深圳市铁路交通枢纽建设现状与发展展望

Current situation and development prospect of Shenzhen railway transportation hub construction

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Headlines

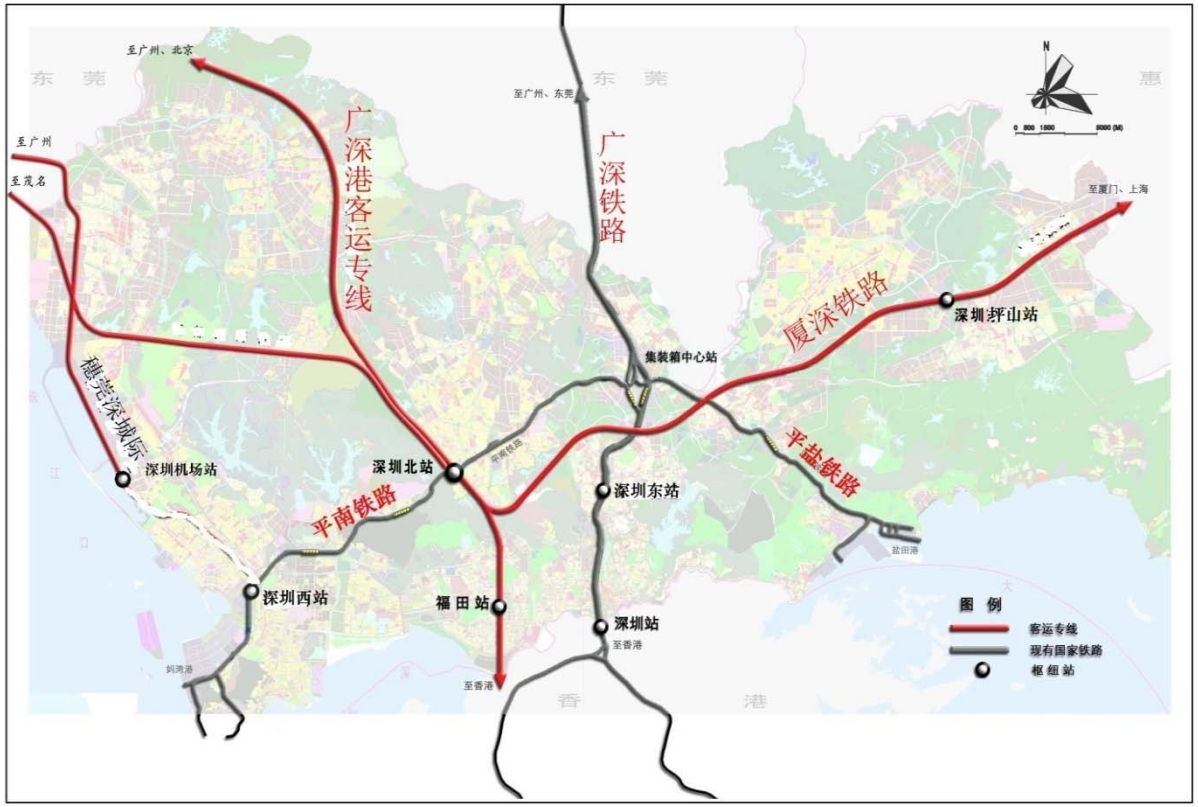
1. • Current situation of Shenzhen railway transportation hub
2. • Development prospect of Shenzhen railway transportation hub
3. • A few enlightments

1. Current situation of Shenzhen railway transportation hub

一、深圳市铁路交通枢纽现状

(1) Current situation of Shenzhen regional railway layout

Shenzhen has formed the “Double Cross” railway network and “Two Main, Three Auxiliary” railway transportation hub layout, which plays an important role in South China.



◆**Guangzhou-Shenzhen-Hongkong passenger dedicated line: Total length: 116km (48km in Shenzhen). Total investment: 29.4 billion. Shenzhen North Station and Futian Station commenced in 2011 and 2015 respectively.**

◆**Xiamen-Shenzhen railway: Total length: 357km (47km in Shenzhen). Total investment of Guangdong section: 37 billion. Put into operation in 2013.**

◆**Guangzhou-Shenzhen railway: Total length: 147km. 24km in Shenzhen.**

◆**Pingnan railway: Total length: 42km. From Pinghu station to Shekou and Mawan.**

◆**Pingyan railway: Total length: 23km, Shugang railway.**

(1) Current situation of Shenzhen regional railway layout

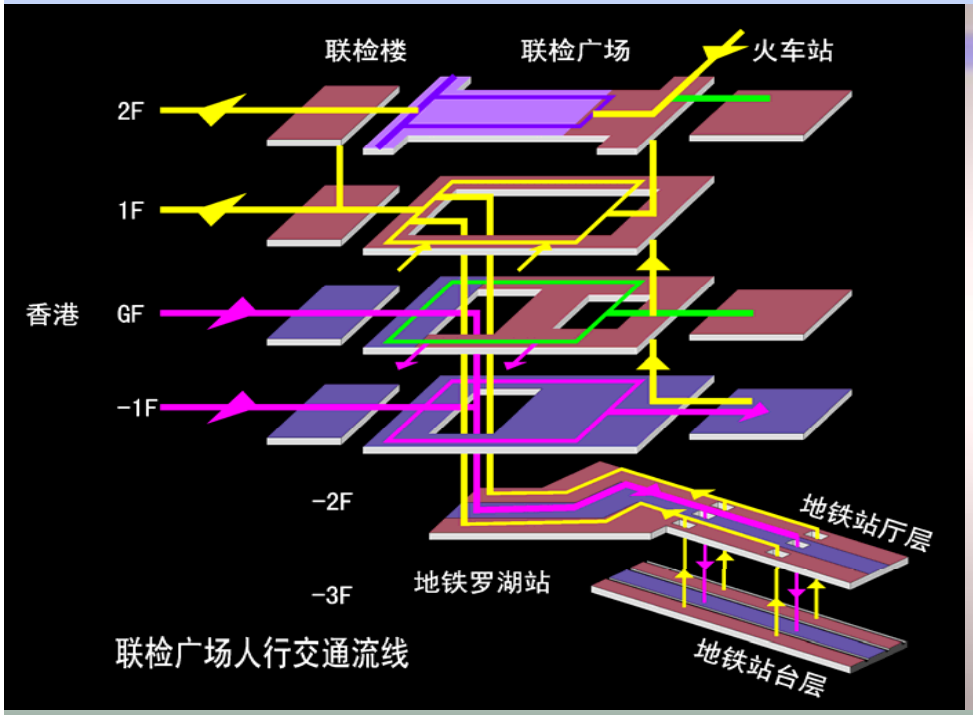
Combined with the urban function, integrated planning and construction through intensive way has formed the “Two Main, Three Auxiliary” railway transportation hub layout. Especially, Luohu transportation hub, Shenzhen North station hub and Futian station hub become models of domestic large-scale integrated hub.

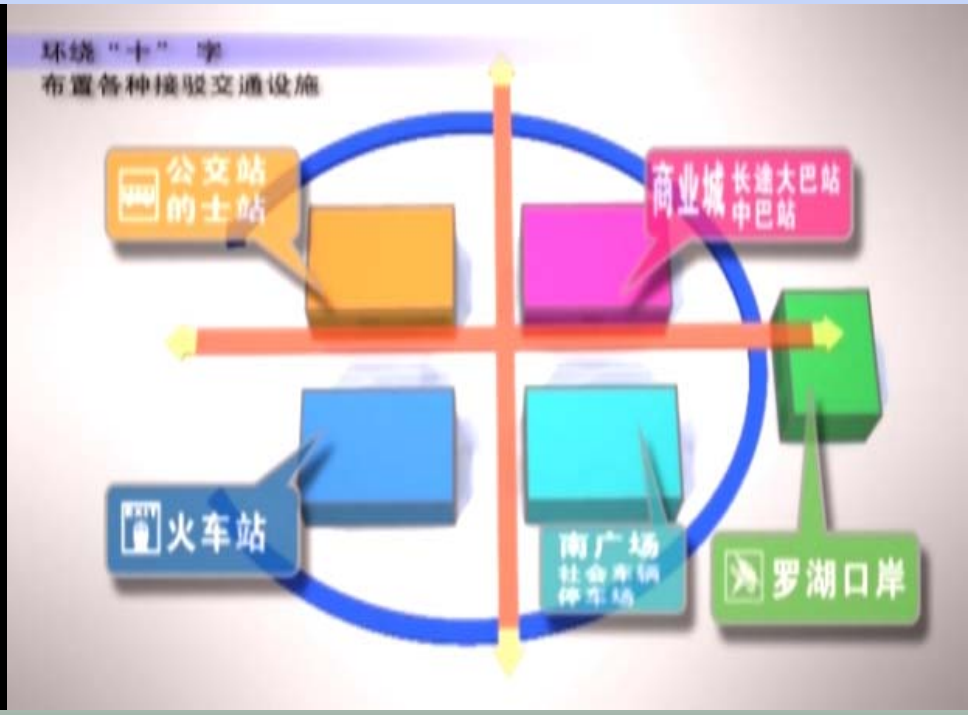
- **“Two Main”:**
  - **Shenzhen North Station**
  - **Shenzhen Station**
- **“Three Auxiliary”:**
  - **Futian Station**
  - **Pingshan Station**
  - **Shenzhen East Station**

(2) Current situation of Shenzhen regional built railway transportation hub

Luohu transportation hub:

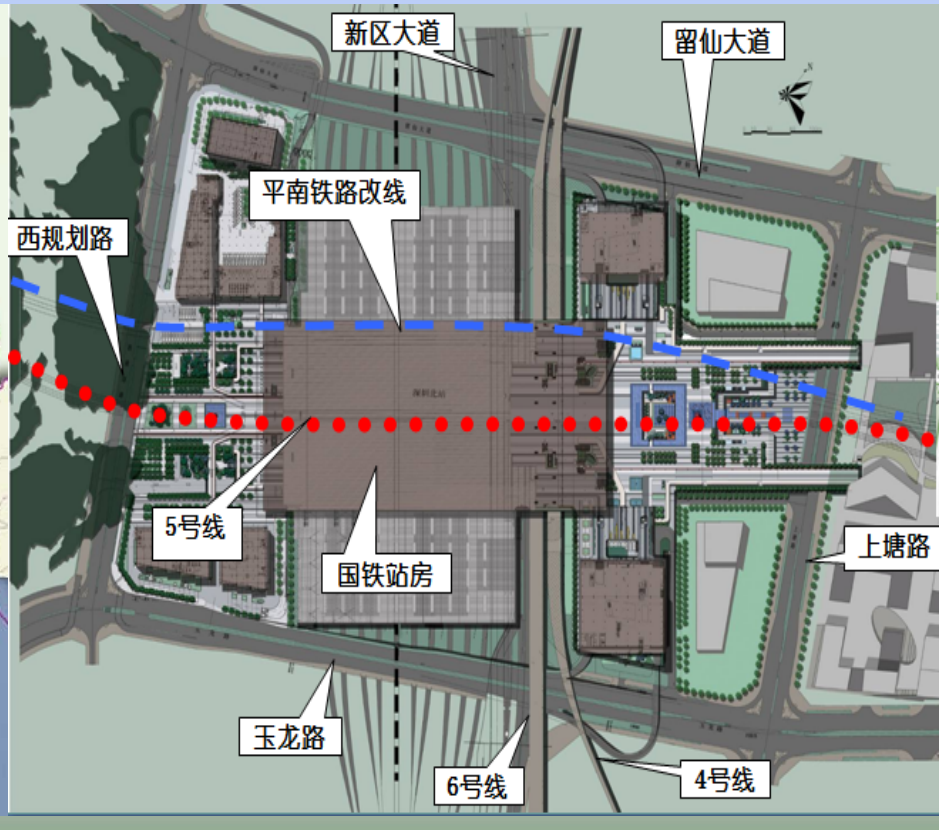
Function: connect the passenger flow with transfer port, metro, train, bus, taxis and coaches. There are three floors underground and two floors above ground (from bottom to top is: metro platform floor, station hall floor, underground transportation floor, ground square and elevated pedestrian system). It is a modern synthesized transportation hub with total building area of 40 thousand square meters.





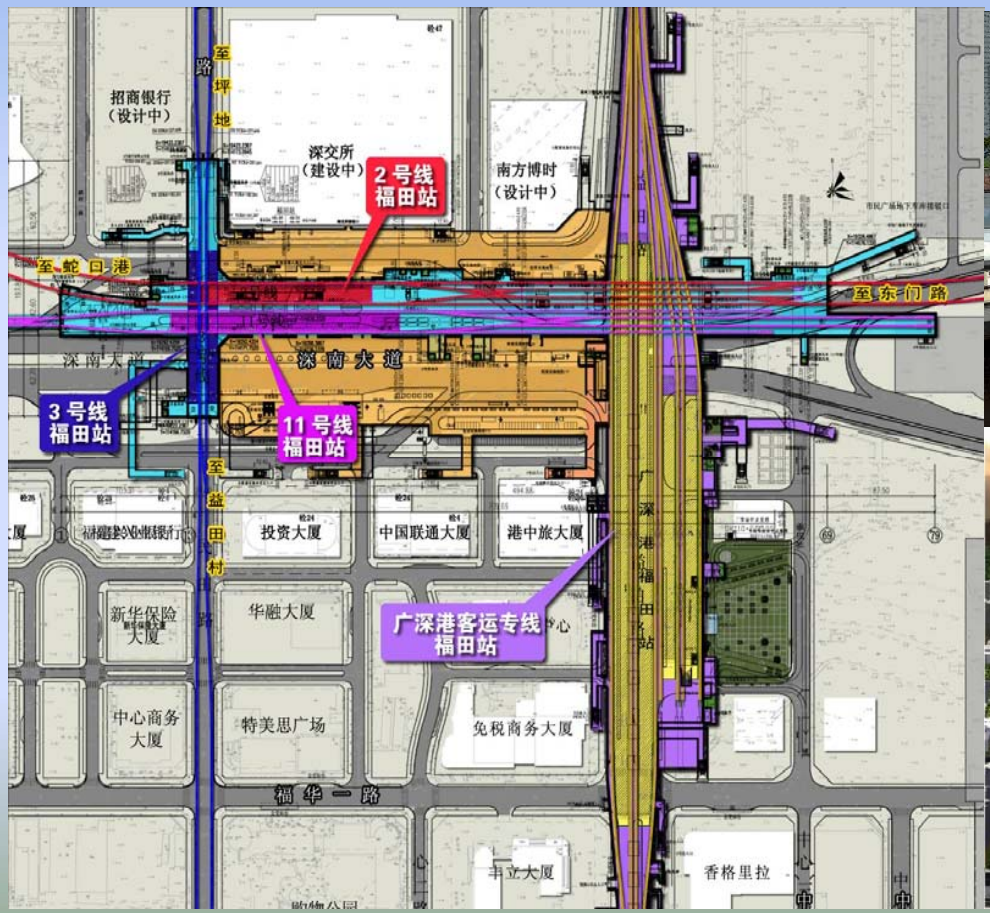
(2) Current situation of Shenzhen regional built railway transportation hub

Shenzhen North Station hub is a comprehensive hub incorporating the high-speed railway station (Guangzhou-Shenzhen-Hongkong line, Xiamen-Shenzhen line), metro line 4, 5, 6, coach, bus, taxi and vehicle stations and different types of commercial facilities into one system. The whole building layout is divided into 5 floors, and there are five connected expressways surrounding the hub.



(2) Current situation of Shenzhen regional built railway transportation hub

Futian station hub includes the Futian Station of Guangzhou-Shenzhen-Hongkong passenger dedicated line, metro line 1, 2, 3, 4, 11 and ground transportation system. The whole building area is 220 thousand square meters and is now the largest underground train station in Asia.



(2) Current situation of Shenzhen regional built railway transportation hub

Our company entrusted by the Municipal Transportation Commission is responsible for operation and management and the commission will subsidize the payment balance.

The operating income mainly comes from property rent, parking lot income, advertisement etc.

In the long run, as the strong exploitation of commercial, advertising and other business resources, these incomes can maintain the normal operation of the transportation hub basically.

2. Development prospect of Shenzhen railway transportation hub

二、深圳市铁路交通枢纽发展展望

(2) Development forecast of Shenzhen railway transportation hub.

On the basis of the latest approved “long-term plan of railway network (2030)”, Shenzhen is positioned as an integrated railway transportation hub. The Ganshen railway and the Shenmao railway play an important role in this plan.

◆**Ganshen railway (red imaginary line): Pass Ganzhou, Heyuan, Huizhou, Dongguan. Total length: 432km. Length of main track in Shenzhen: 25km. Total investment: RMB 64.1 billions. Construction will start at the end of2016.**

◆**Shenmao railway (purple imaginary line)： Pass Dongguan, Guangzhou, Zhongshan, Jiangmen, Maoming. Total length: 394km. Length in Shenzhen: 36km. Total investment: RMB 51.6 billions. Construction between Shenzhen and Zhongshan will start at 2018.**

Inter-city railway plan in Shenzhen area

序号	线路名称	起点	终点	市内长度	备注
1	穗莞深城际	前海妈湾	广州东/白云机场	37 km	至深圳机场段在建
2	深惠城际	前海妈湾	惠州市	67 km	规划保留
3	港深西部快轨	深圳机场	香港机场/洪水桥	23 km	规划保留
4	深莞城际	前海妈湾	东莞莞城	45 km	新增线路
5	中深惠城际	中山/机场枢纽	坑梓/惠阳	72 km	新增线路
6	中虎龙城际	中山北站	坪山中心站	29 km	优化线路
7	深珠城际	西丽枢纽	珠海	13 km	优化线路
合计				286 km	

(2) Development forecast of Shenzhen railway transportation hub.

In accordance with the national railway hub development goals，Shenzhen will build a railway network which runs throughout all directions and eventually form a railway transportation hub layout of four main stations and four subsidiary stations.

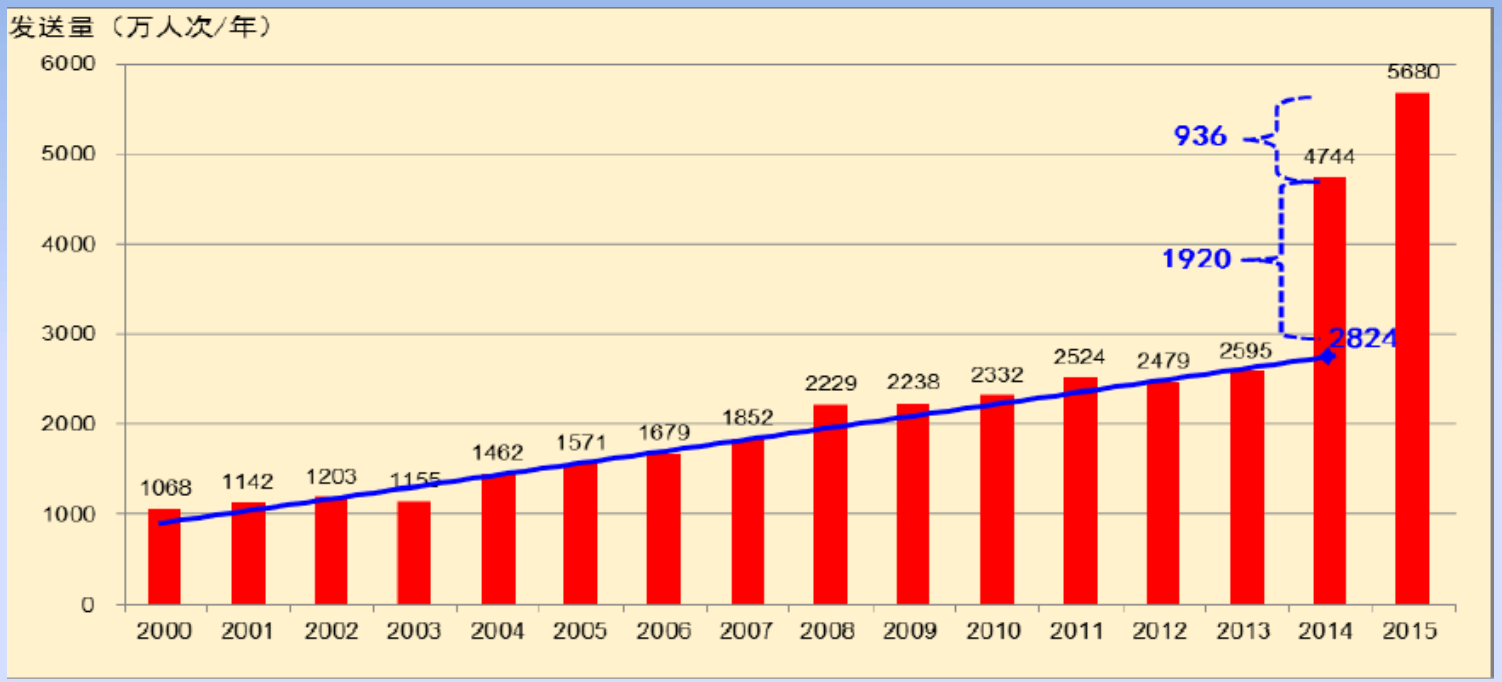
- **four main stations：**
  - **Shenzhen North**
  - **Shenzhen**
  - **Airport East**
  - **Shenzhen Pingshan**
- **four subsidiary stations：**
  - **Futian**
  - **Xili**
  - **Shenzhen East**
  - **Pinghu**

3. A few enlightments.

三、几点启示

(1) Forward metro construction planning.

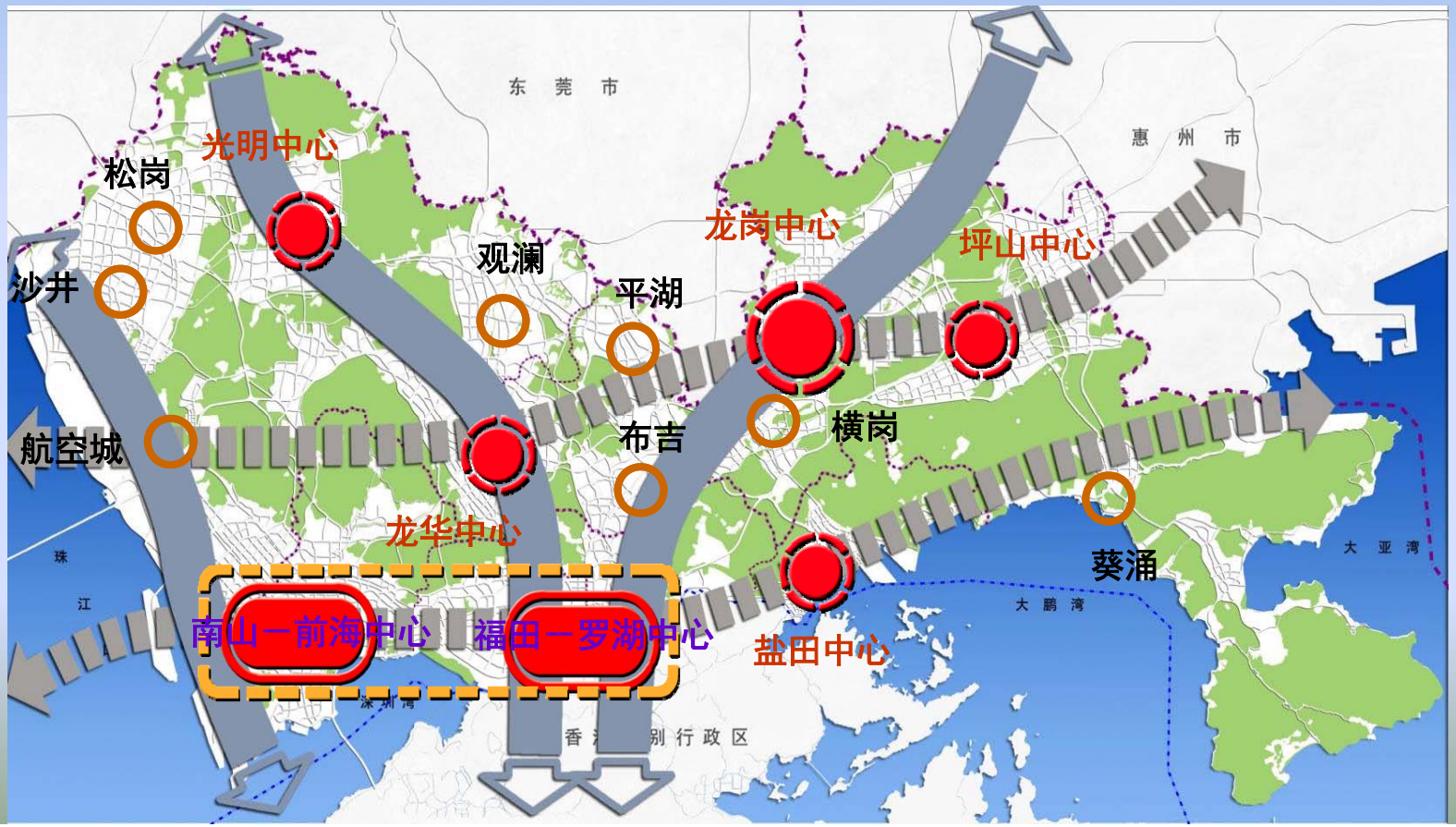
◆ There is a rapid growth of railway demand in Shenzhen. The railway passenger volume reached 47.44 million and 56.8 million in 2014 and 2015, rising 68% and 20% year-on-year respectively.



◆Considering Shenzhen as an important center city in South China, we need to upgrade the function configuration of the railway access and the station facilities when analyzing the demand of railway.

(2) Station planning in view of urban structure and development demand.

- Station selection is based on the urban dimension, urban structure, and development stage. Large cities usually demonstrate multi-centered structure and set up several stations.
- Shenzhen presents a long belt cluster space pattern.



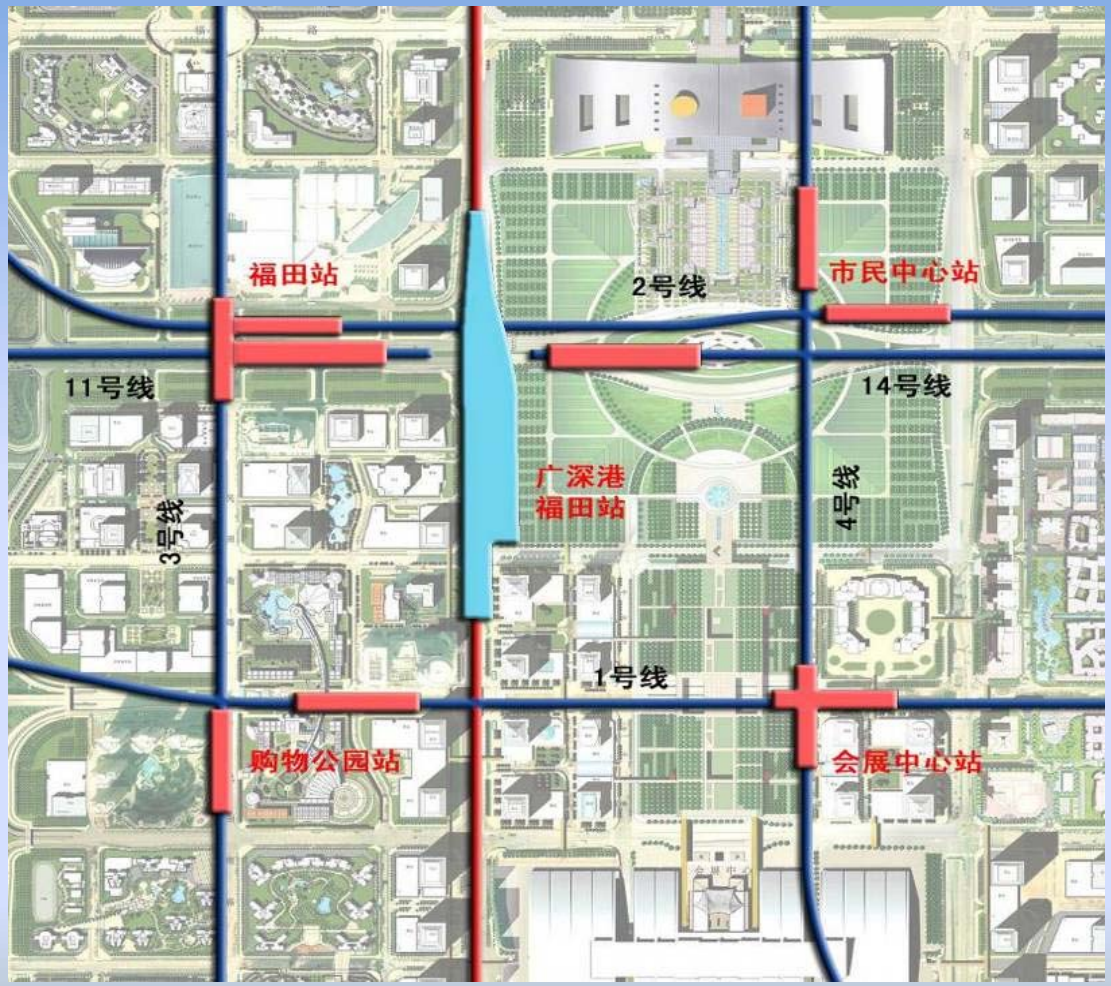
(2) Station planning in view of urban structure and development demand.

◆On the occasion of the construction of high-speed rail hub, we take this opportunity to build a multifunctional and synthetic city center or sub-civic center.

For example, the construction of Shenzhen North station is beneficial for all residents. In the meanwhile, it drives the development of Longhua area, which helps to form a sub-civic center.

(3) Hub station planning in view of the connection with urban rail transit.

Station planning should consider the connection with urban rail transit, which help to bring in passenger flow and expand the influence of the stations.

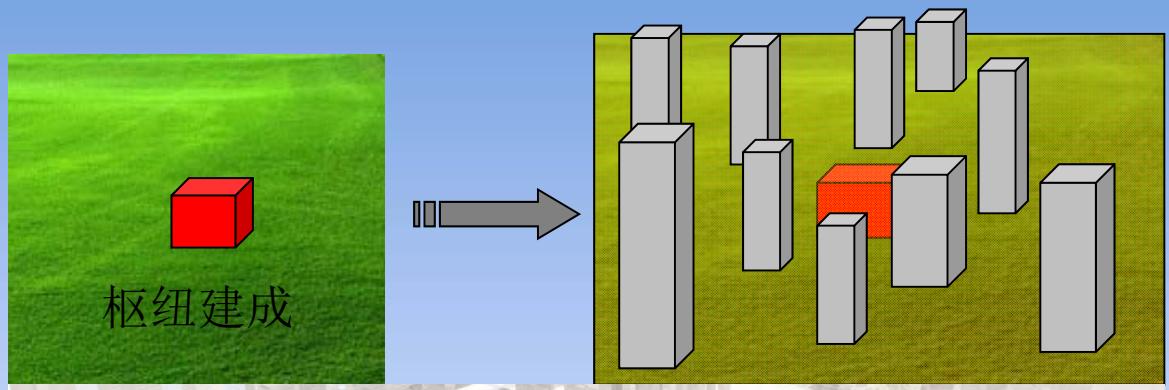


(4) Design and construction of the transportation hub should be linked up with each other.

- First, overall planning for related projects should make an effort to achieve seamless connection of different public transport and decrease the transfer distance.
- Meanwhile, handle engineering interface division, investment apportion, duration coordination and so on.
- For instance, there are problems in engineering interface division and investment apportion between railway stations and hub supporting projects when constructing the Shenzhen North station hub. Shenzhen municipal government communicated well with State Railway Administration about these problems and fixed them eventually.

(5) Integrated development of transportation hub and surrounding land

- To achieve sustainable management, we can carry out high density commercial exploitation of surrounding land when considering the externalities of the transportation hub.
- Obtain land added-value, balance construction cost of the transportation hub, and subsidize operating cost of transportation enterprises.



Thank you !