Quarterly Newsletter on GEF China Sustainable Cities Integrated Approach Pilot Project

Issue No. 3
A Deep Dive Training on Unlocking City Spatial Plans through Transit-Oriented Development & Neighborhood Urban Spaces and Assets was held in Tokyo and Fukuoka from January 21st to 25th, 2019. This training was sponsored by the World Bank Tokyo Development Learning Center (TDLC) and organized by the World Bank Urbanscapes and TOD communities of practice. Centered on community-scale urban planning, design and management in public transport, the course highlighted Japanese case studies and provided opportunities to exchange experiences with local Japanese municipal governments, urban planners, community groups and associations, as well as developers and companies. Tianjin, one of the GEF China Sustainable Cities Integrated Approach Pilot project cities, attended the course and presented its relevant experience on urban development.
Nanchang’s city-level TOD strategy terms of reference (TOR) was cleared by the World Bank on November 8, 2018. The Project Management Office (PMO) entrusted an international tendering agency to officially release the REOI (Request for Expressions of Interest) on the China Procurement and Tendering website and the UNDB online on December 18th. As of January 21st, nine consultants submitted EOIIs. In order to ensure the short list is reviewed fairly, the PMO sent a five-member review panel composed of four experts selected from the expert database of urban planning and architecture of Nanchang and one expert from the international tendering agency. The panel reviewed all EOIIs on February 19th and prepared a review report on the short list, which was submitted to the World Bank for approval. The PMO is currently conducting a second review of the EOIIs based on feedback from the World Bank.

Beijing’s city-level TOD strategy TOR was cleared by the World Bank on January 8th, 2019. The PMO submitted a draft REOI to the World Bank for review on February 19th and the PMO’s final version of the REOI was approved by the World Bank on February 25th. The PMO published the REOI on the China Procurement and Tendering website on March 14th, and the REOI was officially released on the World Bank and the UNDB websites on March 18th. Subsequently, the PMO sent the REOI and the TOR to five companies that had expressed interest in this project. The PMO is expecting EOIIs before the deadline on April 1.
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Latest China TOD Knowledge Events

The 12th Annual City-Rail Summit 2019

The 12th Annual City-Rail Summit 2019 was held at S Hotel in Beijing on January 16th and 17th, 2019. The conference theme was “Intelligence, Innovation, Cooperation and Sustainability,” and attracted over 200 local and international experts and decision-makers who discussed such topics as rail transit planning, sustainable operation and innovation, rail transit technology innovation, safety and green, etc. This event was sponsored by Shine Consultant, with guidance from the International Union of Railways, and supported by Beijing Subway Limited, Beijing MTR Corporation, MTR Corporation Limited, the Collaborative Innovation Centre for Rail Transit Safety of Beijing Jiaotong University, and Jakarta MRT. (News Link)

China TOD Industry News

Shanghai Fengxian Traffic & Energy Group + Longfor Group

On March 8th, 2019, Shanghai Fengxian Traffic & Energy Group Co., Ltd. and Longfor Group Husu Co., Ltd. entered into a cooperation agreement on the development of a commercial complex, signed in the Broadcasting Tower in Beijing. The complex sits on top of the subway in the core area of Fengxian New City. The agreement focuses on the facilitation of integrating and optimizing the urban structure of Fengxian New City. (News Link)

Shenzhen Metro Group’s structural reforms

Shenzhen Metro Group (SZMC) preliminarily completed its structural reforms in March 2019, whereby four affiliated enterprises were announced to have become independent legal entities. The four companies are SZMC Construction, SZMC Operation, SZMC Real Estate and SZMC International. SZMC Construction has built a complete development system integrating planning, survey and design, consultation and supervision, and construction management. Currently, SZMC Construction is constructing 14 metro lines for the third and fourth phase of the Shenzhen rail transit project, totaling 273 kilometers in length. SZMC Operation will operate and service seven metro lines, which totals 265 kilometers. SZMC Operation has been managing the successful operation of the lines for over 5,000 days, carrying 42 percent of the passengers for public transport. SZMC Real Estate works on the development of the “station-city integrated” metro property represented by the hub. SZMC Real Estate actively promotes the integration of the “rail + property” model in the city. In the future, SZMC Real Estate will create land resources through building property atop subways. It will also facilitate rail transit construction and operation by improving property appreciation benefits, with a view to achieve sustainable urban rail transit development. SZMC International currently provides operation, maintenance and consulting services for rail transit projects in Israel, Ethiopia, Vietnam and others, covering a total length of 135 kilometers in rail. Please review the 273km and 265km—it was unclear if the 273km was for all 14, etc. (News Link)

The 2019 Chengdu TOD Business Development Conference

The 2019 Chengdu TOD Business Development Conference was held in Chengdu on February 27th to 28th, 2019 and aimed to attract global investment to popularize integrated TOD development in the city. At the conference, the Chengdu Municipal Bureau of Commerce released the research reports on TOD Ecosystem in Chengdu and TOD Business Model, together with Debenham Thouard Zadelhoff (DTZ) and Chengdu Service Industry Research Institute. The two reports systematically elaborate on the construction ideas and business models of the TOD ecosystem in Chengdu. Chengdu plans to launch its first 13 TOD demonstration projects in 2019. Four major projects were signed at the conference, with an investment of RMB24 billion. The four projects include the Chengdu Wood Integrated Factory project in Jinniu District of Chengdu, the TOD project of Longhu Shangcheng Tianjie in Jinniu District, the southwest headquarters project of Cedar Holding Group in East Chengdu Railway Station of Chenghua District, and the TOD strategic cooperation project in Shuangliu Airport. The conference was supported by the Chengdu Municipal People’s Government, sponsored by the Chengdu Municipal Bureau of Commerce, and co-organized by the Chengdu Municipal Bureau of Planning and Natural Resources, the Chengdu Municipal Bureau of Housing and Urban-Rural Development, the Chengdu Investment Promotion Bureau, and Chengdu Rail Transit Group Co., Ltd. (News Link)

Issue No. 3
Overall news on transportation during the NPC & CPPCC

Every year around March, China’s top legislative body, the National People’s Congress (NPC), its top advisory committee, the Chinese People’s Political Consultative Conference meet to discuss major political decisions that set the course for the country’s future development. Collectively, these annual meetings that gather over 5000 delegates have been called the “Two Sessions.”

This year at the Two Sessions, the total planned government investment in railways, highways and waterways was announced to be RMB2.6 trillion. According to this year’s Chinese government work report, China intends to complete RMB800 billion in railway construction and RMB1.8 trillion in highway and waterway construction. Separate from this, the country will also be building a series of major water conservancy projects and intends to accelerate the planning and construction of the Sichuan-Tibet Railway. Across the country, China will also expand infrastructure investment in the following areas: intercity transportation, logistics, utilities, disaster prevention and mitigation, and civil and general aviation. Another major goal is to strengthen the next-generation information infrastructure to keep up with changing trends in transportation infrastructure.

Zhang Jie, the deputy to the NPC and deputy general manager of the Public Works Maintenance Department, No. 3 Operation Company, Chongqing Rail Group Co., Ltd.

He stated that straddle-type monorail transit is currently the key development trend of urban rail transit in China. It is urgent for relevant national departments to organize authoritative institutions to carry out thematic research to include TOD development strategies of straddle-type monorail transit, industrial form guidance, and relevant supporting policies.

Zhang Jie believes each city should fully understand the technical characteristics of the system and the actual situation of its own urban development when developing straddle-type monorail transit. Only then should it formulate a TOD development strategy according to local conditions and explore comprehensive development of above and underground space of urban rail transit. It should also pay attention to space utilization efficiency and the level of land use. The new elevated light rail model is safe and reliable and has a moderate traffic volume. Building it requires a low investment, a short construction period, a flexible line setting, and has a small environmental impact. In addition, the new elevated light rail is low in noise and vibration, and the station can be connected to the inner part of the urban core of the commercial complex to achieve a seamless connection between the station and businesses. The elevated line passes through the pedestrian street of a city’s business district and can be treated as a city landmark and a sightseeing platform. A large number of pedestrian streets can be planned on the ground-level to provide a comfortable social space for citizens. Urban roads can be planned underground and can be directly connected to the underground parking lot to maximize use of the underground space. In addition, centralized treatment of automobile exhaust underground can improve the urban air quality.
Guo Jifu, a member of the National Committee of CPPCC and president of the Beijing Transport Institute. He stated that it is important to develop large-capacity suburban railway models as soon as possible. He specified the need to adopt the TOD model of centralized and continuous dispersal. He also emphasized the need to carry out secondary development of the city around suburban railway stations.

Guo Jifu put forward a proposal on increasing the speed of construction of suburban railways at the Two Sessions on March 7th. He believes that suburban railways are high-speed, large-capacity transit systems that effectively connect the downtown with the suburbs, and can be used to commute and be a part of urban rail transit. Only large-capacity, fast and convenient rail transit can support the huge demand of urbanization in China and prevent big cities from suffering from the so-called “urban illnesses,” or negative consequences of urbanization. According to Guo Jifu, the most difficult problem for Beijing’s suburban railways is space, with neither proper places nor routes in the city to set up stations. Therefore, it is suggested that Beijing should relocate non-capital functions in a centralized and contiguous manner and then adopt the TOD model to build suburban railway stations. Secondary urban development should then be carried out. This may save land, encourage future development space, and balance the large amount of capital needed to promote sustainable development. Guo Jifu strongly believes in the building of large-capacity suburban railway models along the urban development axis. The earlier this is developed, the lower the cost.

Pan Ming, a member of the National Committee of CPPCC, deputy chairman of the Revolutionary Committee of the Chinese Kuomintang Guangdong Committee, and vice chairman of Zhuhai CPPCC. He suggested improving the planning, construction and approval systems for rail transit in the Greater Bay Area.

The cities within the Great Bay Area is still responsible for its own planning, construction and approval systems, and there is no overall planning for an urban agglomeration. The infrastructure connectivity in the Guangdong-Hong Kong-Macao Greater Bay Area should be promoted as a whole and its urban rail network planning should be formulated from the perspective of urban agglomeration. An urban rail transit network that can connect the core cities and the core development poles of the Greater Bay Area should be built. Rail transit application and approvals should be easily to obtain. Pilot reform should be conducted on the rail transit applications and approval systems. The urban rail transit systems and regulations should be studied and formulated to create effective policy management that should promote the integration and diversification of urban rail transit within the Greater Bay Area. The leadership of the super-ministry system should be strengthened, and its macro-governance capacity in integrated rail transit should be enhanced.

Yu Guanyao, a member of the National Committee of CPPCC and secretary of the Party Committee and chairman of Shanghai Shentong Metro Group Co., Ltd. He promoted rail transit connectivity in the Yangtze River Delta region.

Yu Guanyao stated that rail transit connectivity in the Yangtze River Delta region is already underway. Rail transit has various models such as subways, municipal railways and high-speed railways. And the range of cities where QR codes can be scanned for entering and exiting subway stations will be gradually expanded within the Yangtze River Delta region.
Yu Guangyao is a member of the National Committee of CPPCC and secretary of the Party Committee and chairman of Shanghai Shentong Metro Group Co., Ltd. He emphasized the need for China’s urban rail transit to be guaranteed by comprehensive laws and regulations. Yu Guangyao stated that China’s urban rail transit development is facing new challenges and needs to strengthen related laws and regulations. The following questions need to be answered first: what are the conditions to develop an urban rail transit project that meets people’s travel needs and reasonably controls investment risks? How do we scientifically determine project planning and construction standards that meet local passenger demand and leave appropriate leeway? How to ensure the quality and safety of project construction in the project implementation process? How do we improve the efficiency of government approvals? How do we bring the subsequent working capital guarantee requirements into consideration for project approval at the very beginning of project initiation? If comprehensive legislation on urban rail transit is put in place at the national level, it will play a very positive role in regional urban rail transit construction. In the future, if the rail transit network of "subway + municipal railway + high-speed railway" could be developed, the travel in the Yangtze River Delta region would be more convenient.

Zhong Zhongdui is a member of the National Committee of CPPCC and chief professor of communications of the State Key Lab of Rail Traffic Control & Safety, Beijing Jiaotong University. He comments on the strengthening of the leadership of the super-ministry system, improving the macro-governance capacity of the Ministry of Transport in integrated rail transit, and optimizing and adjusting the functions of the integrated rail transit decentralized in various ministries and commissions.

Professor Zhong proposed to change the National Railway Administration into the National Rail Transit Administration, and believes its responsibility should be expanded from national railways, local railways and intercity railways to guide, supervise and administer policies, planning, construction, standards, science and technology, safety and service related to subways, provincial railways and municipal railways. In this way, the unified industry leading organization of integrated rail transit can be formed. The majority of the inhabitants of China’s sprawling municipalities are in suburban areas and rural counties. Suburban areas are much less dense than the urban center, and even in the suburbs of China’s largest cities. It is impossible to extend subway networks on a large scale. Instead, ground-level railways are what is primarily built. Because Chinese cities vary greatly in category and size, they should learn from Europe and adapt measures to local conditions. Different tier cities should adopt different models according to their own conditions and needs.
## Theme of this issue: Methods of fundraising for urban rail transit

### Tianjin
- **Implementation of the Work Plan for Further Strengthening the Key Tasks of Urban Rail Transit Planning, Construction and Management**
  - December 2018
  - June 2017

### Guiyang
- **Interim Measures for the Administration of Special Funds for the Construction of Rail Transit in Guiyang**
  - May 2018

### Nanning
- **Interim Measures for the Sharing of Urban Rail Transit Construction Funds in Nanning**
  - March 2018

### Dongguan
- **Measures for the Administration of Investment and Financing of Urban Rail Transit Construction in Dongguan**
  - February 2018

### Hangzhou
- **Measures for the Fundraising and Balancing of Urban Rail Transit in Hangzhou**
  - September 2015

### Wuhan
- **Interim Measures for the Administration of Special Funds for the Construction of Rail Transit in Wuhan**
  - September 2014

### Guangzhou
- **Measures for the Administration of Use of Special Funds for the Development of Urban Rail Transit in Guangzhou**
  - May 2014

### Zhengzhou
- **Measures for the Administration of Use of Special Funds for the Development of Urban Rail Transit in Zhengzhou**
  - September 2014

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**China TOD Policy Update—City Level**

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**Quarterly Newsletter on GEF China Sustainable Cities Integrated Approach Pilot Project**

**Issue No. 3**

March, 2019
China TOD Policy Update—City Level

Tianjin

- Improve the investment and financing systems for rail transit in an innovative manner
- Coordinate the city’s financial funds, study the establishment of co-funding mechanisms at municipal and district levels, set up a special fund pool for urban rail transit development
- Introduce measures for the management of special funds, clarify the scope, source, financing method, use management and safeguard measures of the special funds, and put in place a transparent and standardized mechanism for ensuring funding for construction, operation, maintenance and public safety
- Accelerate the land consolidation and transfer of relevant plots, declare the budget of revenue and expenditure for land transfer in different years, and raise the construction funds in full amount
- Revitalize the operating line resources and operational property assets with a low proportion of liabilities through equity transfer, asset securitization and other market-oriented methods is recommended, so as to obtain more funds to support the construction of new lines
- Effort should be made to accelerate the development of “Internet + rail transit” and intensify commercial development in advertising and subway business districts.
- Given the arrangement of urban rail transit construction, priority is given to the research and implementation of land consolidation and transfer along the lines of urban rail transit as well as comprehensive land development around the stations
- It is important to accelerate the development model of “rail transit + comprehensive development + real economy,” focus on promoting the concentration of industries, population and jobs along the lines of urban rail transit and build an urban rail transit economic belt
- Private companies, social insurance, private equity and other institutional investors as well as experienced and strong management teams should be encouraged to participate in the construction and operation of urban rail transit
- Sustainable bonds, project income bonds and other innovative forms that can be included in equity should be studied to promote market-based financing of urban rail transit projects
- Overall consideration should be given to the sources of operating funds for full-life cycle construction, as well as government expenditure obligation and affordability. Scientific research should be conducted on franchised project implementation programs including PPPs to optimize and reduce the financial feasibility gap subsidies.

Hangzhou

- The Measures specified that the construction funds and operating capital requirements of rail transit should be properly calculated.
- The construction funds should be borne by each contributor according to the amount of investment within the jurisdiction.
- The Measures stress the need to carry out rail transit financing as well as the planning, design, approval and transfer of the financed land in accordance with laws and regulations and to follow standardized and normalized financing procedures.
- Support should be given to Hangzhou Metro Group to conduct overall planning and development of land along the rail transit and to enhance its fundraising and balancing ability.
- The Measures outlined in detail the following topics: capital contribution, capital contribution tasks, sharing principles, establishing accounts and settlement methods, establishing an investment fund for rail transit construction, increasing the special provision of the municipal land transfer income for the investment in rail transit, clarifying financed land of contributors, determining the planning index of the financed land, checking and approving the scale of the financed land, determining the operators of the financed land and the way of transfer, improving the relevant development decision-making mechanism, and clarifying project initiation and disposal of the property on top of the allocated land.

Dongguan

- The investment and financing of rail transit construction in Dongguan will receive financial support from the government. A “special fund for the construction and development of rail transit in Dongguan” will be set up to support the construction and operation of rail transit projects.
- The national railway projects (in the Dongguan section), intercity railway projects (also in the Dongguan section), and urban railway projects approved by the city are all included in the scope of investment and financing of rail transit construction.
- According to the rail transit construction and development plan, the following will be developed: a TOD comprehensive development plan of rail transit stations and yards, rail transit construction funds, investment and financing program of the city’s rail transit construction, and balancing program for rail transit line construction and comprehensive development fund.
- The city should actively create innovative investment and financing models and guide social funds for the construction of rail transit, in order to diversify investors. The Dongguan Municipal Finance Bureau should set up a special funds account for tracking, which would responsible for the management and supervision for the allocation and use of such funds.
- Tracking special funds are applicable to urban tracks and intercity tracks, and the scope of use mainly includes the following: capital input for rail transit construction projects; repayment of principal and interest or discount interest on loans for rail transit construction projects; the part of the operating loss that cannot be made up for by the operating income of Dongguan Rail Transit Co., Ltd.; land reserves around rail transit stations; and other expenses related to the construction of rail transit.
Urban Cases

Theme for this issue:
City + station TOD strategy
Case city: Chengdu, China

Policy support
- In 2017, the Chengdu municipal government successively issued the Plan for Raising Special Funds for Urban Rail Transit in Chengdu and the Implementation Opinions of Chengdu Municipal People’s Government on the Comprehensive Development of Rail Transit Stations, which established the design of urban rail transit construction fundraising around comprehensive TOD development in Chengdu. Recently, the municipal government issued the Implementation Rules for the Comprehensive Development of Rail Transit Station in Chengdu, which provide specific operational implementation measures for the development of TOD, guiding and supporting its orderly progress in its development of TOD. 
- In April 2018, the Chengdu Municipal Bureau of Planning and Natural Resources led the preparation of the Special Plan for the Comprehensive Development of Rail Transit Stations and the Guidelines for the Integrated Urban Design of Rail Transit Stations in Chengdu. The documents emphasize the TOD concept of “industry first, function combination, station-city integration, life hub, cultural landmark, and art model,” and define the implementation scope of TOD comprehensive development.

Comprehensive development scope of TOD
About 700 stations and more than 70 train bases for 35 rail lines of 1,696 kilometers are planned to be built in the Chengdu rail transit network by 2035. Land that can be developed is planned within a 500-meter radius of 500 of general stations, whereas the radius changes to 800 meters for transfer stations. Development will also happen around train bases.

TOD implementing body
The integrated design is carried out according to the principle of “industry first, function combination.” The implementing bodies are divided based on the principle of “combination of centralization and decentralization, joint construction and sharing.” This is such that a diversified and dynamic TOD development pattern can occur. The TOD development responsibility is shared between Chengdu Rail Transit Group, district (town) and county governments, and other municipal state-owned enterprises.

- **Chengdu Rail Transit Group** undertakes the comprehensive development of key TOD projects: It is fully responsible for the construction and operation of the metro network in the city, leading the development of urban-level and district-level TOD projects, and participates in the pre-study and pre-examination of the development plans for cluster-level and general-level stations. The group can allocate the construction of and investment in land parcels, rail lines and stations, and participate in various TOD development projects in the city in order to promote consistent implementation between station construction and TOD development. According to the implementation rules, Chengdu Rail Transit Group, as the main body of comprehensive development and implementation of more than 70 train bases and more than 100 rail stations, will actively advance the construction of the first 13 demonstration projects in 2019.
- **Other municipal state-owned enterprises** undertake some projects.
- **Some municipal enterprises** are responsible for one to two urban-level and district-level TOD projects to prevent all TOD developments looking the same and to encourage competition among the industry.
- **Districts (towns) and counties** lead cluster-level and general-level projects. According to the implementation rules, the districts (towns) and counties can undertake the comprehensive development of more than 600 rail stations in the special plan. As the implementing body, they can develop independently or cooperate with Chengdu Rail Transit Group. Separately, districts (towns) and counties are encouraged to take an active part in the TOD project development of Chengdu Rail Transit Group. The specific development model has Chengdu Rail Transit Group (or its subsidiaries) cooperate with district (town) and county governments and municipal state-owned companies to establish a joint venture company to aid in implementation.
Urban Cases

Theme for this issue: City + station TOD strategy
Case city: Chengdu, China

Level classification of TOD rail transit stations
Rail transit stations are divided into four levels: urban, district, cluster and general levels and are classified according to the functional positioning of the station in the rail transit network and the overall spatial layout of the city.

Cluster-level station
Located in the community public service center or feature town center, as well as the comprehensive service center of agricultural industrial park. The service radius of the station is about 2-3 kilometers;

General-level station
Located in other general areas. The service radius of the station is about 1 kilometer.

Urban-level station
Located in the main urban center, comprehensive sub-center, or comprehensive urban traffic hub, determined by the general plan of Chengdu;

District-level station
Located in the main center or sub-center of each district (town) and county as well as in the comprehensive service centers of modern service industry and advanced manufacturing industry parks. The service radius of the station is about 3-5 kilometers;
Report Sharing

TOD Implementation Resources and Tools

Technical Deep Dive

Upcoming TOD Events

1. GEF China Sustainable Cities Integrated Approach Pilot Project:
   - Workshop on TOD Strategies & Regulations
   - Project Progress Reporting and Peer-to-Peer Learning Event
   - May 15th-16th, 2019 Beijing, China

2. The 3rd GPSC Annual Global Conference & The 2nd GPSC City Academy Training
   - September 16th-20th, 2019 São Paulo, Brazil

3. The 3rd GPSC City Academy Training
   - Late November or early December 2019 (tentative), Singapore

Related reports on Unlocking City Spatial Plans through Transit-Oriented Development & Neighborhood Urban Spaces and Assets Deep Dive Training

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