

**Impacts of Public Transportation Fare
Reduction Policy on Urban Public
Transport Sharing Rate Based on Big Data
Analysis**

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ABSTRACT

- Urban transport is an important support system to the city. With the city's development, traffic congestion has become a major traffic problem nowadays and it is badly in need of solutions
- Big data analysis has been widely used in the domain of transportation in recent years and it does great help to find solutions to different kinds of problems from historical data. In order to solve the urban traffic problems fundamentally, developing the public traffic is one of the major effective ways and bus priority policies and strategies are such important measures that they have contributions to the increase of public transport sharing rate.

EXISTING SYSTEM

- Traffic structure is the traffic proportion of different modes of transportation in the comprehensive transportation system, which reflects the characteristics of traffic demand and the main functions and status of different modes of transportation .
- The traffic structure reflects the ratio of different modes of transportation under the conditions of different regions, different time, different research contents, which is an important index to reflect the traffic development pattern. It fully embodies the strategic focus of urban traffic

DISADVANTAGES

- Urban transport is an important support system to the city. With the city's development, traffic congestion has become a major traffic problem nowadays and it is badly in need of solutions.
- Big data analysis has been widely used in the domain of transportation in recent years and it does great help to find solutions to different kinds of problems from historical data.

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PROPOSED SYSTEM

- In order to solve the urban traffic problems fundamentally, developing the public traffic is one of the major effective ways and bus priority policies and strategies are such important measures that they have contributions to the increase of public transport sharing rate.
- This paper mainly studied the influences of two bus fare adjustment policies in Beijing on urban public transport sharing rate based on big data analysis through the computer software SPSS, and then put forward corresponding recommendations to the reform of bus fares in Beijing.

ADVANTAGES

- ▶ different modes of transportation, in this paper, we took the time when the policy was put into effect as the foundation, and we analyzed the collected data connected with the public travel sharing rate through computer data analysis.
- ▶ Then a model was built to forecast the public transit passenger flow without the influences of the policy, and we got the sharing rate of different transit modes under the circumstances that the policy hadn't been put into effect.

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HARDWARE REQUIREMENTS

- ▶ Processor :Intel Pentium IV 1GHz
- ▶ RAM :256MB (Min)
- ▶ Hard Drive :5GB free space
- ▶ Monitor :1024 * 768, High Color inch
- ▶ Mouse :Scroll Mouse(Logitech)
- ▶ Keyboard :104 keys

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SOFTWARE REQUIREMENTS

- ▶ OS : Windows XP/7/8
- ▶ Front End : Visual Studio 2010/ netbeans 7.1
- ▶ Back End : SQL Server 2005/ heidisql 3.2
- ▶ Browser : Any Web Browser

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CONCLUSION

- This paper introduced the changes of public transport mode choice in Beijing in recent years, and we select the year of 2007 when two typical public transit fare adjustment policies were put into effect as a time node.
- We took the number of the bus vehicles, the total length of the city roads, the number of the urban rail transit trains as the independent variables and the quantity of the passengers of the public transport as the dependent variable.
- Then the multivariate regression model was established, and the analysis that how the quantity of the trips and sharing rate of the public transit change whether the influences of the public transport fare adjustment policies are put into effect or not

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