

Exploration of Opportunities and Challenges in Wenzhou Expressway Construction and Corresponding Measures

Ming Xia

Wenzhou Polytechnic, Wenzhou 325035, China

Abstract: Since the 75th anniversary of the founding of the People's Republic of China, Wenzhou's highway construction has achieved remarkable results. Nowadays, Wenzhou is seizing the opportunity to be listed as a comprehensive transportation hub city, accelerating the construction of a strong transportation city, and ushering in a golden age of development for highways. This article first introduces the investment and operation of highways in Wenzhou city, analyzes the challenges and opportunities faced by high-speed project construction under the existing situation and policies, and puts forward suggestions from the development of auxiliary industries, expanding capital channels, and strengthening debt management.

Keywords: Highway construction; Challenge; Opportunity

Since the first expressway in Wenzhou, the Wenzhou Bridge, stood on the Ou River in 1998, marking the beginning of the high-speed development of Wenzhou's expressways. Over the past 25 years, Wenzhou's expressways have gradually formed a "one ring, one winding, and nine shooting" expressway network, which has been further encrypted into a network. As of the end of 2023, the total length of highways in Wenzhou has reached 640 kilometers, surpassing Ningbo and ranking second in the province.

1. Investment situation of urban expressways

According to incomplete statistics, since 1998, the total investment in the construction of highways in Wenzhou, such as the Wenzhou Bridge, the North Line Phase I of the Wenzhou Ring Expressway, the North Line Phase II of the Wenzhou Ring Expressway, the Southwest Line of the Wenzhou Ring Expressway, the Oujiang Beikou Bridge, the Nantang to Huanghua section of the Yongtaiwen Expressway, the Lingkun to Gexiang section of the Yongtaiwen Expressway, the Rui'an to Cangnan section of the Yongtaiwen Expressway, and the East Extension Line of the Jinliwen Expressway, has been about 81.258 billion yuan. Of this, the self owned funds need to be invested about 31.147 billion yuan, and bank loans are about 50.111 billion yuan.

Public data shows that during the 14th Five Year Plan period, Wenzhou will continue to build six highway projects, including the Cangtai Expressway, Wenqing Expressway, Yongtaiwen Expressway (G15 Shenyang Haikou National Expressway) renovation and expansion project, Wenzhou North Baixiang to South Baixiang section, Yongtaiwen Expressway (G15 Shenyang Haikou National Expressway) renovation and expansion project, Wenzhou Huwu Town to Nantang Hub, Leqing Hub to North Baixiang section, Yongguan Expressway Dongtou Branch, and Leyongqing Expressway. The total investment is expected to be 76.3 billion yuan, of which self owned funds will invest about 28.3 billion yuan and syndicated loans will be about 48 billion yuan.

2. Analysis of traffic flow situation

According to incomplete statistics, from January to December 2023, the toll revenue of Wenzhou Bridge, North Line Phase I of Wenzhou Ring Expressway, North Line Phase II of Wenzhou Ring Expressway, Southwest Line of Wenzhou Ring Expressway, Oujiang Beikou Bridge, Nantang to Huanghua Section of Yongtaiwen Double Line, Lingkun to Gexiang Section of Yongtaiwen Double Line, Rui'an to Cangnan Section of Yongtaiwen Double Line, and East Extension Line of Jinliwen Expressway in Wenzhou City amounted to 1.918 billion yuan (after tax), with a daily average of 5.3 million yuan. A year-on-year increase of 18%, with a total annual traffic volume of 109 million vehicles and a daily average of 300000 vehicles on the above-mentioned road sections, a year-on-year increase of 21%.

3. Challenges faced by highway construction

3.1 High pressure on fiscal revenue and expenditure

At the end of 2023, Wenzhou's fiscal revenue achieved a regional gross domestic product (GDP) of 873.1 billion yuan, an increase of 6.9% compared to the previous year. The budget revenue of government funds for infrastructure construction is 131.1 billion yuan, an increase of 13.3% compared to 2022. The balance of local government debt is 150.5 billion yuan, an increase of 18.63% compared to 2022, and the debt scale has rapidly expanded. The proportion of debt interest payment expenditure to general public budget expenditure is constantly increasing, with a growth rate far exceeding the total expenditure growth rate. The fiscal situation is severe, and the contradiction between income and expenditure is intensifying. It is becoming increasingly difficult to invest in high investment and low return infrastructure such as highways. At present, some highways in our city can enjoy a portion of central vehicle purchase tax subsidies, special subsidies for three districts and sixteen counties, national development funds, and policy oriented development financial instruments. In addition, the commonly used investment and financing model is the joint investment and construction of the city level and counties and districts. Due to the generally weak financial resources of counties and cities, as the contradiction between fiscal revenue and expenditure intensifies, it is difficult for the funds raised by counties and cities to be timely and fully in place. According to the syndicated loan

agreement, loan disbursement needs to be matched with the arrival of capital. Due to the delayed payment of capital by shareholders in some counties and cities, as well as low completion rates, project loans cannot be disbursed, further restricting project construction. The methods to alleviate the above problems can usually only be forced by the municipal finance or investment units to advance or advance the construction funds, but this measure is difficult to continue in the current situation of intensified fiscal revenue and expenditure contradictions.

3.2 Large operational losses

The highway industry has the characteristics of high investment, long payback period, and even inability to recover all investment during the operation period of most projects based on economic benefits. The investment benefits are more reflected in the social benefits of public infrastructure and the convenient and beneficial measures implemented according to national, provincial and municipal government policies. In addition, in recent years, the construction costs of Wenzhou expressways have been increasing with the passage of time, including engineering materials, manual construction, land use, and demolition compensation. However, the toll fee standards have remained unchanged instead of increasing. For example, the Wenzhou section of the original Shenhai Expressway (Yongtaiwen) was 120 kilometers long, with an average construction cost of 67 million yuan per kilometer. Now, the Wenzhou section of the Shenhai Double Line Expressway (Yongguan section) is 139 kilometers long, with an average construction cost of 240 million yuan per kilometer, which has increased by nearly 43 times. At the same time, the toll fee of 0.4 yuan per kilometer has remained unchanged, and compared to the original standard, there are also four holidays of 200 days of free passage and ETC vehicle discounts added. In addition, during the initial operation of the expressway, the expressway network is still in operation. It needs to be cultivated, with low traffic volume and generally low income. Therefore, after the newly built highways in Wenzhou are put into operation, often suffer severe losses.

In addition, the main network and major channels of expressways in Wenzhou have been basically completed. The future group plans to undertake the renovation and expansion projects of the Cangtai Expressway and the Yongtaiwen Expressway (G15 Shenyang Haikou National Expressway), including the Wenzhou North Baixiang to South Baixiang section, Dongtuo Second Passage, the Yongtaiwen renovation and expansion from Huwu Town to Nantang Hub, as well as the Leqing Hub to North Baixiang section, the Leyongqing Expressway, and the Wenqing Expressway, which are inclined towards remote and backward areas. The social benefits are prominent, but the traffic volume and economic benefits are generally insufficient.

3.3 Tightening of National Investment and Financing Policies

According to the Opinions of the State Council on Strengthening the Management of Local Government Debt, local governments are required to standardize investment and financing, and strengthen the risk management of local debt. At the same time, the China Banking and Insurance Regulatory Commission (CBIRC) and the State owned Assets Supervision and Administration Commission (SASAC) have successively issued relevant guidance opinions, further requiring that it is strictly prohibited to increase implicit debt in the form of corporate debt, and to complete the clearance of existing government implicit debt by the end of 2025. Enterprises should scientifically determine the investment scale based on their financial capacity and prevent debt risks from the source. This means that the finance department of Wenzhou City needs to free up more funds for the resolution of implicit debts, and after the planned operational projects no longer rely on financial funds, the source of capital will become a top priority.

4. Opportunities Faced by Expressway Construction

4.1 Fee policies may face significant adjustments

The current Regulations on the Management of Toll Highways stipulate that the toll collection period for commercial highways shall not exceed 25 years. The toll collection period of the toll road has expired, and the toll collection must be terminated. The revised draft of the Toll Road Management Regulations (for soliciting opinions) issued by the Ministry of Transport in 2018 also recognized this issue, which specifically stipulates that “for highways with large investment scales and long return cycles, the period can exceed 30 years. The implementation of toll road renovation and expansion projects can increase the number of highway lanes, and the debt repayment period or operating period can be re evaluated.” However, this revised regulation has not yet been officially implemented.

4.2 Technology Assists the Development of Highways

Highways have a monopoly in China, and as a high-quality asset, they can generate stable cash flow every day, making them highly favored by financial institutions. With the maturity and popularization of autonomous driving technology in the future, it is believed that in the near future, the way people travel will undergo earth shattering changes. People can achieve seamless connection from home to their destination by using electric or hydrogen powered vehicles, which have better privacy, convenience, and economy compared to public transportation such as high-speed rail and buses. With the development of technology, more and more people will abandon public transportation in the future and choose to travel on highways, truly achieving “day and night”.

4.3 Financial Policy Benefits

In July and December 2021, the central bank twice lowered the reserve requirement ratio by 0.5% each, releasing long-term funds of 2.2 trillion yuan. After two rounds of reserve requirement cuts, the central bank announced interest rate cuts. In January of the following year, the winning interest rates for one-year MLF operations and open market reverse repurchase operations both decreased by 10BP, guiding loan interest rates to decline. In February 2023, the 5-year LPR was significantly reduced by 25BP, reaching a new high since the LPR reform. The central bank’s policy of lowering reserve requirements and interest rates this time will undoubtedly benefit the financing of highway projects, significantly save annual interest expenses, and reduce the cost of highway construction.

5. Analysis of response measures

At present, there is a serious income and expenditure imbalance that restricts the development of Wenzhou's highways. Currently, Wenzhou has invested 81.258 billion yuan (31.147 billion yuan in capital and 50.111 billion yuan in bank loans) in the construction of expressways. Based on a 25 year depreciation calculation, the annual depreciation is about 3.2 billion yuan (using the average life method), and the toll revenue is 1.919 billion yuan, which is difficult to cover even depreciation expenses. If we consider repayment of principal, interest, and operating expenses, the gap will be even greater. In the current context of intensified fiscal revenue and expenditure contradictions, it can be said that there are many difficulties. Five suggestions and measures have been proposed for this purpose:

5.1 Developing auxiliary industries to support losses on highways

Considering that highways are heavy asset projects with high investment, slow returns, and even continuous losses. In order to ensure the sustainable development of highways, it is recommended that Wenzhou fully leverage the decisive role of market mechanisms, actively expand the industrial chain, increase revenue generation efforts, seize the space of auxiliary industries, further improve professional, intensive, standardized and standardized management, and use light asset industries such as highway service area and gas station operation, highway operation and maintenance, asphalt production, and highway prefabricated component production to repay the losses of highway projects.

5.2 Revitalizing existing assets

The ancients said that Wenzhou City is known as "Seven Mountains, Two Waters, and One Divided Field", with abundant forest and mineral resources. These assets have very rich financial attributes that can be explored, such as forest rights, EOD, mining rights, and other models. They can be used as collateral for bank financing, not only to meet the needs of infrastructure construction and environmental improvement, but also to meet the funding needs of infrastructure construction. Most of these assets are located in mountainous counties, which can activate the assets of counties and cities, inject advanced sustainable development into the local area, and can be used for the construction of highways along the county and city lines.

5.3 Expanding channels for capital sources

At the municipal level, Wenzhou can try to establish a highway development fund with a scale of tens of billions, which will be injected by the government and state-owned enterprises, and attract private enterprises, insurance, central enterprises and other funds to join, jointly solving the capital problem of highway projects and improving project efficiency. It is recommended to issue equity and equity financial instruments as supplementary capital for the project, which can effectively meet the demand for project capital. By introducing insurance funds, the cash flow of highways can be improved and various funding needs for highway construction can be met.

5.4 Establish regulations and systems to ensure that the construction funds that counties and districts should bear are fully and timely in place

In response to the problem of difficulty in timely and sufficient funding raised by counties and districts, which leads to difficulty in ensuring project construction funds and hindering the progress of highway project construction, it is recommended that the Wenzhou Municipal Government include the availability of highway project funds as a key task in the assessment of county and district governments. At the same time, relevant departments of the city should take the lead in supervising counties and districts to ensure timely and sufficient implementation of project funds.

5.5 Strengthen debt management

Considering the current large debt scale in Wenzhou, it is recommended that relevant departments closely monitor the implementation of the annual plan in the early stage of the 14th Five Year Plan and prepare for mid-term evaluation and optimization of the development plan. Pay close attention to debt risks, especially the development trend of debt risks on city and county financing platforms.

References

- [1] Jingying Xia; Chaochang You; Chongdi Chen. Wenzhou Expressway's New Chapter [N] Wenzhou Daily, 2021.
- [2] Jingying Xia. By 2027, strive to exceed the total mileage of highways in the city by 700 kilometers Wenzhou Daily, December 5, 2023 (003).
- [3] Meiruo Ma. The continuous improvement of policy synergy supports the economic recovery and improvement Financial Times, December 4, 2023 (001) DOI: 10.28460/n.cnki.njrsb.2023.006004.
- [4] Yang Peng. Central Bank: Actively Activating Inefficient Occupation of Financial Resources China Securities Journal, December 16, 2023 (A01) DOI: 10.28162/n.cnki.nczjb.2023.006131.