

PROSPECTS OF «GREEN» URBAN TRANSPORT DEVELOPMENT IN CHINA

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The revision and design of urban transport development has become one of the key issues that must be taken into account in the process of urban development. The new requirements of the current urban development for urban transport are to meet the future environmental protection and meet the general needs of health, safety and efficiency. The development of green transport in this environment has become an inevitable trend of urban development and is an inevitable choice for solving transport problems and other deep-level problems.

Keywords: urban transport; green transport; urbanization; green transport system.

ПЕРСПЕКТИВЫ РАЗВИТИЯ «ЗЕЛЕНОГО» ГОРОДСКОГО ТРАНСПОРТА В КИТАЕ

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Пересмотр и проектирование застройки городского транспорта стали одним из ключевых вопросов, которые необходимо учитывать в процессе градостроительства. Новые требования современного городского развития к городскому транспорту заключаются в том, чтобы обеспечить будущую защиту окружающей среды и удовлетворить общие потребности в области здравоохранения, безопасности и эффективности. Развитие зеленого транспорта в этой среде стало неизбежным трендом развития городов и является неизбежным выбором для решения транспортных задач и других проблем глубинного уровня.

Ключевые слова: городской транспорт; зеленый транспорт; урбанизация; зеленая транспортная система.

At present, with the rapid development of China's economy, various problems have also begun to arise in the process of urbanization. Urban pollution, urban transport and urban housing are the three main problems faced in the development of urbanization. As one of the three main problems in the development of urbanization, the problem of urban transport has also become an important problem in the development of cities in our country. Being the country with the largest population in the world and the country with the fastest urbanization process, the problems of urban transport in China have become more noticeable, and the situation is more serious. The problem of urban transport is closely related to urban development. Judging by the experience of the development of developed countries, they tend to improve urban functions and layout with the help of modern urban transport systems, rationally plan urban residential areas, disperse the population and at the same time solve urban housing problems.

Based on this, Western countries have also developed the concept of green transport, which is safe, comfortable, low energy consumption and low pollution, in order to solve the problems of environmental pollution and energy waste caused by the development of urban transport. The proposal of the green transport concept has played a big role in the development of foreign cities. Green transportation methods, such as low-carbon, pedestrian and public transport, began to gain popularity in cities, which greatly contributed to the sustainable development of cities.

As for the current situation with urban development in our country, our country is now on the path of rapid urbanization. With the construction of new rural areas and the modernization of agricultural production, more and more farmers are being freed from heavy agricultural labor. Combined with the rising cost of living in rural areas, agricultural production can no longer meet the production and living needs of most rural families. For these people, the opportunities for survival mainly exist in cities. According to forecasts of domestic experts in the field of population, our country will reach the peak of its population in the 2030s. According to the current population, it will reach approximately 1.6 billion people, while the urban population will reach about 900 million, which is equivalent to doubling the total population of the United States. The new urban population is about 400 million people, which corresponds to the total population of the United States. The huge urban population will put enormous pressure on existing urban transport. With the rapid development of our country's economy and the improvement of people's living standards, private cars have become an important element of urban life. The initial transport system of the city was difficult to adapt to the needs for the movement of a large number of private cars. In some large and medium-sized cities, driving is difficult, parking is difficult, and traffic jams are becoming more serious.

In addition, the problem of car exhaust emissions is also becoming more serious. With the increase in the number of cars, the problem of car exhaust pollution has become the main reason for the deterioration of the urban environmental environment. Air pollution and noise pollution have led to numerous negative consequences for people's quality of life.

The relevance of this study lies in the fact that with the economic development of China, the process of urbanization accelerated, the urban population continued to grow, and the demand for transport and travel from urban residents also increased. The increase in the number of private cars has caused an increase in energy consumption on the roads and greenhouse gas emissions, which has led to an increase in urban traffic congestion, atmospheric pollution, urban heat island effect and other phenomena arise in an endless stream and become more serious, creating a number of threats to the future development of the city. As an important part of economic development, the transport industry should take the initiative and assume social responsibility for achieving coordinated development between economic development, environmental protection and social harmony. In accordance with this concept of development, «green transport» appeared. As a completely new transport concept and development model, the proposal and development of eco-friendly transport corresponds to the trends and trends of modern social development and has become a new engine and driving force leading to economic development.

With the rapid development of society, more and more environmental problems are receiving widespread attention, and the concept of sustainable development and the development of green environmental protection is becoming more and more popular. All sectors of society vigorously promote and popularize the concept of sustainable development. The transport industry, which is closely connected with people's lives, also considers «green» travel and sustainable development as the direction and goal of future development and aims to create «green» transports.

Green transport is a relatively new concept, and so far its concept has not been clearly defined. It is generally considered that green transport is a kind of consent transport system consisting of various diversified vehicles to coordinate various social activities. Its goal is to eliminate environmental pollution, avoid traffic jams, reduce construction costs, improve the urban environment and increase social justice.

Thanks to the promotion and application of the concept of green environmental protection in various industries, the development of green transport has gradually become a trend in the development of the transport industry in the future. Green transport is a development concept and an effective way to achieve sustainable urban transport development [1]. Therefore, there is

still no single definition of «green» transport. As a result of the research, it was found that the generally recognized category of green transport is: green transport – It is a sustainable integrated transport system associated with urban planning, design and space expansion. It relies on safe, fast, eco-friendly and energy-efficient vehicles, focuses on various modes of transport such as public transport, slow-moving transport, environmentally friendly new energy sources and environmentally friendly cars, and uses efficient and intelligent traffic management measures as a means. In general, «green transport» is to create a transport system that corresponds to the trends of urban habitat development and accelerates the sustainable development of the city. It not only meets transport needs, saves energy and reduces emissions, but also protects a bad environment and maintains social harmony [2; 3].

In a deeper category, «green transport» is a kind of transport coordination, encompassing coordination with the environment, the future, resources and society.

Among the guiding principles for the development of green transport, the first is the vigorous promotion and implementation of appropriate environmentally friendly transport technologies. By increasing the number of environmentally friendly vehicles, this will stimulate the growth of demand for transportation while reducing the use of cars. The second is to promote people-oriented transport planning, promote pedestrian transport and prioritize people's travel before considering vehicles, so that people's travel time and economic efficiency can be improved, taking into account the impact of comfort in planning. The third point is to raise public awareness of «green» transport through various advertising campaigns, review the transport environment and choose «green» modes of transport.

In short, from the point of view of the essence of green transport, it consists in meeting the needs of public transport, taking into account the sustainability of the urban transport system. It has the characteristics of a special strategy for sustainable development. It is coordinated with the urban environment, adapted to the earth circulation model, and various modes of transport coexist and complement each other. At the same time, efficient transportation is achieved at a lower cost.

As for the advantages of a green transport system, they are summarized as follows.

- 1) Low power consumption and low environmental pollution.

As mentioned earlier, the most important concept of green transport is to promote that people's daily trips become environmentally friendly. In this article, green transport methods are combined with environmentally friendly modes of transportation, such as walking, bicycles, public transport and new vehicles with clean energy. Walking and cycling are carried out at the expense

of labor, so they practically do not consume energy and do not pollute the environment.; public transport, such as city buses, uses natural gas as an energy source, while metro and light rail use highly efficient, low-emission diesel locomotives and near-zero-emission electric locomotives that have little environmental impact. In addition, public transport units carry a large number of passengers, and the average energy consumption of each passenger is very low, which is naturally explained by the use of low-energy transportation methods; The starting point for research, development and use of new energy vehicles is to reduce energy consumption and reduce environmental pollution, which is accompanied by the emergence of the concept of green transport and the road to sustainable development, therefore it should have low energy consumption and low pollution characteristics. In general, environmentally friendly transportation methods are characterized by low energy consumption and low pollution.

2) High efficiency and comfort.

Modern society is a society with a rapid flow of information and personnel. People's daily journeys require not just simple movement of vehicles so that they can «get» to a certain place, but also so that they can «arrive on time» and «comfortably» to their destination. Thus, high efficiency and comfort are also important characteristics of urban green transport. The emergence of green transport can not only solve the problems caused by the development of transport for the ecological environment and people's daily lives. Its requirements for road planning, design and landscaping, improving public transport management, encouraging people to travel by bicycles and buses, using clean energy and new types of cars, and solving congestion on urban roads also have certain results. This can significantly ease the current situation of «difficult movement» for residents of large cities, improve the accessibility of urban transport and meet the requirements of residents for timely travel. Moreover, thanks to the management and improvement of public transport, it can better meet the needs of people, high demands are placed on the quality of travel with improved living conditions.

3) Eco-friendly transport puts people first and implements a win-win situation.

Green transport is aimed at reducing pollution and protecting the environment, but this does not mean restricting people's freedom of movement, reducing the quality of people's trips and does not allow people to choose the most satisfactory way of transportation. On the contrary, the emergence of green transport is not only about achieving a coordinated development of transport, the environment and the economy, but also so that people can travel better. Firstly, in the process of developing «green» transport, the management and improvement of public transport can better meet the needs of people in the

quality of travel, which reflects the orientation towards people and passengers; secondly, in the process of developing «green» transport, the publicity of the government and the introduction of «green» transport cannot only make citizens realize that the development of green transport is not only good for the environment, but also benefits people's livelihoods. After all, citizens can willingly choose green transport, which ultimately makes citizens happy to choose green transport. The method reflects the orientation towards people; finally, in the process of wide dissemination, the popularization of green transport and the active participation of the whole people have increased not only the awareness of our citizens about green transport. It has been significantly improved, and the quality and moral education of citizens have also reached a higher level. Thus, the appearance of green transport not only reflects the orientation towards people, but also implements a win-win situation in the economy, the environment and the quality of life of citizens. In general, the characteristics of green transport are to save resources, reduce pollution and ensure high efficiency of urban transport. It is qualitatively different from traditional transport, which only satisfies people's desire to travel. Green transport can not only meet the growing travel needs of people in terms of quantity and quality, but also make an important contribution to saving resources, reducing pollution, ensuring high efficiency of urban transport and, ultimately, implementing friendly and coordinated development between the transport industry and the ecological environment, as well as promoting social harmony, which corresponds to the concept of sustainable development.

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