TOD Learning Workshop #1
Summary of Shanghai TOD Forum & Workshop on November 20-21, 2017

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Content

1. Summary of the Half-day TOD workshop

2. Summary of 2017 The 4th Rail Transit TOD&PPP Forum
Summary of the Half-day TOD workshop
CSTC presentation on TOD Policies and Practices in China

Thoughts sharing from the Mumbai delegation

Breakout discussions

Conclusion remarks by Gerald Ollivier
China-TOD Challenge 1: TOD urban structure can hardly be shaped due to segregation between rail planning and urban planning.

Employment centers haven’t been fostered in the suburban. As a result, the average haul distance of the urban railway is too long, the pendulum effect is serious, Crowd can not benefit efficient.
China-TOD Challenge 2:
“Easy first” leads to inadequate institutional collaboration and technology integration between infrastructure construction and land development.

The Arrangement of subways along the expressways, always made the stations overlap with the overpasses, this will lead to low space value, long transfer distance and inconvenient environment which can hardly be improved by urban and architecture designs.
China-TOD Challenge 3:
Isolated stations from surrounding development have resulted in unfriendly public space and inconvenient transfer environment.

地铁站的高强度开发并没有和地铁换乘相结合，公共空间简陋，换乘不便。

High-density development has not been allocated around subway stations. The public space and transfer environment are influenced by the unrestrained commercial benefits.

轨道相关设施只能落实在道路红线内，进一步挤占了集散通道

Transfer facilities related to subway can merely use the space inside boundary lines (red lines) of roads, further squeeze out the pedestrian path and evacuation space.
微观Micro:
以人为本的站点社区

宏观Macro:
用轨道重塑城市结构

《轨道交通引导城市发展专题研究》

中观Meso:
用轨道组织城市生活

《轨道沿线用地调整规划》

《轨道站点一体化规划设计》

《轨道交通引导城市发展专题研究》

China National TOD Guideline

- Structure
- Network
- Density

- Function
- Transfer
- Public space

- Vertical
- Walk space
- Entrance
Macro-level Guideline

- **Structure**: Use rail network to connect city core and centers
- **Network**: Separation b/w rail corridor and car traffic corridor
- **Density**: Match Density to Rail Capacity (minimum FAR control for TOD zone)
Meso-level Guideline

- **Function**: make rail corridor as a corridor for city life
- **Transfer**: ensure system efficiency/friendliness
- **Public space**: establish a continuous network at the corridor level
Micro-level Guideline

- **Vertical control:** multi-layer zoning and land leasing
- **Walking space:** safe, comfortable, convenient; no obstacles along desireline
- **Station entrance:** visible, barrier-free access, space for evacuation
China Local TOD Practice

Zhanjiang TOD Masterplan

Study area: 389km²

1. Using the mass and medium capacity transit to guide the compact urban structure that embracing the bay;
2. Improve the job-housing balance to reduce the inter-district travels;
3. Integrate the TOD centers and city centers based on the mass transit capacity;
4. Increase the development density along mass transit corridors to maximize the land value;
5. Build the public space network that connects the mountains, sea, and city;
6. Improve the road network to enhance the accessibility of green transportation;
7. Continue the transitional urban fabric, creating walking friendly district.
China Local TOD Practice

Zhanjiang TOD Masterplan

Job-housing Balance Districts

TOD districts (36)
TOD centers (187)
China Local TOD Practice

Zhanjiang TOD Masterplan

Increase the development density along mass transit corridors to maximize the land value
China Local TOD Practice

Zhanjiang TOD Masterplan

Improve the road network to enhance the accessibility of green transportation
- couplet streets
- higher road network density/ NMT network density
China Local TOD Practice

TOD Conceptual Plan for Chenggong Core Area  Regulatory Plan Level

Land Use Plan  (Original Regulatory Plan)

Land Use Plan  (TOD Plan)
China Local TOD Practice

TOD Conceptual Plan for Chenggong Core Area

Block Type Design

Key indicators for Regulatory Plan (FAR, Footprint Coverage, Green Ration, Building Height, etc.)
China Local TOD Practice

The TOD Conceptual Plan has been adopted in the revised Regulatory Plan
China Local TOD Practice
China Local TOD Practice

Chenggong Road Network Plan & Design
Kunming Transportation Planning Institute & CSTC

Site Plan Level

Traffic Signal Control

Turning Radius Design

Bus Station Design

Reduced road width at intersections
China Local TOD Practice

Yong-Xin TOD Site Plan
Calthorpe Associates
China Local TOD Practice

Yong-Xin TOD Site Plan
Final site plan by the developer
China Local TOD Practice

Yong-Xin TOD Site Plan
Summary of 2017 The 4th Rail Transit TOD&PPP Forum
2017 The 4th Rail Transit TOD&PPP Forum
Urban Rail Financing Reform and TOD Development During the 13th Five-Year-Plan Period

• On November 20th 2017, The 4th Rail Transit TOD&PPP Forum was held in Minya Hotel in Shanghai, China.
• Approximately 350 guests and representatives attended this year’s forum, coming from government departments, Metro Corporation, real estate and other industries related to TOD and PPP.

Organizers:
Southwest Jiaotong University
Co-organizers:
World Bank
Sun Vision Capital
Longfor Properties Co Ltd
Three main topics for sharing and discussion

• Interpretation of the latest TOD policies, regulations and institutional mechanisms of related cities and discussion of domestic TOD promotion path and implementation details;

• In-depth cooperation between rail companies and real estate companies;

• How to carry out rail transit PPP and how to push on TOD in tier-3 & 4 cities in the “tightening” trend.
Innovation 1
Top-level design & Coordination mechanism

- Government leadership in top-level design: metro company taking an active role, but lacks the ability to integrate urban management departments.

Railway Hub Construction Command Center

Coordination group for construction of rail transit station complexes and comprehensive development of neighboring land

Group leader: Mayor

Deputy group leader: Vice mayor in charge

- Municipal development and reform commission
- Municipal commission for housing and urban-rural development
- Municipal state-owned assets supervision and administration commission
- Municipal land development center
- Municipal rail transit investment and construction party
- Municipal land planning commission
- Municipal transportation commission
- Municipal urban renewal bureau
- District governments
Innovation 2
Urban planning in advance & workflow synchronization

- Push on station complexes and main rail transit works synchronously
- Conduct detail Urban Planning in advance, finish the Urban guideline and put them in local regulations (zooning) when you start the rail construction plans.

Synchronous planning:
- Construction planning and comprehensive development planning are prepared synchronously.
- Rail feasibility study and complex integration schemes are prepared and submitted for approval synchronously.

Synchronous site:
The sites of complexes and main line works have been selected synchronously.

Synchronous design:
The traffic connection of complexes, reserved works and main line works have been designed synchronously.

Integrated construction:
The traffic connection of complexes, reserved works and main line works are built in an integrated way.
Innovation 3
Depot construction through land transfer + construction

- Promote depot construction in a model of land transfer + construction

Chentougang Depot intends to adopt an investment form of aboveground property development and depot construction. The land transfeeree builds the subway depot to realize integrated construction of depot, traffic connection facilities and comprehensive development. Obtain primary land income in advance while reducing the demand for construction fund.
Innovation 4
Station Integration using PPP model

- Promote the construction of station and underground space in a PPP model.

Four metro lines pass Panyu Square. Guangzhou Municipal Development and Reform Commission has approved the PPP proposal of this plot. The underground space of the square will be built synchronously with the metro station.
Innovation 5
Introduction of city renewal fund

- In July 2017, initiated by Guangzhou Metro Corporation and Yuexiu Group, RMB200 billion “Guangzhou City Renewal Fund” was founded to promote the purchase and reserve of the land along metro lines, the development and construction of station complexes, the operation of above-station property and asset finance.
- Use the city renewal fund to promote land preparation of old factory plots
- Apply the city renewal fund to promote preparation of continuous land for hubs and neighboring areas

Planning of the western industry corridor
Innovation 6
Activate existing depots

- Move, reformation and redevelopment

Move at the original location
During construction of phase-2 project in the parking lot, development conditions are reserved. The built part in phase 1 is moved to the second phase and then phase 1 is reformed for development of over-station property.

Move to a nearby location
Near the depot, the increased land is used to build line-3 depot and reserves conditions for further development. In the original depot plot, room is made for depot 2.

Joint move of double vehicles
During construction of Guanggang New Town Depot, some functions of Xilang Depot are moved to Guanggang New Town Depot. The land released from Xilang Depot is developed.
Innovation 6
Activate existing depots

- Explore the capitalization of the land of existing depots

Explore capitalized operation of the land of six existing depots that can be activated for development, set up a simulated REITs platform in form of fund, raise liquidity of land assets of the depots, provide the metro company with balance sheet funds that can be used freely and support metro construction.
Innovation 7
Cooperation model with property developer

- **Shanghai Model**——through stock right transfer and cooperation with real estate developer.
- **Shenzhen Model**——
  Capital contributions based on appraised land value, and employ three different cooperation models with property developer:
  1. corporation/stock right transfer,
  2. contract/usufruct right transfer,
  3. agent /Build and Transfer
THANK YOU