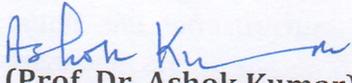


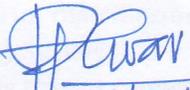
SCHOOL OF PLANNING AND ARCHITECTURE, NEW DELHI
Department of Planning

BID INVITING NOTICE FOR CARRYING OUT TRAFFIC SURVEYS

1. School of Planning and Architecture, New Delhi wishes to engage traffic survey agencies for carrying out traffic and transportation survey for its consultancy project on "Preparation of Regional Plan(s) of Vellore Region and Villupuram Region, 2047". The enclosed document details out the nature and quantity of surveys to be carried out.
2. Interested agencies may participate in traffic and transportation surveys. The interested agencies are required to submit their financial quotation in a sealed envelope addressed to Prof. Dr Ashok Kumar, (Project Coordinator) latest by 06th December 2024, 4 P.M in the Department of Physical Planning, 2nd floor, SPA Delhi, 4B Estate, ITO, New Delhi-110002.
3. All bids received shall be evaluated by an expert committee and the final bidder (L1) shall be intimated by 11th December, 2024. The decision of the school shall be final in this regard.


(Prof. Dr. Ashok Kumar)
Project Coordinator

Coordinator, CASS


2/12/24

SCOPE OF WORK FOR TRAFFIC AND TRANSPORTATION SURVEY

INTRODUCTION

The Vellore and Villupuram regions are experiencing rapid urbanization and economic growth, necessitating a robust and forward-looking regional planning framework to ensure sustainable development. The Regional Plan 2041 for these regions aims to holistically address key challenges related to land use, infrastructure, transportation, and socio-economic dynamics. A critical component of this effort involves the systematic collection and analysis of transportation data.

The regional transportation survey will comprehensively involve all modes of transport to assess the potential impacts of anticipated changes in the area. This will include a detailed examination of existing vehicular circulation, trip patterns, roadway capacity, and the mass transit service. In addition, it will explore opportunities for enhancing public transit, alternative travel modes, and meeting future travel demand for both motorized and non-motorized infrastructure. Consideration will also be given to access patterns for large properties, travel speeds, truck traffic, and areas of conflict between vehicles and pedestrians.

This tender seeks consultants to conduct detailed traffic and transportation surveys in Vellore and Villupuram Regions as part of the Regional Plans of the Vellore and Villupuram Regional Plan 2041. The primary task for the consultancy will be the comprehensive collection of traffic-related data as outlined in the scope of work.

OBJECTIVES

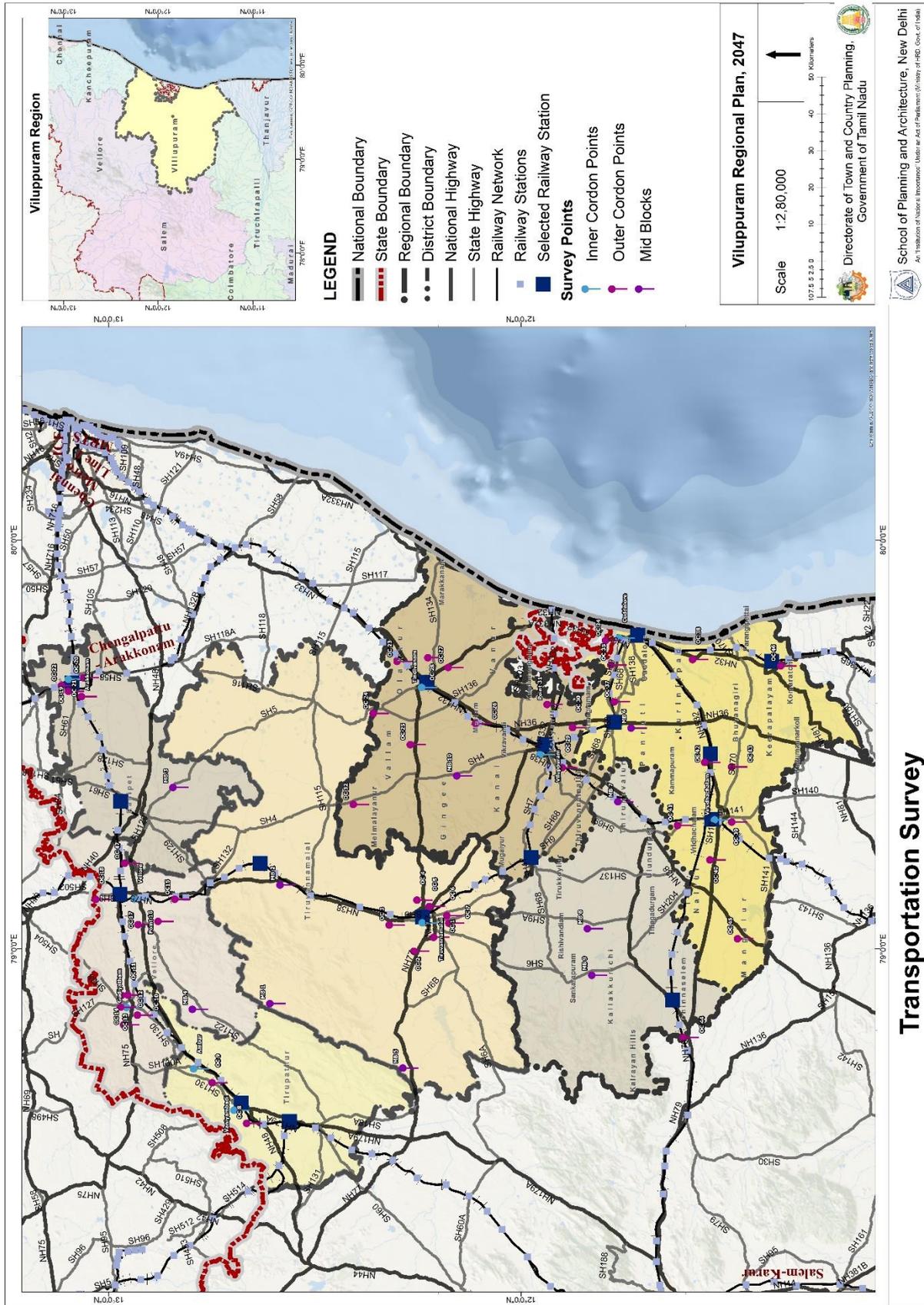
The consultancy services will focus on collecting essential traffic data at strategic locations across the Vellore and Villupuram Regions to support transportation and infrastructure planning efforts in the Regional Plan 2041. The key objectives of this assignment are:

1. To assess current traffic volume and patterns through Classified Traffic Volume Count (CTVC) Surveys.
2. To understand trip distribution patterns and travel behaviour through Origin and Destination (O&D) Surveys.
3. To assess the mass transit capacity and travel characteristics and frequency.
4. To provide transportation survey data in excel format and CCTV recordings of (CTVC) findings for analysis and integration into the regional planning process.

STUDY AREA

The consultancy is comprised of Vellore Region and Villupuram Region. Below map outlines the locations for the transportation surveys

Figure 1: Proposed Traffic Survey Locations



SCOPE OF WORK

The consultant will be responsible for carrying out the following tasks as part of the consultancy services:

TASK 1: TRAFFIC SURVEYS

1.1 Classified Traffic Volume Count (CTVC) Surveys

- **Objective:** To record classified traffic volumes by vehicle type and road user categories to analyse traffic flow patterns in the region.
- **Survey Locations:** The consultant will conduct classified traffic volume count surveys at 55 locations (45 as part of the combined origin-destination and CTVC survey locations, and an additional 10 for CTVC only).
- **Survey Duration:** Surveys shall be conducted over a period of 1 day, capturing hourly traffic variations over 24 hours per day at each location for both directions.
- **Data to be Collected:**
 - Vehicle classification (cars, trucks, buses, two-wheelers, three-wheelers, non-motorized vehicles, etc.).
 - Traffic volume per hour.
 - Direction of travel.
 - Peak and off-peak hour traffic.
 - Traffic composition.

1.2 Origin and Destination (O&D) Surveys

- **Objective:** To capture data on travel behaviour, trip origins, and destinations of vehicles and passengers across the region, identifying key traffic corridors, travel times, and trip lengths.
- **Survey Locations:** O&D surveys will be conducted at 45 locations in the Vellore and Villupuram regions.
- **Survey Methodology:** The survey shall utilize manual and automated methods (such as interviews, GPS tracking, or ANPR systems).
- **Survey Duration:** Surveys shall be conducted over a continuous period of 24 hours at each location for both directions, focusing on both peak and off-peak hours.
- **Sample size:** At least 10 percent sample size using random survey sampling technique covering both peak and off-peak period.
- **Data to be Collected:**
 - Origin and destination of trips.
 - Purpose of travel.
 - Mode of transportation.
 - Time of travel and trip duration.
 - Frequency of travel.

TASK 2: RAILWAY CAPACITY AND OPERATIONS SURVEY

2.1 Railway Capacity and Infrastructure Assessment

- **Objective:** To assess the existing railway infrastructure and capacity to accommodate current and future demand in the Vellore and Villupuram regions.
- **Survey Locations:** Identify key railway stations, routes, and corridors serving the region for detailed assessment.
- **Data to be Collected:**

- Passenger traffic volumes at major railway stations.
- Frequency, capacity, and occupancy of trains.
- **Methodology:** Utilize a combination of manual counting at stations, secondary data from railway authorities, and field observations.

2.2 Rail Travel Behaviour Survey (Passenger Survey)

- **Objective:** To collect data on passenger travel behaviour, preferences, and usage patterns of railway services.
- **Survey Methodology:** Conduct passenger interviews at major railway stations.
- **Data to be Collected:**
 - Origin and destination of railway trips.
 - Purpose of travel (commuting, business, leisure, etc.).
 - Frequency of travel and train preferences.
 - Travel time, comfort, and satisfaction levels.

TASK 3: DATA SUBMISSION

1. Submission of excel document of collected data for all 55 locations for Classified Traffic Volume Count Survey and 45 Origin-Destination Survey with latitudes and longitudes.
2. Submission of CCTV data for Classified Traffic Volume Count Survey for validating the surveys with latitudes and longitudes.
3. Submission of excel document of collected data for all 16 locations for railway stations and excel document for origin destination survey with latitude and longitudes.

TIMELINE

The overall project duration is estimated to be 6 weeks from the date of award of the contract, with the following tentative timeline:

1. Submitting CCTV Footage: 1 weeks
2. Submitting Excel Worksheets: 1 weeks
3. Handholding and Assisting SPA New Delhi Team: 4 weeks

CONSULTANT REQUIREMENTS

The consultant must have experience in conducting large-scale traffic surveys and transportation studies, particularly in the context of regional planning. A multidisciplinary team including transportation planners, traffic engineers, data analysts, and GIS experts is required to successfully execute the scope of work. The Enumerators should be qualified (above 10+2), trained and have great communication skills. Enumerators should know English, Hindi and Tamil

TERMS AND CONDITIONS

1. A trained and experienced Supervisor shall be present at all times at all the survey locations.
2. As mentioned in the survey plan, the mentioned number of enumerators shall be placed at all the survey locations for all the days of the surveys.
3. All the survey forms in hard copies for conducting all traffic surveys and stationery items (pens, pads etc.) shall be procured by the traffic survey agency

4. All the necessary infrastructure required for smooth conduct of surveys such as safety jackets, lighting (for night times or low light conditions), temporary seating arrangements, tents, traffic cones, batons, etc. Should be provided by the survey agency and it is the responsibility of the survey agency to maintain the same for the whole duration of the surveys.
5. All the traffic survey enumerators and supervisors should be well trained and experienced before the start of each survey. The mandatory age of all the enumerators shall be minimum as prescribed and applicable by the local laws.
6. Manpower deployment should be as per commitment. NCRTC and on its behalf School of Planning & Architecture (SPA- New Delhi) reserves the right to conduct checks at random, and in case of any discrepancy, you would have to repeat that particular survey on the same day of the week and the cost of the repeated survey will be borne by the survey agency.
7. Data Coding and punching in MS Excel has to be done for all the traffic surveys in the English language only and submitted vide e-mail within the stipulated time agreed prior to the commencement of survey.
8. In case NCRTC/ SPA - New Delhi is not satisfied with the quality of the data, you may be asked to repeat that particular survey on the same day of the week and the cost of the repeated survey will be borne by the survey agency.
9. If the work is not completed within the stipulated time frame, unless the reasons are beyond control, a penalty of 0.5% of total fee will be levied on per day basis.
10. The cost of local conveyance (to and fro from survey locations), food and any other daily allowance of all the Supervisors and enumerators shall be borne by the survey agency.
11. Survey schedule and contact numbers of the deployed team should be communicated to the Client (SPA-Delhi) at least 24 hours prior to commencement of the survey.
12. Survey agency team should follow the checklist given below at all the time of the traffic survey.

Apart from the above-mentioned terms and conditions, checklist provided as part of the work order should also be strictly followed

PAYMENT SCHEDULE

The payment to the survey agency shall be made in Indian (INR) currency. Payment will be made upon raising the invoice as per following schedule:

1. 20% mobilization fee.
2. 80% amount shall be released after submission of all data in soft and hard copies and incorporating all corrections/ suggestions, if any

QUOTATION

Submit the quotation under major heads mentioning the rates along with the total amount in the Indian currency excluding taxes.

S.No	Traffic Survey	Duration of Survey	Quantity (Survey Locations)	Rate (per unit)	Total Amount
			A	B	A x B
1	Classified Traffic Volume Count (CTVC)	24h*1 Day	55		
2	Origin Destination Survey (OD)	24h*1 Day	45		
3	Railway Station Passenger Origin – Destination Surveys	Operational Hours	16		
4	Railway station – Entry/Exit Footfall Count	Operational Hours	16		
Total Amount in Rs. (Amount in Numbers excluding taxes):					
Total Amount in Rs. (Amount in Words excluding taxes):					
Taxes applicable (GST):					
Total Amount in Rs. (Amount in Words excluding taxes):					

CHECK LIST

For survey supervisors and enumerators

Checklist during Traffic Surveys	
1	All survey supervisors and enumerators present at site should be wearing reflective jackets as safety precautions
2	Enumerators should be clearly briefed and tested about category of vehicle and its identification, that they are counting and interviewing (OD survey)
3	Mock survey of minimum of 30 min. at start of the day is ensured at all locations
4	Survey locations are set up on either side of the road to cater to each direction of traffic.
5	Enumerators for change of shift on day one is at site at least an hour before their slot and briefed and tested for category of vehicles
6	Survey is being carried out with relievers (already considered in the manpower requirement) at all locations - to cover during breaks/shifts
7	Enumerators are taking break for food/rest only if relievers (already considered in the manpower requirement) are taking their place
8	Surveys are continuously and thoroughly supervised;
9	Proper precautions shall be taken care of like the anticipation of rain which should not hamper the survey progress
10	Frequent checks are done to ensure that enumerators are completely aware of the category of vehicle that are counting
11	The responses for OD survey should be recorded in English language preferably and the coded and punched data shall be sent in English language only