

Factors Affecting Bus Use as a Sustainable Mode of Transportation: Insights from Kerman, Iran

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Abstract : In the near future, cities with medium populations will face traffic congestion, air pollution, high fuel consumption, and noise pollution. It is possible to improve the sustainability of cities by utilizing public transportation. A study of the factors that influence citizens' bus usage in medium-sized cities is presented in this paper. For this purpose, Kerman's citizens were surveyed online. The model was based on a binary logistic regression. A descriptive analysis revealed that simple measures like renewing the fleet, upgrading the stations, establishing a schedule program, and cleaning the buses could improve passenger satisfaction. In addition, the modeling results showed that future traffic congestion can be prevented by implementing road and parking lot pricing plans. Further, as the number and length of trips increases, the probability of citizens taking the bus increases. In conclusion, Kerman's bus system is both secure and fast, but these two characteristics can be improved to increase bus ridership.

Keywords : sustainability, transportation, bus, congestion, satisfaction

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