

Kunming Forum on United Nations
Global Geospatial Information Management



Exploring Smart City Innovation: The Rise of Geospatial Information Platform

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Topics

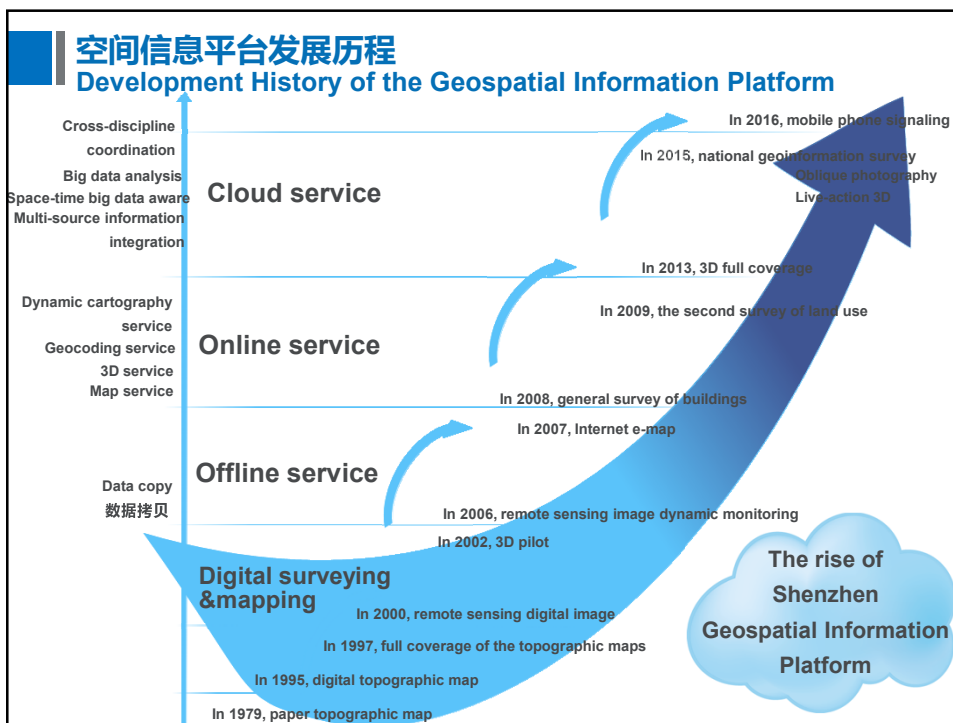
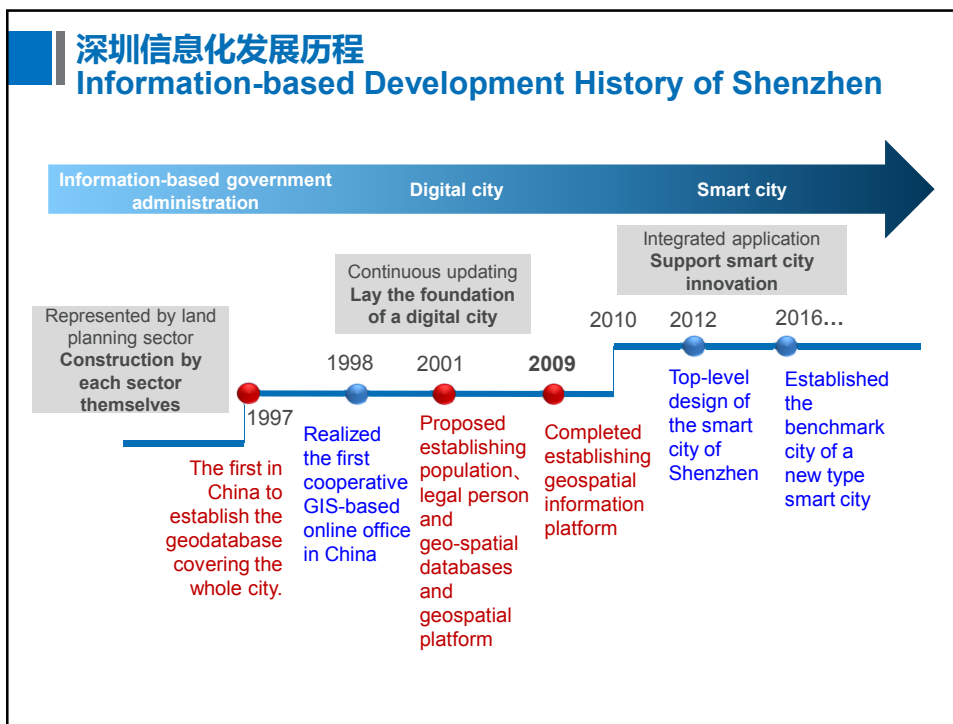
- 1 历程
Stage of Shenzhen
- 2 应用
Applications
- 3 展望
Future Prospect

1. Stage of Shenzhen

深圳 The City of Shenzhen







空间信息平台发展历程

Development History of the Geospatial Information Platform

the platform has successfully served nearly 90 departments



2. Applications

Application of Geospatial Information Platform



Exploit



Pioneer



Livable

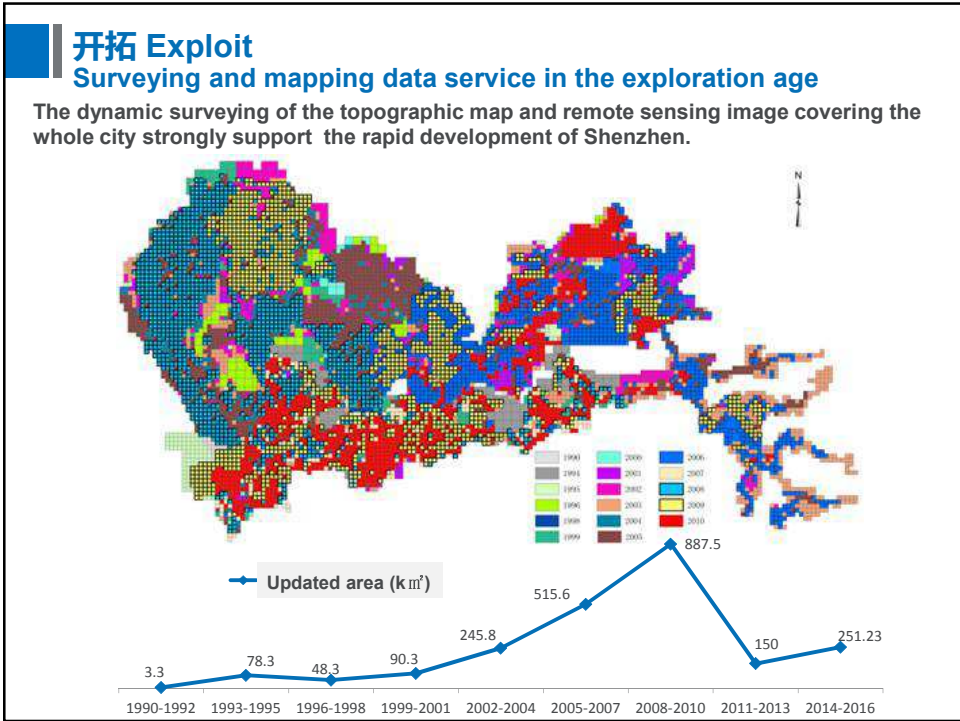


Innovation

开拓 Exploit

'Exploit' is a key word in 'Shenzhen spirit' in 1990.





先锋城市理念下的城市设计

Urban design in the pioneer city idea

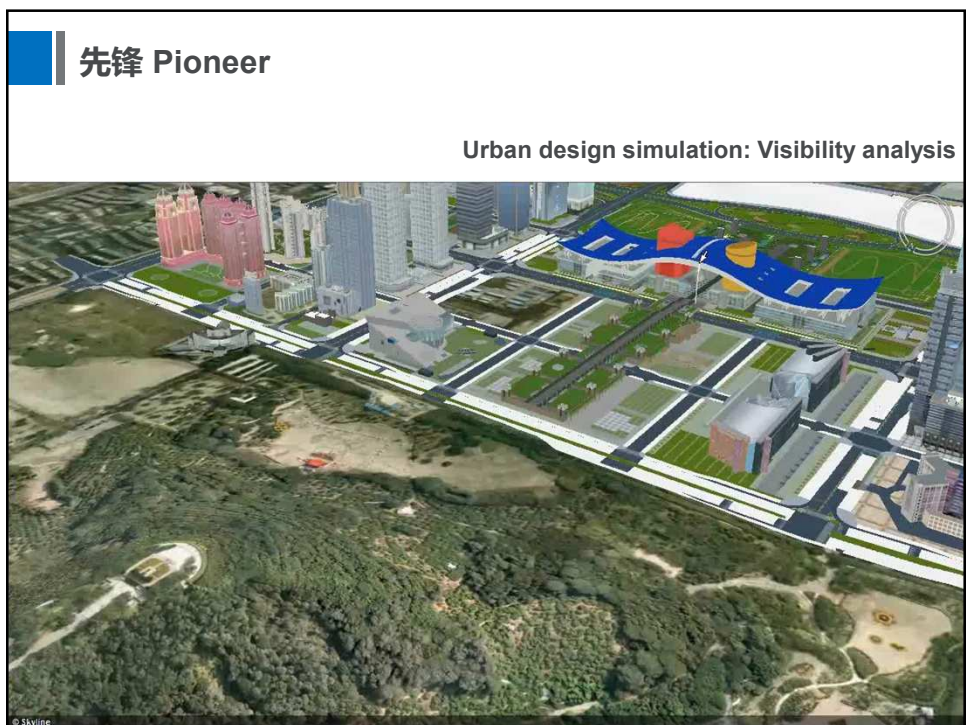
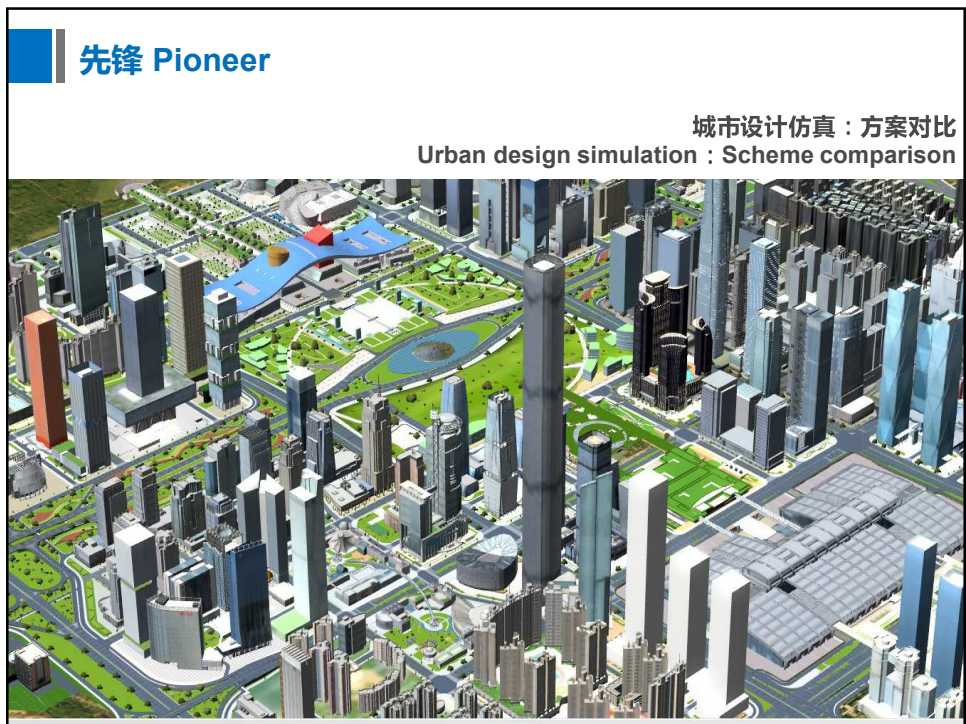
Master planning + Urban design ——urban morphology strengthened urban design, and improved urban quality.



Figure: Shenzhen Bay Coastal Leisure Strip Landscape Design International Consultation

先锋 Pioneer





Application of Geospatial Information Platform



Exploit



Pioneer



Livable



Innovation

城市问题 Urban Problems

Environmental pollution



Traffic jam

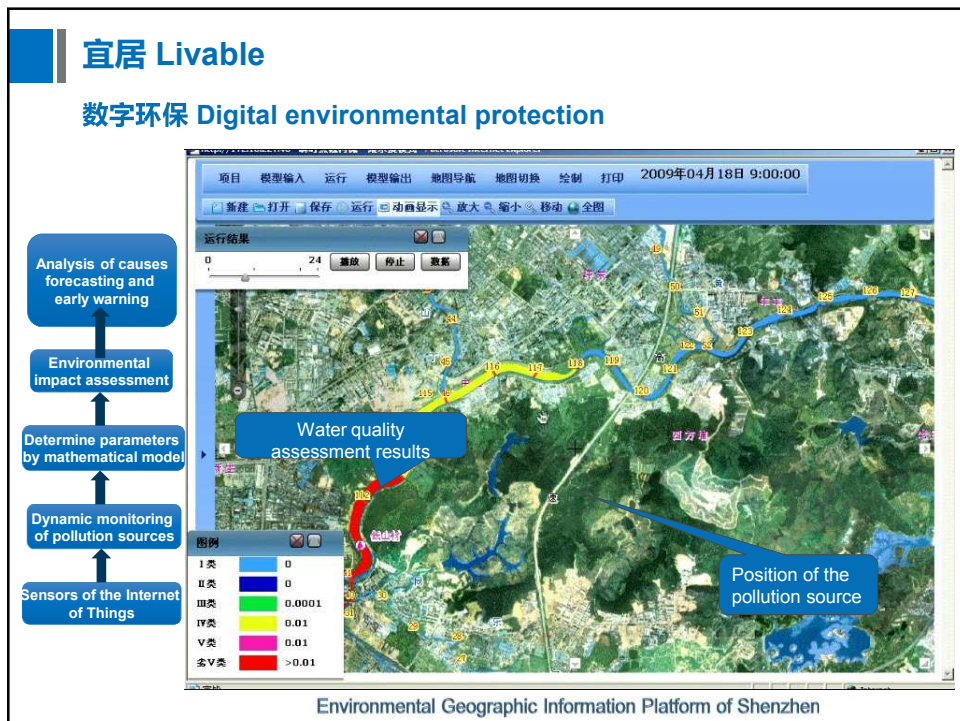


Illegal construction



Population expansion





宜居 Livable

数字环保 Digital environmental protection

By monitoring and control of environmental protection, from 2007 to 2012, Shenzhen reduced 250,000 tons of PM2.5 per year, and in 2014 only, reduced PM2.5 by 77%.

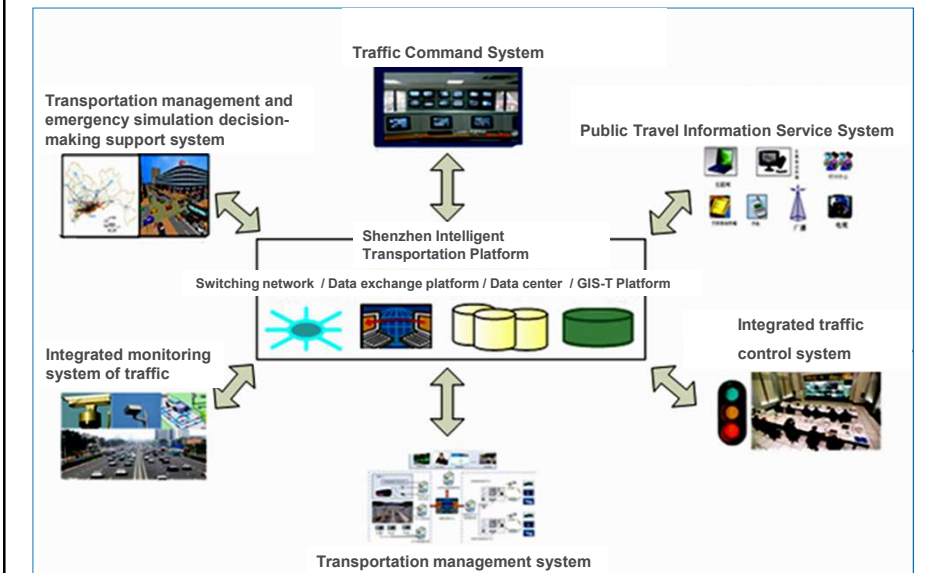
Pollution dispersion model parameters

- Meteorological parameters
- Altitude
- Height of emission
- Temperature of emission
- Emission flow velocity
- Smoke volume
- Amount of pollutants
- ...

Environmental Geographic Information Platform of Shenzhen

宜居 Livable

智能交通 Intelligent Transportation



宜居 Livable

The smoothest city with a population of tens of millions people among the 98 cities in China- "Xinhua News Agency& Didi Chuxing Report of 2015".

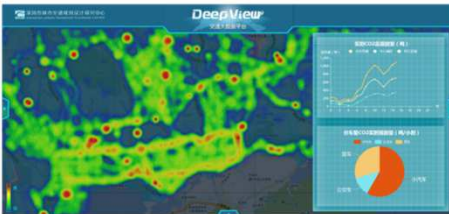
Traffic Application System



Road traffic operating index system



Signal intersection dynamic assessment system



Road traffic emission monitoring system

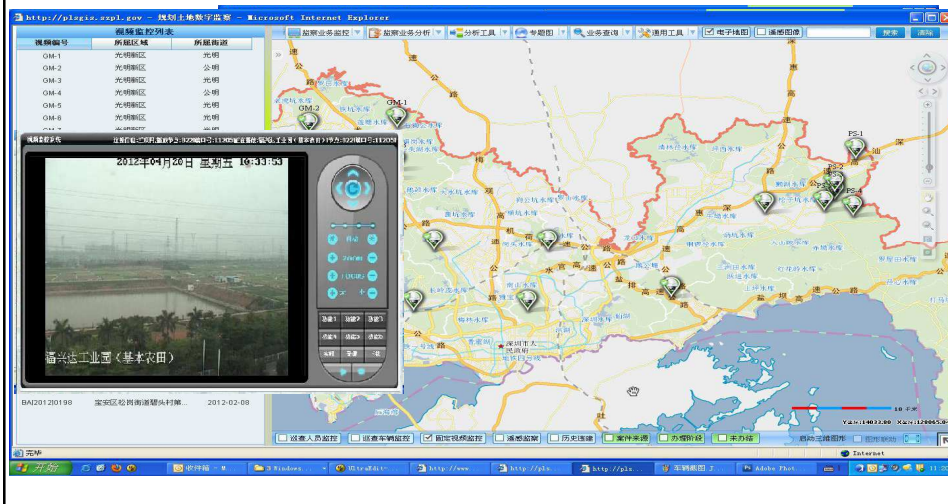


Smart parking management and guidance system

宜居 Livable

土地监察 Land Supervision

Viewing from the sky, Probing by videos, Reporting by people, Managing on line



摄像机号	所属区域	所属街道
GM-1	光明新区	光明
GM-2	光明新区	公明
GM-3	光明新区	光明
GM-4	光明新区	公明
GM-5	光明新区	光明
GM-6	光明新区	公明
GM-7	光明新区	光明

2017年04月20日 星期四 14:03:03

潘兴达工业园(基本农田)

2017-02-09

宜居 Livable

社会治理 Social Governance
Proactive service for specific group



Resident group

Analysis of big data of residents








According to personal feature labels, analyze specific groups by using big data technology, such as the disabled, the elderly, the veterans.

Accurate positioning
Accurate service
Meticulous help

Medical treatment for the disabled, education aid,
Placement of the veterans
Allowance for the elderly
.....
... ..

Application of Geospatial Information Platform



Exploit



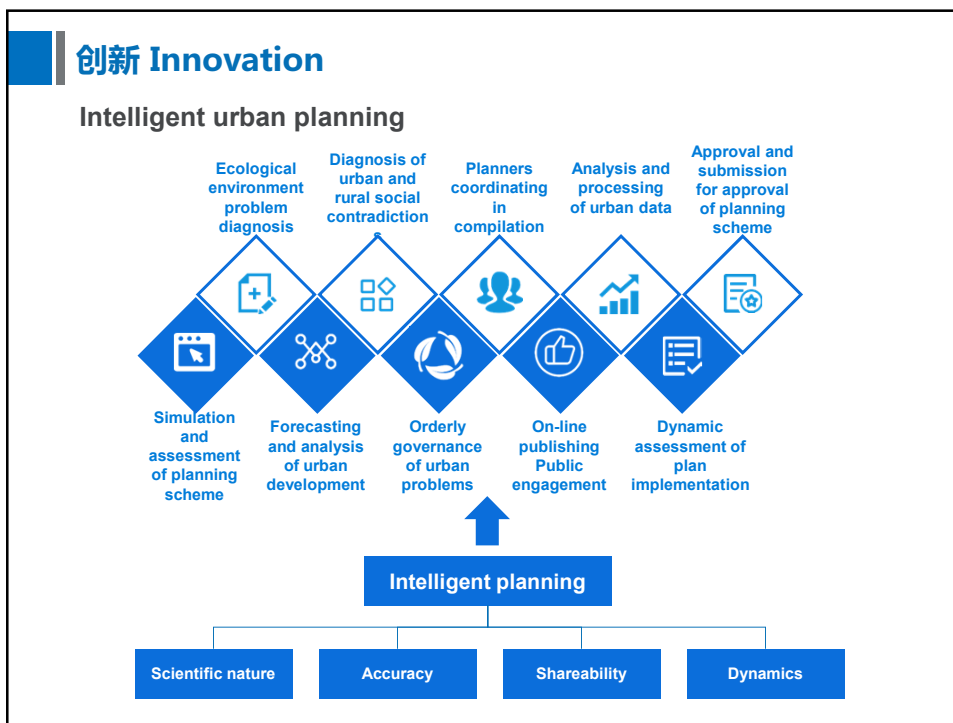
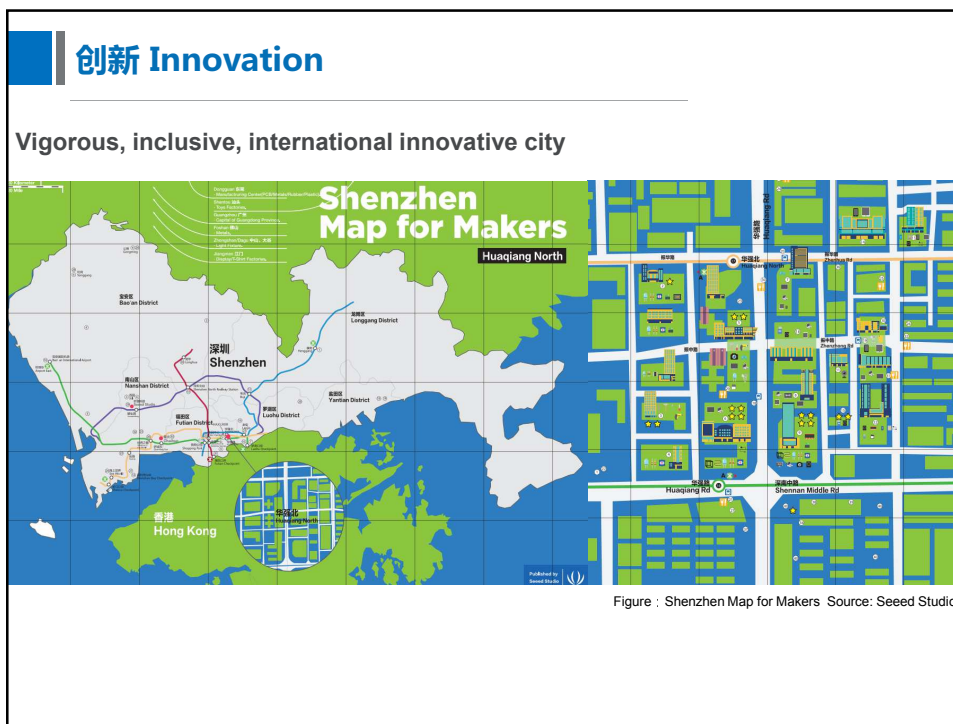
Pioneer

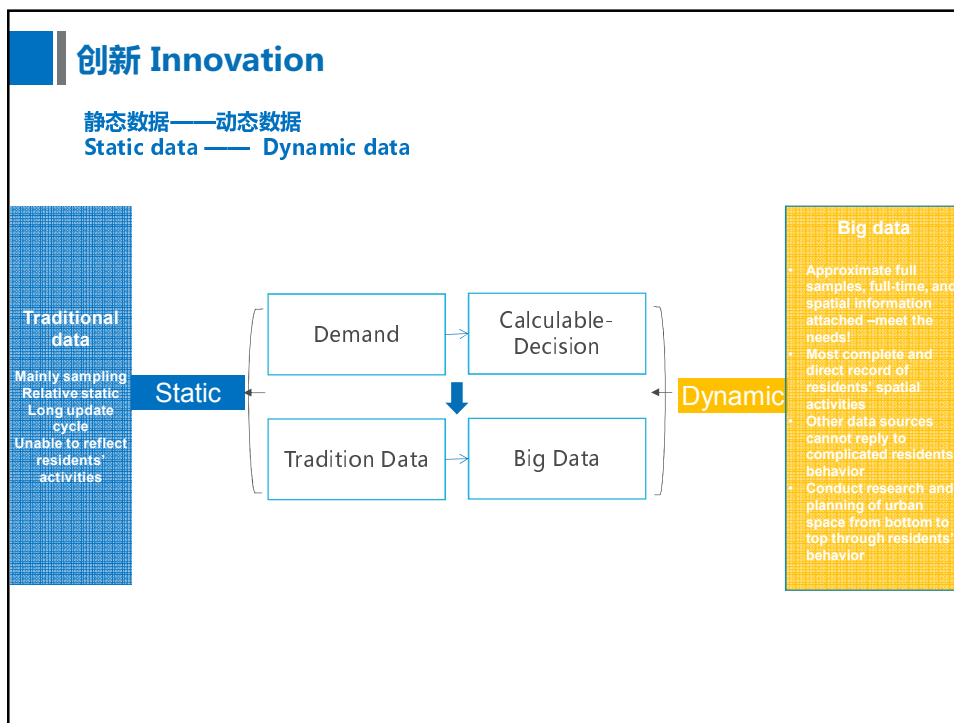
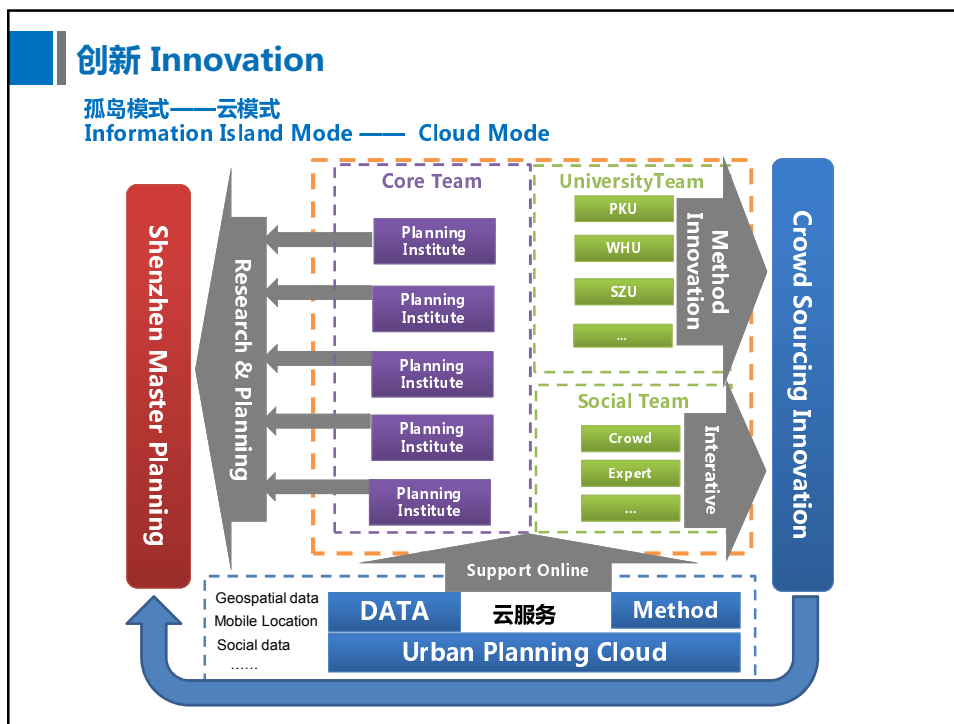


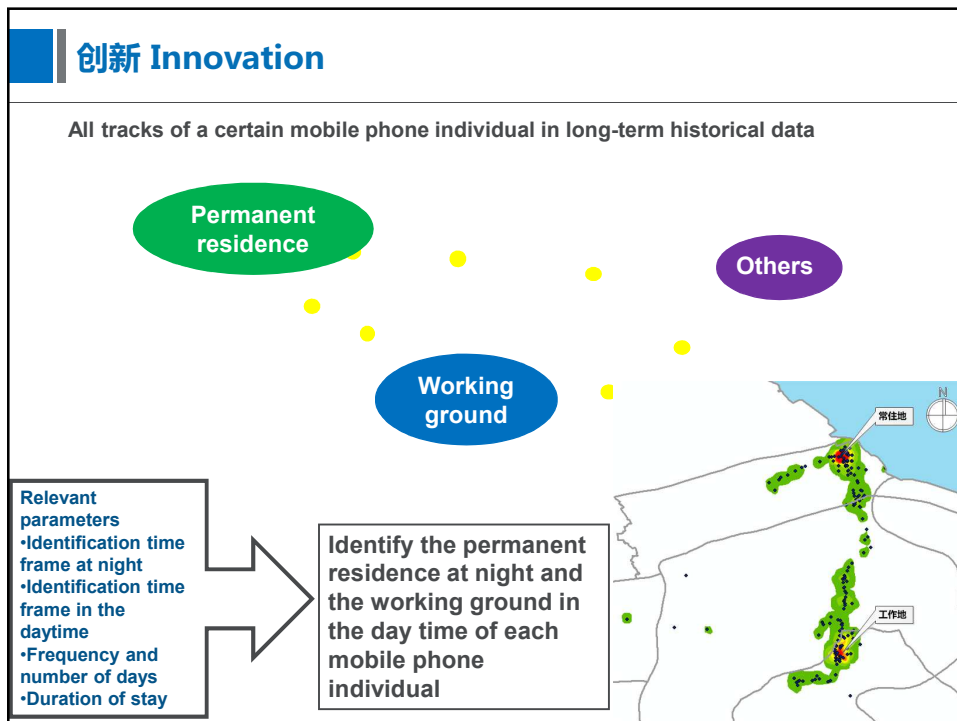
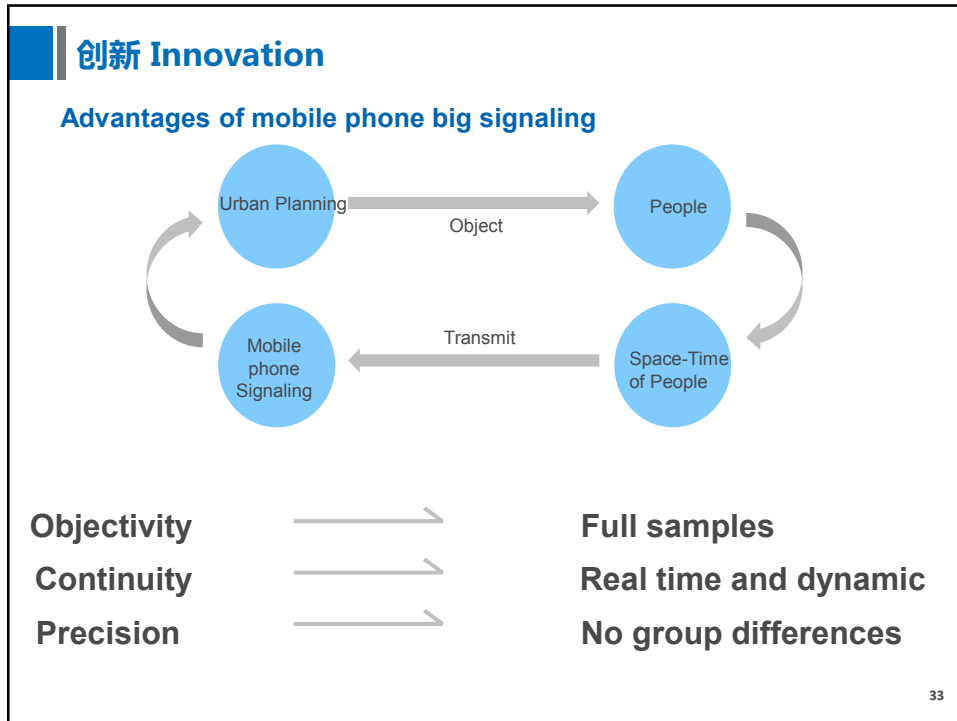
Livable

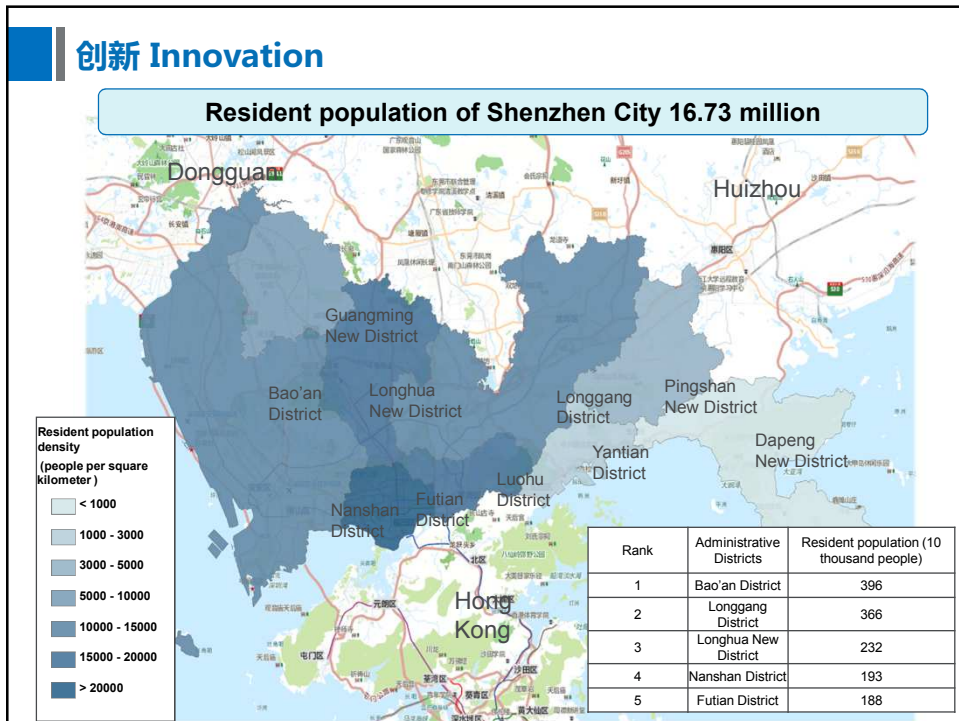
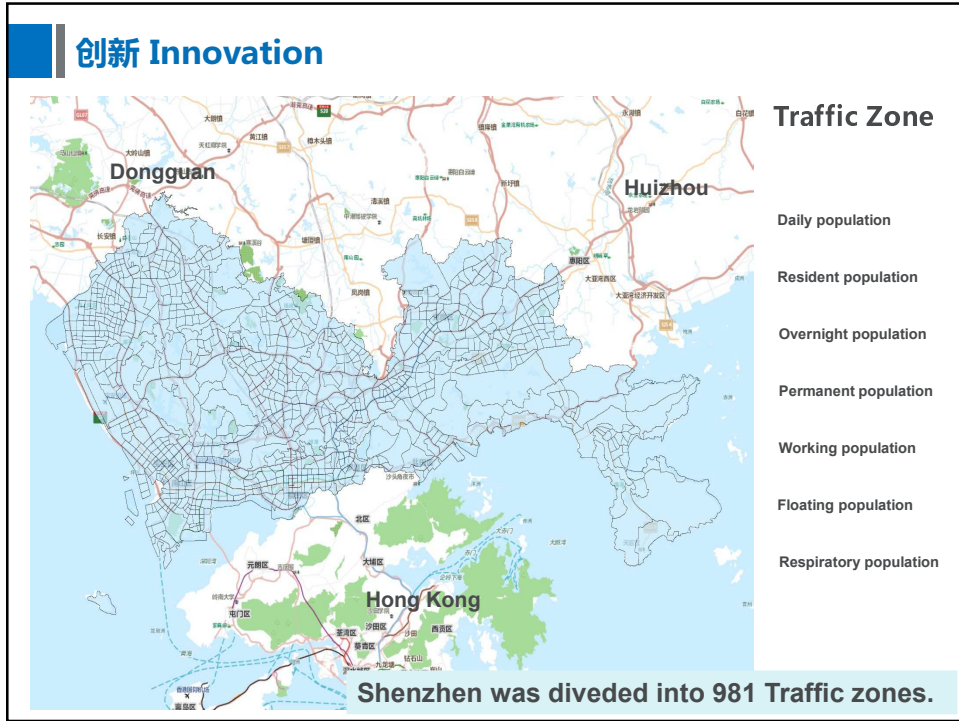


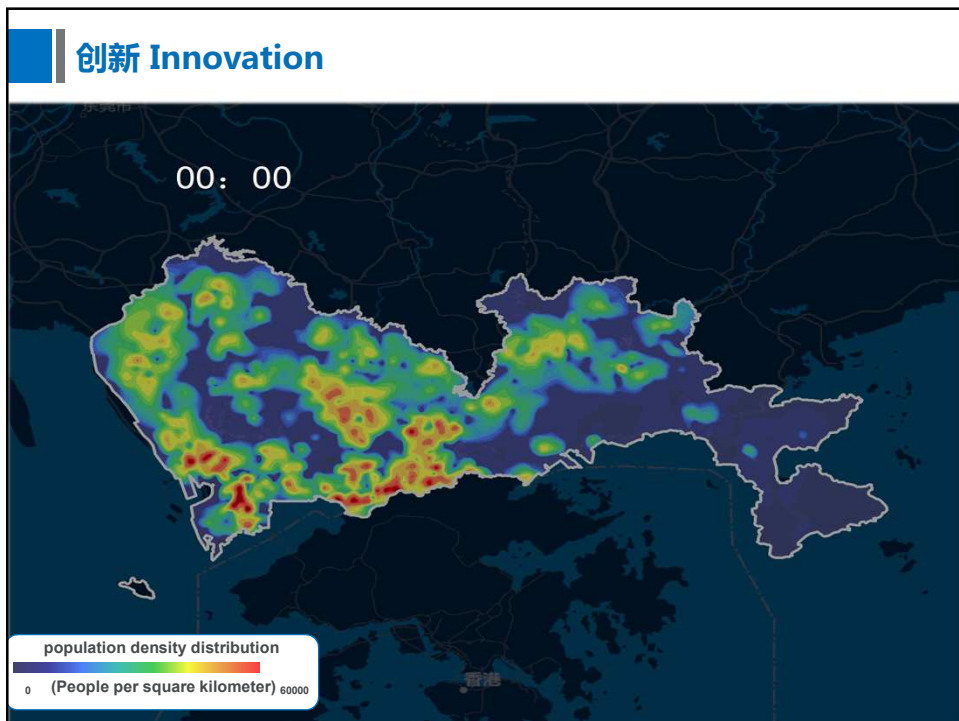
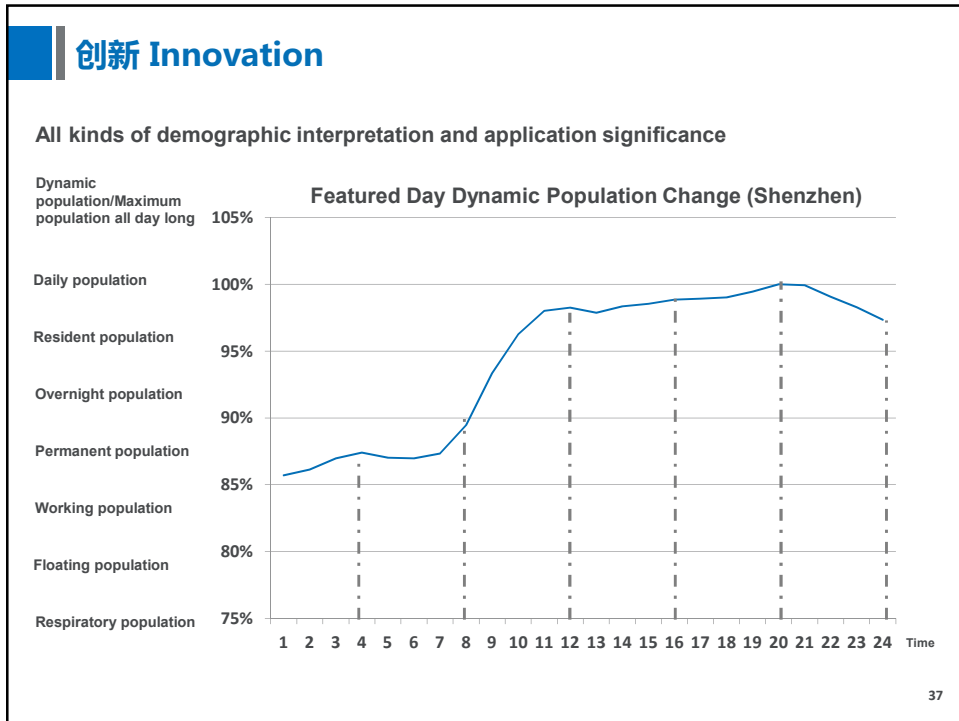
Innovation

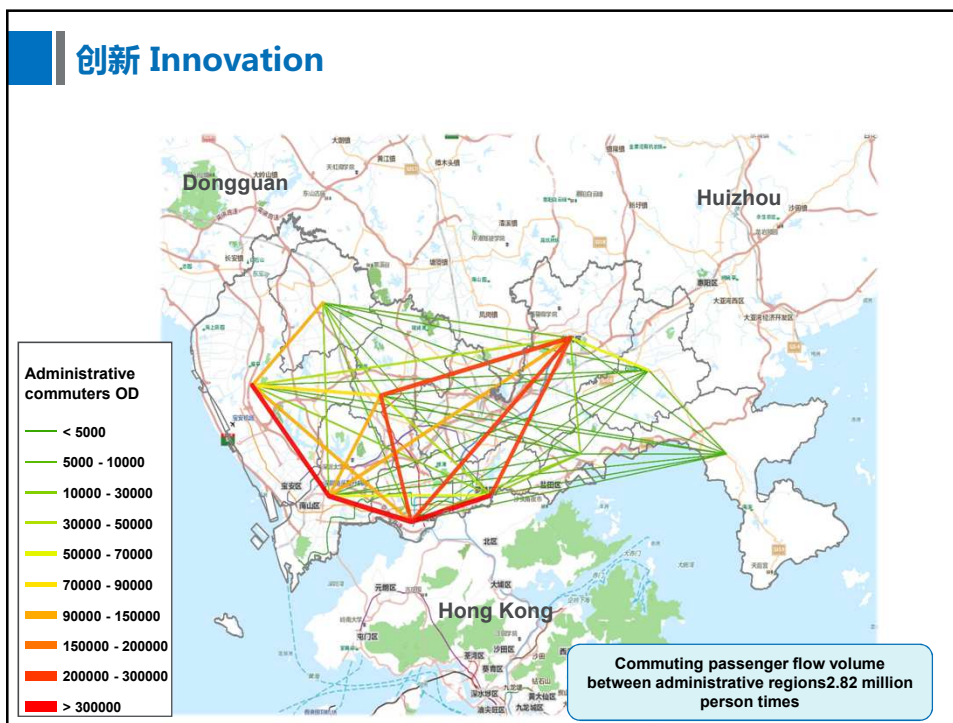
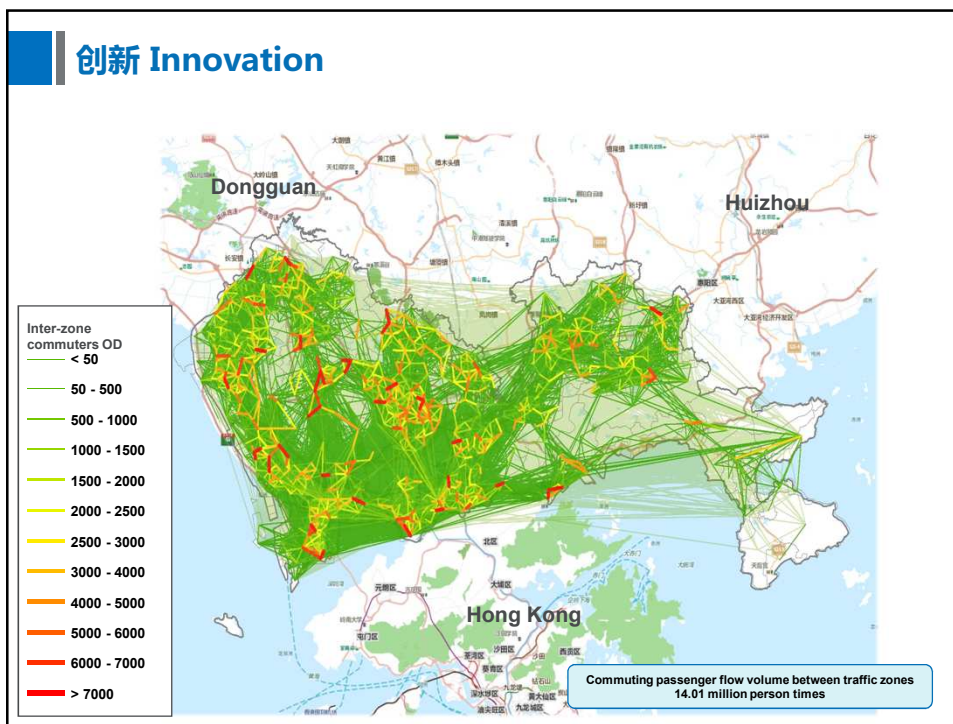


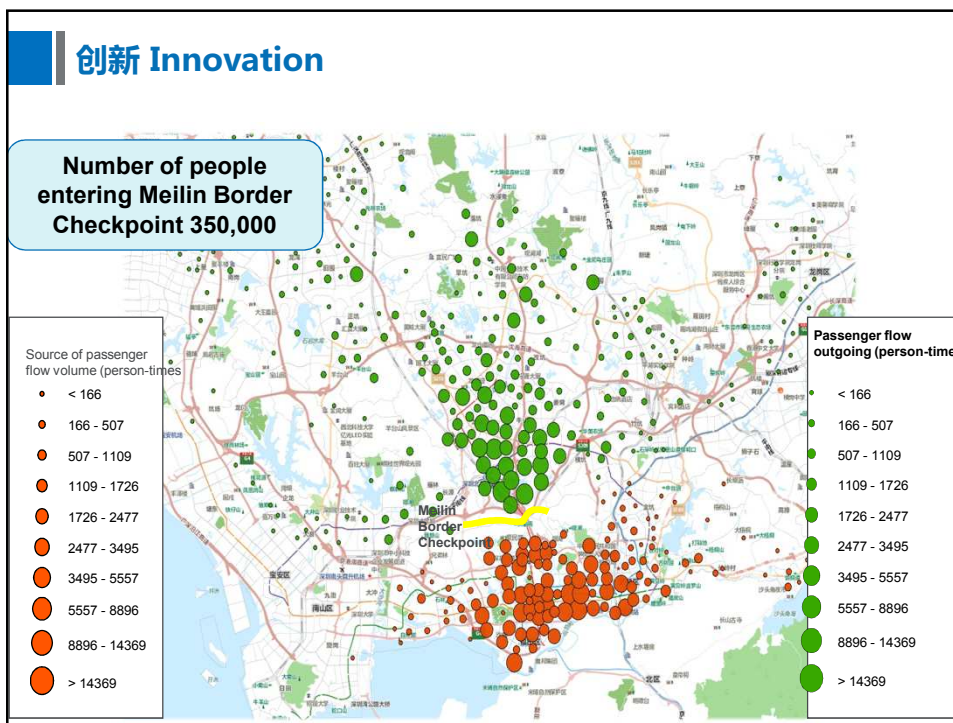
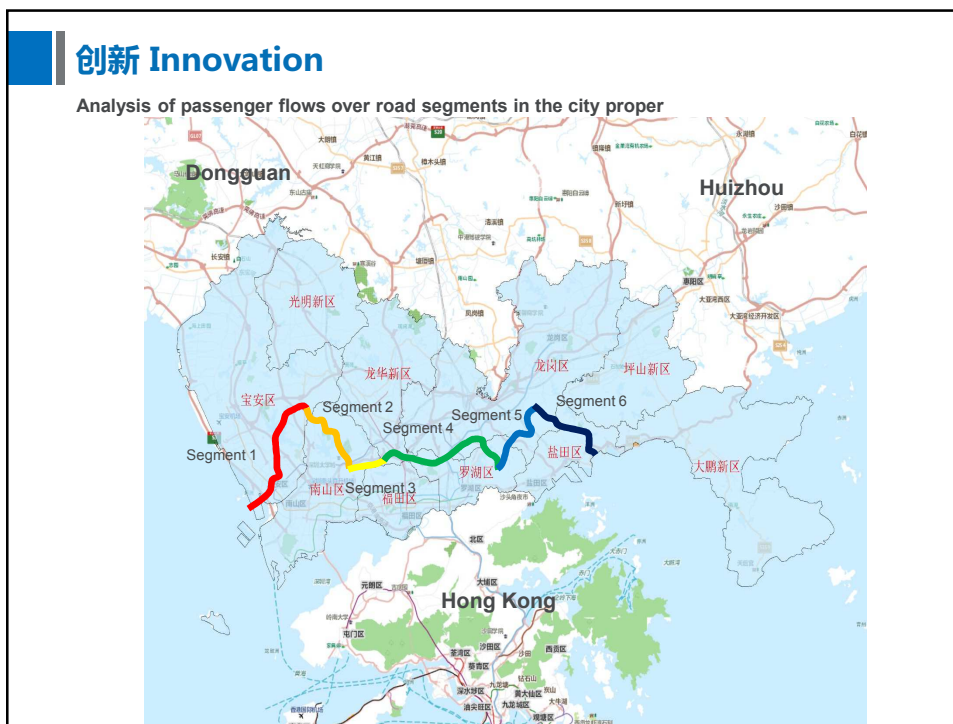


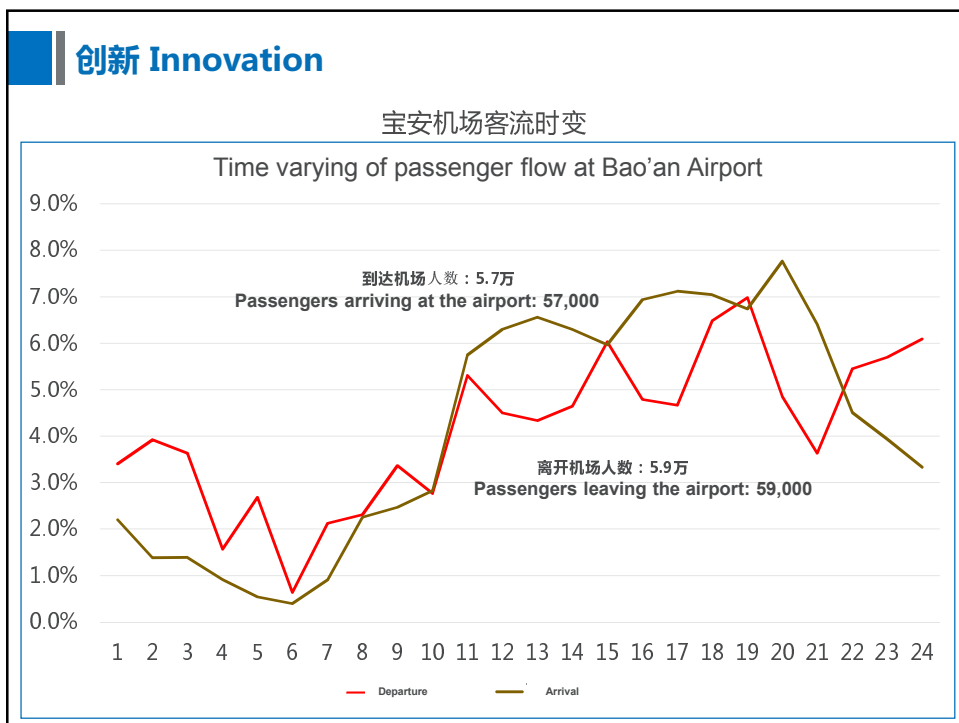
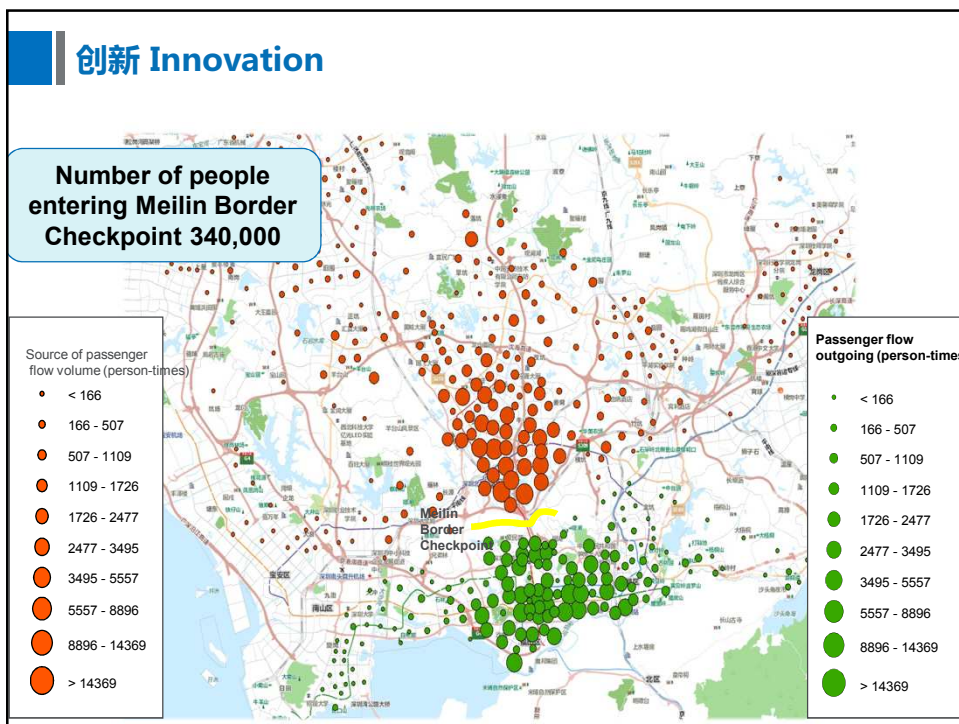


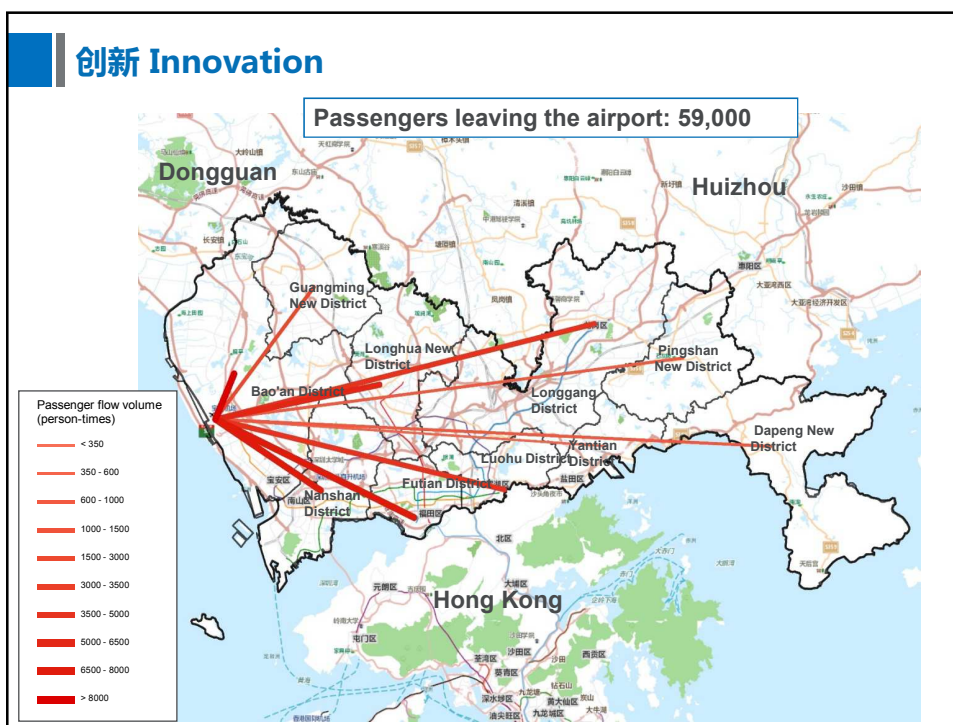
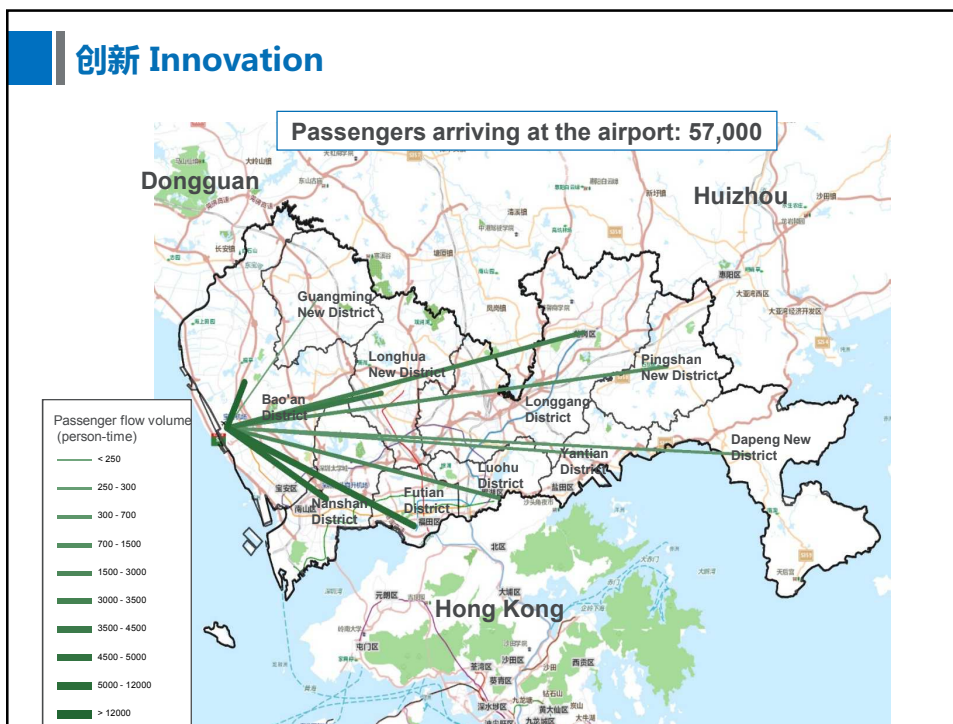




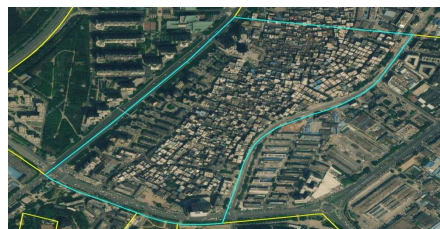
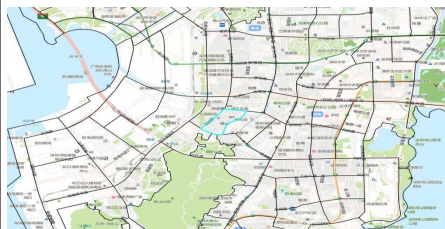




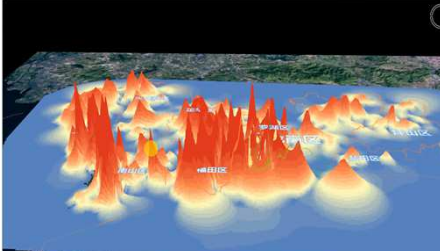
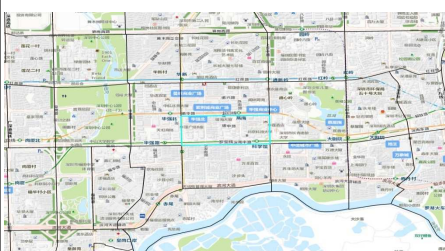




创新 Innovation



Nanyuan (traffic zone) Resident population 52,600 , population density 131,200 people per square kilometer



Huaqiang North (traffic zone) Working population 56,300 , population density 135,6 131,200 people per square kilometer

创新 Innovation

The above-listed data types are far from all of the big data. They are only our preliminary research and attempt in the master planning. With the further research of planners, big data will be applied more widely to explore more application mode.



3. Future Prospect



