**Public Transport Traffic Analysis Project Report**

**Introduction:**

This project report presents a comprehensive analysis of public transport traffic in Chennai. The study aims to understand the current state of public transportation, identify key challenges, and provide recommendations for improving the efficiency and accessibility of public transit.

**Objectives:**

=>Assessing current public transport infrastructure.

=>Analyzing passenger demographics and travel patterns.

=>Identifying traffic congestion hotspots.

=>Proposing strategies for enhancing public transport services.

=>Data Collection and Sources:

=>Explain the methods and sources used to gather data, which may include surveys, traffic counts, public records, and interviews with stakeholders.

**Public Transport in Chennai:**

The major public transport mode used by people in Chennai is City bus. There are approximately 3,800 city buses with more than 800 bus routes and they cover the major trunk roads except Outer Ring Road and Chennai Bypass.

The phase 1 section with a total length of 45.1 km of Chennai Metro is under development. Approximately 55% of the section will be underground and the rest will be OpenStreetMap contributors Data Collection Survey for Chennai Metropolitan Region ITS Final Report vi elevated structure. The operation has been commenced on the stretch of approximately 21 km of the elevated section since June in 2015.

The phase 2 with a total length of 88 km is under planning. There are four (4) suburban railway lines: namely North line, West line, South line and Mass Rail Transit System line. The whole stretch of Mass Rail Transit System line is constructed as elevated structure. The monorail with a total length of 43.68 km and Bus Rapid Transit System which covers 96.7 km are being planned.

**Public Transport Challenges:**

* The ‘person congestion’ occurring inside public transport vehicles at such peak times adds insult to injury, sometimes literally. A very high proportion of the day’s journeys are made under conditions of peak-hour loading, during which there will be lengthy queues at stops, crowding at terminals, stairways and ticket offices, and excessively long periods of hot and claus­trophobic travel jammed in overcrowded vehicles.
* Recently, most public transport in Tamil Nadu comprises of bus services operated by the Tamil Nadu State Transport Corporation (TNSTC) along with shared auto-rickshaws and some private bus services. None of the public transport modes are of high quality. As growing use of personal motor vehicles lead to worsening congestion, buses and share autos become slower and less reliable. Customers look for alternatives, resulting in a declining mode share for public transport.
* The public transport infrastructure in Chennai was not adequate to meet the growing demands of the population. There was a lack of dedicated bus lanes, modern bus terminals, and other necessary facilities.

**Design Thinking:**

* Traffic congestion trends.
* Public transport utilization rates.
* Demographic information of passengers.
* Routes with the highest demand.
* Bottlenecks and challenges in the system.
* Recommendations:
* Based on these findings, we can provide a set of recommendations for improving public transport in Chennai.

These may include:

* Adding or modifying transit routes.
* Enhancing bus and train schedules.
* Implementing dedicated bus lanes.
* Introducing smart ticketing systems.
* Promoting public transport through marketing campaigns.
* Expanding the fleet of vehicles.
* Reducing fare costs for certain demographics.
* Integrating transportation modes (e.g., bus and subway connections).