A COMPARATIVE APPROACH TO EVALUATE THE EFFICIENCY OF PUBLIC AND PRIVATE TRANSPORT SYSTEMS IN THE PRESENT URBAN SCENARIO OF THE METROPOLIS OF KOLKATA

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ABSTRACT:

A comprehensive evaluation and understanding of the performance of the transportation systems of a metropolitan city is invaluable to transport planners, traffic engineers, environment engineers, the state government and the daily commuters. The trafficscape of the enigmatic Indian metropolitan city of Kolkata is characterized by a highly intricate traffic pattern of multimodal public and private mass transport system comprising STUs (State Transport Undertakings), mini buses and other private buses, the newly introduced bus rapid transit system, private vehicles, taxis, trams, the suburban and circular railway system and the Kolkata Metro Railway. In the last few decades the city has witnessed unprecedented growth in vehicular population owing to the population and economic growth. The urban population of the city has grown from 0.29 million to 4.57 million from 1961 to 2001whereas the bus fleet strength has increased from 3085 to 9626 for a total vehicular growth from 68849 to 762924 during the same period (Source: Transport Research Wing, Ministry of Road Transport and Highway, Government of India). With the boom in the automobile sector in India the number of vehicles on the roads of Kolkata and other Indian cities has grown at more than 10% per annum and is expected to continue at this pace. All of this has put enormous pressure on the existing transport systems of the city and has aggravated the woes of the city. Traffic delays, bottlenecks, congestions, accidents, over-crowding of vehicles and environmental issues have only worsened by the day. Increased vehicular load has severely damaged the pavement surface of roads. On the other hand, with the deployment of technologies like 'Intelligent Transportation Systems' there has been a significant alleviation of the transportation woes of the city. With the use of 'Automated Traffic Control' and 'Area Traffic