



China Academy of Transport Sciences

Policy Options for Public Transport Development in Chinese Cities

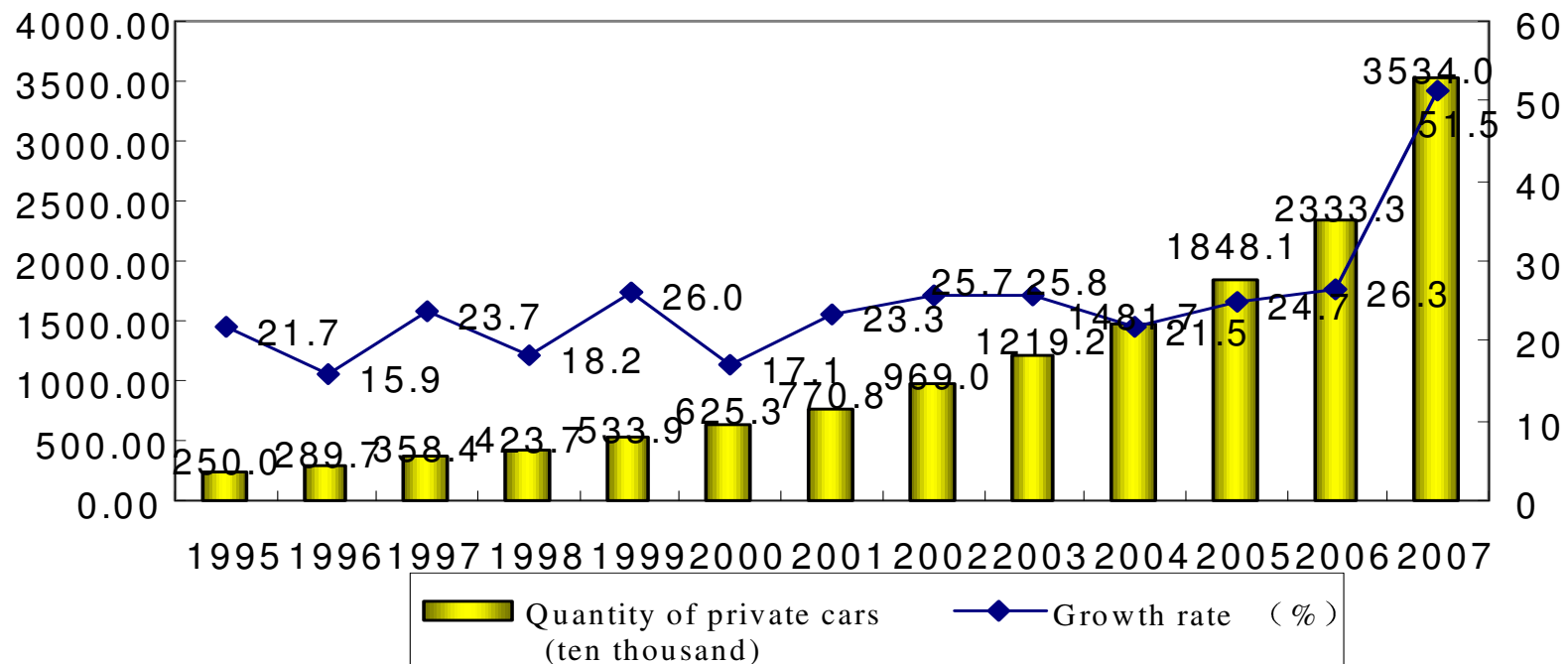
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China Urban Sustainable Transport Research Center

April, 2009



◆ Speedy motorization cause serious challenges to Chinese urban transport



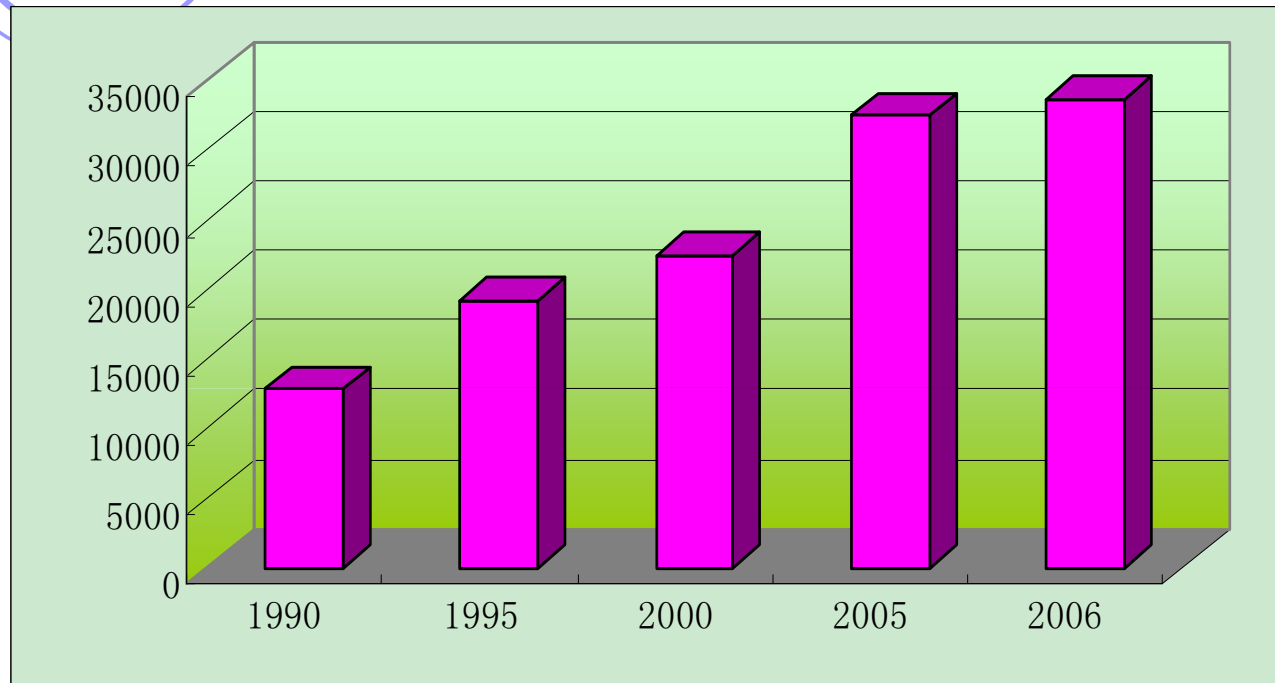
City	Traffic congestion loss (CNY/month.person)
Beijing	375
Guangzhou	274
Shanghai	228
Xi'an	69



Fast urbanization: 45% in 2007.

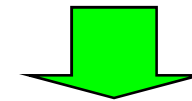
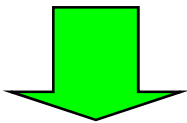
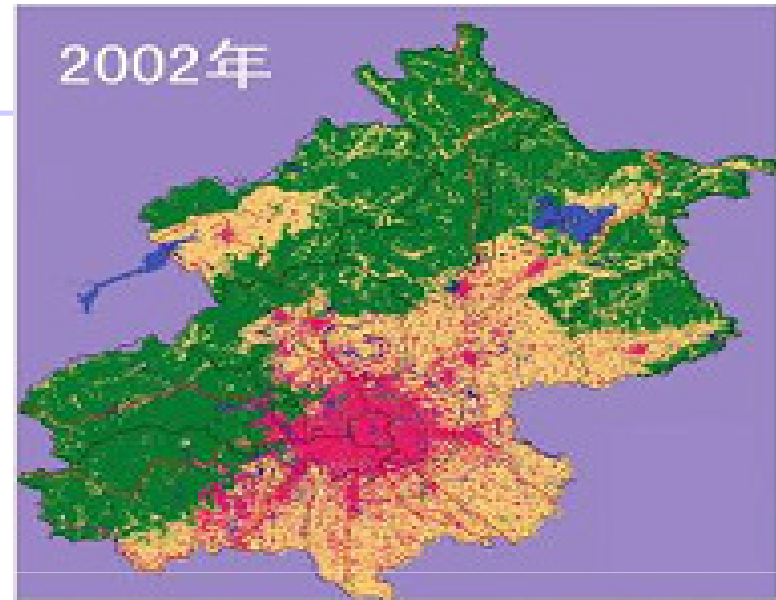
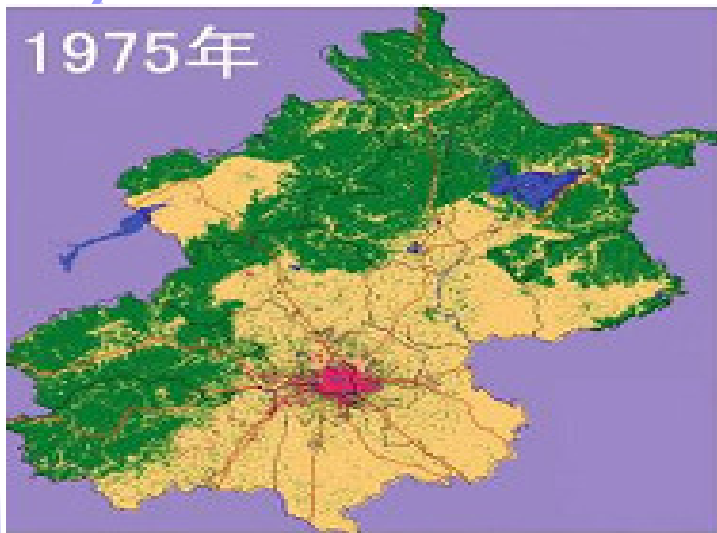
12 million people move from countryside to city.

Changes of Total Built-Up Area in Chinese Cities (sq.km.)



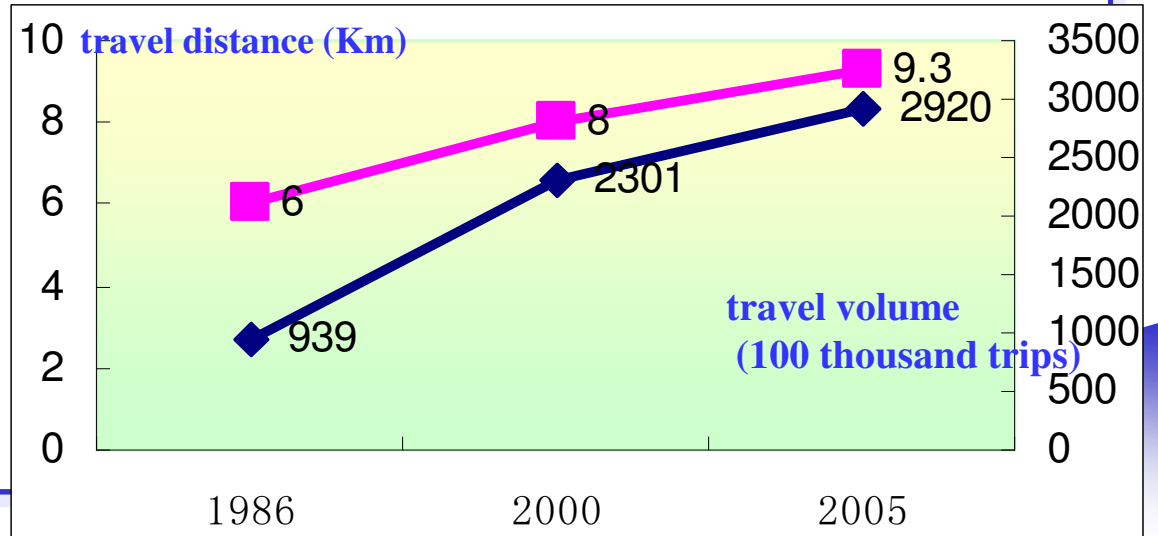
the cultivated land per capita, 0.093 hectare in China, only 40% of world level.
Eleventh Five Year Plan, by 2010, the limit of national cultivated land must be no lower than 120 million hectares
the annual reduced cultivated land should not exceed 43.3 hectares.

Build-up area Increase of Beijing, 50 Km² per year



Travel demand increase

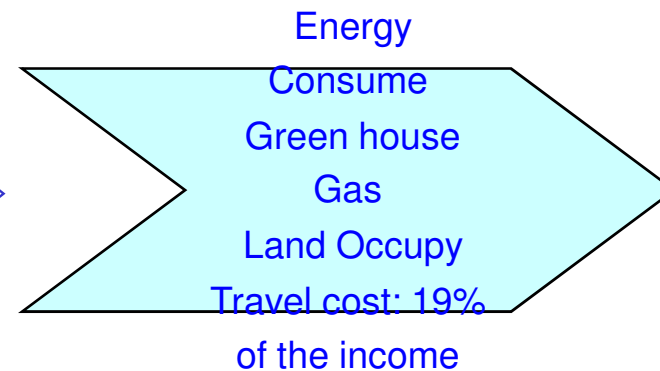
- Total travel volume, 7.0%
- Travel distance, 16.3%



The coming 15 years is a crucial stage for urban transport development in China

We should take actions in advance, implement strategies of sustainable development, and avoid mistakes experienced by developed countries.

Which way to choose ?



Public transport priority is the right strategy for city and transport development in China.

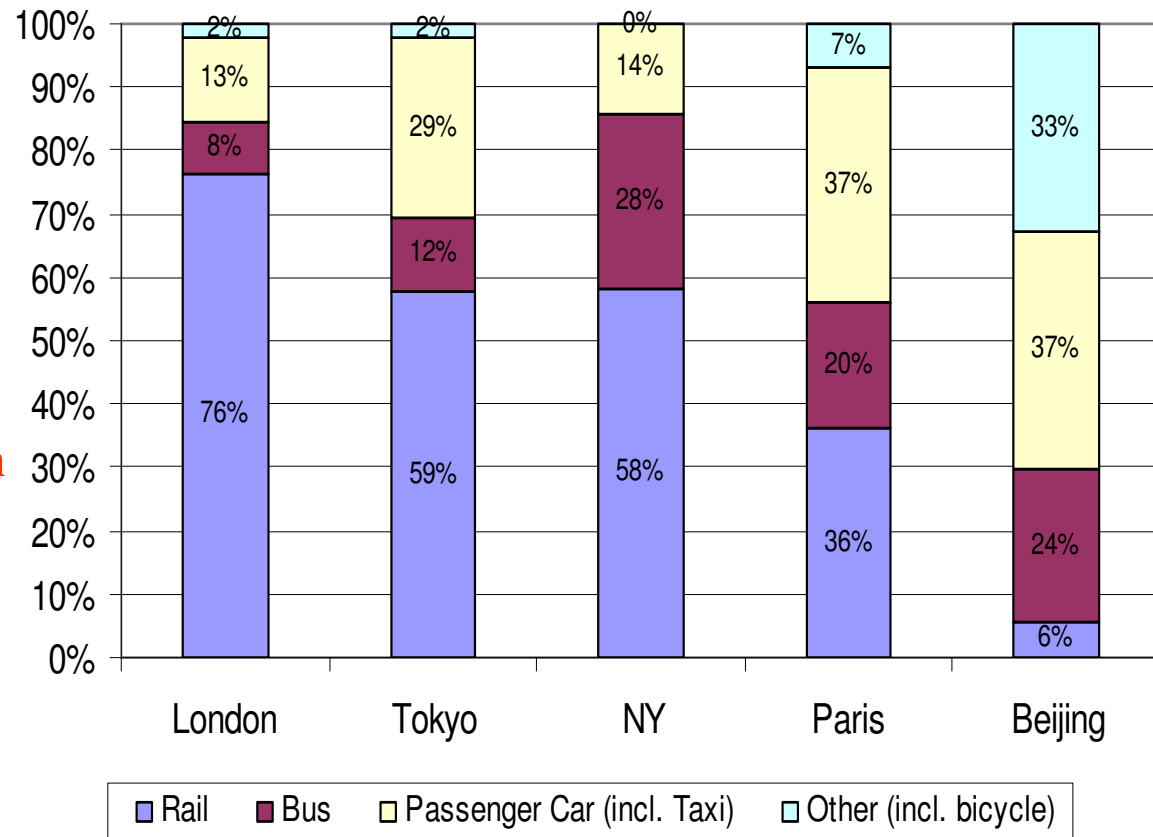
——Premier Wen Jiabao, June, 2004.

The state council, MoC and NDRC, have issued many policy documents for public transport priority.

**The conception of PT priority is well accepted in theory,
——but not fully implemented in practice!**

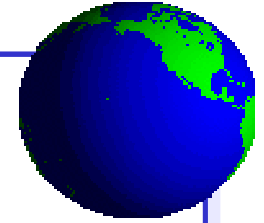
◆ Public transport development lag behind

- ✓ low coverage
- ✓ low punctuality rate
- ✓ Inconvenient transfer
- ✓ Conflicts between urban and suburban transport



◆ Incomplete structure of public transport system

- ✓ Relatively low efficiency of bus operation
- ✓ Rail transport lags behind. Operating rail transport totals 700 kms, only equivalent to that of London.
- ✓ BRT system is in the starting stage



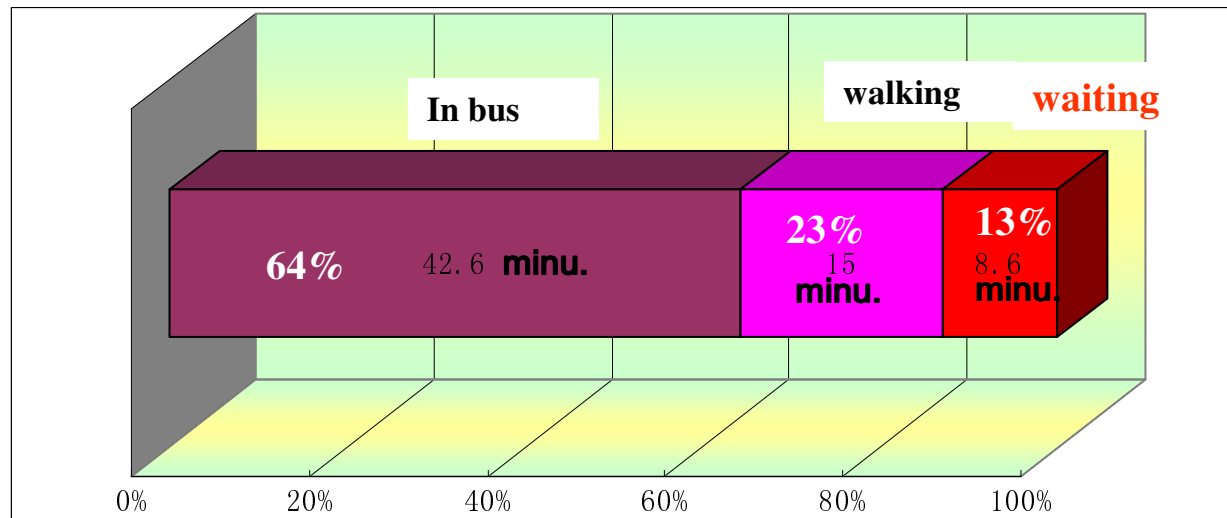
◆ PT development lag behind

■ Beijing:

✓ Travel distance by bus is 4.5 kms **shorter** than car, but

✓ Time using is 24.3 minutes **longer**

30% transfer distance of average trips in Beijing is over **500 meters**





**Public transport
service in China**



Problem analysis:

(1) Lack of stable institution and policy guarantee

The PT regulations at the national level are not issued yet

- ✓ From the National People's Congress——No law
- ✓ From the State council——No administrative regulations
- ✓ From the MoT——No departmental regulations

■ Insufficient PT management regulations at local level

- ✓ No guarantee for priority of road rights, investment, subsidy and land use
- ✓ Irregular **market operation** and weak **supervision**
- ✓ Inconsistent **planning mechanism**

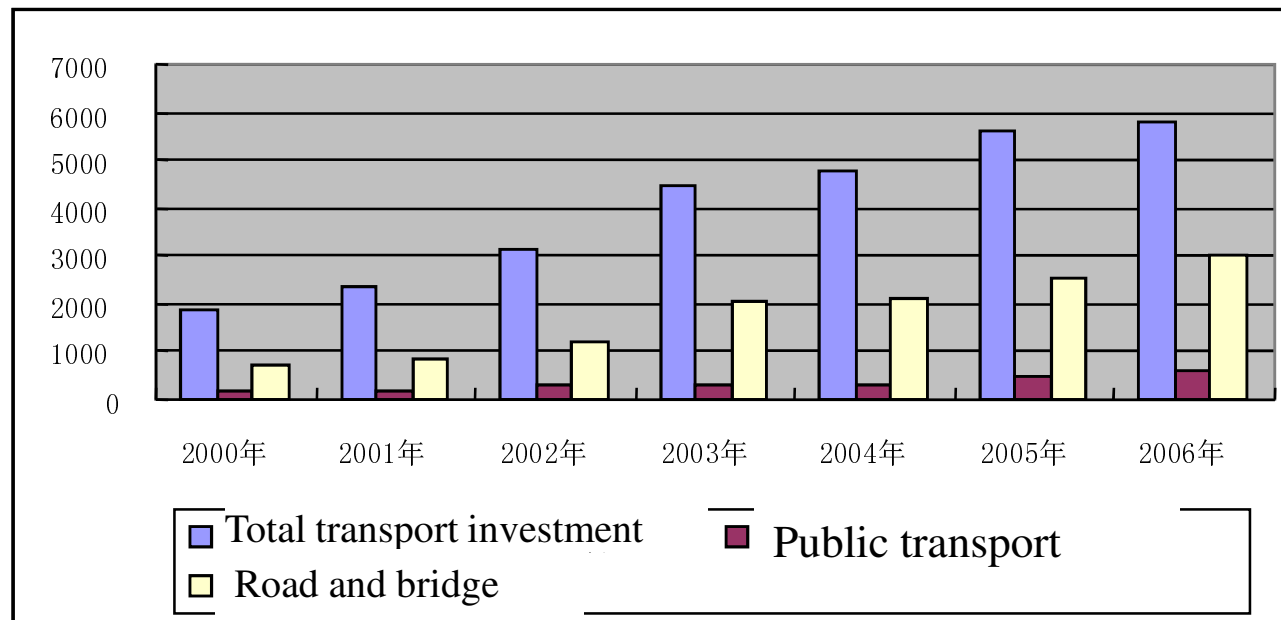
Problem analysis:

(2) Insufficient input for public transport development

In 2006, total fixed assets investment in urban construction was 576.51 bill. CNY, of which :

- ✓ urban public transport, 10.47%,
- ✓ roads and bridges 52.03%.

■ Investment structure of urban transport (100 mill. CNY)



(3) Market operation is not standardized and lacks supervision

◆ Market operation

Monopoly operation: lack of innovation, heavy burden for the government.

Entire market operation: malignant competition and resource waste. Some city even auction and transfer the operating rights of public transport routes.

◆ Supervision

Lacking supervision, assessment mechanism and appraisal standards for service quality, resulting in non-guaranteed service quality.

(4) Incomplete institutional system and mechanism

PT planning, building and operation are managed by different departments, namely, departments of planning, transport, development and reform, land, and construction.

Lack of communication and coordination, results in PT facilities shortage (e.g. bus special lanes and stations) after the roads are built

✓ Public transport facilities are not included in the urban land use control planning, which are often taken and diverted for other use.

Problem analysis:

(5) Conflicts between urban and suburban transport

■ Dual management system

✓ Inconformity in planning, regulations, standards and policy of taxation and fees.

Survey in Gui'zhou :

The cost of the same bus on the same route in suburban operation is **2.45** times that in urban operation.

The conflicts caused big obstacles for transport equity and the integrated development of city and rural areas

■ Comparative study of urban and suburban transport

Item	Urban Public Transport	Road Public Transport
Managed by	Construction.	Transport.
Nature	Mainly public interest.	Business operation.
Policy	Preferential taxation policies.	Few preferential policies.
Taxation and fees	Reduce urban maintenance fees(or refund), urban education and additional fees (230-440 Yuan per month). Land tax of public transport depot can be exempted or the land can be allocated by the government.	Have to pay passenger public transport additional fees, road maintenance fees, transport management fees, industry and commerce tax, operation tax (2,537-1,904 Yuan per month), and investment in depot (1 million to 10 million Yuan), etc.
Fiscal sources	Policy subsidies by the government.	Few subsidies.
Approved passenger number	Approve passenger number according to domestic space (8 passengers per square meter).	Approve passenger number according to seat number and overload is not permitted.
Operation mode	Start at regular intervals, stops on the route for passengers to get on and off.	Irregular starting time, not allowing to stop halfway in principle.
Depot resource	Exempt from depot fees.	Pay depot fees and bus stop fees.
Route definition	Planned by municipal government. The route and cross districts.	Approved by district or county governments, most of the routes are not allowed to reach the urban area.
Operation entity	State owned public transport enterprises are in the absolutely dominant position.	Diversified operation participated in by state owned enterprises, collectively-owned enterprises and private companies.

■ Opportunities for public transport development in China

March, 2008, *the State Council's Institutional Reform Plan.*

Integrate transport responsibilities, form new MOT (Ministry of Transport)

- ✓ postal service
- ✓ civil aviation
- ✓ urban passenger transport management of the Ministry of Construction

■ Local cities

- ✓ deepen the institutional system reform
- ✓ integrate administration bodies
- ✓ explore the transport administration system

Policy Options for Public Transport Development in China

1. Acceleration of regulation system

■ National level:

- ✓ Issue the *Regulation of Urban Public Transport*, to provide stable policy guarantee for PT

■ Local Level

- ✓ Work out and implement specific policies and measures of public transport priority
- ✓ Guarantee policies regarding fiscal budget, taxation, capital allocation, land use and facility construction.

Beijing Public Transport Regulations (2006)

the development concept of “2 positions and 4 priorities” is identified.

The important strategic position and social welfare positioning of public transport in urban development.

Priority is given to facility land use, investment in , road right allocation to, fiscal and taxation support to public transport.

2. Regulate market operating management

- A supply system with dominant government supply, participated in by a certain number of entities: **scale operation, orderly competition.**
- Responsibility orientation
 - ✓ *government: service management and supervision*
 - ✓ *Company: operation*
- Franchise public transport service to a few enterprises for comparison **price, operation performance and operation cost**

Shanghai -- “Public interest positioning and market operation”, “**2+7**” operation mode.

Guangzhou – Introduce foreign capital and private capital, deepen the reform of state owned public transport enterprises: 5 joint ventures and cooperatives and 3 private enterprises.

Shenzhen – Carry out corporate regrouping and franchised operation of public transport, encourage the enterprises to run independently.

3. Reform public transport investment and financing policy

- Ensure **public financial sources** be allocated to the public transport.
- Set up **special fund for PT**: e.g, certain ratio of urban land use transfer income and municipal capital be used.
- **Social funds**: attract and encourage individuals, enterprises and foreign capital to participate in investing in and operating public transport in the form of joint ventures, cooperatives or entrustment.

Beijing -- Change the public financial subsidy to expenditure of **public finance** in public transport. **Spend the government public finance in buying the public transport service.**

Hangzhou -- Each year, the government spends 5% of its land transfer income in supporting public transport development.

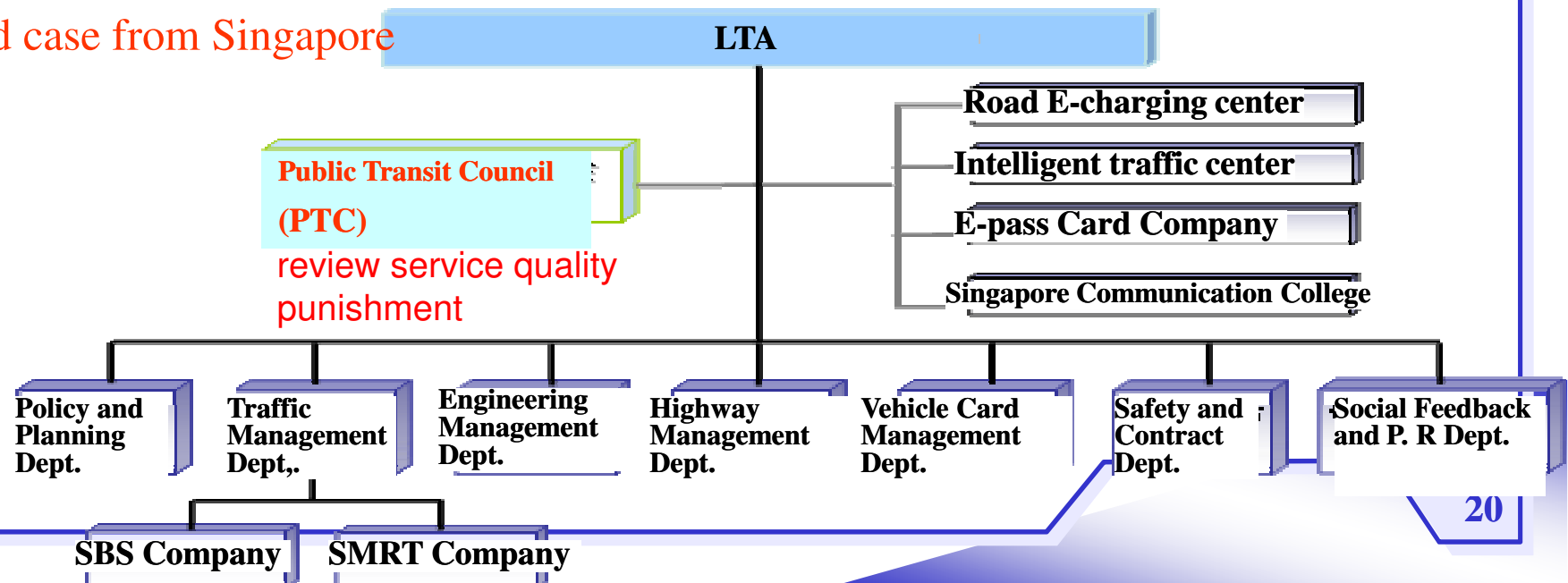
Changzhou -- Since 2007, abstract in a compulsory way **10%** of the non-taxation income of the municipal government departments (municipal capital or administration fees) to set up special fund for public transport. In 2008, the ratio is increased to **20%**.

Policy Options

4. Establish market supervision system of public transport

- Carry out result oriented effective supervision for services
- Collect evaluation information from the public
- Establish an index system for service quality evaluation, and formulate supervisory rules.

◆ Good case from Singapore

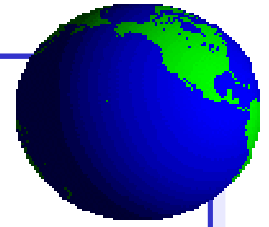


5. Strengthen Transport Demand Management

— Pull : **Public transport**

— Push : **TDM**

- Take measures in advance, through economic, technical, management, administrative means, to control car usage
 - ✓ Differentiated parking charge
 - ✓ Car using restriction based on plate number
 - ✓ Flexible work time etc.
- Induce the public to take public transport modes



Thank you for your
attention

