**3. Introduction**

Public transportation systems are vital for the smooth functioning of urban areas, providing residents with reliable and affordable means of travel. However, the city bus transportation system in our urban environment has been plagued by significant issues of lateness and a lack of specific scheduling. These problems have resulted in passenger dissatisfaction and operational inefficiencies. In the section we will gather information about users’ opinions and experiences on the current system in intension to outline the major issues.

This essay explores the root causes of these issues and proposes potential solutions based on insights from a comprehensive study utilizing both questionnaire-based and investigation-based approaches.

**3.1 Investigation Method**

An efficient public transport system is crucial in a modern city lifestyle. However, our city's current public transport system suffers from considerable issues and to address these issues and discover the root causes of delays and inefficiencies of the system an in-depth investigation was carried out. The investigation includes firsthand observations, interviews with managers and operational workers and a thorough review of existing performance data such as Buses departure and arrival records.

Direct observations of bus operations during peak and off-peak hours were conducted. The observations revealed that traffic congestion in critical areas and longer boarding times during peak hours were significant factors to delays, Furthermore, mechanical issues with buses, though infrequent, resulted in unplanned stops also contributed to the unplanned delays.

Interviews with bus drivers and transportation officials revealed a lack of immediate communication between administrators and drivers, resulting in lack of updates and information about the factors and problems that are causing the delays and unreliability of schedules.

The analysis of buses' departure and arrival record data revealed patterns of unpredictability in schedule adherence, particularly during off-peak hours.

**3.2 Questionnaire Method**

Public transportation systems are critical for urban mobility because they provide economical and convenient travel options. However, in our city, the bus transit system has been suffering several issues, particularly in terms of lateness and the lack of a specific schedule. To further understand these difficulties from the passengers' perspective, a detailed questionnaire-based study was done. This essay delves into the outcomes of the study and makes recommendations based on passenger comments.

The questionnaire was created to collect extensive information about passengers' experiences using the bus system. It asked on the frequency of delays, communication about schedules, and suggestions for improvements. The questionnaire was distributed both at significant bus stations and online to ensure a varied sample of responses.

The responses showed several important difficulties. Many passengers experienced numerous delays. This irregularity in bus arrivals created frustration and difficulty, interfering with their daily routines and trust in the public transit system. Many passengers also reported being unaware of schedule changes or delays, indicating a lack of effective communication from bus service providers. Overall, satisfaction was low. The majority of students (60%) believe that the public bus schedule is not always correct; yet, 50% believe that the bus system's information is easily accessible, but it is not always accurate.

The effects of these difficulties on passengers are significant.   
The unpredictability of bus services wastes time and adds stress, especially for people who rely on them to get to university or school. More than half of the students used public buses on a daily basis. Lack of communication exacerbates these issues, leaving travelers unsure and unable to plan their trips properly. Furthermore, 40% of respondents stated they waited 20 minutes, while 26% said they waited 30 minutes, and 13% waited more than an hour. This has an impact not only on individual passengers, but also on the overall perceived reliability of the public transit system.   
Based on the questionnaire results, various recommendations can be made to solve these difficulties, as proposed by students who took the survey. First, establishing real-time tracking systems on all buses would enable passengers to receive real-time updates via a smartphone app and digital displays at bus stops. This would greatly increase transparency and eliminate ambiguity. Second, improving schedule adherence through better route design and traffic control tactics may help reduce delays. Adding dedicated bus lanes in high-traffic regions may also improve efficiency.  
Improving communication channels is critical. Establishing clear communication rules and routinely informing passengers of any changes or delays will increase trust and improve the overall passenger experience.  
Finally, increasing the frequency of preventative maintenance and providing drivers with further training on efficient boarding techniques and customer service would aid in resolving operating concerns and improving service quality.

**3.3 Conclusion**

The analysis approach identified traffic congestion, particularly in high-traffic regions, as a significant cause of delays. Longer boarding waits at peak hours, along with infrequent but disruptive mechanical failures, exacerbated the situation. Communication gaps between dispatch and drivers resulted in poor schedule adherence, and data analysis demonstrated volatility in schedules, particularly during off-peak times.   
  
The questionnaire method collected useful information from passengers, many of whom experienced regular delays that frustrated and interrupted their daily routines. A large proportion of passengers were uninformed of schedule changes or delays due to poor communication, resulting in low overall satisfaction. Long wait times were a prevalent complaint, with some passengers waiting 20-30 minutes or longer. To address these difficulties, we recommend adopting the previously explained solutions.

Adopting these ideas will help the city improve the dependability and efficiency of its bus transportation system, thereby enhancing customer happiness and the overall effectiveness of public transportation.