



A Brief Introduction to China's PPP Application in Transport and Logistics Sectors



Dr. & Prof. Li Kaimeng
Director General of CIECC Research Centre

China's Economy and Transport Infrastructure Investment Growth Overview

- In the past 3 decades, China's economy has been growing at an extraordinarily high speed.
- The growth of China's economy is mainly driven by infrastructure investment. From 2009 to 2014, the investment contributes about 45% to GDP growth.
- China has made a large-amount investment in transport infrastructure during the past 10 years. The annual investment from transport and logistic sectors is about 5 trillion RMB at present.
- The transport investment in China has kept growing rapidly and consistently.

China's Economy and transport Infrastructure Investment Growth Overview

➤ China's GDP and Transport Infrastructure Investment

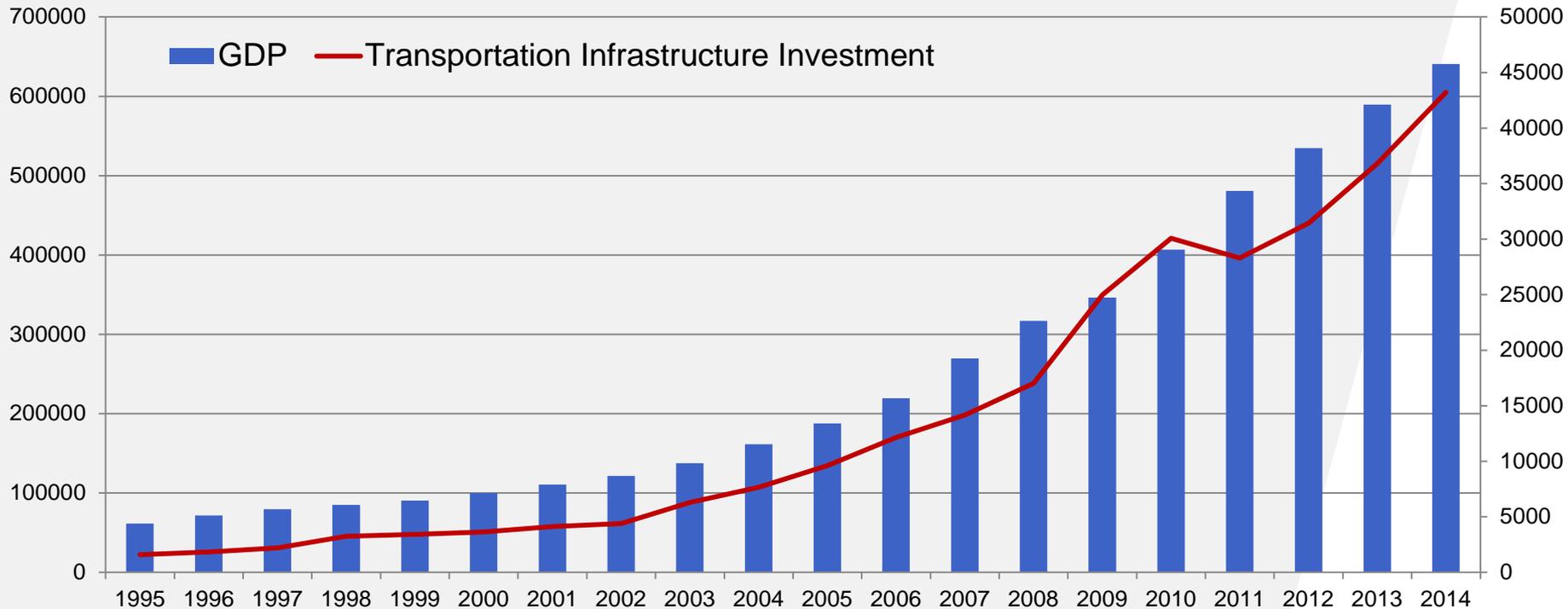


Figure 1 China's GDP and transport infrastructure investment trend during 1995-2014.

China's Transport and Logistic Growth Overview

➤ The length of major transport models in the past 5 years

	2010	2011	2012	2013	2014	Growth Rate
Railway (thousand km)	91.2	93.2	97.6	103.1	111.4	22.1%
Express Railway (thousand km)	8.4	8.8	9.4	11	16	90.5%
Road (thousand km)	4008	4106	4238	4356	4464	11.4%
Express Highway (thousand km)	74.1	84.9	96.2	104.4	111.9	51%
Regular Flight Routes (thousand km)	2765	3491	3280	4106	4637	67.7%
Urban Metro Line Mileage (km)	1599	1887	2286	2746	3155	97.3%
Inland waterway mileage (thousand km)	124.2	124.6	125.0	125.9	126.3	1.7%

The length of express railway, express highway, airport and urban metro grew fastest, and the investment on them increased rapidly as well.

The 13th Five-Year-Plan and China's Transport Policy

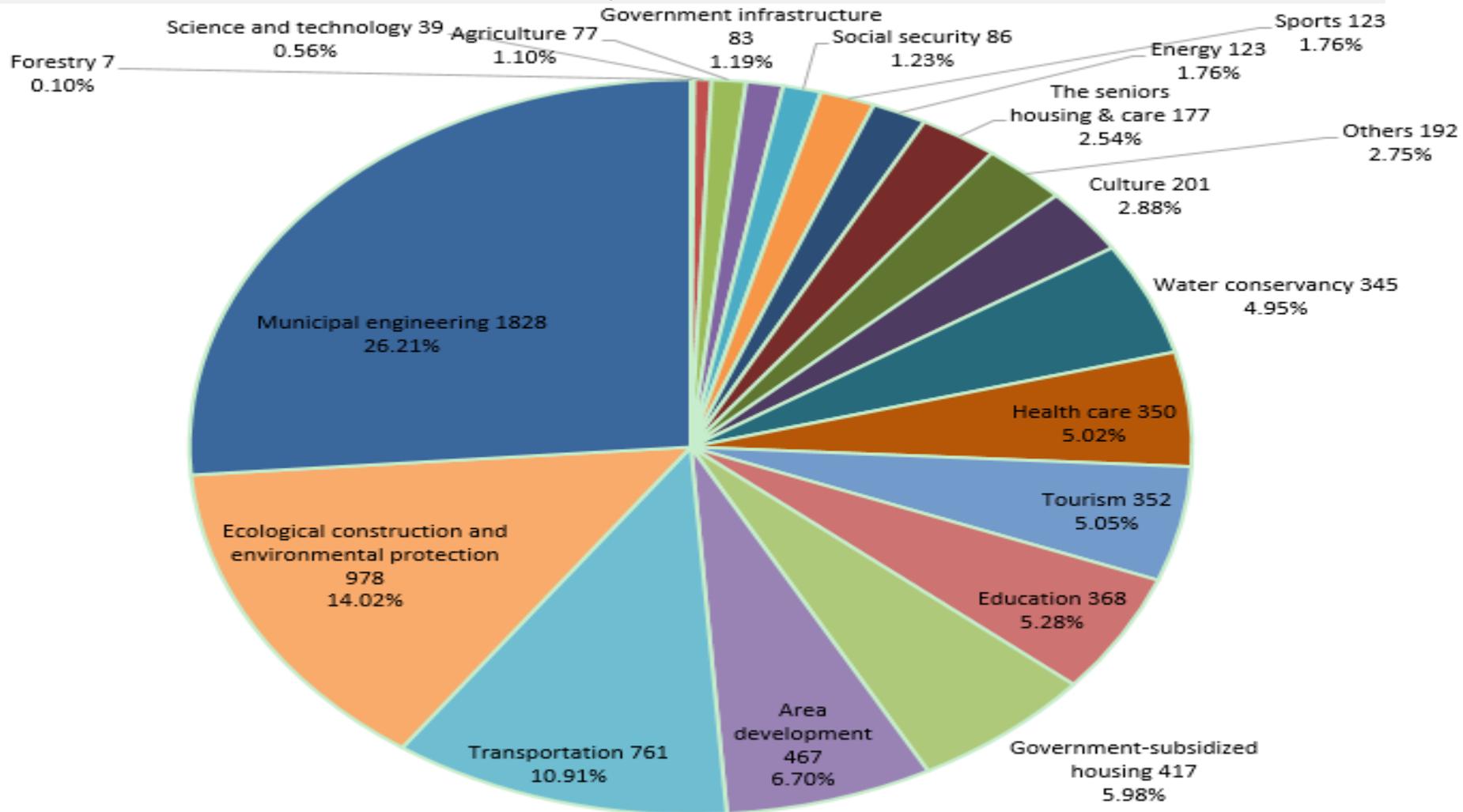
- The transport infrastructure in China has kept growing rapidly, and in March 2016, the National People's Congress of China has approved the 13th five-year-plan, which still emphasizes on accelerating the development of transport infrastructure.
- In the upcoming several years, China will continue adopting the infrastructure acceleration policy and work out an ambitious plan on it.
- In the future, China's transport infrastructure will further highlight the development concept of “innovation, harmony, green, openness and sharing”, which are perfectly consistent with the Sustainable Development Goals (SDGs) of the United Nations.
- PPP is expected to play a more and more important role in China's transport and logistic infrastructure area.

The Overview of PPP in China

- Transport infrastructure is the most important area in PPP application in China at Present.
- Up till now, a total of 6,997 PPP projects have been incorporated into the MOF's PPP information system, and the total investment of which has reached 8.13 trillion RMB.
- PPP models have been applied among 19 industries in China, including energy, transport, water conservancy, ecological construction and environmental protection, municipal engineering, regional development, agriculture, forestry, science and technology, government-subsidized housing, tourism, healthcare, the seniors housing & care, education, culture, sports, social security, government infrastructure, and others.
- Currently, the number of transport infrastructure projects using PPP in China is 761, making up 10.9% of the total; the investment on the PPP projects in transport sector is about 2.23 trillion RMB, accounting for 27.47% of the total.

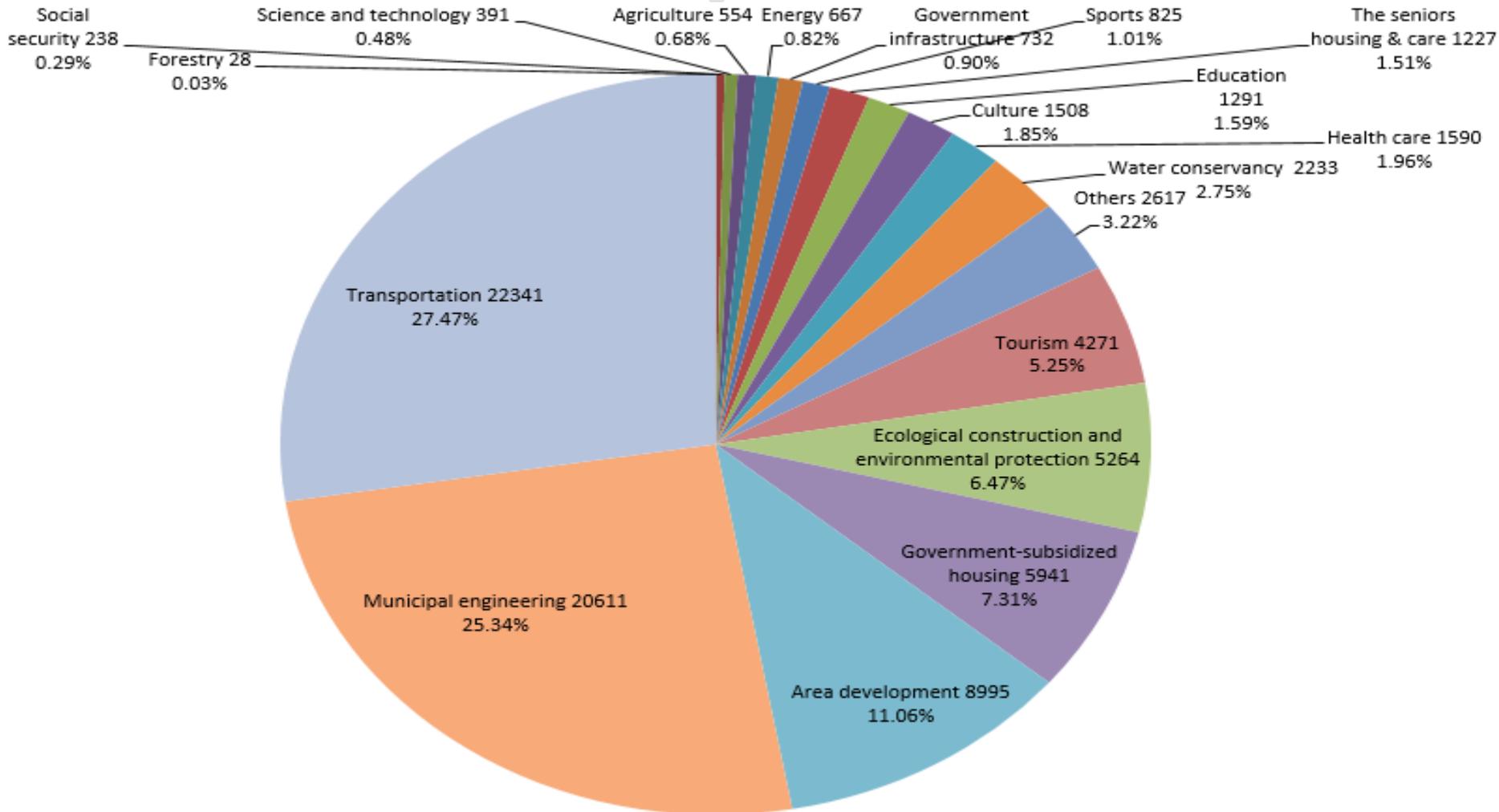
China's Transport and Logistic PPP

➤ The Number of PPP Projects in Different Sectors



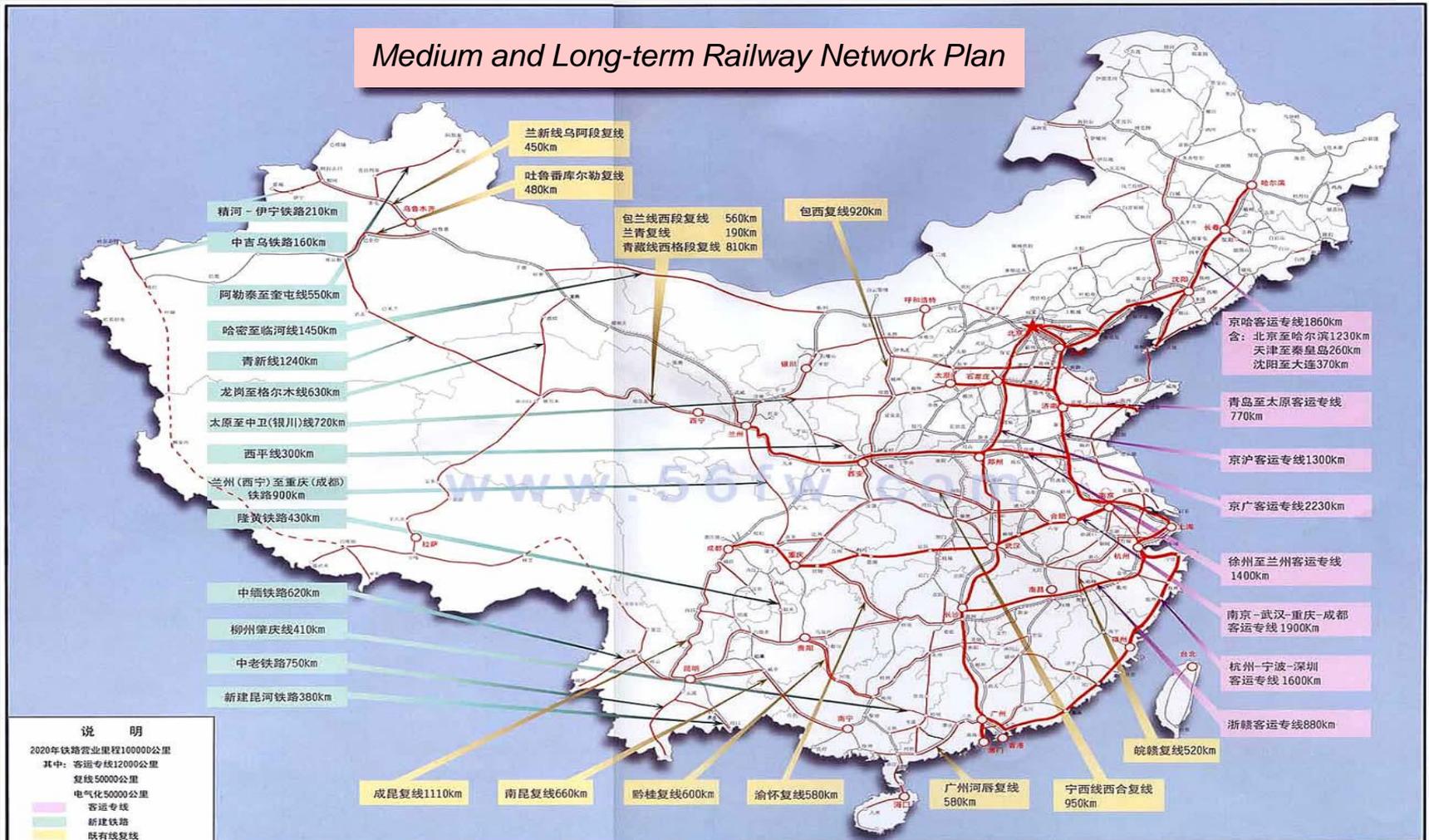
China's Transport and Logistic PPP

➤ PPP Investment in Different Sectors (100 million RMB)



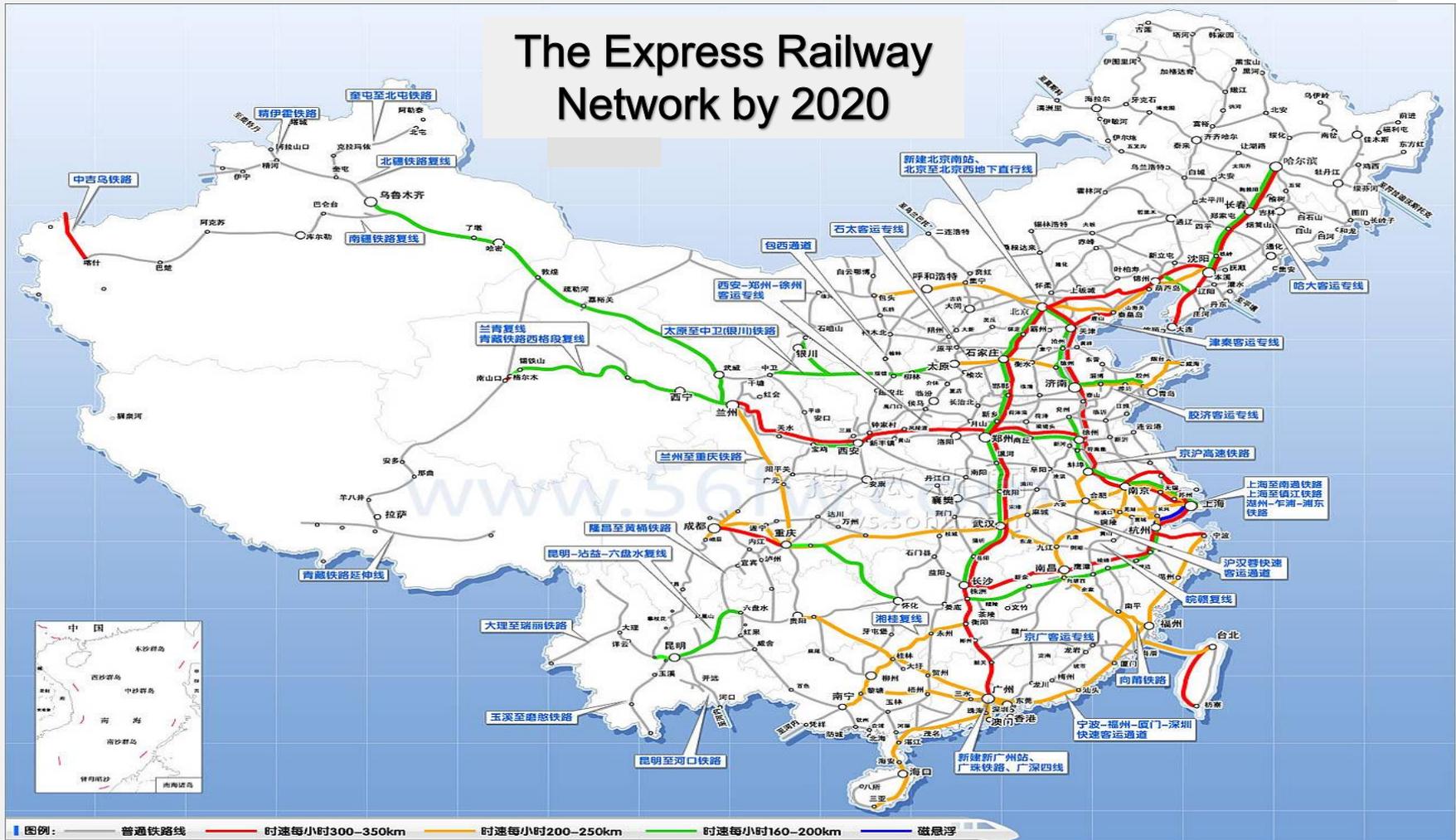
China's Railway and PPP

➤ China's *Medium and Long-term Railway Network Plan*



China's Railway and PPP

- The length of China's express railway network is the longest worldwide



China's Railway and PPP

- In recent years, the investment on China's railway has been kept in an extremely large amount (i.e., 832.8 billion RMB in 2015). Moreover, the 13th Five-Year Railway Plan proposed a 3.8 trillion RMB investment, which will enable an increase from the current 120 to 150 thousands km on operating mileage.
- The express railway construction will be accelerated even faster. By the end of 2015, the length of express railway was 19 thousand km, which will reach 30 thousand km by 2020.
- China's railway construction in the past mainly relied on government investment, usually with a joint investment between the central and local governments. Nowadays the government is keen to encourage the use of PPP.
- The NDRC promulgated a *Suggestion on Further Encouraging and Expanding the Social Capital Investment in Railway Constructions in 2015*. However, the progress might be slow and China Railway Corporation may still dominate the financing and construction in the near future.

China's Highway and PPP

China's National Highway Network Master Plan Map



China's Highway and PPP

- China has been strongly promoting the highway constructions, with a 1.6 trillion RMB investment in 2015, almost twice as much as the railway investment.
- The mileage of express highway increases rapidly, which has reached 125.3 thousand km by the end of 2015, 3.05 times of the 2005 level. Over the past decade.
- Different from the railways, the highway constructions, especially the express highways, have been using PPPs and other diversified financing models.
- Express highway is the area on which PPP/Concession was applied earliest in China. BOT has been adopted in express highway construction since 1995.
- The Ministry of Transportation issued the *Toll Road PPP Guide* in 2015, emphasizing the spread and application of PPP.

China's Airport and PPP

China's National Civil Airport Master Plan (by 2020)

(未含港澳台地区)



China's Airport and PPP

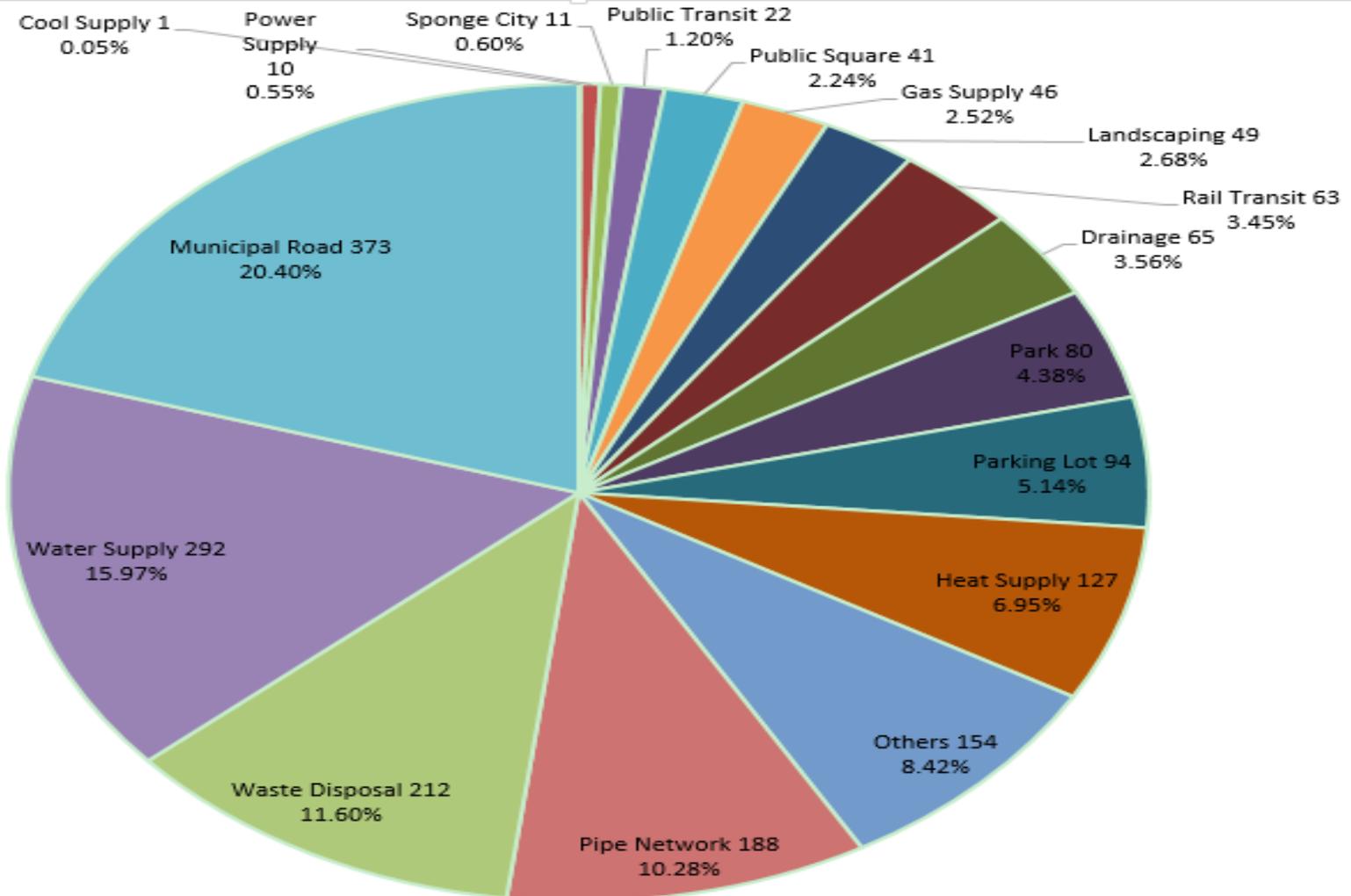
- China's civil aviation has entered the stage of rapid development. The master plan proposes a goal that by 2020 there will be 244 civil airports totally in China, which means many new airports will be built in the next 5 years.
- China's civil aviation airport constructions mainly rely on government funds, rarely using private sectors' investment. Thus, PPP model is seldom used in airport construction.
- We are looking for opportunities to use PPP model on the construction of airports which have rational profitability expectations.
- For example, the total investment of Beijing's new airport is 80 billion RMB, the equity capital of which accounts for 50%, involving a 18 billion RMB investment from the Civil Aviation Development Fund, 6 billion from the Capital Airports Holding Company and some government funds from the NDRC and MOF, and the funding from private sector is also under the consideration .

China's Urbanization and PPP

- China's fast urbanization enables urban construction to be one of the most important PPP application fields. Urban subway and municipal road are the leading sectors.
- Up till now, a total of 1,828 urban development PPP projects have been incorporated into the MOF's PPP information system, the total investment of which reach 2.1 trillion RMB.
- More and more urban infrastructure projects are under the consideration of using PPP models.

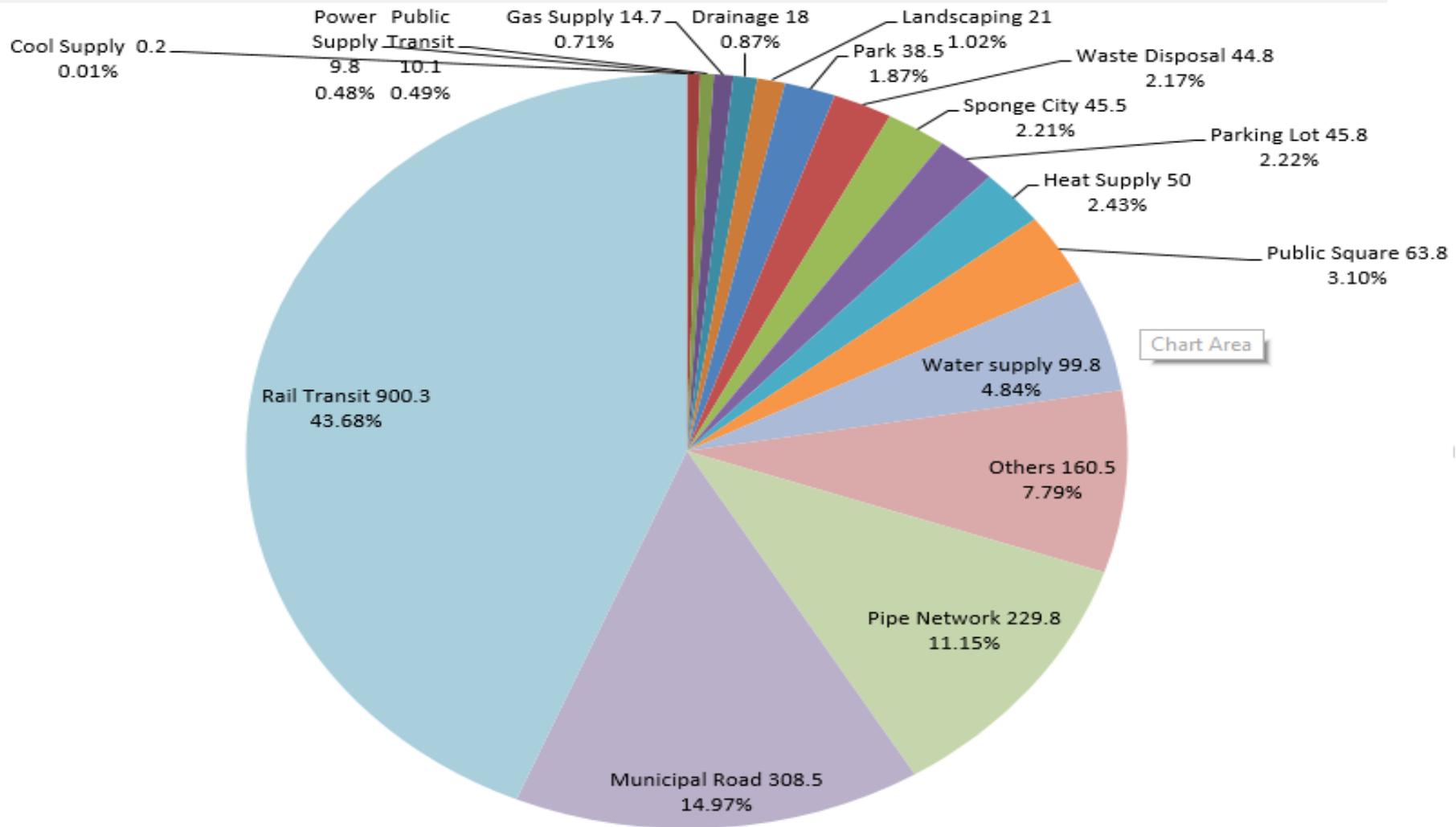
China's Urbanization and PPP

➤ The Number of Urban Development PPP Projects in Different Sectors



China's Urbanization and PPP

➤ Urban Development PPP Projects Investment (billion RMB)



China's Urban Metro and PPP

- The investment of urban metro is the largest among the municipal construction sectors using PPP. Among the 1,828 municipal PPP projects with a total investment of 2.1 trillion RMB in the MOF's PPP information system, 63 are urban metro PPP projects, with a total investment of 0.9 trillion RMB.
- In 2015, the urban metro operating mileage reached 3,252 km, 7.32 times as much as the 2005 level.
- The urban metro has maintained a large amount of investment in recent years. In 2015, the investment was 300 billion.
- By 2020, the urban metro mileage will reach 6,000 km. The number of cities equipped with urban metro will increase to 50. The total investment will reach 4 trillion in the next five years.
- The urban metro is the most active sector using PPP, as Chinese government requires PPP to be applied in all urban metro projects.

China's Urban Road and PPP

- The rapid development of urbanization in China has aroused a great demand for the construction of municipal road.
- Traditionally, China's municipal road construction mainly depends on government fund. Private sector investment has not taken a share.
- The Chinese government is now promoting the private sector investment in urban infrastructure. PPP model has been gradually applied on municipal road projects.
- 373 municipal road PPP projects are incorporated in the MOF's PPP information system with a total investment of 308.3 billion RMB, which occupy 20.4% and 14.97% of the total project number and investment respectively.

China's Logistics and PPP

- Generally, China's logistic industry has been backward.
- The ratio of China's total logistic cost in GDP almost doubles that of US and Japan, and is even higher than that of Brazil, India and some other developing countries.
- No logistic project is included in the MOF's PPP information system up till now. But PPP should be applied upon China's logistic infrastructure investment in the future.
- China's logistic industry is facing various challenges, such as structural adjustment, technological progress, industrial upgrade, etc., which in turn indicates considerable investment prospects and great opportunity.

China's Logistics Cost (2005-2015)

Year	China's Logistics Cost (billion RMB)	Growth rate	Social Logistics Cost /GDP
2005	3386.0	12.9%	18.6%
2006	3841.5	13.5%	18.3%
2007	4540.6	18.2%	18.4%
2008	5454.2	16.2%	18.1%
2009	6082.6	7.2%	18.1%
2010	7098.4	16.7%	17.7%
2011	8410.2	18.5%	17.8%
2012	9370.2	11.4%	18.0%
2013	10239.6	9.3%	18.0%
2014	10594.4	6.9%	16.6%

Conclusion and Expectation

- Nowadays, the application of PPP in China is increasing rapidly. Relevant laws, regulations and standards are in urgent need to be perfected.
- Both transport and logistics are important fields to apply PPP in China and have great potentials.
- Currently, the largest PPP market of the world is in China. China will definitely play a significant role in promoting people first Public-Private-Partnerships that meet the Sustainable Development Goals (SDGs) of the United Nation.
- China International Engineering Consulting Corporation (CIECC) is a key participant in China's PPP policy, regulation, standard and plan making. We are willing to play an unique role in UN's PPP standard development.

Question And Answers

THANK YOU !

QUESTION & ANSWERS

