

# **SOLUTIONS TO PUBLIC TRANSPORT CHALLENGES: THE SOLUTION OF URBAN PUBLIC TRANSPORTATION - THE DEVELOPMENT AND APPLICATION OF BRT**

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## **ABSTRACT**

With the development of society and economy, the trend of urbanization and motorization in China has led to the increasing traffic issues in cities, which are mainly shown as traffic congestion, energy shortage, environmental pollution, noise pollution and frequent traffic accidents. The urban public transport system has become the main means to solve the contradiction between the supply and demand of urban traffic and the adjustment of the traffic structure with its less per capita dynamic occupancy of road surface area, low per capita pollution, etc. However, due to the shortcomings of the conventional public transport system, the urban public transport system is difficult to meet the travel needs of residents, especially in the cities where rail transit is not fully developed. Bus Rapid Transit System is an effective means to solve the existing traffic contradictions in the city and to adjust the new traffic layout. The Bus Rapid Transit System originated in Curitiba, Brazil, which uses modified public transport vehicles, operates in the accommodation lanes of public transportation and keeps track of the traffic characteristics. It's a convenient and fast public transportation with flexibility of ordinary bus and a new public transport system between rail transit and bus transit.<sup>[1]</sup> That system has low cost, less space, short construction period, fast operating speed, large volume, environmental protection and is easy to develop expressway network crisscross.<sup>[2]</sup> These characteristics can effectively alleviate traffic congestion and other problems, reduce the travel cost of residents and improve the quality and efficiency of transportation. But there are also some problems in the development of BRT, such as unclear function orientation, problems in the setting of exclusive bus lanes, and coordinated operation between BRT and regular buses. In view of these problems, the methods and means to solve the problems have been put forward. Through these solutions, the BRT system can be better developed in China.

**Key words:** Public transport; BRT; Traditional public system; Rail transit















## **5 CONCLUSION**

As an indispensable part of the urban public transport system, the public transport system plays an important role in urban transportation and urban development. Rapid public transport is recognized as an effective means to solve the existing traffic travel contradictions in the city and to adjust the new traffic layout of the city. Although there are some problems that cannot be ignored in the development and application of the system, the benefits it brought is far better than that of other transportation modes. Through a series of measures to solve these problems, the development of the BRT system will be more and more successful.

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