

**Ministry of Transport of the
People's Republic of China**

&

**Ministry of Environmental
Protection of the People's
Republic of China**

Wish the Forum a Success!

Environmentally Sustainable Transport in China

HE Jianzhong
Ministry of Transport, P.R.China



Content



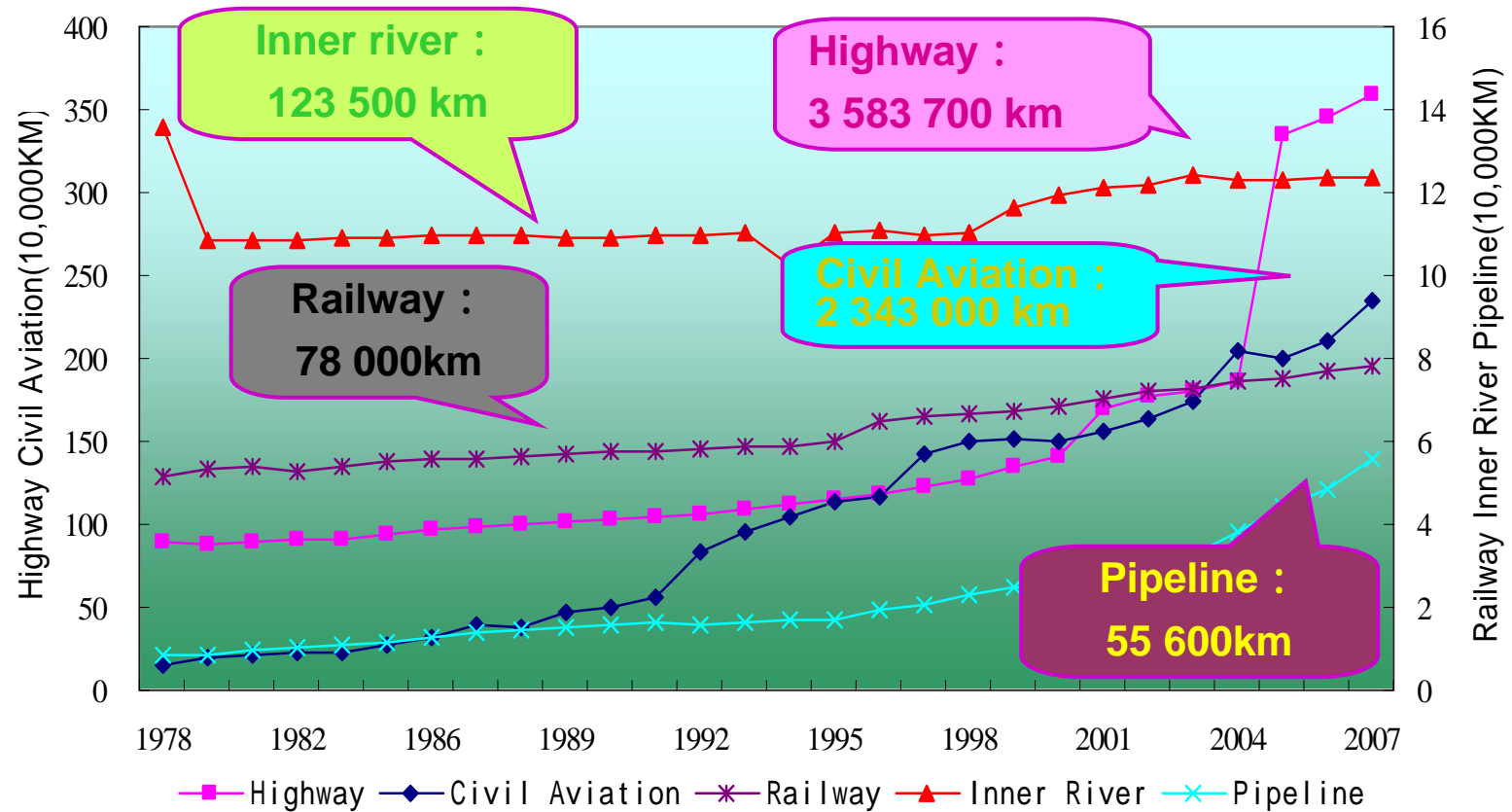
- 1. Current Status of EST in China**
- 2. Challenges**
- 3. Future Development**

1. Current Status

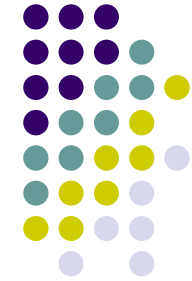


1.1 Rapid development

□ Transport infrastructure network



1. Current Status

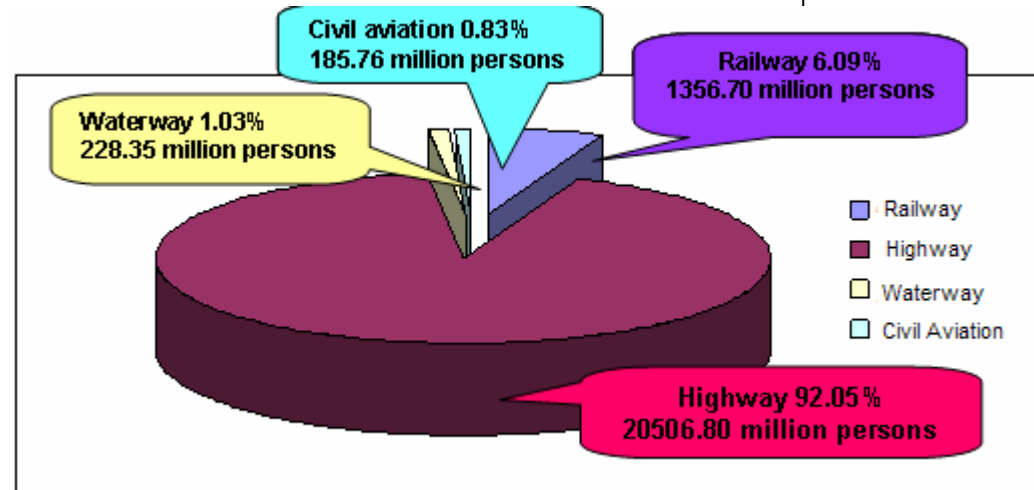


1.1 Rapid development

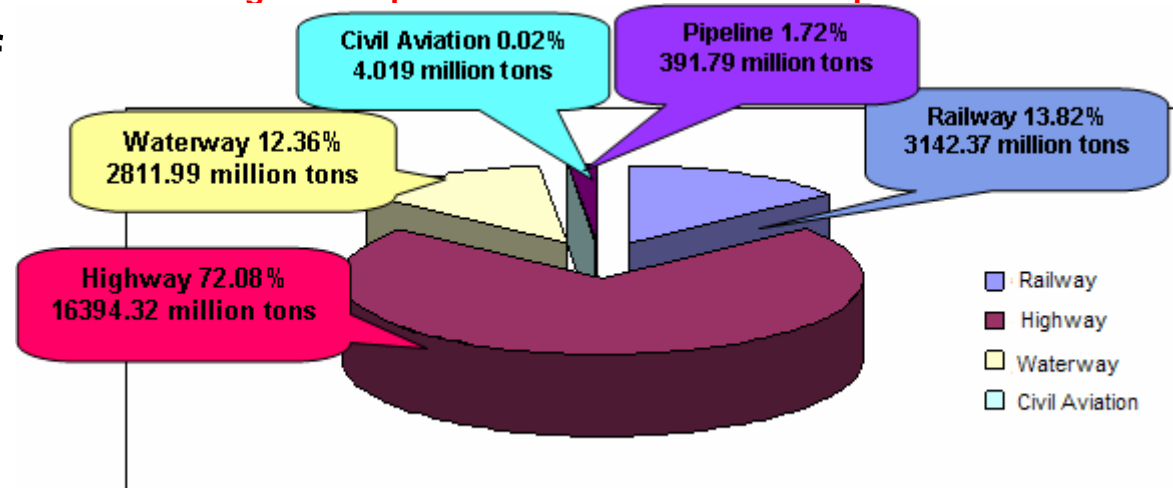
□ Transport capacity

In 2007 :

- Expressway: **53 900 km**
- Port: **35 900** ;
- Berth ten thousand tons above: **1337** ;
- Inner river corridors of grade four or above : **15 800 km**



Passenger Transport Volume of Different Transport Modes in 2007



Freight Transport Volume of Different Transport Modes in 2007

1. Current Status



1.2. Laws and regulations

1.2.1 National legislation

- 1989 , *ENVIRONMENTAL PROTECTION LAW OF THE PEOPLE'S REPUBLIC OF CHINA* by NPC standing committee
- 2004 , *China Medium-and-long Term Energy Conservation Plan* by NDRC
- 2007 , *Energy Conservation Law of the People's Republic of China* by NPC standing committee
- 2007 , *China National Climate Change Programme* by the State Council
- 2007 , *National Environment and Health Action Plan (2007-2015)*

In 2004, the transport sector was set as one of the three areas for energy saving in order to achieve the national strategy of building an energy-saving and environmental friendly society,

1. Current Status



□ Energy saving and emission reduction regulations

——2003 , Regulations on the Administration of Environmental Protection of Transport Construction Project

——2008 , The Implementation of Energy Conservation Law in the Highway and Waterway Sectors

——2008 , Opinions on Promoting the Development of the Modern Transport Sector

——2008 , Outline of Medium-and-long Term Energy Saving Plan of Highways and Waterways

——2008, Policy Outline of Energy Saving and Environmental Friendly Transport Development during 2008-2020



1. Current Status



□Transport safety and security

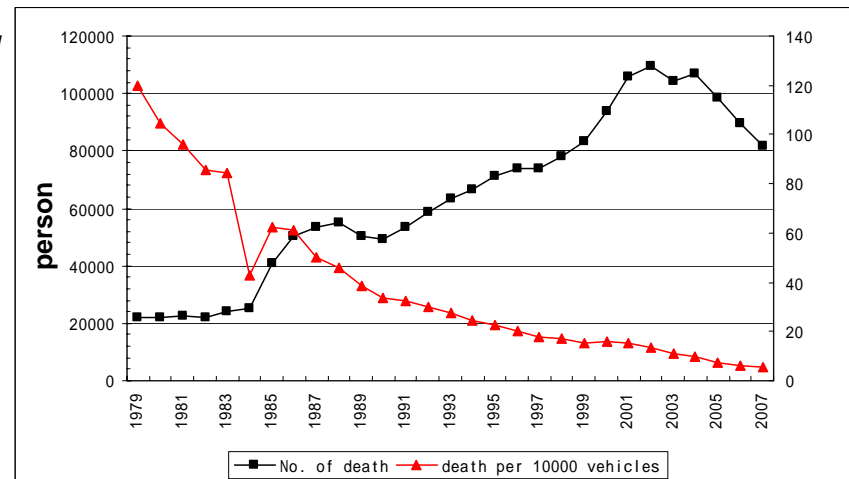
—In 2004, *The Regulation of the People's Republic of China on Road Transport* by the State Council

—In 2004 “*Highway Safety Ensuring Engineering*” by MOT, with theme on “*Eliminate hidden risks and protect the life*”

— In 2007, *Law of The People's Republic of China on Road Traffic Safety (Modification)* by the People's Congress

— in 2008 , *Highway Traffic Safety Manual*

In 2008, fatality per ten thousand vehicles in China reduced to 4.3



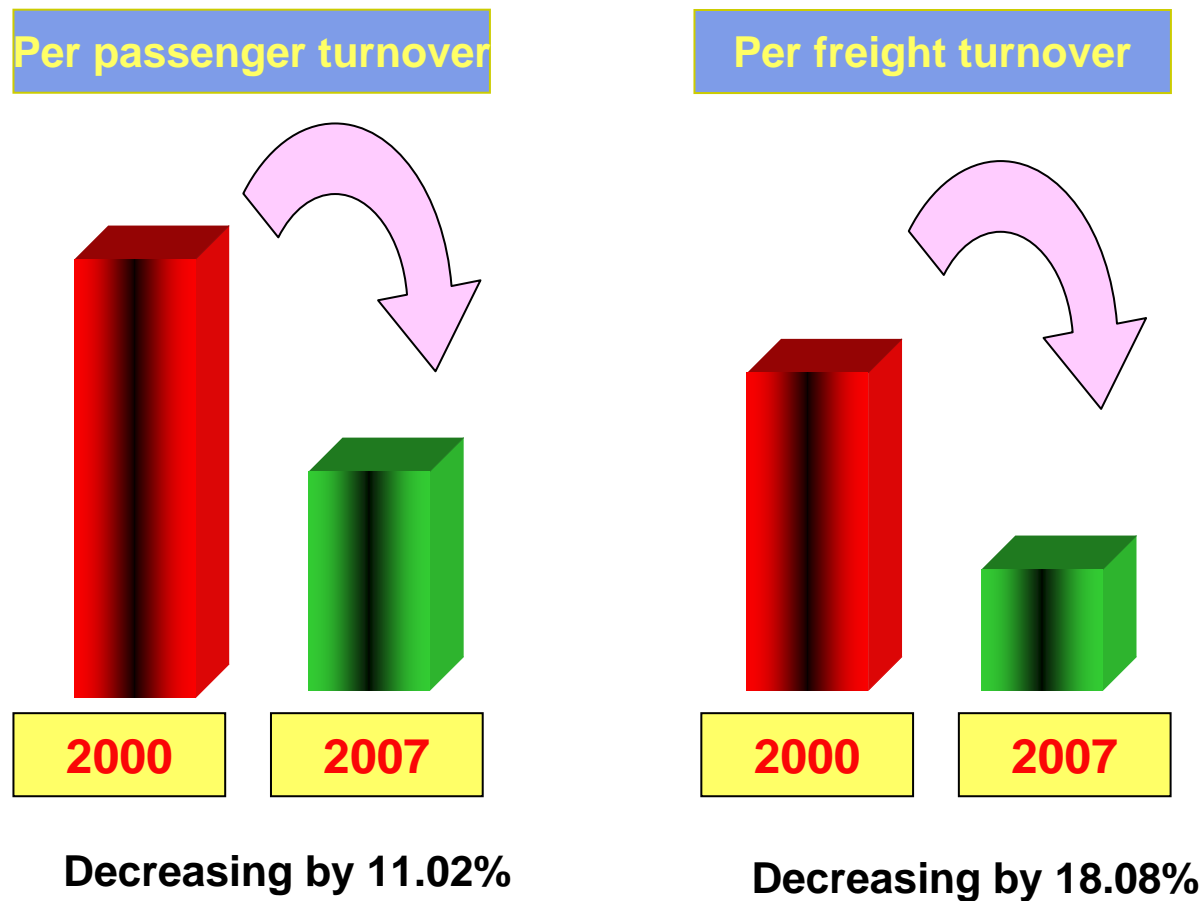
National Road Traffic Accidents Status⁸

1. Current Status



□ Land use efficiency

— decreasing land use per unit



1. Current Status



1.2.2 Relevant specifications

- ❑ Limits and Measurement Methods of Fuel Consumption for. Commercial Vehicle for Passenger Transport ;
- ❑ Limits and Measurement Methods of Fuel Consumption for. Commercial Vehicle for Freight Transport ;
- ❑ Limits and Measurement Methods of Pollutants for Light Vehicles (China and) ;
- ❑ Effluent standard for pollutants from ship ;
- ❑ Specification for Energy Conservation Design of Port and Waterway Engineering ;
- ❑ Specification for Environmental Protection Design of Port Engineering
.....

1. Current Status



1.2.3 Urban Public Transport Strategy

China Government put public transport priority as the strategic focus of urban and transport development

- In 2005 , The Guideline of Giving Priority to Urban Public Transport by the State Council;
- In 2006, Comments on the Economic Policy of Urban Public Transport Priority by the former MOC, NDRC, MOF, and MHRSS;
- In 2007 and 2008 , Public transport week (108 cities) and car free day (110 cities), with theme on green transport and health

1. Current Status



Public Transport---Beijing

During the 29th Olympic Games, Beijing public transport: 20 million person times per day, travel percentage 45%, with 10% increase.

During : odd-even number traveling, flexible working time, reducing large public compaigns and conferences

□**After**: one day free per week, 30% government vehicles stop

□**Long-term**: parking fees raise, park-and-ride

□**Air quality much improved**

Vehicle use restriction: before and after



2. Challenges



2.1. Social development puts higher demands on transport

⊞ **Rapid Economic Development**

⊞ **Turnover Volume of Passenger and Freight**

⊞ **Rapid Urbanization and Motorization**

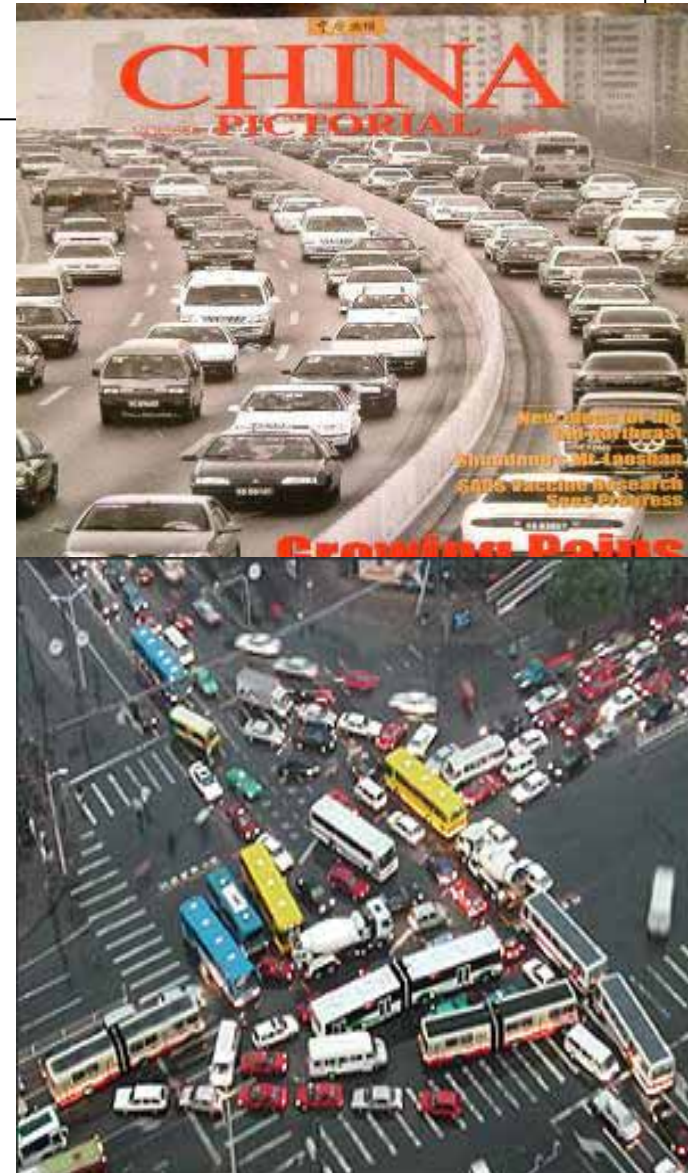
2. Challenges

✦ Mega-city congestion

By 2008, private car Ownership in China: over 40 million

	From	To	Years
1949-1997	2300	1 Mil.	48
1997-2003	1 Mil.	2 Mil.	6
2003-2007	2 Mil.	3 Mil.	4
2007-2008	3 Mil.	3.5 Mil.	1

Vehicles Ownership in Beijing



2. Challenges



2.2. Transport structure improvement and service quality improvement to meet multiple demands of passenger and freight transport

- Passenger-oriented service: Convenience, Comfort, Seamless Connection and Affordable Price

Rapid passenger transport, arterial road passenger transport, rural passenger transport, tourism transport

- Logistics: Reliable, Fast, Efficient, at an Affordable Price

Increasing daily travel mileage and loading factor; the development of commercial vehicles towards large-scale, professional and clean



2. Challenges

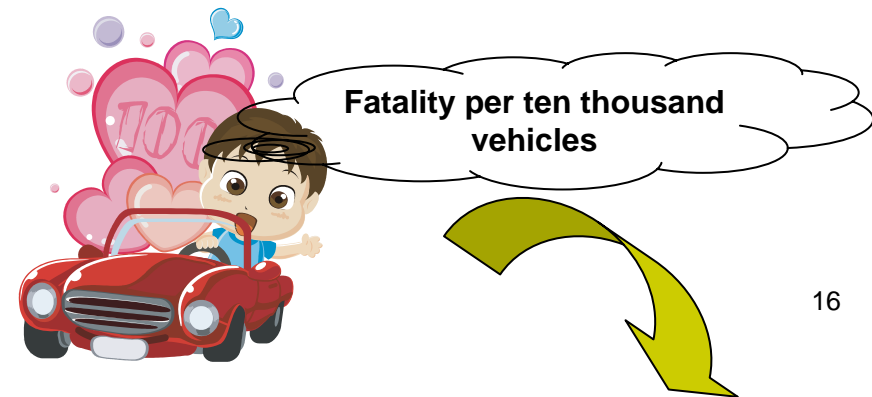


2.3. Energy saving and environmental friendly transport industry

- # Oil
- # Variable land
- # Coastline

Nonrenewable !

2.4. Transport safety to be improved



2. Challenges



2.5. Harmony between transport & environment

- **Air Pollution**
- **Traffic Noise**
- **Ecological Damage**
- **Oil Pollution in Ocean**
- **Greenhouse Gas**

3. Future Development



3.1 Strategic Objectives

One Integrated System, Three Satisfactions

An Integrated transportation system coordinated with socio-economic development

fast, efficient, economical, safe, equitable, and environmental friendly

Meet the needs of Socio-economic development

Meet diversity travel demand

Meet harmony between transportation and nature

3. Future Development



3.1 Strategic Objectives

- 1、 Establish an integrated administrative system that facilitates sustainable transport development
- 2、 Build highly accessible transport network with broad coverage
- 3、 Develop high quality, reliable and efficient transport Systems
- 4、 Promote transport modes and vehicles with 5-low Principle

3. Future Development



□ Promote transport modes and vehicles with 5-low Principle

- Low Energy Consumption
- Low Environmental Pollution
- Low Accident Rate
- Low Resource Consumption
- Low Financial Burden



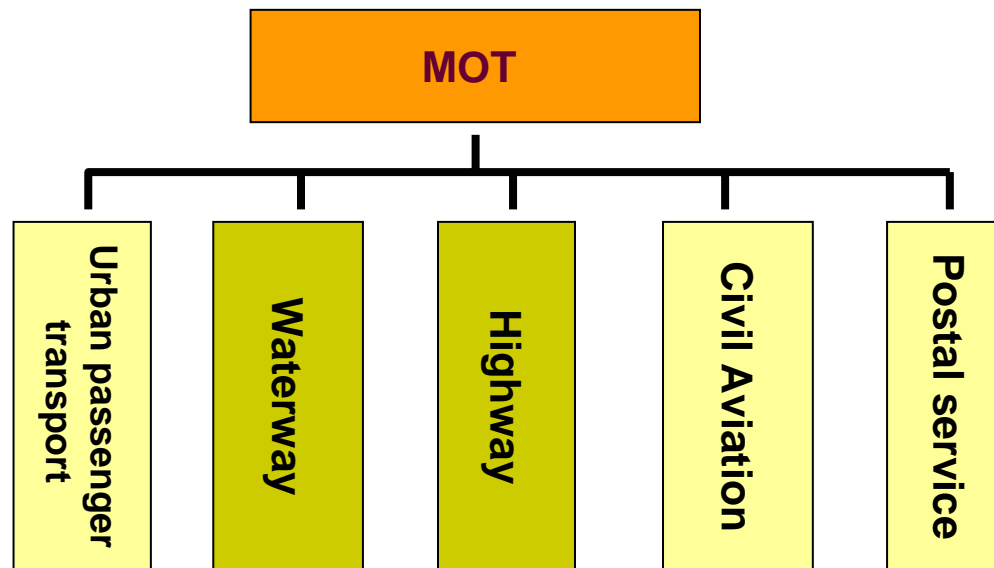
3. Future Development



3.2 Key Action

—In 2008, national institutional reform to strengthen the integrated transport management and environmental supervision

- Ministry of Transport: convenient, comfortable, efficient and safe integrated transport system



- Ministry of Environment: environment policy, planning and key issues ²¹

3. Future Development



—Integrated Transport Planning

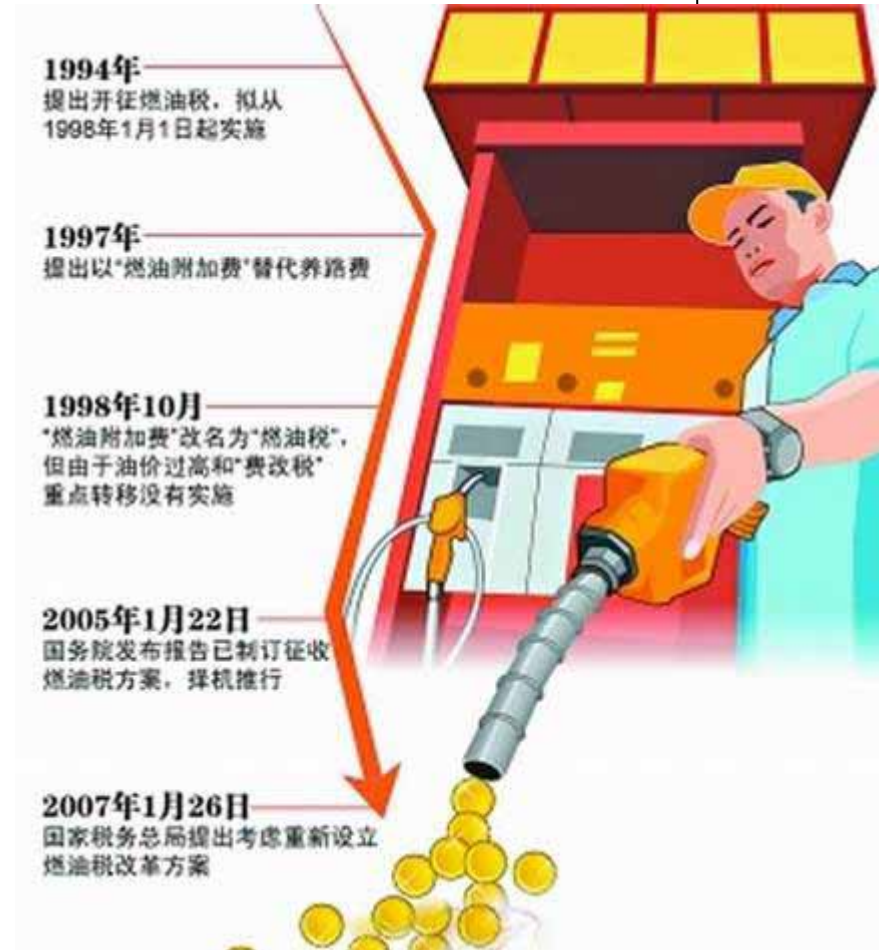
Comparative advantage of different transport modes to strengthen the planning and construction of integrated terminals



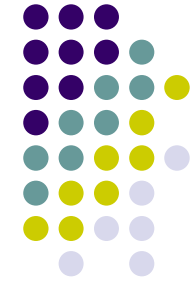
3. Future Development

—Fuel Tax: fairness, standardization, energy saving and affordable

- Fairness——pay by cost ;
- Standardization——maintenance and management fees of highways and waterways; toll collection targeting highways below the second grade ;
- Energy saving——more tax more oil use ;
- Affordable——burden reduction



3. Future Development



— Public Transport Priority and TDM

BRT

- In 2008, operating mileage 283.8 km in ten cities, 1000km in 2015

Urban rail

- In 2008 operating mileage 782.7 km in ten cities,
- 1700 km in 16 cities in future 10 years.



3. Future Development



—National policies for energy saving and pollution control

In 2009, the State Council: Auto and Steel Industry Revitalization Plan

- ❑ **Small displacement vehicle: vehicle purchasing tax reducing from 10% to 5% for small displacement cars below 1.6 liter;**
- ❑ **Agricultural vehicle retirement subsidy :**
 - ❑ Three-wheel vehicle
 - ❑ Exchange purchase from Low-speed truck to light-duty truck
 - ❑ Mini passenger car with displacement under 1.3 liter
- ❑ **Technology innovation :**
 - ❑ Technology innovation supporting
 - ❑ Technology improvement
 - ❑ New-energy motor vehicles
- ❑ **High energy consumption vehicles retirement and access mechanism for fuel consumption of commercial vehicles**

3. Future Development



—National policies for energy saving and pollution control

Medium-and-long term energy saving of highways and waterways

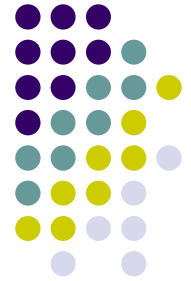
	2015 vs 2005	2020 vs 2005
Energy consumption per unit of commercial trucks	12%	16%
Energy consumption per unit of commercial buses	3%	5%
Energy consumption per unit of commercial ships	15%	20%
Energy consumption per unit of commercial ships	8%	10%

General objectives of energy-saving and environmental friendly society :

2020

- Land use per transport turnover reduced by 25%
- main pollutants of commercial vehicles reduced by 30%
- main pollutants per transport turnover reduced by 50%

EPILOGUE



It is a heavy task for the transport sector to achieve the sustainability in terms of economy, society, environment and institution. China Government has made active efforts and achieved a lot in these aspects , but there is still a long way to go. We are confident that the set objectives can be realized through our practical efforts. We also wish to jointly promote the environmentally sustainable transport development by learning foreign advanced experience and carrying out international exchange and cooperation.



**Thank you for your
attention**