

Experience and Lessons in the Planning and Construction of New Cities and Districts in Shanghai

Shanghai Municipal Bureau of Planning and Land Resources

2013.11.12

Disclaimer:

The views expressed in this document are those of the author, and do not necessarily reflect the views and policies of the Asian Development Bank (ADB), its Board of Directors, or the governments they represent. ADB does not guarantee the accuracy of the data included in this document, and accept no responsibility for any consequence of their use. By making any designation or reference to a particular territory or geographical area, or by using the term "country" in this document, ADB does not intend to make any judgments as to the legal or other status of any territory or area.

Findings, interpretation and conclusions expressed in this document are based on information obtained by the author. ADB or Tongji University do not guarantee the accuracy or completeness of information in this document and cannot be held responsible for any errors, omissions or losses, which emerge from its use.

The views expressed in this contribution are those of the contributor and do not necessarily reflect the views and policies of Tongji University and the Asian Development Bank or its Board of Governors or the governments they represent.

Author(s) warrant that the Contribution is original except for such excerpts from copyrighted works (including illustrations, tables, animations and text quotations) as may be included with the permission of the copyright holder thereof, in which case(s) Author(s) warrants that he/she has obtained written permission to the extent necessary and has indicated the precise source.

Outline

I Overview

II Achievements and Problems

III Development Strategy

IV New Cities Planning

V Conclusions

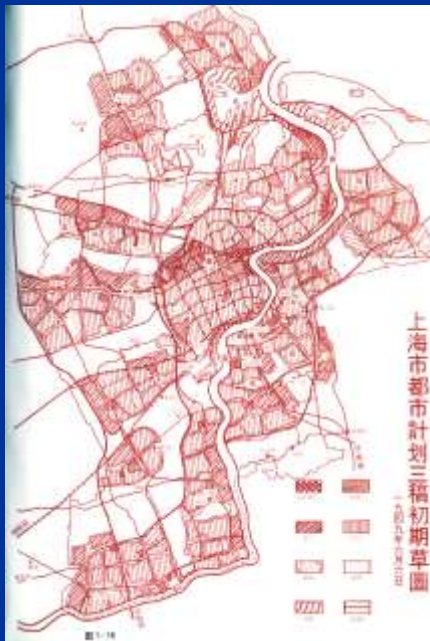
I. BACKGROUND

- **History**
- **Context**
- **Significance**
- **Objective**

1. History of New City Planning

The towns in the suburban area of Shanghai underwent a transformation from “satellite city” to “new city”.

1949



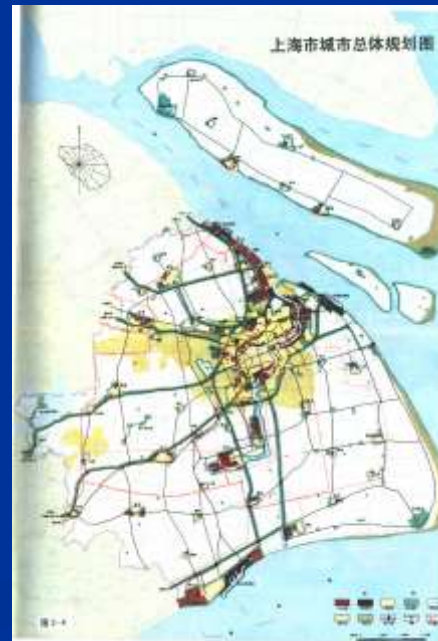
Suburban towns

1959



Satellite city

1986



Central city-satellite city-suburban towns-suburban counties

2001



Central city-new city-key towns-general towns

2. Context

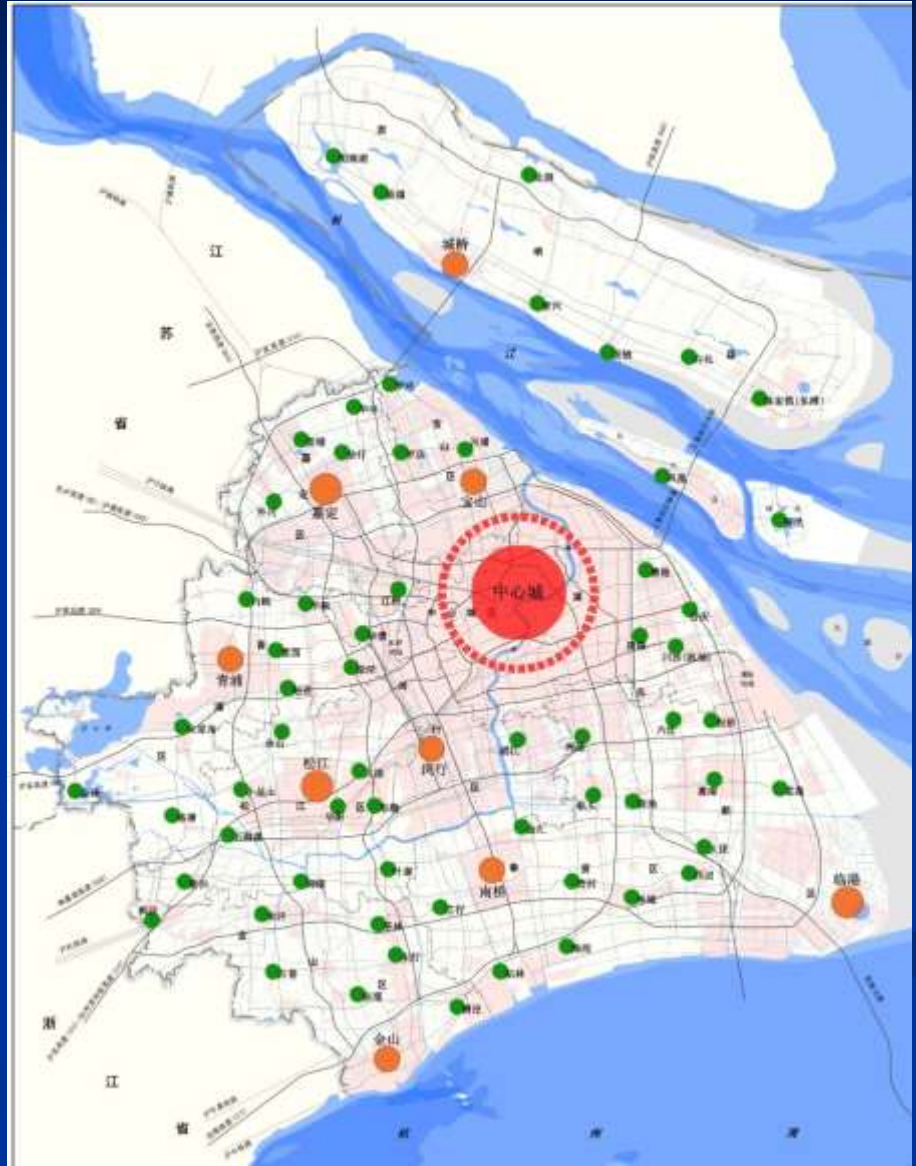
In 2001, *Comprehensive Plan of Shanghai* approved by the State Council proposed **to accelerate the development of new cities in suburban.**

During the period of the Tenth Five-Year Plan, **pilot projects of “one city and nine towns”** (Songjiang, Lingang, Anting, Pudong, Zhujiajiao, Gaoqiao, Luodian, Fengjing, Fengcheng, Chenjiazhen) were carried out to explore the path of urbanization in suburban areas and to promote their characteristics and diversity, which helped to accumulate experience in suburban town development.



2. Context

During the Eleventh Five-Year Plan, according to the requirement of “three centralizations”, the “1966” Urban-Rural Planning System of Administrative region of Shanghai was put forward, which developed an overall plan of Shanghai at the four levels of central city, new cities, new towns and central villages. It is the first attempt to include both urban and rural areas in one city plan, establishing the basic frame of urban-rural planning in Shanghai.



3. Significance

During the period of twelfth five-year plan, the construction will shift to suburban area of Shang, highlighting the **important role of new cities in the development of suburban areas.**

Important path to integerate urban-rural development and new urbanization mode of Shanghai; to exercise EXPO ideas and enlarge EXPO effects; to promote integrated development of Yangtze River Delta and develop a world-class city group;

3. Significance

1). Development of new cities will optimize urban spatial distribution, forming a new pattern of urban-rural integration which fits in Shanghai's character of a mega-city: **to give priority to the development of seven new cities of Shanghai.**



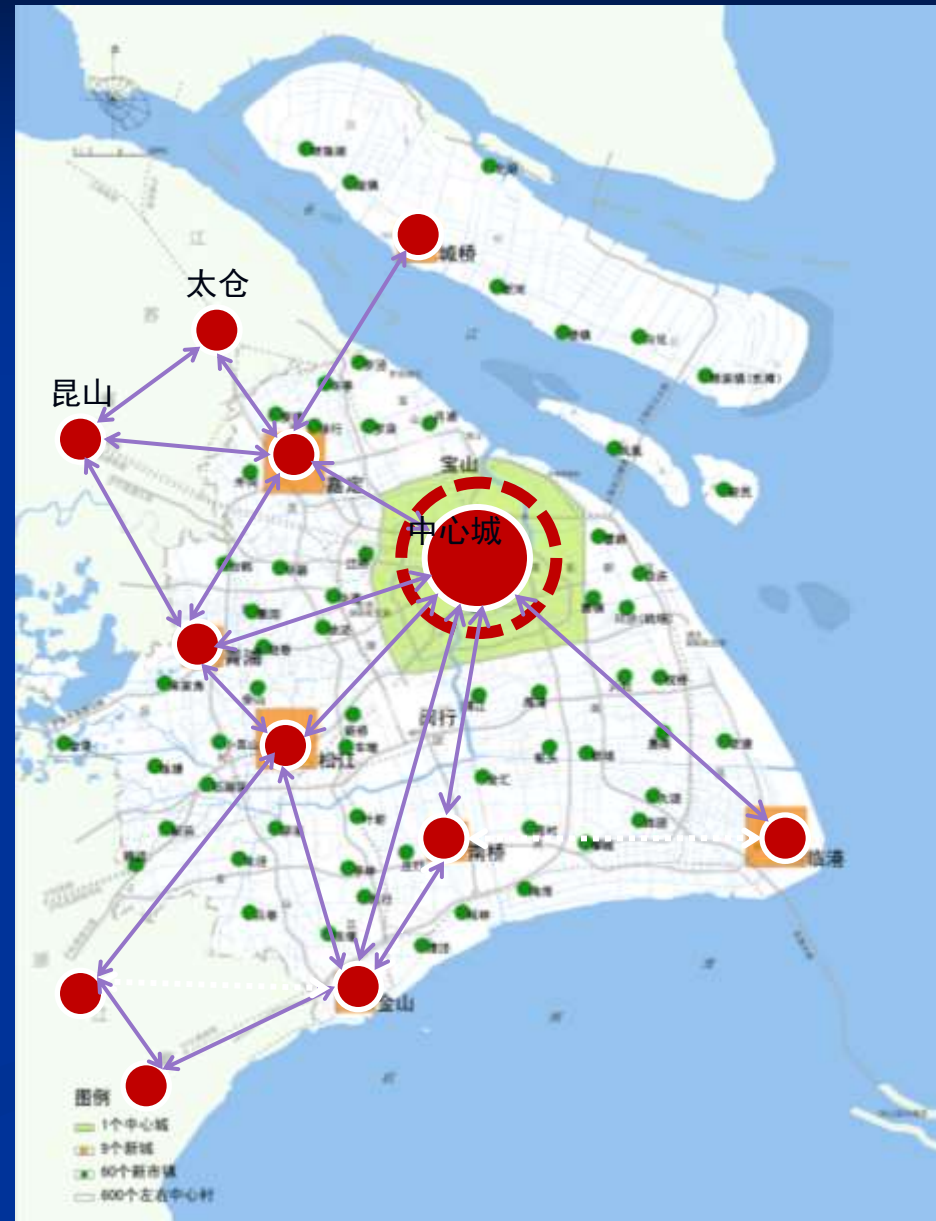
3. Significance

2). Development of new cities will be a new engine to promote industrial restructuring and optimization. New cities will act as bases of advanced manufacturing, new strategic industries and an important center of modern service.



3. Significance

3) Development of new cities will facilitate to develop new city groups around central city areas in Yangtze River Delta, and build up a new platform towards other areas in the region.



3. Objective

By 2020, the new cities will see a breakthrough in its development. A new city group in the suburban area will take shape to complement the functions and development of the central city.

Jiading and Songjiang New city will establish their roles as the urban nodal point in the Yangtze River Delta, with a population of 800,000 to 1,000,000;

Lingang, Qingpu and Fengxian nanqiao will be more functional as agglomeration and radiation sub-centers of the area, with a population of 600,000 to 800,000 ;

Jinshan and Chongming will take a leading role in and serve the development of their surrounding areas, with a population of 200,000 to 400,000.



3. Objective

The plan aims to develop an integration of city and industry in new cities, to formulate a modern infrastructure system and a relatively balanced system of public service, to build livable and ecological environment of living and work



Land Use of Lingang

II. ACHIEVEMENTS & PROBLEMS

1. Achievements

increasing population in suburban areas;

Shift of development, with initial scales in Songjiang and Jiading;

major projects of infrastructure, functional projects, industries

Suburban areas have been a new engine of urbanization in Shanghai.



2. Problems

New cities are still more functioning as center of suburban districts in terms of politic, economy and culture, while the role in **population decentralization is not evident**), where the density is much lower than those immediate peripheral areas around central city.

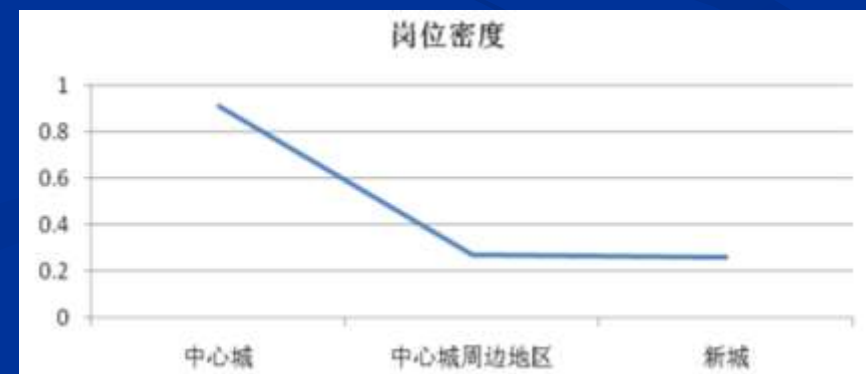
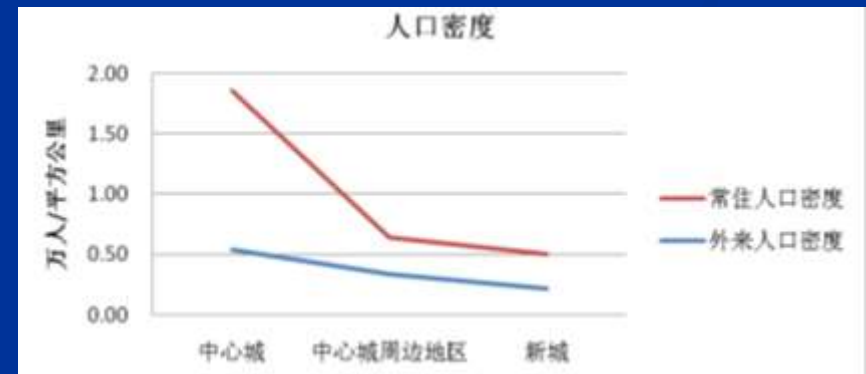
10% of permanent population of Shanghai live in new cities;

population density: 5000 PPKM²,
27% of central city area;

density of floating population: 2100
PPKM², 40% of central city area;

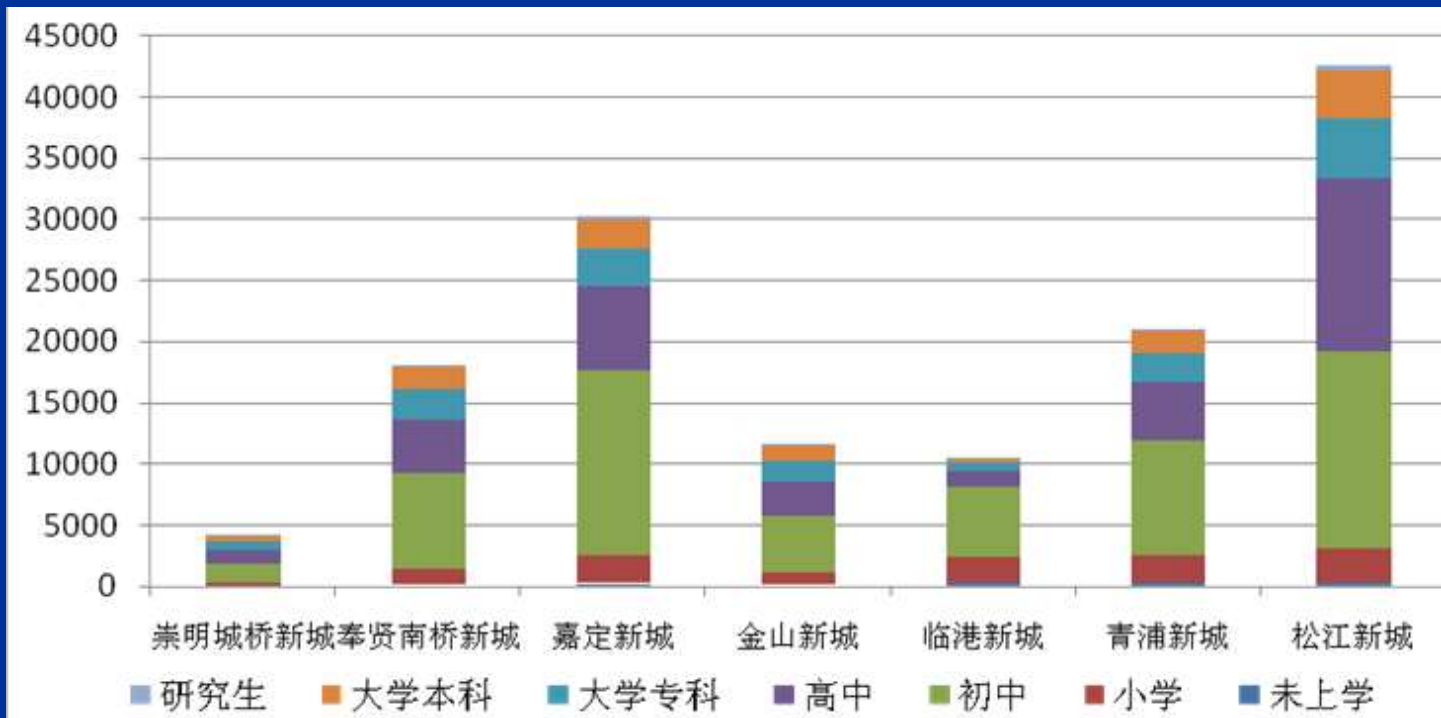
68% of new populations are
migrants;

Employment density: 2600 PPKM²,
29% of central city areas



2. Problems

Relatively low industry energy level causes disconnection between employment population and the development goal. Efforts should be made in **further strengthening of city-industry integration**). New population in new cities are less educated immigrants brought in by job opportunities,

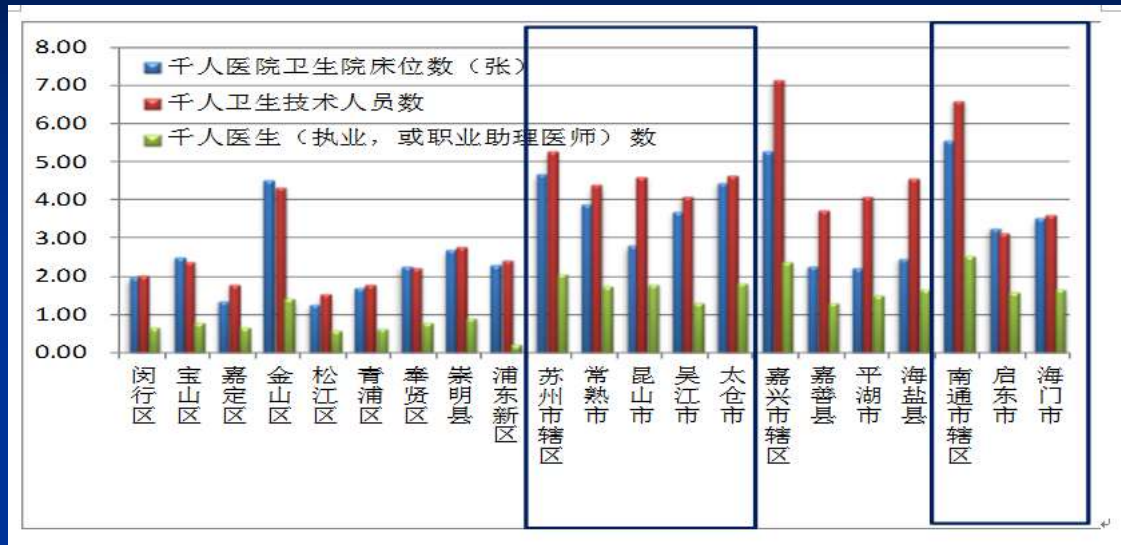


2011 Education Degree of New City
Population of Shanghai

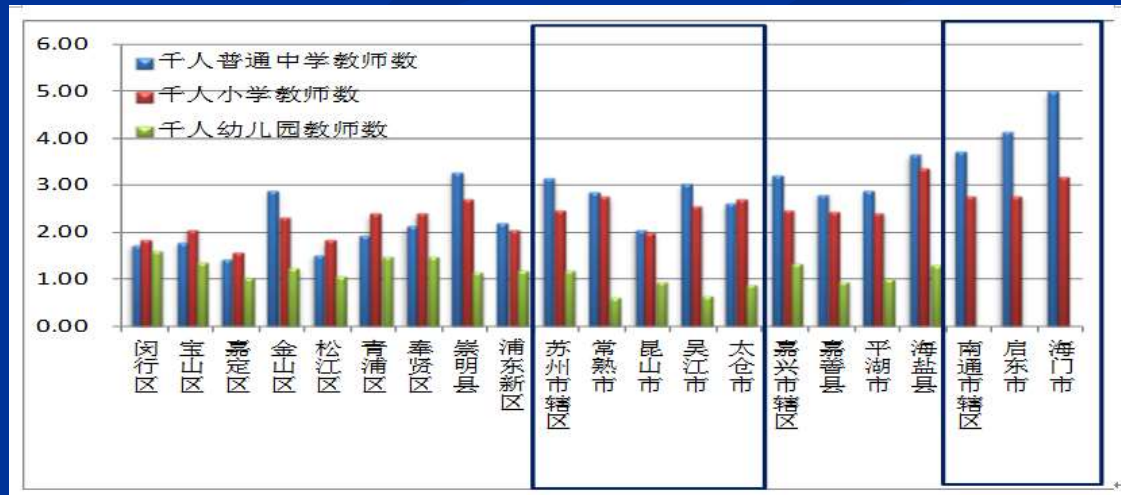
2. Problems

Insufficient public service

Both scale and level of public service are significantly lower than other towns/cities in the region and central city area.



2011 Index of Medical and Health Facility



2011 Number of Teachers for Every 1000 Population

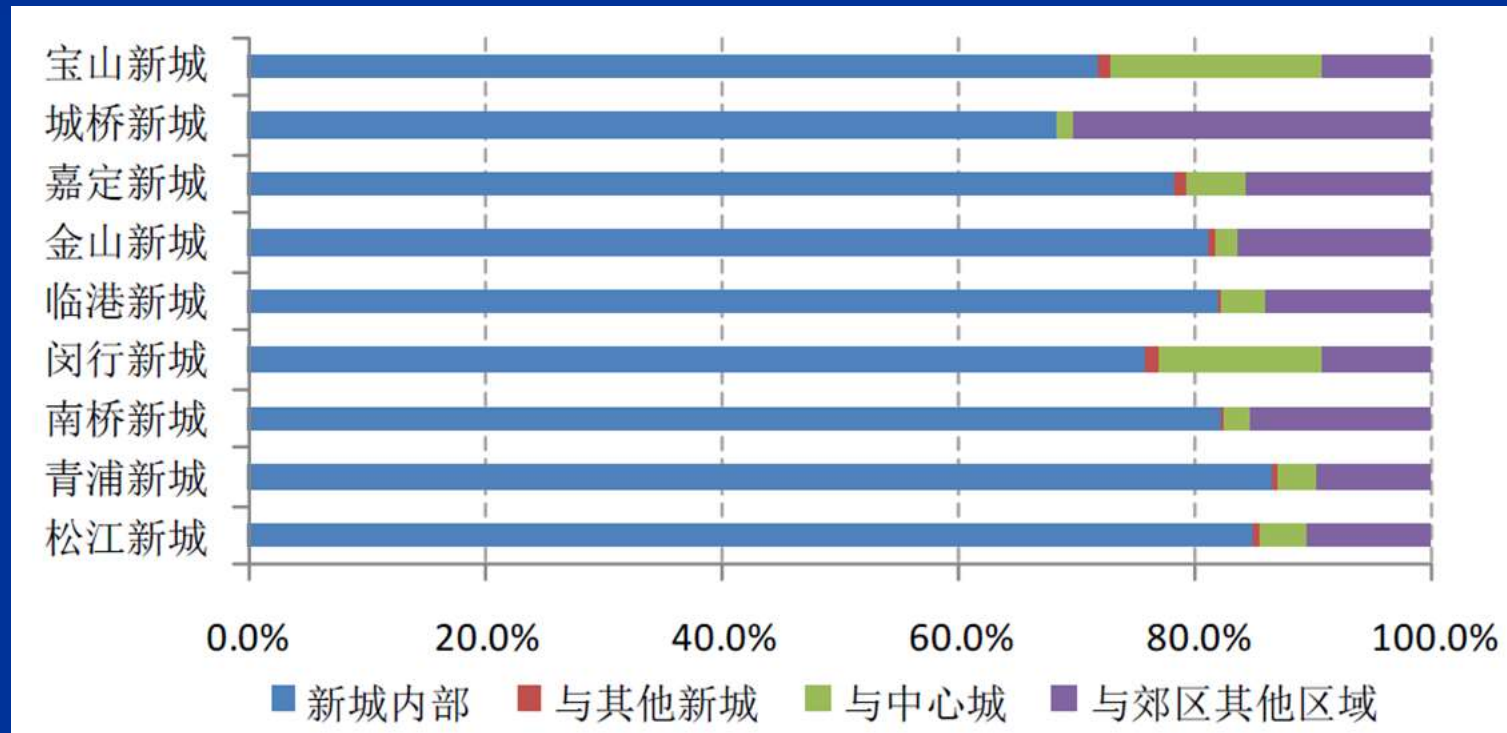
2. Problems

Less-desirable environment: Relatively low ratio of plaza and green space(except for Qingpu), high ratio of industrial and warehouse lands, less-attractive environment compared with central city area



2. Problems

Less accessible transport to the central city and inside the new city) Restrictions on commuting between central city and other suburban areas; private car-dependent and less utilization of public transport



2. Problems

Less-effective utilization of lands. The average and per capita out-put of construction land in the new city is below the average level of Shanghai and other cities in Delta region(except for Jiading), with an equivalence to suburban areas around central city.



III. STRATEGY

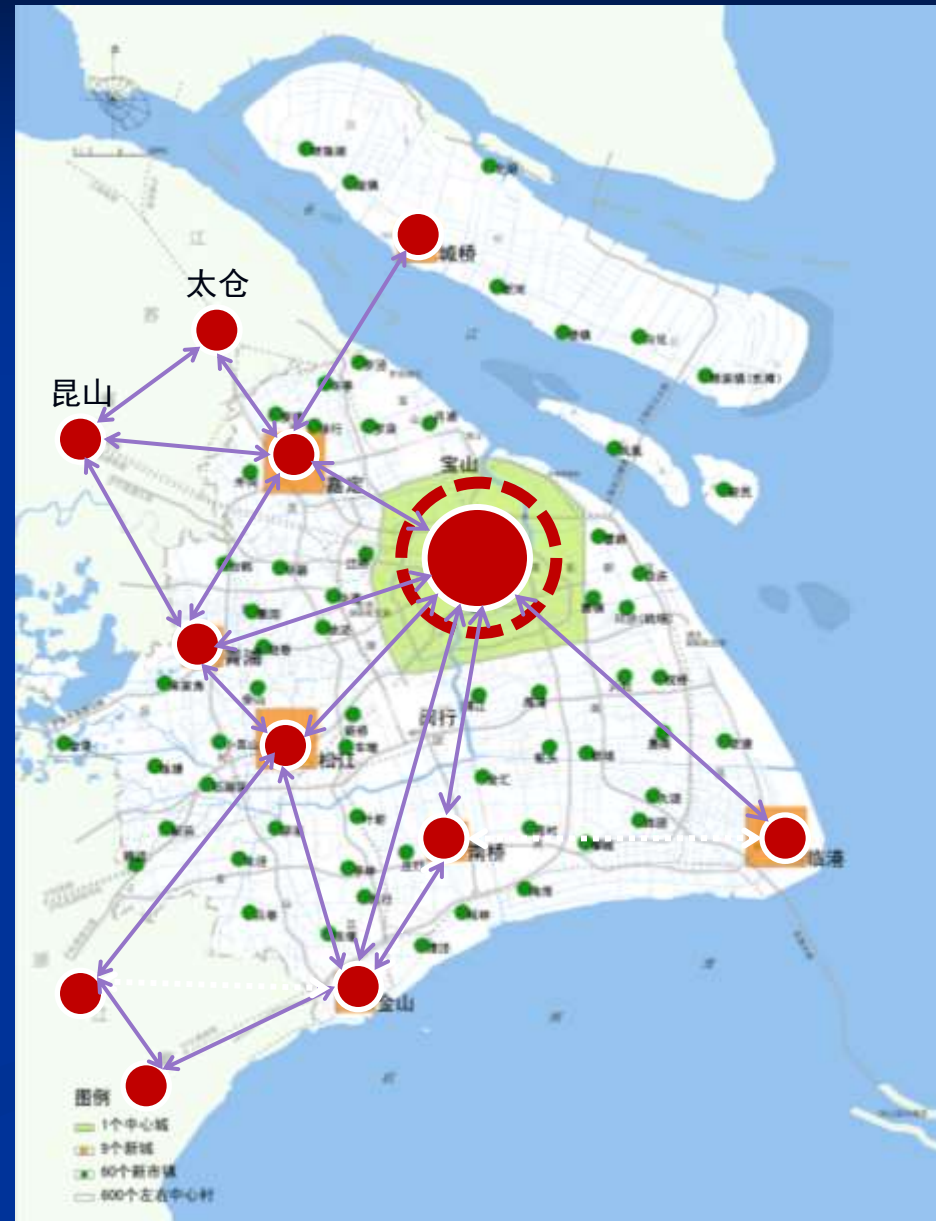
- **Function and Objective**
- **Integration into the Delta City Group**
- **Integration of City and Industry**
- **Public Service**
- **Livable Environment**
- **Multi-layering Transport**
- **Development Policy**

1. City Function and Objective

In the future, new cities will become **important nodes and cities with comprehensive functions** of Delta city group. With objectives to integrate into the region, integrate city and industry, optimize function and land-efficiency and eco-friendly, new cities will play a role as population “pool”, and facilitate regional integration, differentiation of functions, intensification of spatial layout, low-carbon industries, comprehensive and convenient transportation, ecological environment and diversified public service.

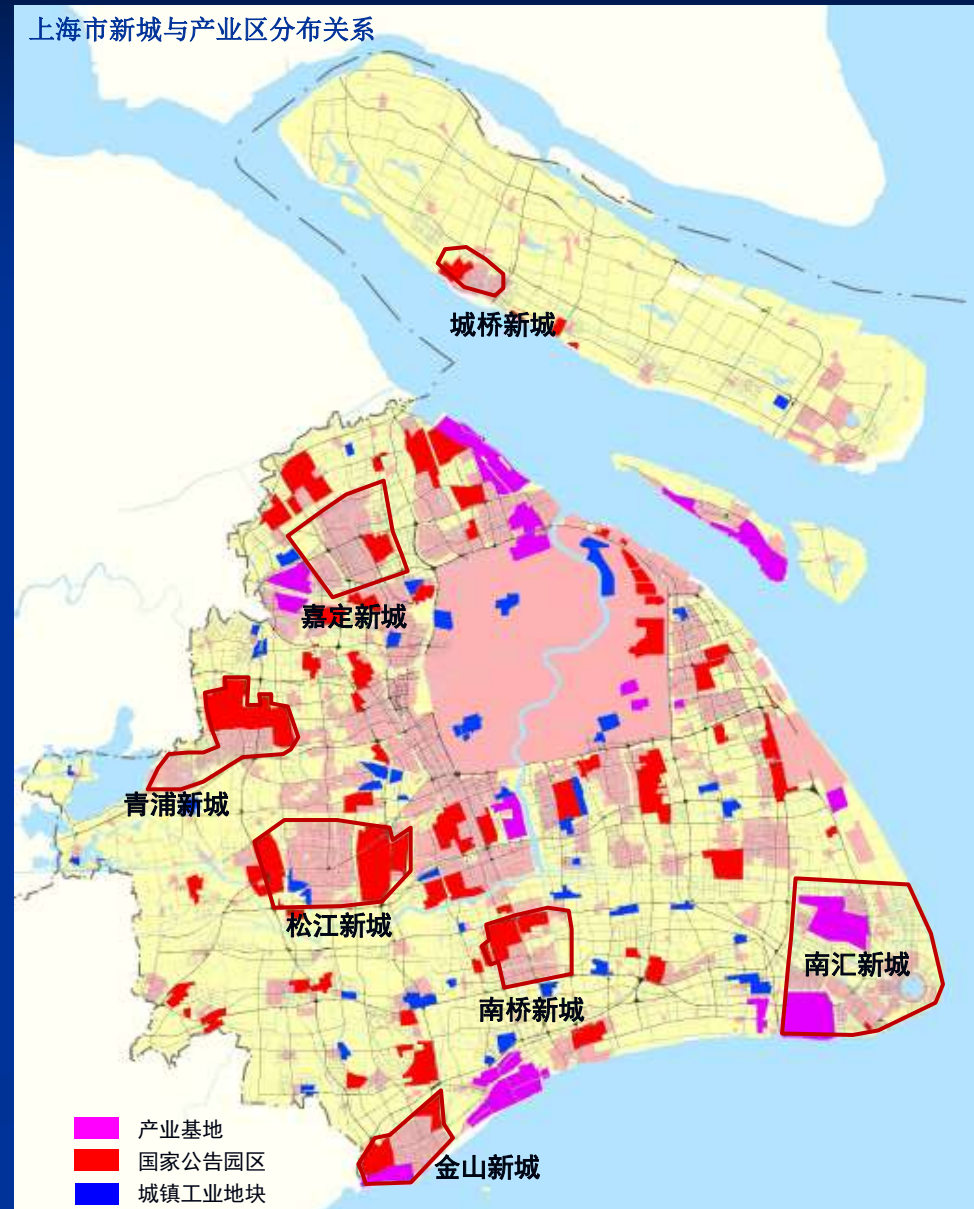
2. Integration into the Delta City Group

To highlight priorities, focus on policies and comprehensive promotion during construction and development process; to promote combination of new cities and potential areas to be developed in the future; Jiading, Kunshan and Taicang areas, three isles at Yangtze estuary, areas around Taihu Lake and Hangzhou Bay where most of resources in Delta region concentrates are major linkage areas of Shanghai and with great potentials in the future.



3. Integration of City and Industry

To promote development of modern service industry by taking use of the low cost and new environment of new cities; based on exiting industrial foundation, to encourage self-innovation and guide distribution of high and new technology industry and emerging industries of strategic importance; to promote functional optimization inside industrial parks, strengthen linkage development with surrounding parks and to achieve integration of city and industry by balancing the living and employment aspects.



4. Improvement of Public Service

To allocate resources of public service on a standard of modern cities; to improve social service mechanism and guide concentration of functional projects such as high-quality facilities of healthcare, education, culture and sport in new cities so as to improve local quality of life.



5. Livable Environment

On a basis of ecological space network of the municipality, to improve ecological and green space inside new cities, greenbelts along streets and waterways and city parks and make landscape of watertowns in the south Yangzte River Delta

千米一湖
百米一林



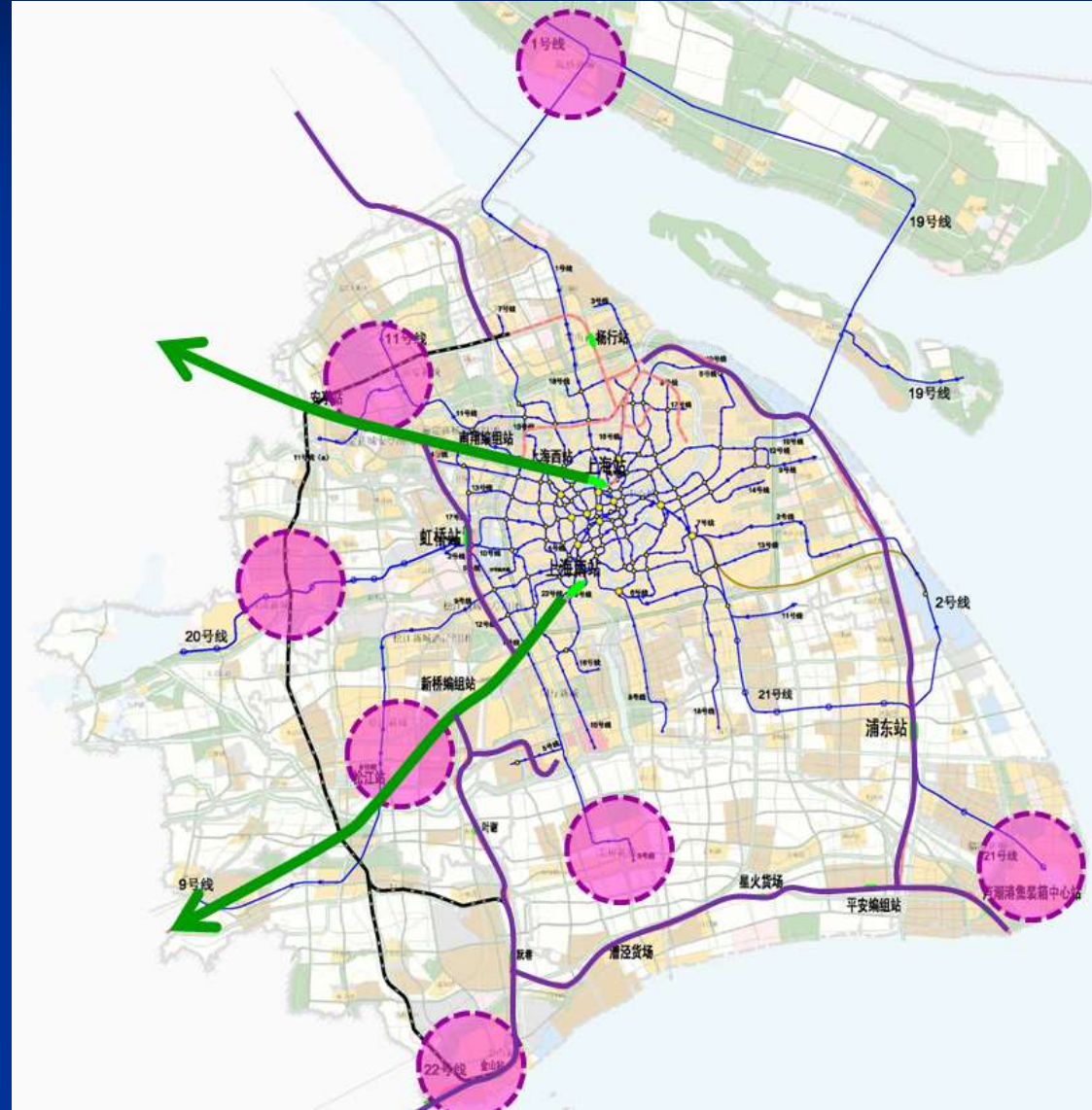
6. Multi-layering Transport System

priority to infrastructure

To improve a comprehensive transport system composed of expressways, rail transit and inter-city railways.

priority to public transport

To construct a public transport system which fits into the needs of a mega-city, and to encourage slow traffic mode of walk and bicycle



7. Development Policy

To strengthen coordination between each government sectors and departments in terms of industrial economy, land planning, infrastructure, social service and Housing;

To draw new-city experience of developed countries in the formulation of relevant laws and regulations, to institutionalize the policy and planning of new cities;

To institutionally ensure urbanization and new city construction by clearly specification of right and obligations of actors, fund raising, development procedures and management as well as policies on finance, household system, talents introduction and social welfare.

IV. NEW TOWNS

- Songjiang New City
- Jiading New City
- Nanqiao New City

1. Songjian New City

1. overview

South to Huangpu River with She Hill to the north, Minhang and Qingpu to the west and east;

An important nodal city in Delta region and gateway of Shanghai in the southwest; a vivid evidence of strength and level of suburban Shanghai, and livable and modern city with both historical, cultural and natural distinct of Shanghai



1. Songjian New City

2. Spatial Distribution——“one belt, four areas, two corridors, three centers”

- south-north belt of residential areas
- three centers for public activities;
- Four areas and nine divisions connected by two ecological corridors;



1. Songjiang New City

3. City Size

With a population of 1.1 million by 2020,

Size of construction land: 120km² ,110m² per capita



2. Jiading New City

1. overview

Jiading new city is located in the northwestern part of Shanghai, along Shanghai-Hanzhou Highway, south to Jiangsu Province and south to Qingpu;

As an important nodal point in Delta region, Jiading is characterized by the automobile industry, and modern manufacturing and service industries. It is a livable modern new city.



2. Jiading New City

2. Spatial Distribution — “one core area, one park, multiple axes, six areas”

One core area of city;

One forest ring around city;

Wetland in the north, important base of ecological development and new recreational area of Shanghai—

Several axes for public space and ecological space linking all the six functional divisions



图例

- 城市中心
- 历史文化风貌区
- 区域功能主轴
- 居住组团
- 公共活动轴
- 绿楔森林
- 城市主要绿化道路



2. Jiading New City

3. City Size

With a maximum population of 790,000 by 2020, area of construction land: 76.7 km², 97.1 m² per capita



图例

- | | | | | | |
|----|----------|-----|--------|-----|------------|
| 黄色 | 居住用地 | 绿色 | 公共绿地 | 浅绿色 | 生态结构用地及农用地 |
| 红色 | 公共设施用地 | 深绿色 | 防护绿地 | 浅蓝色 | 水域 |
| 橙色 | 商住综合用地 | 蓝色 | 市政设施用地 | 白色 | 规划道路 |
| 紫色 | 研发产业综合用地 | 深蓝色 | 对外交通用地 | 灰色 | 道路广场用地 |
| 棕色 | 工业仓储用地 | | | | |



3. Nanqiao New City

1. overview

Located in west part of Fengxian District, north to Hangzhou Bay, south to Huangpu River and with deep-sea port and chemical park in east and west;

- Important gateway of Pudong area and service platform to north area of Hangzhou Bay



南桥新城区位图

3. Nanqiao New City

2 Spatial Distribution—— “four sections with one center, two areas in one belt”

On center: green and public space around central eco-forest;

Four sections: three areas of old city, north city and south city and one industrial area;

One ring: ring of forest belts along waterways to connect the four sections;

Two belts: Public belts along Jiefang Road and ecological belts in Jinhui port

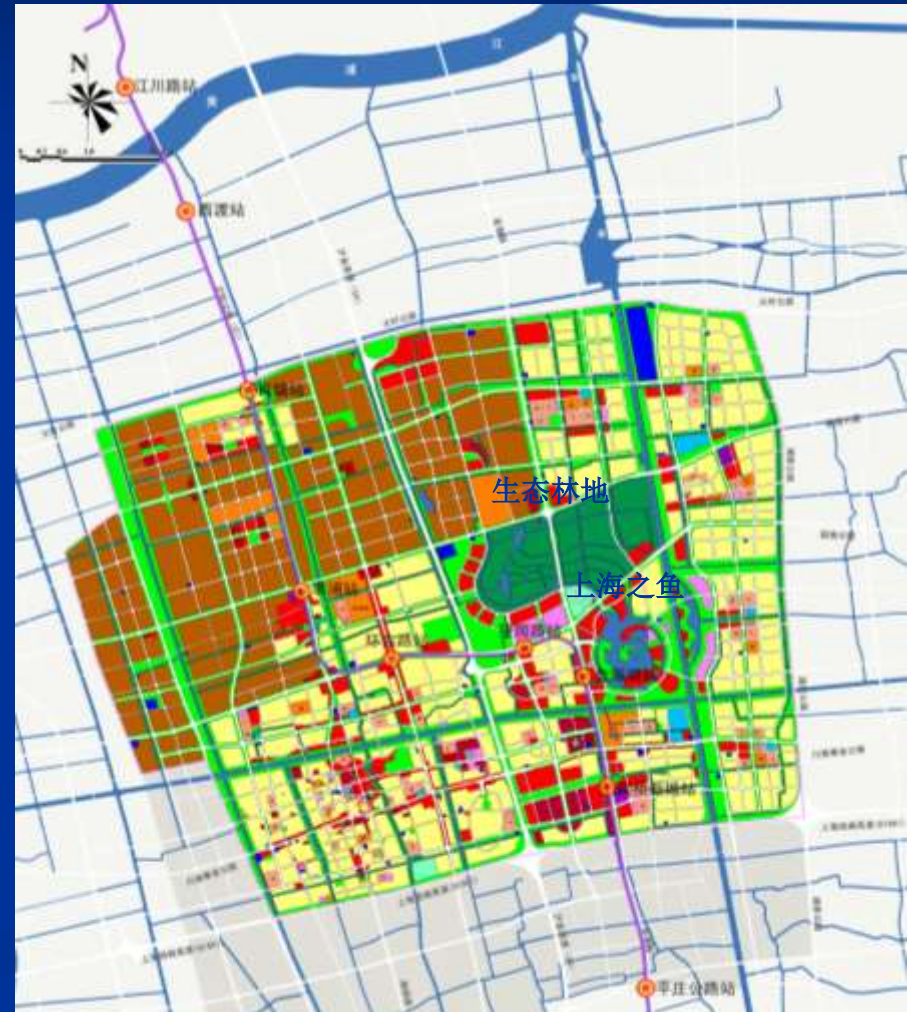


3. Nanqiao New City

3. City Size

With a population 750,000 by
2020

Area of construction land: 62.40
km² , 83.21m² per capita



生态绿地用地	行政办公用地	商业用地	住宅用地	工业用地	道路
社会服务设施用地	居住用地	其他公共用地	其他公共用地	其他公共用地	其他公共用地
其他公共用地	其他公共用地	其他公共用地	其他公共用地	其他公共用地	其他公共用地

V. CONCLUSION

Experience:

1. regional integration

To integrate new cities into Delta city groups, and build them into regional nodal points which complement and connect with the development of central city areas



2. ecological and livable standard

To optimize living environment of new cities, give priorities to development of public transport, to strengthen operational capacity and major public facilities and increase their attractions to migrants



Chengqiao



nanhu



nanqiao

3. rational and efficient growth

To control the size of construction land, avoid unplanned extension, to improve utilization of land and integration of city and industry



Shanghai`s experience in planning, pattern, standard and development path of new cities may provide guidance to other cities in China. However, with their own characteristics and unique conditions, each city should still explore its own way to development which fit into its own location and reality.

Thank you !