

PROBLEM STATEMENT

Develop a predictive model to optimize bus schedules by considering passenger demand, traffic patterns, and the carbon footprint of each route. This model aims to reduce pollution and improve the efficiency of public transportation by ensuring buses run efficiently and are filled with more passengers.

In a city like Motorville, the goal is to reduce carbon emissions by 20% within the next five years through intelligent scheduling and route optimization.

MAIN TARGET

- **TO maintain best bus scheduling based on traffic patterns, passenger demand and carbon footprints.**
- **Optimizing vehicle capacity with the right number of passengers and minimizing pollution by managing traffic flow.**
- **Making use smart bus and smart routes to overcome such difficulty in transport systems.**
- **Building predictive model for future attachments and uses.**
- **Monitoring and updating systems upto date for keeping track of vehicles and current conditions like weather etc...**



RIDE SMART ! BREATHE EASY

CAUSES

- **OVERDEPENDENCE ON PERSONAL VEHICLES DUE TO LACK OF TRUST IN PUBLIC TRANSPORT.**
- **DISCOMFORT IN PUBLIC TRANSPORTATION (E.G., OVERCROWDING, LACK OF CLEANLINESS, UNRELIABLE SCHEDULES).**
- **PERCEIVED OR REAL SAFETY CONCERNS IN BUSES, ESPECIALLY DURING LATE HOURS OR IN LESS-PATROLLED AREAS.**
- **UNPREDICTABLE DELAYS AND TRAFFIC CONGESTION REDUCE THE APPEAL OF PUBLIC TRANSPORT.**
- **LACK OF REAL-TIME INFORMATION LEADS TO UNCERTAINTY AND LONGER WAITING TIMES FOR PASSENGERS.**
- **INSUFFICIENT LAST-MILE CONNECTIVITY, MAKING IT HARD TO REACH FINAL DESTINATIONS FROM BUS STOPS.**
- **LIMITED ACCESSIBILITY FOR DIFFERENTLY-ABLED AND ELDERLY PASSENGERS.**
- **AIR CONDITIONING AND COMFORT FEATURES IN PRIVATE VEHICLES ATTRACT PEOPLE AWAY FROM BUSES.**

Reducing

Carbon emmisions



Traffic demands



Passenger demand



METHODOLOGY AND APPROACH

THE MAIN GOAL IS TO ACHIEVE HIGHER PASSENGER CAPACITY WITH LOWER CARBON EMISSIONS.

BUS SCHEDULING IS IMPROVED BASED ON:

- **PASSENGER DEMAND**
- **TRAFFIC PATTERNS**
- **CARBON FOOTPRINT CONSIDERATIONS**

THE WEBSITE SUPPORTS THIS BY PROVIDING REAL-TIME INFORMATION ON:

- **BUS ROUTES AND TYPES**
- **PICKUP AND DROP-OFF POINTS**
- **TIMINGS**
- **PASSENGER COUNTS**
- **TRAFFIC LEVELS**

CONCLUSION

In conclusion, our website offers innovative bus designs that focus on increasing capacity and reducing emissions. By creating more efficient transportation solutions, we help cities optimize public transit, enhance passenger experience, and contribute to a more sustainable, high-capacity transportation system. Our goal is to make urban mobility smarter, more efficient, and better for everyone.



**THANK
YOU**