

**Chennai Unified Metropolitan Transport Authority
(CUMTA)**

**Terms of Reference
Mobility and Spatial Data Development Architect**

I. Introduction

1. The Chennai Unified Metropolitan Transport Authority (CUMTA) was established by the Government of Tamil Nadu (GoTN) through a Statutory Act provision during November 2010, and the Rules for CUMTA were notified during January 2019. The Act has been further amended in September 2020 proposing the Hon'ble Chief Minister of Tamil Nadu as Chairman of the of the CUMTA.
2. The creation of CUMTA was a step towards integrated and sustainable urban mobility initiative for Chennai. CUMTA is better placed to manage the existing institutional gaps and overlaps amongst various agencies in tackling urban transport issues at an optimum utilization of resources. The jurisdiction of CUMTA extends over the whole of Chennai Metropolitan Planning Area.
3. Currently, CUMTA is functioning under Housing and Urban Development Department and a 'Special Officer' has been appointed to execute the duties of Member-Secretary, CUMTA (as well as the Chief Executive Officer). One of the key responsibilities of the Member Secretary is to carry out day-to-day functions undertaken by CUMTA and also to conduct meetings/ facilitating discussion for the authority to take multiple decisions under CUMTA. Hence, GoTN with the help of World Bank under Chennai City Partnership program is working towards strengthening the existing CUMTA to make it fully operational.

II. Name of the Post: Mobility and Spatial Development Data Architect

III. Role & Responsibilities:

- a) Collaborate with multiple departments/agencies and to develop a data strategy that meets the requirements of the Authority.
- b) Create an inventory of the data necessary to build and implement a data architecture.
- c) Envision data pipelines and how data will flow through the system.

- d) Maintain a repository of all data architecture procedures and artifacts.
- e) Evaluate current data management technologies and what additional tools are needed for efficient data management and analysis.
- f) Determine upgrades and improvements to current data architectures.
- g) Design, document, build and implement database architectures and applications.
- h) Build data models for database structures, analytics and AI applications.
- i) Develop and enforce database development standards.
- j) Integrate new systems and functions like security, performance, scalability, reliability and data recovery.
- k) Research new opportunities and create methods to acquire data.
- l) Develop measures that ensure data accuracy, integrity and accessibility.
- m) Continually monitor, refine and report data management system performance.
- n) Examine data sets, identify patterns and use that information to help the Authority/Government in decision making.
- o) To establish digital platform and protocols for data acquisition from various inter-state agencies.
- p) To provide technical assistance to consolidate data, map and share data on urban mobility.
- q) To support policies and procedures enforced by the authority to ensure best practices of data architecture including accountability, governance, and transparency requirements.
- r) To ease means and measures to support operational use of data for facilitating various functions of CUMTA.
- s) To document, maintain data inventory and data flow diagrams to determine quantitative and qualitative analysis on the entries.
- t) Liaising with the different department for collating shared key information.
- u) To carry out such other functions and duties that are assigned to the position.

IV. Qualifications and Experience

- a. Graduate/Post graduate degree in Big data/Machine learning/Business Intelligence/Data Science/Data Analytics or Equivalent.
- b. At least 05 years of work experience in relevant field.
- c. Past experience in Urban Mobility/Urban Development related data management is desirable.

v. Age as on the closing date of application:

Maximum 45 years

VI. Duty Headquarters

The duty headquarters of the 'Mobility and Spatial Development Data Architect' will be in Chennai Unified Metropolitan Transport Authority, Chennai. He / she will be required to travel frequently within and outside the city and occasionally outside the state for project purposes.

VII. Duration:

Appointment to the post will be on contract basis initially for a period of two year and likely to be extended based on the performance.

VIII. Reporting Arrangements

The Mobility and Spatial Development Data Architect will report to the Special officer / Member Secretary, CUMTA.

IX. Remuneration

Rs. 1,20,000 – Rs. 1,75,000