

面向2040的上海交通

Shanghai Transport: Towards 2040

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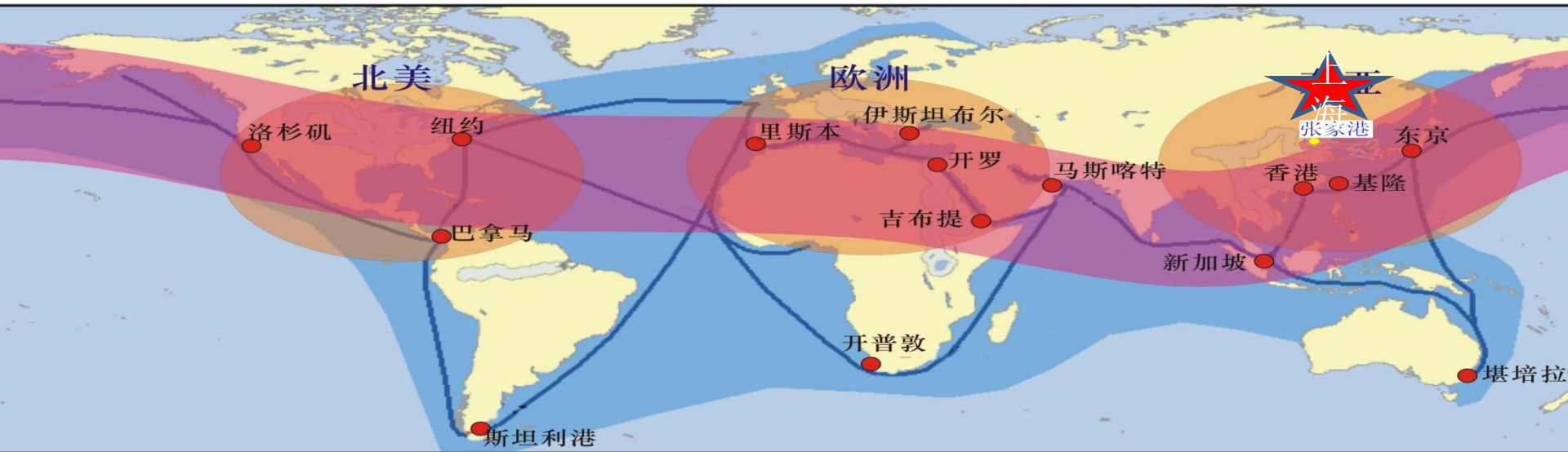
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提纲 Outline

- 上海区位
Where is Shanghai positioned, geography-wise, economy-wise, and traffic-wise?
- 交通与上海城市的发展
Transport and Urban Development of Shanghai
- 面向2040的上海交通
Shanghai Transport Development Towards 2040

上海区位：地理区位 Geographical Location of Shanghai



- 全球黄金钟摆航运带
Global golden pendulum shipping belt
- 沿海经济带和沿长江经济发展带
“T”字型结构的结合部
Geographically situated at the juncture
of the coastal economic zone and
Yangtze River economic belt taking a
form of T-shape.

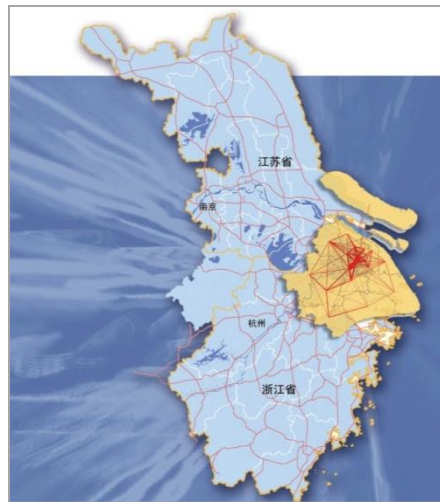
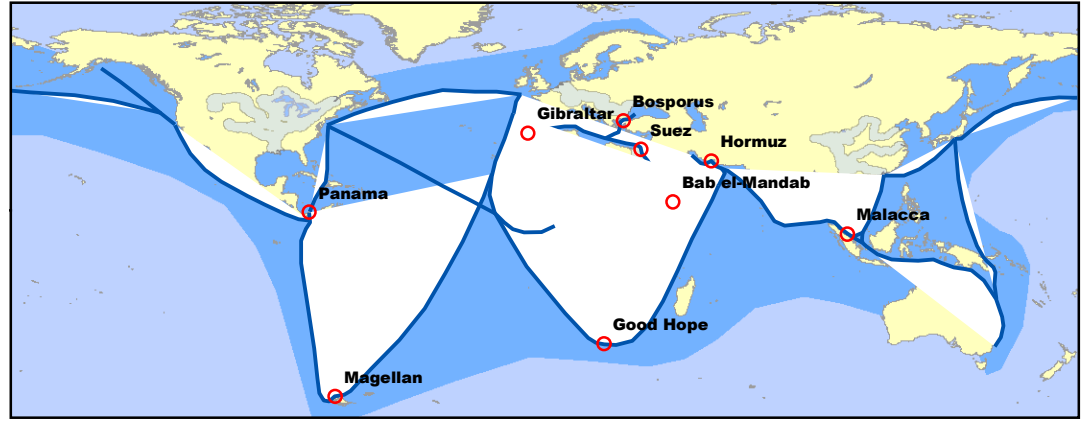


上海区位：经济区位 Economic Position

- 正在建设中：经济、金融、贸易与航运中心
Under development: economic, financial, trade and shipping center
- 未来目标：国际经济、金融、贸易、航运的资源配置中心
Future targets: international center for economic, financial, trade, shipping resources allocation and distribution

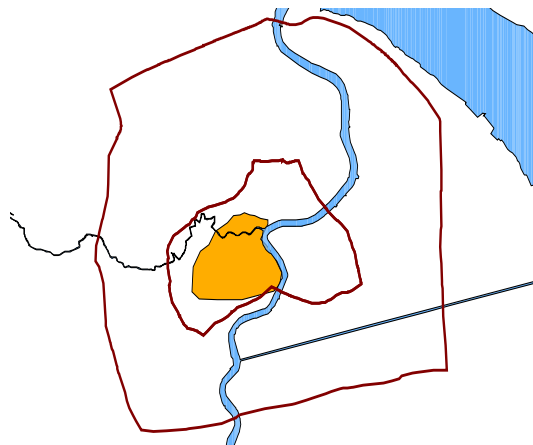
上海区位：交通区位 Traffic Location

- 国际航运与航空枢纽
International shipping and aviation hub
- 国家综合交通枢纽
National integrated traffic hub
- 世界六大都市连绵区核心城市枢纽
Core city in Yangtze River Delta Region as one of the six metropolis clusters in the world
- 巨型城市综合交通
Mega-scale urban integrated transport

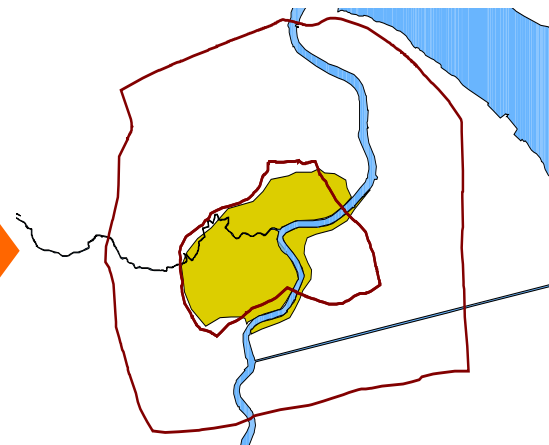


上海城区的空间拓展 Urban Spatial Expansion of Shanghai

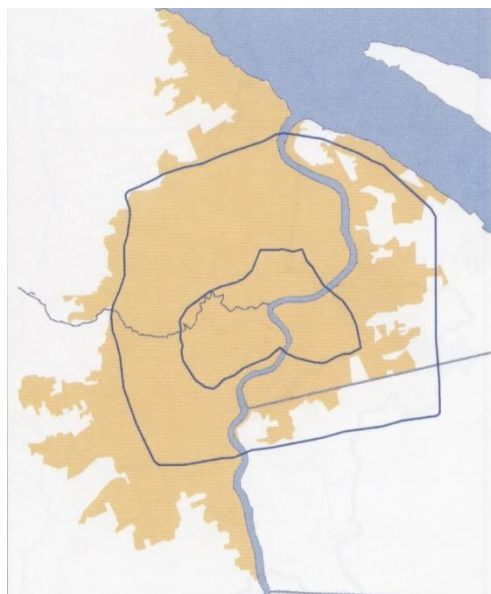
1950s



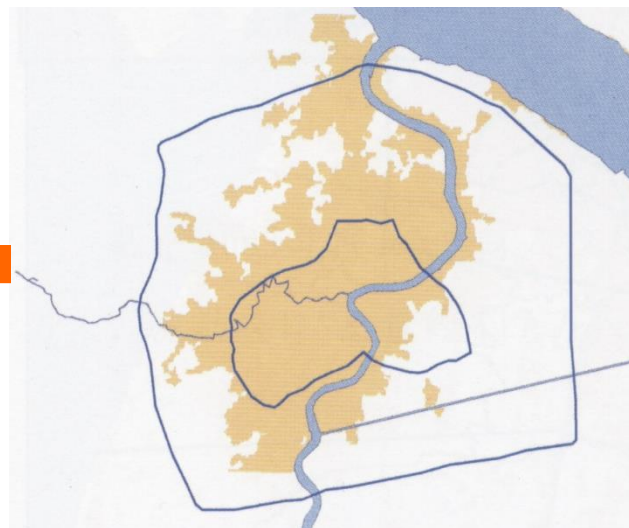
1980s



2003年



1990s

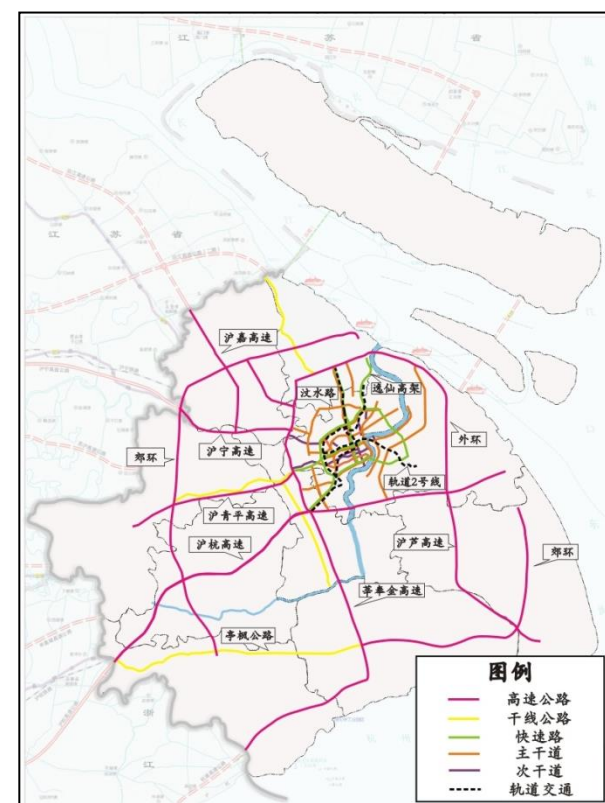
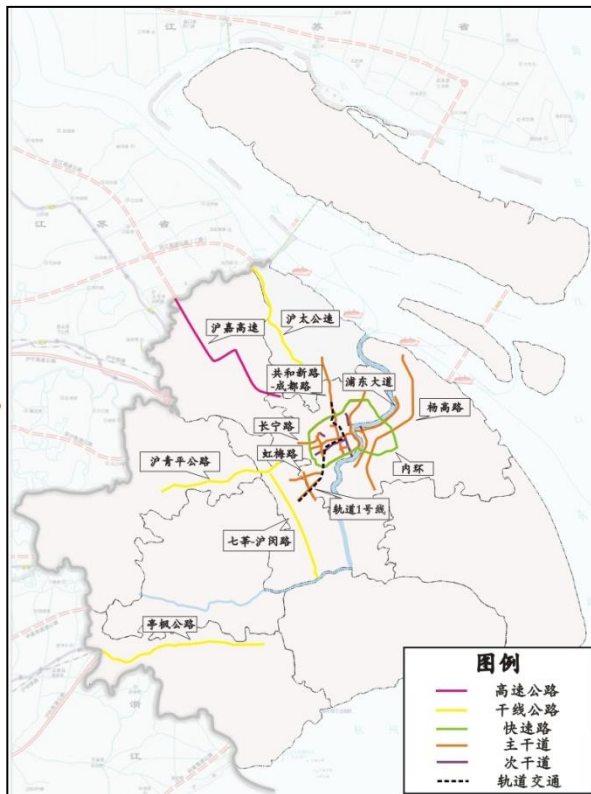
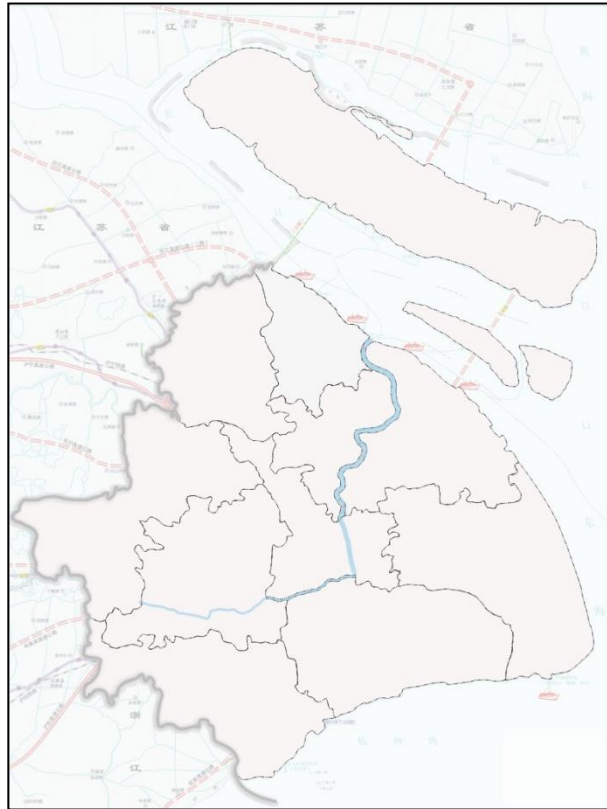


上海骨干交通基础设施的完善 Improvement of Backbone Traffic Infrastructure in Shanghai

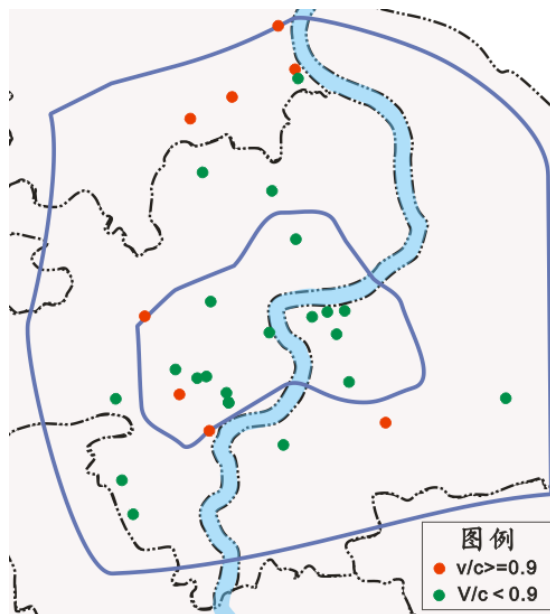
1986年

1995年

2004年



上海交通拥堵的蔓延 Proliferation of Traffic Congestion across Shanghai



1995年



2004年

上海现状：对外交通 Current Situation: International/Regional Traffic

- 国际港航 International aviation and maritime transportation
 - 上海国际航运枢纽港地位日益凸显：2012年上海港集装箱吞吐量(throughput)达到3253万TEU¹，较2002年增长278%，浦东机场货邮吞吐量达到293.8万吨，增长363%。
Escalated position as international hub, with total throughput in 2012 amounting to 32.53 million TEU (an increase of 278% as compared to 2002) and total cargo and mail throughput amounting in 2012 amounting to 2.938 million tons (an increase of 363% as compared to 2002).
- 区域交通 Regional traffic
 - 高速铁路快速发展，城际出行效率显著提高。沪宁城际铁路、沪杭客运专线相继建成投入使用，沪宁、沪杭城际出行时间大幅减少，出行效率显著提高，为促进长三角一体化发展奠定了基础。
Rapid development of high-speed railway and significant efficiency improvement of inter-city travels. The operation of Shanghai-Nanjing inter-city railway and Shanghai-Hangzhou inter-city railway contributes significantly to the reduction of time consumption reduction and the increase of travel efficiency, playing a fundamental role in facilitating the integrated development of Yangtze River Delta Region.

上海交通现状：市域 Current Situation: City-wide Traffic

- 市域：公路网总长度近1.2万公里，其中高速公路通车里程达778公里；
City-wide: roads network with total length of approximately 12,000 km, of which 778km belongs to expressways.



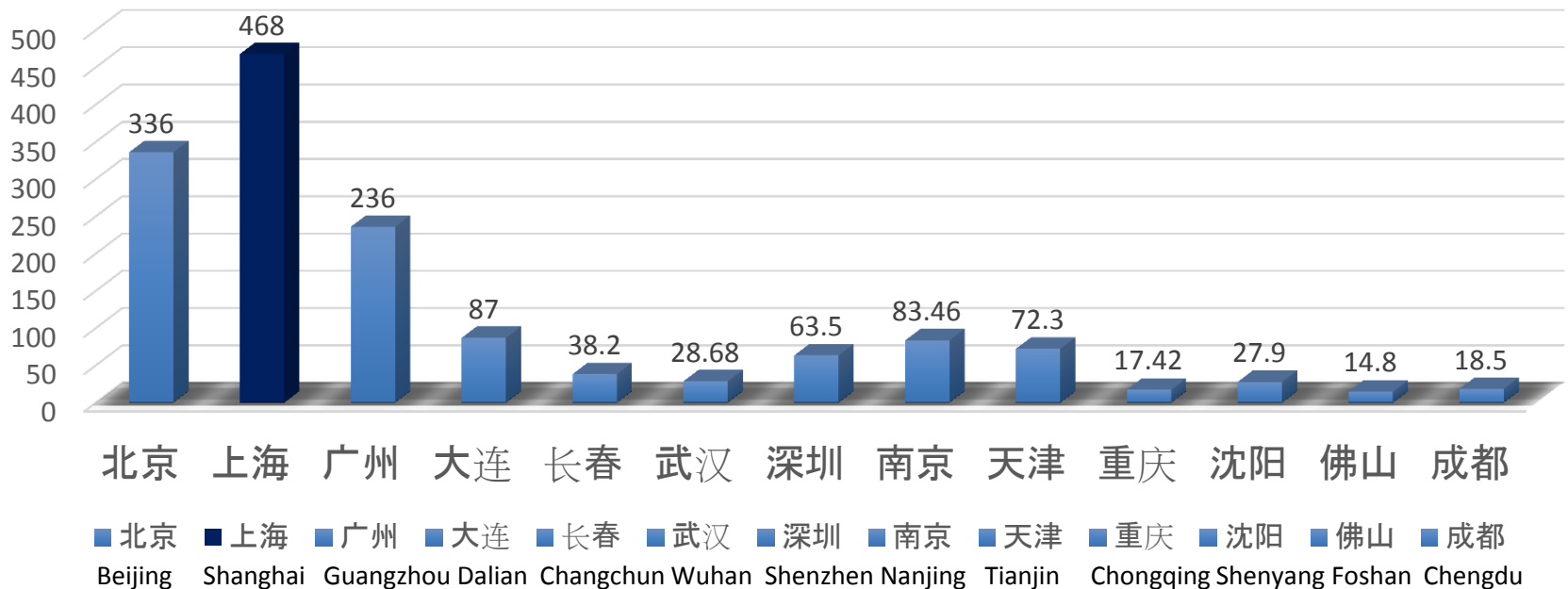
上海现状： 中心城 Current Situation: City Center

- 城市道路总长约3224公里（不含外环），快速路约200公里。
Total length of urban roads reaching approximately 3,224 km (excluding outer ring road), in which intra-city expressways account for 200km.
- 轨道交通基本成网：运营线路长度达468公里，运营车站275座
Rail-based public transport system network has taken shape, with the total length of all operating lines reaching 468km and a total of 275 stations.
- 公共汽电车规模进一步扩大：截止2011年底，上海市公共汽电车运营数量达17455辆，万人拥有率约13辆/万人；公共汽电车线路里程23131公里。公共汽电车站面积为177.7万平方米，车均场站面积为82.3平方米/标台（全国平均水平为95.5平方米/标台）。
Further expansion of fleets of fossil-fuel buses and electric buses: as of the end of 2011, there were a total of 17,455 buses in operation, equivalent to approximately 13 buses per 10,000 persons. Total length of operating bus lines reached 23,131 km. Total areas of buses depots and stations were 1.777 million m², equivalent to an average area of 82.3 m² per standard unit, a level slightly lower than the national average of 95.5 m² per standard unit.

上海现状：中心城 Current Situation: City Center

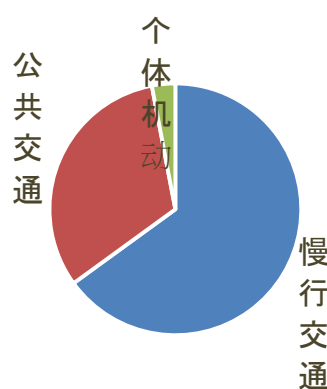
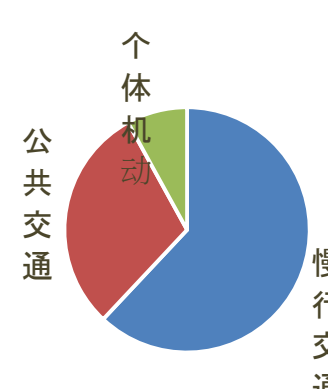
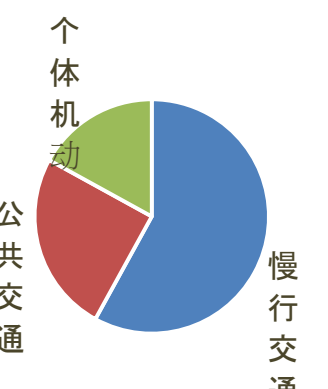
- Comparison of operating kilometer of urban rail-based public transport systems in China

中国城市轨道交通运营里程（公里）



发展总体态势

Overall Development Status and Trend

	20世纪80年代 1980s	20世纪90年代 1990s	21世纪初 2000s
城市面积/平方千米 Urban area (km ²)	260	400	800
城区人口/万人 Urban population (10,000)	600	700	970
郊区人口/万人 Suburban population (10,000)	600	700	700
出行量/ (万人次/天) Trips (10,000 passenger/day)	2000	2800	4100
交通设施/千米 Traffic infrastructure (km)	道路 Road: 4400	道路 Road: 5400	道路 Road: 1200 轨道 Rail: 120
主要出行方式结构 Structure of main transport modes (Red: public transport Green: private cars Blue: low-speed transport)			
交通模式特点 Characteristics of transport modes	公共汽车+自行车 Bus + bicycle	公共汽车+机动两轮车 (如 摩托车、轻便摩托车等) Bus + motorcycle	公共汽车+轨道交通 +私人小汽车 Bus + MRT/LRT + private car

远景1：构筑航空、海运国际枢纽中心，支持城市进入世界经济空间

Vision 1: Development of international hub for aviation and maritime transportation

- **双向辐射：**以深水港和航空港为核心，构筑国际集装箱枢纽港、亚太地区航空枢纽港。兼顾规模扩张和功能开发，强化国际和国内的双向辐射，由“喂给港”向“枢纽港”转变。
Bidirectional radiation: Placing deep-water port and airport at the core of developing Shanghai into international container hub port and aviation hub in Asia and the Pacific region. Giving equal priority to capacity expansion and function development, strengthening international/domestic bidirectional radiation, upgrading Shanghai from “feed port” to “hub port”.
- **联运与衔接：**通过政策扶持、经济补贴手段，提高海、铁联运的竞争力。加强机场与其他城市通道建设，推进机场间快速交通联系和配套地面交通基础设施的建设。
Multimodal combined transport and connection: Enhancing the competitiveness of maritime and railway combined transport through policy support and financial subsidy. Intensifying the development between airports and other urban transport channels. Facilitating the construction of inter-airport high-speed connections and relevant ground infrastructures.

远景2：优化区域交通引导城市群联动发展，充分发挥上海市作为国家经济活动的经济引擎作用

Vision 2: Optimizing regional traffic to guide joint development of city cluster and giving full play to Shanghai's role as the national economic center

- **公路、铁路均衡发展：**上海作为全国公路和铁路网的重要节点之一，应均衡发展铁路运输和高速公路运输，引导城市空间有序发展。上海往苏、浙方向的公路、铁路客运比例达3:1，刺激城市“摊大饼”式蔓延，引发土地和环境资源紧张。

Balanced development of road and railway: Balancing the development of railway and road transportation of Shanghai for the purpose of maintaining orderly and organized urban spatial development. “Urban sprawl” leading to shortage of land and environment resources must be prevented.

- **提升区域辐射能力：**完善对外交通体系，加强内外交通的衔接整合，推进区域交通一体化，增强上海衔接国内主要城市、辐射长三角地区的交通服务能力。

Escalating capability of regional radiation: Optimizing overall transport system of Shanghai to facilitate regional traffic integration and strengthening Shanghai's capability of connecting big cities in China and serving the traffic demand across Yangtze River Delta Region.

远景3：公共交通优先发展，引导城市走集约紧凑型发展道路

Vision 3: Prioritizing public transport to promote intensive and compact urban development path

- **站点周边开发：**公共汽车站和枢纽周边开发应以遵循高密度建设（Density）、土地混合开发（Diversity）、宜人的空间设计（Design）的3D原则，对周边居住、商务、娱乐等公共设施进行一体化开发

Development in the vicinity of stations: Integrated development of residence, commercial and entertainment functions in the vicinity of bus depots and stations in compliance with the “3D” principle of high density development, diversity of land use and development and spatial design for livability and amenity.

- **走廊沿线整合规划：**公共交通走廊是有机衔接公共交通节点、形成整合优势、优化区域布局的关键，作为城市空间结构的支撑组织城市发展，提高城市整体运行效率

Integrated planning along public transport corridor: Public transport corridors, as pillars to urban spatial structure, are pivotal to the effective and efficient connections amongst public transport nodes, the creation of advantages of integration, the optimization of regional layout, and the improvement of overall performance of a city.

远景4：交通与城乡空间协调发展，支持城市高效运转

Vision 4: Coordination between traffic and urban-rural spatial development

- 强化城市总体规划对城市发展的综合调控，促进人口、产业合理布局，均衡交通需求分布。加强交通规划与城乡规划的统筹协调，强化公共交通引导和支撑城市发展的规划模式，促进交通与用地融合发展

Reinforcing the role of master planning in comprehensively regulating and controlling urban development, promoting reasonable distribution of population and industry, balancing the distribution of traffic demand, strengthening the coordination between traffic planning and urban-rural planning, reinforcing the planning mode of public transport guiding and underpinning city development, promoting joint development of traffic and land use.

- 郊区及新城
Suburban areas and new towns
- 与周边城市
Other cities in surrounding areas

远景5：发展绿色交通体系，建立节能减排新型城市
Vision 5: Developing green transport system and promoting energy saving and emissions reductions

- 优化交通能源结构，提高能源利用效率，降低交通排放强度。持续提高运输工具的排放标准，逐步淘汰高污染的运输工具。倡导绿色出行，显著改善步行和自行车等交通方式的出行环境。
Optimizing energy mix in transport sector, improving efficiency in energy use, lowering emission intensity in transport sector, constantly tightening the emission criteria of vehicles, phasing out vehicles with high polluting levels, advocating green travels, significantly improve the traffic conditions for NMTs such as pedestrians and bicycles.

远景6：完善城市交通管理体制，从粗放式转向信息智能、统筹兼备的精细化管理体制

Vision 6: Improvement of urban traffic management system, transition from extensive and primitive management to sophisticated management featuring information intelligence, diversity, compatibility and coordination

- 不断完善体制、机制、法制，强化交通参与各方协同联动。充分应用最新信息技术手段，创新交通管理模式，提升交通组织管理水平，提高交通资源利用效率。加强社会动员，引导全社会共同营造文明交通环境。

-Improving legal system, institutions and mechanisms in transport sector and reinforcing the coordination and joint actions amongst various stakeholders.

-Availing of state-of-the-art information technologies for innovations and improvement in traffic organization and management and increase of efficiency in utilizing traffic resources.

-Strengthening propaganda and mobilization targeting the general public for creating a civilized traffic environment.

谢谢聆听， 请多交流指导！

Thanks!