spreading across 61.88 Sq.Km with all modes including pedestrians, cyclists and Inter-mediate Public Transport (IPT), public transport, canal navigation across canals, a road map on infrastructure development options and investment requirements to provide desirable level of mobility with least carbon emissions etc. to achieve convenient and cost effective accessibility to places of employment and education along with optimal utilization of funds and human resources.

The specific objectives of the study are:

- i. Identify socio-economic background of different groups and their travel pattern residents in Vijayawada
- ii. Select, develop and operationalize an Urban Transport Planning (UTP) model using state of the art modeling techniques and CUBE software package
- iii. Assess the relevance of the existing strategy, identify the consequences of pursuing alternative transportation strategies and recommended/ update short term, medium term and long-term comprehensive transportation strategy for the study area up to 2036 based on cost benefit analysis of alternatives.
- iv. Strategize transport policy and parking policy as an integrated part of urban planning.
- v. Identify for all modes, a phased program of appropriate and affordable investments and policy proposals and also integration of various modes of mass transits as well as public transport with Intermediate Public Transport (IPT).
- vi. Assess existing infrastructure requirements and forecast short term and long term requirements.
- vii. Estimated local pollutants and CO2 emission levels from urban transport based on the travel demand and technological choices; Integrated transport options with land use structure and create alternative scenarios for achieving low carbon transport development.
- viii. Selected desirable scenario based on the impacts measured above and proposed a set of policies, infrastructure projects and technological interventions to achieve the goal of low carbon transport;
- ix. Recommend institutional mechanism for inter agency co-ordination.
- x. Help strength transport planning skills and transfer all data, planning model/tools and knowledge obtained through the study to Vijayawada Municipal Corporation
- xi. Action plan for improvement of Service Level Bench Marks (SLBs) as per MoUD guidelines.

In line with the specific objectives of the study described in above, the consultancy work is expected to cover following areas of activity:

i. Collection of household, land use and travel demand data

- ii. Development and operation of an urban transport planning model
- iii. Define a Vision, mobility policy and formulation of transport strategy and institutional mechanism:
- iv. Canal Navigation (Seasonal)
- v. Review of existing energy consumption.
- vi. Review of existing emissions.
- vii. Identification of a phased program of transport investment and management proposals
- viii. Training and knowledge transfer to the concerned agencies
- ix. Propose the action plan for achieving the standard service level benchmarks

The studies, surveys, investigations, proposals and reports shall be based on relevant provisions of IRC Standards, Codes and Special Publications (with latest amendments); MORT&H Specifications/ Circulars/ Guidelines (up to date) or any other applicable standards/codes, etc. In case some such practices are not available in the above documents, reference shall be made to other International Standards with prior approval of the Authority.

#### 3. SCOPE OF SERVICES

#### 3.1. ACTIVITY 1: COLLECT HOUSEHOLD, LAND USE AND TRANSPORT DATA

The data to be collected are those usually required for the purpose of metropolitan transport strategic planning. These would include both historical and spatial data. Spatial data are needed for the calibration of the LUT & UTP models. An elaborate traffic zonal system needs to be determined for the purpose of spatial data collection traffic forecasts and sub area analysis. Considering the vast study area, the population and its distribution over the area, the sample size for the survey should be determined based on the size and spread of the geographical section. However it is desirable to adopt an average sample size of at least 2% for household survey for the entire region.

A statistically valid basis for expansion of the sample adequate to represent the total population of the study area and the geographical distribution of trips to be adopted. Analysis of recent electoral rolls and census details may provide a basis of selection of the sample. The following tasks are to be considered under this activity.

#### A. Baseline data collection

#### B. Surveys/ studies:

- Design Supervision and implementation. Household Travel Origin Destination survey including a stated preference survey & option survey on all necessary issues
- ii. Screen line Traffic Counts
- iii. Traffic counts at outer cordon and inner cordon points
- iv. Midblock Traffic Volume Counts
- v. Survey of floating population
- vi. Bus Passenger Survey
- vii. Roadside Motor Vehicle O.D Survey (including Goods Vehicles)
- viii. Roadside interview & public transport surveys of a conventional kind shall be done for 24 hours at the external cordon (sample survey). For inner cordons and screen line, such surveys shall be done for continuous 16 hours.
- ix. Estimating speed Flow Functions.
- x. Taxi Auto rickshaw and other surveys (IPT Surveys trip lengths, costs, maintenance cost ownership etc.)
- xi. Speed and delay surveys

- xii. Workplace surveys
- xiii. Goods local point survey
- xiv. Parking survey
- xv. Non Motorized Traffic Survey
- xvi. Pedestrian Survey
- xvii. Option survey regarding willingness to pay willingness to charge and capacity to pay for various services.
- xviii. The commercial vehicles surveys should be done on trucks and LCV trips within the study area. Data on O.D time period and goods carried shall be collected for a full 24 hours period. As in the household survey O.D Data shall be recorded as accurately as possible to facilitate zone coding. The consultant must collect accurate information on the total number of goods vehicles based in the study area. A scientific basis of sampling for commercial vehicles must be proposed.
- xix. Survey on Existing Energy Consumption and Emissions.
- xx. Any other survey or study which deemed to be appropriate for preparation of CMP.
- xxi. Transportation passengers / goods / services through seasonal canal navigation.
- C. The interview shall be carefully structured to secure all data required for the model analysis. It should necessarily include.
  - i. Sample survey relating into trip data should also take into account the residents of hotels, educational institutions including universities and other residential establishments.
  - ii. For proper estimation of trip making and trip length over a geographical area, household surveys and roadside interviews would be utilized
  - iii. Factual data on the household location, size and employment details of members, students and vehicle ownership including cycles:
  - iv. Details of all trips (trip duly including access mode, time distance, cost etc.) made on the day preceding the interview by the residents who are more than 5 years old. These details shall include Origin & Destination (O&D) purpose, and mode time. For trips performed by rail/bus name of rail/bus station of boarding/ alighting shall be recorded.
  - v. Income of each member of the household- salary pension, investment income etc.
  - vi. The household interview forms shall be pre/ coded as far as practicable. For each household the measured walking time to the nearest railway station and appropriate bus stop shall be coded irrespective of whether any public transport trips are made.
  - vii. O & D data shall be recorded with full addresses and the addresses should be coded. This must be specifically ensured for Central Business District (CBD) and other business areas.
  - viii. Journey purpose data at origin as well as destination shall be recorded to enable allocation of trips borne to their relevant motivation, e.g. returning from work education
  - ix. Classified traffic counts on the screen lines and long term counts on the cordon lines
  - x. Speed and journey tine surveys.
  - xi. Inventory surveys (road, footpaths, drains lights, signs, marking etc.
  - xii. Land use populations and employment data. Care has to be taken to collect and estimate trip reaction variables (employment by type schooling opportunities, shopping opportunities, entertainment facilities etc.
  - xiii. The consultants will break these data down into the CTTS zones.

- D. Survey Data Processing and Analysis.
- E. Study of the Master Plans, CDP and spatial data.
- F. Study the physical roadway characteristics (including functional condition of pavement and pedestrian pathways etc. in detail).
- G. Study the present trend of growth, desired development and actions for including desired development from land use, land development and traffic pointy of view.
- H. Study the effect of various alternative development strategies inclusive of seasonal canal navigation.

#### 3.2. REVIEW OF EXISTING TRANSPORT SCENARIO

Analyze the data collected to identify and quantify the existing transport problems. Also assess the operational characteristics and deficiencies of the existing transport systems.

- i. Concentrating the growth (work & education places) in the city centers and catering the traffic needs (including park and ride, feeder bus services, prohibition of freight vehicles along certain roads/ areas/ city etc.) or
- ii. Dispersing the development (work & educational places) and catering to the different pattern of traffic.
- iii. Analysis existing road network and its adequacy for pedestrian, NMV and public transport improvement.
- iv. Integrating main mass rapid transit system and various modes of feeder transit system (bus, IPT, NMT, Pedestrians etc.)
- v. Carry out Road Safety Analysis and Air Quality Analysis
- vi. Study of historical canal navigation system and its utility in the present scenario.

Service level performance benchmarks have been identified for the following areas of Intervention by MoUD, GoI for Urban Transport.

- i. Public transport facilities
- ii. Pedestrian infrastructure facilities
- iii. Non Motorized Transport (NMT)facilities
- iv. Level of usage of Intelligent Transport System (ITS) facilities
- v. Travel speed (Motorized and Mass Transit) along major corridors
- vi. Availability of parking spaces
- vii. Road safety
- viii. Pollution levels
- ix. Integrated land use transport system
- x. Financial sustainability of various modes of public transport including seasonal canal navigation.

Through surveys existing service levels on each of the above have to be established following the guidelines as given by Ministry of Urban Development, GoI (Service Level Benchmarks for Urban Transport) and the action plan for improvement of to be prepared as a separate attachment in the final report.

### 3.3. ACTIVITY 2: DEVELOPMENT & OPERATION OF AN URBAN TRANSPORT PLANNING (UTP) MODEL

The consultant is expected to recommend a commercially available, state-of-the-art, transport network based Urban Transport Planning model package that would be suitable for Vijayawada transport planning needs. The purpose of the model will be to provide policy-related and future travel forecasts. In other words, the model should be able to simulate person trips by origin and destination, by purpose, by time of the

day, by mode and by route, under different demographic, land use, vehicle ownership, infrastructure service, and policy scenarios.

In addition, the model should reflect long term interaction between travel patterns and land use patterns. The model should estimate travel demand with regard to long term choices of residential and employment location, land use, and adaptive behavior in response to transportation system changes, including fare and pricing policy.

It should be noted that given the high volume of passengers that travel in the bus net work, the model should pay particular attention to mode split between bus & two wheeler as well as private car & two wheeler and other modes of transport and conduct sensitivity analysis of demand with regard, to bus fare quality of buses and bus stations. Attention should be paid to the issue of how travel time (walk and wait time) comfort and mobility or access to transport is treated in the model and how improving these parameters could affect modal split in favor of the mass transit/BRT network. Similarly attention should be paid to these issues for travel on the bus network as well as the impact of traffic congestion on bus speed. The behavior pattern of the commuters' trip makers and preference needs to be considered.

In the model, the road and public transport networks shall be described accurately: travel time should be calculated from link-speed and speed relationships. The link speed must be derived from previous data and/or fresh surveys. Provisions must be made for the cost of travel by different private public modes of transport. In the public transport network appropriate time for access walk, waiting transfer may arise in future. Modeling mode split including walk ,public transport modes (auto rickshaw, taxi, bus) and private transport (motorcycle and car), good's vehicles.

Assigning trips to bus networks taking into account variation in bus speeds and frequency due to changes in overall traffic volume and fares. Reflecting the impact of new land use developments and/ or control policies, including freight terminals, truck parking lots, intercity bus terminal etc. Plying of private buses, boarding and alighting of passengers from private buses within city, etc & its effect on congestion (for evaluating short term management measures). Responding to traffic demand management measures such as parking fees, road user charges and congestion pricing as well as the staggering of working hours, taxi hours and multiple shift work. Working out alternative scenario and its effect on the traffic situation Infrastructure development (developed, being developed & proposed) and its impact analysis. Type of road network- main/ arterial roads and in residential areas/ layout with particular emphasis on hierarchy of roads & improper utilization resulting in unsafe conditions.

#### 3.3.1. Transport Network Coding

Consultants shall compile transport network inventory with sufficient details with a view to ensuring traffic assignments to network at link level. The consultant will have to compile attribute data for the network (link and mode characteristics). The consultant will prepare impact files including network coding based on the inventory collected as a part of Task 1 to code the network. Hierarchy of roads will be addressed in detail. Also the road networks will be studied in detail and model road network for new layout will be suggested along with improvement to major road network. In addition, the consultant will also develop traffic origin and destination matrix by mode time day/ peak/ off peak). The consultant will review current speed volume function and assess the adequacy of this function for the purpose of planning and update speed /volume if necessary specialty for the new road facilities like flyovers, bypass, ring road etc).

The consultants in consultation shall identify the committed schemes, proposed schemes and accordingly prepare do-nothing do-minimum ,do-something & do all networks to assess the impact, Examine strategies for making all corridors pedestrian and NMV friendly by adopting different strategies possibility of providing dedicated lanes for public transport and also study one way system, prohibition of carry to certain type of vehicles complete pedestrianization of selected areas and dedicated lanes for cycling along certain roads periods of time, etc. (for evaluating short term traffic management measures).

#### 2.1.1. Model Calibration

The model should reflect the travel behavior of different schemes and social groups in a disaggregate fashion and should be sufficiently sensitive to test policy measures and physical improvements to the transportation network and services. The model should be calibrated for travel costs, speed and other factors.

Traffic assignment with respect to creation of new facilities, imposition of certain management actions, etc. needs to be studied for various alternative scenarios. Traffic assignment should be done on both peak and off/peak hour. The model result should be sufficiently detailed for the identification of project benefits among different income groups and users by different modes. The consultants, upon calibration, must demonstrate to the client how reliable the model is in replicating the current modal splits and traffic flows at screen lines and cordons. If the model is to be used for evaluating micro-investments including major land use changes (commercial development exceeding 10000 square meters of built up area, development of new roads, grade separators at junctions, widening of ROW/ carriage ways considering introduction of transfer of development rights on a corridor basis, providing exclusive bus lanes, introduction of ATC system, various mass rapid transit proposed integration of mass transit system, etc., The consultants should show how reliable the calibrated model is for more detailed flows than at screens / cordons.

#### 2.1.2. Establish Economic Evaluation Procedures.

Consultants are expected to establish the framework for economic evaluation that would be used in the formulation of a long term master transport strategy and the identification of a phased investment program. The framework should allow the economic feasibility to be expressed in terms of expected Net Present value (NPV). Financial Internal Rate of Return (FIRR) and Economic Internal Rate of Return (EIRR) Special attention should be given to the following major areas.

- i. Identify major items of economic benefits.
- ii. Evaluate appropriate Vehicle Operating Costs (VOC) benefit costs (Population and Incidents) and Value of Travel Time (VTT) and value of comfort.
- iii. Develop appropriate economic evaluation procedures to make full use of UTP model outputs including link traffic volumes and speeds by vehicle type for existing and planned networks.
- iv. Present trend of growth, desired development trends and actions for including desired development from land use. Land development and traffic facilities issues, shall be detailed, development properties like
- v. Concentrating the growth (work & education places) in the city centers and catering to the traffic needs (including park and ride facility, feeder bus services, prohibition of freight vehicles along certain road/ areas, etc.)
- vi. Dispersing the development (work & educational places) and catering to the multi directional pattern of traffic.
- vii. Economic incentives/disincentives critical to public transport management road use parking, pedestrianization, NMT etc. to be examined.

viii. Phase wise development and phase wise accrual of benefits needs to be estimated.

#### 3.4. ACTIVITY 3: PROPOSE THE LONG – TERM TRANSPORT STRATEGY

#### 2.1.3. Review of earlier reports

The consultant should review the strategy, assess its relevance to the current and future transport needs of study area, identify major changes in socioeconomic conditions, land use, and transport and suggest strategic areas that need to be considered, improved and strengthened.

#### 2.1.4. Review of Institutional Arrangement of Transport

The purpose of this task is to clarify current arrangements for formulating, monitoring and implementing transport policy and for identifying, appraising, authorizing, sanctioning, financing and implementing traffic and transport schemes and operational policies. The study is required to identify the role and responsibilities of the various agencies concerned with transport policy, financing, investment and regulation of operations. The main issues to be addressed include the following:

- i. The current lack of a clear institutional structure with regard to urban transport planning, management and investment coordination.
- ii. Institutional and policy barriers to positive change in the delivery of transport services to the people and businesses.
- iii. The requirement of number of staff qualified in traffic engineering, transport planning and management.
- iv. The relative roles of public and private passenger transport operations, and the means of regulating them.
- v. The relative roles of central, state and municipal governments, in transport planning, investment and management.

The study should advise on the needs and possible scope of (i) institutional and policy reform; and (ii) proposed and organized suitable professional development and training program in transport planning, management and implementation.

#### 2.1.5. Review of Transport Financing

The study should pay careful regard to the financial resources available for transport investments, maintenance and operation, both in total and by agency, on the basis of an assessment of the level of funding available annually during the past 5 years, current changes in the fiscal framework and economic trends. The outcomes of this work should be estimates, on the basis of a number of assumptions and scenarios, of resources likely to be available for transport investment, maintenance and operations during the coming years, with distinction between tied resources and united resources. Potential sources of private sector finance needs to be identified. Likely candidates for private sector financing/ PPP based on feasibility of levying tolls or user fees should be identified & presented.

#### 2.1.6. Traffic Demand Analysis and Forecast

The consultant shall review the latest development plan and may consider alternate land use scenarios for future development. Forecast of population and employment distribution for the years 2019, 2024, 2029, 2034,2039 and 2044 to be considered. The consultants are required to forecast travel demand by mode using the UTP model for the years 2019, 2024, 2029, 2034,2039 and 2044 on the existing transport network plus all committed transport investments, under the assumed alternative income, population and land use growth scenarios along with sensitivity analysis.

These exercises will give indications on the likely traffic problems in the future years, thus providing a basis for strategy formulation.

#### 2.1.7. Alternative Long-Term Transport Strategies

The long term transport development and management strategy should be a combination of policies (e.g. demand management, user charges etc) and physical improvements (land use strategies, network strategies and model strategies etc). The consultants should define the specific objectives, principles, and criteria required to guide the formation of the long-term strategy.

Having regard to various policy options and transport strategies and systems, alternative feasible scenarios for horizon years should be developed in consultation with Employer. Test the effects of various combinations of schemes/ networks and management policies using the model. Use the results to evaluate the project and policies for economic viability. It is likely that the scope to manage transport demand by control of land use development will be limited but that the implications of transport developments on land use developments will be great. It is likely, for example, that restricted space combined with demand management measures and improvement of rail and road links will lend to faster development of less developed areas in periurban areas. The study should seek to identify the scale of such development pressures.

#### 2.1.8. Evaluations of Alternative Strategies and Selection of Preferred Strategy

A comprehensive evaluation system should be developed in consultation with the employer and stakeholders, taking into account all relevant factors such as capital and operational costs and environmental, social and political factors, services to the poor and vulnerable. In principle, the evaluation should be comprehensive, on the basis of four major criteria (i) economically viable (ii) socially acceptable (iii) environmentally sustainable and (iv) financially sustainable. At the strategic planning level, a preliminary assessment of economic and financial feasibility and social and environmental impacts is expected for each proposed alternative strategy. In defining alternative strategies, the consultants are expected to pay special attention to the services to poor and the vulnerable. The comprehensive evaluation should result in the recommendation of a preferred long term transport strategy. The consultants in collaboration with employer and transport agencies should explain the basis for its recommendations. Strategies will be evaluated with regards to NUTP compliance.

#### 2.1.9. Preparation of Draft Transport Strategy Document

The outline strategy should amount to a directional plan indicating the main imperatives of transport policy during the foreseeable future, having regard to need, desirability (with regard to factors such as land use development and environmental and social impacts), affordability and uncertainty. This strategy should take account of economic growth, current initiatives, the need to conserve and enhance the urban environment, land use plans and likely land use development patterns. The strategy document should cover the following patterns:

- i. Current Situation: Clarification in broad but objective terms of the current situation and trends the quantity of personal movement by suburban rail, bus, car, autorickshaws, NMT, two wheelers, taxis, and on foots the amount of goods vehicle movement: Intercity traffic both (passenger & goods and by Govt. and Pvt. Modes), long distance bus movement; origin destination patterns; current problems.
- ii. **Traffic Growth**: Clarification of current growth rates, potential growth rates (with reference to experience elsewhere) potential problems).
- iii. Current Constraints: Clarification of current constrains with regard to government policies on vehicle and fuel prices and trends, land use policies and the resources

- available for transport investment and the scope of cost recovery through direct user charges such as tolls etc.
- iv. **Long Term Trends and Prospects**: Review of implications for transport (supply and demand) of economic growth and land use developments and of the implications for transport planning of uncertainty.
- v. **Transport Investment Options:** Review of the main means of providing additional transport capacity with regard to their effectiveness, magnitude of orders of cost (including both capital and recurrent costs), economic and financial viability, etc.
- vi. **Demand Management:** The need for and means of achieving the management of the potentially high growth in the use of motor vehicles (including motorcycles). Alternative of various mass rapid transit systems including integration of the same needs to be considered.
- vii. **Environmental Measures**: Review the need for measures to ameliorate adverse environmental impacts, either existing or resulting from proposed projects or increased development.
- viii. Land Use Strategy: Review of the scope and limitations of reducing/ controlling traffic demands through land use policy and of the scope for using transport policy to influence land use development. Also examine legal framework- Act / zoning & Traffic rules (police), Densification of major transport corridors, using land as a resource.
- ix. **Institutional Arrangement**: A diagnostic assessment of the current institutional arrangements for administering and planning transport activities, including policy formulation, regulation of transport operations, financing and investments and recommendations for improving the arrangement.
- x. Conclusion and Recommendations on Transport Strategy: Broad Conclusions and priorities for development of consumer rail, bus transit, highway construction, goods transport ,goods transport through canal navigation and inter regional bus / rail transport, rapid mass transit, integration of various modes of mass transit and IPTs, traffic management and demand management in short, medium, and long terms, observations on land use strategies, connection of new townships by mass transit systems.

#### 3.5. ACTIVITY 4 DEVELOPMENT OF MEDIUM AND SHORT TERM INVESTMENT PROGRAM

The product required for this Activity is a rolling program of investments and management proposals sufficient and appropriate for the period to 2044. The emphasis of the work will depend upon the conclusion reached on the transport strategy. The Medium-Term investment Program will probably comprise the following parts:

- i. Mass Rapid Transit Development Program: Identification of a staged program of mass rapid transit development and its cost implications etc.
- ii. Pedestrianization, NMT network development Program: Identification of present deficiencies hindrances in pedestrian & NMT movement and phased investment for developing vast network, facilitating pedestrian movement so as to make it convenience and safe.
- **iii. Road Network Development Program:** Identification of staged program of road investments having regard to traffic demands, economic benefits, system effects etc.
- iv. Bus System Development Program: Route identification based on network approach, identification of proposals for investment in buses and civil works (depots, workshops, terminals, segregated bus lanes, exclusive bus ways, Introduction of state of the art buses with ITS, modern bus stations etc) and operational management, taking account of bus transport policy recommendations outlines in the transport strategy, Also to examine high capacity bus system introduction.

- v. Seasonal canal navigation: Identification of navigable routes, feeder routes for other modes of transportation and feasibility for the movement of goods and services along the market located on the banks of canals. Providing solutions for alternative modes of transportation in non seasonal conditions. Prepare canal navigation policy including operational and institutional frame work for operation under PPP.
- vi. Traffic Management: Identification of low-cost physical and regulatory measures to improve the efficiency and safety of traffic circulation with and without ITS. Particular attention should be given to the management of NMI, pedestrians, bus priority measures, etc.
- vii. Immediate solution: For negotiable checking along high-density corridors and junctions.

#### 2.1.10. Identification and Costing of Investment Options

The identification of a phased program transport investments proposals will fast involve a string of options and pre-feasibility studies. The consultants are also expected to take consideration of the projects already proposed by the transport agencies. For each investment project, the consultants are expected to define a base option and one or more alternative options. For each option, the consultants are expected to propose preliminary alignment, conceptual design option, technology choice, and timing of construction and start of operations. The consultants should also provide preliminary (or pre-feasibility study level) estimates of the associated capital and operating costs, traffic, revenues if applicable, and operating characteristics.

#### 2.1.11. Evaluation of options

The consultants are expected to evaluate these options using the comprehensive criteria specified above but at a more detailed level. The evaluation should consist of two parts. The first, which may be partially quantitative and largely qualitative, will consist of categories such as operational feasibility, Integration with existing systems and physical environment, ease of response to changing conditions, land use effects, travel generation potential, environmental quality, requirement for involuntary resettlement, and other. The second part will consist of simplified economic and financial evaluation, based on capital and operating costs and revenues, passenger costs and financial costs of each option. It is provisionally envisaged that evaluation of investment options will be based upon the network assignment of traffic demand matrices derived from the results of the transport surveys.

#### 2.1.12. Prioritize the investment Projects and Formulate an Investment Program

On the basis of comprehensive evaluation of the above options, the consultants are expected to prioritize the identified investment projects and formulate a Medium-Term Investment Program. The program should focus on identification of capital investment to be made in the 30 year period 2014-2044.

#### 3.6. ACTIVITY 5 SKILL AND KNOWLEDGE TRANSFER

The study should advise on the needs and possible scope of professional development and training in transport planning and management. The new CTS model should be installed on employer's office and any other office suggested by the employer. The software for installation of CTS model shall be purchased by the Authority. The key personnel with technical background in the sector, in these institutions should be provided necessary training in its use. It is also expected that two week workshop will be conducted for senior officers on the usage of model.

The consultant will train core staff on model update and calibration so that they could use the model proficiently as a planning tool with only minimal assistance from

consultants on the need basis after the study is completed. The study shall make provision for two trainings for the concerned staff of various authorities and its organizations dealing with city's traffic & transportation management. CTTS team will undergo these trainings. The training shall be organized through:

- Seminars
- On the job training

At least three seminars connected with the study processes and evaluation techniques shall be held during the study. These seminars shall be organized by the consultant and presented by the team with senior staff from Vijayawada Municipal Corporation, Traffic Police and other relevant local academicians & practitioners in the city planning and transport field. The seminars may focus on the following:

Transport issues brought out in the development plan and criteria & techniques appropriate for evaluating them.

- Objectives and techniques of the operational transport analysis and modeling process.
- Evaluation of transport program, policies and projects.

All data, in the form of raw data and structured database in soft copy should be fully transferred to the authority with copy rights employer/ his representative.

#### 3.7. ACTIVITY 6 Develop two project ideas into project proposals

- a. The identified project ideas will be taken up for carrying out prefeasibility.
- b. Develop a funding and implementation programme.
- c. Quantification of emission reduction due to the project interventions and identification of climate financing opportunities
- d. Put into a template for accessing domestic funding (e.g., under JnNURM) and / or from multi-lateral financing institutions (e.g., ADB, World Bank, etc.)

Above tasks are required to be delivered in consultation with Indian project team and as per the methodology for LCMP attached at Annexure A for your guidance.

#### 4. STUDY OUTPUTS

The study shall be completed within a span of 6 Months from the date of work order. The time allocation for main mile stones identified shall be as follows:

Task Details	No. of Copies	Submission Time (starting from the date of signing of agreement)
Inception Report including approach and methodology and proposal regarding development of model through appropriate software package	6	1 Month
Interim Report-I (Survey/studies & its analysis and Short Term Traffic Management Plan)	6	2 Month
Interim Report-II (Revalidation development of CTS model & Development scenarios and Travel demand forecasts along with alternative strategies for CMP)	6	3 Month
Draft CMP	6	4 Month
Final CMP	6	5 Month

Project Proposals(Pre-feasibility of two project proposals)	6	6 Month
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NOTE: Consultant shall make a presentation to the Authority after submission of each Report.

The Consultant must establish a local office on its own or else seek office space from VMC on rent for the Project period. The personnel deployed for the Project must work from the local office only. The consultant shall establish all the material required to operate the office.

The consultants shall from time to time submit the reports and working papers to Authority. The Monitoring cum Approval Committee will review the same and convey its modification/ amendments and suggestions which shall be reported and incorporated in subsequent reports. The study outputs expected from consultants are as follows:

- i. Inception report by the end of 1 Month which will essentially review: Data and confirm/ attend the work plan while bringing out the direction of the study and proposed study methodology, time schedules etc.Proposals for this process and the validation criteria to be adopted shall be included in the inception Report.
- ii. Reports on following topics should be submitted
  - a. Data compilation and statistical analysis of whole survey
  - b. Methodology for CTS model development, calibration and validation
  - c. Alternatives Analysis for Short and Medium Term investment strategy
  - d. Report on Long Term Strategy for the Transport System
  - e. Report on Existing and Future Scenarios of city profile and travel demand and their impact on environment and society using city level indicators.
- iii. **Draft final reports** with Executive Summary covering each task described in TOR and should also include key tables, development scenarios, network options travel demand forecasts traffic assignment etc.

#### iv. Final report

- v. **Technical notes** on the following topics.
  - a. Sampling techniques and sample generation
  - b. OD matrices and Desire line diagrams
  - c. Road Inventory and Canal Navigation, Traffic surveys and analysis
  - d. Development scenarios and network options for different horizons
  - e. Vehicle Operating Cost and Value of Time
  - f. CTS model development, calibrations and validation
  - g. Institutional Arrangement of Transport
  - h. Financial assessment and Funding Analysis
  - i. Economic and Operation Assessment of Network improvements

#### vi. Data / Reports (Hard+Soft Copy)

- a. CDs with raw and processed data in a formatted database and tables and report in database format.
- b. All the traffic survey data and analysis, in hard and soft copies.
- c. Technical notes, final report, executive summary with proper labeling and
- d. Documentation.
- vii. Proper documentation for operation of the model

viii. Delineation of Traffic zone and base year planning parameters, base year transport network (road/rail) including maps to appropriate scale in consultation with employer.

#### 5. PERIOD OF SERVICE

The period of this service will be 6 Months from date of awarding the contract.

#### 6. PAYMENT SCHEDULE

The Time schedule for important Deliverables (the "Key Dates") of the Consultancy and the payment schedule linked to the specified Deliverables is given below:

Deliverable	No. of Copies	Submission Time (starting from the date of signing of agreement)	Payment	
Inception Report	6	1 Month	10%	
Interim Report-I	6	2 Month	15%	
Interim Report-II	6	3 Month	15%	
Draft CMP	6	4 Month	10%	
Final CMP	6	5 Month	20%	
Project Proposals	6	6 Month	10%	
Approval of Final CMP			20%	
Total 10				

<sup>\*\*</sup> The Authority shall review and convey the observations for each stage within a period of 15 days of receipt of report for each stage, and in the event of any delay the consultant shall be paid a sum equal to 80% of the due payment for that stage.

# excludes the time taken by the Authority in providing its comments on Draft Reports. The Consultant shall get one week for submission of the Final CMP after comments of the Authority are provided.

#### 7. MEETING

The Department/ Agency shall hold fortnightly or as required review meeting with the Consultant on any or all of the documents and advice forming part of the Consultancy relating to their respective parts, at the Authority's office. The Consultant will ensure the presence of Team Leader along with relevant key personnel / professionals for that particular stage of the project, in this meeting.

Further, the Consultant may be required to attend meetings and conferences during the bid process and till signing of Agreements for execution of the Project cities.

#### 8. CONSULTANCY TEAM

The Consultant shall form a multi-disciplinary team (the "Consultancy Team") for undertaking this assignment. The following Key Personnel whose experience and responsibilities are briefly described herein would be considered for evaluation of the Technical Proposal:

- 1. Team Leader
- 2. Transport Modeler
- 3. Transport Planner
- 4. Highway Engineer
- 5. Transport Economist
- 6. PPP Expert/Financial Analyst
- 7. Environmental Expert

#### 8. Institutional Expert

Consultants may include group of advisors in the team to infuse high level of expert advice and integrate any missing skills in the study team. Although their inputs and skills will be considered in evaluating proposed overall approach and methodology for this study, their CVs will not be evaluated.

Broad job-description and minimum qualification for key personnel mentioned above is given in "Data Sheet". The Consultant should feel free to submit their proposal on the basis of the man-months which they consider to be necessary to undertake the assignment. All the key personnel mentioned in Para above shall be evaluated at the time of evaluation of technical proposal.

Consultants are advised in their own interest to frame the technical proposal in an objective manner as far as possible so that these could be properly assessed in respect of points to be given as part of evaluation criteria.

#### 9. CONSULTANCY TEAM

- 9.1. The Consultant will work closely with the authorities, Project Coordinators and other nodal officer will be responsible for the overall coordination and project development. The Project Coordinators will play a coordinating role in dissemination of the Consultant's outputs, facilitating discussions, and ensuring required reactions and responses to the Consultant.
- 9.2. The Consultant may prepare Issue Papers highlighting issues that could become critical for the timely completion of the Project and that require attention from the authorities.
- 9.3. The Consultant will make a presentation on the Inception Report for discussion with the authority at a meeting. This will be a working document. The Consultant is required to prepare and submit a monthly report that includes and describes, inter alia, general progress to date; data and reports obtained and reviewed, conclusions to date, if any; concerns about availability of, or access to, data, analyses, reports; questions regarding the TOR or any other matters regarding work scope and related issues; and so on. The Consultants work on the TOR tasks should continue while the report is under consideration and is being discussed. The Consultant shall be required to give presentation on his proposal from time to time and shall incorporate necessary changes as may be suggested by the Authority.
- 9.4. Regular communication with the Project Coordinators is required in addition to all key communications. This may take the form of telephone/ teleconferencing, emails, faxes, and occasional meetings.
- 9.5. The Deliverables will be submitted as per schedule provided in this RFP.

## TECHNICAL PROPOSAL STANDARD FORMS

#### **SECTION 4: TECHNICAL PROPOSAL – STANDARD FORMS**

Form TECH 1	Technical Proposal Submission Form	
Form TECH 2 Firm/Consortium's Profile and Experience		
Form TECH 3	Comments and Suggestions on the (a) Terms of Reference (b) on Data Services, and facilities to be provided by the employer; and (c) Appreciation of Assignment.	
Form TECH 4	Description of the methodology and work plan for performing the assignment.	
Form TECH 5 Composition of team personnel and their task assignment		
Form TECH 6	Format of Curriculum Vitae of Proposed Key Professional Staff.	
Form TECH 7	Staffing Schedule	
Form TECH 8 Work Schedule		

#### Form TECH 1: TECHNICAL PROPOSAL SUBMISSION FORM

[On the Letter Head of the Lead Member / Sole Applicant] Location, Date

To: Address:	
Sir:	
Subject: Hiring of Consultancy Services for Preparation of Comprehensiand around Vijayawada City: Technical Proposal.	ve Mobility Plan in

Being duly authorized to represent and act on behalf of Lead Member (in case of JV/Consortium) / Sole Applicant, I the undersigned having fully reviewed and fully understood all of the proposal requirements and information provided hereby submit the proposals for the above consultancy services.

If negotiations are held during the period of validity of the Proposals. i.e., before [Date] we undertake to negotiate on the basis of the proposed staff. Our Proposal is binding upon us and subject to the modifications resulting from contract negotiations.

We understand you are not bound to accept any Proposal you receive.

We remain, Yours Sincerely, Authorized Signature (in Full and Initials) Name and Title of Signatory: Name of Firm: Address:

#### Form TECH 2: FIRM'S/CONSORTIUM'S PROFILE AND EXPERIENCE

#### A. Consultant's Organization

Shall also include Financial Capacity of Applicant, Software Capability (details on Software name, Cost, License No., Validity period).

**B. Consultant's Experience** (Relevant Services Carried Out in the Last Ten years that Best Illustrate qualifications, using the format below, provide information on each reference assignment for which your firm/ Consortium)

Assignment Name:		Country:	
Location within Country:		Professional Staff Provided by your Firm:	
Name of the Employer:		Total No. of Staff Months of the Assignment:	
Address of the Client:		Approx Value of Services under the contract in Rs. Million:	
No. of person-months provide	ded by our firm:		
Start Date (Month/Year): Completion Date (Month/Year):		Approximate value of services (in current US\$):	
Name of Associated Consul	tants, if any: Nil	No. of months of professional staff provided by Associated Consultants:	
Name of Senior Staff involve	ed and functions performed:		
Narrative description of the	Project:		
Description of Actual Servic  –	es provided by your Staff:		

## Form TECH 3: COMMENTS AND SUGGESTIONS OF CONSULTANTS ON THE TERMS OF REFERENCE AND ON DATA, SERVICES, AND FACILITIES TO BE PROVIDED BY THE EMPLOYER AND APPRECIATION OF ASSIGNMENT

A.	On Terms of Reference
1. 2. 3.	
В.	On the Data, Services and Facilities to be provided by the Employer
1. 2. 3.	
C.	Appreciation of Assignment
1. 2. 3.	

## Form TECH 4: DESCRIPTION OF THE APPROACH AND METHODOLOGY AND WORK PLAN FOR PERFORMING THE ASSIGNMENT

You are suggested to present your Technical Proposal divided into the following three chapters:

- a) Technical Approach and Methodology,
- b) Work Plan, and
- c) Organization and Staffing,
- a) Technical Approach and Methodology: In this chapter you should explain your understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. You should highlight the problems being addressed and their importance, and explain the technical approach you would adopt to address them.
- **b) Work Plan:** In this chapter you should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Client), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here. The work plan should be consistent with the Work Schedule of Form TECH-8.
- **c)** Organization and Staffing: In this chapter you should propose the structure and composition of your team. You should list the main disciplines of the assignment, the key expert responsible, and proposed technical and support staff.

# Form TECH 5: COMPOSITION OF TEAM PERSONNEL AND THEIR TASK ASSIGNMENT

## 1. Key Professional/Personnel

SN	Name	Position	Task

## 2. Support Technical Staff

SN	Name	Position	Task

# Form TECH 6: FORMAT OF CURRICULUM VITAE (CV) FOR PROPOSED KEY PROFESSIONAL STAFF

Proposed Position:
Name of Firm:
Name of Staff:
Year with the Firm:
Date of Birth:
Nationality:
Membership with Professional Bodies:
<b>Key Qualification</b> [Give on outline of staff member's experience and training most pertinent to tasks on assignment]
Education:  [Summarize college/ university and other specialized education of staff member, giving names of schools, dates attended, and degrees obtained.]
<b>Employment Record</b> [Starting with present position, list in reverse order every employment held. List all positions held by staff member since graduation, giving dates, names of employing organizations, titles or positions held]
Professional Experience [For experience give type of activities performed along with client name]
Languages [For each language indicate proficiency: excellent, good, fair, or poor, in speaking reading and writing]
Certification
I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describes me, my qualifications, and my experience.
Signature of proposed personnel or authorized personnel submitting the proposal Phone: Email ID: Date:

# Form TECH 7: STAFFING SCHEDULE FOR KEY PROFESSIONALS AND SUPPORT TECHNICAL PERSONNEL

	Name of Staff	Position	Months (in the form of a Bar Chart)								
SN			1	2	3	4	5	6	7	8	Total No. of Months
I. Key	Professional Staff										
	Subtotal										
II. Sup	port Staff										
	Subtotal	·									

# Form TECH 7: WORK SCHEDULE

# 1. Field Investigation and Study Item

CNI	Item of Work/Task/Sub-	ub- Months (in the form of a Bar Char					Chart	)		
SN	Task	1	2	3	4	5	6	7	8	9

## 2. Completion and Submission of Reports

SN	Report	Programme (Date)

# FINANCIAL PROPOSAL - STANDARD FORMS

# **SECTION 5: FINANCIAL PROPOSAL – STANDARD FORMS**

Form FIN 1	Financial Proposal Submission Form
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# Form FIN 1: FINANCIAL PROPOSAL SUBMISSION FORM

10							
Ladies / Gentlemen:							
Subject: Hiring of Consultancy Services for Preparation of Comprehensive Mobility Plan for Vijaywada: Financial Proposal.							
We, the undersigned, offer to provide the consulting services for the above in accordance with your Request for Proposal dated [Date], and our (Technical and Financial Proposal).  Our attached financial proposal is for the sum of (INR							
taxes but excluding service tax.							
We have estimated Amount of Service Tax at [INR							
Our financial proposal shall be binding upon us subject to the modifications resulting from contract negotiations, up to expiry of the validity period of the Proposal, i.e., [Date].							
We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".							
We understand that you are not bound to accept any Proposal you receive.							
Yours Sincerely, Authorized Signature:[in Full and initials] Name and Title of Signatory: Name of Firm: Address:							

# DRAFT FORM OF CONTRACT

#### **SECTION 6: DRAFT FORM OF CONTRACT**

#### 1. FORM OF CONTRACT

This CONTRACT (baroinafter called the "Contract") is made on the

This Contribator (hereinater called the Contract) is made on the	
the month of, 20, between, on the one hand,	
(hereinafter called the "Employer") and, on the other hand,	(hereinafter
called the "Consultants")	•
,	
[*Note: If the Consultants consist of more than one entity, the above should	be partially
amended to read as follows" (hereinafter called the "Employer") and, c	
hand, a joint venture consisting of the following entities, each of which will be	
severally liable to the Employer for all the Consultant's obligations under this	, ,
namely, and (herein	
·	iaitei cailee
the "Consultants."]	

day of

#### **WHEREAS**

- a. the Employer has requested the Consultants to provide certain consulting services as defined in the General Conditions of Contract attached to this Contract (hereinafter called the Services");
- b. the Consultants, having represented to the Employer that they have the required professional skills, and personnel and technical resources, have agreed to provide the Services on the terms and conditions set forth in this Contract;

NOW THEREFORE the parties hereto hereby agree as follows:

- The following documents attached hereto shall be deemed to form and integral part of this Contract:
- a. The General Conditions of Contract (hereinafter called "GC");
- b. The Special Conditions of Contract (hereinafter called "SC");
- c. The following Appendices;

[Note: If any of these Appendices are not used, the words "Not Used" should be inserted below next to the title of the Appendix on the sheet attached hereto carrying the title of that Appendix.]

- Appendix A: Description of the Services
- Appendix B: Reporting Requirements
- Appendix C: Key Personnel and Sub-consultants
- Appendix D: Minutes of the Contract Negotiations Meeting/Correspondence/others
- Appendix E: Breakdown of Contract Price in Local Currency
- Appendix F: Services and Facilities Provided by the Employer
- Appendix G: Payment Schedule
- 2. The mutual rights and obligations of the Employer and the Consultants shall be as set forth in the Contract, in particular:
- a. The Consultants shall carry out the Services in accordance with the provisions of the Contract; and
- b. The Employer shall make payments to the Consultants in accordance with the provisions of the Contract.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names as of the day and year first above written.

FOR AND ON BEHALF OF [NAME OF EMPLOYER] By (Authorized Representative)	
FOR AND ON BEHALF OF [NAME OF CONSULTANTS] By (Authorized Representative)	
[Note: If the Consultants consist of more than one entity, all these entities should appearing signatories, e.g., in the following manner:]	ar as
FOR AND ON BEHALF OF EACH OF THE MEMBERS OF THE CONSULTANTS	
[NAME OF MEMBER]	
By (Authorized Representative)	
[NAME OF MEMBER]	
By (Authorized Representative)	

#### 2. GENERAL CONDITIONS OF CONTRACT

#### 1. GENERAL PROVISIONS

#### 1.1. Definitions

Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

- a. "Applicable Law" means the laws and any other instruments having the force of law in the Government's country (or in such other country as may be specified in the Special Conditions of Contract (SC)), as they may be issued and in force from time to time;
- b. "Contract" means the Contract signed by the Parties, to which these General Conditions of Contract (GC) are attached, together with all the documents listed in Clause 1 of such signed Contract;
- c. "Contract Price" means the price to be paid for the performance of the Services, in accordance with Clause:
- d. "Foreign currency" means any currency other than the currency of Government;
- e. "GC" mean these General Conditions of Contract;
- f. "Government" means the Government Employer's Country;
- g. "Local Currency" means the currency of the Government;
- h. "Member," in case the Consultants consist of a joint venture of more than one entity, means any of these entities; "Members" means all of these entities; "Member in Charge" means the entity specified in the SC to act on their behalf in exercising all the Consultants' rights and obligations towards the Employer under this Contract;
- i. "Party" means the Employer or the Consultants, as the case may be, and Parties means both of them;
- j. "Personnel" means persons hired by the Consultants or by any Sub-consultant as employees and assigned to the performance of the Services or any part thereof;
- k. "SC" means the Special Conditions of Contract by which these General Conditions of Contract may be amended or supplemented;
- I. "Services" means the work to be performed by the Consultants pursuant to this Contract, as described in Appendix A; and
- m. "Sub-consultant" means any entity to which the Consultants subcontract any part of the Services

#### 1.2. Law Governing the Contract

This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Law.

#### 1.3. Language

This Contract has been executed in the language specified in the SC, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.

#### 1.4. Notices

Any notice, request, or consent made pursuant to this Contract shall be in writing and shall be deemed to have been made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail, telex, telegram, or facsimile to such Party at the address specified in the SC.

#### 1.5 Location

The Services shall be performed at such locations as are specified in Appendix A and, where the location of a particular task is not so specified, at such locations, whether in the Government's country or elsewhere, as the Employer may approve.

#### 1.6. Authorized Representatives

Any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the Employer or the Consultants may be taken or executed by the officials specified in the SC.

#### 1.7. Taxes and Duties

Unless otherwise specified in the SC, the Consultants, Sub-consultants, and their Personnel shall pay such taxes, duties, fees, and other impositions as may be levied under the Applicable Law, the amount of which is deemed to have been included in the Contract Price, excluding Service Tax.

# 2. COMMENCEMENT, COMPLETION, MODIFICATION, AND TERMINATION OF CONTRACT

#### 2.1. Effectiveness of Contract

This Contract shall come into effect on the date the Contract is signed by both parties and such other later date as may be stated in the SC.

#### 2.2. Commencement of Services

The Consultants shall begin carrying out the Services Fifteen (15) days after the date the Contract becomes effective, or at such other date as may be specified in the SC.

#### 2.3. Expiration of Contract

Unless terminated earlier pursuant to Clause, this Contract shall terminate at the end of such time period after the Effective Date as is specified in the SC.

#### 2.4. Modification

Modification of the terms and conditions of this Contract, including any modification of the scope of the Services or of the Contract Price, may only be made by written agreement between the Parties and shall not be effective until the consent of the Bank or of the Association, as the case may be, has been obtained.

#### 2.5. Force Majeure

#### 2.5.1 Definition

For the purposes of this Contract, "Force Majeure" means an event which is beyond the reasonable control of a Party, and which makes a Party's performance of its obligations under the Contract impossible or so impractical as to be considered impossible under the circumstances.

#### 2.5.2 Extension of Time

Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.

#### 2.5.3 Payments

During the period of their inability to perform the Services as a result of an event of Force Majeure, the Consultants shall be entitled to continue to be paid under the terms of this Contract, as well as to be reimbursed for additional costs reasonably and necessarily incurred by them during such period for the purposes of the Services and in reactivating the Service after the end of such period.

#### 2.6. Termination

#### 2.6.1 By the Employer

The Employer may terminate this Contract, by not less than thirty (30) days' written notice of

termination to the Consultants, to be given after the occurrence of any of the events specified in paragraphs (a) through (d) of this Clause 2.6.1 and sixty (60) days' in the case of the event referred to in (e):

- a. if the Consultants do not remedy a failure in the performance of their obligations under the Contract, within thirty (30) days of receipt after being notified or within any further period as the Employer may have subsequently approved in writing;
- b. If the Consultants become insolvent or bankrupt;
- c. if, as the result of Force Majeure, the Consultants are unable to perform a material portion of the Services for a period of not less than sixty (60) days; or
- d. if the consultant, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

For the purpose of this clause:

- " Corrupt practice" means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the selection process or in contract execution.
- "fraudulent practice" means a misrepresentation of facts in order to influence a selection process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among consultants (prior to or after submission of proposals) designed to establish prices at artificial noncompetitive levels and to deprive the Borrower of the benefits of free and open competition.
- e. if the Employer, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.
- f. Incase if the consultant does not complete the project within their quoted time the EMD amount will be forfeited /liquidated. Further necessary action will be taken.

#### 2.6.2 By the Consultants

The Consultants may terminate this Contract, by not less than thirty (30) days' written notice to the Employer, such notice to be given after the occurrence of any of the events specified in paragraphs (a) and (b) of this Clause 2.6.2:

- a. if the Employer fails to pay any monies due to the Consultants pursuant to this Contract and not subject to dispute pursuant to Clause 7 hereof within forty-five (45) days after receiving written notice from the Consultants that such payment is overdue; or
- b. if, as the result of Force Majeure, the Consultants are unable to perform a material portion of the Services for a period of not less than sixty (60) days.

#### 2.6.3 Payment upon Termination

Upon termination of this Contract pursuant to Clauses 2.6.1 or 2.6.2, the Employer shall make the following payments to the Consultants:

- Remuneration pursuant to Clause 6 for Services satisfactorily performed prior to the effective date of termination;
- b. except in the case of termination pursuant to paragraphs (a) and (b) of Clause 2.6.1, reimbursement of any reasonable cost incident to the prompt and orderly termination of the Contract, including the cost of the return travel of the Consultant's personnel and their eligible dependents.

#### 3. OBLIGATIONS OF THE CONSULTANTS

#### 3.1 General

The Consultants shall perform the Services and carry out their obligations hereunder with all due diligence, efficiency, and economy, in accordance with generally accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe methods. The Consultants shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the Employer, and shall at all times support and safeguard the Employer's legitimate interests in any dealings with Sub-consultants or third parties.

#### 3.2 Conflict of Interests

#### 3.2.1 Consultants Not to Benefit from Commissions, Discounts, etc.

The remuneration of the Consultants pursuant to Clause 6 shall constitute the Consultants' sole remuneration in connection with this Contract or the Services, and the Consultants shall

not accept for their own benefit any trade commission, discount, or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the Consultants shall use their best efforts to ensure that the Personnel, any Sub-consultants, and agents of either of them similarly shall not receive any such additional remuneration.

#### 3.2.2 Consultants and Affiliates Not To Be Otherwise Interested In Project

The Consultants agree that, during the term of this Contract and after its termination, the Consultants and their affiliates, as well as any Sub-consultant and any of its affiliates, shall be disqualified from providing goods, works, or services (other than the Services and any continuation thereof) for any project resulting from or closely related to the Services.

#### 3.2.3 Prohibition of Conflicting Activities

Neither the Consultants nor their Sub-consultants nor the Personnel shall engage, either directly or indirectly, in any of the following activities.

- a. during the term of this Contract, any business or professional activities in the Government's country which would conflict with the activities assigned to them under this Contract: or
- b. After the termination of this Contract, such other activities as may be specified in the SC

#### 3.3 Confidentiality

The Consultants, their Sub-consultants, and the Personnel of either of them shall not, either during the term or within 6 Months after the expiration of this Contract, disclose any proprietary or confidential information relating to the Project, the Services, this Contract, or the Employer's business or operations without the prior written consent of the Employer.

#### 3.4 Insurance to be taken out by the Consultants

The Consultants (a) shall take out and maintain, and shall cause any Sub-consultants to take out and maintain, at their (or the Sub-consultants', as the case may be) own cost but on terms and conditions approved by the Employer, insurance against the risks, and for the coverage, as shall be specified in the SC; and (b) at the Employer's request, shall provide evidence to the Employer showing that such insurance has been taken out and maintained and that the current premiums have been paid.

#### 3.5 Consultants' Actions Requiring Employer's Prior Approval

The Consultants shall obtain the Employer's prior approval in writing before taking any of the following actions:

- a. Entering into a subcontract for the performance of any part of the Services,
- b. Appointing such members of the Personnel not listed by name in Appendix C ("Key Personnel and Sub-consultants"), and
- c. Any other action that may be specified in the SC.

#### 3.6 Reporting Obligations

The Consultants shall submit to the Employer the reports and documents specified in Appendix B in the form, in the numbers, and within the periods set forth in the said Appendix.

#### 3.7 Documents Prepared by the Consultants to Be the Property of the Employer

All plans, drawings, specifications, designs, reports, and other documents and software submitted by the Consultants in accordance with Clause 3.6 shall become and remain the property of the Employer, an the Consultants shall, not later than upon termination or expiration of this Contract, deliver all such documents and software to the Employer, together with a detailed inventory thereof.

The Consultants may retain a copy of such documents and software. Restrictions about the future use of these documents, if any, shall be specified in the SC.

The authorities will take necessary steps to appoint the consultant for undertaking the comprehensive transport study. The consultant will assign the copyright to Client and Ministry of Urban Development, Government of India and there would be no objection from them for this study to be put in the public domain.

#### 4. CONSULTANTS' PERSONNEL

#### 4.1 Description of Personnel

The titles, agreed job descriptions, minimum qualifications, and estimated periods of engagement in the carrying out of the Services of the Consultants' Key Personnel are described in Appendix C. The Key Personnel and Sub-consultants listed by title as well as by name in Appendix C are hereby approved by the Employer.

#### 4.2 Removal and/or Replacement of Personnel

- a. Except as the Employer may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Consultants, it becomes necessary to replace any of the Key Personnel, the Consultants shall forthwith provide as a replacement a person of equivalent or better qualifications.
- b. If the Employer finds that any of the Personnel have (i) committed serious misconduct or has been charged with having committed a criminal action, or (ii) have reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Consultants shall, at the Employer's written request specifying the grounds thereof, forthwith provide as a replacement a person with qualifications and experience acceptable to the Employer
- c. The Consultants shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of Personnel.
- d. The employer may at his discretion impose penalty if it is observed that if there is frequent change in the key personnel's of the study team.
- e. The consultants are requested that not to give any professional names for the sake of selection and withdraw after selection. In such case EMD will be forfeited and further necessary action will be taken.

#### 5. OBLIGATIONS OF THE EMPLOYER

#### 5.1 Assistance and Exemptions

The Employer shall use its best efforts to ensure that the Government shall provide the Consultants such assistance and exemptions as specified in the SC.

#### 5.2 Changes in the Applicable Law

If, after the date of this Contract, there is any change in the Applicable Law with respect to taxes and duties which increases or decreases the cost of the services rendered by the Consultants, then the remuneration and reimbursable expenses otherwise payable to the Consultants under this Contract shall be increased or decreased accordingly by agreement between the Parties, and corresponding adjustments shall be made to the amounts referred to in Clauses 6.2 (a) or (b), as the case may be.

#### 5.3 Services and Facilities

The Employer shall make available to the Consultants the Services and Facilities listed under Appendix F.

#### 6. PAYMENTS TO THE CONSULTANTS

#### 6.1 Lump-Sum Remuneration

The Consultant's total remuneration shall not exceed the Contract Price and shall be a fixed lumpsum including all staff costs, Sub-consultants' costs, printing, communications, travel, accommodation, and the like, and all other costs incurred by the Consultant in carrying out the Services described in Appendix A. Except as provided in Clause 5.2, the Contract Price may only be increased above the amounts stated in Clause 6.2 if the Parties have agreed to additional payments in accordance with Clause 2.4.

#### 6.2 Contract Price

The price payable in local currency is set forth in the SC.

#### 6.3 Payment for Additional Services

For the purpose of determining the remuneration due for additional services as may be agreed under Clause 2.4, a breakdown of the lump-sum price is provided in Appendix E.

#### 6.4 Terms and Conditions of Payment

Payments will be made to the account of the Consultants and according to the payment schedule stated in the SC. unless otherwise stated in the SC, the first payment shall be made against the provision by the Consultants of a bank guarantee for the same amount, and shall be valid for the period stated in the SC. Any other payment shall be made after the conditions listed in the SC. Any other payment shall be made after the conditions listed in the SC for such payment have been met, and the Consultants have submitted an invoice to the Employer specifying the amount due.

#### 7. SETTLEMENT OF DISPUTES

#### 7.1 Amicable Settlement

The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.

#### 7.2 Dispute Settlement

Any dispute arising out of or relating to this contract shall be settled by arbitration. Each dispute submitted by a party to arbitration shall be heard by an arbitral tribunal composed of three arbitrators in accordance with the following provisions.

- I. The employers and the consultants shall each appoint one arbitrator and the two appointed arbitrators shall appoint the third arbitrator who shall act as presiding arbitrator
- II. The arbitration proceedings shall be conducted in accordance with the Arbitration and Conciliation Act, 1996.

#### 3. SPECIAL CONDITIONS OF CONTRACT

Number of GC Amendments of, and Supplements to, Clauses in the General Conditions of Contract Clause\*

	The words "in the Government's country" are amended to read "in India"]  The Member in Charge is]  The language is English.  The addresses are:					
Emplo	oyer:					
Atten	tion:					
Facsi	mile:					
Cons	ultants:					
Attent Facsi						
1.6	The Authorized Representatives are:					
	For the Employer:					
	For the Consultants:					
1.7	The Consultants and the personnel shall pay the taxes, duties, fees, levies and other impositions levied under the existing, amended or enacted laws during life of this contract and the client shall perform such duties in regard to deduction of such tax as may be lawfully imposed.					
2.1	The date on which this Contract shall come into effect is approval of the Contract and receipt by Consultants of advance payment and by Employer of bank guarantee (see Clause 6.4) etc.					
2.2	The date for the commencement of Services is 15 days after contract has become effective.					
2.3	The period of services shall be 6 Months.					

The risks and coverage shall be:

3.4

- (1) Third Party motor vehicle liability insurance as required under Motor Vehicles Act, 1988, in respect of motor vehicles operated in India by the Consultants or their Personnel or any Sub consultants or their personnel, for the period of Consultancy;
- (2) Third Party liability insurance, with a minimum coverage for Rs.5,00,000 for the period of Consultancy;
- (3) Employer's liability and workers' compensation insurance in respect of the personnel of the Consultants and of any Sub-consultant, in accordance with the relevant provisions of the Applicable Law, as well as, with respect to such Personnel, any such life, health, accident, travel or other insurance as may be appropriate;
- (4) Professional liability insurance, with a minimum coverage of equal to total contract value for this consultancy; and
- (5) Insurance against loss of or damage to (i) equipment purchased in whole or in part with funds provided under this contract, (ii) the consultant's property used in the performance of the Services, and (iii) any documents prepared by the Consultants in the performance of the Services.
- 3.7 The Consultants shall not use these documents for purposes unrelated to this Contract without the prior written approval of the Employer.
- 6.2(a) the amount (of Fee) in local currency is; INR\_\_\_\_\_\_\_ Service tax in INR.....
- 6.5 Payment shall be made within 30 days of receipt of the invoice and the relevant documents specified in Clause 6.4, and within 45 days in the case of the final payment.

# **APPENDICES**

## **IV. APPENDICES**

#### **APPENDIX A**

### **Description of the Services**

[Give detailed descriptions of the Services to be provided, dates for completion of various tasks, place of performance for different tasks, specific tasks to be approved by Employer, etc.]

#### APPENDIX B

#### **Reporting Requirements**

The study shall be completed within a span of 6 months from the date of work order. The time allocation for main mile stones identified shall be as follows:

Task Details	No. of Copies	Submission Time (starting from the date of signing of agreement)
Inception Report including approach and methodology and proposal regarding development of model through appropriate software package	6	1 Month
Interim Report-I (Survey/studies & its analysis and Short Term Traffic Management Plan)	6	2 Month
Interim Report-II (Revalidation development of CTS model & Development scenarios and Travel demand forecasts along with alternative strategies for CMP)	6	3 Month
Draft CMP	6	4 Month
Final CMP	6	5 Month
Project Proposals	6	6 Month

NOTE: Consultant shall make a presentation to the Authority after submission of each Report.

The consultants shall from time to time submit the reports and working papers to Authority. The Monitoring cum Approval Committee will review the same and convey its modification/ amendments and suggestions which shall be reported and incorporated in subsequent reports. The study outputs expected from consultants are as follows:

ix. Inception report by the end of 1 Month which will essentially review:

Data and confirm/ attend the work plan while bringing out the direction of the study and proposed study methodology, time schedules etc. Proposals for this process and the validation criteria to be adopted shall be included in the inception Report.

- x. Reports on following topics should be submitted
  - f. Data compilation and statistical analysis of whole survey
  - g. Methodology for CTS model development, calibration and validation
  - h. Alternatives Analysis for Short and Medium Term investment strategy
  - i. Report on Long Term Strategy for the Transport System
  - j. Report on Existing and Future Scenarios of city profile and travel demand and their impact on environment and society using city level indicators. (Refer Annexure –B for City level indicators for your guidance)

xi. **Draft final reports** with Executive Summary covering each task described in TOR and should also include key tables, development scenarios, network options travel demand forecasts traffic assignment etc.

#### xii. Final report

- xiii. **Technical notes** on the following topics.
  - j. Sampling techniques and sample generation
  - k. OD matrices and Desire line diagrams
  - I. Road Inventory and canal navigation, Traffic surveys and analysis
  - m. Development scenarios and network options for different horizons
  - n. Vehicle Operating Cost and Value of Time
  - o. CTS model development, calibrations and validation
  - p. Institutional Arrangement of Transport
  - q. Financial assessment and Funding Analysis
  - r. Economic and Operation Assessment of Network improvements

#### xiv. Data / Reports (Hard+Soft Copy)

- e. CDs with raw and processed data in a formatted database and tables and report in database format.
- f. All the traffic survey data and analysis, in hard and soft copies.
- g. Technical notes, final report, executive summary with proper labeling and
- h. Documentation.
- xv. Proper documentation for operation of the model
- xvi. Delineation of Traffic zone and base year planning parameters, base year transport network (road/rail) including maps to appropriate scale in consultation with employer.

#### **APPENDIX C**

#### **Key Personnel and Sub-Consultants**

List under:

- C-1 Titles [and names, if already available], detailed job descriptions and minimum qualifications and experience of Personnel to be assigned to work in India, and staffmonths for each.
- C-2 Same as C-1 for Key foreign Personnel to be assigned to work outside the India. C-3 List of approved Sub-consultants (if already available); same information with respect to their Personnel as in C-1 or C-2.
- C-4 Same information as C-1 for Key local Personnel

## **APPENDIX D**

**Minutes of the Contract Negotiations Meeting/Correspondence/others** 

#### **APPENDIX E**

#### **Breakdown of Contract Price in Local Currency**

List here the elements of cost used to arrive at the breakdown of the lump-sum price—local currency portion:

- 1. Monthly rates for Personnel (Key Personnel and other Personnel).
- 2. Reimbursable expenditures

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This appendix will exclusively be used for determining remuneration for additional services.

#### **APPENDIX F**

#### SERVICES AND FACILITIES PROVIDED BY THE EMPLOYER

The Employer will provide the following inputs:

- (1). Reports of the previous studies mentioned in Appendix 1 of TORs.
- (2). Introduction letter to the concerned agencies for obtaining necessary information
- (3) Issuing press notifications, advertisements and letters as required for undertaking the Home Interview and other surveys
- (4) Holding TAC and Steering Committee meetings as scheduled/based on the request received from the consultants
- (5) Participation in Consultations with stake holders
- (6) Soft and hard copy of latest GIS maps of HMA and constituent areas of HMA with detailed planning attributes
- (7) Existing and proposed land-use (population and employment) and socioeconomic parameters at disaggregate level
- (8) Any other data/information/services/assistance based on the study needs, as requested by consultants from time to time

#### **APPENDIX G**

#### **PAYMENT SCHEDULE**

The payment schedule will be as follows:

Deliverable	No. of Copies	Submission Time (starting from the date of signing of agreement)	Payment
Inception Report	6	1 Month	10%
Interim Report-I	6	2 Month	15%
Interim Report-II	6	3 Month	15%
Draft CMP	6	4 Month	10%
Final CMP	6	5 Month	20%
Project Proposals	6	6 Month	10%
Approval of Final CMP		1	20%
Total			100%

<sup>\*\*</sup>The Authority shall review and convey the observations for each stage within a period of 15 days of receipt of report for each stage, and in the event of any delay the consultant shall be paid a sum equal to 80% of the due payment for that stage.

# excludes the time taken by the Authority in providing its comments on Draft Reports. The Consultant shall get one week for submission of the Final CMP after comments of the Authority are provided.

#### **APPENDIX H**

#### **BASIC DATA SHEET**

1	Area of Vijayawada Municipal Corporation (Before merging)	61.88 Sq.Km.
2	Population of Vijayawada Municipal Corporation (Before merging) as per 2011 census	10,21,806
3	Мар	Enclosed