



**POLITECNICO
DI TORINO**

Collegio di
Pianificazione e
Progettazione

Master's degree programme in
**Territorial, Urban, Environmental and Landscape
Planning**

Curriculum: Planning for the Global Urban Agenda

Master Thesis

**ChongQing's Transformation and Economic
Developmen within the Framework of the Belt and
Road Initiative and the Yuxinou International Railway
Opening**

Supervisor
Prof. Marco Santangelo

Candidate
ZheRan Liu

A.Y. 2019/2020

1. Introduction

1.1 Research background and significance

1.2 Research questions

1.3 Research methods

2. ChongQing municipality and surrounding area

2.1 Geography

2.2 Demography

2.3 Economy

3. Study on the significance and impact of the opening of the BRI and Yuxinou international railways on Chongqing

3.1 Introduction to the BRI Cooperation Initiative

3.2 Significance of BRI and Yuxinou International Railway Opening to Chongqing

3.3 The Impact of the Opening of the BRI and Yuxinou International Railways on Chongqing's economy and society

3.3.1 Promote the upgrading of traditional industries

3.3.2 Deepening Chongqing's ties with Europe

3.3.3 Enhance Chongqing's international tourism

3.4 Impact of the opening of the BRI and Yuxinou international railways on Chongqing's trade

3.3.4 Promoting the rise of emerging trade industries

3.3.5 Create a new situation in international logistics

3.3.6 Improving Chongqing's trade status

3.4 Impact of the opening of the BRI and Yuxinou international railways on Chongqing's city construction

3.4.1 Changes in Chongqing's city positioning

3.4.2 Changes in the overall planning of Chongqing

3.5 Summary of this chapter

4. The study of Chongqing Trade Development Before and After the Opening of BRI and Yuxinou International Railways

4.1 Study on the growth of trade volume

4.2 Study of trade structure

4.2.1 Export trade

4.2.2 Import trade

4.3 Summary of this chapter

5. Quantitative Analysis of Chongqing Trade SWOT under the Background of the Opening of BRI and Yuxinou International Railway

5.1 SWOT qualitative analysis of Chongqing's trade development

5.1.1 Strengths analysis

5.1.2 Weaknesses analysis

5.1.3 Opportunities analysis

5.1.4 Threats analysis

5.2 Summary of this chapter

6. Changes on the Planning of Metropolitan City of ChongQing Before and After the Opening of BRI and Yuxinou International Railways

6.1 Study of Changes in Chongqing's Metropolitan City Planning and land use planning

6.1.1 Urban planning and form

6.1.2 Change of City land use planning

6.2 Study on the Redevelopment and Reconstruction of the Old City in the Metropolitan area of Chongqing

6.3 Research on the establishment of new towns (satellite cities)

6.31 West New Town

6.32 East New Town

6.33 Caijia New Town

6.4 Summary of this chapter

7. Three case studies within the Metropolitan City of ChongQing

7.1 Planning of the remaining land after the relocation of Chongqing Iron and Steel Co., Ltd.

7.11 The history and current situation of the factory

7.12 The urban positioning of the space left after factory relocation

7.13 The function and zoning planning of the space left after the factory relocation

7.14 Nodes and overall image of the space left after the factory relocation

7.15 Planning of road network and traffic connection in the space left after the factory relocation

7.2 Research on Planning of Chongqing Jiefangbei Central Business District and Surrounding Areas

7.21 The history and current situation of the Jiefangbei Central Business District and Surrounding Areas

7.22 Industrial Types of Jiefangbei Central Business District

7.23 Current planning issues of Jiefangbei Central Business District

7.2.4 Traffic Planning and Research of Jiefangbei Central Business District

7.2.5 Research on Cultural Tourism Planning of Jiefangbei Central Business District

7.3 Research on Yuzui New City (Satellite city) Planning

7.31 The history and current situation of Yuzui City

7.32 Urban Positioning of Yuzui New City

7.33 Layout planning and spatial form of Yuzui New Town

7.4 Summary of this chapter

8 Suggestions on Chongqing's trade development strategy and city planning strategy under the background of the opening of the BRI and Yuxinou international railways

8.2 Support high-end industries and increase product technology content

8.3 Adjust the structure of the trade industry and improve the trade chain

8.4 Further absorbing foreign capital and improving the quality of foreign capital

8.5 Relying on Yuxinou to further integrate into the BRI strategy

8.6 Implement national strategic positioning and goals, and comprehensively do a good job in territorial and spatial planning

8.7 Respect the law of urban development and build a coordinated development of towns

8.8 Based on the characteristics of mountain city and river city, shape the three-dimensional city style of landscape

8.9 Insist on putting people as the center, optimizing public services and infrastructure systems

8.10 Pay attention to the inheritance of Bayu culture and enhance the value of the city with history and culture

8.11 Summary of this chapter

9 Conclusions

9.1 Conclusion of economic sector

9.2 Conclusion of city transformation

References

1. Introduction

1.1 Research background and significance

Chongqing is not only the youngest, but also the only directly administered municipality in the central and western regions of China: a municipality, that is, under the direct administration of central government, having the same rank as a province and part of the first level of administrative divisions in China (there are only 4 cities with this rank, the others are Beijing, Shanghai and Tianjin). It is the political and economic center in the upper and middle reaches of the Yangtze River (Fig 1.1, Fig 1.2). It is also a major manufacturing base of the country.

Fig 1.1-The geographic location of ChongQing in China



SOURCE:https://www.researchgate.net/publication/325399814_Exploring_the_Interactive_Development_between_Population_Urbanization_and_Land_Urbanization_Evidence_from_Chongqing_China_1998-2016/figures?lo=1

Fig 1.2-The skyline of Chaotianmen area, at the confluence of the Yangtze(left) and Jialing (right) rivers. ChongQing, China.



SOURCE:<https://www.britannica.com/place/Chongqing>

From this perspective, it is an industrialized city that focuses on traditional heavy industry. In recent years, Chongqing has focused on industrial upgrading and began to promote the creation of new industries, the representative of which is the creation of a laptop industry park (Xiyong Microelectronics Park). Around 2011, Chongqing has introduced well-known foreign computer brands such as Hewlett-Packard, Acer, Asus, Toshiba, Cisco, etc. At the same time, six factories of Foxconn, Quanta, Inventec, Pegatron, Compal, and Wistron have also settled in Chongqing, mass production of laptop products.

The original intention of Chongqing to establish a laptop computer park and mass-produce laptop computers was to build Chongqing into the world's largest laptop production base. Naturally, therefore, laptop computer export issues were involved. The logistics problem is the biggest problem facing the export of Chongqing laptop products. Chongqing is located inland. Compared with coastal areas, Chongqing lacks the necessary logistics conditions for the development of foreign trade. According to traditional methods, "Made in Chongqing" is going to Europe and the United States, and it is generally "crossing the ocean" to take river-sea combined transport or iron-sea combined

transport. But the transportation cost is too high. Therefore, how to transport the produced laptop products abroad has become a practical problem.

In order to break the restrictions of the transportation environment on the development of Chongqing's foreign trade, and in particular to solve the problem of export logistics of "Made in Chongqing" laptop products, the Chongqing government, with the vigorous assistance of the central government, made the Yuxinou railway through difficult negotiations International railway channel.

Fig 1.3-The route of Yuxinou railway



SOURCE:<http://www.globaltimes.cn/content/983333.shtml>

The Youxinou international railway (fig. 1.3) is a large corridor stretching from Chongqing to Europe. It departs from Chongqing, passes Xi'an, Lanzhou, and Urumqi, crosses the North Xinjiang Railway to the west, reaches the border port Alataw pass, enters Kazakhstan, and then passes through Russia, Belarus, Poland, to Duisburg, Germany, with a total length of 11,179 kilometers. It was officially opened in 2011. If you need to transport goods from Chongqing to Europe, using the traditional all-water freight method, it takes a total of about 47 days and costs about 2354.1 US dollars per container; using air transportation to reach Europe requires a total of about 4 days and costs about 8930.5 US dollars per container. However, it takes only about 15 days to use the Yuxinou railway to Europe, and the cost only needs to be about 4436.6 US dollars per container (Asian Shipping Logistics Magazine, September 2017). The Yuxinou international railway freight transportation takes much less time (around 30 days) than water transportation, and the

cost is much lower than air transportation. Through the Yuxinou international railway, the laptop products produced in Chongqing have flowed to all parts of the world. Chongqing's electronic information industry has been in the limelight for a while, which has greatly promoted the development of Chongqing's emerging manufacturing industry. The Yuxinou international railway brings Chongqing not only an international logistics channel, but also a deeper strategic significance. One of the most important is to integrate Chongqing into the BRI strategy (Fig 1.4, Fig 1.5).

Fig 1.4-The BRI routes



SOURCE:<http://www.pensierostrategico.org/2018/03/14/la-cina-e-la-belt-and-road-initiative/>

Fig 1.5-The Yuxinou railway routes



SOURCE:<https://cea-nrw.com/down/Yuxinou%20Railway%20v1.10.pdf>

The BRI strategy is currently China's highest national development strategy. The latest data shows that the total trade volume between China and neighboring countries of the BRI accounted for a quarter of the country's total trade volume. The Yuxinou international railway runs through Central Europe. On one end, it is the economic center of the EU, and on the other is the Yangtze River Economic Belt in China. Through Yuxinou,

Chongqing successfully integrated into the BRI economic belt.

The Yuxinou international railway has created a new era on many levels, making Chongqing's trade development enter a new era. On the one hand, Chongqing's foreign trade has been greatly developed because of the Yuxinou international railway, and the trading environment has been greatly improved; on the other hand, relying on the Yuxinou international railway, Chongqing has actively integrated into the country. The BRI strategy has made of Chongqing a leading city in the western region of the BRI, and has ushered in a good opportunity for trade development. It can be seen from this that the opening of Yuxinou has had a great impact on the development of Chongqing trade, and it is necessary to study Chongqing trade under the new era.

This thesis will focus on discussing the development status of Chongqing trade and city transformation before and after the opening of Yuxinou from various data, and through the SWOT quantitative analysis model to study the development prospects of Chongqing trade, get the strategic direction, and further discuss the strategy of Chongqing trade further development, also analysis and compare Chongqing's city planning and construction change before and after this time period, give the examples of some area before Yuxinou railway and BRI strategy open, then show the future planning or construction of these area, then make comparison with them, at last give the conclusion on how these strategy influence the city planning and construction.

1.2 Research questions

The opening of the Yuxinou International Railway will undoubtedly play a role in promoting the development of Chongqing's foreign trade. This thesis has conducted a comprehensive study on the status of Chongqing's trade development in the context of the operation of the Yuxinou international railway.

Since the opening of the Yuxinou International Railway, under the conditions of its operation, how should Chongqing trade develop in the future? This thesis uses the SWOT quantitative analysis model to analyze the internal and external environment of Chongqing's trade development in detail, and further derives the future development prospects of Chongqing's trade, and formulates corresponding strategies for the future

development of Chongqing's trade.

The proposal of BRI and the opening of the Yuxinou International Railway contributed to the Chongqing economy and promoted the upgrading and transformation of traditional industries. But has it brought about changes in Chongqing's cities? This thesis introduces the changes of the city's general planning and also the specific case study under the background of Yuxinou and BRI, to show the changes that BRI and Yuxinou International Railway have brought to Chongqing's city and their enlightenment for Chongqing's urban planning.

The opening of the Yuxinou international railway and BRI not only promoted Chongqing's trade development and city's planning, but also gradually improved Chongqing's trade status in western area of China. Chongqing also provided a new trade development model for building itself into an inland open highland, also by this reason, Chongqing's tourism and urban development are also advancing by leaps and bounds, and the city's influence is gradually increasing, setting a model for inland China, especially the southwestern region. The experience is also worthy of reference from other inland regions and has practical guiding significance for the development of international trade in the western region.

The Yuxinou international railway is an important part of the country's BRI strategy. Studying its operation will help to better understand the status of the development of the BRI, enrich the strategic connotation of the BRI, and Provide practical experience for the future development of the BRI strategy. From this point of view, it is also of profound practical significance to study the operation of the Yuxinou international railway.

The main content of this thesis includes the following aspects:

1. The first is to use qualitative methods to study the development of Chongqing's trade under the background of the opening of the Yuxinou international railway and the BRI strategy.
2. The second is to analyze the future development direction of Chongqing's trade, synthesize the advantages, disadvantages, opportunities and challenges in the process of Chongqing's trade development, and predict the development direction of Chongqing's future trade strategy.
3. The third is to introduce the country's changes in Chongqing's positioning under the influence of the Yuxin-Europe Railway and BRI, as well as the impact of such

changes on Chongqing's urban planning and policy changes.

4. The fourth is to use specific examples to introduce the impact of these planning and policy changes on specific regions or locations.
5. The fifth is to draw conclusions and make suggestions on how to promote the further development of Chongqing's trade and Chongqing's city planning.

1.3 *Research methods*

This thesis mainly adopts the following research methods:

1. Literature research method: through CNKI, Wanfang, Weipu and other Chinese academic literature databases and PQDD full-text thesis database, SpringerLink comprehensive foreign language journals, series and handout full text databases, BAIDU academic search engine, comprehensive access to relevant domestic and foreign academic literature, for Prepare literature review and theoretical research.
2. Empirical analysis: Through the reading and summarization of related literature, under the overall analysis of a large number of relevant data, the normative analysis of Chongqing's trade development is used.
3. Strategic research method: Use SWOT quantitative analysis model to analyze the development status and make suggestions on its future development direction.
4. Combining Qualitative and Quantitative: The thesis comprehensively uses qualitative and quantitative methodologies to conduct research and analysis on the current status and future development strategies of Chongqing's trade.

This thesis first collects data through the above-mentioned search engines and databases. The main data collected are the statistical data of Chongqing Municipality in Yuxinou Railway and the BRI Opening for about a period of time, economic and trade and manufacturing, tourism and other related industries. The relationship data and information of the partnership; and the urban changes in Chongqing during this time period are mainly based on the changes in urban planning brought about by the opening of the Yuxinou Railway and the BRI, as well as the establishment of new areas and the transformation of old industrial areas.

After the data collection is completed, the economic analysis based on statistical data is the first to prove the impact of the Yuxinou Railway and the BRI on Chongqing's trade. That is to compare the amount and types of Chongqing's exports and the changes in Chongqing's local industry economy, and also to list and analyze data on tourism.

Then it is based on the changes in Chongqing's urban planning before and after the opening of the Yuxinou Railway and the BRI; such as changes in regional divisions, changes in land use, changes in urban planning, construction of new landmark buildings and renovation of old industrial areas, etc.

Through the above aspects, to prove the impact of the Yuxinou Railway and the BRI on Chongqing.

2. The introduction of ChongQing municipality

2.1 Geography

Chongqing is located in the southwest of China's inland, east of the Sichuan Basin, on the upper reaches of the Yangtze River, is an important city along the Yangtze River. Chongqing has a vast territory (around 82300 km²). It is adjacent to Hunan and Hubei provinces in the east, adjacent to Guizhou province in the south, close to Sichuan in the west, and adjacent to Shaanxi in the north. Chongqing has continuous mountain ranges and crisscross river valleys. The city's terrain is undulating and hills are widespread. It is a famous mountain city in the country.

Fig 2.1-Chongqing's location in China



SOURCE: <http://www.chinatourmap.com/chongqing/chongqing-location-map.html>

Chongqing is the connection point between the economically developed eastern region and the resource-rich western region. It shoulders the important responsibility for the

inter-regional material, economic, cultural, and information dissemination and exchange. It is an important material distribution center in the southwest of China and an important area in the upper Yangtze River. The economic center is an important window for the coastal economy to develop inland, and it is also an important supporting point for China's economic transfer to the west. Chongqing's unique geographical advantage is an important strategic node for the country's development towards the west.

2.2 *Demography*

By 2018, Chongqing's total population will be approximately 34.03 million, with a resident population of approximately 31.01 million. Among them, the urban population is about 20.31 million, and the rural population is about 10.7 million; the population of 0 to 14 years old is about 5.29 million, and the population of 65 years and over is about 4.37 million (Chongqing Statistics Bureau, Chongqing Statistical Yearbook 2019). Chongqing is now facing problems such as an aging population and a slowdown in labor force growth. Therefore, the Chongqing Municipal Government issued the Chongqing Population Development Plan 2016-2030.

The plan predicts that by 2020, the comprehensive two-child policy will be brought into full play, the fertility level will steadily increase, the population quality will continue to improve, the population structure will be gradually optimized, and the population distribution will be more reasonable. By 2030, a balanced development of the population itself will basically take shape, and the degree of coordination between population, economy, society, resources and environment will be further improved.

By 2020, the city's population will reach about 34.5 million. By 2030, the city's population will reach about 36 million, and the total fertility rate will reach about 1.8 (Chongqing Municipal Government, Chongqing Population Development Plan 2016-2030, 2017).

Table 2.1-Total inhabitants and population from 2005 to 2018

Year	Total inhabitants (10000 inhabitants)	Total population (10000 persons)
2005	1010.41	3169.16
2006	1030.66	3198.87
2007	1056.97	3235.32
2008	1080.15	3257.05
2009	1110.70	3275.61
2010	1154.83	3303.45
2011	1205.20	3329.81
2012	1220.64	3343.44
2013	1236.78	3358.42
2014	1248.67	3375.20
2015	1254.54	3371.84
2016	1260.88	3392.11
2017	1260.93	3389.82
2018	1269.58	3403.64

SOURCE: Data Sources From Chongqing Statistical Yearbook, Table made by writer.

2.3 *Economy*

In 2011, Chongqing's GDP reached 100.113 billion yuan, second only to Tianjin and higher than Hangzhou; GDP ranks seventh in the country in terms of cities. The added value of the primary industry was 84.452 billion yuan, an increase of 5.1%; the added value of the

secondary industry was 554.28 billion yuan, an increase of 21.8%; the added value of the tertiary industry was 362.381 billion yuan, an increase of 10.8%. In 2017, Chongqing's GDP reached 1.95027 trillion yuan, surpassing that of Tianjin, ranking fifth in the country in terms of cities, second only to the four first-tier cities of Beijing, Shanghai, Guangzhou and Shenzhen (Chongqing Municipal Government, Chongqing Economic Development Report, 2015).

The most obvious problem of Chongqing's economy after it became a municipality directly under the central government was that it merged into a large number of underdeveloped areas in the central government, resulting in a large regional gap.

The per capita GDP of District 9 in Chongqing's main urban area exceeded 85,000 yuan, while the per capita GDP of many backward suburban counties Only less than 5,000 yuan. Among them, Chengkou County, which has the most backward economy, is one of the 10 poorest counties among the poor counties released by the State Council in 2008 (Chongqing Municipal Government, Chongqing Economic Development Report, 2015). The core area of Chongqing's metropolitan area accounts for 9% of the area under the jurisdiction of Chongqing, but it occupies 92% of the output value of Chongqing.

Chongqing's industry used to be dominated by heavy industry. It was one of the three major heavy industry centers in the country. The structure of Chongqing Heavy Industry is mainly based on ships, metallurgy, automobile and military industry, and precision instruments. Changan Automobile Co., Ltd. is Chongqing's largest industrial enterprise under central jurisdiction. Chongqing Independent Brand Construction Industry (Group) Co., Ltd., Tiema Industry (Group) Co., Ltd., China Jialing Industrial Group, Lifan Holding Group Co., Ltd., Loncin Group Co., Ltd., Zongshen Group Co., Ltd., Wangjiang Shipbuilding Co., Ltd., Yu'an Automobile Group Co., Ltd. etc.

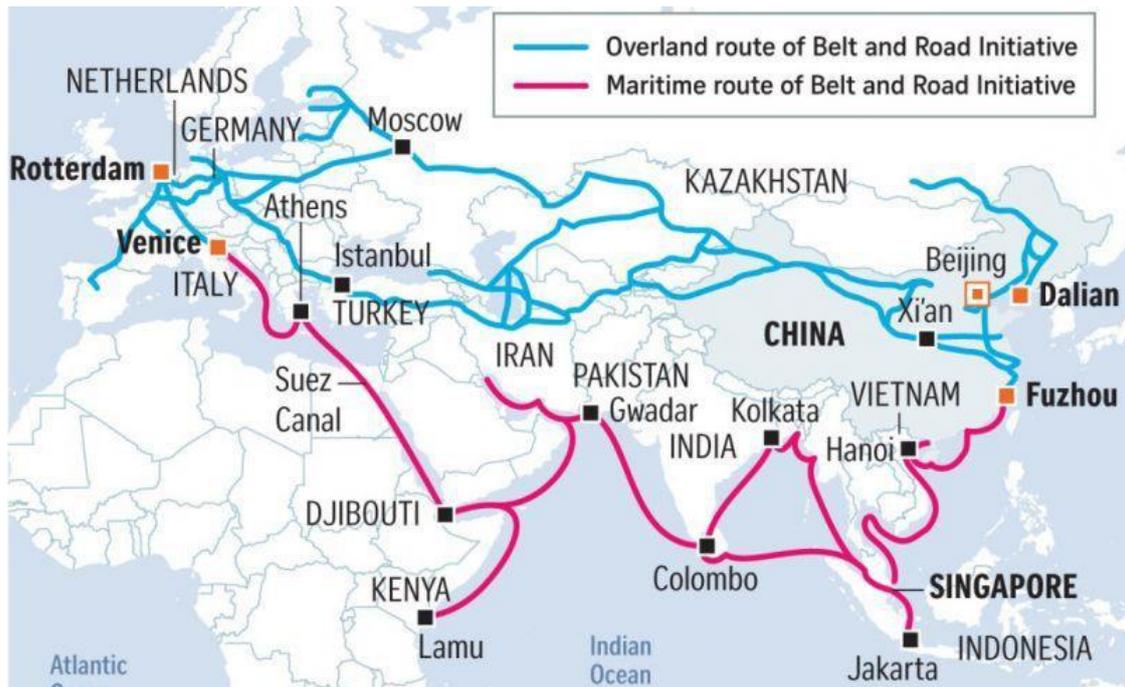
Since August 4, 2009, major projects such as the HP laptop computer export manufacturing base and its Asia-Pacific settlement center, Foxconn industrial base and other major projects have settled in Chongqing. After the two projects are completed and put into production, the annual output of 20 million laptop computers will be exported. Delta Computer, Compal Computer, Inventec, and Chimei Electronics will successively settle in Chongqing, forming a huge industrial chain cluster of over 200 billion yuan. In 2012, there were 225 Fortune 500 companies in Chongqing (ranked first in the Midwest).

The computer-based electronics industry replaced the automobile and motorcycle industries as the first pillar industry in Chongqing.

3. Study on the significance and impact of the opening of the BRI and Yuxinou international railways on Chongqing

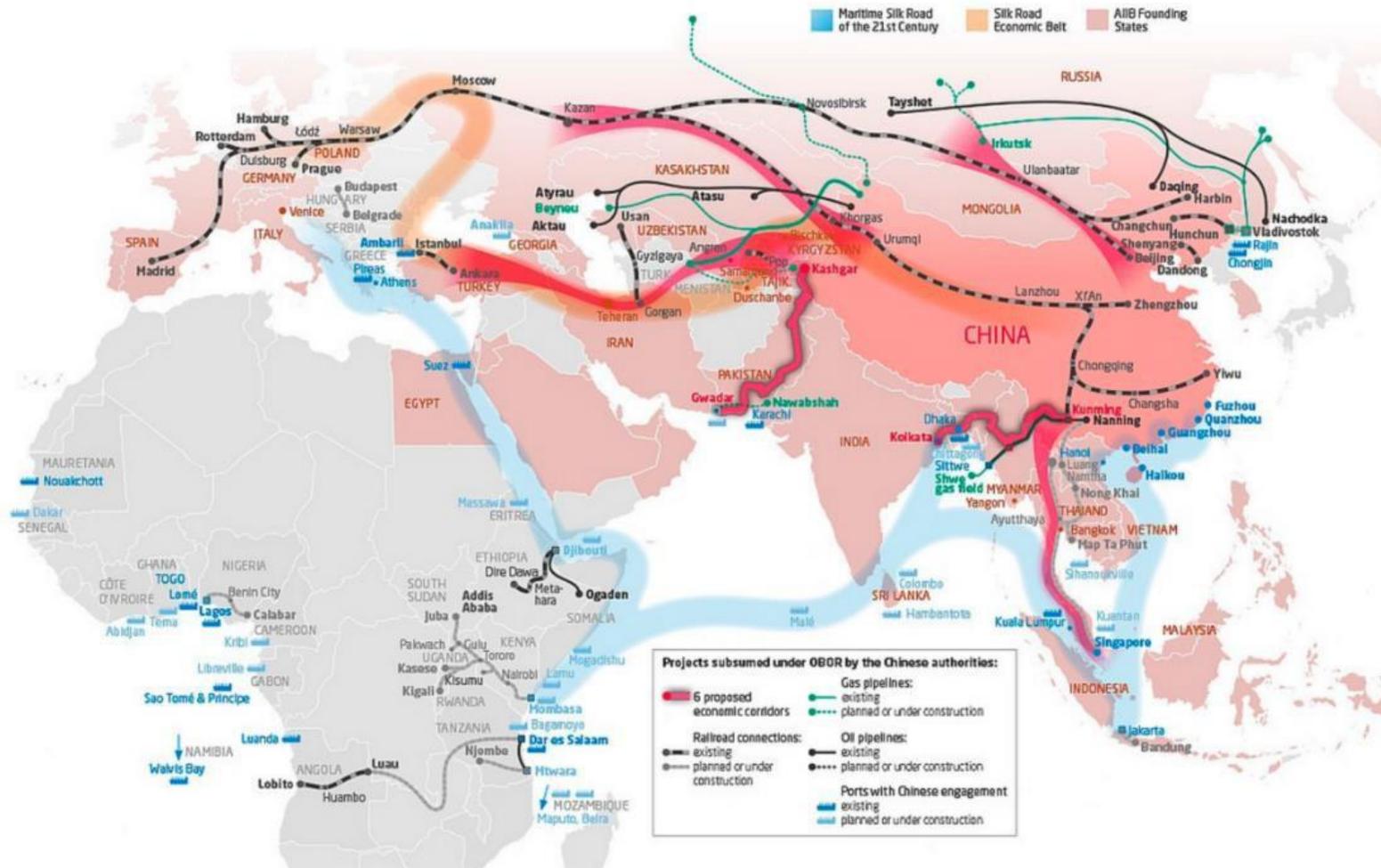
3.1 Introduction to the BRI Cooperation Initiative and Yuxinou International Railway

Fig 3.1-Map of BRI



SOURCE:<https://www.asiagreen.com/en/news-insights/the-belt-and-road-initiative-and-the-rising-importance-of-china-s-western-cities>

Fig 3.2-Map of BRI detailed



SOURCE: <https://chinahistory101.wordpress.com/2017/02/16/infographicchina-mapping-silk-road-initiative-infographicchina-mapping-publications-mercator-institute-for-china-studies/>

The BRI is the sum of "Silk Road Economic Belt" and "21st Century Maritime Silk Road"(Fig 3.1, Fig 3.2). In September and October 2013, Chinese President Xi Jinping proposed the construction of new Cooperative initiative of "Silk Road Economic Belt" and "21st Century Maritime Silk Road"(Chen jimin, 02/06/2018). Relying on the existing bilateral and multilateral mechanisms between China and the countries concerned, with the help of existing and effective regional cooperation platforms, the BRI Initiative aims to borrow the historical symbols of the ancient Silk Road to develop economic partnerships with countries along the route and jointly build a community of interests, a community of destiny, and a community of responsibility with political mutual trust, economic integration, and cultural tolerance (baidu baike, 2015).

On March 28, 2015, the National Development and Reform Commission, the Ministry of Foreign Affairs, and the Ministry of Commerce jointly issued the Vision and Actions for Promoting the Joint Construction of the Silk Road Economic Belt and the 21st Century Maritime Silk Road (Promote the vision and action of jointly building the Silk Road Economic Belt and the 21st Century Maritime Silk Road). After the opening of the BRI economic zone, the number of contracted engineering projects exceeded 3,000. In 2015, Chinese companies made direct investments in 49 countries related to the BRI initiative, with an increase of 18.2% year-on-year. In 2015, China's undertaking of BRI related national service outsourcing contracts amounted to US\$ 17.83 billion, with an execution amount of US \$ 12.15 billion, up 42.6% and 23.45% year-on-year (Liu ran ,Zhou suya, 01/20/2016). By the end of June 2016, China-Europe trains had opened a total of 1881 trains, of which 502 were returned, and the total value of import and export trade was 17 billion U.S. dollars. On March 23, 2019, China and Italy signed the BRI memorandum (Xinhua News Agency, 01/03/2017).

The Yuxinou international railway opened up China's inland regions to Europe and attracted extensive international attention (Fig 3.3). It is known as the New Silk Road. At the beginning of the opening of the Yuxinou international railway in 2011, 17 trains were operated; the next two years were 40-degree trains; in 2014 it exceeded 100 trains; in 2015, 257 trains were opened throughout the year; in 2016, more than 350 trains are planned (Hualong,Lanyu 08/03/2016).

Fig 3.3-Route of Yuxinou railway



SOURCE: https://www.chinadailyasia.com/news/2013-09/13/content_15088046.html

According to relevant data, the Yuxinou international railway was opened from 2011 to the end of 2015. A total of 490 flights were carried and 41,698 boxes of cargo were transported. The number of trains accounted for 45% of the China-Europe trains, and the value of the goods was about \$ 10 billion (Hualong, 26/07/2016).

3.2 Significance of BRI and Yuxinou International Railway Opening to Chongqing

The Yuxinou international railway as a main railway line, the most intuitive meaning of its opening is to open up the geographical connection between Chongqing and Europe, and open up a trade logistics channel for inland areas. Chongqing is located inland, and the traffic exchange with foreign countries is not particularly relevant (see ch. 3.4). The opening of this railway trunk line undoubtedly provides an important logistics channel for Chongqing's foreign trade development.

The opening of the Yuxinou international railway has greatly improved Chongqing's trade status, mainly reflected in the following two aspects: first, Chongqing has become a domestic export goods distribution center and an inland import distribution center. Second, a customs clearance policy stipulates that trade goods are loaded from Chongqing Customs until the end of the line. Customs along the route are no longer checked, so Chongqing Customs is in an important position.

Thirdly, the opening of the Yuxinou international railway has made Chongqing's port economy develop rapidly, becoming the only city in China's 12 provinces and cities with three ports in the form of aviation, water transport and railway. The development of the region's foreign trade is crucial.

The opening of the Yuxinou international railway is an important layout of China's BRI strategy. This railway trunk line allows Chongqing to better integrate into the BRI strategy, enhance Chongqing's strategic position, and BRI It is a national-level cooperation initiative, and Chongqing is located right in the logistics cloud belt, and can enjoy the convenience brought by various national policies, such as tax reductions and benefits provided by foreign investors, and the establishment of tax-free zones. It has brought great opportunities for Chongqing's foreign trade development.

The Impact of the Opening of the BRI and Yuxinou International Railways on Chongqing's economy and society

3.2.1 Promote the upgrading of traditional industries

Chongqing is an industrialized city famous for heavy industry. The secondary industry is the pillar industry of Chongqing's economic development. There are many motorcycle and car brands in Chongqing. Internationally well-known motorcycle brands include Zongshen, Zongshen Piaggio, Lifan, Loncin, Jinlong, Jialing, Jialing Honda, Jianshe, Jianshe Yamaha, Yinxiang, Kai Seoul, Shuangqing, Xinyuan, Mount Everest, Aerospace Bashan, Runtong, etc. Car brands include Lifan Motors, BAIC Yinxiang, Changan Automobile, Changan Mazda, Changan Ford, Changan Suzuki, Changan Leap, Dongfeng Xiaokang, Xinyuan Automobile, Tiema Automobile, Golden Crown Automobile, Dima Automobile, etc. Chongqing's foreign trade development is also more concentrated on industries, such as the automobile industry and motorcycle industry, most of the motorcycle and cars are export to southeast Asia. However, with the development of the times, the traditional trade industry has encountered development bottlenecks, and automobile exports and motorcycle trade have been affected to a certain extent.

Table 3.1 Chongqing Automobile and Motorcycle Production from 2005 to 2014 (Unit: 10,000 units)

Year	Cars		Motorcycle	
	Yield	Increase	Yield	Increase
2005	42.15	-	420.84	-
2006	51.99	23.35%	534.60	27.03%
2007	70.80	36.18%	638.25	19.39%
2008	76.64	8.25%	774.90	21.41%
2009	118.65	54.81%	761.74	-1.70%
2010	161.58	36.18%	849.23	11.49%
2011	172.20	6.57%	879.59	3.58%
2012	184.46	7.12%	877.51	-0.24%
2013	215.06	16.59%	810.94	-7.59%
2014	262.89	22.24%	844.62	4.15%
2015	304.51	15.83%	841.64	-0.35%
2016	315.62	3.65%	787.66	-6.41%
2017	299.82	-5.01%	595.69	-24.37%
2018	205.04	-31.61%	389.11	-34.68%

SOURCE: Chongqing Statistical Yearbook, table made by writer.

From Table 3.1, it can be seen that: first, in the automotive industry, since 2011, the growth rate of Chongqing's automobile output has slowed down significantly, far less than in previous years; second, the output of the motorcycle industry has also negative growth, especially after 2010 and 2011, is almost in a state of stagnation. Since 2015, it has completely turned into negative growth, and the development prospects are not optimistic. This is mainly because Chongqing's automobile and motorcycle products are labor-intensive products with low added value. These products are transferred to countries and regions with lower labor costs as Chongqing's labor costs gradually increase, resulting in Chongqing's automobile and motorcycle industry development encountered some difficulties. Therefore, Chongqing urgently needs to upgrade its traditional industries and rejuvenate itself. To upgrade traditional industries, the best strategy is to upgrade the industry level (for the automotive industry, most of the products is belong to the low-end products, the government want concern more on high-end products, Such as chip manufacturing, Internet and other high-tech industries) and increase the technological content of products.

The opening of the Yuxinou international railway provided an opportunity for Chongqing to upgrade its traditional industries. Take the automotive industry as an example. The main problem of Chongqing's auto industry is that most of its products belong to low-end products. In terms of Chongqing's current labor costs, this product structure is not conducive to the development of Chongqing's auto industry. It is Chongqing Automobile's development of high-end auto industry and enhancement of added value the way out of the industry. The production of high-end cars requires imported parts, and the shipping cost is low. Therefore, most high-end cars are distributed in coastal areas; but with the opening of the Yuxinou international railway, Chongqing also has a convenient channel for transporting high-end car parts. At the same time, Chongqing also has a labor cost advantage over coastal areas, so it began to focus on creating high-end automobile production projects to enhance the added value and technological content of Chongqing's automobile industry. There have been successful examples in the industrial upgrading of Chongqing 's automobile industry. Ford will use Chongqing as the world 's largest production base in addition to its domestic market. It will bring some high-value-added luxury cars to Chongqing for assembly. The R&D center is located in Chongqing, forming a

complete R&D design, parts production, vehicle assembly and sales service system.

3.2.2 Deepening Chongqing's ties with Europe

The proposal of the BRI and the opening of the Yuxinou international railway have increased economic exchanges between China and Europe. On the one hand, the value of trade between Chongqing and Europe is increasing, the economic influence of Chongqing is increasing, and more and more European brands are entering Chongqing. On the other hand, Chongqing investors have also spotted business opportunities in Europe and actively invested in Europe, such as Changan Automobile, and set up R&D centers in the United Kingdom and Turin, Italy. Next, Chongqing plans to increase scientific and technological exchanges with Europe.

The exchanges between Chongqing and Europe are getting closer and European companies are investing more and more in Chongqing. For example, Germany invested 5 billion US dollars in chemical projects in Chongqing, Danish Carlsberg Group and ChongQing beer cooperation, Sweden's automotive projects in Chongqing, etc. Chongqing and Norway have potential for cooperation in scientific research, exchanges with universities and colleges, low-carbon materials, forestry, fishery, etc. An event called "Norway Day" was also carried out in Chongqing. "Norway Day" is a gathering of friendship. A Norwegian delegation composed of more than 100 people came to Chongqing, covering various fields such as education, science and technology, and enterprises. Through the "Norway Day" activities, we hope to communicate with Norway in environmental protection, tourism and culture. Communicate and learn more from Norway. Chongqing and Antwerp have also established a sister city relationship, which indicates that the cooperation between the two places is at a new starting point. In the future, the two places will carry out more in-depth cooperation in diamond industry, tourism, education, fund investment and other aspects. At the "Seminar on New Opportunities for the Development of the Western Region", a total of 8 Belgian companies signed 11 agreements with the Municipal Foreign Economic and Trade Commission, the Municipal Council for the Promotion of International Trade and a

number of Chongqing companies in the fields of culture, economy, trade, and logistics between Chongqing and Antwerp, Contract or memorandum. (Yang Ji, 2015).

The Netherlands and Chongqing also have cooperation in the energy sector. So far, a total of 477 Chinese companies have established operating organizations in the Netherlands, including 30 energy companies. Among them, companies from Chongqing, such as Chongqing International Composites, Chongqing Lifan and Chongqing Huansong, have established operating agencies in the Netherlands. Currently, more than 10 Chongqing enterprises are in contact with the Dutch Foreign Investment Agency under the Ministry of Economic Affairs of the Netherlands. For example, Chongqing General Industry Co., Ltd. signed a contract with We4Ce Company of the Netherlands. Chongqing General Industry Co., Ltd. will buy We4Ce blade design technology and set up a factory in Chongqing to produce new wind turbine blades (Li Jing, 2014).

Also, the Deutsche Bank's first branch in the Southwest region settled in Chongqing. Europe's largest printed circuit board manufacturer Austrian Otis Group invested US\$600 million to produce high-end printed circuit boards in the Liangjiang New District. Sweden and Chongqing will also cooperate again. The second phase of the kitchen waste treatment project with technical support will start in Chongqing. After the completion of the second phase, Chongqing will be the city with the largest scale of kitchen waste disposal and the most advanced technology in China and the world (Li Jing Xiang Jie Tan Shu, 2016).

The opening of the BRI and Yuxinou international railways has also increased cultural exchanges between Chongqing and Europe. The BRI and Yuxinou international railways have started Chongqing's popularity in Europe. In addition, the Chongqing Sichuan Opera Troupe took the Yuxinou international train to bring Sichuan Opera, a profound Chinese traditional skill, to Europe, and cultural exchanges between the two sides are increasing.

3.2.3 Enhance Chongqing's international tourism

Chongqing is located in the southwest center of China. It has always played the role of connecting inland (Tibet, Yunnan, Guizhou) geographically. It is a key city in Chinese history,

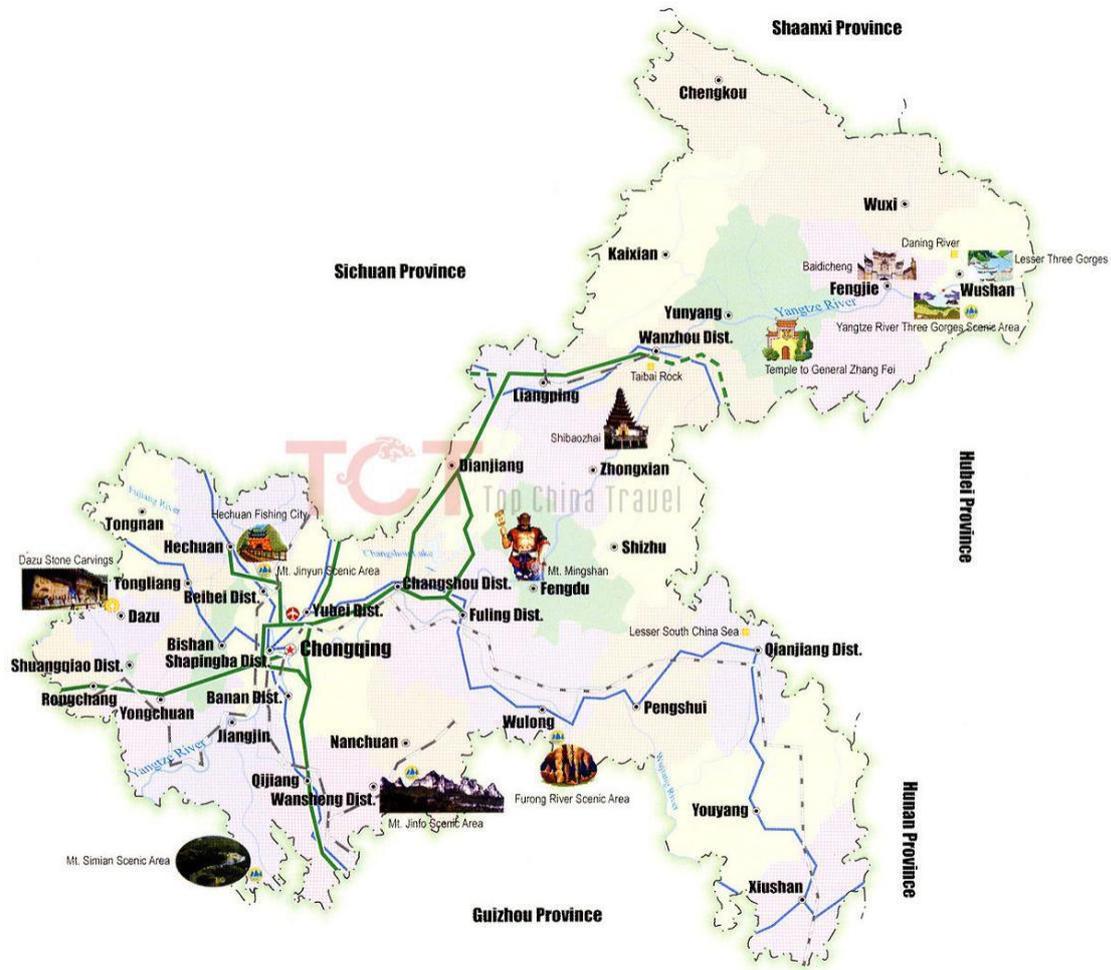
but has not been well-known internationally. Since the proposal of the BRI initiative and the opening of the Yuxinou railway, Chongqing has more and more appeared internationally, making more European countries aware of this pearl located in southwest China.

There are 36 important tourist resources in Chongqing, including one world cultural heritage, one world natural heritage, four national scenic spots, seven national forest parks, seven national nature reserves, and seven national key cultural relics. There are eight national 5A tourist attractions.

In the long history of Chongqing for more than 3,000 years, the rich cultural resources and strong cultural atmosphere have made the cultural influence far-reaching. These are precious spiritual wealth. The most representative and symbolic cultural elements are mainly manifested in four aspects:

(1) Bayu culture. Bayu culture (Fig 3.4), as the foundation of Chongqing's historical culture, is the source and root of Chongqing culture; Bayu culture has a long history, Wushan primitive culture, Bayu culture, Three Kingdoms culture, Fengdu ghost culture(Fig 3.6), Bayu bamboo branch folk art, Dazu stone carving art(Fig 3.5) , The late Song Dynasty anti-Yuan military culture, Mingyuzhen Daxia culture, Xinhai Revolutionary culture, accompanying capital and Hongyan culture, etc. constitute a complete series of Bayu culture (Li Wei, Wei Wei, 2008).

Fig 3.4-Map of Bayu



SOURCE:<https://www.topchinatravel.com/china-map/chongqing-tourist-map.htm>

Fig 3.5-Dazu stone carving



SOURCE:<https://www.flickr.com/photos/wolfmars/3475779452>

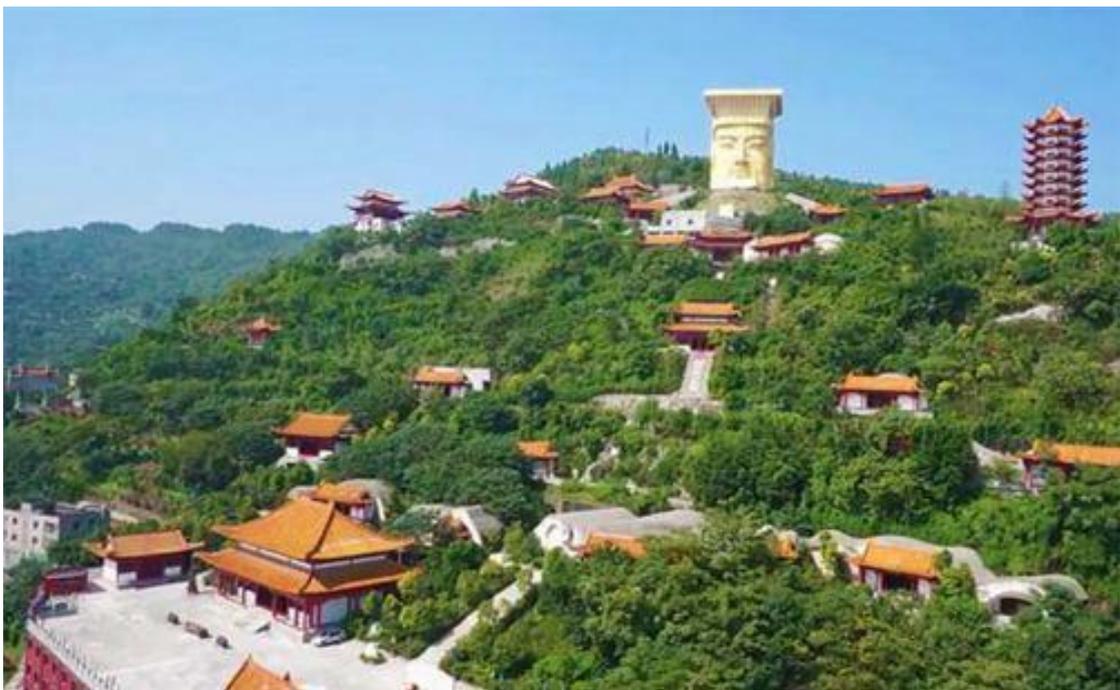


Fig 3.6-Fengdu ghost city

(2) Yangtze three Gorges Culture. The Three Gorges culture (Fig 3.7) is an important component and valuable asset of the excellent traditional culture of the Chinese nation and a unique cultural form of Chongqing. Relying on the unique natural landscape of the Three Gorges of the Yangtze River (Fig 3.8) to show the cultural characteristics and folk customs of different historical periods. Among all the scenic spots in our country, the scenery of the Three Gorges of the Yangtze River has always been more outstanding.

Fig 3.7-Yangtze three gorges map



Fig 3.8-Nature landscape of three gorges



(3) Folk culture. Since ancient times, Chongqing has been an immigrant city. It has experienced seven immigrants in history, which has formed the characteristics of Chongqing people's tolerance and openness. The food culture is unique, in which the wisdom of Chongqing people's life practice is condensed. As the birthplace of hot pot(Fig 3.9), hot pot can best reflect the core of Chongqing's food culture; and the rivers and lakes dishes all over the streets are a gathering of folk snacks and become a beautiful scenery of Chongqing's food culture. Chongqing's ethnic minorities have also left a lot of intangible cultural heritage, such as the folk tales of Zuma Town, the Shijia Tujia tunes, and hand-waving dances(Fig 3.10).

Fig 3.9-Hotpot



SOURCE:<https://www.nanrenwo.net/living/food/144113.html>

Fig 3.10-Tujia hand-waving dances



SOURCE:<http://news.sxxw.net/html/20158/17/394452.shtml>

(4) Internet celebrity city cultures. In the age of the Internet, mass media such as short videos and live broadcasts have emerged, and various Internet celebrities have emerged. With the stimulation of self-media such as Tiktok, Chongqing has become a "Internet celebrity city" city. Such as the light rail through the building (Fig 3.12), Hongya cave(Fig 3.11), the Yangtze River cableway, etc., attracted the attention of the world. In the online search, Chongqing Hongyadong appeared on the hot list for the first time, and the popularity ranked only after the Forbidden City, ranking second(Huanglong, 2019).

Fig 3.11-Hongya cave



SOURCE:<https://www.tuniu.com/restaurant/2027367/>

Fig 3.12-Liziba light rail station



SOURCE:<https://touch.travel.qunar.com/comment/10158835149>

Fig 3.13-Sheraton Nanbin road hotel



SOURCE:<https://www.booking.com/hotel/cn/sheraton-chongqing.zh-cn.html>

As of 2018, there were 12,778 hotels in Chongqing providing accommodation, of which 484 were mid-to-high-end hotels (four- and five-star hotels and four- and five-star standard hotels) (Dandan, 2019). In 2011, only mid-to-high-end hotels 72 companies (Liu Yan, 2012). Moreover, international hotels such as Marriott Hotel, Hilton Hotel, InterContinental Hotel, and Kempinski Hotel have also settled in Chongqing. The Sheraton Hotel, which opened in 2011, has become a landmark of Nanbin Road(Fig 3.13).

Also, in recent years, the number of inbound tourists in Chongqing has also been increasing. As can be seen from Table 3.2, in the time period between 2010 and 2011 (that is, the proposal of the BRI initiative and the opening of the Yuxinou railway), the number of international tourists visiting Chongqing has soared, which shows the popularity of Chongqing with these two initiatives growing internationally.

Table 3.2 Chongqing's international tourist arrivals from 2004 to 2018.

YEAR	Number of people	Increase
2004	434423	-
2005	523872	20.59%
2006	603239	15.15%
2007	761676	26.26%
2008	871907	14.47%
2009	1048125	20.21%
2010	1370231	30.73%
2011	1864016	36.04%
2012	2242834	20.32%
2013	2422605	8.02%
2014	2637590	8.87%
2015	2825339	7.12%
2016	3165844	12.05%
2017	3583545	13.19%
2018	3880233	8.28%

SOURCE: Chongqing Statistical Yearbook, table made by writer.

3.3 Impact of the opening of the BRI and Yuxinou international railways on Chongqing's trade

3.3.1 Promoting the rise of emerging trade industries

The opening of the BRI and Yuxinou international railways has brought three emerging trade industries to Chongqing: high-tech industries, cross-border e-commerce, and tourism. The most profound impact of the Yuxinou international railway on the structure of Chongqing's trade industry is to promote the vigorous development of the high-tech industry represented by the laptop industry.

The laptop industry in Chongqing is a process from scratch. After the planned establishment of the Chongqing laptop Park, the opening of the Yuxinou international railway is in the planning of the relevant departments-Chongqing's laptop industry and the opening of the Yuxinou international railway are complementary and common: Without the establishment of the laptop park and the development of the laptop industry, there will be no Yuxinou international railway; without the Yuxinou international railway, there will be no transportation channels for laptop products, nor There is a vigorous development of the laptop industry.

Table 3.3 Top 10 Chongqing Export Enterprises from 2010 to 2018

Ranking	2010	2011	2012	2013	2014	2015	2016	2017	2018
1	Lifan Group	Hongfujin Precision Electronics (Chongqing) Co., Ltd.	Dafeng (Chongqing) Computer Co., Ltd.	Dafeng (Chongqing) Computer Co., Ltd.	Dafeng (Chongqing) Computer Co., Ltd.	Dafeng (Chongqing) Computer Co., Ltd.	Dafeng (Chongqing) Computer Co., Ltd.	Dafeng (Chongqing) Computer Co., Ltd.	Dafeng (Chongqing) Computer Co., Ltd.
2	Loncin Group	Dafeng (Chongqing) Computer Co., Ltd.	Hongfujin Precision Electronics (Chongqing) Co., Ltd.	Asahi Technology (Chongqing) Co., Ltd.	Compal (Chongqing) Co., Ltd.	Computer Inventec (Chongqing) Co., Ltd.	Inventec (Chongqing) Co., Ltd.	Inventec (Chongqing) Co., Ltd.	Inventec (Chongqing) Co., Ltd.
3	Zongshen Group	Inventec (Chongqing)	Compal Computer	Hongfujin Precision	Asahi Technology (Chongqing) Co., Ltd.	Asahi Technology (Chongqing) Co., Ltd.	Asahi Technology (Chongqing) Co., Ltd.	Chongqing Economic Co., Ltd.	Foreign and Economic Co., Ltd.

		Co., Ltd.	(Chongqing) Ltd.	Co., Electronics (Chongqing) Ltd.	Ltd. Co.,	Ltd.	Ltd.	Trade (Group) Co., Trade Group Ltd.			
4	Hongfujin Electronics (Chongqing) Co., Ltd.	PrecisionLifan Group	Asahi Technology (Chongqing) Ltd.	Inventec (Chongqing) Ltd. Co.,	Inventec (Chongqing) Ltd. Co.,	Wistron (Chongqing) Co.,	CapitalHongfujin Electronics (Chongqing) Ltd.	PrecisionWistron Co.,	CapitalWistron (Chongqing) Co., Ltd.	Capital (Chongqing) Co., Ltd.	
5	Chongqing Youyang Import and Export Co., Ltd.	Hans AnhaiLoncin Group	Inventec (Chongqing) Ltd.	Compal (Chongqing) Ltd. Co.,	ComputerHongfujin Electronics (Chongqing) Ltd. Co.,	PrecisionHongfujin Electronics (Chongqing) Co.,	PrecisionWistron (Chongqing) Co., Ltd.	CapitalAsahi (Chongqing) Co., Ltd.	TechnologyAsahi (Chongqing) Co., Ltd.	Technology (Chongqing) Co., Ltd.	
6	Yinxiang Group	Compal Computer (Chongqing)	Wistron (Chongqing)	CapitalChongqing Jewelry Co.,	Fuyuan Wistron (Chongqing) Co., Ltd.	CapitalCompal (Chongqing) Co., Ltd.	ComputerElsevier Semiconductor (Chongqing) Co.,	Hynix Elsevier Semiconductor (Chongqing) Co.,	Hynix Elsevier Semiconductor (Chongqing) Co.,	Hynix Elsevier Semiconductor (Chongqing) Co.,	

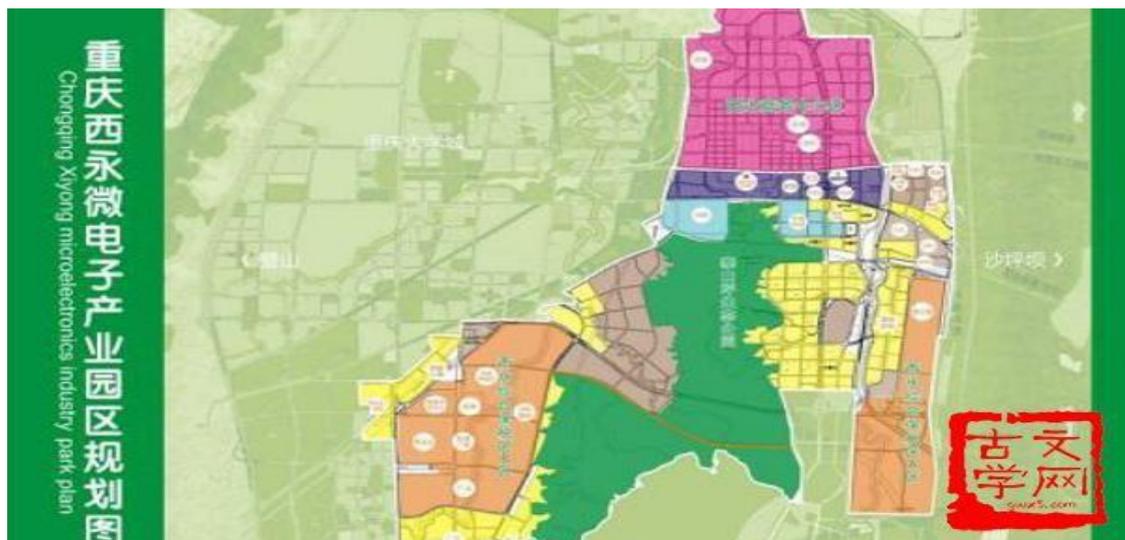
		Co., Ltd.	Co., Ltd.	Ltd.			Ltd.	Ltd.	Ltd.		
7	Chongqing Foreign Economic and Trade Group	Zongshen Group	Lifan Group	Wistron (Chongqing) Ltd.	Capital Lifan Group Co.,	Elsevier Semiconductor (Chongqing) Co., Ltd.	Hynix Mazda Co., Ltd.	Changan Automobile Co., Ltd.	Ford Hongfujin Electronics (Chongqing) Co., Ltd.	Precision Hongfujin Electronics (Chongqing) Co., Ltd.	Precision Electronics (Chongqing) Co.,
8	Chongqing International Composite Materials Ltd.	Chongqing Foreign Economic and Trade Group Co.,	Loncin Group	Lifan Group	Loncin Group	Lifan Group	Chongqing Optoelectronics Technology Ltd.	BOE Co.,	Compal (Chongqing) Co., Ltd.	Computer Compal (Chongqing) Co., Ltd.	Computer Compal (Chongqing) Co., Ltd.
9	Chongqing Group	Yu'anYinxiang Group	Zongshen Group	Chongqing Mingxuan Jewelry Ltd.	Chongqing Communication Technology Co., Ltd.	Xinwei Loncin Group Co.,	Chongqing Investment and Export Co., Ltd.	Energy Changan Import Mazda Automobile Ltd.	Ford Co.,	Changan Mazda Automobile Ltd.	Ford Co.,

10	Southwest Aluminum (Group) Ltd.	Chongqing Co., Youyang	HansChongqing Anhai Foreign ImportEconomic and Trade Group Export Co., Ltd.	Loncin Group	Chongqing Technology Ltd.	Hongdaofu Chongqing Co., Xinghuitong Supply Chain Management Ltd.	Vivo Communications (Chongqing) Co.,Ltd	Mobile Hongxiang Technology Development Ltd.	Chongqing Hongxiang Technology Co.,Development Ltd.	Weishi Hongxiang Technology Co.,Development Ltd.	Weishi Co.,
----	---------------------------------	------------------------	---	--------------	---------------------------	---	---	--	---	--	-------------

SOURCE: Chongqing Statistical Yearbook, table made by writer.

From the list of Chongqing's top ten exporters in Table 3.3, we can see that in 2010 before the opening of the Yuxinou international railway and the BRI, motorcycle manufacturers accounted for half of the country: Lifan, Loncin, Zongshen are the top three motorcycle companies. After 2011, motorcycle manufacturers gradually withdrew from the top ten, and the traditional top three Lifan, Loncin, and Zongshen have become more and more backward, even after 2013, Zongshen Group has withdrawn from the top ten export list. In contrast, starting from 2011, the top five of this top 10 list are laptop manufacturers; there are still some companies in the top ten that focus on laptop related products. It is worth noting that these companies were established around 2011, and the production of laptop products is mainly for export. Their development model is very clear: an industrial cluster has been formed in Xiyong (Fig 3.3), and the laptops produced are transported abroad through the Yuxinou international railway channel. It can be seen that the BRI and opening of the Yuxinou international railway has greatly promoted the development of Chongqing's laptop industry and Semiconductor industry, and also helped these industries to grow from scratch in Chongqing, becoming a new advantageous industry for Chongqing's foreign trade development.

Fig 3.14-map of the Xiyong Microelectronics Park



SOURCE:http://www.gwx5.com/chengyu/show_16982.htm

Table 3.4 Top 10 Import Enterprises in Chongqing, 2010-2015

Ranking	2010	2011	2012	2013	2014	2015
1	Changan Automobile Co., Ltd.	Ford Mazda Global (Chongqing) Co., Ltd.	Logistics Global (Chongqing) Co., Ltd.	Logistics Global (Chongqing) Co., Ltd.	Logistics Global (Chongqing) Co., Ltd.	Logistics Chongqing Feilida Supply Chain Management Co., Ltd.
2	Chongqing Iron and Steel Co., Ltd.	Changan Ford Mazda Automobile Co., Ltd.	Chongqing Feilida Supply Chain Management Co., Ltd.	Hongfujin Electronics Co., Ltd.	Precision (Chongqing) International Logistics Co., Ltd.	Chongqing Timely Global Logistics (Chongqing) Co., Ltd.
3	Chongqing Petrochemical Co., Ltd.	Pengwei Chongqing Iron and Steel Co., Ltd.	Changan Ford Mazda Automobile Co., Ltd.	Changan Ford Mazda Automobile Co., Ltd.	Changan Ford Mazda Automobile Co., Ltd.	Changan Ford Mazda Automobile Co., Ltd.
4	Chongqing Economic Group	Foreign and Trade Petrochemical Co., Ltd.	Chongqing Pengwei Hongfujin Electronics Co., Ltd.	Precision (Chongqing) Chain Management Co., Ltd.	Chongqing Feilida Supply Chain Management Co., Ltd.	Chongqing Feilida Supply Chain Management Co., Ltd. Chongqing Timely International Logistics Co., Ltd.

5 Chongqing Changan SuzukiChongqing Foreign Chongqing Red DragonflyChongqing Red DragonflyHongfujin Precision Chongqing BOE
Motor Co., Ltd. Economic and Trade Group Grease Co., Ltd. Grease Co., Ltd. Electronics (Chongqing) Co.,Optoelectronics Technology
Ltd. Co., Ltd.

6	Chongqing Zhongji Import and Export Co., Ltd.	Chongqing Zhongji Import and Export Co., Ltd.	Chongqing Logistics Co., Ltd.	Jieshun	Chongqing Iron and Steel Co., Ltd.	Chongqing Express Logistics	Elsevier Semiconductor Co., Ltd.	Hynix (Chongqing)	
7	Chongqing Xinfu Food Co., Ltd.	Chongqing Changan Motor Co., Ltd.	Suzuki	Chongqing Iron and Steel Co., Ltd.	Chongqing Express Logistics Co., Ltd.	Chongqing Foreign Economic and Trade Group	Hongfujin Electronics (Chongqing) Co., Ltd.	Precision	
8	Hongfujin Electronics Co., Ltd.	Precision (Chongqing) Chain Management Co., Ltd.	Feilida Supply	Chongqing Automobile Co., Ltd.	Changan	Chongqing Foreign Economic and Trade Group	Dafeng (Chongqing) Computer Co., Ltd.	Chongqing Express Logistics Co., Ltd.	
9	Chongqing Automobile Co., Ltd.	Changan	Hongfujin Electronics Co., Ltd.	Precision (Chongqing) Computer Co., Ltd.	Dafeng (Chongqing) Computer Co., Ltd.	Dafeng (Chongqing) Computer Co., Ltd.	Chongqing Iron and Steel Co., Ltd.	Dafeng (Chongqing) Computer Co., Ltd.	
10	HP (Chongqing) Co., Ltd.	Nine Dragons (Chongqing) Co., Ltd.	Paper	Chongqing Petrochemical Co., Ltd.	Pengwei	Chongqing Hongdaofu Technology Co., Ltd.	Elsevier Semiconductor Co., Ltd.	Hynix (Chongqing) Grease Co., Ltd.	Red Dragonfly

SOURCE: Chongqing Statistical Yearbook, table made by writer.

According to the data in Table 3.4, Chongqing's top ten importing companies in recent years are not all laptop manufacturers like exporters. They are distributed in logistics, steel, automobile, food, and laptop companies. For traditional car imports, the top rankings are basically related to laptop companies. In addition to some traditional laptop brands and foundries, we see that some comprehensive logistics companies are also ranked very high, and the main customers of these logistics companies happen to be concentrated in the IT industry, the main business is for laptops Brands, OEMs and their suppliers provide the basis for laptop spare parts and value-added logistics services. This shows that laptop manufacturers and related companies have also left a strong pen on Chongqing's import projects, which are complementary to exports.

According to Table 3.3 and Table 3.4, Chongqing's laptop industry has become a pillar industry of Chongqing's import and export trade. Statistics show that in 2014, the global laptop market shrank by 5%, while Chongqing 's laptop industry achieved a 15% growth (Zhouyan, 06/15/2015). At the same time, the laptop industry accounted for 37% of Chongqing 's total imports and exports in 2014. The contribution rate of the growth rate reached 21%. Chongqing's laptop industry started as early as in 2010(Chongqing Statistics Bureau,2016). In a period of heyday from a few years to now, there are three important contributions: the BRI initiative and the national government with the support of the city; the establishment of a laptop park to form a complete industrial cluster; third, the opening of the Yuxinou international railway so that "Chongqing-made" laptop products can be continuously shipped internationally. Now, Chongqing has become the world's largest laptop production base, accounting for about 40% of the world's output. There is a saying that "For every 3 laptop computers in the world, Chongqing has 1" (Liuxian,05/21/2020); At the same time, Chongqing's laptop industry supporting industry It is also developing vigorously, with a total of 895 contracted laptop computer supporting enterprises and 40 of 42 laptop computer supporting categories signed with Chongqing (such as Intel FPGA Creation Center, etc.), and the industry chain is constantly improving (Xiyong Microelectronics Park,05/22/2019).

Not only laptop products, other high-tech products have also developed rapidly in Chongqing's foreign trade market in recent years. In recent years, Chongqing has newly introduced a number of indirect laptop supporting enterprises such as mobile phones, home appliances, and LCD panels. The laptop supporting channels have been opened up to the matching channels of smart terminal products such as mobile phones, home appliances, and

panels, and the supporting field has been further expanded. According to statistics, in 2018, Chongqing City shipped 58 million computers, 36 million mobile phones, 14 million printers, 5.52 million monitors, 10 million set-top boxes, and more than 200 million cloud-based devices (Chongqing Statistical Yearbook 2019, Chongqing Statistics Bureau,2020). The Yuxinou international railway has been transported to the world, and has made great contributions to Chongqing's trade development. Overall, the high-tech industry represented by the laptop industry is now undoubtedly the pillar industry of Chongqing's foreign trade, providing assistance for Chongqing's trade development.

Relying on the BRI and Yuxinou international railways, cross-border e-commerce industry is gradually emerging in Chongqing.

Cross-border e-commerce is an emerging foreign trade industry developed by Chongqing. This is the "Internet + foreign trade" economic model created in the current Internet era. It is a current economic hotspot and a mainstream trend in future trade development. It has great potential for development.

The Chongqing government took the opportunity of the BRI and Yuxinou to set up a special cross-border e-commerce task force to develop the cross-border e-commerce industry. The convenient freight conditions of the Yuxinou international railway have attracted the attention of many cross-border e-commerce companies. As of now (2015), more than 40 cross-border e-commerce companies have successively settled in Chongqing Xiyong Comprehensive Bonded Zone, including Vipshop and Miyabao; nearly 100 companies have filed in Chongqing's cross-border e-commerce pilot. Although this is not a big number as a whole, Chongqing's cross-border e-commerce has taken the first step. With the continued hot trend of cross-border e-commerce and the further maturity of the Yuxinou international railway operation, the international e-commerce industry through the Yuxinou international railway will have long-term development, and cross-border e-commerce is also expected to become in addition to laptop products, Chongqing's trade industry is a new development ace.

3.3.2 Create a new situation in international logistics

As an international logistics channel, the Yuxinou international railway opened Chongqing's new international logistics structure, which is embodied in the following aspects:

- The running time of goods is greatly reduced compared to traditional transportation methods. The current actual operating time of the Yuxinou international railway is around 14 or 16 days, which is about 20 days less than that from the rail-sea combined transport or the Jianghai combined transport. The channel is reduced by more than 1000 kilometers, which saves transportation time.
- The freight rate of the Yuxinou international railway is cost-effective and has obvious competitive advantages. When the Yuxinou international railway started, the price of the container per kilometer was US \$ 1. This price dropped to US \$ 0.8 in 2012, US\$ 0.7 in 2013, and US \$ 0.6 in 2014. The same as the shipping price, which greatly improves the competitiveness of the Yuxinou international railway trunk line(Zhong jingrui,02/25/2015).
- Compared with other transportation methods, the Yuxinou international railway has better stability and is not affected by the weather like sea transportation. In addition, railway transportation is a green and environmentally friendly transportation method, unlike ocean transportation, which easily causes crude oil to leak. Ocean pollution is not the same as air pollution caused by shipping. It is a more ideal way of freight transportation.

In addition, the Yuxinou international railway, as an international main railway line opened by Chongqing, has not been able to carry this big flag to organize the operation of Yuxinou international freight, so a number of countries jointly established Yuxin European (Chongqing) Logistics Company, which is an international logistics company, has a more advanced operation model, which optimizes the structure of Chongqing's logistics company, and also helps other local logistics companies to learn from.

3.3.3 *Improving Chongqing's trade status*

The opening of the BRI and Yuxinou international railways has greatly enhanced Chongqing's trade status, mainly reflected in the following points:

- Chongqing has thus become a domestic distribution center for export goods. Chongqing is the western leader of the Yangtze River Economic Belt, with convenient

transportation. On the one hand, Chongqing, which is located on the Yangtze River channel, has a natural inland port advantage. On the other hand, the rapid development of Chongqing's railways and high-speed railways has formed a railway network layout that runs through East China, Central China, and South China. This allows nationwide cargo to be transported. Conveniently gather in Chongqing; the goods gathered in Chongqing then go to Europe through the Yuxinou international railway.

- Chongqing has thus become a distribution center for inland imports. Chongqing was approved by the State Council as the first inland railway port and vehicle import port in China. A large number of imported goods were transported through Chongqing to all parts of the country.
- The status of Chongqing Customs has improved. The Yuxinou international railway adopts the "one customs clearance" policy (that is, the "Anzhi Trade" agreement), which stipulates that the goods will be loaded from Chongqing Customs until the end. As a result, Chongqing's trade status has also been greatly improved (Zhaohuan,2018).

Chongqing has increased its radiation to the world. The Yuxinou international railway takes Duisburg, Chongqing to Germany as a main line, and other countries and regions along the route as gathering points and distribution points, forming a "1 + N" distribution operation mode. "1" means the main line, "N" is the other areas along the line. At present, some areas have been opened as assembly points or distribution points, including Duisburg, Frankfurt, Cologne, Antwerp, Moscow, etc., cities such as Rotterdam will be opened, and major cities such as Paris, Stuttgart, Munich, Milan are also planning to open in. As a result, Chongqing has increased its radiating power to the regions along the Yuxinou international railway, and Chongqing is also expected to become a distribution center for European trade with China (Tuoweng,04/17/2018). The Yuxinou international railway helped Chongqing become an important city in the country's BRI strategy. Chongqing has actively expanded the scope of the Yuxinou international railway, extending it to the eastern coast of China and connecting the "21st century maritime "Silk Road", actively integrated into the BRI strategy, trade status has been improved.

3.4 Impact of the opening of the BRI and Yuxinou international railways on Chongqing's city construction

3.4.1 Changes in Chongqing's city positioning

Chongqing has laid the foundation for Chongqing's industry since the 1940s, before the War of Resistance Against Japan before the founding of the People's Republic of China, which greatly promoted the development of Chongqing's industry. Chongqing became the accompanying capital during the war. A large number of party, government, and military agencies, as well as cultural and educational departments, banks, factories, and enterprises moved into Chongqing. The number of industrial categories also increased rapidly, and major industries were greatly developed. In particular, the inland relocation of the arsenal has prompted Chongqing to become an industrial structure centered on munitions production and weapons, and dominated by metallurgy, machinery, shipbuilding, mining, textiles, and chemicals. After the end of the War of Resistance Against Japan, new China was founded. Due to the backward heavy industry at that time, the entire industry was unable to form a system due to the lack of support from heavy industry. The industrial structure determined the industrial strategy of giving priority to the development of heavy industry under the new socialist mass production needs. During this period, relying on the inland relocation of the previous factories, Chongqing became an important national production base for civil machinery, chemical industry, instrumentation, weapons, medicine, and industry. The status of the old industrial base.

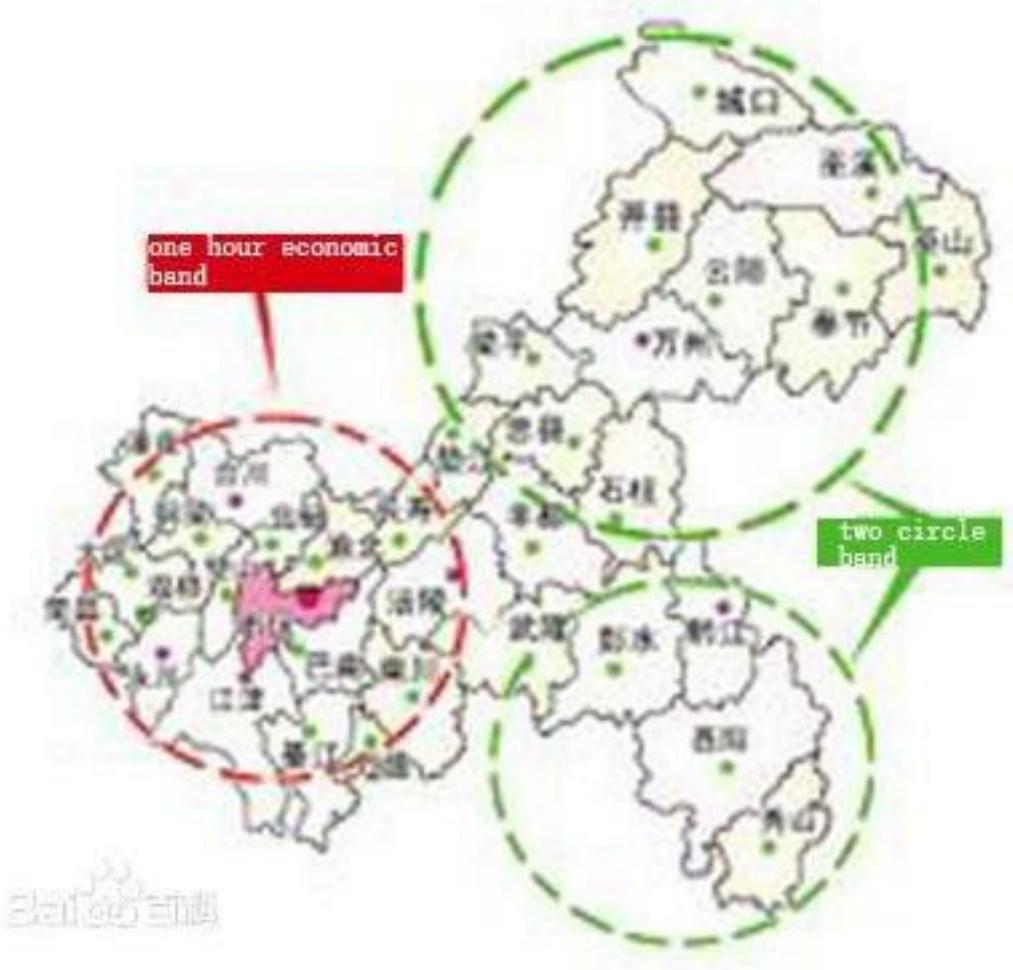
In summary, Chongqing has an excellent heavy industry heritage, and therefore the country has always positioned Chongqing as a heavy industry city. Until about 2010, due to the opening of the Yuxinou Railway and the proposal of BRI, the state changed Chongqing's position as a heavy industrial city since the founding of the People's Republic of China. It proposed to "primary industry as the foundation, secondary industry as the center, and the tertiary industry as the leader" model has made major adjustments to its original pillar industries, which are dominated by heavy industry. With the introduction of the "Twelfth Five-Year Plan", Chongqing's original heavy industry base city has also been adjusted to focus on high-tech secondary industries (computers, chip manufacturing and assembly, etc.);

finance, Internet, tourism, and service industries are supplemented. Make it as a national central city, and plan to build Chongqing into an international metropolis in 2030 (Ju Jianbing, 2017).

3.4.2 Changes in the overall planning of Chongqing

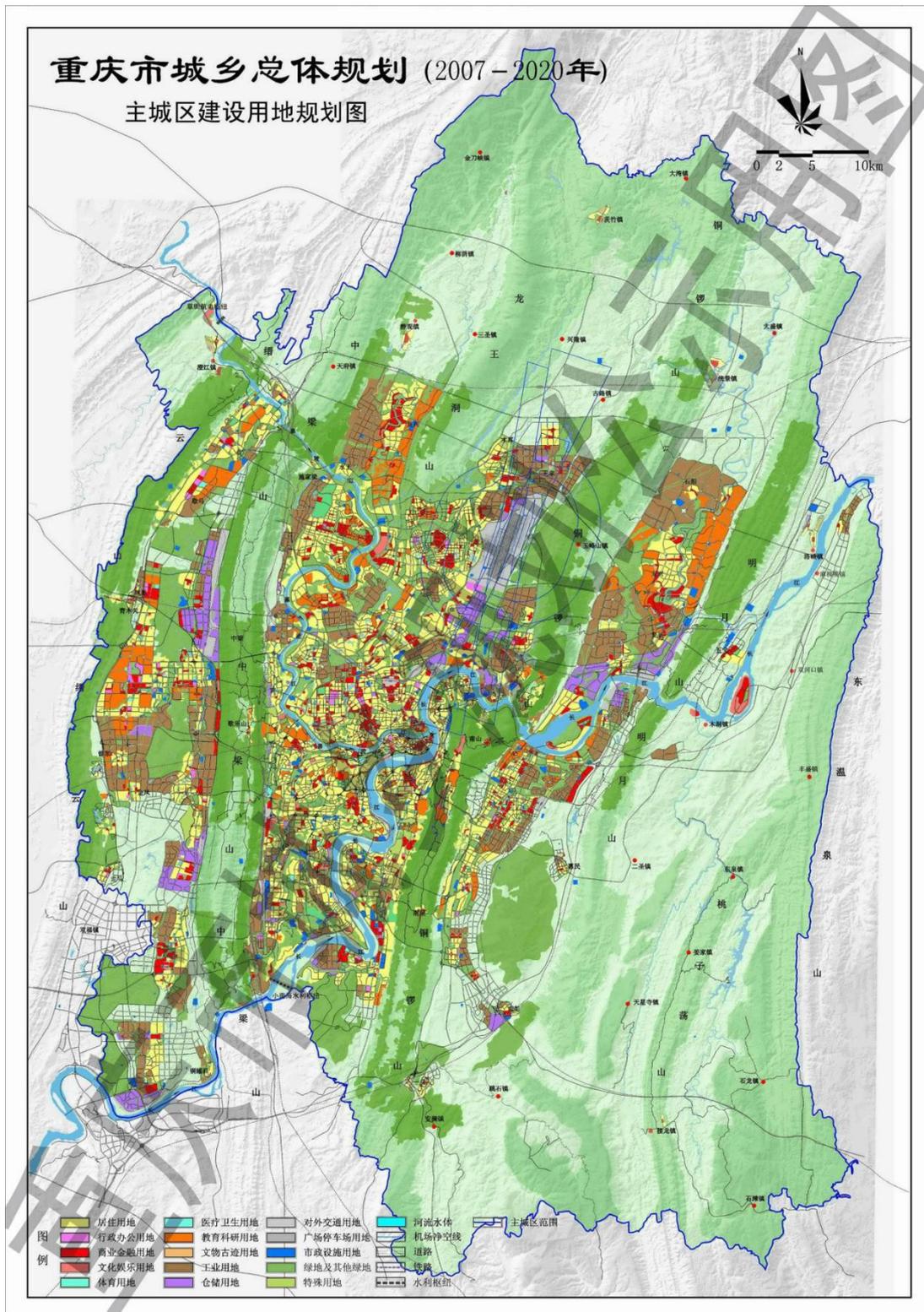
Due to the fundamental changes in the city's positioning, in the overall urban and rural planning of Chongqing (2007-2020), corresponding changes to the future urban planning of Chongqing have also been made. The regional spatial structure of "one circle, two wings" (Fig 3.15) was constructed. "One circle" refers to the one-hour economic circle, including the 6 districts of the main city and the 23 surrounding districts and counties, covering an area of approximately 28,700 square kilometers. Relying on the integrated transportation network of the Yangtze River system, railways, expressways, and airports, a network-type open regional spatial structure and urban layout system will be formed. "Two Wings" refers to the northeastern part of Chongqing with Wanzhou as the core and Kaixian and Fengjie as the nodes; the southeast area with Qianjiang as the core and Xiushan as the node, forming different belt-shaped development zones through the nodes and the core.

Fig 3.15-Map of one circle two wings



SOURCE:<https://baike.baidu.com/item/%E4%B8%80%E5%9C%88%E4%B8%A4%E7%BF%BC>

Fig 3.16-Materplan of metropolitan area



SOURCE:http://www.cq.gov.cn/zwgk/fdzdgnr/ghxx/qygh/202007/t20200702_7633998.html

At the same time, for the overall planning of the metropolitan (Fig 3.16) area: adjust the industrial structure in the central area, optimize the land use layout, vigorously develop the tertiary industry mainly based on finance, commerce, modern logistics and tourism in the urban tourist area, and take the relocation of Chongqing Iron and Steel Group as an opportunity to improve and Improve urban planning and functions; in the north, focus on the Northern New District, Cuntan Bonded Port and Jiangbei City Modern Business District to gather high-tech-led industries; in the south is the Tongluoshan area, which is based on exhibitions, commerce, and scientific research. The leading area also accepts some industries that have been transferred or relocated; the west is a key area for future expansion of the city, focusing on scientific research and education. The establishment of a university town and Xiyong Micro-electric Park as the main area to attract and gather population and industries, also Undertake some industries that are transferred or relocated; the eastern part is an important area for industrial expansion in the urban area. The construction of an area dominated by new tea gardens will attract and gather population and industries, and focus on improving the functions of the city.

3.5 Summary of this chapter

The opening of the BRI and “Yuxinou” international railways has a huge impact on Chongqing: first, it promotes the upgrading of Chongqing ’s traditional industries; second, it deepens Chongqing ’s economic and cultural exchanges in Europe; third is to promote the emergence of emerging trade industries; fourth is to improve Chongqing's transportation and logistics environment, and the fifth is to enhance Chongqing's trade status.

Through this chapter, the impact of the BRI and Yuxinou international railways on Chongqing, especially on Chongqing ’s trade, is studied. The next chapter will continue to analyze Chongqing trade under the background of the opening of the BRI and Yuxinou international railways.

4. The Study of Chongqing Trade Development Before and After the Opening of BRI and Yuxinou International Railways

4.1 Comparative study on the growth of trade volume

Chongqing has undergone a great leap in economic development since the reform and opening up, especially after it became a municipality directly under the Central Government. Foreign trade development has also changed rapidly. Especially in recent years, trade development has reached a new level. After the opening of the BRI and Yuxinou international railways, after the development of the country's foreign trade slowed down, Chongqing's total trade value increased from 12.42634 million USD in 2010 to 95.524 million USD in 2014, In the next four years, it has increased nearly 7 times, with an increase of 83.293 million US dollars, which is nearly 7 times the increase from 1987 to 2010. This shows that Chongqing's trade growth in recent years.

Table 4.1 Table of total export value of Chongqing and the whole country from 2001 to 2014
(unit: USD 100 million)

Year	ChongQing Area		Nationwide		Percentage
	Total value	Increase	Total value	Increase	Weight
2001	11.0248	-	2661.0	-	0.41%
2002	10.9119	-1.02%	3256.0	22.36%	0.34%
2003	15.8509	45.26%	4382.3	34.59%	0.36%
2004	20.9119	31.93%	5933.3	35.39%	0.35%
2005	25.2054	20.53%	7619.5	28.42%	0.33%
2006	33.5192	32.98%	9689.8	27.17%	0.35%
2007	45.0772	34.48%	12177.8	25.68%	0.37%
2008	57.2182	26.93%	14306.9	17.48%	0.40%
2009	42.8008	-25.20%	12016.1	-16.01%	0.36%
2010	74.8875	74.97%	15777.5	31.30%	0.47%
2011	198.3813	164.91%	18983.8	20.32%	1.05%
2012	385.7043	94.43%	20487.1	7.92%	1.88%
2013	467.9749	21.33%	22090.0	7.82%	2.12%
2014	634.0935	35.50%	23422.9	6.03%	2.71%
2015	551.8994	-12.96%	22734.7	-2.94%	2.43%
2016	406.9415	-26.27%	20976.3	-7.73%	1.94%
2017	425.9899	4.68%	22633.4	7.90%	1.88%
2018	513.771	20.61%	24866.8	9.87%	2.07%

SOURCE: Chongqing Statistical Yearbook, table made by writer.

According to Table 4.1, Chongqing's total trade value has shown an upward trend since 2001, and its growth rate after 2006 has exceeded the national average. After the opening of the Yuxinou international railway, especially in 2012, the country's trade development level is at a low-speed development period, falling below 10%, but Chongqing's trade development still maintains a high level. This shows that Chongqing's trade has been developing well in the past two years. The BRI and the Yuxinou international railway have promoted Chongqing's trade to a certain extent.

Secondly, it is also worth noting that in the past two years, Chongqing's exports have also become an increasingly important part of the country. Before 2010, the proportion of Chongqing's total trade value in the country did not change much, but from 2010, Chongqing's proportion increased from 0.47% to 2.71% in 2014. This data also reflects the rapid development of Chongqing's trade in the past two years.

Table 4.2 Total Import Value Table of Chongqing and the whole country from 2001 to 2014
(Unit: USD 100 million)

Year	ChongQing Area		Nationwide		Percentage
	Total value	Increase	Total value	Increase	Weight
2001	7.3136	-	2435.5	-	0.30%
2002	7.0282	-3.90%	2951.7	21.19%	0.24%
2003	10.0979	43.68%	4127.6	39.84%	0.24%
2004	17.6616	74.90%	5612.3	35.97%	0.31%
2005	17.7229	0.35%	6599.5	17.59%	0.27%
2006	21.1821	19.52%	7914.6	19.93%	0.27%
2007	29.3774	38.69%	9559.5	20.78%	0.31%
2008	37.9939	29.33%	11325.6	18.47%	0.34%
2009	34.2851	-9.76%	10059.2	-11.18%	0.34%
2010	49.3759	44.02%	13962.4	38.80%	0.35%
2011	93.7973	89.97%	17434.8	24.87%	0.54%
2012	146.3315	56.01%	18184.1	4.30%	0.80%
2013	219.0661	49.71%	19499.9	7.24%	1.12%
2014	320.4089	46.26%	19592.3	0.47%	1.64%
2015	192.8662	-39.81%	16795.6	-14.27%	1.15%
2016	220.771	14.47%	15879.2	-5.46%	1.39%
2017	240.0492	8.73%	18437.9	16.11%	1.30%
2018	276.6302	15.24%	21357.3	15.83%	1.30%

SOURCE: Chongqing Statistical Yearbook, table made by writer.

According to the import data in Table 4.2, similar to the export situation, the import value is also on the rise, and its share in the country has also increased in recent years. After 2012, the growth rate of national imports has decreased year by year, and the growth rate has dropped to 0.47% in 2014; however, Chongqing's import growth rate has been relatively stable and has maintained a relatively high level. It is worth noting that in the past two years, Chongqing's imports have increased more than exports. Under the premise of a gradual slowdown in export growth, import growth has remained at a relatively high speed and stable state, which reflects Chongqing's current degree of openness to some extent.

Combining Table 4.1 and Table 4.2, since the introduction of the BRI initiative in 2011 and the opening of the “Yuxinou” international railway, Chongqing's trade volume has maintained rapid development in the context of a slowdown in national foreign trade and overall economic growth.

4.2 Comparative study of trade structure

4.2.1 Export trade

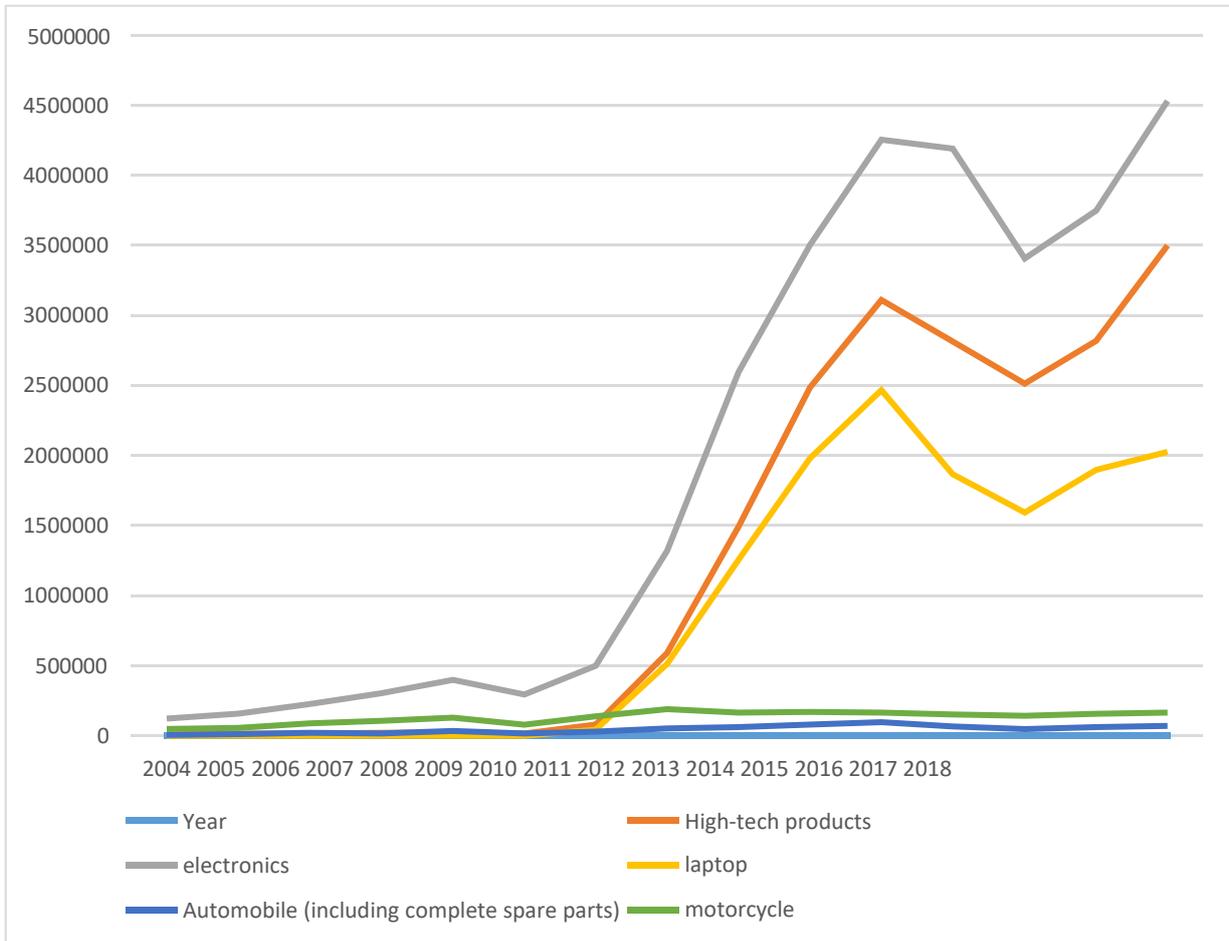
2011 was a watershed moment in Chongqing's trade structure. After 2011, after the introduction of the BRI and the opening of the “Yuxinou” international railway, Chongqing's trade structure has undergone a fundamental change compared to before. With the gradual decline of Chongqing's traditional superior trade, the opening of the Yuxinou international railway and the establishment of Chongqing's global laptop base, the export volume of high-tech products represented by portable computer products has increased significantly, occupying After half of Chongqing’s foreign trade, the trade structure has changed.

Table 4.3 Chongqing's Major Commodity Exports from 2004 to 2014 (Unit: USD 10,000)

Year	Automobile				Motorcycle
	High-tech products	electronics	laptop	(including complete spare parts)	
2004	9673	122540	-	6010	49609
2005	14802	156620	-	13144	58869
2006	15389	225868	-	22693	87594
2007	20199	302085	-	16197	106113
2008	23009	399772	-	33011	131335
2009	17719	293328	-	16548	81613
2010	79483	500241	44231	30882	141208
2011	589420	1319384	514506	52477	190358
2012	1493151	2595092	1254123	62062	165593
2013	2483624	3501691	1980908	78256	170175
2014	3108367	4253876	2465960	96880	167817
2015	2811966	4187740	1864302	66913	153964
2016	2512750	3403235	1591718	50189	143106
2017	2818149	3747561	1898231	60115	156717
2018	3498287	4529024	2025247	68907	167796

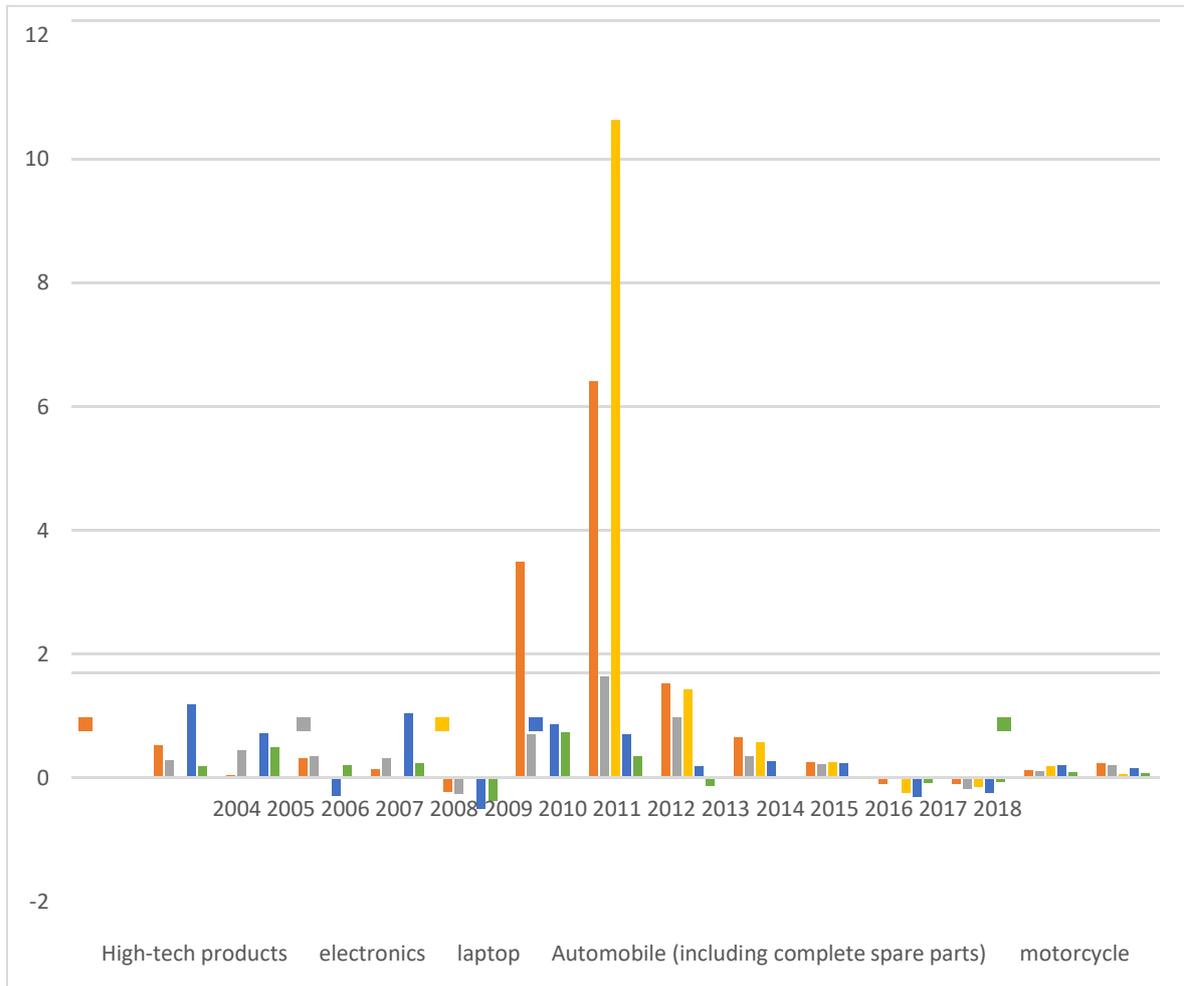
SOURCE: Chongqing Statistical Yearbook, table made by writer.

Figure 4.1 The curve of Chongqing's main commodities export volume from 2004 to 2018 (unit: USD 10,000)



SOURCE: Chongqing Statistical Yearbook, graph made by writer.

Figure 4.2 2005-2018 Chongqing's main commodity export growth curve



SOURCE: Chongqing Statistical Yearbook, graph made by writer.

The above three sets of data show:

- First, before the introduction of the BRI and the opening of the Yuxinou international railway, the export value of electromechanical products occupied an overwhelming advantage, among which motorcycle products were represented. From 2004 to 2010, Chongqing's motorcycle export volume was more than the total export volume of high-tech products, which shows the superiority of such products in Chongqing's export trade. After 2011, although the overall export of motorcycles is still at the domestic leading level, it can no longer be compared with laptop products. Although it has negative growth after 2014, the export base has been much larger than the

automobile and motorcycle industries.

- Second, before 2010, there was no statistical data on the export value of portable computers, and the total amount of high-tech products was relatively small. 2010 is the first year of Chongqing's opening of the laptop industry park, and from this year on, the export market share of high-tech products in Chongqing is increasing. In 2011, the growth rate of high-tech products reached 641.57%, of which the growth rate of export of portable computers reached 1063.22%, far exceeding other industries. Also in 2011, the export volume of portable computers exceeded the sum of exports of automobiles and motorcycles in the traditional trading industry and became a new export focus. In 2014, the export value of laptop products accounted for 38.89% of the city's total exports, becoming a new trade-leading product.
- Third, from the perspective of the growth rate of exports of different commodities, the growth rate has fluctuated. Before 2010, the growth rate of exports of different commodities was relatively stable, and the difference was not large; after 2010, the sudden rise of laptop computers and high-tech products surged.

4.2.2 *Import trade*

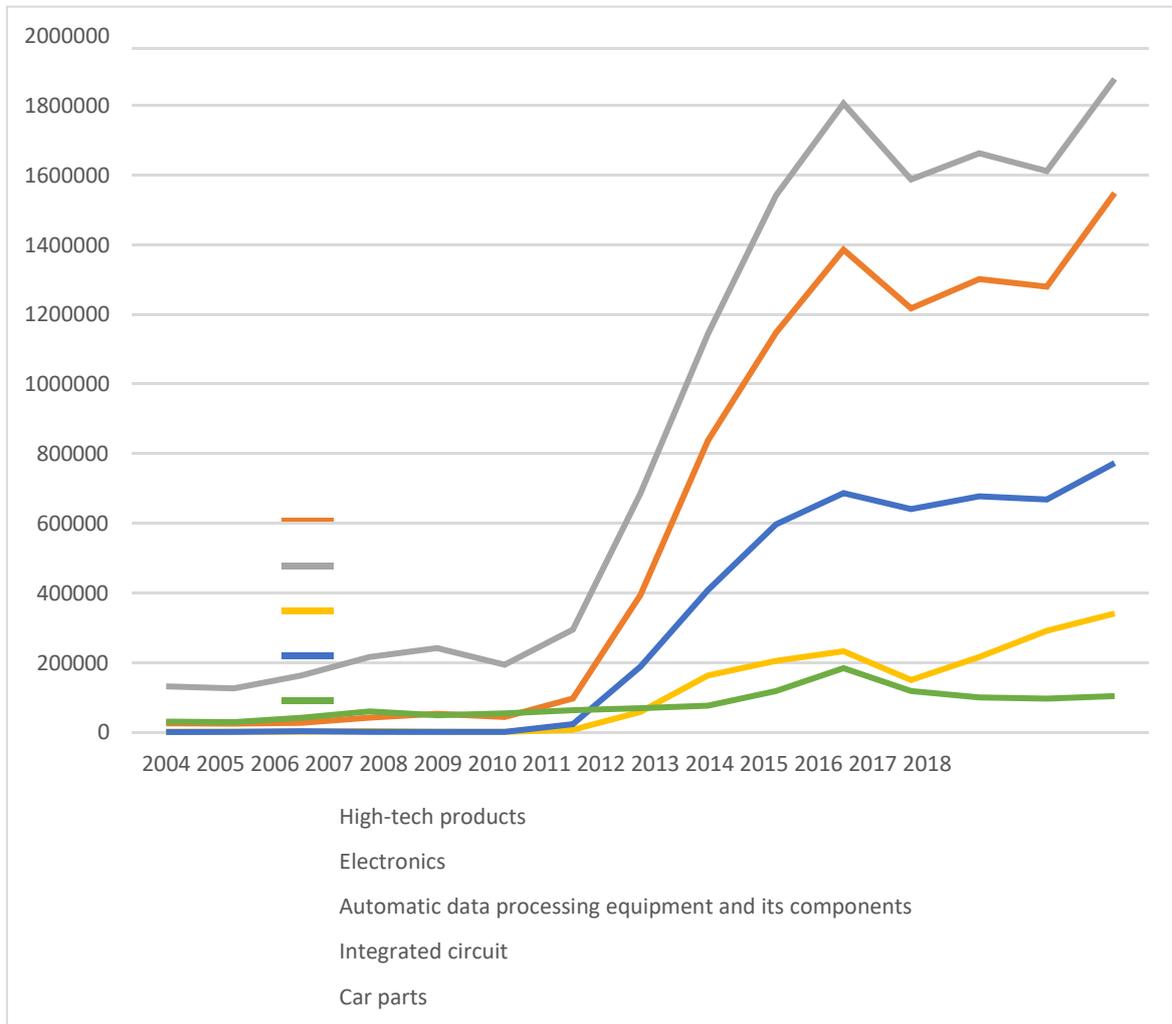
The following three sets of data show: First, the import value of electromechanical products in Chongqing's import market is unique, occupying an absolutely dominant position. However, the growth rate of high-tech products is the fastest. Second, the growth rate of the import value of these two types of commodities, such as automatic data processing equipment and its components, and integrated circuits, was not much different from that of other commodities before 2009. And other products, and so far (2018) still maintain a high import rate. This is due to the establishment of a laptop park and the production needs of mass-produced laptop computers. Taking into account the main import and export commodities of Chongqing, it can be seen that Chongqing's trade structure has changed a lot after the introduction of the BRI initiative and the opening of the "Yuxinou" international railway in the past: The main electromechanical products are now high-tech products mainly based on laptop products.

Table 4.4 Import Value of Major Commodities of Chongqing from 2004 to 2018 (Unit: USD 10,000)

Year	Automatic data processing equipment and its components				
	High-tech products	Electronics		Integrated circuit	Car parts
2004	24459	131620	1670	621	31046
2005	24266	125403	1432	730	28860
2006	27582	162895	1788	2117	42124
2007	41983	215913	2184	1689	59715
2008	51780	241833	1142	1301	48741
2009	43111	193038	747	1927	55117
2010	96936	294535	6409	23075	64280
2011	394184	685016	58302	187521	69234
2012	837347	1142848	161741	408043	76184
2013	1147623	1541492	204267	596848	119166
2014	1385412	1804994	232240	687305	184084
2015	1217132	1586759	150255	641856	119012
2016	1301355	1663309	215911	677792	100195
2017	1279977	1612058	291607	668668	97083
2018	1548509	1876402	340773	773030	104133

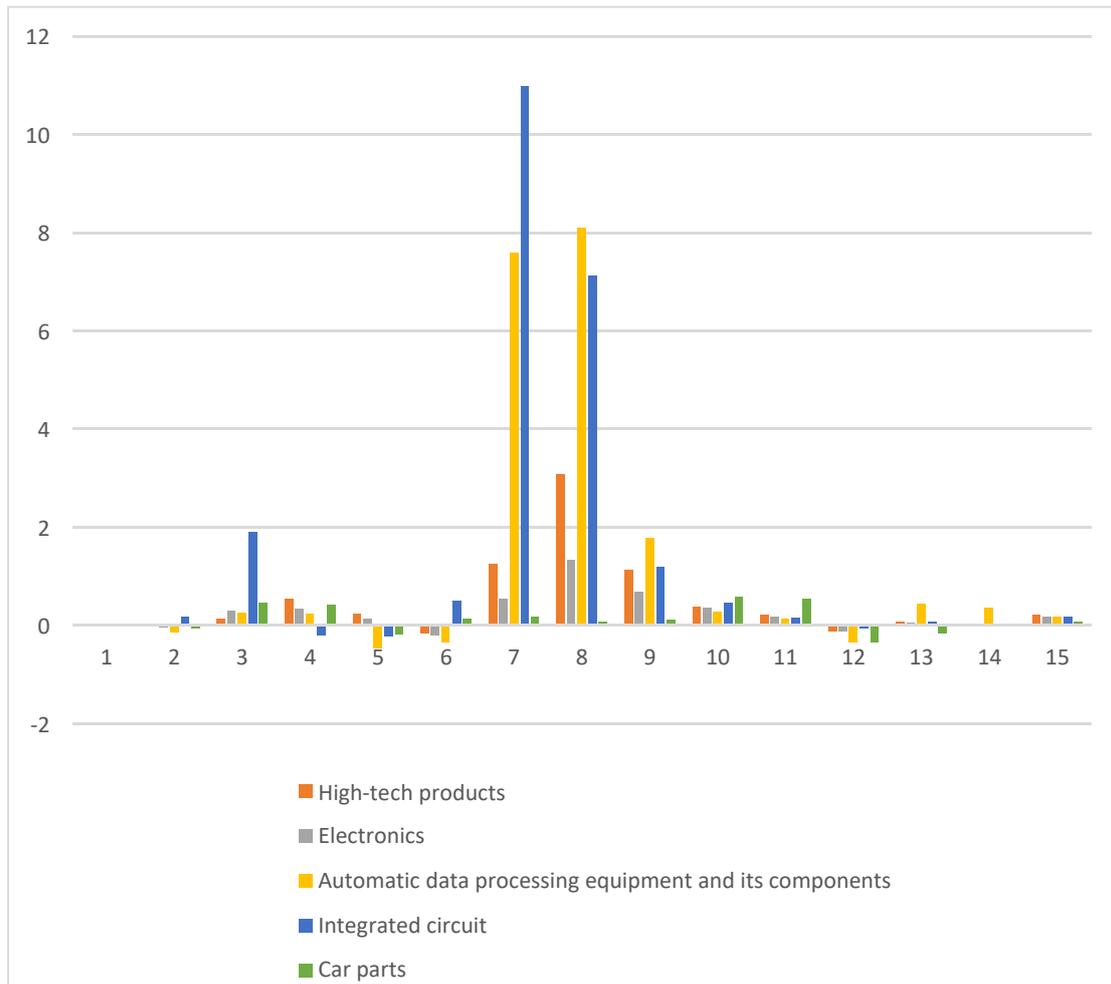
SOURCE: Chongqing Statistical Yearbook, table made by writer.

Figure 4.3 The curve of Chongqing's imports of major commodities from 2004 to 2018 (unit: USD 10,000)



SOURCE: Chongqing Statistical Yearbook, graph made by writer.

Figure 4.4 2004-2018 Chongqing's main commodity import value increase curve



SOURCE: Chongqing Statistical Yearbook, graph made by writer.

4.3 Summary of this chapter

This chapter studies Chongqing's foreign trade development through trade volume and trade structure. From the research, we can see that the overall development of Chongqing's trade is good, and the total volume is growing rapidly. In terms of time, 2011 was a turning point in Chongqing's trade. Prior to 2011, the electromechanical products in Chongqing's trade structure were absolutely dominant, and high-tech products accounted for less; after 2011, the status of high-tech products in Chongqing's trade structure became more and more important, laptop products have accounted for 40% of Chongqing's increased exports, and major trading products have undergone a fundamental transformation, and this situation

continued until 2018. It is also after 2011 that Chongqing's trade competitive advantage has become greater and greater, the economic development of Chongqing has become more dependent on trade, and the degree of openness of the Chongqing market has also increased. In 2011, the state proposed the BRI and the opening of the "Chongqing-European" international railway, which started the rapid development of Chongqing's high-tech industries represented by laptop products. As a result, the entire Chongqing trade pattern has undergone a fundamental transformation and trade development. Start entering a new era. In summary, Chongqing's trade is in a period of rapid trade development, with promising development prospects. The next chapter will make a SWOT analysis of Chongqing's trade development, and from this will generate a development tactical strategy to advise on Chongqing's trade development strategy.

5. Quantitative Analysis of Chongqing Trade SWOT under the Background of the Opening of BRI and Yuxinou International Railway

This thesis uses the SWOT analysis method to analyze the changes brought about by Chongqing's trade development by the Yuxinou Railway and the BRI. The first is to list the strength, weakness, opportunities and threats of the SWOT method. The advantage part uses the conclusions drawn from the analysis of Chongqing trade data in the first half of the thesis and the conclusions obtained from the literature and data; the disadvantages and opportunities part are It is mainly derived from the literature found, and the corresponding conclusions are obtained by synthesizing the conclusions of Chongqing trade articles, and apply them; the threat part is to restart trade articles and literature data through research, plus the author's own opinions, combined According to the current international situation. Then detail analyzes the strength, weakness, opportunities and threats of Chongqing's trade development. Use specific examples, data, policies and regulations to analyze each item in detail, so that each item is quite convincing. Finally, the author summarized the conclusions of Chongqing Trade SWOT analysis based on the above analysis and the author's opinion.

5.1 SWOT qualitative analysis of Chongqing's trade development

The SWOT analysis of Chongqing's trade development is shown in Table 5.1.

Table 5.1 SWOT analysis of Chongqing's trade development

	Internal conditions		External environment
	S1 The economy is developing well		
	S2 Port Economic Development		O1 Implementation of the BRI strategy
	S3 Complete logistics facilities		O2 Sino-Singapore project settled in Chongqing
Strength	S4 FDI is growing fast	Opportunity	
S		O	
	W1 Location Factor		
	W2 Loss of competitive advantage in traditional trading industry		T1 The impact of the European debt crisis T2 Impact of trade barriers
Weakness		Threaten	
	W3 Single trade structure		T3 suppression of China's trade by the United States hindered the development of Chongqing's trade
W		T	

5.1.1 *Strengths analysis*

The good development of Chongqing's economic environment has laid the foundation for Chongqing's trade development. As we all know, the economic development of a country or region has a clear positive correlation with foreign trade. In addition to the development of foreign trade development can promote economic development, a good economic development environment can also promote the further development of trade.

The GDP growth rate of Chongqing has been ahead of the national average since 2001, providing a good development environment for the development of Chongqing's trade. Especially in recent years, the national economic growth has slowed down. In 2015, the national GDP growth rate fell to below 7% for the first time. The entire economic development was in a downturn, but Chongqing's GDP growth rate remained above 10%, leading the country One of the most active regions in the domestic economy, this economic environment is conducive to the further development of Chongqing's foreign trade.

The vigorous development of the port economy is conducive to Chongqing's construction of an inland development highland. The port economy has a decisive influence on a country or region's foreign trade development. After the opening of the Yuxinou international railway, the starting point of the Tuanjie Village of Shapingba, Chongqing, passed the acceptance and was formally operated in 2014, becoming the third Chongqing to obtain the national opening qualification after the Cuntan Water Port and Jiangbei International Airport. Port. As a result, Chongqing has become the only city in China's 12 inland provinces with three ports of air, water and railway. The three "three-in-one" open platforms of water, iron and air, which function as hubs, ports and free trade zones, have been put into operation one after another. The port economy of Chongqing has undergone major development, Chongqing will further penetrate the international market and trade will be further developed.

The further improvement of logistics supporting facilities is conducive to Chongqing's trade development. Chongqing is located inland, and transportation has always been an important factor restricting the development of Chongqing's foreign trade. The traditional Chongqing trade and transportation methods include river-sea combined transportation, rail-sea combined transportation and air transportation. The former two take a long time, while the latter cost a lot. Both have certain problems. The opening of the Yuxinou international railway has neutralized the advantages and disadvantages of the previous transportation mode and

created a new logistics channel.

The opening of the Yuxinou international railway has created a new logistics channel for Chongqing's foreign trade development, which has alleviated the adverse effects of traffic restrictions on Chongqing's trade to a certain extent, and deepened Chongqing's links with the world, especially with Europe, Bringing new trade partners to Chongqing.

In addition to new logistics channels, with the opening of the Yuxinou international railway, Yuxinou (Chongqing) Logistics Company came into being. This logistics company is jointly established by many countries and is a relatively mature international logistics enterprise. Its operation and management model is beneficial to Chongqing's local international logistics enterprises for reference, thereby promoting the overall development of Chongqing's trade.

The rapid growth of FDI is also one of Chongqing's trade development advantages. International direct investment (FDI) has a far-reaching impact on a country or region's trade development. The promotion effect of FDI on trade is mainly manifested in: firstly, it is to expand the scale of trade and increase the total volume of trade; secondly, to improve the trade structure; and thirdly, the technical effects brought by FDI inflow will enhance export competitiveness. This shows that FDI's importance to regional trade is essential. Another advantage of Chongqing's development of foreign trade is that FDI has grown rapidly, leading the country and developed regions along the southeast coast. Although the growth rate of FDI in Chongqing has been relatively volatile in recent years, the overall growth rate is ahead of the national average and also ahead of some developed regions along the southeast coast. It is worth noting that Chongqing has had two highs in FDI growth in recent years, one in 2008 and one in 2011, of which 2011 was the year when the Yuxinou International Railway opened. All in all, Chongqing's strong FDI growth strength is also a major advantage for Chongqing's development of foreign trade (Chen Junhua, Analysis of the structure and countermeasures of foreign direct investment in Chongqing, Chinese scientific papers online Vol 29 No 3, 05/2013).

5.1.2 *Weaknesses analysis*

First, being located inland, the gap between its own trade base and the coastal area greatly hinders the development of Chongqing's trade. Compared with the superior shipping conditions in the southeast coastal area, developing foreign trade has a great disadvantage.

Even if the Yuxinou international railway has been opened to operation, this disadvantage cannot be eliminated. At the same time, since Chongqing developed foreign trade later than other economically developed regions, its own trade foundation is weak, and it also has a negative impact on the development of future trade.

Second, the loss of competitive advantage in labor-intensive products poses a threat to Chongqing's trade. Chongqing is a traditional industrial city, and the most famous export products are labor-intensive types such as cars and motorcycles. Products, but in recent years, the growth rate of the automobile and motorcycle industry has slowed down in recent years, especially the motorcycle industry, and there has been negative growth. This is mainly because Chongqing's automobile and motorcycle products are labor-intensive products with low added value. These products are transferred to countries and regions with lower labor costs as Chongqing's labor costs gradually increase, resulting in Chongqing's automobile and motorcycle industry. Development encountered some difficulties. The loss of competitive advantage of Chongqing's labor-intensive products has seriously hindered the development of Chongqing's foreign trade.

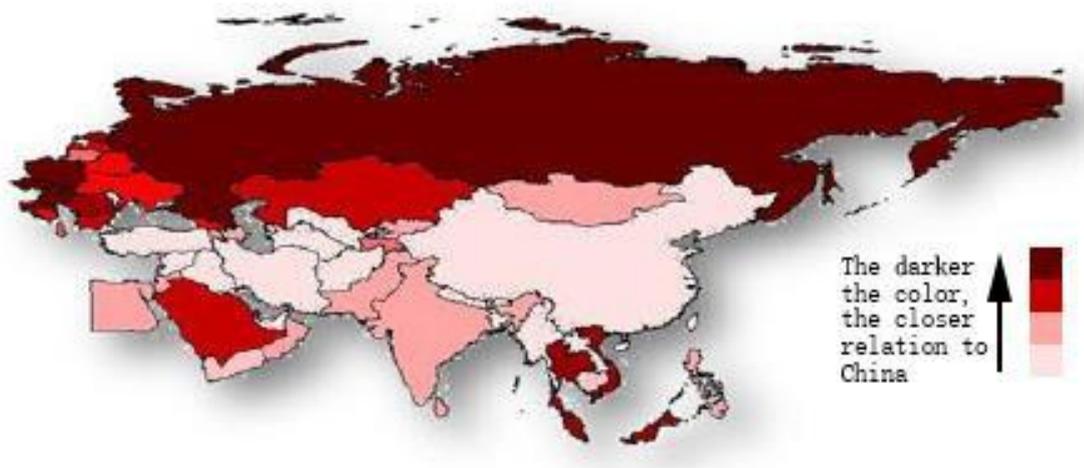
Third, the relatively simple industrial structure of export trade hinders the sustainable development of Chongqing's trade. The single structure of export trade is another reason for Chongqing's foreign trade development. Whether before or after the opening of the BRI and "Yuxinou" international railways, there is a problem in Chongqing's export trade structure, that is, over-reliance on the same type of products. After the opening of the international railway, it became more and more serious. In 2014, half of the products exported by Chongqing belonged to high-tech products, and four-fifths of high-tech products belonged to laptop products. It can be seen that Chongqing's current export trade relies heavily on laptop products, and the trade structure is too single. Such a trade structure is not conducive to the long-term development of Chongqing's trade, and has become another shortcoming of Chongqing's trade sustainable development.

5.1.3 Opportunities analysis

First, the BRI national strategy has brought historical opportunities to Chongqing's trade development. The BRI is a national top-level strategy and short for "Silk Road Economic Belt"

and “21st Century Maritime Silk Road”. The BRI economic belt involves 26 countries and regions, covering a population of 4.4 billion, accounting for 63% of the world; the economy is 21 trillion US dollars, accounting for 29% of the world; and exports of goods and services account for 23.9% of the world. Chongqing is an important strategic fulcrum of the Silk Road Economic Belt and the hinterland of the 21st Century Maritime Silk Road Industry, connecting the Yangtze River Economic Belt. Through the Yuxinou international railway and the Yangtze River shipping route, Chongqing has connected the Silk Road Economic Belt, the 21st Century Maritime Silk Road, and the Yangtze River Economic Belt in series, thus ushering in historic opportunities for Chongqing's foreign trade development. The following figure (Figure 5.1) is a schematic diagram of the trade complementarity between China and the BRI regions. The darker the region, the stronger the trade complementarity with China.

Figure 5.1 Schematic diagram of trade complementarity between China and surrounding areas



It can be clearly seen from the above figure that in the BRI economy, China's trade with Russia and Central and Eastern European countries is the most complementary, and trade with Russia and Central and Eastern European countries should be vigorously developed. The Yuxinou international railway runs through this trade belt and provides Chongqing with advantageous conditions for its foreign trade development.

Second, the settlement of the China-Singapore project in Chongqing will enhance Chongqing's

overall trade quality. In addition to the BRI national strategy, another historic opportunity for Chongqing's foreign trade development is the establishment of the third intergovernmental cooperation project between China and Singapore in Chongqing. The China-Singapore project will bring interconnected service trade and high-quality Singapore enterprises to Chongqing, and highlight cooperation in finance, aviation, logistics, and communications, which will help improve Chongqing's overall trade quality.

5.1.4 Threats analysis

First, the global economic downturn, especially the European debt crisis, has adversely affected Chongqing's trade. The current global economic environment is not ideal, affecting the development of the entire trade industry. Relevant data show that the trade volume in Europe continues to decline. As an important logistics channel for Chongqing to develop foreign trade, the Yuxinou international railway connects the European region, and the continuous "European debt crisis" in the European region has cast a shadow over the development of Chongqing's trade. The European debt crisis has seriously spread to the whole of Europe, and the economic development of the whole of Europe is not ideal. Although the European economy has recovered in recent times, the overall situation is still relatively low, which will inevitably affect trade with Chongqing.

Second, trade barriers hinder Chongqing's trade development. The global economic slowdown has made the European Union, ASEAN and other economies have added barriers to tariffs and thresholds, and these areas are the main trade targets of Chongqing. Continued tariff barriers are bound to have an adverse impact on Chongqing.

Third, the suppression of China's trade by the United States hindered the development of Chongqing's trade. The recent suppression of the Chinese economy by the United States, such as the implementation of a "sales ban" on China, maliciously raising tariffs, etc.

5.2 Summary of this chapter

This chapter analyzes the internal and external environment of Chongqing's foreign trade

development through the SWOT quantitative model, and draws conclusions: Chongqing's trade development has obvious external environmental advantages, and its internal advantages and disadvantages are equal; Trade should adopt a pioneering strategic approach, seize development opportunities, and be aggressive. In the next chapter, the thesis will start to study the changes of ChongQing's city plan influenced by Yuxinou railway and BRI.

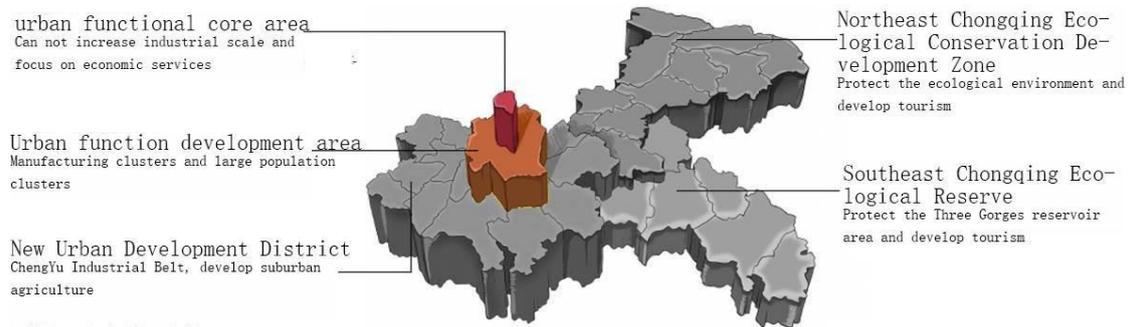
6. Changes on the Planning of Metropolitan City of ChongQing Before and After the Opening of BRI and Yuxinou International Railways

6.1 Study of Changes in Chongqing's Metropolitan City Planning and land use planning

6.11 Urban planning and form

The Chongqing Municipal Government proposed the main city land structure to form a "one city, five areas, twelve clusters" overall layout structure (Fig 6.1). Among them, "One City, Five Areas" is composed of five major areas: east, south, west, north, and central. The twelve clusters continue to maintain a "multi-center, cluster-style" layout structure, and together form an organic whole of urban spatial layout. From the actual development point of view, the clusters in the three areas of the main city, especially the Yuzhong cluster, Dayangshi cluster and Shapingba cluster have a clear tendency to merge, and the "multi-center" development model remains the same. Due to the city's own natural mountains and rivers, with the maintenance of the ecological corridors, the entire urban space has developed from a "small group" model to a large-scale "three districts, multiple centers, and large group" overall layout structure (Chongqing Urban and Rural Master Plan, 2007).

Figure 6.2 Chongqing's five functional areas



SOURCE:<http://gb.oversea.cnki.net/KCMS/detail/detailall.aspx?filename=1016704746.nh&dbcode=CDFD&dbname=CDFD2016>

Among them, the entire Yuzhong District, Dadukou District, Jiangbei District, Shapingba, Jiulongpo, Nan'an District and other areas within the inner ring are designated as urban functional core areas. This area is the city with the highest development intensity and is basically completely urbanized. Most of the urban industrial relics are also concentrated in this area. According to the planning requirements (Chongqing Historic and Cultural City Protection Plan, 2013), this area cannot add further more industrial sites, and shift to a service economy, gathering finance and insurance, R&D and design, cultural creativity, high-end business, e-commerce, boutique business, etc. In combination with the basic conditions of transformation and planning and positioning (Chongqing urban and rural master plan, brought out by the Chongqing municipal planning bureau and Chongqing municipal government), the transformation of the remaining industrial space is expected to develop into business core areas, urban industrial cultural tourism areas, creative complex areas, research and development science and education areas, tourist resort areas, modern logistics areas, sports and residential complex areas, and ecological industry demonstration areas (Fig 6.2).

The overall plan echoes the overall structure of "three districts, twelve groups", and clearly arranges the main urban functions of each district group. In actual work, with the changes in the development environment, the functional layout of each area group in the new version of the "General Regulations" has also been adjusted and optimized, mainly in:

- 1) The establishment and functioning of districts have undergone certain changes, such as

"Liangjiang New District"(Fig 6.3), "Chayuan New City"(Fig 6.4), "Xiyong New City"(Fig 6.5), etc., reflecting the improvement of the status of corresponding areas in the urban functional layout.

2) The construction standards of the urban sub-centers in the "one urban center, four urban sub-centers" determined in the overall plan will be greatly improved. Today, Guanyin Bridge (including the new archway) in the northern area, Nanping in the southern area, Shapingba and Dayangshi in the western area, the construction of four sub-central cities has been fully launched, especially the construction of roads, municipalities, and supporting facilities. With a certain scale, the structural system of the city's multi-level center has been further improved. At the same time, the urban functional areas of these sub-centers have basically assumed urban functions.

3) The transformation of modern industrial parks into comprehensive new urban areas, such as the Northern New District, the Tea Garden New District, the Xiyong Group, the Xipeng Group, and the Two Road Group all have greater development, the total amount of space expansion is huge, and the comprehensive life service functions have been significantly enhanced, Its functional positioning has also been improved (Table 6.1).

Figure 6.3 Liangjiang New District map (orange part)



SOURCE:<http://news.sohu.com/20100619/n272906764.shtml>

Figure 6.4 Chayuan New District map (inside red circle)



SOURCE:<https://j.17qq.com/article/qwvfnwgy.html>

Figure 6.5 Xiyong new city map (inside black line, darker cover area)



SOURCE:<https://j.17qq.com/article/swesqhx.html>

Table 6.1 Functions of twelve clusters in the urban area

Functional zoning of the master plan	main function	Current planning function partition	The main functions of the new master planning
Yuzhong cluster	The city's political, financial, commercial center and water and land passenger transportation hub	Yuzhong cluster	Municipal administrative office and commercial center; Jiefangbei area is an important part of the city center, undertaking the commercial and commercial functions of the central business district; Chaotianmen is a water passenger transportation hub.
Guanyinqian cluster	Develop finance, trade, and information industries, plan the new archway area as the long-term CBD of the city, and the Longtousi area as an external transportation hub	Guanyinqiao-Renhe cluster	The Jiangbei City area is an important part of the city center and mainly undertakes business functions; the Guanyinqiao-Xinpaifang area is the city's sub-center and the city-level administrative office concentrated; people and areas are part of the national high-tech development zone expansion zone; Longtousi area is a railway passenger transport hub; Cuntan area is a
Dashiba cluster	Develop tertiary industries such as finance, trade, culture, and high-tech incubation areas and administrative office areas of the city		

			waterway freight hub and container logistics base; Qiubao area is an export processing zone.
Nanping cluster	With the Chongqing Economic and Technological Development Zone as the main body, develop tertiary industries such as technology, finance, culture, commerce and tourism, and non-polluting technology-intensive industries	Nanping cluster	Sub-center of the city; recent municipal convention and exhibition center, municipal scientific research and education base, location of national economic and technological development zone; Danzishi riverside area is an integral part of the central business district and a supporting service area focusing on cultural and entertainment, tourism and leisure functions .
Danzishi cluster	Develop a processing industry that does not pollute the atmosphere		
Lijiatuo cluster	The south gate of the city, the development of machinery and textile industries	Lijiatuo-Yudong cluster	One of the modern manufacturing bases; Luohuang area is the energy base. (Including the original Yudong group)
Shuangbei cluster	Important machinery and metallurgical industrial zone	Shapingba cluster	City sub-center; municipal science, education and cultural center
Shapingba cluster	Technology and Cultural Center		
Dayangshi cluster	Sports center, high-tech industry development zone and machine industry concentrated area	Dayangshi cluster	Yangjiaping is the city's sub-center; Yuanjiagang is the municipal sports center; Shiqiaopu area is the resident of the national high-tech

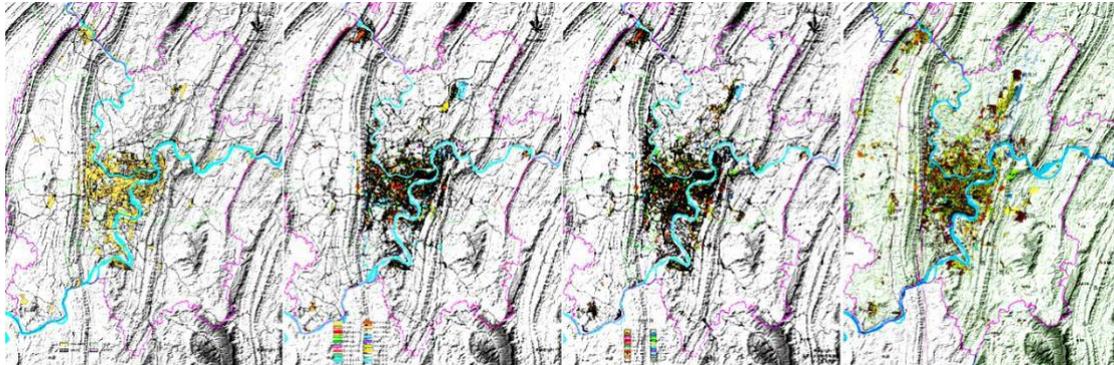
			development zone, focusing on high-tech industries.
Dadukou cluster	An important industrial zone dominated by metallurgy and building materials industry and the location of the Southwest Building Materials Wholesale Market	Dadukou cluster	One of the modern manufacturing bases, focusing on the development of new materials, machining, modern logistics and other industries
Zhongliang mountain cluster	Important industrial area and storage area		
Tangjiatuo cluster	Main port areas, focusing on the development of a processing industry that does not pollute the atmosphere and focuses on shipbuilding and repairing	Tangjiatuo cluster	Industrial expansion zone focusing on machinery manufacturing and processing

Source: According to the 98th edition and the new draft of the general regulations, the author organizes

Urban form

In terms of urban morphology, the overall plan determined the planning morphology to be "multi-center and cluster type", and the urban morphology and pattern basically maintained the overall planning morphology. As the scale of traffic development expanded, clusters showed a trend of adhesion and consolidation. Since the establishment of the Northern New District, along with the northern Jinkai Avenue, the construction of Longtousi Railway Station and the expansion of Jiangbei International Airport, the northern area has become a hot spot for urban construction. With the opening of Yu-Qian Expressway and Century Avenue in the eastern tea garden and Changsheng area, the development of the eastern area has been promoted. The construction of the Western University Town has promoted the development of the western area. The urban clusters stretched out along the traffic lines, and the trend of "moving north, advancing east, and expanding west" was obvious (Fig 6.6).

Figure 6.6 The Built-up urban area of main city



2006 city area

2011 city area

2015 city area

2017 city area

SOURCE: Over the years, the overall planning of Chongqing City, compiled by the author

6.12 *Change of City land use planning*

The land layout of the main city has been optimized. From the current construction land structure, the proportion of residential land in the main city is relatively high. Industrial land in the main urban area is showing a decreasing trend year by year. If we compare the urban planning in 2007 and 2015 (Fig 6.7), in the urban land planning of Chongqing in 2007, a large number of scattered industrial areas were distributed in the urban area. These industrial areas were small in area and lacked contact with each other. The surrounding land was already occupied by the city. Surrounded by commerce, it is difficult to have greater development in the future. In the 2015 plan for the expansion of Chongqing's urban area, there is basically no industrial land in the central area, and a large amount of industrial land is set up on the periphery of the city, forming a large cluster industrial park. The total amount of construction land used in the peripheral clusters has increased significantly, but the overall structure is still maintained. Due to the rapid development of the real estate market in recent years, the proportion of residential land has increased to a certain extent, but the proportion of land for public facilities, land for roads and squares, and green space related to the quality of the living environment is obviously low (table 6.2).

Figure 6.7 Comparing the 2007 and 2015 urban master plans, industrial land has expanded to the periphery of the city, and there is basically no industrial land in the central area of the city



SOURCE:<http://cdmd.cnki.com.cn/Article/CDMD-10611-1014045513.htm>

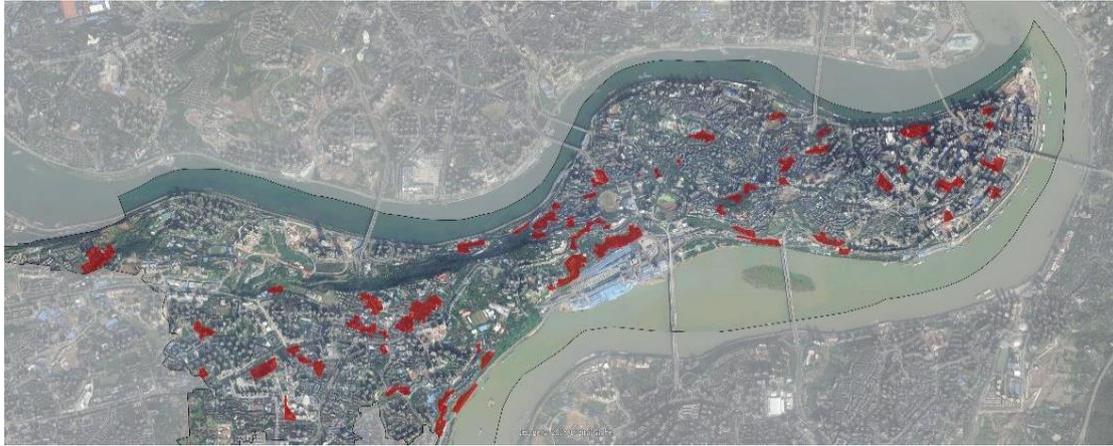
Table 6.2 Statistical Table of Land Use Indicators of Built-up Areas in 2006, 2011, 2017

Land name	2006		2011		2017	
	Area (ha)	proportion(%)	Area (ha)	proportion(%)	Area (ha)	proportion(%)
Residential land	11164.11	37.10	15659.27	39.44	26162.7	22.46
Land for public facilities	3460.14	11.50	4306.1	10.85	11272.93	9.68
Industrial land	6616.16	21.99	8181.86	20.61	18314.21	15.73
Storage land	595.89	1.98	568.35	1.43	2768.15	2.38
Diplomatically	2217.25	7.37	960.01	2.42	1330.65	1.14
Road square land	2663.91	8.85	6072.73	15.30	26357.71	22.63
Land for municipal facilities	633.87	2.11	672.44	1.69	1896.51	1.63
Green land	1763.69	5.86	2336.1	5.88	11027.85	9.47
Special land	974.4	3.24	944.36	2.38	1006	0.85
Urban construction land	30089.42	100	39701.22	100	116460.97	100

SOURCE:Text data of Chongqing Planning Bureau and general plan, compiled by the author

6.2 Study on the Replanning and Reconstruction of the Old City in the Metropolitan area of Chongqing

Figure 6.8 Distribution of plots for shantytown reconstruction in Yuzhong District (red parts)



SOURCE:http://zfcxjw.cq.gov.cn/zwgk_166/fdzdgknr/zcwj/xzxfwj/202004/t20200403_6969758.html

Figure 6.9 Old residential and office buildings in Linjiangmen, Yuzhong District



SOURCE:<http://www.cqslyw.com/newsview.php?id=79381>

In 2008, Chongqing began to renovate dilapidated houses and shanty towns in the main city, and planned to complete the old city renovation project in three to five years. Take Yuzhong District as an example, it plans to initiate the demolition and renovation of 24 old house renovation projects. The specific work plan is to determine the overall scale and red line of demolition of the dilapidated house renovation area, and generate a large number of shantytown renovation plots (Fig 6.8). After investigation and verification of the

reconstructed land, combined with the functional positioning of the main city area and the control detailed planning study, the old houses, dilapidated houses and "village in the city" dilapidated houses were demolished and reconstructed (Fig 6.9).

Figure 6.10 Jialing West Village after renovation



SOURCE:http://www.hsfwest.com/ch/reader/view_abstract.aspx?file_no=2013005013&flag=1

Figure 6.11 Nanyuan road after facade reconstruction

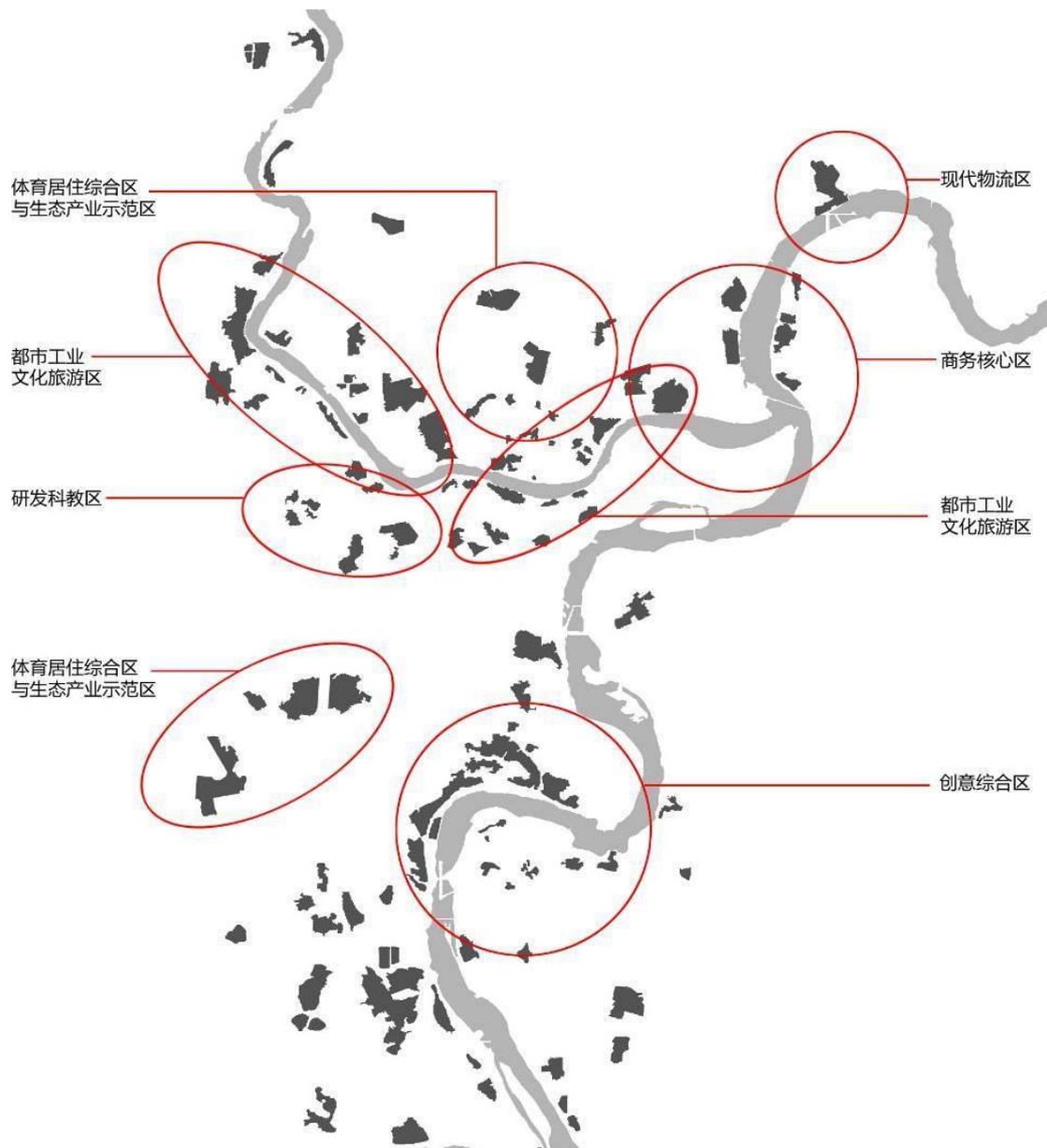


SOURCE:<https://cq.qq.com/a/20200119/008826.htm>

Subsequently, starting in 2009, Chongqing started a larger-scale round of “comprehensive renovation” of urban arterial roads and communities in conjunction with the renovation of dilapidated houses. Renovate the facades of main urban roads and existing blocks and renovate the landscape environment to enhance the image of the city and improve the urban space environment of the old city. This kind of old city landscaping renovation method focuses on the improvement of urban space and the materiality of building facades, and the improvement of environmental quality has improved the residents' sense of community identity to a certain extent (Fig 6.10, Fig 6.11).

At the same time, the re-planning and construction of the remaining industrial space that has been demolished in the city is carried out to achieve "less push, more use", and maximize the urban landscape effect of the old industrial space. Develop the old industrial space into a multi-dimensional comprehensive space that can be used by people, integrating landscape, culture and commerce (Fig 6.12).

Figure 6.12 Planning and distribution of Chongqing's legacy industrial space's transformation zone



SOURCE:<http://cdmd.cnki.com.cn/Article/CDMD-10475-1019195685.htm>

In general, for urban renewal, it is no longer driven by pure economic goals, and is no longer limited to simple demolition and construction, rough and simple transformation methods. Through continuous reflection and exploration, it has gradually entered the existing urban space and architecture. Although urban beautification campaigns such as facade renovation and street renovation have achieved different results, the renewal methods have begun to

diversify. The comprehensive renovation and renovation of the community combining street greening, municipal facilities, advertising, and shop recruitment has achieved certain effects in some areas. Urban renewal research and practice on the scale of streets or communities.

6.3 Research on the establishment of urban new cities (satellite cities)

The opening of the Yuxinou Railway and the proposal of BRI, the gradual implementation of the twelve five-year plans, and the improvement of the western development strategy have caused a fundamental change in Chongqing's urban positioning and urban scale. Under these guidances, according to actual land use conditions and other factors, a reasonable scale of development and urban functions is determined through the establishment of satellite cities (new towns, Table 6.3). Its construction goal is to complement each other with the central city, and each has its own characteristics in terms of urban functions, urban form, and development conditions. A relatively complete and independent city with central agglomeration and self-growth. In the future urban development, the new city will take on the function of dispersing the population in the central city, gathering new industries, and driving the large-scale development of the region. The development strategy of the new city is to accelerate the development of both sides of the metropolitan area while realizing the northward expansion of the central city. The recent construction focus will be on the development of the new city west of Zhongliangshan and the new city east of Tongluoshan through high-quality, construct various public service facilities of the new city with high standards, increase the attractiveness of the new city, and promote the development of the new city; guide the labor force to the new city area, more efficiently allocate resources and made the new cities have better coordinate of Regional development.

Table 6.3 The contrast table of new towns in Chongqing's metropolitan area

	Functional positioning	Land scale (2020) Km ²	Population size (10,000 people)
West New Town	Modern science and education new city, dominated by education technology industry and logistics industry, low water consumption, low pollution high-tech industry, processing industry, leisure and holiday tourism service industry and other industries; the city's sub-center.	80	70
East New Town	New concept commercial area, exhibition area, business office area, cultural and sports area, tourist resort area, administrative office area, industrial development gathering area and water transportation port area,	42	40.5

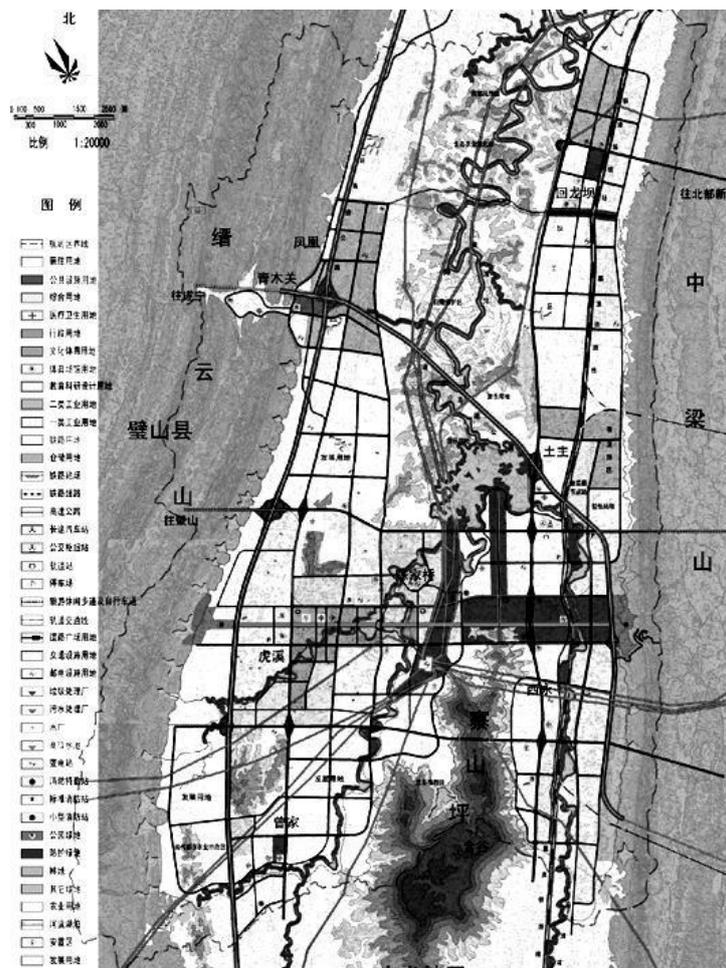
	information exchange and technological innovation area, ecological residential area; urban sub-center.		
Caijia New Town	One of the important industrial bases in the northern part of the main city, dominated by high-tech and modern manufacturing, and developed in conjunction with the northern new district, a modern new city with coordinated development of production, life and ecology	35	30~35

SOURCE:Chongqing Urban Master Plan 2005~2020, the development conceptual plan of the Caijia Group in the main urban area of Chongqing, the overall development conceptual plan of the Yuzui Group in the main urban area of Chongqing, the conceptual plan of the Western New Town in Chongqing; edited by the author

6.31 West New Town

The Western New City of Chongqing is located in a vast area of nearly 220 square kilometers between Zhongliang Mountain and Jinyun Mountain. It is adjacent to Bishan and Beibei. The new city includes eight towns including Xiyong, Tuzhu, Chenjiaqiao, and Huxi. 180,000 people. In the 1996 city master plan, Xiyong was planned as one of the 11 peripheral clusters. The city was defined as a transportation hub in the western part of the metropolitan area. The peripheral cluster focused on the development of low-consumption, light-polluting industries, large markets and warehouses, with a development scale of 15 square meters. Kilometers, 180,000 people.

Figure 6.13 The urban plan of West New Town in Chongqing



SOURCE: <http://www.cq.xinhuanet.com/2018/rcft/index.htm>

Through comprehensive consideration of the actual urban development situation, appropriate adjustments were made to the nature and scale of the new western city. The city will be built into a modern science and education city with beautiful environment, complete functions and distinctive features, and an important part of the main city expansion area. The city will be led by education technology industry and logistics industry, and vigorously develop low water consumption and low pollution high technology Industries and export-oriented processing industries, leisure and holiday tourism service industries. The new western city, planned recently (2003-2007), has a population of 290,000 people with a land scale of 29 square kilometers; by 2020, the city's population will be 700,000, and the land will be about 80 square kilometers; the urban prospective population is controlled within 1 million, and the land scale is about 120 square kilometers (Fig 6.13) (Detailed Explanation of the Planning of Western New Town in Chongqing, 2002).

The new city mainly has five functional zones, namely: Chongqing University Town with 20 square kilometers; Tertiary Industry Service Center and Central Business District with 10 square kilometers; Xiyong Science and Technology Industrial Park with 14 square kilometers supporting the University Town; 15 square kilometers of Tuzhu Modern Logistics Park (including Southwest Railway Marshalling Station, Chongqing Railway Container Network Node Station, and supporting storage areas and processing industrial areas) 10 square kilometers of tourist sightseeing areas (including artificial lakes, golf courses), Fairy Tale World Theme Park and Egret Reserve).

Figure 6.14 The overall urban design of Chongqing University City



SOURCE:<http://ghzrzyj.cq.gov.cn/>

With the revised "Chongqing City Master Plan (2005-2020)", the main directions of urban development are determined to be north of the Inner Ring Road, west of Zhongliang Mountain and east of Tongluo Mountain. The center also has multiple functions such as a university town, a logistics park, a high-tech industrial park, and a comprehensive new urban area. The central area of the University Town and the Xiyong-Tuzhu Central Area, as the carrier of the sub-center of the Xiyong City, will jointly assume the central function of the Western New City. In 2005, the Chongqing Municipal Planning Bureau organized an international bidding for the "Overall Urban Design of Chongqing University Town" and passed the review. It provided substantive guidance for further improving the urban functions of the new western city and pointed out the direction for the construction of the new city center (Fig 6.14).

The university city in the new city is located in the central area of the western new city, between Zhongliang Mountain, Jinyun Mountain and the northern foot of Zhaishanping, covering an area of 20 square kilometers. It will be the largest gathering area for higher education and scientific research in Chongqing in the future, and it is also an important platform for improving the strength and development level of universities in the city, and giving play to the advantages of the science and education industry. It is planned to settle in

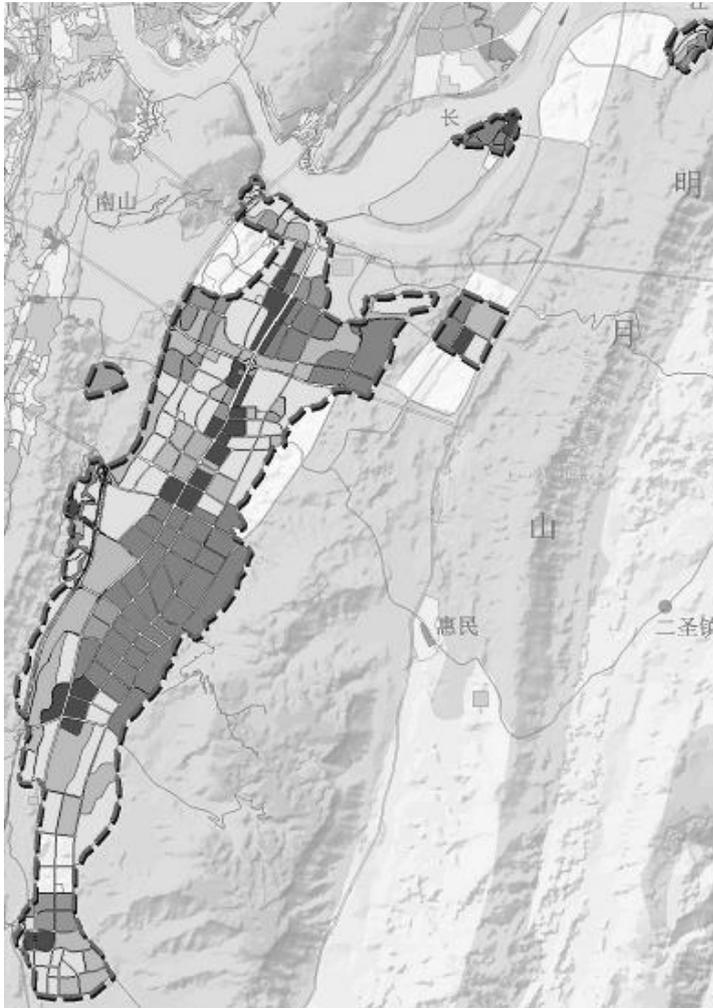
6-10 universities, and the number of teachers and students will be 150-200,000. It mainly includes urban resource sharing area, university campus area, student residential area, teacher residential area, and concentrated R&D incubation area.

With the start of construction of the University Town in June 2003, it has greatly promoted the development of related industries around it. At present, a large number of high-tech R&D industries have quickly gathered in the surrounding areas of the university town. The Xiyong Microelectronics Industrial Park has broken ground, and the Xiangyu Railway Container Node Station construction project is about to start construction in the nearby Tuzhu Town, with the container node station as the center. A large-scale logistics park will be formed, and Chongqing University Town and surrounding areas have shown a trend of vigorous development. The University Town has been regarded as a key project of Chongqing's recent development and construction, and will become a landmark area to showcase the modern image of Chongqing.

6.32 *East New Town*

Most of Chongqing's Eastern New City is located in the east of Chongqing's central city, south of the Yangtze River. The area between Tongluo Mountain and Mingyue Mountain is across the river from Yuzui New City. There is a shallow hilly landform in the area, and the land is open, and there is a large space for expansion of construction land.

Figure 6.15 The urban plan of East New Town in Chongqing



SOURCE:<http://ghzrzyj.cq.gov.cn/>

The Eastern New City is the bridgehead of Chongqing facing the Yangtze River Economic Belt and the most dynamic area in Chongqing in the future. Also, it is an important industrial center in the city, a livable green city. (Planning and Design of the Sub-center of Chongqing Tea Garden City-Eastern New City Positioning, Chongqing Municipal Planning Bureau, 2009) In the new round of urban master planning, the mid-level positioning of the Eastern New City is Chongqing's comprehensive commercial and entertainment district, serving the eastern part of Chongqing. The office area of Nan'an District, the administrative office area of Nan'an District, the technological innovation and information exchange area, the eastern industrial development gathering area, the cultural and sports area, the urban tourism and vacation

area, the residential area that interprets the new concept of Chongqing residence, the exhibition area that serves the whole city, and the water transportation port District, industrial zone. (2000-2020 Chongqing Municipal Master Planning Outline, Chongqing Municipal Planning Bureau, 2001) Eastern New City 2020 will be developed to 405,000 people, and the land scale will reach 42 square kilometers. (Fig 6.15)

The urban spatial structure of the eastern new city is a belt-shaped multi-center and multi-cluster model. From north to south, there are the municipal exhibition center, the eastern new city complex (tea garden sub-center), the industrial service center and the Jieshi logistics center.

Figure 6.16 The urban design of East New Town Center in Chongqing



SOURCE:<http://ghzrzyj.cq.gov.cn/>

The Eastern New Town Comprehensive District and the Western New Town are two newly added urban sub-centers in the new round of urban master planning, which will make up for the lack of services provided by the central area of the city to each area of the city, optimize the urban spatial structure, and reduce the pressure on the central area. In 2005, "Chongqing

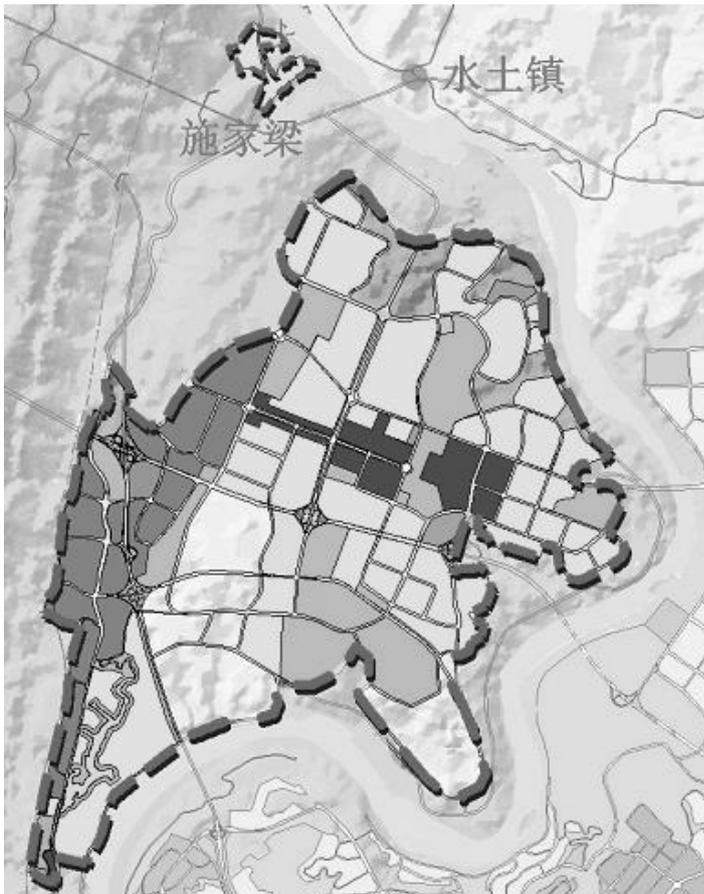
City Tea Garden Urban Sub-center Planning and Design" passed the review. The planning and design made a rational analysis of the spatial layout, construction strategy, transportation strategy and image strategy of the comprehensive area, and pointed out the direction for the development of the district. The tea garden sub-center will make full use of the existing mountains and rivers to create an open space system, and organize the spatial layout of the city center with open space as the leading and TOD model as the guide. (Chongqing Eastern New Town Planning, Chongqing Planning Bureau, 2009) (Fig 6.16).

As a key area of Chongqing's recent development, the Eastern New City has become a new industrial base with a certain scale in Chongqing. The rapid development of the secondary industry has greatly promoted the development of the tertiary industry, and the real estate industry and various service industries have settled in the Eastern New City. The construction of urban public infrastructure has also been carried out on a large scale, providing strong support for the formation of the tea garden city sub-center, and successfully realized the transformation from an industrial park to a comprehensive new city.

6.33 *Caijia New Town*

Caijia New City is located in the southern part of Beibei District, Chongqing, bordered by Jialing River in the east, 212 National Highway and Yuhe Expressway in the west, and faces the northern new district across the river. It is 16 kilometers away from Beibei City and 35 kilometers away from Chongqing's downtown area. The new city is located at the syncline axis of the lighthouse and its spread area, high in the east and low in the west, and the terrain is relatively flat.

Figure 6.17 The urban plan of Caijia New Town in Chongqing



SOURCE:<http://ghzrzyj.cq.gov.cn/>

Caijia New City will be planned and developed into the north of Chongqing's main urban area on the basis of the current Caijiagang Town in Beibei District. It will be an important industrial base of the Ministry of Science and Technology, a modern new city with a coordinated development of production, life and ecology, dominated by high-tech and modern manufacturing, and developed in conjunction with the Northern New District. The urban land scale of the new city in 2020 will be 35 square kilometers, and the population will reach 300 to 350,000. Combining the natural terrain conditions, the new city will form its own structure, namely: a commercial and residential center with five different functional areas. Concentrate on urban construction in the relatively flat terrain in the central area to form the central urban area of the new city in the future, focusing on the development of commercial and residential areas; on five terraces and hills with different elevations, planning industrial areas, high-end residential areas, and comprehensive development areas respectively, sports

and leisure area and five different functional areas in the industrial development area; green space combined with natural valleys wedged into the center of each area (Fig 6.17).

6.4 Summary of this chapter

This chapter introduces the development of Chongqing's urban planning under multiple factors such as the opening of the Yuxinou Railway, the BRI proposal, and the others. Through the overall changes in Chongqing's urban planning and the renovation of the old city etc., a series of measures have confirmed the impact of the above actions on Chongqing's urban planning and the promotion of Chongqing's urban development. The next chapter will use specific case study to show the planning changes of Chongqing in different specific regions under the influence of the opening of the BRI and Yuxinou Railway.

7. Three case Studies within the Metropolitan City of ChongQing

7.1 Planning of the remaining land after the relocation of Chongqing Iron and Steel Co., Ltd.

7.11 The history and current situation of the factory

Chongqing Iron and Steel (Group) Co., Ltd. is a large-scale steel conglomerate with a history of one hundred years. Its predecessor was the Hanyang Iron Factory founded by Governor Zhang Zhidong of Huguang during the Westernization Movement in 1890. It was founded by Governor Zhang Zhidong of Huguang on September 6, 1890. Three years later, all projects were completed. It was the earliest and largest in Asia at that time. Steel Plant. During the Anti-Japanese War, Hanyang Iron Works established the "Steel Plant Relocation Committee" and moved to Chongqing. At that time, the choice of site layout was to have large rivers for easy transportation; secondly, mountains for easy concealment ("Chonggang Yearbook", 2004). The factory in the Republic of China was called the "29th Arsenal" and it was still the largest iron and steel company in the southwest at that time. On December 6, 1949, the Chongqing Military Control Commission of the Chinese People's Liberation Army sent 6 officers with representatives take over. When Comrade Deng Xiaoping was in charge of the Southwest Bureau, he decided to build the Chengdu-Chongqing Railway to promote the recovery and development of Chongqing's economy, which was a waste of time (Baidubaike,2012). The heavy steel 100-ton blast furnace that was destroyed during the war was finally restored and rolled out of Chinese history. The first heavy rail produced by ourselves was laid on the roadbed of the Chengdu-Chongqing Railway. On March 1, 1951, it was renamed "The 101st Plant of the Southwestern Ministry of Industry"(Fig 7.1), and in 1955 it was renamed Chongqing Iron and Steel Company again.

Figure 7.1 Overall view of the heavy steel plant (101 plant) in 1949



SOURCE:<http://eng.oversea.cnki.net/kns55/>

Figure 7.2 Chongqing Iron & Steel's plant layout plan in the 1980s



SOURCE:<http://nianjian.xiaze.com/down/2011/zgnj-2004.html>

Since the establishment of the plant, Chongqing Iron & Steel has profoundly affected the development of the surrounding urban space. The Dadukou District was built in 1965 to serve Chongqing Iron & Steel. Since 1980(Fig 7.2), Chongqing Iron & Steel began to face the problem of aging and obsolete equipment, with dilapidated factories in the industrial zone,

low production capacity, obsolete equipment, backward technology, and slow development (Wen Yongyao, 2008.). According to statistics in 1994, there were about 20,000 idle employees in Chongqing Iron & Steel Co., Ltd., and 18,000 retired and retired employees. The burden on the enterprise is heavy. Dadukou is dependent on the lips and teeth of heavy steel. Heavy steel contributes most of the tax revenue to the Dadukou area, and its pollution and over-prominent heavy industry have also restricted the development of the urban space in the Dadukou area to a certain extent. "Backward, obsolete and polluted" are synonymous with the image of urban space that has long accompanied the development of heavy industry in Dadukou District. Whether to develop heavy steel or to improve the development of urban space suitable for life has already plunged urban planning into a dilemma.

The total production area of the heavy steel plant area is 6.07 square kilometers, of which the factory area is 2.64 square kilometers. It is planned on the north bank of the Yangtze River in a crescent-shaped zone surrounded by mountains on three sides (Baidubaike, 2012). The scope includes factory buildings, office buildings, warehouse buildings, residential buildings, commercial buildings, medical and health buildings, municipal facilities, production equipment structures, and industrial equipment. The current factory buildings are mostly one-story buildings. The production workshops in the main plant area are arranged according to the topography. The coking plant is located at the east end and the iron plant is connected to the west; the small and medium-sized rolling mills are located in the middle of the plant area and are arranged along both sides of the railway; the first steel plant , The second steelmaking plant and the machine repair plant are located on the west side of the small and medium-sized rolling mills, and to the south are the large rolling mills, machine repair plants, and stockyards. The current factory buildings are outdated and some of the factories are in dilapidated buildings. In addition, there are many factory-specific structures in the factory area, including pipeline systems, gas transmission systems, water supply and drainage systems, and power supply systems.

Figure 7.2 Heavy steel production and residential supporting buildings



搬迁前重钢生产建筑的整体布局



重钢搬迁前的工业建筑



重钢搬迁前的住宅建筑及公建配套

SOURCE:<https://www.cqcb.com/hot/2018-08-17/1031205.html>

Surrounding the production area are public and residential buildings, and most of the residential buildings are workers' residences in the factory. The residential area is a typical arrangement of workers' villages, with primary schools (Dayan Primary School, Baihua Primary School, Chejiaping Primary School, Tuoji'ao Primary School, Xicheng School), middle school (37 Middle School in Chongqing) and hospital (Chongqing Iron and Steel Workers' Headquarters). Hospital) and other facilities, forming a commercial area on both sides of Ganghua Road (Fig 7.3).

Generally speaking, the current road network structure of Chongqing Iron and Steel is set up for steel production, and the traffic connections between the internal parts of the land are not close. They are mainly connected by external urban roads, lacking the north-south urban arterial road that runs through the area, and the road level is low. Does not meet the urban road design standards; the Chengdu-Chongqing Railway from south to north blocks the traffic connection between the waterfront area and the main factory area, which is not conducive to the use of shoreline resources and waterfront space; some factories have become dilapidated buildings and offices The building quality is good, but the functional structure lags behind the needs of the times; the residential construction date is long, the building environment lacks planning, and the current living environment is poor, which can barely meet the basic functions of residence.

7.12 The urban positioning of the space left after factory relocation

After the relocation of Chongqing Iron and Steel Co., Ltd., more than 7,000 acres of urban construction land were freed up, giving Dadukou a lot of room for construction in all areas of industry, commerce, residential and green space. "Chongqing Metropolitan Area Urban and Rural Master Plan (2007-2020)" describes the positioning of Dadukou city: "Dadukou will use the relocation of Chongqing Iron and Steel as an opportunity to enhance the city's functions, share part of the functions of Yangjiaping's urban sub-center, and vigorously develop financial, Commerce, modern logistics and the tertiary industry dominated by urban tourism."

The relocation of the factory first provided a lot of space for the construction of urban green parks. In the future, Dadukou will be built as a "two belts, seven corridors, 42 parks, 148 small

amusement parks" multi-level green network space structure (Dadukou District District Planning Bureau, 2015). The increase of green space will completely change the original image of the industrial zone. The original riverside production area will focus on commercial and residential development. Dadukou has always been the main function of the city to serve the production of heavy steel, the city's commercial construction is not perfect, local residents can only go to other areas for consumption. After the relocation of Chongqing Iron and Steel, it is planned to form a large-scale commercial center and a commercial pedestrian street within about 3 square kilometers of the original production area with "Ganghua Road-Pedestrian Street-Theme Park-Municipal Plaza" as the axis.

In order to avoid the hollowing out of the industry after the relocation of heavy steel, Dadukou newly introduced companies such as Long March Heavy Industry, Tianan Digital, Meilin Jinpu, and Baofeng Cable. Most of the newly introduced enterprises are small and medium-sized enterprises with high technological content, good economic benefits, low resource consumption and low environmental pollution. They are placed in the Jianqiao Industrial Zone not far from the old industrial zone of Chongqing Iron and Steel. The new industrial zone has a compact layout and has become the gathering place of the most dense manufacturing enterprises in Chongqing, effectively solving the employment problem after the relocation of Chongqing Iron and Steel.

In addition to new construction and expansion, the reuse of some facilities in the original industrial zone, preserving its spatial form and changing internal functions will also be part of the industrial transformation: the plan proposes to transform the railway station in the heavy steel industrial zone-Dadukou Station, which was originally a third-class dual-purpose passenger and freight station, 16 kilometers away from Chongqing Station (Caiyuanba Railway Station), planned to be transformed into a passenger station connected to the urban railway network. The transformation of the section steel plant will also be the focus of the transformation. The section steel plant building with a length of 420 meters and a width of 200 meters is a multi-span continuous plant with more than 10 spans. In such a large spatial scale, the original steel-making and steel-rolling workshop functions It can be transformed into a museum and a gathering place for various creative industries.

After the relocation of Chongqing Iron and Steel, the planning department's control and adjustment of the area shows that the residential function will be the main function of the

future transformation of the area. The green belt is connected and the scope is defined. The riverside area is opened up and transformed into commercial and entertainment land. Future emerging industries and office land are also partly considered.

7.13 The function and zoning planning of the space left after the factory relocation

Regarding the planning of the legacy of heavy steel, the single production function of the industrial zone must be changed first, and the complex function of the city must be restored. After the transformation of Chongqing Iron and Steel, the area can be divided into the following functional areas according to reality and long-term planning: commercial and financial areas, leisure and entertainment areas, art and creative parks, transportation hub areas, residential areas, open waterfront areas, mixed areas, and emerging areas Urban industrial area. Such a functional layout is more complicated than the simple functional division of residential and commercial plots in the original control regulations.

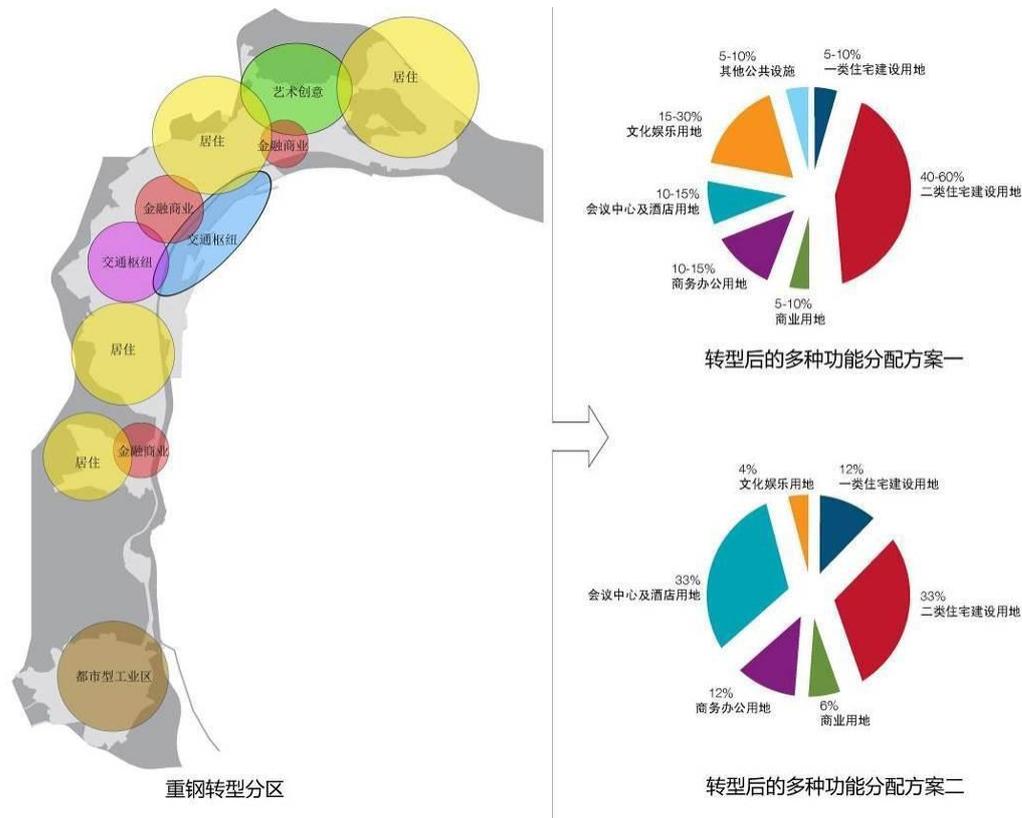
Commercial and financial districts have agglomeration requirements, which can be distributed in green parks in the form of high-rises to form concentrated areas; artistic creative districts can be arranged in renovated industrial buildings and as close as possible to the direction of Sichuan Academy of Fine Arts. The district can set up a transportation hub building inside the industrial area to establish a convenient connection between the original industrial area and the surrounding cities. For example, the subway No. 4 in the reconstruction of the Hamburg port in Germany is a direct urban transportation line specially designed for the port transformation; the residential area uses new Renovation of existing residential areas in the village. A mature urban pipe network and complete living facilities have been formed in this area. The old city reconstruction can be used to combine new development with the transformation of dilapidated houses. The newly developed area is close to Xinshan Village, and it is the best choice for building landscape houses. It is planned to be landscape houses and can rely on original service facilities such as hospitals and stadiums. The flat terrain on the east side combines the inherent conditions of the basin and water system to build a green demonstration residential area. This area uses a high-density, low-story approach to restore the urban texture of the original low-rise factory buildings,

trying to replace the commonly used high-rise residential models with new forms.

The waterfront open area will set up a business port, business and conference center hotel, small boat dock and leisure center, water park, fisherman's wharf and other facilities. And keep part of the industrial cultural heritage as a landmark node of the riverside open area. This area is connected with the pedestrian corridors and greening system of the large area, and will provide a unique and dynamic public hydrophilic feeling space.

The southern part of the original heavy steel is the Masangxi Bridge, and the land on the north side of the bridge head of the bridge is the original heavy steel No. 5 and No. 6 plants. This area is far away from the main plant and relatively difficult to communicate with, both from the geographical position and the functional point of view. Both are relatively independent, but relying on the advantages of Jianqiao Industrial Park, this will form a center of emerging industries.

Figure 7.3 The functional zoning plan for the relocation of Chongqing Steel



SOURCE:<https://j.17qq.com/article/cnggpgov.html>

After the transformation, the Chongqing Iron and Steel Area will become a new area that focuses on residence and integrates business, leisure and entertainment, and creative emerging industries (Fig 7.3). Residential land is the main component of urban construction development and recycling, and is also the main demand point of urban construction, accounting for 40-60% of the total land area; service commercial land mainly serves residents in the region, and is controlled at 10-15% of the residential area; others Public land (hospitals, schools, public facilities), mainly for services within the region, is mainly controlled at about 10% of the living area; taking into account the advantage of the riverside area, the land for commercial office and conference center hotel accounts for about 20% of the area; post-industrial The cultural cluster is a spatial gathering place for the cultural and entertainment industry. It is involved as the focus of the entire development, accounting for 10-20% of the total land area. It can also be integrated with commercial facilities, conference hotels and

headquarters base functions. Danish VLA Company, 2015).

7.14 Nodes and overall image of the space left after the factory relocation

For the newly-planned heavy steel relocation legacy, the node buildings are the industrial museums and exhibition halls scattered in various regions. They can be transformed from industrial buildings and integrated into other functional areas. The specific renovation is selected and decided according to the actual situation of the industrial building.

Figure 7.4 The coherent arrangement of the axis of the public node of the relocation legacy of Chongqing Iron and Steel Co., Ltd., and the linkage between Xingang Wharf and the railway station



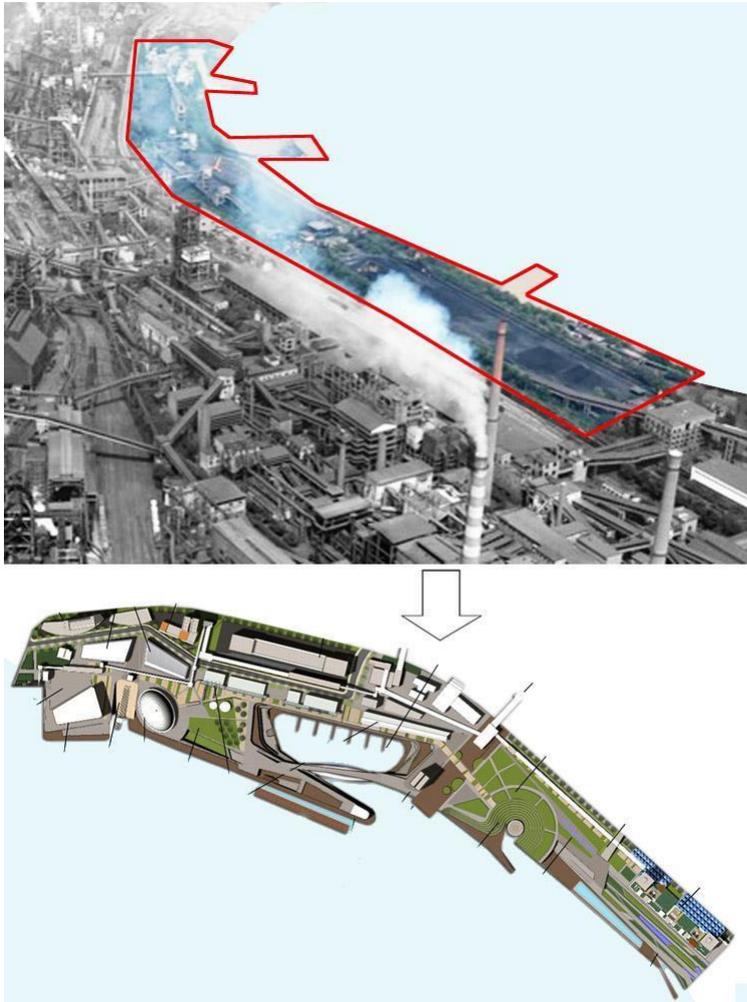
SOURCE:http://ghzrzyj.cq.gov.cn/zwgk_186/fdzdgknr/gggg/ghgg/202002/t20200208_4952214.html

The north side of the heavy steel industrial area was originally the production area of a large steel rolling mill. The industrial sites are concentrated and it is close to the Sichuan Academy of Fine Arts. It will attract many art designers; it can be combined with the development plan

of the Dadukou District to build a large steel rolling mill in the original heavy steel. A central square is set up near the factory. The profiled steel factory has a huge body. The two workshops cover an area of 49,200 square meters and 30,300 square meters respectively. The existing workshop space can be used to build a concert hall and an industrial heritage museum. They will be the first batch of construction The cultural buildings of the city and the Ganghua Theater along the line and the Dadukou District Government form an axis relationship, which shows the main public nodes of the area (Fig 7.4).

The pipelines and gas tanks of Chongqing Iron and Steel Co., Ltd. distributed on the top of the mountain can be used as visual landmarks and interspersed in other districts to remind the history of the region. The existing wharf and railway station are renovated and designed, that is, using the original industrial facilities, it will become a new public transportation system hub and an important landmark building.

Figure 7.5 Planning for the relocation of Chongqing Iron and Steel Corporation



SOURCE:<http://www.landscape.cn/landscape/10924.html>

The overall image of the riverside side will also be the focus of attention. The architectural landscape of Chongqing Iron & Steel facing the waterfront area is an important development aspect of the future city image, and it is also an important part of the overall image of the entire Chongqing city, which has the characteristics of a sideline. The construction of Changbin Road has contributed to the formation of the riverside architectural landscape interface. This architectural image is the most intuitive impression of the transformation of Chongqing Iron and Steel. The riverside landscape and its roads have been re-planned (Fig 7.5), and the overall image of the riverside has been shaped as follows:

Building outline and continuity: The degree of undulation of building outline determines the strength of people's impression of the area. A complete and continuous urban outline is an

important aspect of urban image characteristics. The undulating terrain of the Chongqing Iron and Steel Industrial Zone can provide this kind of skyline change. The landscape along the river is still mainly composed of factory buildings and low-rise buildings. The middle part of the mountain that was previously covered by vegetation is retained, and some industrial equipment structures on the top of the mountain form a unique skyline outline. The residential buildings are arranged on the top of the mountain and change along the mountain to form the skyline outline.

The formation of the waterline: the waterline is like the stage of the urban architectural landscape. The unevenness of the water surface determines the effect of the image of the riverside area.

Architectural background relationship: The highland slope behind the heavy steel industrial zone provides a good background for the front row of buildings. From the opposite side of the Yangtze River, all the buildings in the industrial zone are built on the hillside, and the heights are scattered, which will reflect the strong characteristics of the mountain city.

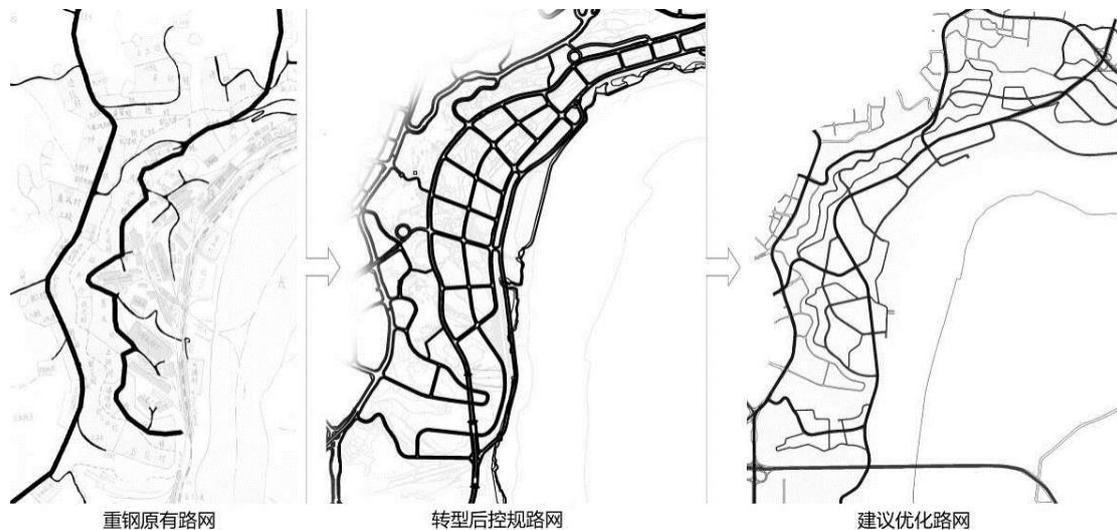
7.15 Planning of road network and traffic connection in the space left after the re-planning

After the re-planning, the regional functions will be diversified, and the traffic flow will also be greatly increased. Realizing the continuity of the road network on the larger height difference is the difficulty of the transportation design in the transition. The transformation of the industrial space of heavy steel must abandon the past modernist urban road network planning methods. At present, the linear and symmetrical patterned expressions in many control planning schemes will contradict the actual situation of the terrain, and the circuitous paths tossing, turning and flickering are themselves the real situation of mountainous urban space. In the urban space of Chongqing, winding streets can be seen everywhere. Therefore, the new road network system after the transformation of the heavy steel industrial zone cannot be a regular straight-line network, but will be a north-south main road and a tortuous east-west direction. The road network formed by branch roads, the road system of the entire plot is mostly free-form roads closely integrated with greening and contour lines. The lowest

Binjiang Road will weaken its motor vehicle traffic function. It is mainly a pedestrian-oriented landscape road. Through the re-integration design of Binjiang Road, Masangxi Old Street, which was originally isolated from the outside world, can easily lead to Binjiang Road and enrich it. The landscape content of Binjiang Road.

Figure 7.6 The original road network of Chongqing Iron and Steel, after re-planning, the control and planning road network and the suggestion to optimize the road network

SOURCE:http://ghzrzyj.cq.gov.cn/zwgk_186/fdzdgknr/gggg/ghgg/202002/t20200208_4951600.html



The plan calls for the introduction of public transportation into the industrial zone, which will incorporate the heavy steel industrial zone into the city's public transportation system. The original Xingang Wharf and Railway Station are easy to transform in terms of function and structure. Through their reconstruction and addition, they will become a new regional transportation hub, and external transportation will be very convenient to reach the inside of the industrial zone. The wharf and railway station, which integrate the functions of railway, bus, and shipping, are truly urban transportation complexes. This large-scale transportation building is transformed into a natural integration with the adjacent industrial heritage park and becomes the center of the masses of people on the plot. Other external bus systems also need to be introduced into the industrial zone efficiently and orderly. For example, bus stations and subways can be gradually deployed in advance through planning (Fig 7.6).

7.2 Research on Planning of Chongqing Jiefangbei Central Business District and Surrounding Areas

7.21 The history and current situation of the Jiefangbei Central Business District and Surrounding Areas

The Jiefangbei was formed during the Anti-Japanese War and became a place for grand gatherings and major festivals in Chongqing and a well-deserved commemorative symbol of Chongqing. In addition, it developed into a commodity distribution center in modern times, and then became a commercial center. It has a great influence in Chongqing and even western China. A large number of financial institutions also gathered in the Yuzhong Peninsula during this period, laying a solid foundation for the future development of the Central Business District. Foundation. Jiefangbei area has undergone a century of development, especially after decades of development after Chongqing became a municipality directly under the central government. The city's appearance, infrastructure construction, city management, and spiritual civilization construction have undergone earth-shaking changes and become a famous urban landmark in Chongqing. Jiefangbei area follows a functional and spatial development trajectory such as "Commercial Pedestrian Street-Central Business District-Central Business District", and has gradually developed a fixed and orderly level of development. In recent years, the Jiefangbei Central Business District has not only changed in terms of its nature and positioning, but also its actual development needs. Therefore, Chongqing decided to expand the Central Business District in September 2013. Also with the establishment of the five major functional areas in Chongqing, the central area of Chongqing's Yuzhong District, etc., is divided into urban functional core areas, which intensively reflect the central functions of political economy, historical culture, financial innovation, and modern service industry, and showcase historical and cultural cities and beautiful mountains and rivers. , Smart cities and modern metropolitan styles, and build a metropolitan downtown area with a concentration of high-end elements, strong radiation effects, and national influence.

7.22 *Industrial Types of Jiefangbei Central Business District*

Jiefangbei Central Business District is a business-oriented central business district with commerce and trade, and gradually strengthens and establishes a central business district function system with the tertiary industry as the leading industry. The leading industries in the CBD of major foreign cities are very similar, mostly in the aspects of finance, commerce and intermediary services, but the focus is different. Among them, there are 152 institutions above the city level such as banks, insurance, trusts, and securities, including a large number of innovative financial institutions, factor markets, third-party payment companies, and foreign-funded financial institutions (Fig 7.7).

Figure 7.7 Yingli International Financial Center



SOURCE:<http://www.cqxingyi.com/m/Case/195.html>

The Jiefangbei Central Business District evolved from a commercial pedestrian street and a commercial center. It is still an important center among the five major business circles in Chongqing. At present, the wholesale and retail industry in the Jiefangbei Central Business District still accounts for a large proportion. There are a large number of enterprises, including the operation of various goods, such as clocks, arts and crafts, building materials, household appliances, electronic products, hardware, communication equipment, Computer parts, general machinery, agricultural and sideline products, cultural and sports products, clothing, cosmetics, daily necessities, goods import and export operations, etc. The Jiefangbei Central Business District is also home to many real estate companies, including Chongqing Huaxun Real Estate Development Co., Ltd., Chongqing Zhicheng Industrial Co., Ltd., and Chongqing Pengrun Real Estate Development Co., Ltd. In addition, there are also leasing and

business services, transportation and postal services, information transmission, computer services and software, education, resident services and other services, scientific research, technical services and geological prospecting, water conservancy, environment and public facilities. There are also very few secondary industries in management, culture, sports and entertainment, accommodation and catering.

7.23 Current planning issues of Jiefangbei Central Business District

Loss of consumers and slower growth in business profits.

Although the total retail sales of consumer goods in the Jiefangbei Central Business District have increased in recent years, based on people's objective feelings about Jiefangbei, most Chongqing residents would think Jiefangbei is not as lively as other business districts at night. Compared with other commercial districts in Chongqing, Jiefangbei is located in the middle or middle and lower reaches of the city. It is obvious that the passenger flow is being lost, and the passenger flow is significantly reduced during the Spring Festival.

High building vacancy rate.

The Jiefangbei Central Business District has a high construction intensity and a large total construction area. However, due to the disintegration of industrial and urban development, the decline of the central area has caused enterprises to move out and population loss. At the same time, it has also caused an increase in vacant houses in Jiefangbei buildings. Vacancy may also be due to other reasons, such as the inability of the building to meet the demand for rent expansion, the lack of investment in new construction, or property rights, etc. However, the high vacancy can also reflect the phenomenon of industry-city disintegration and central decline.

Road congestion during morning and evening rush hours.

A large number of employees (more than half) of Jiefangbei live in areas outside Jiefangbei, mainly Jiangbei District and Nan'an District, but also include other districts in the main city. In this way, every working day, a large number of long-distance commutes are integrated into the Jiefangbei Central Business District, which covers an area of only 0.92 square kilometers, from all directions. Most of them choose to use private cars for commuting.

Figure 7.8 Congestion in Jiefangbei



SOURCE:<https://www.zhihu.com/question/319790156>

In the future, such a “one vehicle, one person” transportation mode will not only occupy the road greatly and reduce the utilization rate of roads, but also will overload the urban roads, and the roads will be congested and the vehicles will not be able to move forward. Such a large amount of traffic is bound to be This has caused traffic congestion in the limited area of Jiefangbei Central Business District, and a large amount of long-distance traffic has also increased the burden of urban traffic between the employees’ residence and Jiefangbei, thus reducing the industrial efficiency of Jiefangbei and the affected areas. , And it affects the mood of workers (Fig 7.8).

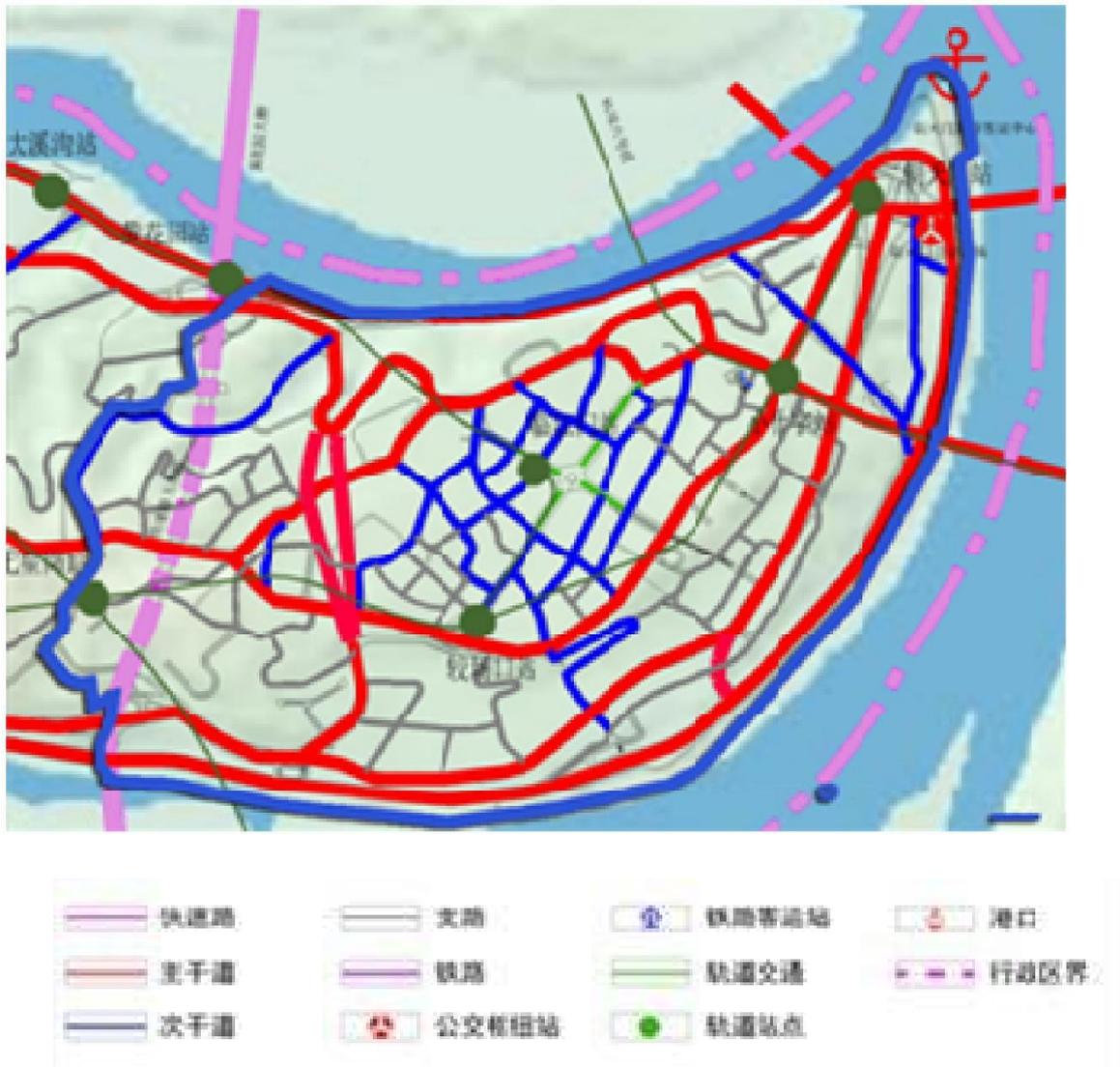
Weak cultural vitality.

The influence of Jiefangbei culture is relatively weak, especially the lack of exploration and utilization of traditional culture. The Jiefangbei is located in the old city of Chongqing. It is the origin of Chongqing's urban development. It has very rich historical and cultural resources scattered throughout the Jiefangbei area. However, the protection and utilization of these resources is less, and some historical and cultural relics have long been used. It was demolished in urban development and construction, and people lacked nostalgic material space and spiritual sustenance. Compared with the neighboring city of Chengdu, Chongqing, especially the mother city of Jiefangbei area, has a more unique cultural heritage and unique natural geographical environment, but it does not create a lively cultural environment like Chengdu, which is indeed a lack.

7.24 Traffic Planning and Research of Jiefangbei Central Business District

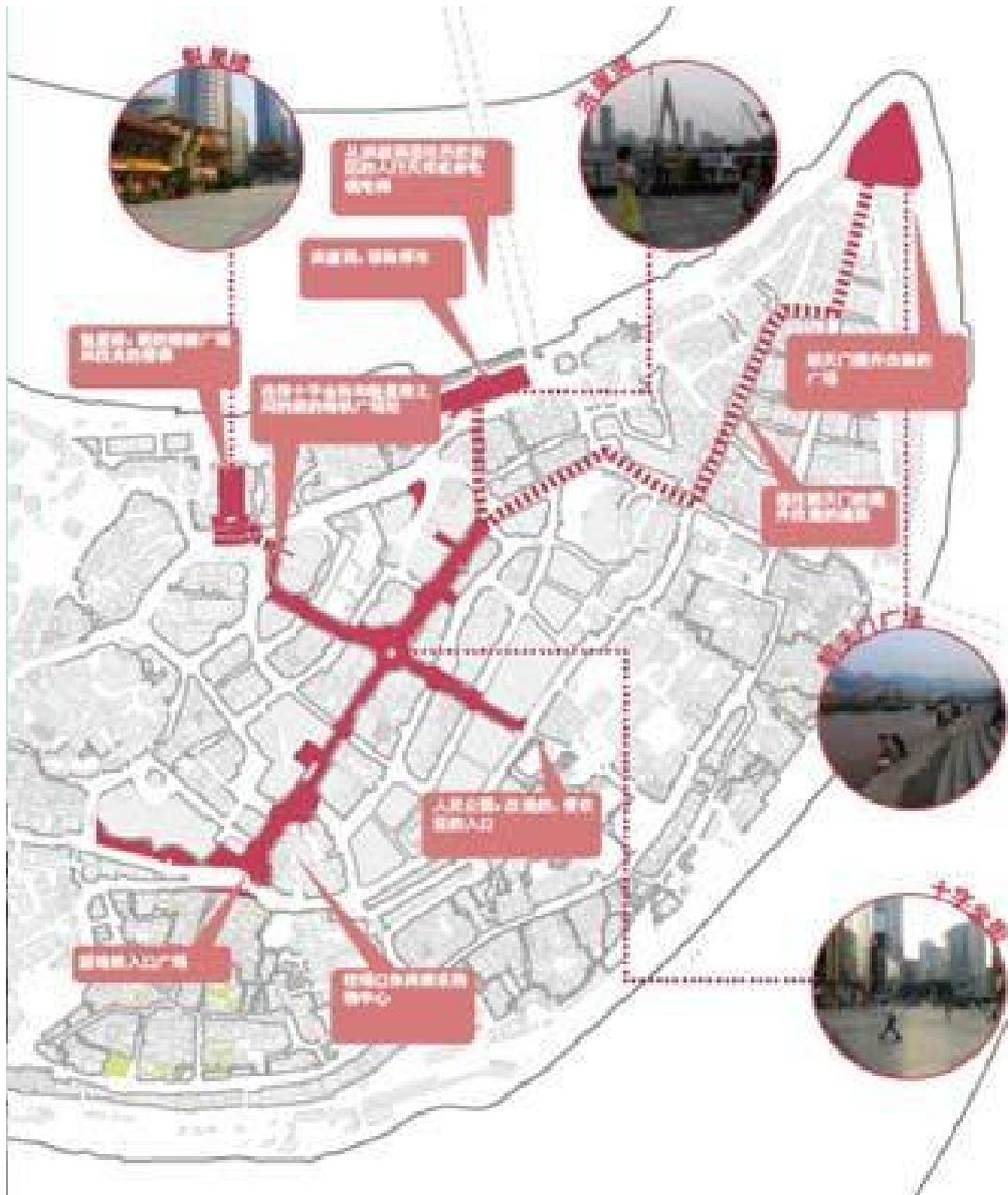
The main problems within the current scope of Jiefangbei's central vitality area are the low density of arterial roads and the lack of north-south arterial roads. Therefore, the adjustment of the current traffic road network mainly focuses on these two aspects. One is to increase the density of the main road network and increase the number of main roads based on the entire road network relationship. Some existing secondary roads and even branch roads with high traffic volume can be upgraded to main roads, such as Linjiang branch road and Jiefang East road. Road, Shaanxi Road, etc.; the second is to clean up several roads that are perpendicular to the river, such as connecting Beiqu Road and Nanqu Road through Bridge No. 1 and Zhongxing Road, and connecting the upcoming Qiansimen Bridge and Dongshuimen Bridge (Fig 7.9).

Figure 7.9 Jiefangbei Central Business District Traffic Planning Map



SOURCE:http://www.gov.cn/gzdt/2011-03/14/content_1824299.htm

Figure 7.10 Main pedestrian structure of the central business district

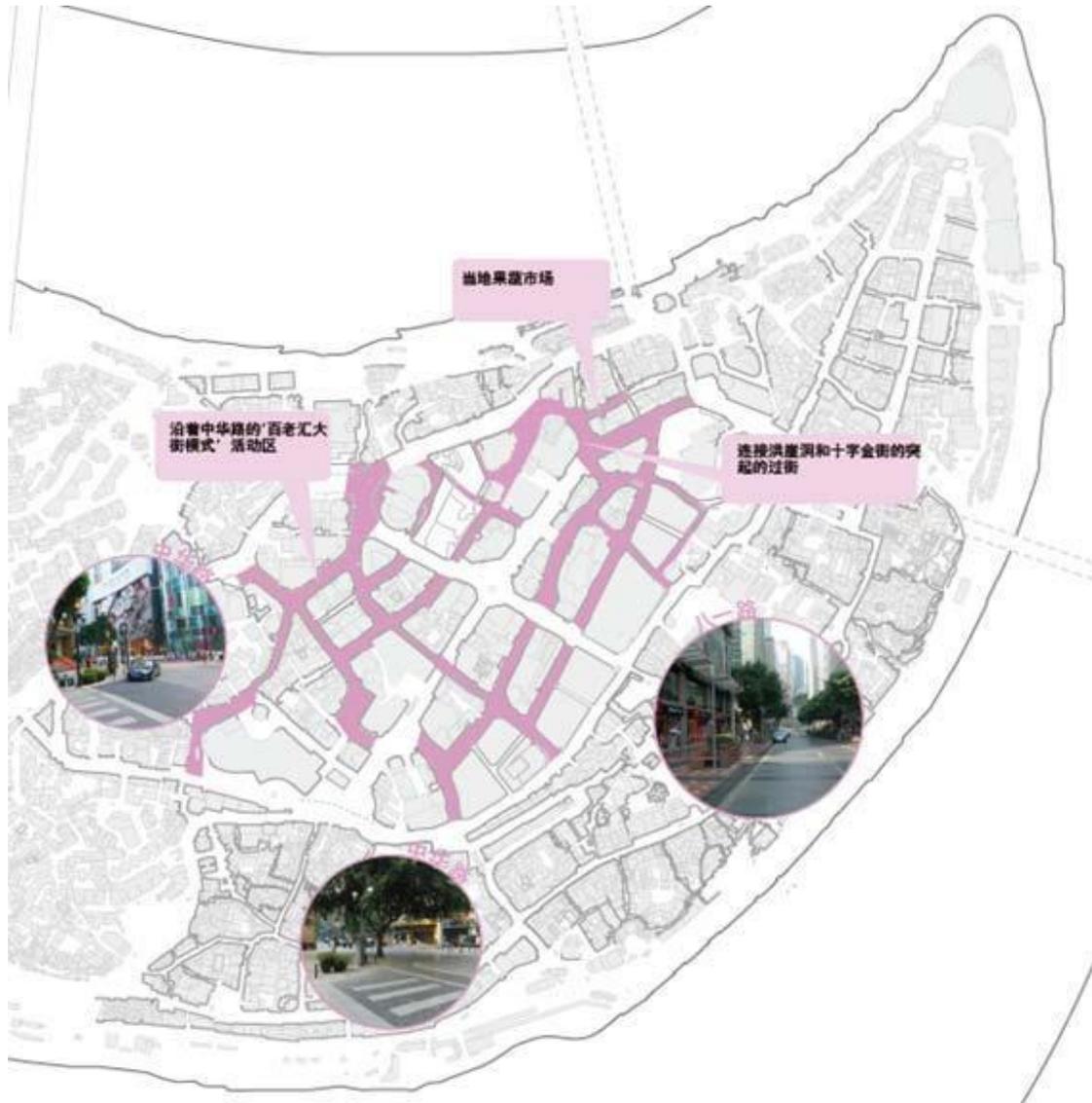


SOURCE:<http://www.cqghy.com.cn/index.php?s=/articles/251.html>

At the same time, the main space is connected with a walking frame. Extend the current Shizijin Street to form a "one heart and four doors" spatial layout, so that Jiefangbei can conveniently connect Jiaochangkou entertainment area, Linjiangmen, Hongyadong, and People's Park, and add the main walk to Chaotianmen Passage, increase the walking facilities of this passage and enhance the walking atmosphere. Establish a good walking atmosphere in the core area of Jiefangbei's central vitality area to facilitate life, work in the area and other

citizens and tourists' activities and sightseeing in the city, forming the main system of walking network (Fig 7.10).

Figure 7.11 Central Business District Slow Travel System Map

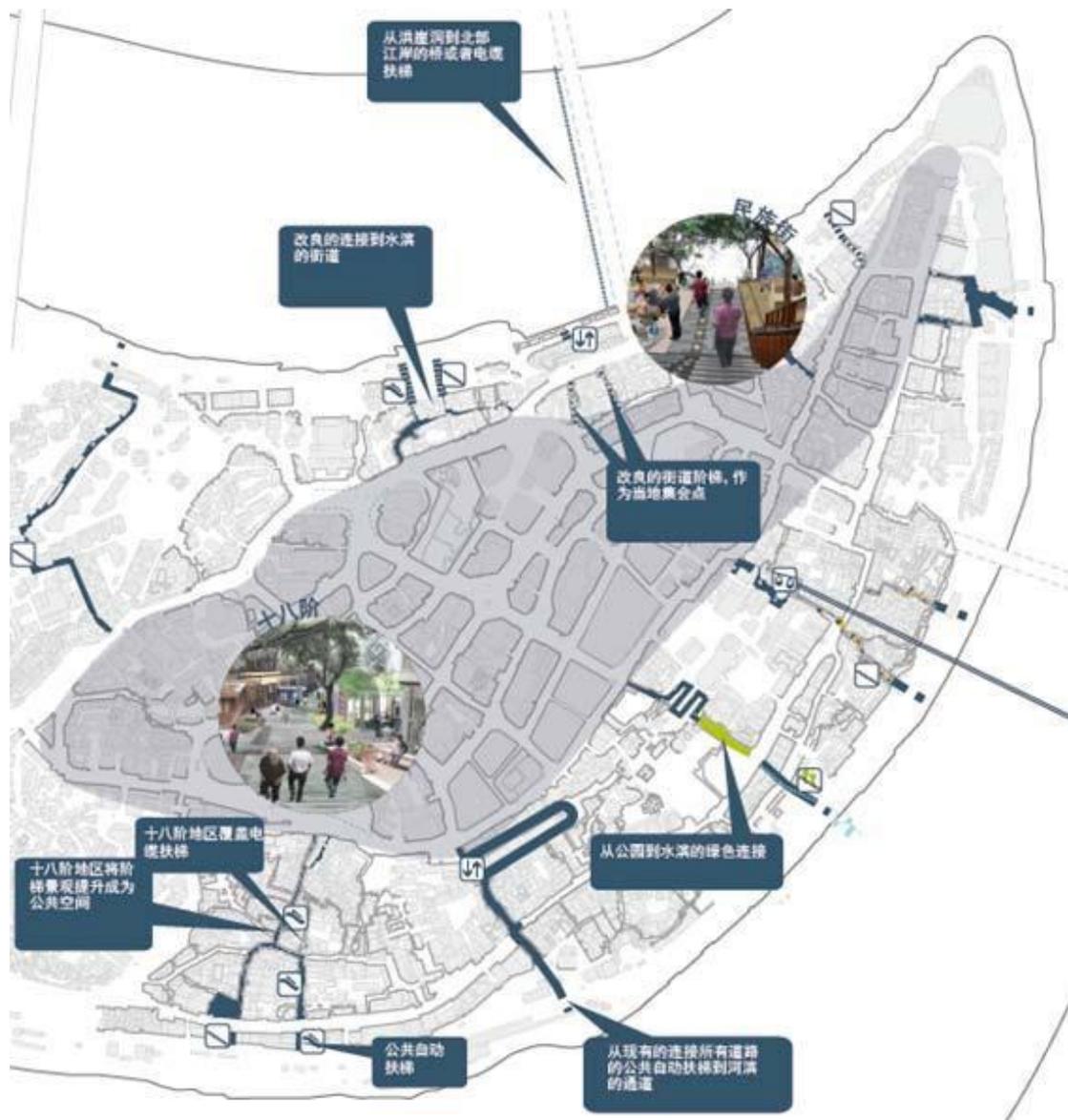


SOURCE:<http://www.cqghy.com.cn/index.php?s=/lists/46.html>

By establishing the next level of slow-moving system around the main passage of the pedestrian network. The chronic system is mainly located in the core area of the central vitality area and is a gathering place for industrial functions. The walking specificity of the slow-moving system is lower than that of the upper level. The street mainly controls the low-speed driving of motorized traffic, so as to highlight pedestrian travel and outdoor activities,

and provide a good space for it. The street should provide a variety of functional environments, improve the content of pedestrian activities along the street, and provide good seating facilities for pedestrians to rest on the roadside, better interaction between the building and the road, increase the living atmosphere of the street, and eliminate industrial functions (Fig 7.11).

Figure 7.12 Vertical Traffic Map of the Central Business District

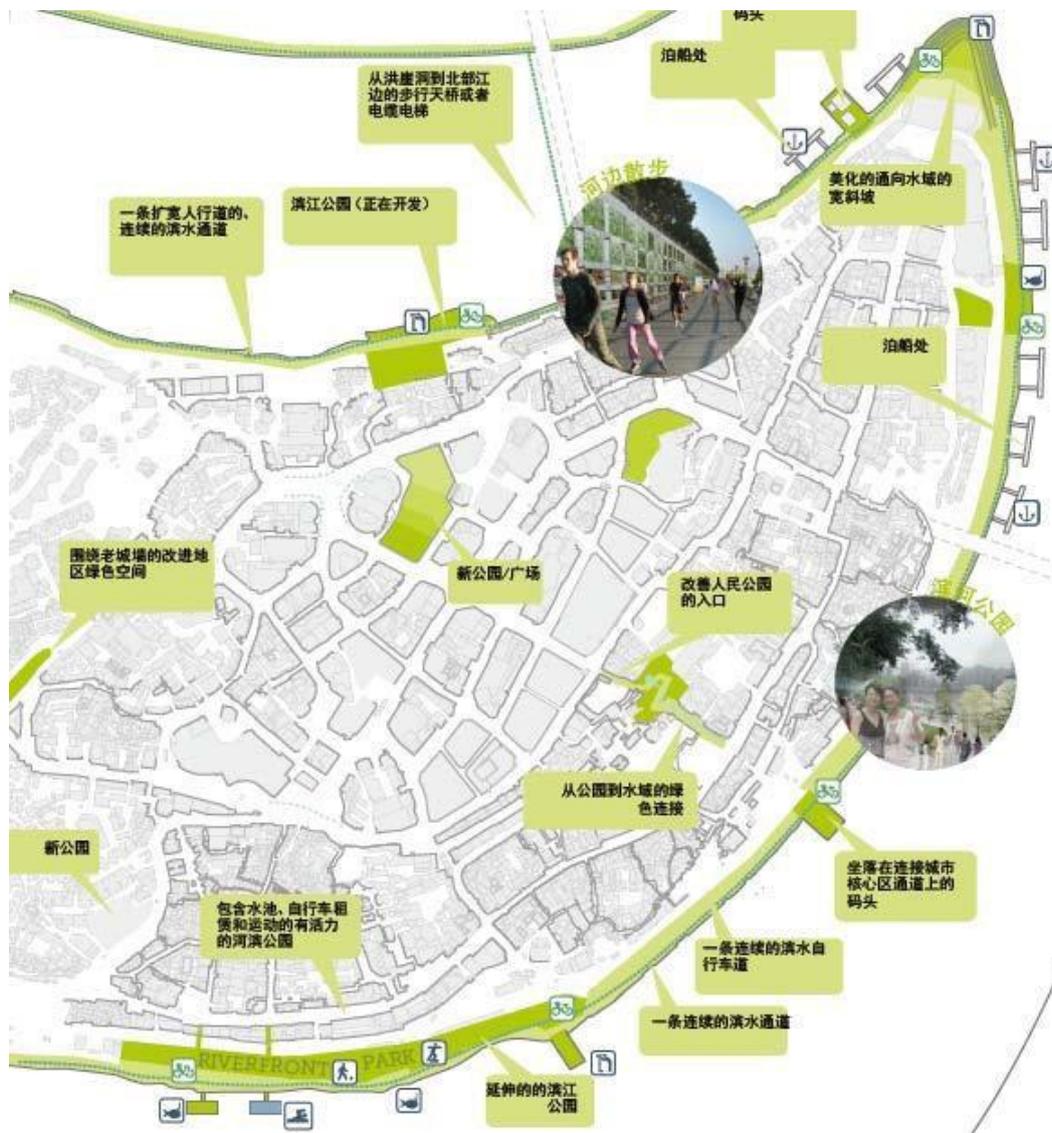


SOURCE: <http://www.chinastc.org/cn/project/51/533>

Establish vertical transportation links. Pedestrian traffic in mountain towns is a problem worthy of attention everywhere, and the vertical connection of mountain environment is

mostly based on steps built along the way. Pedestrians walk straight to overcome the inconvenience that must be bypassed by motorized traffic. This also strengthens the content and necessity of the Jiefangbei walking system. Jiefangbei Central Business District has large elevation differences, mostly along the river. Strengthening and beautifying the vertical traffic in these places is to better guide citizens and tourists to the riverside area and strengthen the beautiful scenery along the riverside and the connection between the core areas (Fig 7.12).

Figure 7.13 Riverside Pedestrian Space Map of the Central Business District



SOURCE:http://ghzrzyj.cq.gov.cn/zwgk_186/fdzdgknr/gggs/ghgg/202002/t20200208_4952376.html

Create a pedestrian space along the riverside and improve the hydrophilicity of the riverside

area. Although Chongqing is located at the confluence of the two rivers, with the rapid development of riverside roads, the waterfront space on the riverside has been very small. Chongqing people's perception of water has begun to become weak, and people are naturally hydrophilic, facing the two rivers. Precious natural resources must be utilized, especially the absolute advantage of the Jiefangbei Central Vigor Zone surrounded by water on three sides. The current use of the river is mainly the two-river tour at Chaotianmen Wharf, which interprets Chongqing's landscape to the extreme, but it lacks some popular open spaces and parks along the river. Therefore, the central vitality area of Jiefangbei needs to fully consider the pedestrian requirements and some open spaces in the planning of the existing riverside space, so that citizens and tourists can have full access to the stalwart and majestic shores of the two rivers, and meet people's requirements for hydrophilicity (Fig 7.13).

7.25 Research on Cultural Tourism Planning of Jiefangbei Central Business District

The area of Jiefangbei's central business district area is the birthplace of Chongqing's history as well as Chongqing's cultural heritage. It is the birthplace, the intersection of the two rivers gave birth to the people of Chongqing, and the Chongqing culture was born from this. The Jiefangbei area is the area with the most Chongqing cultural characteristics, and it is also the most attractive to Chongqing people. Just as Dashilan leads to Beijing's culture, and the flowing water boats to Venice Logo imprint. However, the unique regional culture of Chongqing has been gradually diluted in the process of urban development. Although Jiefangbei has become an economic highland in Chongqing and even in the southwestern area of my country, its cultural function has been obscured by powerful industrial functions. The establishment of the Central Vitality Zone is to reshape the uniquely charming regional culture of Chongqing in the Jiefangbei area, strengthen the cohesion of Chongqing, and enhance the characteristics of the city with regional culture. Preliminary analysis shows that there are two important historical and cultural resources in the central vitality area that are in urgent need of protection and utilization to show traditional charm.

Figure 7.14 Distribution map of Chongqing ancient city gates



Source:<http://www.cqcpe.cn/index.php?m=content&c=index&a=show&catid=25&id=1087>

The central business district area of Jiefangbei includes the scope of the old city of Chongqing that was expanded in the early Ming Dynasty, as well as the scope of the city gate site with "nine open and eight closed". Many place names in this area are named after city gates, such as Chaotianmen, Linjiangmen, Nanjimen, Chuqimen, Dongshuimen, etc. (Fig 7.14). The largest gate, Chaotianmen Gate, was demolished in 1927 due to the expansion of the wharf and the widening of the road. Due to disrepair and war damage, many other gates no longer exist. There are only three remaining gates: Tongyuan Gate, Dongshui Gate, and Renhe Gate. The best preserved is Tongyuan Gate in Qixinggang. The protection and restoration of ancient city gates and ancient city walls can reshape the historical sense of Chongqing's mother city. Although Chaotianmen, the largest city gate, has disappeared, it can be restored through historical data to reproduce the glorious momentum of "Ancient Yuxiongguan". Nowadays, the central business district is basically built on the scope of the ancient city, which is a kind of historical fate. Therefore, making the central vitality district is not only a modern product, but also a continuation of history, and also a kind of ancient and modern Fusion.

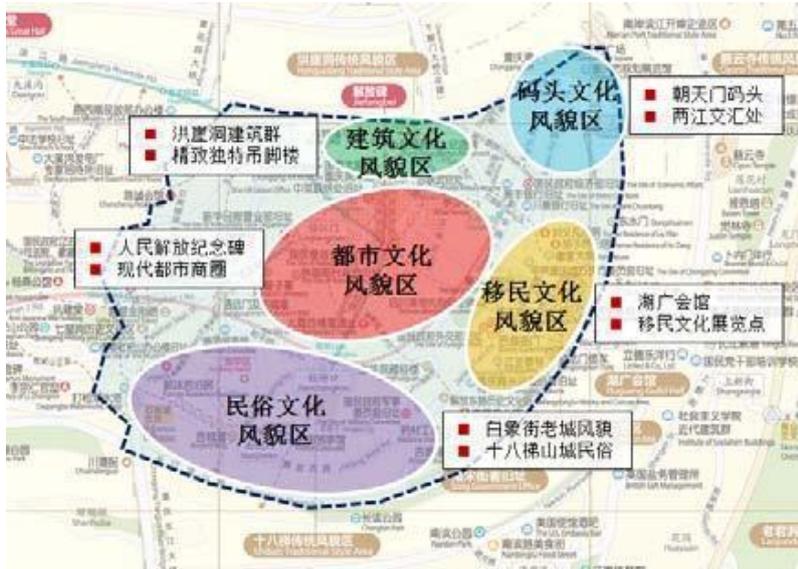
Figure 7.15 The excavation site of Chongqing Southern Song Dynasty Office Site



Source:<http://tech.sina.com.cn/d/2010-11-19/11154886720.shtml>

The Southern Song Dynasty Office Site (Fig 7.15) was discovered in the area of Jiefang East Road during the demolition of dilapidated houses in 2010. The Southern Song Dynasty Office Site was the beginning of Chongqing's urban development. The Southern Song Dynasty Office Site is an important witness to this history. The site is well-preserved and has a clear date. It is currently the highest-ranking and most valuable Song Dynasty site discovered in Chongqing. The ruins of the Southern Song Dynasty Government Office not only played an important role in the historical and cultural atmosphere of Chongqing and the central vitality area, but also had important academic value to the ancient architecture of the Sichuan-Chongqing area and the Song-Mongolian War.

Figure 7.16 Jiefangbei Cultural Tourism Zone Integration Map



Source:http://113.31.19.22/Qikan/Article/Detail?id=7000187048&from=Qikan_Article_Detail

In order to enable tourists to fully experience the historical relics and ancient culture of Jiefangbei, the plan proposes a "method of sorting and sorting according to outstanding features" (Fig 7.16). That is to say, the resources with outstanding value for different areas are the main body, and the surrounding resources are integrated to form a cultural style protection area. Each area forms its own characteristics and constitutes a system with strong internal correlation, enabling tourists to visit more scenic spots on foot. Increase the stay time. Analyzing the characteristics of the central vitality area of Jiefangbei, cultural tourism is roughly divided into "Jiefangbei Urban Cultural Features Area", "Chaotianmen Wharf Cultural Features Area", "Huguang Guild Hall Immigrant Cultural Features Area", "Baixiang Street and Ten There are five areas, namely, the Bati Folk Culture and Cultural Features and Hongyadong Architectural and Cultural Features. They are characterized by urban culture, dock culture, immigration culture, folk culture and architectural culture.

The Jiefangbei Urban Cultural Scenery District uses the Jiefangbei monument as its image logo. It mainly displays the modern urban culture unique to the central vitality area, shows the achievements of regional development and the positive spirit of modern people, and mainly integrates the business functions of modern high-end brands. Provide visitors with the ultimate commercial consumption experience; Chaotianmen Wharf Cultural District is centered on wharf culture, combined with cruise ships and hydrophilic wharf space, to

present visitors with an intuitive feeling of "mountain city", and enjoy river cruises and boat tours. Visit Chongqing's unique landscape beauty and row upon row of urban spatial patterns by night view, and learn about Chongqing's unique geographical and cultural environment that is dependent on mountains and accompanied by water; Huguang Guild Hall's immigrant cultural style area is dominated by the historical buildings of Huguang Guild Hall and mainly shows Chongqing The immigration culture of Chongqing shows the inclusiveness of Chongqing culture and brings some interactive experience content to tourists; Baixiang Street and Shibati Folk Culture Area mainly show the folk culture that combines mountain terrain with people's traditional lifestyle and environment, As well as the cultural and folk customs left over from the opening period, allowing tourists to appreciate the urban landscape.

Figure 7.17 Jiefangbei Riverside Landscape Function Link Strategy Plan Map

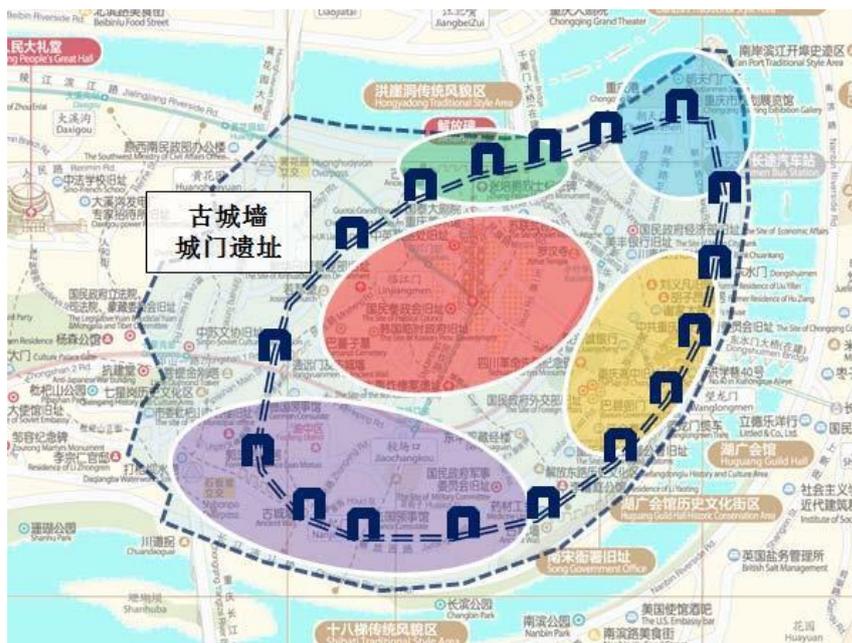


Source:http://113.31.19.22/Qikan/Article/Detail?id=7000187048&from=Qikan_Article_Detail

While feeling the unique atmosphere of the old city of Chongqing; the Hongyadong architectural culture area is mainly based on the Hongyadong Diaojiao Building. Chongqing Diaojiaolou is the most traditional and local architectural form. It is dependent on the water and built on the cliffs, showing the traditional construction wisdom of Chongqing is an

important place indispensable for visiting and learning regional architectural design (Fig 7.17). After partitioning by cultural characteristics, most of the scenic spots have been integrated and used, but a certain connection and coordination between the various style areas are still needed. In addition to the use of convenient transportation or planning tourist lines, these external auxiliary forms can also be used through functional Connect to achieve mutual connection, that is, a functional bond. One is to plan the riverside landscape along the riverside in the central vitality area to bring together different styles and features, so that visitors can visit the various cultural styles while looking at the river view. The riverside area is the most hydrophilic area. This kind of unique landscape and interesting water experience is also necessary for centralized planning. People also feel different regional cultures while watering water.

Figure 7.18 Jiefangbei ancient city wall gate function link plan map



Source:http://113.31.19.22/Qikan/Article/Detail?id=7000187048&from=Qikan_Article_Detail

The second is to use the ancient city gate wall of the old city to plan the most archeologically characteristic of the ancient city relics search route in Chongqing, that is, the "nine open and eight closed" ancient city gates and the ancient city wall search loop. Because many important scenic spots in this area are distributed along the river, Forming a tourism element with a unique atmosphere of adventure and archaeology, the ancient city loop can also cleverly connect these important scenic spots, functionally interconnect with each other, and build a functional network (Fig 7.18).

The third is to design themed tourist routes and explore connections between scenic spots. For example, the theme line of humanities tourism is mainly composed of Hongyadong-Chaotianmen-Huguang Guild Hall-Baxian Yamen; or the theme of leisure tourism is mainly composed of Jiefangbei Pedestrian Street-Chaotianmen Square-Two Rivers Tour. At the same time, it can also cooperate with tourist attractions outside the central vitality area of Jiefangbei to comprehensively create tourist routes. For example, the archeological tour takes Chaotianmen-Southern Song Dynasty Government Office-Tongyuanmen City Wall Park-Diaoyu City as the main body; religious cultural experience tour takes Luohan Temple-Ruose Hall-Huayan Temple-Longshui Lake-Dazu Rock Carvings as the main body; Old Chongqing The memory journey takes Chaotianmen-Chongqing Huguang Guild Hall-Hongyadong-Dongshuimen Historical and Cultural District-Chongqing Three Gorges Museum-Chongqing Tiandi-Ciqikou as the main body.

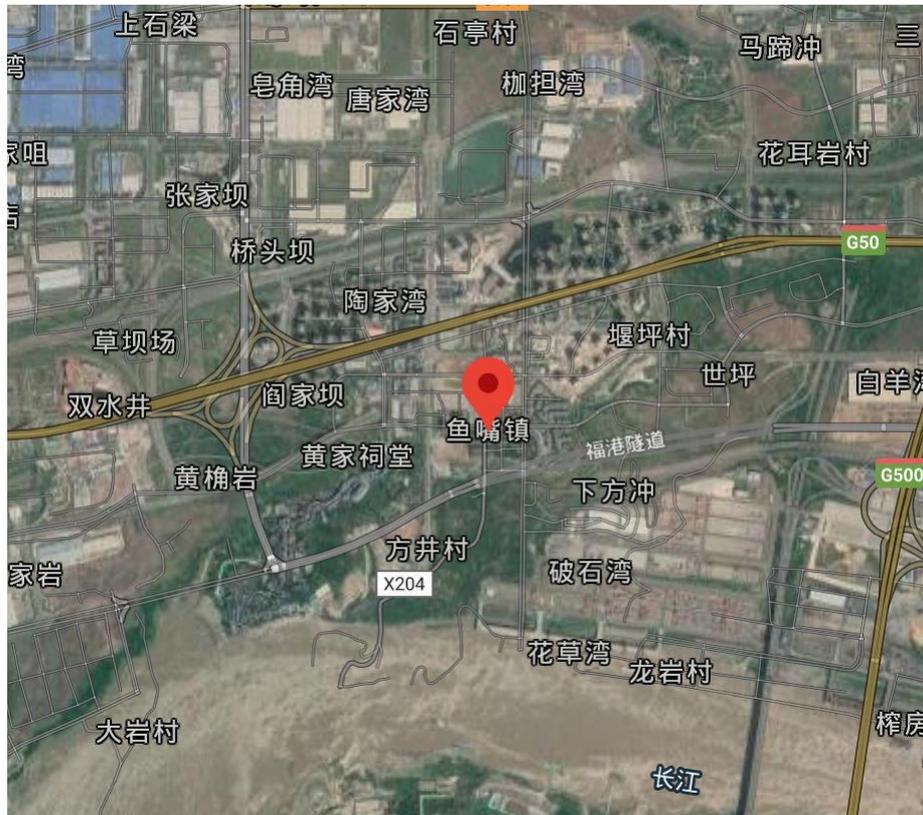
7.3 Research on Yuzui New City (Satellite city) Planning

7.31 The history and current situation of Yuzui City

Yuzui City (Fig 7.19) has a long history, There is the earliest hydrological inscription discovered in the Yangtze River Valley-Yuzui Hydrographic Rock Carvings, which records the low water level during the Five Dynasties and the prosperity of the year. As far back as the Han Dynasty, the town has traces of human activities. In the Five Dynasties period, the small dock around the Yangtze River gradually developed into a small town. Yuzui was built relatively early and was originally under the jurisdiction of the original Jiangbei County of Chongqing. In 1995, the

original Jiangbei County was placed under the jurisdiction of Jiangbei District. Yuzui City has three towns under its jurisdiction, namely Fusheng Town, Wubao Town and Longxing Town.

Figure 7.19 Location of Yuzui city



Source: <https://www.google.com/maps/place/%E4%B8%AD%E5%9B%BD%E9%87%8D%E5%BA%86%E5%B8%82%E6%B1%9F%E5%8C%97%E5%8C%BA%E9%B1%BC%E5%98%B4%E9%95%87/@29.6228774,106.7435724,14z/data=!3m1!4b1!4m5!3m4!1s0x36933ac47dd06adb:0xae4af20f3e2d4b2!8m2!3d29.622879!4d106.761082>

Yuzui City has been classified as a "peripheral central town" built by Chongqing since 1996. The concept of Yuzui Group was put forward in the "Master Plan of Chongqing 1996~2020", and it is one of the twelve peripheral groups of Chongqing; "Yuzui New Town" was formally proposed in the "General Development Conceptual Plan of Yuzui Group in the Main City of Chongqing (2003)", forming a modern comprehensive city integrating production, life and ecological coordinated development. In 2020, the new city will occupy a land scale of 60 square kilometers, with a planned population of 550,000, and a prospective development of 87 square kilometers. The population will be close to 700,000, reaching the development

scale of a medium-sized city. The plan was approved by the Chongqing Municipal Planning Administration in 2004.

7.32 Urban Positioning of Yuzui New City

Yuzui New City is located on the eastern radiation axis and has relatively independent development space. It can be quickly built into a medium-sized city, which will help the rapid formation of urban agglomerations along the Yangtze River, and enhance the radiation and absorption of low-level urbanization areas in eastern Chongqing. It will soon become an important part of the Yudong urban agglomeration. Its land use conditions and resource conditions are unique. With the advancement of urbanization and the implementation of the strategy of “moving the main city from the north to the east”, a relatively independent development city will be formed in the eastward movement of the main city of Chongqing, which is conducive to the overall development and overall promotion of Chongqing’s economy and society, and is conducive to reasonable The formation of urban agglomerations will play a role in connecting the main urban area, Jiangbei District, Yubei District and other cities in Yudong within the region. Therefore, the positioning of Yuzui New City is exactly the need for the development of urban spatial structure. Yuzui New City has a complete and systematic preferential policy system that is open to the outside world, allowing foreign businessmen to choose industries (projects) with a wide range of investment fields, large policy space, strong industrial relevance, and large radiation driving effects. It can fully meet and adapt to the positioning of various development forms and the individualized and diversified needs of various investors and the integration of various functions. It can be seen that the positioning of Yuzui New City is the need to realize the diversified development of the new city.

Yuzui will be one of the peripheral areas with the greatest potential for economic development due to the rapid development and change of the industrialization and urbanization of Chongqing in the future. It is the main area with the most favorable conditions for the "Northward Move to East" of the main city of Chongqing. It is the northern part. The development trend of the expansion and extension of the new area will be a unique

comprehensive multi-functional new industrial city.

After analyzing various factors, the new city upgraded the peripheral cluster proposed in the original city master plan to a medium-sized city, and repositioned it, namely: building a comprehensive modern industrial base and logistics center, and vigorously developing ecological real estate. It is a complex city that realizes the coordinated development of production, life and ecology.

7.33 Layout planning and spatial form of Yuzui New Town

The general purpose of the new town planning is to build a cluster-type eco-industrial city that maintains ecology, utilizes the environment, creates mixed development, efficient connection, moderate scale, phased development, and rolling development (Fig 7.20). The purpose of cluster urban layout is to form a mosaic urban pattern of "orderly structure, complementary functions, overall optimization, and joint construction and sharing", reflecting functional interaction, and building an advanced urban succession form characterized by orderly and overall consistency. Horizontally, it is a city plane cluster of different scales and different functions that complement each other. On the vertical scale, it is a three-dimensional network of cities with different levels, different divisions of labor and complements each other. The interaction between the two makes scale effect and aggregation. The effect, linkage effect and radiation benefit are maximized (China Urban Development Report, China Urban Development Report Editorial Committee, Commercial Press, 2003).

Figure 7.20 Yuzui New Town Master Plan



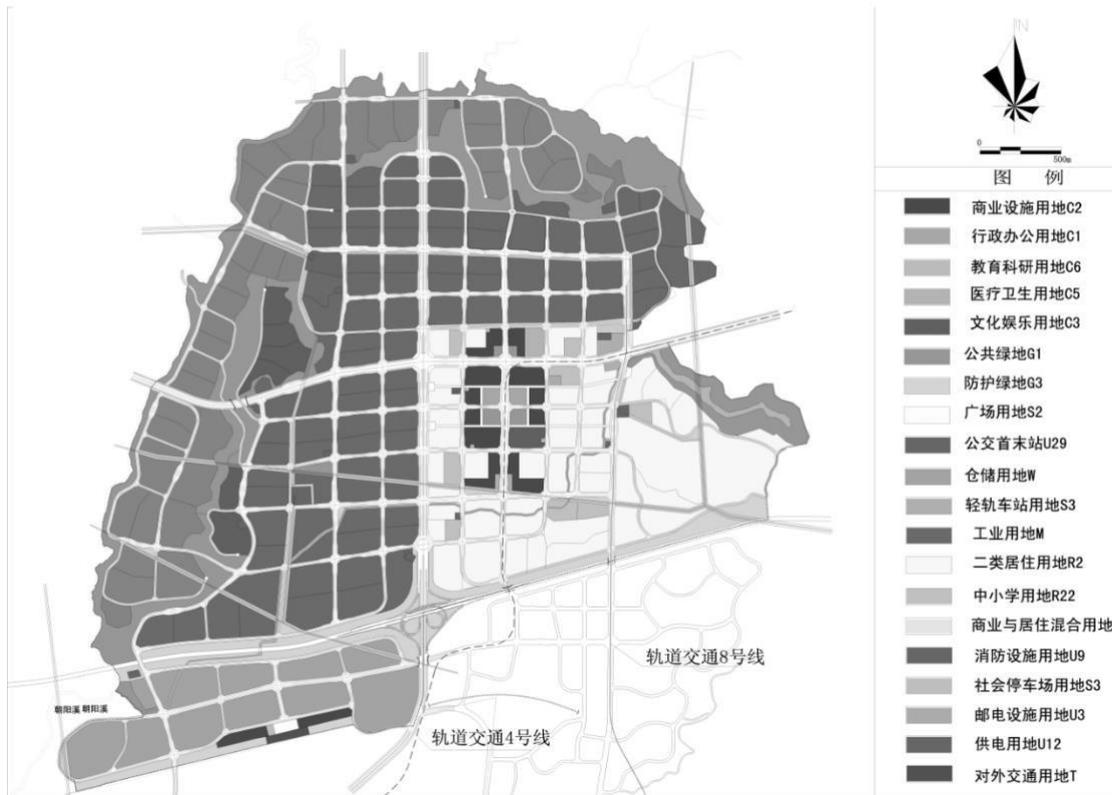
Source:http://www.liangjiang.gov.cn/Content/2015-07/08/content_1283.htm

Under the guidance of the above theoretical basis, the spatial layout of the overall conceptual plan of Yuzui New City is to retain the mountains, control the waterfront, and use the mountains and water bodies as green belts. The spatial form is clearly expressed as a scattered multi-cluster pattern, dividing the new city into The six areas enable the city to grow in an orderly manner, avoid the development model of spreading the pie, and facilitate the use of terrain and promote urban construction. The new city adopts a cluster layout. The main advantages are that it can reduce the large traffic volume, inconvenient urban connection, and repeated construction caused by the absolute separation of industrial and

residential land. Through effective use of natural green belts such as mountains and water bodies, the area can be isolated. The interior can also produce a good effect of non-interference between industry and residence. In the case of limited urban land space, at the same time, through the strong promotion of Yuzui New Town's cluster urban construction, can it attract batch after batch of higher-level projects and absorb them. Better talents.

Yuzui New City has chosen the location of the future city center as the focus of the city's recent construction. The reason is mainly due to the relatively mature external conditions in the central area, such as the passenger and freight station close to the Yu-Chang Expressway and Yu-Huai Railway; At the same time, the land in the central area is relatively flat and complete, and the capital investment in land renovation is relatively small, and it is easy to form large-scale industrial parks and urban centers, attracting the influx of industries and population; in addition, the area also has complete municipalities Infrastructure, electricity, water supply, gas and pollution Water treatment facilities can be expanded as required by urban development.

Figure 7.21 Land Use Planning Map of Yuzui New Town Central District



Source:http://ghzrzyj.cq.gov.cn/zwgk_186/fdzdgknr/gggs/ghgg/202002/t20200208_4952277.html

At this stage, the detailed regulatory plan for the central area of the new city has been approved by the Chongqing Municipal Planning Administration (Fig 7.21), and urban construction is also proceeding as planned. Yuzui New City chooses the central area as the initial start-up area. The purpose is to build a mature urban community through the construction of the central area, build urban infrastructure and public service facilities, and provide good living conditions to attract the inflow of population. The new city brings vitality; large-scale industrial parks provide development space for attracting industries to settle in, and inject a "strong needle" into the economic development of the new city. The construction of the new city is being carried out in stages in a scientific and orderly manner in accordance with the predetermined unified planning.

7.4 Summary of this chapter

This chapter uses specific cases to show the specific changes brought about by the opening of the Yuxinou Railway and the implementation of BRI to Chongqing's urban planning. Through the analysis of three representative cases, it shows the planning changes implemented in different areas with different ideas and different strategies. At the same time, the changes in other similar related areas can also be seen from the side.

The next chapter will combine the overall analysis and reference materials of this thesis and the author's own opinions to give some suggestions on Chongqing's trade and urban planning development.

8. Suggestions on Chongqing's trade development strategy and city planning strategy under the background of the opening of the BRI and Yuxinou international railways

8.1 Support high-end industries and increase product technology content

Through the analysis in the previous chapter, we can see that a major problem in Chongqing's trade development is that trade products are concentrated in labor-intensive industries, mostly low-end manufacturing, with relatively low added value and lack of core technology. To solve the problems of low added value and low technology content of Chongqing's trade products, it is mainly to vigorously support high-end industries. It mainly includes the following three aspects: First, the government has increased investment, using the construction of the industrial cluster of the laptop park as a reference, and the government has increased investment to build a mid-to-high-end industrial chain in a cluster; The third is to guide the capital market to invest in emerging high-end industries to solve the financial burden of enterprises.

8.2 Adjust the structure of the trade industry and improve the trade chain

Through the analysis in the previous chapter, we can see that a major problem in Chongqing's trade development is that trade products are concentrated in labor-intensive industries, mostly low-end manufacturing, with relatively low added value and lack of core technology. To solve the problems of low added value and low technology content of Chongqing's trade products, it is mainly to vigorously support high-end industries. It mainly includes the following three aspects: First, the government has increased investment, using the construction of the industrial cluster of the laptop park as a reference, and the government has increased investment to build a mid-to-high-end industrial chain in a cluster; The third is to guide the capital market to invest in emerging high-end industries to solve the financial burden of enterprises.

8.3 Further absorbing foreign capital and improving the quality of foreign capital

From the perspective of Chongqing's FDI industrial structure, the primary industry accounts for a relatively small amount, mainly concentrated in the secondary and tertiary industries. FDI has a greater role in pulling labor-intensive and resource-intensive exports of manufactured goods, and it is intensive in capital and technology. The effect of small-scale export-made products is relatively small. It can be seen that the influx of foreign capital into Chongqing is mainly to use local cheap labor. Therefore, excluding the impact of processing trade, FDI has to reduce the promotion of Chongqing 's trade development. To further develop Chongqing's trade, it is necessary to choose FDI selectively, encourage export-oriented, capital and technology-intensive investment, and improve the quality of foreign investment. Ford's investment in Chongqing mentioned above is a good example for reference. Chongqing should take advantage of the Yuxinou international railway operation and the implementation of the BRI strategy to introduce more high-level foreign capital.

8.4 Relying on Yuxinou to further integrate into the BRI strategy

The BRI strategy is a national top-level strategy. Chongqing is located on the Silk Road Economic Belt of the BRI strategy and at the same time upstream of the Yangtze River Economic Belt, radiating the Indo-South Peninsula Economic Corridor. Through the Yuxinou international railway and the Yangtze River channel, Chongqing organically links the Silk Road on the sea and the Silk Road on the sea, thus Chongqing is in an important trade position. Chongqing should vigorously develop the intermodal transportation of water and iron, connect the two parts of the BRI economic belt and the Yangtze River economic belt, achieve seamless connection, and use policy advantages to further develop Chongqing's foreign trade.

8.5 Implement national strategic positioning and goals, and comprehensively do a good

job in territorial and spatial planning

The Party Central Committee has given Chongqing a new major mission, positioning Chongqing as an important strategic fulcrum in the western region, at the junction of the BRI, and has a unique and important role in the national regional development and opening-up pattern. It is hoped that Chongqing will speed up the construction of inland open highlands, beautiful mountains and clear waters, and strive to promote high-quality development and create a high-quality life. Chongqing's location advantages, ecological advantages, industrial advantages, and institutional advantages are very prominent. It must play a supporting role in promoting the development of the western region in the new era, play a leading role in the joint construction of the BRI, and play a role in promoting the green development of the Yangtze River Economic Belt Demonstration role.

8.6 Respect the law of urban development and build a coordinated development of towns

The main urban metropolitan area strives to improve the energy level, coordinating core functions such as gateway hubs, international exchanges, technological innovation, advanced manufacturing, green demonstration, urban-rural integration, and integrating urban functions, cultivating modern industries, expanding the urban economy, and gathering high-end elements and configurations. Corresponding resources, focus on building the city's high-quality development leading area, inland open highland construction pioneer area, urban-rural integration development demonstration area, and create a core engine leading the development and opening of the western region. The town cluster in the Three Gorges Reservoir Area in Northeast Chongqing, highlighting ecological and cultural advantages, and building a green development demonstration zone on the upper reaches of the Yangtze River with "big ecology, great cultural tourism, and great people's livelihood", Gaoxia Pinghu "Great Three Gorges Culture" scenic belt and the core of the international golden tourism belt Area. The town cluster in Wuling mountainous area in southeast Chongqing, highlighting the advantages of folk customs and ecology, builds a new-type mountainous urbanization demonstration area and an ethnic cultural ecological global tourism demonstration area with

"big ecology, big folk customs, and big tourism", and builds a characteristic ecological economic corridor in Wuling mountainous area (Yang Fan, Zhang Jun. Persist in planning one domain from the overall situation and serving the overall situation with one domain, and be more proactive in promoting the development of "one circle and two groups", Chongqing Daily, 2019-10-10). While accelerating the formation of a coordinated urban development pattern, the city will jointly build an integrated, open, and networked higher-level urban agglomeration.

8.7 Based on the characteristics of mountain city and river city, shape the three-dimensional city style of landscape

Chongqing is a famous mountain city and river city. There are mountains and hills all over the place, rivers and rivers are intertwined, especially the main urban area is surrounded by "two rivers and four mountains". The mountains, water, forests, fields, lakes and grasses are integrated. It is a unique landscape city in the world's megacities. model. The unique landscape and water resources, on the one hand, bring many challenges to the land and space planning and construction; on the other hand, it objectively establishes a spatial pattern of "multi-center, group-like, and networked", giving the city a distinctive individual beauty. For example, the Liziba Light Rail Transit Building and Hongya Cave fully rely on topography and landforms and clever use of three-dimensional space, highlighting the beautiful shape of a "standing city", which is very recognizable and impactful, and has become a "net celebrity city" for domestic and foreign tourists to check in. "Attractions. Based on the endowment of mountain water resources, adhere to ecological priority and green development, give full play to the three-dimensional advantages, integrate "good mountains, good water, and good scenery" into urban planning and construction, and build mountain city trails, mountain parks, forest belt flower gardens, cliff balconies and other mountain city characteristic landscapes. As well as the river city's characteristic landscapes, such as the green bank of the river, the peninsula bay area, the river center green island, the canyon hot tub, the hot spring bridge capital, and the cableway ferry, strive to demonstrate the hero of the modern metropolis, the spirit of water, and the three-dimensional beauty.

8.8 Insist on putting people as the center, optimizing public services and infrastructure systems

Persist in "building the city for the people and the city for the people", strive to make up for shortcomings, strengthen the longboard, and coordinate industrial development, infrastructure construction, and public services to make people's lives more convenient, more comfortable and better. Optimize the "multi-center, group-style" spatial layout. Optimize regional functions in accordance with the principles of comprehensive functions, complete supporting facilities, and balance between job and residence. According to the concept of "independently becoming a city", a batch of production. A modern ecological new city with urban integration and complete supporting facilities, building a "one core and multiple centers" urban center system, forming a relatively independent and closely connected network landscape city. Leading the urban development pattern with rail transit. Put the solution of traffic congestion in an important position of urban development, promote the integration of the "three railways" of high-speed rail, municipal railways, and urban rail transit, fully implement the public transportation priority strategy, and form a safe, convenient, efficient, green, and economic integrated transportation system. "Metropolitan Circle on Track". Improve the urban and rural functional facilities, introduce international schools, international hospitals, build international communities, and build an international business environment, living environment and humanistic environment.

8.9 Pay attention to the inheritance of Bayu culture and enhance the value of the city with history and culture

Chongqing is a famous national historical and cultural city with a history of 3,000 years of city construction. Bayu culture, Three Gorges culture, etc. blended and developed here, leaving more than 20,000 historical and cultural relics such as Dazu Rock Carvings and Huguang Guild Hall. Chongqing will insist on incorporating historical and cultural protection into urban

planning and construction, and implanting historical and cultural elements into scenic spots and urban blocks, so that the city will leave memories and people will remember homesickness. The "Opinions of the General Office of the Chongqing Municipal People's Government on Strengthening the Planning and Implementation of the Protection and Inheritance of History and Culture" recently released on Taiwan, and put forward the goal of comprehensively building a national historical and cultural city with a trinity of "landscape, humanities, and city" (Shen Xiaojia, Zhao Yingzhao). The General Office of the Government issued the "Opinions" to strengthen the planning and implementation of historical and cultural protection and inheritance, Chongqing Daily, 2019-10-26). In the protection and inheritance work, we must insist on giving priority to protection, establish and improve the city's historical and cultural protection laws and regulations, and strengthen rigid constraints; we must pay attention to rational use, let historical culture live in the present and serve the contemporary; use modern technology to digitally protect historical culture, Process, display, and innovate the dissemination of historical and cultural content to improve the quality of the city.

8.10 Summary of this chapter

In summary, Chongqing's trade development ushered in a rare opportunity. It should actively improve its own problems that are not conducive to trade development and be aggressive. Specific measures that can be taken include: adjusting the industrial structure, cultivating emerging industries, developing high-end industries and modernizing service trade. To increase the level of foreign investment, use the Yuxinou international railway to actively integrate into the BRI national strategy and the Yangtze River Economic Belt, and develop Chongqing's international trade in many aspects at a deep level. The evolution of the city's nature and scale has witnessed the changes in Chongqing's urban development. In order to actively serve the national strategy, Chongqing's urban planning management must be continuously improved and new concepts developed. From the perspective of global vision and national positioning, the construction of inland open highlands should be accelerated.

Strive to create high-quality urban development and provide people with a high-quality life.

9. Conclusions and research prospects

9.1 Conclusion of economic sector

The opening of the BRI and the Yuxinou Railway has had a decisive impact on Chongqing's trade, mainly including two aspects: one is to promote the rapid development of notebook products and change the structure of Chongqing's trade products; the second is to improve Chongqing's trade and transportation environment. Chongqing's trade strategic position is at a new height. From the perspective of various trade indicators, since the opening of the BRI and the Yuxinou International Railway, Chongqing's trade has been increasingly competitive, the degree of opening has been deepened, and the level of trade has continued to rise, with good development momentum. Also, through SWOT quantitative analysis and all these conditions will be made explicit with in following part, it can be concluded that the internal advantages of Chongqing's trade development are not obvious, but the external development opportunities are good; Chongqing's recent rapid trade development has also benefited more from external opportunities. In the future trade development, Chongqing should adopt an aggressive strategic development policy, be aggressive, continue to seize development opportunities, improve its own shortcomings, and actively promote trade development. Based on the current situation of Chongqing's trade, some problems of Chongqing's trade development are raised, including unreasonable trade industrial structure and low value-added products, and corresponding solutions are proposed based on these problems. These measures can be summarized as the following points: support emerging trade industries and upgrade the level of trade products; continue to seize policy advantages, make full use of the Yuxinou Railway, seize the historical opportunities of the BRI, and actively develop Chongqing's foreign trade. From the situation of Chongqing's foreign trade development pattern, in terms of trade volume: first, in 2015 Chongqing's foreign trade is in a surplus position, and Asia is the main foreign trade area of Chongqing. Among them, import trade is relatively concentrated, mainly in Asia, accounting for 76.27% of Chongqing's total import trade; export trade is relatively diversified, Asia, North

America, and Europe Both are the main export trade clusters of Chongqing, accounting for 41.03%, 23.53%, and 21.26% of Chongqing's total exports respectively. Second, in 2015, the trade volume between Chongqing and the countries or regions along the BRI route accounted for 28.89% of Chongqing's total foreign trade. The countries or regions along the route were mainly distributed in Asia, Europe and Africa. In terms of import trade: First, from the perspective of importing countries, the main sources of Chongqing's import trade in 2015 were Taiwan, Malaysia, South Korea, Japan and other Asian countries or regions. 56.41% of Chongqing's total import trade. Second, from the perspective of import trade methods, Chongqing's import trade in 2015 was dominated by imported materials processing trade in general trade and processing trade. Among them, the import volume of general trade reached US\$28.99 billion, accounting for 52.55% of Chongqing's total import trade; the import volume of processing trade was US\$25.06 billion, accounting for 45.41% of Chongqing's total import trade. Third, from the perspective of imported commodities, Chongqing's overall import concentration index reached 0.70 in 2015. Imported products are highly concentrated. The 16th product (machines, mechanical appliances, electrical equipment and their parts; tape recorders and sound players, TV images, audio recording and replaying equipment and its parts and accessories) are mainly used (Chongqing Statistical Yearbook, chapter 16 Foreign economic trade and tourism, page 8 and 9 The quantity and amount of main import and export commodities), with imports reaching 13.411 billion U.S. dollars, accounting for 69.53% of Chongqing's total imports. In terms of the structure of Chongqing's export products: Chongqing's export concentration index is as high as 0.62, and the structure of export products is relatively concentrated, with the 16th category of products are the main products, with exports accounting for 60.69% of Chongqing's total exports. In terms of the importance of Chongqing's exports in the markets of trading countries: First, from a regional perspective, Chongqing's export occupies an important position in the Asian and African markets in 2015. The position in the European market is relatively low; the importance of the Asian market along the BRI, especially the Southeast Asian market, is relatively high, while the importance of the European market is relatively low. Second, from a national perspective, Chongqing exports are more important in the markets of Angola, Togo, Brunei, and Myanmar. Brunei and Myanmar are both countries along the BRI; Chongqing exports are among the most important markets in Luxembourg, Austria, Switzerland, and

Norway. The degree of importance is low; and the least important in the markets of Serbia, Ukraine, Slovakia, and Bulgaria along the BRI. In terms of the degree of dependence of Chongqing's exports on the markets of trading countries: First, from a regional perspective, Chongqing's exports in 2015 were relatively more dependent on Asian countries and relatively less dependent on European countries; and more dependent on Southeast Asian countries along the BRI. Large, less dependent on the markets of European countries along the route. Second, from a national perspective, Chongqing exports are highly dependent on the markets of the United States, Germany, and Hong Kong, China; and on the Malaysian and Singaporean markets along the BRI. Chongqing's exports are less dependent on the markets of Luxembourg, Somalia, Albania, and Serbia. Albania and Serbia are all countries along the BRI (Chongqing Statistical Yearbook, 2015).

From the time series evolution of Chongqing's foreign trade development, in terms of trade volume: first, 2000-2015 Chongqing's foreign trade volume fluctuated under the influence of the international financial crisis and global economic weakness in 2009, but the overall trend was increasing, and it was in a long-term trade surplus. It can be roughly divided into the following four stages: Stage 1 (2000-2008), showing a rapid development trend; Stage 2 (2008-2009), showing a sharp downward trend due to the international financial crisis; Stage 3 (2009-2014) Years), showing rapid development again; Phase 4 (2014-2015), affected by the global economic crisis, showing a rapid downward trend. Second, from 2000 to 2015, the proportion of Chongqing's trade with the countries or regions along the BRI route in Chongqing's foreign trade and the average annual growth rate have fluctuated. It can be roughly divided into the following four stages: Stage 1 (2000-2007), the proportion of the trade volume between Chongqing and the countries or regions along the BRI has shown an overall downward trend, with an average annual growth rate fluctuating between -11.51% and 45.70%; In the second stage (2007-2011), the proportion of trade volume showed a rapid upward trend. The average annual growth rate was affected by the 2008 financial crisis and reached -16.82% in 2009, and reached the highest average annual growth rate during this period in 2011 192.81%; in phase three (2011-2014), the proportion of trade volume showed a slight downward trend, and the average annual growth rate dropped from 192.81% to 22.88%. However, with the implementation of the BRI initiative in 2011 and the opening of the Yuxinou railway, 2014 The average annual growth rate increased to 38.02%; in stage 4

(2014-2015), the proportion of trade volume showed a slow upward trend, and the average annual growth rate fell to the lowest average annual growth rate during this period of -20.52%. In terms of the structure of imported products: The Chongqing Import Concentration Index has changed a lot from 2000 to 2015, and the overall trend is on the rise in volatility. Imported products are becoming more concentrated. It can be roughly divided into the following four stages: Stage 1 (2000-2009), the import concentration index shows a downward trend year by year, and the relative concentration of products of the 16th, 17th and 6th categories gradually changes. It is a relative diversification dominated by the 16th tea products, the 17th products, the 5th products, the 15th products and the 18th products. In the second stage (2009-2012), the import concentration index showed a clear upward trend, forming an import product structure dominated by the 16th category. In the third stage (2012-2014), the import concentration index showed a sharp downward trend, and the import structure changed from being concentrated mainly in the 16th category to a diversified mainly in the 16th and 14th categories. In the fourth stage (2014-2015), the import concentration index reached the highest value, which strengthened the position of the 16th category of imported products. In terms of export product structure, the Chongqing Export Concentration Index showed a steady upward trend from 2000 to 2015. The export product structure has changed from relatively diversified to increasingly centralized. It can be roughly divided into the following four stages: Stage 1 (2000-2005), the export concentration index is relatively low and fluctuates greatly, and the export products are relatively diversified, with the 17th, 16th and 6th products mostly; In the second stage (2005-2008), the export concentration index rose steadily, mainly in the 17th and 16th categories; in the third stage (2009-2011), the export concentration index remained at around 0.46 with slight fluctuations, and gradually formed export advantage of the 16th category of products; Phase 4 (2012-2015), the export concentration index is growing rapidly amidst fluctuations, export products are becoming more and more concentrated, and the export volume of the 16th product is growing rapidly, forming an absolute export advantage (Research on the Evolution and Influencing Factors of Chongqing's Foreign Trade Pattern under the Background of One Belt One Road, zhenglili, 2018).

From the perspective of the influencing factors of Chongqing's foreign trade pattern, in terms of economic development level, economic development level is highly positively correlated

with trade volume, which directly affects the scale of its foreign trade development and restricts the commodity structure of international trade, forming Asia, North America, and Europe. It is Chongqing's main trading area, and the United States and Germany are the foreign trade patterns of Chongqing's main trading partners. In terms of geographical location and transportation, the distance between the two places and whether the transportation is convenient are important factors that affect the cost of trade and transportation. Relying on its location advantages, Chongqing has formed a foreign trade pattern dominated by Asian countries. With its transportation advantages, Chongqing has become a trading country. There is a trend of gradual expansion to European and North American countries. In terms of industrial structure, the growth of Chongqing's notebook computer and automobile and motorcycle industries has not only expanded overseas markets and accelerated the growth of trade volume; Chongqing's advantageous industries are highly complementary to those in Asia and Africa, making Chongqing an important importer in Asia and Africa. Market, and Chongqing's exports are relatively highly dependent on the Asian market. In terms of tariffs, the rate of increase or decrease in a country's tariff rate is inversely proportional to the development speed of international trade. The reduction of China's tariff rate and the signing of free trade agreements have strengthened the supply and demand capabilities of products among trading countries, and brought Chongqing closer to trading countries.

9.2 Conclusion of city transformation

The construction of Chongqing's metropolitan area, accelerate the cultivation of large cities and regional central cities, the development of small and medium-sized cities and qualified organic towns, and promote coordinated and sustainable urban development. Strengthen the status of the metropolitan area as a central city in Chongqing and a region where the functions of the upper reaches of the Yangtze River are concentrated, highlight its core position in the economic belt of the upper reaches of the Yangtze River and the western region, transform traditional industries, cultivate new industrial systems, and develop high-tech industries. Modern service industry, strengthen the construction of central functions such as transportation, logistics distribution, financing, modern management, comprehensive services, and technology transfer, and enhance the ability to drive regional radiation. For

Greater Chongqing, further clarify the spatial strategy of urban-rural integration, build a pattern of urban-rural integration and coordinated development in the urban area, speed up the process of urbanization, and narrow the gap between urban and rural areas; Service function, form agglomeration effect, promote the intensive use of land, and strive to build a modern small town system; accelerating industrial agglomeration, rationally lay out the space for regional industrial development, and promote the sustainable and coordinated development of the tertiary industry; the construction of new rural areas and continue Improve and improve the rural living environment and quality; the construction of an integrated urban-rural infrastructure network to form a complete infrastructure network at different levels. Considering that the metropolitan area is vast, spanning nine administrative districts, and the internal development status is unbalanced. On the one hand, it has regional spatial characteristics and contains a large number of natural ecological areas. On the other hand, its geographical environment is divided by the north-south mountain range, population and economy. And the city facilities are highly dense. On the one hand, it requires both large-scale macro-control and urban construction management and development control at the meso and micro-scale levels; It is necessary to consider the overall regional development plan and fully take care of the interests of various development subjects.

Therefore, the planning and management of this kind of cross-administrative development with highly complex socio-economic ties cannot be solved simply through administrative structure and zoning adjustments. Instead, system innovation must be carried out to establish a coordination mechanism for regional development and construction to govern. The establishment of a regional cooperation mechanism should be accelerated. Under the current market economy system, cross-regional cooperation between administrative divisions should be established to establish a regional planning cooperation system parallel to administrative powers, forming a cross-administrative planning and construction under the market economy system Management mode. During the implementation of the overall urban planning, in accordance with the requirements of urban-rural integration, we should promptly compile the urban zoning plan and the regulatory detailed plan of the construction area, further determine the regional urban-rural spatial planning framework and basic pattern, determine the regional land use, infrastructure facilities, Ecological environment construction and other urban and rural coordinated development goals.

In the past, Chongqing's urban master plan did not have enough grasp of the laws of urban development and population scale changes, resulting in insufficient prediction of rapid population agglomeration in the city, and urban construction was stretched. Therefore, it was necessary to control the appropriate urban development scale. The development of a city must depend on and coordinate with the support system of its ecosystem. Through the interactive relationship between the scale of urban development and the ecological support system, with the ecological environment as the forerunner, the population scale and construction land scale of the city are determined, and the spatial strategy for urban development is proposed. Through the analysis of urban resources, ecology and environmental system factors, starting from the elements of resource carrying capacity, environmental carrying capacity and ecological carrying capacity, the scale of metropolitan area is adaptively controlled.

The Chongqing metropolitan area is located in the parallel ridge valley low mountain and hilly area in the eastern part of the Sichuan Basin. It is also the confluence zone of the Yangtze River and the Jialing River. It is affected by natural conditions and restricted by the resource environment. Judging from the current stage, Banan, Yubei and Beibei districts in the three outer areas of the metropolitan area can provide the reserve land resources needed for construction land and ecological land, but the energy structure of the densely populated central city is relatively unreasonable. Metropolitan areas have resource and environmental problems such as the fragility of the mountain environment's own ecological system, the decline of water environment quality, the energy structure caused by atmospheric environment quality, the urban heat island effect, the urban land use structure, and the lack of ecological land in central urban areas.

At the same time, as a typical mountainous city, Chongqing has more people and less land, and the contradiction between supply and demand of land resources is acute. With the urban construction in the metropolitan area, the rapid development of industry and transportation will further occupy a large amount of land, the contradiction between land supply and demand will become more prominent, and urban construction land will be scarcer.

Therefore, with regard to the scale control of urban development, in the planning and implementation process, we should start from the combination of resource carrying capacity, environmental carrying capacity and ecological carrying capacity, and reasonably control the

scale of urban development land to construct an ecological, urban-rural integration, the security pattern of resources and environment. The ecological, resource and environmental security patterns in the process of urban development are divided from the macro and micro levels to maintain the balance of the entire ecological, resource and environmental system and ensure the rapid, sustainable and healthy development of the city.

With the further implementation of the urban development strategy to the north of the Inner Ring Road, to the west of Zhongliang Mountain, and to the east of Tongluo Mountain, the population spatial layout of the urban area will also be changed accordingly. The population of the central urban area will also be evacuated to various new districts, and finally its population density will decrease. At the same time, the population density of new districts in peripheral cities will be greatly increased, and effective industrial population dispersal should be adopted to achieve a suitable population scale for each group.

As an important central city in the western region and an economic center in the upper reaches of the Yangtze River, the Chongqing Metropolitan Area should avoid further strengthening the functions of the core area and carry out the necessary effective and orderly decomposition of the functions of the urban core area. On this basis, starting from the overall urban area, breaking the constraints of administrative divisions, and achieving the sustainable development of the overall space through the integration of economy, environment, ecology and various resource functions. On the other hand, it is necessary to strictly control the urban non-construction land and the isolated green space of the clusters to ensure the controlled development between clusters and avoid the adhesion development between clusters.

Based on the current development foundation of the Chongqing metropolitan area, further strengthen and improve the functions of the metropolitan area group, and improve the industrial system of Chongqing as the economic center of the upper reaches of the Yangtze River, with high-tech industries and modern manufacturing as the leader, modern service industry as the support, and modern agriculture as the foundation. Functions of modern service industry center, modern manufacturing base and transportation and communication hub in western China. Accelerate the process of economic integration with the Southwest region, take on higher-level and richer regional functions in regional cooperation, and form an urban system centered on metropolitan areas with reasonable layout of large, medium, and small cities and small towns.

At the same time, as far as the clusters in the metropolitan area are concerned, they are still facing the problem of how to construct appropriate functions of the clusters in each city. It is necessary to emphasize the spatial agglomeration of each group, change the state of dispersion, and form a reasonable urban model; it must also emphasize the coordination and division of labor of each group, optimize the allocation of resources, and rationally allocate functions; it must emphasize the sharing of resources of each group and implement various cities Infrastructure and public service facilities are jointly constructed and shared to maximize the benefits of resources and funds. At the same time, it is necessary to emphasize environmental quality, continuously improve the quality of life and ecology, enrich and improve various facilities, and create a good living environment.

First, the principle of ecological priority should be established, and at the same time, make full use of the advantages of the existing environment and facilities, and rationally arrange the functions of the group. At the same time, the direction of the industry must be effectively transferred. For a certain period of time, the processing industry will continue to maintain its leading industry status and become the main economic pillar of the city; however, due to the weakening of cost advantages, the processing industry may further decline; the development of the processing industry The labor-intensive type shifts to the high value-added type, and adheres to non- (light) pollution. With the continuous development of metropolitan areas, new urban function development elements have been given to the development of various groups, such as high-tech industries based on information technology, biomedicine, new materials, and optomechanical integration technology; education industry, and plans to establish universities Campus or research base. However, as the city continues to develop, emerging service industries featuring conference commerce, large-scale exhibitions, and competitive sports will form a regional center of housing, commerce, service, and financial industries.

The construction of a comprehensive transportation network system in urban areas should be based on the construction of ground road networks and transportation facilities, accelerate the construction of urban expressways and urban rail transit systems, give priority to the development of public passenger transportation, and gradually establish a ground public passenger and cargo transportation as the main body , Express roads and rapid rail transit as the backbone, a comprehensive urban transportation system that combines multiple modes

of transportation with complete functions, advanced management, safety, convenience, efficiency and economy.

As a typical mountain city, Chongqing has the obvious characteristics of more bridges, long tunnels, and steep slopes, etc. than other cities in China under the influence of the division of the two rivers and the topography. The various clusters in Chongqing are divided by natural elements and need to be connected through convenient and effective river crossings and mountain tunnels, and corresponding management measures should be formulated. In terms of public transportation system construction, comprehensive transportation hubs should be built in densely populated areas, the organic combination of points and lines in the public transportation system should be strengthened, and rail transit should be vigorously developed. , Orderly and reachable. At the same time, it is necessary to speed up the construction of bus stations and parking lots in combination with the transformation of the old city, so as to avoid the encroachment of various roads in the dense areas of the old city by various buses, resulting in road congestion. In various business districts, crowded areas of people and vehicles, station terminals, large-scale distribution plazas and recreational plazas In other regions, the urban pedestrian traffic system should be planned uniformly, and an effective pedestrian and car traffic conversion system should be established.

In the current stage of the implementation of the overall plan, the construction of the new district should focus on strengthening road infrastructure construction, emphasizing the coverage of public transportation, and to a certain extent, it can also relieve the population of the centers; in the densely populated areas of the business districts, make full use of the public space. The advantages of automobiles, optimize the network structure, adjust the composition of vehicles, and improve the setting of parking lots. Combining with various commercial concentration points, lay out rail transit lines to build urban large-capacity rail transit systems. Make overall plans for the line network of minibuses and taxis to meet the needs of passengers on secondary trunk and branch roads. On the whole, build and perfect a three-dimensional transportation system that conforms to the characteristics of "Mountain City" and "River City" to form a passenger transportation system that connects ground, underground, air, water, and underwater. According to the needs of passenger traffic, combined with terrain and buildings, various public passenger transportation facilities with local characteristics of Chongqing, such as aerial ropeways, cable cars, elevators and

escalators, will be built.

The creation of urban characteristics is a major problem in urban construction and an important goal in urban construction. Urban characteristics are not simply unconventional, not simply copying or imitating, nor are they just empty shells, but on the basis of digging into the urban development history and development environment, and throughout the entire urban planning and urban construction process.

As metropolitan areas enter a period of rapid urbanization, urban construction is accelerating, and the scale of cities is also rapidly expanding and expanding in a short period of time. It is more necessary to effectively guide urban planning and construction to build cities with personalized urban characteristics. Therefore, in the process of implementing the overall plan, the grasp of urban characteristics should include three aspects: its cultural traditions and facilities, human environment, natural environment and its utilization.

Urban culture is a product of historical development and a projection of history; a city is not only a product of historical culture, but also a cultural carrier of social economy. In the process of urban construction and development, by maintaining the continuity of urban culture, protecting the regional characteristics of traditional buildings, and maintaining the memory slice of the urban space, can the culture of the city be preserved and the charm of the city can be continued. At the same time, we must also pay attention to the historical and realistic values of historical relics, highlight the characteristics of the city and enhance the quality of urban culture through the protection, continuation and reproduction of the human environment. The natural landscape and topography have a direct impact on the material culture of Chongqing. The urban style is restricted and influenced by the natural environment, and the urban spatial layout, urban form, urban landscape and urban architectural style all have distinct individual characteristics. "There is a city on the mountain, and a mountain in the city." "Mountain" is the carrier of Chongqing city and an organic part of the city. "There is a river in the city, and a city is built by the river." The Yangtze River and Jialing River meander through the urban area. The "River" is one of Chongqing's traffic arteries and the main water source of the city. The two rivers have become an organic part of the urban structure. Therefore, it is necessary to find urban characteristics in the natural environment.

References

Literature and paper resources

Analysis on the Role of Import and Export Trade in my country's Economic Growth[J].
Technical Economics and Management Research,2001.

Cheng Dazhong, Quantitative Analysis of the Dominant Comparative Advantage of China's
Service Trade[J].Shanghai Economic Research,2003(5).

Chenweiguo, Fandaliang.An Empirical Analysis of the Relationship between my country's
Foreign Trade and Economic Growth[J].Journal of Yunnan University of Finance and
Trade,2004,(8).

Chongqing Economic Commission. Planning for the adjustment of the layout of industrial
productivity in Chongqing[R]. 2004.10

Chongqing Planning Research Center. Research on the planning strategy of Chongqing
municipality to build a national central city[R]. Chongqing. 2008.05

Ding Li, Intra-product trade and the upgrading of China's industrial structure[J]. Northern
Economics and Trade,2011.

Editorial Board of Chongqing Steel Yearbook. "Chonggang Yearbook"[M]. 2004. Internal

publication

Editorial Committee of Chongqing Special Steel History. Chongqing Special Steel History 1986-1999[M]. Internal publication, 2002.

Editorial Office of the Chronicles of Heavy Iron and Steel. "Chronicles of Heavy Iron and Steel (1938-1985)" [M]. Internally published December 1987

Gao Qian, Guo Xinxin, A Summary of Modern International Trade Theory[J].News in Economics,1997.

Guo Fanli. et al. "2013-2020 Chongqing Strategic Emerging Industry Development Research Report" [R]. China Investment Consulting Agency Research Report

He Liancheng, A comparative analysis of Sichuan and Chongqing's foreign trade structure [D].2009.

Highwell, Introduction to China's Development Economics[M]. Higher Education Press, 1996.

Hu Yong, Introduction to Modern Economic Growth Theory[M]. The Commercial Press, 1994.

Hu Dinghe, The third largest marshalling station in Asia will put into use "Yuxinou" within this year and shorten it by one day[N]. Chongqing Commercial Daily, 2013-04-27.

Jia Jianhua, Chen Hong, Research on the Development of Chongqing's Foreign Trade[D]. 2010.

Jingjing, The development prospects and countermeasures of the New Asia-Europe Land Bridge[J].Regional Economy,2001.

Li Wen, Reassess the export structure transformation of East Asian countries[J].World Economy,2001.

Li Zixiang. "Chongqing Industry Before and After Victory"[J]. Sichuan Economic Quarterly. Vol. 3 No. 4. 1946. 12

Li Xin, Wang Cuizhu, Tan Sang, Co-integration analysis of China's foreign trade and economic growth[J].Industrial Economic Review,2004.

Lin Yifu, Liu Peilin, China's Export Potential and Its Influencing Factors ——Estimation Based on Stochastic Frontier Gravity Model[J]. Quantitative and Technical Economic Research, 2010.

Liu Lijun, Theory and Practice of International Trade[M]. Capital University of Economics and Business Press, 1999.

Liu Zhaoran, The relationship between economic development strategy and fairness and efficiency[J].Economics,2003.

Liu Mingxing, Yue Changjun, Xu Xiulan, Cooperative trade transmission in the international business cycle: an empirical study based on the H-K trade ternary decomposition method[D]. Tianjin University of Finance and Economics, 2013.

Lu Dayue. "A Summary of 100 Important Events in Chongqing Since Modern Times"[M]. 2005.1

Lu Xiaodong, Zhao Qiwei, Research Progress on the Relationship between Institutions and International Trade[J]. Economic Developments, 2013.

Peng Jianfang, How to treat the current role of foreign trade on national economic growth[J].International Trade Issues,1999.

Peng Fuwei, Enlightenment of EU's multimodal transport policy on the development of combined iron and water transport in my country[J].Railway Transport and Economy,2013.

Planning Innovation: 2010 China Urban Planning Annual Conference Proceedings [C]. China Urban Planning Society, Chongqing Municipal People's Government, 2010:6.

Qiuyi,Qifangyun,Dai Binbin.Measurement and application of international technology spillover based on import trade[J].China Soft Science,2005.

R. Solo, Collected Papers on Economic Growth[M]. Beijing University of Economics Press, 1989.

Research on Wuhai Railway Freight Transport Development Strategy Based on SWOT Analysis[D]. Chang'an University, 2012. Gong Liutang, Economic Growth Theory[M]. Wuhan University Press, 2000.

Shao Yong, Wang Xueyong. Parking planning practice in urban CBD area: Taking Yujiapu Financial District as an example[A].China Urban Planning Society, Chongqing Municipal People's Government.

Sun Jian.A Correlation Analysis of Chongqing's Export Trade and Economic Growth[J].Journal of Chongqing Technology and Business University (Western Forum), 2005(4).

Tian Defang. An Empirical Study on the Relationship between Foreign Trade and Economic Growth in Chongqing[D].2009.

Wang Lu, Feng Lipeng. Research on the time of customs clearance and track change on Yuxin-Europe Railway[J]. Logistics Engineering and Management, 2014.

Wang Qingying, Empirical Analysis on the International Competitiveness of China's Service Trade[J].World Economic Research,2005.

Wang Yudi,Qin Teng.An Empirical Analysis of Chongqing's Economic Growth Driven by Foreign

Trade[J].Business Culture,2011.

Wen Yongyao. Archives witness the new development of the national iron and steel industry in the past century-a review of the 30 years of reform and development of Chongqing Iron and Steel Group Corporation. 2008

Wu haifeng,Niu yongping,Huang yan.Improvement of terms of trade and technological progress[J].Economic Issues,2004.

Xue Rui, Su Qingyi. Does factor endowment affect trade structure?—A review based on empirical research literature[J]. Journal of Zhongnan University of Economics and Law, 2014.

Yu Ying, Hu Wantai. Compact City—A Study on the Spatial Structure Model of Chongqing Metropolitan Area[J]. Urban Development Research,2004,04: 59-63+66.

Yang Fu, Yuxinou restarts the world continent era[J]. New Chongqing, 2015.

Zhang Erzhen, Ma Yeqing. International Trade[M]. Nanjing University Press, 2002.

Zhang Haiwei. Research on the Impact of Institutions and Institutional Changes on International Trade[D]. Dongbei University of Finance and Economics, 2012.

Zhang Junxia. Research on the influence of "Yuxin-Europe" international railway on

Chongqing's foreign trade development[D]. University of International Business and Economics, 2015.

Zhang Xuan. Analysis on the Influencing Factors and Mechanism of Sino-European Trade——Based on the Trade Gravity Model[D].Central China Normal University, 2013.

Zhang Yantao. Research on Chongqing's Industrial Layout Changes and Location Optimization[D]. Master's Thesis of Southwest University

Zhao Qingsong. The characteristics, problems and countermeasures of China-Europe international railway train operation[J]. International Business Forum, 2015.

Zhong Zhaorui. "Industrial Construction in the Rear Area during the War"[M]. National Book Publishing House, 1941

Zhou Yan. The Chongqing Model of the "Notebook" Industry[N]. China Today, 2015-06-15.

Zhu Baohua, New Economic Growth Theory[M]. Shanghai University of Finance and Economics Press, 1999.

Government planning document resources

"Chongqing Central Business District Planning", 2003.

"Dadukou District Green Space Construction Plan", "Dadukou District Forest Project Master Plan", Dadukou District District Planning Bureau, 2015

"The First Street in Western China-Jiefangbei", Market Office of Chongqing Municipal Commission of Commerce.

Chongqing Jiangbei District Statistical Yearbook over the years, Jiangbei District Statistics Bureau

Chongqing Statistical Yearbook over the years, Chongqing Bureau of Statistics

General development concept planning manual and special report of Yuzui Group in the main urban area of Chongqing City, Yuzui Group Project Team

General Urban Design Manual of Chongqing University Town, Sand District Division of Chongqing Planning Bureau

Research on the Development of Urban Spatial Structure Form of Chongqing Metropolitan Area, Master's Thesis of Chongqing University, 2005

Texts and manuals of Chongqing's previous urban master plans, Chongqing Planning Bureau

The text and manual of the conceptual planning of the Western New Town in Chongqing, the Western New Town Project Team

Internet resources

2011 National Star-rated Hotel Statistics Bulletin, Liu Yan, Baidu Library, 2012/06/29,
<https://wenku.baidu.com/view/eb3c9675f242336c1eb95e1e.html>

2018 Chongqing Mid-to-High-end Hotel Market Big Data Analysis Report, Dandan, Zhihu
column, 2019, <https://zhuanlan.zhihu.com/p/56506172>

2019 Chongqing National Economic and Social Development Statistical Bulletin, Chongqing
Bureau of Statistics, National Bureau of Statistics Chongqing Investigation Team, 2020,
http://www.cq.gov.cn/zqfz/gmjj/tjgb/202004/t20200402_6963113.html
93%81%E8%B7%AF&fromid=5714342AF/13132427

Atlas of Chongqing Urban and Rural Master Plan (2007-2020) (revised in 2011), Chongqing
Planning and Natural Resources Bureau, 2020, http://www.cq.gov.cn/zwgk/fdzdgnr/ghxx/qygh/202007/t20200702_7633998.html

Baidubaik ,baidunet ,[https://baike.baidu.com/item/%E4%B8%80%E5%B8%A6%E4%B8%80%E8%B7%AF/13132427#reference-\[1\]-20049275-wrap](https://baike.baidu.com/item/%E4%B8%80%E5%B8%A6%E4%B8%80%E8%B7%AF/13132427#reference-[1]-20049275-wrap)

Chen jimin, Recognize the Belt and Road correctly, people'snet,
02/06/2018,<http://theory.people.com.cn/n1/2018/0226/c40531-29834263.html>

China,People'sDailyOverseasEdition,02/25/2015,http://finance.sina.com.cn/world/20150225/091921589068.shtml?from=cq_xgbd

China-Europe Express Railway Multimodal Transport Case Analysis: A Case Study of Laptop Computer Transportation from Chongqing, China to Rotterdam, Europe, China Industrial Supply Chain Logistics Network, 2019, <https://www.amiue.com/p/7037/>

Chongqing Customs official website. <http://chongqing.customs.gov.cn/publish/portal153/>.

Chongqing Foreign Trade and Economic Commission website. <http://www.ft.cq.cn/>.

Chongqing Jiefangbei Central Business District Management Committee
<http://www.cqcbd.gov.cn/html/?27-1-118.html>

Chongqing Municipal Commission of Commerce website: <http://wsy.cq.gov.cn/html/2007-08-01/402881e414207d7101142099dbc60049.html>.

Chongqing Regional Planning, Chongqing Municipal People's Government Website, 2011,
http://www.cq.gov.cn/zwgk/fdzdgknr/ghxx/qygh/index_3.html

Chongqing Statistical Yearbook, Chongqing Bureau of Statistics,
http://tjj.cq.gov.cn/zwgk_233/tjnj/index_1.html

Chongqing Urban and Rural Master Plan (2007-2020), Chongqing Bureau of Natural Resources
Planning, 2011, <https://wenku.baidu.com/view/80f32a21192e45361066f5dd.html>

Comprehensive ranking of China's top 500 foreign trade companies in 2018, Ministry of
Commerce of the People's Republic of China, 2019/08/13,
<http://tjxh.mofcom.gov.cn/article/n/201908/20190802890159.shtml><https://baike.baidu.com/item/%E4%B8%80%E5%B8%A6%E4%B8%80%E8%B7%>

Hualong,Lanyu Railway opened to traffic in 2015, Yuxinou will be
diverted,Hualongnet,08/03/2016,http://cq.cqnews.net/jjxw/2012-07/17/content_17651739.htm

Hualong,The significance of Yuxinou
train,Hualongnet,26/07/2016,http://cq.cqnews.net/cqztlm/2013-10/30/content_28443576.htm

Jiefangbei business district,<http://hanyu.iciba.com/wiki/2605550.shtml>.

Liu ran,Zhou suya,Ministry of Commerce: In 2015, Chinese enterprises' investment in "Belt

and Road" countries increased by 18.2%,people's
net,01/20/2016,<http://finance.people.com.cn/n1/2016/0120/c1004-28070428.html>

"Liuxian,Chongqing has become the world's largest notebook computer production base for 6
consecutive years, Sina Tech,05/21/2020,[https://tech.sina.com.cn/roll/2020-05-21/doc
iircuyvi4330506.shtml](https://tech.sina.com.cn/roll/2020-05-21/doc
iircuyvi4330506.shtml)"

Microelectronics Park: "quiet changes in investment contracting projects,
XiyongMicroelectronicsPark,05/22/2019,[http://xiyong.xinhua023.com/xiyong_content/2019-
05/22/content_530585.htm](http://xiyong.xinhua023.com/xiyong_content/2019-
05/22/content_530585.htm)

National Bureau of Statistics data query, <http://data.stats.gov.cn/easyquery.htm?cn=C01>

National Bureau of Statistics, <http://www.stats.gov.cn/>

Notice of Chongqing Municipal People's Government on Printing and Distributing Chongqing
Population Development Plan (2016-2030), Chongqing Municipal People's Government,
2017/06/27,[http://www.cq.gov.cn/zwgk/fdzdgknr/ghxx/zxgh/202001/t20200114_4604932.h
tml](http://www.cq.gov.cn/zwgk/fdzdgknr/ghxx/zxgh/202001/t20200114_4604932.h
tml)

One Belt One Road (National Top-level Cooperation Initiative), Baidu Encyclopedia, 2012,
Promote the vision and action of jointly building the Silk Road Economic Belt and the 21st
Century Maritime Silk Road,Xinhua
net,06/27/2015,http://news.xinhuanet.com/finance/2015-03/28/c_1114793986.html

Sun Zhengcai, Secretary of the Chongqing Municipal Party Committee: Strive to build Chongqing into an international metropolis around 2030, Ju Jianbing, Chongqing Daily, 2017/05/21,

https://www.guancha.cn/politics/2017_05_21_409400.shtml

The ranking of China's top 500 foreign trade companies in 2018 is released, Souhang.com, 2019, http://www.sofreight.com/news_29287.html

Tuoweng, One Belt One Road China Version Globalization (2): China-Europe trains running through Eurasia, Zhihu Zhuanlan, 04/17/2018, <https://zhuanlan.zhihu.com>

"Xinhua News Agency, Dancing Wings and Rich Achievements--Review and Vision of the Construction of ""One Belt and One Road""", Xinhua net, 01/03/2017, http://www.xinhuanet.com//politics/2017-01/03/c_1120233965.html"

"Yuxinou" International Rail Link, Baidu Encyclopedia, 2011, <https://baike.baidu.com/item/%E2%80%9C%E6%B8%9D%E6%96%B0%E6%AC%A7%E2%80%9D%E5%9B%BD%E9%99%85%E9%93%81%E8%B7%AF%E8%81%94%E8%BF%90%E5%A4%A7%E9%80%9A%E9%81%93/19872044?fromtitle=%E6%B8%9D%E6%96%B0%E6%AC%A7%E5%9B%BD%E9%99%85%E9%/p/27748775>

Zhaohuan, Discussion on the Trans-Asian Cross-border Transportation Facilities Construction of the Lower Chongqing New Europe Line, Zhifushidai, 2018, <http://m.fx361.com/news/2018/0502/3470799.html>

Zhong jingrui,Yuxinou connects Eurasia: 10,000 European luxury cars are expected to enter
Zhouyan,The Chongqing Model of
the"Laptop"Industry,chinatoday ,06/15/2015,[http://www.chinatoday.com.cn/chinese/sz/sd/
201506/t20150615_800034157.html](http://www.chinatoday.com.cn/chinese/sz/sd/201506/t20150615_800034157.html)