Issue 11 | March 2021

GEF-6 China Sustainable Cities Integrated Approach Pilot Project

QUARTERLY NEWSLETTER

GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

WORLD BANK GROUP
Urban, Disaster Risk Management, Resilience & Land

PROJECT PROGRESS (As of March 15, 2021)

Ministry of Housing and Urban-Rural Development of P.R.C.

GEMH-01A *Development and Applications of TOD Policies, Technical Standards, and Management Tools for Chinese Cities:* The detailed design for diagnosis, planning, monitoring, and impact assessment module of the national TOD platform has been completed. The expert review meeting will be held at the end of March 2021 and the output report will be submitted to the World Bank after the meeting.

Beijing

GEBJ-1A *Preparation and Implementation of City-level Transit-oriented Development (TOD) Strategy and Project Management Support for Beijing:* The output report covering Tasks 1-4 was submitted to the World Bank on January 22, 2021. Beijing PMO is currently working on Task 6 TOD indicator system, TOD-related policy framework research, and summary of public engagement activities.

GEBJ-2 *Research on Optimization of Rail Transit Lines and Land-use based on TOD Concept:* Beijing PMO has completed the research framework of Task 2. All the work under Task 2 is expected to be completed by the end of May 2021.

GEBJ-3 *Pilot Project of Comprehensive Urban Renewal Planning and Development based on TOD Concept:* Beijing PMO held an expert review meeting for the work under Task 1 on March 11, 2021. The revised outport report of Task 1 will be submitted to the World Bank by the end of March 2021. Activities under Task 2 are being carried out simultaneously. Task 2 is expected to be completed by the end of August 2021.

Tianjin

GEFTJ-1 *Preparation and Implementation of City-level Transit-oriented Development (TOD) Strategy and Project Management Support for Tianjin:* Tianjin PMO has completed the expert review of Tasks 1-6 and submitted relevant output reports to the World Bank on February 19, 2021. Currently, activities under Task 7, 9 and 10 are being carried out. Tianjin PMO plans to complete the expert review of the above work by the end of July 2021.

GEFTJ-2 *Research on Tianjin Urban Rail Transit Project Financing under TOD Mode:* Due to the cancellation of Task 8, the total contract price was reduced accordingly. An amendment request for the contract was submitted to the World Bank on January 6, 2021. The inception report was reviewed and evaluated by experts and submitted to the World Bank on February 19, 2021. Currently, activities under Tasks 1-4 are being carried out.

GEFTJ-3 *Tianjin Jianchang Road Area Rail Station - Planning and Design Research Project based on TOD Concept:* Tianjin PMO has issued the bidding announcement on January 25, 2021, and the deadline has been extended to March 12, 2021. As of March 15, 2021, 4 consulting agencies expressed their interest in providing consulting services for this project.

Shijiazhuang

GESJ-1-2 *Preparation and Implementation of City-level Transit-oriented Development (TOD) Strategy and Project Management Support for Shijiazhuang:* Tasks 1-5 were completed. Shijiazhuang PMO plans to hold the expert review meeting in March 2021 and submit the relevant output reports to the World Bank after the meeting.

GESJ-2-2 *Land Adjustment Plan for Shijiazhuang Urban Rail Transit Line 4:* The contract was officially signed on February 2, 2021. The inception report is expected to be completed in March 2021.

GESJ-3 *Research on the Planning and Design of the area north of Metro Line 1 Shijiazhuang East Station based on TOD Concept:* The TOR was finalized on March 1, 2021 and the contract procurement process will start in the same month.

Nanchang

GENC-1A *Preparation and Implementation of City-level Transit-oriented Development (TOD) Strategy and Project Management Support for Nanchang:* Nanchang PMO conducted a project mid-term review meeting on February 5, 2021. The relevant output reports are still under revision. The final draft of the reports will be submitted to the World Bank in March 2021.

GENC-2A *Study of TOD Planning and Design for Rail Transit:* Tasks 1-2 were completed and the output report was submitted to the World Bank on February 7, 2021.

GENC-3B *Study of TOD-based Regional Planning around Rail Transit Stations:* Nanchang PMO started the contract procurement process on December 1, 2020. The first shortlist review was held on January 26, 2021. However, since the organizations submitting EOI documents involved various types of NGOs, institutions, enterprises, etc., Nanchang PMO adopted the opinion of the evaluation panel and received no objection from the World Bank to change the procurement selection method from QCBS to QBS to ensure the market competitiveness. The PMO reissued the bidding announcement on February 1, 2021 and planned to complete the shortlist review by the end of March 2021.

Ningbo

GENB-1 *Preparation and Implementation of City-level Transit-oriented Development (TOD) Strategy and Project Management Support for Ningbo:* Activities under Task 4 are being carried out. Ningbo PMO plans to hold an expert review meeting in June 2021.

GENB-2.A *Whole-process Consulting Services for TOD Improvement Pilot Project of Kaiming Street (Yaohang Street-Zhongshan Road) and Xinjie and Shuangliang Communities:* Ningbo PMO completed the bid evaluation on March 10, 2021. The contract will be officially signed by the end of March 2021.

GENB-2.B *Research on Financing Model of GNEB-2. B TOD Improvement Pilot Project of Kaiming Street (Yaohang Street-Zhongshan Road) and Xinjie and Shuangliang Communities:* Ningbo PMO completed the bid evaluation on March 11, 2021. The contract will be officially signed by the end of March 2021.

GENB-3 *Studies on TOD-based Improvement of Built Rail Stations:* Tasks 1-3 were almost completed. Among them, the public engagement activities under Task 2 were postponed due to full consideration of potential infection risk in the post-covid-19 period. An amendment request for the contract was submitted to the World Bank on January 28, 2021. The relevant output report was submitted to the World Bank on February 1, 2021. Currently, activities under Task 4 are being carried out.

Guiyang

GEFGY-1 *Preparation and Implementation of City-level Transit-oriented Development (TOD) Strategy and Project Management Support for Guiyang:* Currently, activities under Tasks 8-16 are being carried out. Guiyang PMO plans to conduct the expert review and submit the output reports to the World Bank in March 2021.

GEFGY-2 *Study on the TOD Comprehensive Development Planning for Areas along the Rail Transit Line S1 Phase I and Line 3 Phase I Project in Guiyang City:* The contract was officially signed on December 22, 2020. Activities under the contract are being carried out simultaneously.

GEFGY-3 *Study on the TOD Comprehensive Development Planning for Areas along the Ring High-speed Railway in Guiyang City:* The contract negotiation was conducted on January 14, 2021. The contract was officially signed on February 1, 2021.

GEFGY-4 *Study on the Corridor TOD Development Planning and Strategic Environmental Assessment:* As the content of contract GEFGY-2 and GEFGY-3 triggered the World Bank's Strategic Environmental Assessment Safeguard Regulations, Guiyang PMO proposed to add a new contract EIA. The TOR is in the preparation stage and the final draft is expected to be completed by the end of March 2021.

Shenzhen

GESZ-1 *Preparation and Implementation of City-level Transit-oriented Development (TOD) Strategy and Project Management Support for Shenzhen:* Shenzhen PMO held the semi-annual review meeting on January 18, 2021. The final draft of the semi-annual report covering Task 1-3 will be submitted to the World Bank by the end of March 2021.

GESZ-2A *District and station-level application of TOD strategy: Planning, Implementation and Management of Sustainable Development of Bainikeng District Based on TOD Strategy:* The contract was officially signed on December 22, 2020. The first draft of the inception report was submitted to the World Bank on March 11, 2021.

Project Progress (As of March 15, 2021)

PMO	Activity	Draft TOR	TOR	Bidding Announcement	Shortlist Review	Bid Evaluation	Contract Negotiation	Contract Signing	Inception Report	Inter-mediary Output	Mid-term Report	Draft Final Report	Final Report
MoHURD	National TOD Platform												
Beijing	City-level TOD Strategy												
	Corridor and Station-level TOD Application												
	District-level TOD Application												
Tianjin	City-level TOD Strategy												
	Research on Private Sector Engagement in TOD Financing												
	District-level TOD Application												
Shijiazhuang	City-level TOD Strategy												
	Corridor-level TOD Application												
	District and Station-level TOD Application												
Nanchang	City-level TOD Strategy												
	Corridor-level TOD Application												
	Station-level TOD Application												
Ningbo	City-level TOD Strategy												
	District-level TOD Application												
	District-level TOD Application												
	Station-level TOD Application												
Guiyang	City-level TOD Strategy												
	Corridor-level TOD Application												
	Corridor-level TOD Application												
	Strategic Environmental Assessment for Corridor-level TOD Application												
Shenzhen	City-level TOD Strategy												
	District and Station-level TOD Application												

LEGEND

Project implementation progress Latest Project Progress from December 15, 2020 to March 15, 2021

KNOWLEDGE EVENTS

On December 3-4, 2020, Department of Transportation of Zhejiang Province, Development and Reform Commission of Zhejiang Province, Department of Economy and Information Technology of Zhejiang Province, Xiaoshan District Government, and Shanghai Institute of Traffic Engineering, Science and Technology Committee of Shanghai, and Shanghai Municipal Transportation Commission held the 14th International Summit on Rail Transit and Cities in Hangzhou, Zhejiang. The theme of the Summit was "Embracing Digital Intelligence and Leading New Infrastructure." 380 experts, scholars, and professionals in industrial chain of rail transit from various provinces and cities in China, Finland, France, and other countries attended the Summit. They had discussions on integrated development and high-quality operation of rail transit in the Yangtze River Delta and Shanghai Metropolitan Region as well as opportunities and challenges in the context of New Infrastructure.
(Related link)

INDUSTRY NEWS

Spatial land use

In January 2021, the Ministry of Housing and Urban-Rural Development issued the *Guiding Opinions on Strengthening the Construction of Underground Municipal Infrastructure in Cities.* This document requires that we should look at the city as a living organism. It also suggests strengthening the overall utilization of the underground space and the planning of municipal infrastructure constructions to realize the integrated development of above-ground and underground space to achieve clear vertical stratification and close horizontal connection of underground space. The Opinions promotes the use of layered structure for underground space to improve the efficiency underground space use. The long-term management mechanism should be continuously improved. We should innovate the management methods, models, and concepts for underground municipal infrastructures through informatization and intelligence technologies. We should also improve the efficiency of operational management and the capability of accident monitoring and early warning.

In January 2021, General Office of the CPC Central Committee and the General Office of the State Council issued the *Action Plan to Guide the Building of a High-Standard Market System*. The Action Plan emphasizes promoting the market-based allocation of commercial lands,, and strengthens the management, tracking, and evaluation of land use plans. promoting the rational conversions of different types of industrial land and explore ways to increase the supply

of mix-used land , subject to the requirements of the national spatial planning and land-use control. and promoting the interconnection of infrastructure, continuously improving the integrated transportation network and strengthening the application of new-generation information technology in the transportation sector to enhance the comprehensive operational efficiency. In January 2021, the Dongguan Municipal People's Government issued *Measures for the Development and Implementation of Urban Renewal Projects within the TOD Scope of Dongguan Rail Transit (Dongfu [2021] No. 3)*. The Measures defines the basic principles of urban renewal, scope of unit land use, transformation and transfer methods, income distribution methods, etc. within the scope of TOD. It is the first implementation measures for the integration of TOD and urban renewal in China.

TOD-related land market

In December 2020, Chengdu Public Resources Trading and Service Center completed the transfer of seven TOD-related state-owned construction land use rights. These seven parcels of land total about 821 acres, with a capacity building area over 1.35 million m2 and a starting price of RMB 9.959 billion. All 7 parcels were awarded by Chengdu Rail Transit Group at the price of the floor area, and each of them corresponded to 4 TOD projects..
(Related link)

In February 2021, the bid for other types of multi-functional land of the North Integrated Transportation Hub F3 of Universal Studios in Beijing Tongzhou Cultural Tourism Zone were awarded to Beijing Gonglian Dingcheng Transportation Hub Construction Development Co., Ltd. (Beijing Capital Highway Development Group Co. Ltd) at the floor prices of RMB 327 million and RMB 773 million, respectively.
(Related link)

In February 2021, the site ofChisha Depot in Haizhu District, Guangzhou was officially sold. The site is located between the Liuligang Station and Chishajiao Station of Metro Line 11, with a GFA of 304,000 square meters, and is planned to be an urban complex with commercial office, residential and public service facilities, which was acquired by Guangzhou Metro at a reserve price of 8.234 billion.
(Related link)

TOD project development

On December 30, 2020, the first TOD high-speed rail urban complex in China, Longfor Chongqing Jinsha Paradise Walk opened. Located in the core business district of Shapingba District, Longfor Chongqing Jinsha Paradise Walk was built on the railway station of Chengdu-Chongqing High-Speed Railway and seamlessly connected to the Three Gorges Square. The completion of Jinsha Paradise Walk also pushed forward the expansion of the original Shapingba commercial district by nearly three times and realized the upgrading of the business model.
(Related link)

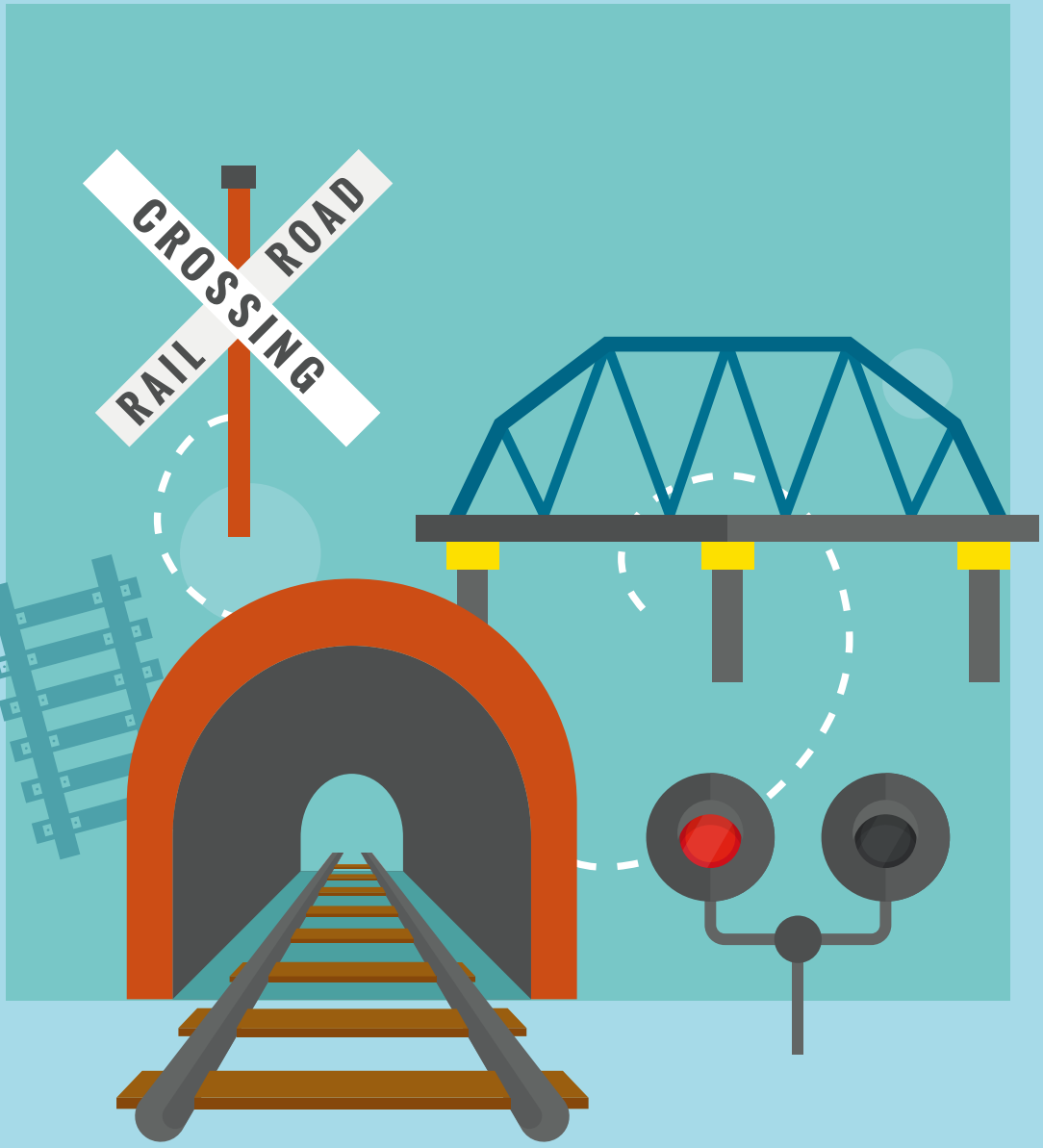
In February 2021, Pinghu Hub Station Project (Key Renewal Project of Pinghu Old Town Area (GX04)) received formal approval of the specialized planning and entered the substantive construction stage. Developed under the TOD model, this project seeks to improve the traffic condition in the central area of Pinghu and become a landmark commercial and cultural office center in Pinghu area. Pinhu

Hub Station Project also aims to promote regional urban renewal, industrial transformation as well as environmental quality improvement.
(Related link)

In February 2021, the official website of Chengdu Municipal Bureau of Planning and Natural Resources announced 10 integrated urban design proposals for TOD projects, including Lu Xiao Station, Tianfu New Station, Central Business District Station, Hongxing Road Vehicle Base, School of Administration Station, Sichuan Normal University Station, Shuangfeng Bridge Station, Machangba Station, Xingfu Bridge Station, and Longtan Temple Station. It is also an opportunity to present the world some innovative urban scenarios.
(Related link)

POLICY UPDATES

Intercity Railway and Commuter Rail Development in China



Intercity Railway and Commuter Rail Development in China

Since the announcement of 13th Five-Year Plan, the main railway lines in Beijing-Tianjin-Hebei Region, Yangtze River Delta Region, and Guangdong-Hong Kong-Macao Greater Bay Area have begun to take shape. In contrast, the railway development in suburban ofom city clusters and metropolitan areas has relatively lagged behind. These areas became breakpoints and affected the efficiency of the rail transit network. Through rich practices over the past 10 years, the development of intercity highway and commuter rail has fallen into filling the gaps in the rail transit network.

Under the new infrastructure and transportation policy, suburban areas new intercity highway and commuter rail development is planned to be built in a total of 10,000 kilometers during the 14th Five-Year Plan period. By 2025, 1-2 hour commuting circles in urban areas and 1-hour commuting circles in metropolitan areas will be formed, so as to achieve basic completion of Beijing-Tianjin-Hebei Region, Yangtze River Delta Region, and Guangdong-Hong Kong-Macao Greater Bay Area on the track

Intercity highway and commuter rail that feature large kinetic energy, less area, less pollution, and high efficiency can closely connect main city nodes within the urban agglomeration, They are conducive to accelerating the flow of personnel and capital factors, coordinating the development of the urban center and region. These railroads can also rationally spread non-core functions to surround areas to foster a multi-center, multi-level, multi-node network-based development pattern for coordinated regional development. This chapter aims to compile national, regional and city-level intercity highway and commuter rail development policies and plans to explore the development trend of the rail transit system. [1]

(Related link)

[1] **Rewritten from "Responsible comrades of the Department of Infrastructure Development, National Development and Reform Commission answering reporters' questions on promoting the construction of intercity and urban (suburban) railways in key regions**" *https://mp.weixin.qq.com/s?__biz=MzA3MDE5NjE2Mg==&mid=2650696006&idx=2&sn=443e5fcf319239a4dc145b0b05c7937e&chksm=86ca47ebb1bdcefd37a2c37b7ee039a5f4a19fd5e4f6666684ebcb39b7a8df07c4eff2b2a8c6#rd*

TABLE 1

Differences among intercity railway, commuter rail and subway

Rail transit system	Service scope (km)	Main characteristics
Intercity railway	100-300	Focus on serving long-distance business travel, family visits, and tourism flows between cities within the urban agglomeration
Commuter rail	50-100	Mainly serve the passenger flow in the range within the metropolitan area, the urban area, the central urban area of the metropolitan area, and surrounding towns; compared with the subway, the interval between urban (suburban) railway stations is larger, the speed of design and operation is faster. The transportation organization model is more flexible, comfortable, and economical which can meet the passengers' needs for rapid commute at different distances.
Subway	Within 50, generally about 30	Mainly solve the short commute travel problem in the urban area at the city center and the traffic problems in the city.

NATIONAL LEVEL POLICIES

Infrastructure development

In June 2017, the National Development and Reform Commission, Ministry of Housing and Urban-Rural Development, Ministry of Transport, National Railway Administration, and China Railway Corporation issued the *Guiding Opinions on Promoting the Development of Urban (Suburban) Railways (Fa Gai Ji Chu [2017] No. 1173)*. The Opinions states that we should coordinate orderly development and effective supply of commuter rails, scientifically divide the appropriate amount of traffic among main railway lines, commuter rails, intercity rails, and urban rail transit lines. We should pursue resource sharing and interconnection in terms of infrastructure and operation services based on the requirements of seamless transfer and integrated operations. By 2020, the backbone railway lines are expected to be basically completed in megacities or big cities, large cities where conditions allow, economic developed areas in Beijing-Tianjin-Hebei Region, Yangtze River Delta, Pearl River Delta, the middle reaches of the Yangtze River, and Chengdu-Chongqing Area. 1-hour commuting circle from the core area to surrounding main areas will be built. Planning and constructions of commuter rails will be launched in cities of remaining urban agglomerations and urbanized areas where conditions are met.

In October 2018, the General Office of State Council issued the *Guiding Opinions on Maintaining the Strength to Make Up for Shortcomings in the Infrastructure Sector(Guo Ban Fa [2018] No. 101)*, aiming to overcome

shortcomings in infrastructure, optimize the fixed asset investment structure, maintain effective investment, expand domestic demand, build medium and long-term supply capacity, and deepen supply-side reforms. The Opinions proposes to focus on major strategies such as the Belt and Road Initiative, Coordinated Development of the Beijing-Tianjin-Hebei Region, Development of the Yangtze River Economic Belt, and Construction of the Guangdong-Hong Kong-Macao Greater Bay Area. It actively encourages private capital to participate in the development of process improvement projects and strengthen reserves for major process improvement projects. In the railway sector, the National Development and Reform Commission, China Railway Corporation, Ministry of Transport, and National Railway Administration will be responsible for accelerating the implementation of the Eight Vertical and Eight Horizontal main high-speed railway projects with the focus on the central and western regions. These government agencies endeavor to expand regional railway connections, further improve the railway backbone network, and advance the construction of a number of major strategic and landmark railway projects. Constructions of railways for land development should be accelerated. Constructions of railway lines and special railway lines should be carried out and railway hubs should be upgraded as well.

Division of authority and responsibility

In June 2019, the General Office of the State Council publicly released the *Reform Plan for the Division of Financial Affairs and Expenditure Responsibilities between the Central and Local Governments in the Field of Transportation (Guo Ban Fa [2019] No. 33)*. This document clarifies that specific implementation matters, such as construction, maintenance, management, and operation of intercity railways, commuter rails, and dedicated lines shall be carried out by local governments or by the central enterprises entrusted by local governments.

Metropolitan area development

In February 2019, the State Council issued the *Guiding Opinions of the National Development and Reform Commission on Development of Modern MetropolitanArea (Fa Gai Gui Hua [2019] No. 328)*, stating that, "We should work toward the direction of integrated development of central cities and their surrounding cities, promote the integrated infrastructure development, and build "metropolis on the track." Urban rail transit plans in areas where conditions permit should be formulated. We should promote four-network integration of main railway lines, intercity railways, commuter rails, and urban rail transit. The Opinions also suggests that new commuter rails should be incorporated into the urban transit system. Related government agencies should establish the concept of TOD development, exert the efficiency of comprehensive development, and support the comprehensive development of existing railway yards. Furthermore, government agencies should not only revitalize existing railway facilities, but also standardize and promote integrated development of new commuter rail yards.

In December 2020, the General Office of the State Council forwarded the *Notice on Promoting the Accelerated Development of Urban (Suburban) Railways in Metropolitan Areas (Guo Ban Han [2020] No. 116)* to National Development and Reform Commission, Ministry of Transport, National Railway Administration, and China State Railway Group Co., Ltd. The Notice clarifies that we should take the metropolitan area as the focus of regional development, actively and orderly

promote the development of commuter rails in the metropolitan area, enhance the operation supply capacity of commuter rails, and focus on meeting the demands for one-hour rapid access to the commuter circle. Railways should connect stations in urban groups with population of 50,000 or more, important industrial parks, and tourist attractions to improve gathering capacity of passenger flow. Design of the rail transit stations should enable transfers across lines through multiple points. Making overall standards for transit coordination system to promote cross-line direct operation in areas where conditions permit, and implement public transportation organizations. During planning and management, a comprehensive development plan for lands along the railway line and around stations should be made, while studying the policies related to land value capture along the railway line to support the development of commuter rails. We should also explore ways to attract insurance funds and other long-term capital into the investment, and support financing through the issuance of corporate bonds, corporate bonds, and non-financial corporate debt financing instruments. Local government should encourage financial leasing companies to innovate financial products and service models that are suitable for the characteristics of local commuter rails to establish a sustainable development mechanism.

In December 2020, Codes for Designing Commuter Rails, a railway industry standard edited by China Railway SIYUAN Survey and Design Group Co., Ltd. (hereinafter referred to as China Railway SIYUAN) under the organization of National Railway Administration was officially released. The standards came into force on February 1, 2021. The Codes starts from the perspective of integration of four networks and clarifies that urban (suburban) railways can operate independently or cross lines with main highway lines, intercity railways, commuter rails and urban rail transit according to their functional positioning and needs. This is to reduce the number of transfers and accelerate the development of metropolitan areas.
(Related link)

REGIONAL LEVEL POLICES

In April 2020, the National Development and Reform Commission and Ministry of Transport issued the *Integrated Development Plan for Higher Quality Transportation in the Yangtze River Delta Region*. It is designed to plan and develop urban transport infrastructure so as to build the Yangtze River Delta Region on the track. By improving the connectivity within the Yangtze River Delta Region, the development of Shanghai metropolitan and the one-hour commute network connecting Nanjing, Hangzhou, Hefei, Suzhou-Wuxi-Changzhou, and Ningbo metropolitan will be accelerated. The local government should develop public transportation operating systems for intercity and commuter rails in metropolitan areas based on actual needs and travel modes advocate green

and low-carbon ways of travel. They should also advance the development of public transportation in cities, so as to support and drive high-quality, comprehensive, and sustainable development in the Yangtze River Delta Region.

In August 2020, the National Development and Reform Commission officially approved *the (Intercity) Railway Construction Plan for the Guangdong-Hong Kong-Macao Greater Bay Area*. The Commission agreed to further increase the development of intercity railways on the basis of continuing to implement and optimize the original intercity rail transit network plan for the Pearl River Delta Region. Ensuring the integration and connection of high-speed railways, general-speed railways, and commuter rails in the Guangdong-Hong Kong-Macao Greater Bay Area to form a multi-level, supported by the development axis, connected to the main lines of the rail network. The government aims to develop a one-hour commute circle between major cities in the Greater Bay Area, two-hour circle from major cities to inland-level cities in Guangdong Province, and three-hour circle from major cities to neighboring provincial capitals, and build the Great Bay Area on the track. The Plan also seeks to improve its modern and integrated transport system.

In December 2020, at the regular press conference of National Development and Reform Commission, the spokesperson of the Commission said that they plan to include the development of intercity and commuter rails in Beijing-Tianjin-Hebei Region, Yangtze River Delta Region, and Guangdong-Hong Kong-Macao Greater Bay Area into the 14th Five-Year Plan as major projects in combination with the 14th Five-Year Plan study. This is to promote the integrated development of the railway system . By 2025, 1-2-hour commute circle in urban agglomerations and 1-hour commute circle in metropolitan areas will be formed, and the development of Beijing-Tianjin-Hebei Region, Yangtze River Delta, and Guangdong-Hong Kong-Macao Greater Bay Area on the track will be completed.
(Related links 1 & 2)

In January 2021, Chongqing Municipal People's Government unveiled the *Action Plan for Promoting the Development of Chengdu-Chongqing Double-city Economic Circle and Strengthening the Construction of Transportation Infrastructure (2020-2022) (Yu Fu Fa [2020] No. 30)*. The Action Plan aims to accelerate the construction of the Western China International Comprehensive Transportation Hub, the National Gateway Transportation Hub, and the comprehensive transportation network in the Chengdu-Chongqing economic circle. This is a network multi-level rails, multiple high-speed channels, 1000-ton shipping lanes, airports with dual hub and spoke system, one pipeline network, Cun-cun-tong Delivery, and transportation integration. The Action Plan also helps Chongqing and Chengdu accelerate the building of the compound fast track composed of a high-speed rail with dual channels and a highway with eight lanes. Chongqing government strive to create four multi-directional, three-dimensional, interconnected, integrated, and efficient one-hour traffic circles to provide strong support for the construction of Chengdu-Chongqing economic circle.

PROVINCIAL LEVEL POLICIES

The *Decision of the People's Government of Guangdong Province on Adjustment of a Batch of Provincial-Level Administrative Powers to Guangzhou and Shenzhen* will come into force on March 15, 2021. Guangdong Provincial Government will adjust 13 provincial administrative authorities related to the transportation sector (such as the approval of provincial highways, water transportation projects and railway projects, issuance of security compliance certificates for port facilities, charging standards for road excavation and repair fees) to Shenzhen. These authorities include preliminary design review and approval, construction drawing review and approval, project acceptance inspection and other matters within the intercity railway within Shenzhen. This practice is conducive to further improving administrative efficiency, speeding up city development, and optimizing the business environment in Shenzhen. Upon acceptance of these matters, the Municipal Transportation Bureau will further simplify the processing procedures and shorten the processing time limit, so as to provide efficient and convenient services for enterprises and the public.
(Related link)

In December 2020, Tianjin Municipal People's Government officially approved the Tianjin Municipal (Suburban) Railway Special Plan (2019-2035). The government will fully implement the public transportation priority development strategy to improve the hierarchical system of integrated rail transit network and meet the needs of medium- and long-distance fast travel between Tianjin, Dalian, and exurb areas. This is to foster an urban development pattern of one core, dual centers, and multiple nodes in Tianjin.
(Related link)

In December 2020, the Development and Reform Commission and the Transportation Department of Guangxi Zhuang Autonomous Region jointly released a notice *Guangxi Zhuang Autonomous Region Urban (Suburb) Railway Planning (2020)*.

CASE STUDY

Urban Cases: TOD Planning and Development in Chongqing

Credit to Shijiazhuang Global Environment Facility (GEF) Project Management Office and the consulting firms under the project

1. OVERVIEW OF TOD IN CHONGQING

(1) Overview of Chongqing city

Chongqing is a provincial administrative region, a municipality directly under the Central Government, a national central city, and a megacity. It is one of the important central cities in China approved by the State Council, an economic center in the upper reaches of the Yangtze River, an important national modern manufacturing base, and an integrated transportation hub in the southwest region. With a total area of 82,400 square kilometers, Chongqing has jurisdiction over 26 districts, 8 counties, and 4 autonomous counties. In 2019, the permanent population of Chongqing reached 31,243,200, the urban population of 20,869,900, and the permanent resident population of 1,676,500.

At the same time, according to the positioning of this city stated in the Spatial Planning of Chongqing Municipality (2019-2035), Chongqing is also an economic, financial, scientific and technological innovated, shipping and trade logistics center in the upper reaches of the Yangtze River. It is a national logistics hub, an important strategic fulcrum of the Western Development Program. Most importantly, Chongqing is a key joint point of the Belt and Road Initiative and the Yangtze River Economic Belt, as well as an economic competitive inland city.

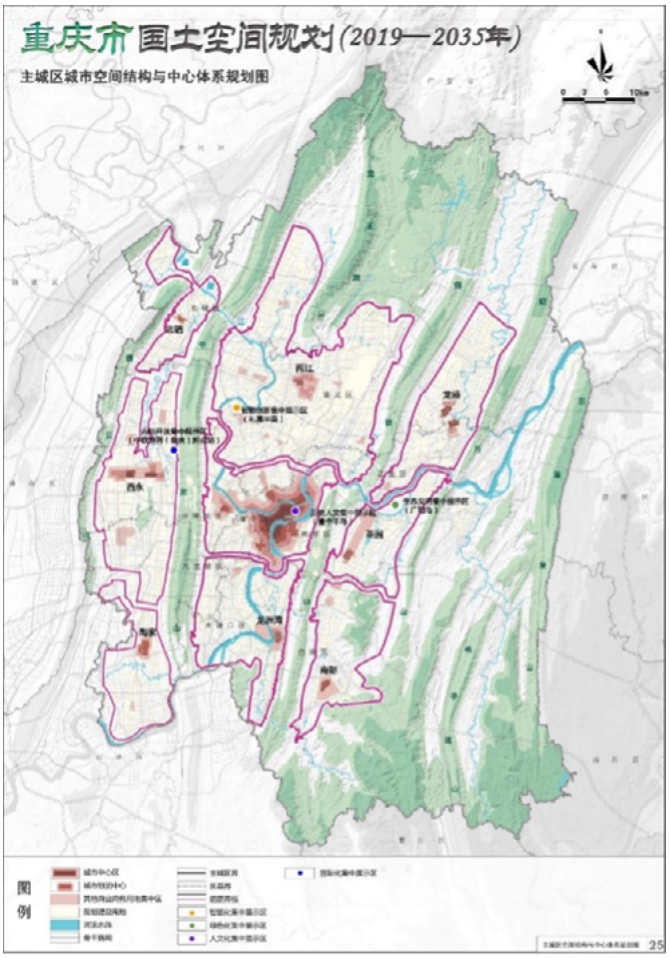
In recent years, Chongqing has put forward the development goal of leading the urban development with rail transit and accelerating the construction of a modern metropolitan area. The government

also ensures the one core, multi-node, networked urban spatial structure is based on rail transit as the skeleton network. To succeed in this, they propose to build a dense network, optimize ways of travel, and formulate smooth mechanisms by using the Yangtze River water systems and integrated transportation facilities of railways, expressways, and airports. This transportation network connects districts, counties, industrial parks, key scenic spots, port hubs, and small towns along the line, and then build the urban network, traffic network, industrial network, and cultural network, so as to form a highly integrated metropolitan circle.

"One core" refers to the main urban area. The main urban area should emphasis its economic impacts and the leading role as a major district and the core of the metropolitan circle. It will further expands the main urban area's development space to the west of Chongqing. It pushes forward the integrated development of Jiangjin District, Bishan District and the main urban area. Multi-node seeks to strengthen the role of Yongchuan as the major node city in Chengzhou-Chongqing Urban Agglomeration with the support from central areas in suburbs. Fuling's role in linking northeast Chongqing and radiating southeast Chongqing will be enhanced. The role of the metropolitan area in radiating northeast and southeast Chongqing will be amplified. The Chongqing government should also cultivate key small towns such as Baitao, Changshou Lake, Baisha, Tuchang, and Anju.

FIGURE 1:

Spatial structure of the main urban area of Chongqing



(2) Railway and transportation hub development in Chongqing: Build a multi-layer railway hub in the main urban area with many lines.

The railway hubs in Chongqing connect more than 10 multi-level trunk railways, including Chengdu-Chongqing Railway, Suining-Chongqing Railway, Xiangyang-Chongqing Railway, Chongqing-Lichuan Railway, Chongqing-Huaihua Railway, Chongqing-Guiyang Railway, Lanzhou-Chongqing Railway, Chongqing-Guizhou Railway, Chongqing-Wanzhou Intercity Railway, and Chengdu-Chongqing High-speed Railway. These hubs have a "T" shape, in which the passenger corridor is in the central trough valley and the freight corridor in the western trough valley. This layout represents a characteristic of railways in the main urban area will only be used for passengers while the railways in its industrial parks and suburban will be used for transporting freight.

TABLE 2:

List of Current Rail Tracks in Chongqing

Type	Name	Technical standard	Domestic mileage: km	Bearing functions
High-speed rail	Chengdu-Chongqing High-Speed Railway	350km/h	128	Dedicated to passenger railway line
Intercity	Chongqing-Wanzhou Intercity Railway	250 km/h	247	Dedicated to intercity passenger railway line
General-speed railway	Lanzhou-Chongqing Railway	200km/h	98	Passenger and freight
	Suining-Chongqing Railway	200km/h	97	Passenger and freight
	Chongqing-Guizhou Railway	200km/h	115	Passenger traffic
	Chongqing-Huaihua Railway	120km/h	450	Passenger and freight
	Chongqing-Lichuan Railway	200km/h	237	Passenger and freight
	Chengdu-Chongqing High-speed Railway	80km/h	226	Freight
	Xiangyang-Chongqing Railway	160km/h	81	Passenger and freight
	Chongqing-Guiyang Railway	80km/h	177	Freight

After years of development, the railway hubs in Chongqing have initially formed a multi-hub pattern featuring multi-line interconnection. At present, Chongqing North, Chongqing West, and Shapingba passenger stations are in operation. Chongqing East Railway Station is under construction, while Chongqing Railway Station is undergoing renovation.

Chongqing North Railway Station will be reconstructed and expanded through the introduction projects of Chongqing-Lichuan Railway and Chongqing-Wanzhou Intercity Railway. Three yards, Yuli Yard, Yuwan Yard, and Yuhuai Yard will be built, with a total of 14 platforms and 29 arrival and departure lines (including the main lines) as well as a station building scale of 106,000 m2. At present, Chongqing North Railway Station mainly handles the departure, arrival and passing of passenger trains on Suining-Chongqing Railway, Xiangyang-Chongqing Railway, Chongqing-Lichuan Railway, Chongqing-Huaihua Railway, and Chongqing-Wanzhou Intercity Railway. The South Yard of Chongqing North Railway Station is designed to accommodate 5,000 passengers; the expanded North Yard is designed to accommodate 11,000 passengers, totaling 16,000 passengers. The number of passengers of arrival and departure from this station is expected to reach 53.65 million in 2020 and 58.4 million in 2030.

Chongqing West Railway Station is designed to connect Kunming, Guiyang, Changsha, etc., with 16 platforms, 31 platform loading docks, and 37 lines (including 6 main lines), which is mainly responsible for passenger train operations in the north-south direction of the hub. The construction land of Chongqing West Railway Station is about 440 mu, and the gross building area of the station complex is controlled at 120,000 m2. The maximum accommodation is up to 15,000 people. It is estimated that the number of passengers in 2020 and 2030 will reach 25.14 million and 41.28 million, respectively.

Shapingba Station will be rebuilt in the original site. On the Chengdu-Chongqing High-Speed Railway, there will be 1 basic platform and 2 island platforms. 2 platforms and 4 lines will be set between two stations. This station will also build 6 arrival and departure lines (including main lines), which can take in up to 800 people. At present, it mainly undertakes the operation of Chengdu-Chongqing High-Speed Railway.

The Chongqing Station (Caiyuanba Station) is currently an end-type station, with 3 platforms, 6 arrival and departure lines for passenger trains, and 2 locomotive running tracks. This station can accommodate up to 5000 people. Passenger car servicing depot will be built on the Yangtze River side of the station. Chongqing station is the reconstructed and expanded as the introduction project of the Chengdu-Chongqing High-Speed Railway. After the reconstruction, the station will be arranged in the form of 2 stations sandwiched with 2 lines, with a total of 4 stations and 8 lines (including 2 main lines). The station can accommodate up to 10,000 people. The existing 6 Passenger car service lines will be converted into EMU storage lines.

According to the planning for Chongqing East Railway Station, which is under construction, the station will include the Chongqing-Hunan High-speed Railway, Shanghai-Chongqing-Chengdu High-speed Railway, Chongqing-Xi'an High Speed Railway (Wanzhou direction), and the railway east ring line. Yuxiang Yard, Yuxi Yard and Pusu Yard will be built. Upon completion, Chongqing East Railway Station will become an important railway hub for the east exit of the main city railway.

FIGURE 2:

Current railway hubs in the main urban area of Chongqing

(3) Overview of urban rail transit development: The central radiation form of the rail transit network is basically formed

As of the end of December 2018, Chongqing has opened 8 lines for operation, including Line 1, Line 2, Line 3, Line 6 (including the first phase of Guobo branch line), northern section of the first phase of Line 5, northern section of Line 10, northeast loop of the circular line, and the first phase of Line 4. Chongqing has a total route length of the railway network of 313 km, ranking fifth in China. There are 178 operating stations, including 13 transfer stations.

In 2018, the modal share of rail transit in the main urban area accounted for 16.3% of the motorized travel of residents in the main urban area. The average daily passenger volume of rail transit in the main urban area reached 2.88 million, and the highest daily passenger volume exceeded 3.589 million.

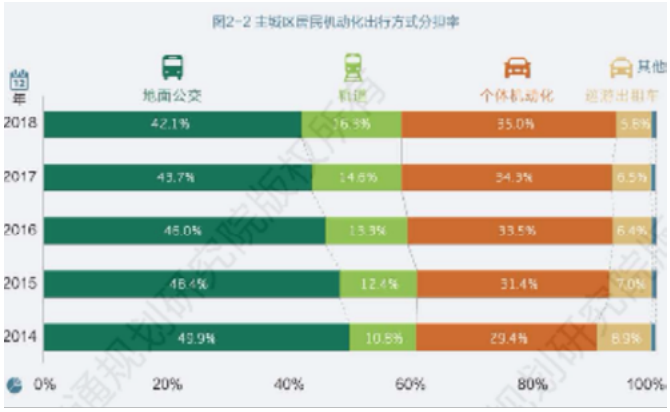
The overall completed rail network is centered on the northern half-ring area of the inner ring, connecting traditional business districts, important functions points, and major transportation hubs as nodes. With a basic full coverage of nine main urban areas, the rails strongly support the development and construction of Jiefangbei CBD and Jiangbei CBD, accelerate the construction of Xiyong, Chayuan, Longzhou Bay, and other urban sub-centers. The completion of the rail network also further promotes the development of Lijia, Caijia, Beibei, and Dadukou as a city cluster.

Rail transit is playing an increasingly important role in serving as the passage through mountains and rivers, which effectively alleviated the traffic pressure in the central urban area. At the same time,

with continuous city expansion on space and land, the demand of urban traffic has changed, and the current rail transit has encountered some conflicts with these new changes and trends. At the early stage, more attention was paid to building new ones and meeting the development needs along the line. Lines 3 and 6 are ultra-long lines with a length of about 60 km. It features short distance between stations, low travel speed, and the through service about 1.5 hours. As the travel distance continues to increase, the low operational efficiency of existing rail lines and the identical settings of stations in peripheral and central areas were unable to meet the citizens' needs for efficient and fast travel.

FIGURE 3:

Share rate of motorized travel modes in the main urban area of Chongqing (2014-2018)



According to the Annual Report on Traffic Operation Analysis in the Main Urban Area of Chongqing (2017), the average daily passenger volume of rail networks in 2017 reached 2.036 million, an increase of 141,000 passenger throughput or 6.9% from 2016, with the maximum daily passenger volume of 2.566 million (January 13, 2017); the average passenger flow intensity of networks reached 9,600 passengers/km/day, excluding the northern section of Line 5 and northern section of Line 10 that were newly opened for operation on December 28, 2017. The overall passenger flow intensity still remains low.

FIGURE 4:

Average daily passenger volume and growth rate of rail networks in the main urban area over the years

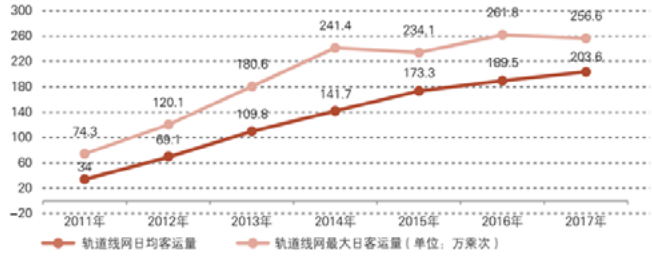
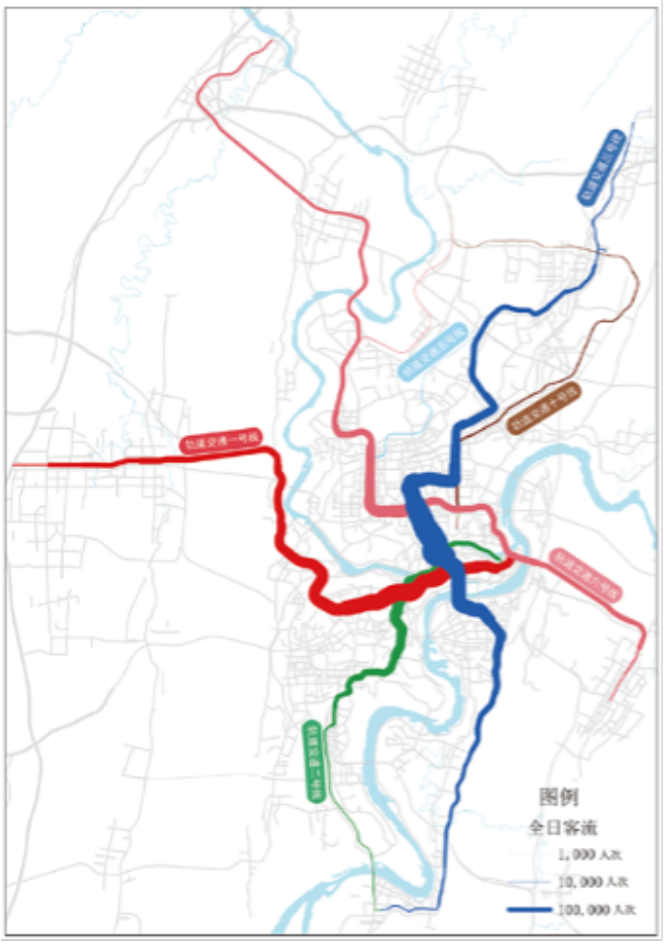


FIGURE 5:

Average daily passenger volume of rail networks in the main urban area over the years

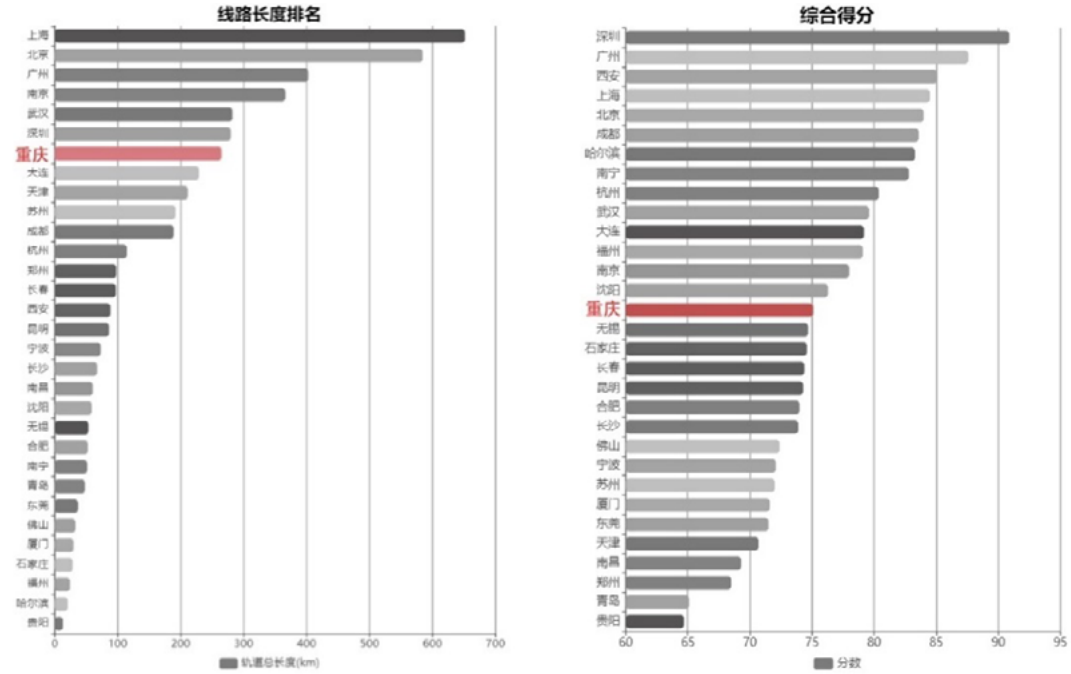


(4) The basic situation of TOD development in Chongqing
Rapid growth of rail transit mileages and TOD development sites

According to the latest TOD development index evaluation, as of 2018, Chongqing operates a total of 265 kilometers of railway, ranking at 7th out of 31 cities surveyed, second only to Wuhan and Nanjing in the second-tier cities. The total number of rail transit under construction means ranked in forefront of cities in China. In terms of overall score, Chongqing has a score of 75 in the TOD development index evaluation, ranking at 15th out of 31 cities surveyed.

FIGURE 6:

TOD development index ranking



With rapid growth of track mileage, there emerged a number of outstanding TOD construction projects such as the TOD development project of Shapingba Comprehensive Station and the development project of Longfor Times Paradise Walk.

FIGURE 7:

Longfor Times Paradise Walk

2. MAIN FEATURES OF TOD DEVELOPMENT IN CHONGQING

(1) Station-city integrated development, establish a benchmark for TOD integrated development

Located in Shapingba District, Chongqing, Shapingba Station is a comprehensive transportation hub integrating high-speed rails, rail transit, buses, taxis, and other transportation methods, and the first high-speed rail station with urban complex development in China. Located in the business district of Three Gorges Plaza, Shapingba Station is an important transportation node of Chengdu-Chongqing High-Speed Railway. Railway stations have great impacts on the development of the city. As the first high-speed rail TOD project in the business district in China, the focus of this project is on how to combine the functions of the city with the station to realize station-city integration.

Different from Chongqing North Railway Station and Chongqing West Railway Station, Shapingba Station locates in a business district. To realize station-city integration, it shall be deeply integrated into the urban space as an organic part of urban life. Since lands are scarce and expensive in the business district, Shapingba Station has changed the traditional land transfer model by transferring the ownership of space, building a comprehensive hub underground, and implementing commercial development on ground. This solution can maximize the use of space resources and form a multi-level three-dimensional structure of the integrated transportation hub and superstructures. It has set up a model for domestic space utilization. The total construction volume reached 450,000 m^2.

FIGURE 8 :

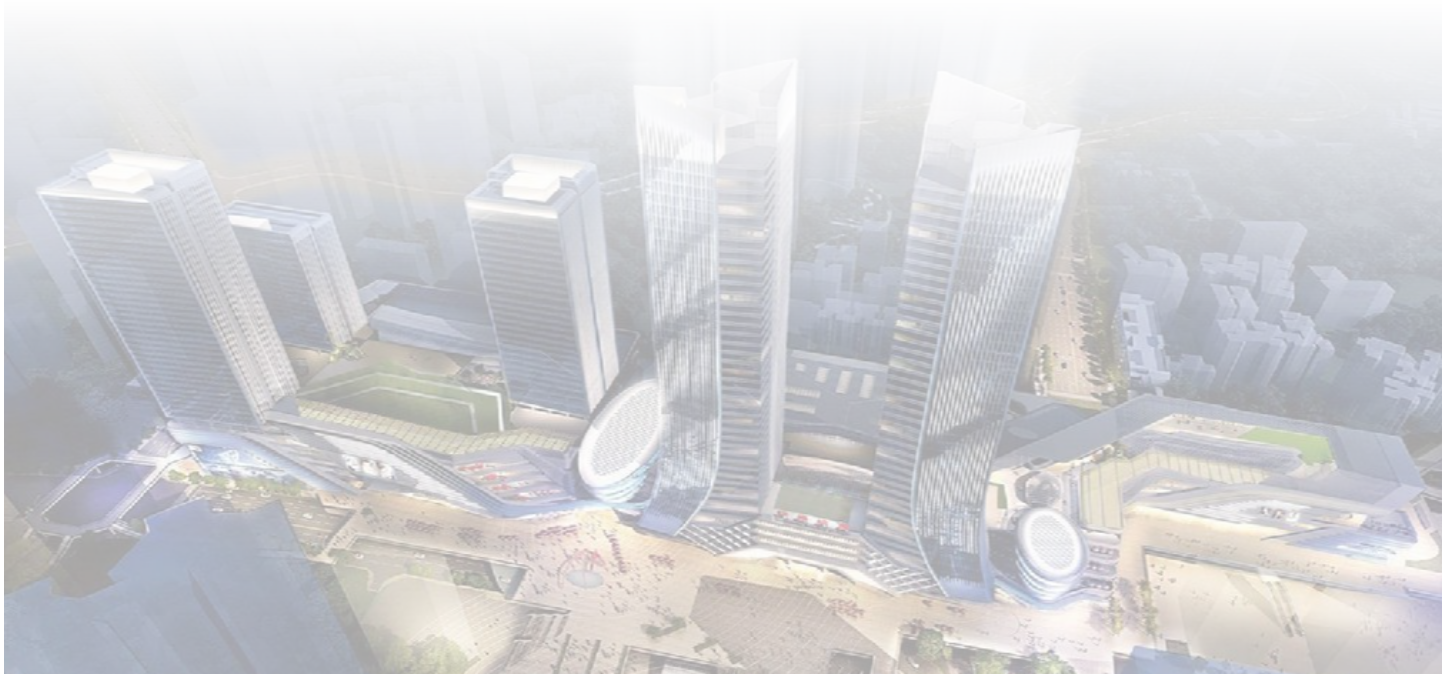
Business formats of the areas surrounding Shapingba

Innovate the concept of land space ownership

On June 16, 2017, Longfor Real Estate obtained the property development right of the superstructures in the Shapingba project at a comprehensive land listing price of approximately RMB 3.41 billion through land bidding, auction, and listing. The Shapingba project divides the space ownership into two parts, the upper and lower parts, for the purpose of transferring land by layers. Through building a comprehensive transportation hub underground and leaving the superstructures for development through bidding, auction, and listing, it not only maximizes the use of space resources, balances the project construction funds with proceeds from land sales, but also explore a new way in the reform of the financing system for the construction of high-speed railway stations and yards. It overturns the traditional model of one-time transfer of land leasing, innovates the concept of land space ownership, and realizes the self-sustaining function. In terms of results of TOD implementation, the surrounding areas of Shapingba Station integrate retail, medical, health, catering, entertainment, education, public services, and many other business format, to provide diverse and comprehensive services for people on site. The TOD model has led to a threefold increase in the passenger flow of the business district, created 40,000 jobs, and improved the total retail sales of consumer goods by 50%.

FIGURE 9:

Rendering of Longfor Lightyear Commercial Complex



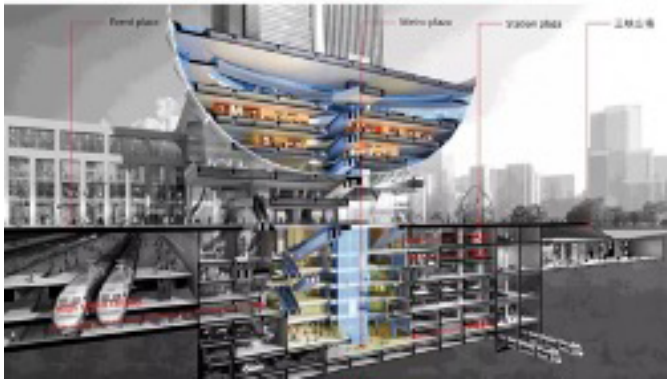
Seamless connection between various transportation modes

In the 8-storey underground space in Shapingba Station as deep as 47 m, a three-dimensional transfer system is built to successfully connect the Chengdu-Chongqing Railway Passenger Dedicated Line, rail transit (Ring Line, Line 1, Line 9), buses, taxis (cab, online car-hailing), private vehicles, and other transportation. It is to realize seamless transfer between multiple modes of transportation.

The Shapingba project took the lead in introducing the station-city integration design concept, realized organic integration of high-speed rail stations and urban development, and turned Shapingba Railway Station into China's first high-speed rail TOD in the business district. The model of "High-speed rail + superstructure" has opened up new direction for urban development of station-city integration. This project has completely bidded farewell to the history of railway stations dividing the city and make the dream of hiding station inside urban buildings come true.

FIGURE 10 :

Profile of Shapingba Station



(2) Ensure the implementation of TOD concepts by issuing multiple policies

In order to ensure effective implementation of the TOD concepts, Chongqing has successively issued a number of policies, putting forward effective planning management and policy implementation measures in terms of land supply, cooperation mechanisms, financing methods, comprehensive development models, and planning management. On November 3, 2020, the Chongqing Municipal Development and Reform Commission issued the Implementation Opinions on Promoting the Regional Integrated Development of Urban Rail Transit in Main Metropolitan Areas, proposing to strengthen overall planning, clarify implementation entities, enhance cost allocation mechanisms, and provide policy support as four major strategies:

Strengthen overall planning

1, Delimit the range of TOD: Set the site radius as 600 meters; The scale of the comprehensive rail transit development project is determined by the size of the land for actual project and the size of the land for development purpose, which is no less than 2 times of size of land of the actual project. The specific range is defined based on actual conditions such as topography, land use conditions, land ownership, and urban roads in accordance with the principle of one policy for one case.

2, Formulate special plans: Formulate a special plan for comprehensive development of urban rail transit that is based on the urban rail transit network plan approved by the municipal government. The plans are interconnected with the territorial spatial planning. they also clarify the scope of the land use

for the comprehensive development of urban rail transit, as well as major indicators such as integrated development format, intensity, and volume.

3, Incorporate the special plans into regulatory plans: After the urban rail transit construction plan is approved by the state, the special plan of comprehensive development of related lines will be incorporated into the regulatory plan of the areas' surrounding stations and yards. Then, the legislation process for the plan will be completed.

4, Merge the approval process: At the feasibility study stage of urban rail transit projects, special reports on comprehensive development plans will be prepared according to the regulatory plan of the comprehensive development of urban rail transit. The overall design scheme of the integrated development will be put forward. The level of development revenues will be measured. The inseparable engineering part of the construction of the rail transit project and integrated development will be included in the project feasibility study report for approval.

5, Integrated Station-City Develop - ment: At the preliminary design stage of the urban rail transit project, in accordance with the approved comprehensive development plan, within the construction scope of the urban rail transit project, the closely connected engineering portion of the rail transit project construction and comprehensive development should be integrated and implemented simultaneously. The owner of the urban rail transit project is responsible for organizing and carrying out the design, supervision, and construction work.

Clarify implementation entities

1, Primary development entity: Chongqing City Transportation Development & Investment Group Co, Ltd. At the early stage of the urban rail transit project, under the premise of ensuring the transportation functions, the preliminary work of project research and design can be advanced in accordance with the principle of maximizing profits from the comprehensive development project. PPP and other modes can be adopted to introduce urban rail transit projects built by social investors. The project owner shall be responsible for the implementation of the engineering portion where rail transit project construction and comprehensive development is inseparable. It's necessary to solicit the opinions of Chongqing City Transportation Development & Investment Group Co, Ltd regarding the design scheme. The increased investment fee resulting from consideration of comprehensive development will be paid in advance by Chongqing City Transportation Development & Investment Group Co, Ltd.

2, Determine the secondary development entity in a market-oriented way: Lands that are within the scope of the comprehensive development and out of the scope of rail transit projects shall be transferred through bidding, auction, and listing. The scale of land transfer shall be determined based on actual conditions. Comprehensive development projects within the land of rail transit stations and yards shall be supplied layer by layer according to their purpose. The construction land space of the actual rail transit complex shall be supplied in accordance with the allocation method. The land space used for comprehensive development shall still be supplied through bidding, auction, and listing. Chongqing City Transportation Development & Investment Group Co, Ltd may participate in the secondary development in a market-oriented way.

3, Bidding, auction, and listing of the superstructure with plans or conditions. Lands that are within the scope urban rail transit station yard are for comprehensive development projects. Planning briefs, construction requirements, and design schemes can be all included into the open transfer conditions. Buyers can bid and purchase the ownership of the land by providing design schemes or satisfying all conditions.

4, Define the management scope of the superstructure: The post-operation maintenance and safety management of the structural engineering, partial municipal-controlled pipelines, and facilities and equipment shared between the comprehensive development property and the urban rail transit complex will be divided based on property rights. The the comprehensive development property management organization and the owners of urban rail transit operation shall sign a property management agreement to clarify corresponding management responsibilities.

Establish a mechanism for cost sharing and income distribution

1, Establish a cost-sharing mechanism for the construction of urban rail transit and the comprehensive development of station land: The cost of land acquisition and demolition within the scope of the urban rail transit project is included in the urban rail transit project investment instead of the comprehensive development cost; additional investment in the urban rail transit project due to the implementation of projects reserved by the comprehensive development project is included into the comprehensive development land cost. The land cost produced by constructions of the comprehensive development project that are lag behind of the urban rail transit project and with no owner, as well as the land cost from the implementation of the reserve projects of comprehensive development will be included as the urban rail transit construction investment. The advance payment will be repaid upon bidding, auction, and listing of the land used for comprehensive development. The cost of land for the comprehensive development project outside the scope of the rail transit project shall be borne by the owner of the comprehensive development project.

2, Land-level Revenue mechanism featuring city-district income sharing: Establish the land-level revenue distribution mechanism for integrated development of urban rail transit. The premium part of the land-level revenue from the integrated development of rail transit shall be shared by the city and district. The part included into the municipal income shall be used for capital expenditures and operating subsidies for urban rail transit construction in a coordinated way.

Strengthen policy support

1, Establish a leading group for integrated development of urban rail transit: with the executive deputy mayor of the municipal government serving as the group leader, and deputy mayor in charge serving as the deputy group leader. Relevant departments of the municipal government, management committees of the district governments, and heads of Chongqing City Transportation Development & Investment Group Co, Ltd. are group members. The office of the leading group is set in the Municipal Housing and Urban-Rural Development Committee, who is responsible for daily work of the leading group.

2, Control urban spatial forms using TOD concepts: While controlling the total scale of regional development, the development intensity of the areas along the urban rail transit should be concentrated to the areas subject to comprehensive development. It is to form an urban pattern with proper density and clear texture.

3, Incorporate the land of the comprehensive development project of rail transit stations yards into the land supply plan: Adhering to the concept of leading the urban development pattern with rail transit, the Municipal Planning and Natural Resources Bureau made construction arrangements for rail transit projects according to the territorial spatial planning and the implementation of the special planning for omprehensive development of urban rail transit stations yards in Chongqing.

4, Adhere to the city-district co-construction model: District governments are responsible for land acquisition, demolition, and capital contribution, while the Municipal Finance Bureau is responsible for actively providing assistance for district governments in financing.

Formulate a three-year rolling plan to advance the implementation of TOD construction in sites orderly

The Chongqing Development and Reform Commission takes the lead in promoting the three-year rolling plan and building a number of demonstration projects on existing and planned rail stations. They aim to provide design and implementation references for TOD construction at other stations in Chongqing in the future. For the comprehensive development of the areas surrounding the sites included in the three-year rolling plan, corresponding supporting policies are as follows:

Corresponding Supporting Policies:

1) Speed up the preliminary work: The preliminary demonstration work can be started in advance to reduce the preliminary preparation time by more than 2 months on average.

2) Optimize and simplify the approval process: Ensure the total time used between obtaining the land use planning permission and obtaining construction drawing design permission stage is within 65 days.

3) Appropriately separate the technical review and administrative approval: The Capital Verification Bureau may carry out demonstration work prior to administrative approval.

4) Put project pool, capital pool, and factor pool into use: Guarantee the resources such as capital and land.

The Principle for Inclusion:

1) Support major function layout: Functional city centers at all levels and the areas witgh major urban functions.

2) Support the distribution of integrated hubs: Urban integrated hubs.

3) Serving important public facilities: Important cultural, sports, hospital, and other nodes.

4) Incorporated into Phase IV construction projects: Can be implemented in the near future.

3. LESSONS LEARNED FROM THE CHONGQING CASES

(1) Understand the background, sort out problems, and clarify main points

The corresponding policies and planning strategies of Chongqing for TOD integrated development are formulated on the basis of clearly sorting out the development issues around Chongqing's rail transit stations and being aware of relevant challenges. The TOD implementation status or potential around rail transit stations are evaluated through evaluation indicators such as TOD index and TOD group standards. Clarifying existing problems to lay a solid foundation for formulating corresponding TOD strategies and implementation tools in the future.

(2) Led by the Development and Reform Commission, cooperated with multiple departments, formulate corresponding policies for TOD integrated development.

In Chongqing, the Development and Reform Commission took the lead in issuing corresponding policies to enhance top-level design and planning coordination, clarify implementation entities, sort out the distribution mechanism, and provide more policy support. Relevant departments such as the Natural Resources Bureau, the Municipal Finance Bureau, the Municipal Development and Reform Commission, the Municipal Housing and Urban-Rural Construction Commission, the operation owner of the rail transit project, and the rail group perform their duties to solve various key issues, such as land supply, benefit distribution, property rights distribution, implementation right distribution, city-district distribution and planning coordination under the concept of TOD. It is to ensure effective implementation of the TOD concept.

(3) Formulate rolling plans and concentrate on creating TOD implementation models

Using benchmarks projects to encourage more TOD projects. Some districts should implement advanced and pilot policies and build model TOD comprehensive development projects. Governments should make policies based on the feedbacks from Learning and understanding the actual ways of implementation as well as testing the implementation bottleneck with existing policies. New policies aim to help the city to adapt the overall TOD strategies.Rolling plans and the standard for inclusion should be formulated. Which sites has the priority to implement should be clarified. Local governments should create several models to guide others and promote the implementation of TOD strategies in a comprehensive and orderly way.

REPORT SHARING

TOD Implementation Resources and Reference Book (English Edition 2)

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(Related link)

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(Related link)

China International Railway Conference for Urban & Intercity Transit 2021

October 17-19, 2021, Shanghai, China

(Related link)

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