



Road Safety Situation in China

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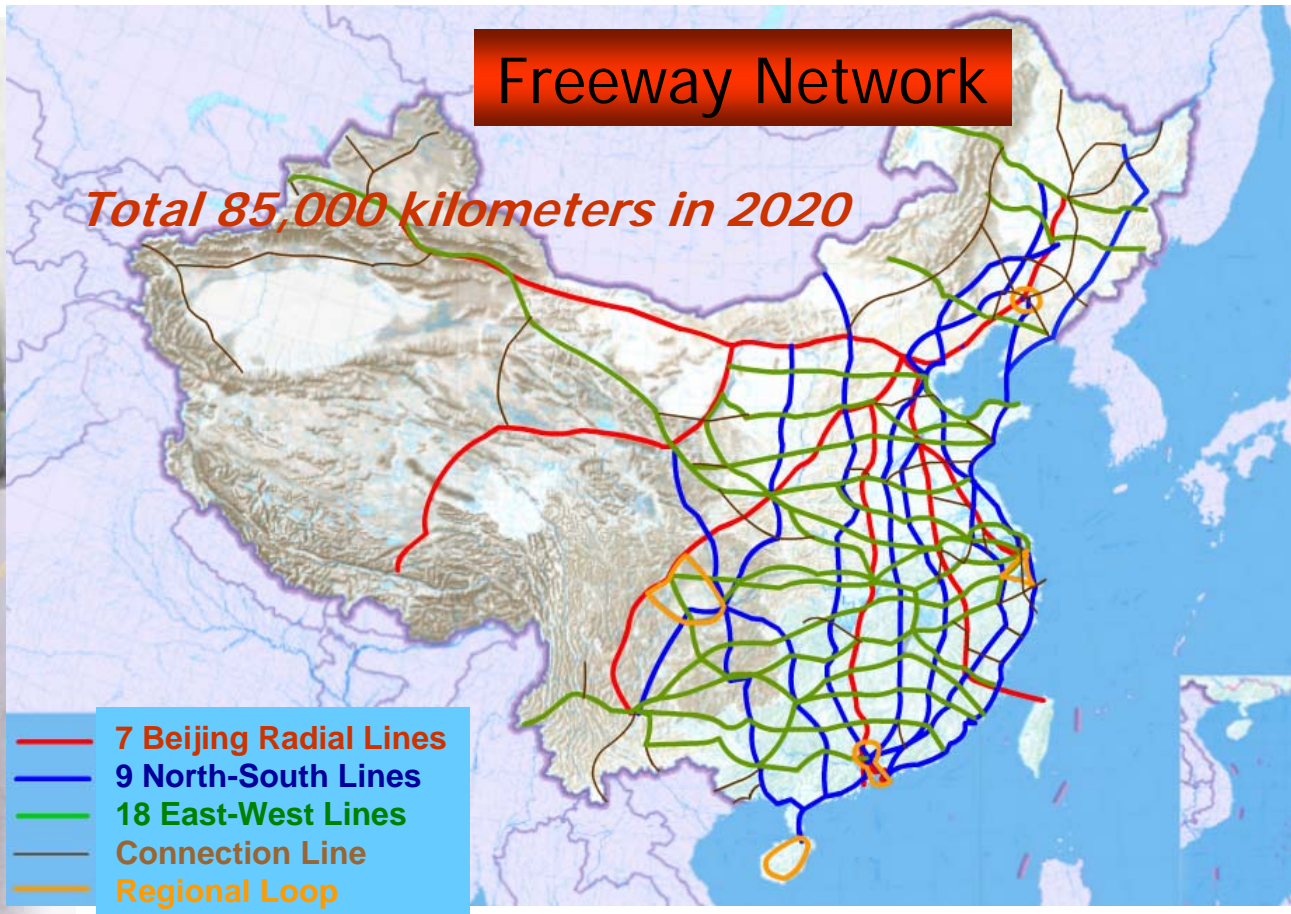


Background-highways





Background-highways





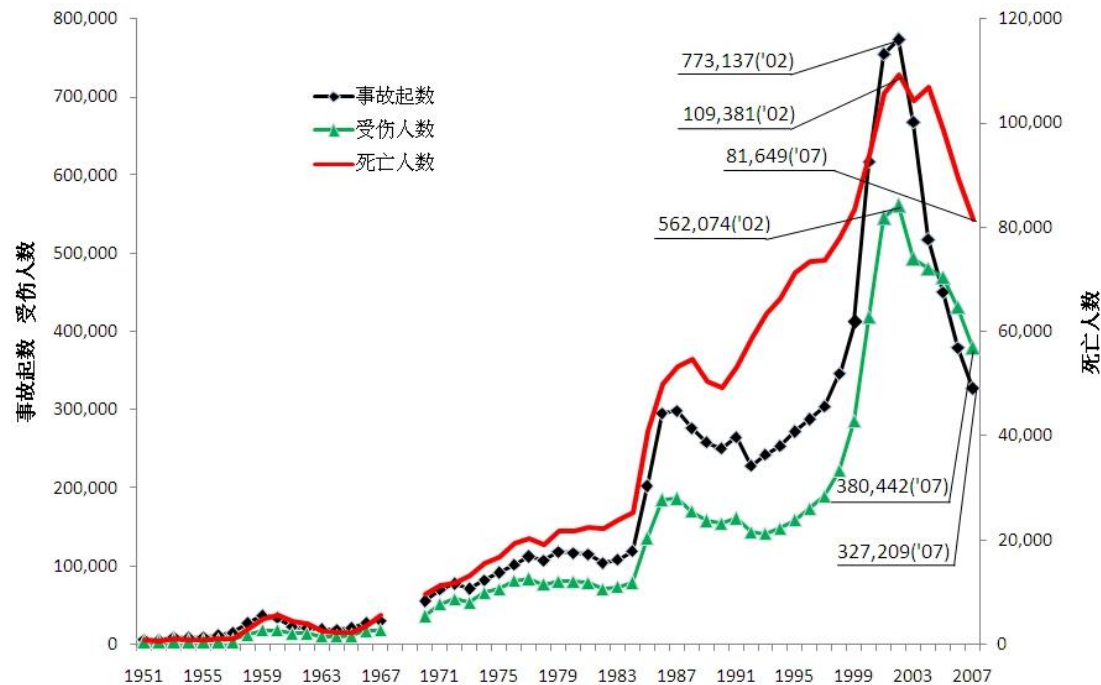
Background-vehicles

At the end of 2008, number of Motor Vehicles reaches about **170 million**, which increasingly worsen road safety situation in China.





Background-traffic crashes



Distribution of annual traffic crashes since 1950



Background-traffic crashes

- In recent years, number of traffic crashes and fatalities are dramatically decreasing, but these figures still keep at a high level. In 2008, the number of traffic crashes is 265,204 nationwide with 73,484 fatalities and 304,919 injured.





Major causes of traffic crashes in China



- 1 Poor safety consciousness
- 2 Insufficient traffic safety facilities
- 3 Irrational highway design
- 4 Poor vehicle safety performance
- 5 Mixed traffic Composition



Major causes of traffic crashes in China

1

Poor safety consciousness

in city



in rural



Major causes of traffic crashes in China

1 Poor safety consciousness

urban roads

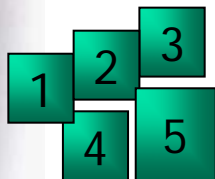
The image block contains several visual elements: three aerial photographs of a multi-lane urban intersection. The first photo has a red arrow pointing to a vehicle in the left lane. The second photo has two red arrows pointing to a truck and a car in the middle lanes. The third photo has a red arrow pointing to a vehicle in the right lane. Below these is a photograph of a red car with significant front-end damage, involved in a collision with a large orange truck. A yellow curved arrow with the numbers 1, 2, and 3 points from the intersection towards the collision scene. A green arrow with the number 4 points directly to the collision scene.



Major causes of traffic crashes in China

2

Insufficient traffic safety facilities





Major causes of traffic crashes in China

2

Insufficient traffic safety facilities

Low grade highways are accident prone locations





Major causes of traffic crashes in China

3

Irrational highway design

Highway design produces potential dangers.





Major causes of traffic crashes in China

4

Poor vehicle safety performance



1	3
2	4





Major causes of traffic crashes in China



Mixed traffic composition





Safety countermeasures

Inter-ministerial joint conference system

In 2003, the State Council approved the inter-ministerial joint conference

- Ministry of Public Security
- Ministry of Transport
- Administration for Supervision and Management of Safe Production

.....

15 Ministries and Administrations in total



Safety countermeasures

Traffic Safety Education

In 2004, the Traffic Administration Bureau of the Ministry of Public Security launched the Five-entrance Activity.



Village



Community



Family



School



Company



Safety countermeasures

Truck Overloading Abatement

In 2004, the Ministry of Transport, the Ministry of Public Security and other six ministries allied to launch the movement of truck overloading abatement.

The overloading rate was decreasing from 80% to approximately 10%.





Safety countermeasures

Truck Overloading Abatement





Safety countermeasures

Highway Safety Enhancement Project

- ✓ Highway Safety Enhancement Project was launched by the Ministry of Transport in 2004.
- ✓ It is to improve the sharp curves, steep grades, road sections with poor sight distance and road sections with dangerous roadside conditions on national and provincial roads.
- ✓ 10 billion RMB has been invested in the project and 210,000 black spots have been reconstructed.
- ✓ About 100,000 accidents and 5,000 fatalities per year are reduced.



Safety countermeasures

Highway Safety Enhancement Project



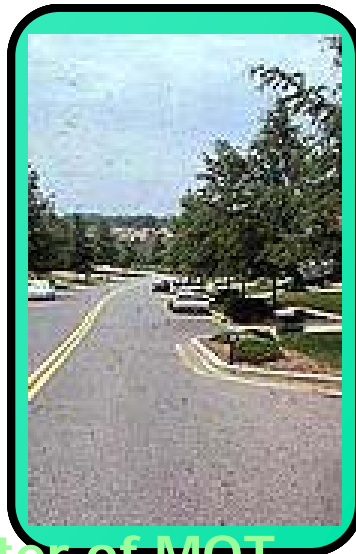
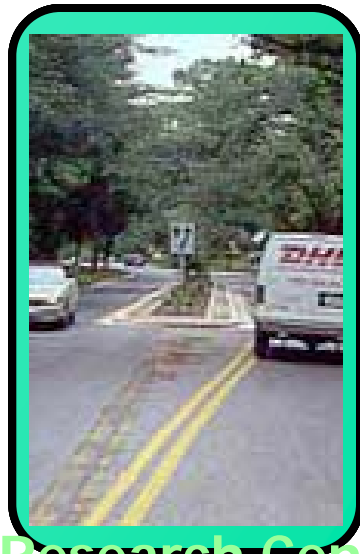
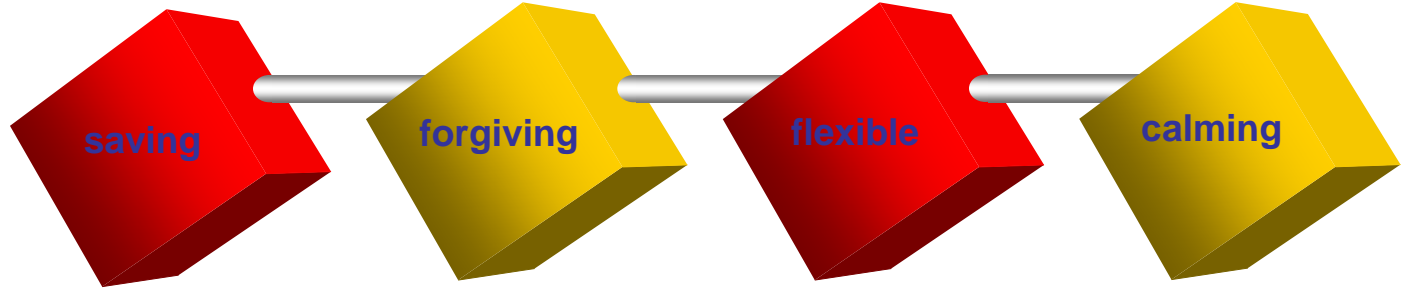
1	2
3	4





Safety countermeasures

Safe Design Concepts





Safety countermeasures

Striking for Safer and Harmonized Development





Fundamental researches

National Road Traffic Scientific Action Plan

On Feb 18, 2008, the Ministry of Science and Technology, the Ministry of Public Security and the Ministry of Transport signed the cooperation agreement on National Road Traffic Scientific Action Plan in the People's Great Hall.

The action plan aims at constantly reducing the number of fatalities due to traffic crashes, and further reducing the number of especial severe traffic crashes in several years. The fatality rate approximately reach the level in the middle-developed countries.



Fundamental researches

National Road Traffic Scientific Action Plan





Fundamental researches

National Road Traffic Scientific Action Plan

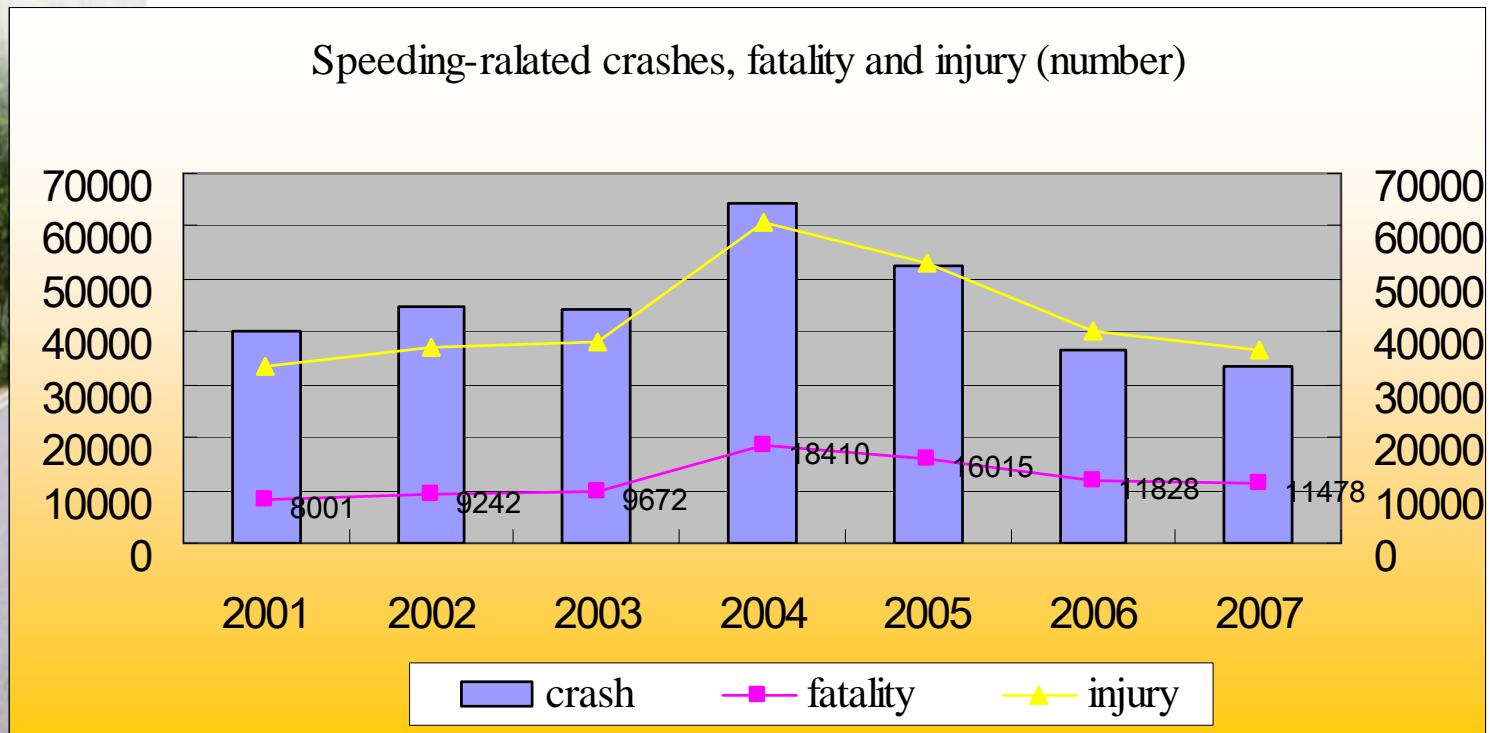
According to National Road Traffic Scientific Action, seven research projects concentrating on human beings, vehicles, and roadways are proposed. Relevant works about these seven research projects are going very well. Professor Li, the director of Road Safety Research Center is leading one of research projects.





Fundamental researches

Speed Management



Data source: annual report for road traffic crashes issued by ministry of public security



Fundamental researches

Speed Management

- The GRSP Speed Management Manual was translated into Chinese and published by China Communication Press in August 2008;
- The press conference was held in Beijing on Sep 22, 2008 to launch the Chinese version of the Manual. More than 40 people from the governments, institutes, NGOs, international organizations and media attended the event.





Fundamental researches

Traffic Safety Facilities





Fundamental researches

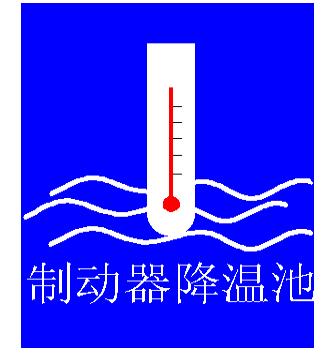
Traffic Safety Facilities



Animal Passageway Sign



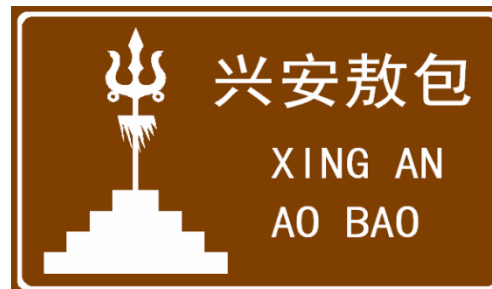
Animal Protection Sign



Brake Cooling Tank Sign



Scene Spot Guide Sign



Rest Area Sign

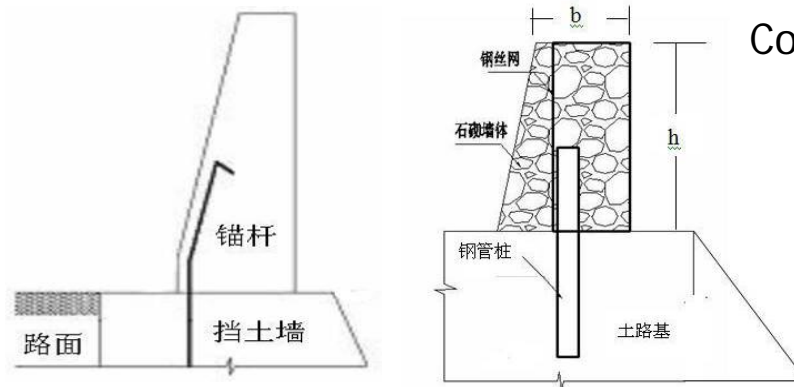
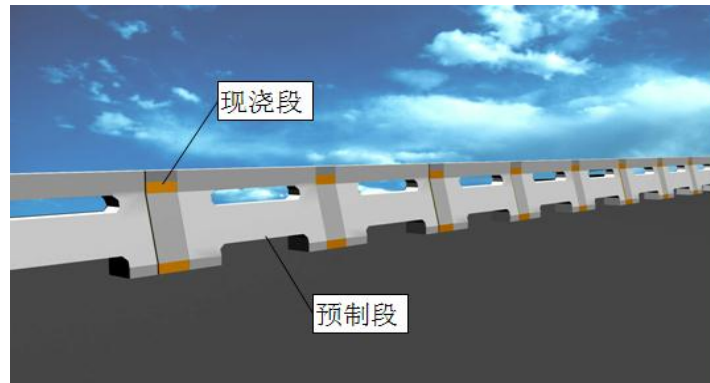


Escape Ramp Sign



Fundamental researches

Traffic Safety Facilities

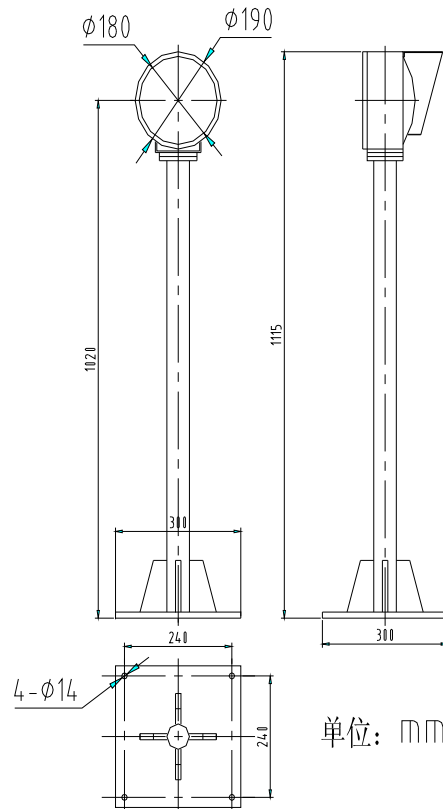


Concrete Barriers and Foundations



Fundamental researches

Traffic Safety Facilities

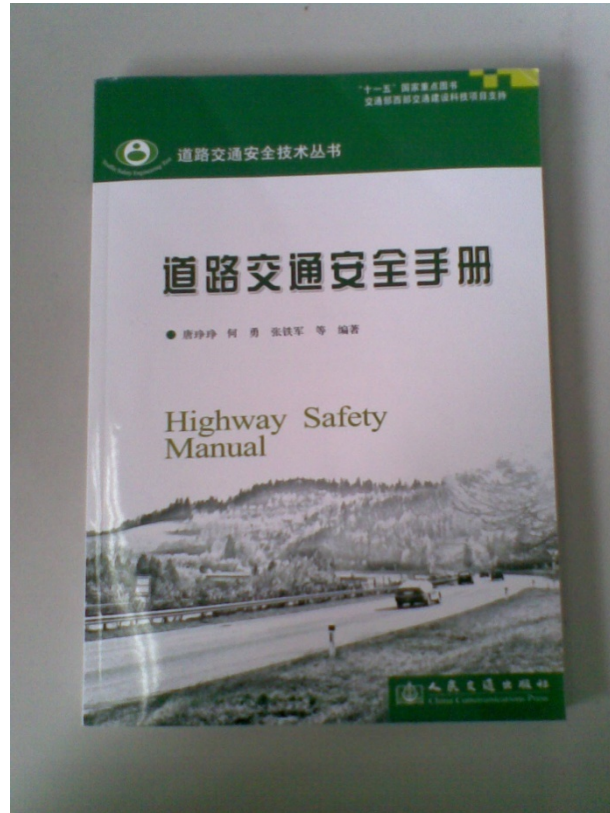


Fog Lamp and Structure



Fundamental researches

Highway Safety Manual





Fundamental researches

Highway Safety Manual

This manual consists of 4 parts:

- Overview
- Road factors affecting traffic safety
- Safety prediction methodology
- Safety improvement technology

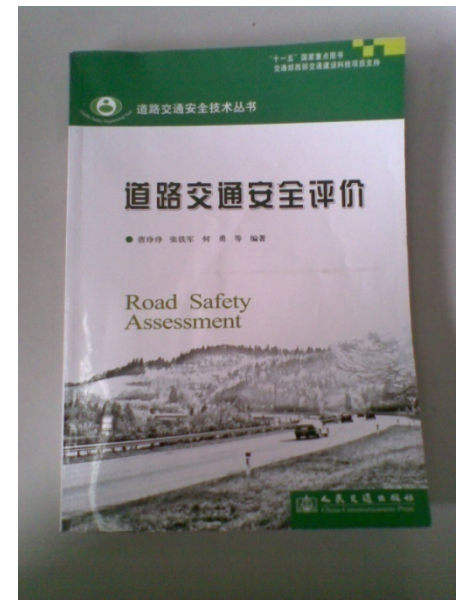
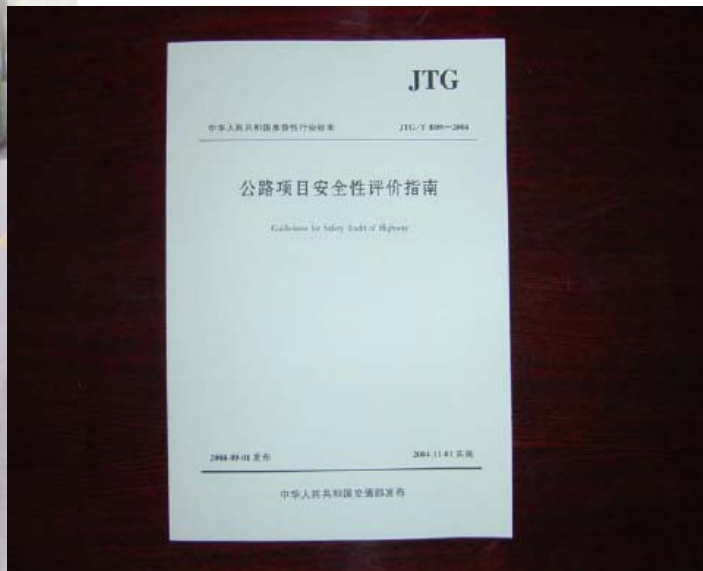




Fundamental researches

Road Safety Audit

In 2004, the MOT published “Guidelines for Safety Audit of Highway”.
In 2007, the Road Safety Research center published “Road Safety Assessment”.





Fundamental researches

Road Safety Audit

In 2006, RSRC completed a research project titled Traffic Safety Audit for Highways in Western China.

Major research results include:

- ① Identification methods for black spots
- ② Safety performance prediction models for two-lane highways
- ③ Safety performance prediction models for at-grade intersections
- ④ Safety performance prediction models for freeways
- ⑤ Traffic safety audit software



Fundamental researches

Road Safety Audit

In recent years, road safety audits have been conducted on dozens of freeways and national highways, and the audits focus on preliminary design stage, detailed design stage and operation stage.



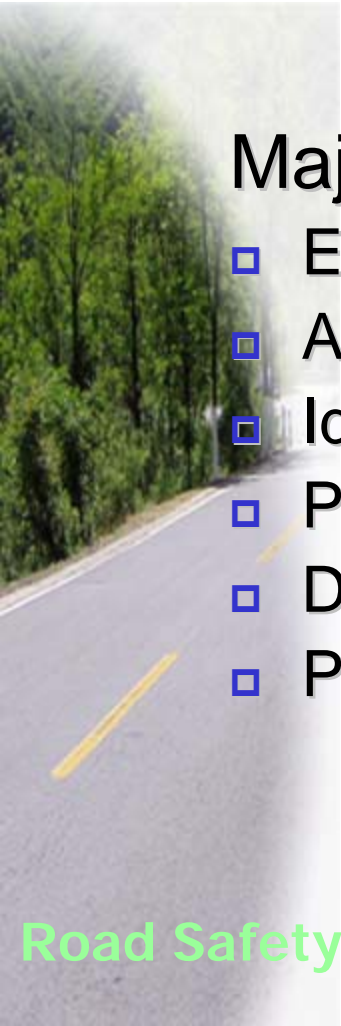


Fundamental researches

Roadside Safety

Major research findings:

- ❑ Evaluation methods for classifying roadside safety
- ❑ Audit lists for roadside safety
- ❑ Identification of black spots for roadside crashes
- ❑ Prevention measures for roadside safety
- ❑ Development of roadside facilities
- ❑ Prediction models for roadside crashes





Fundamental researches

Roadside Safety



Highway Information Collection System



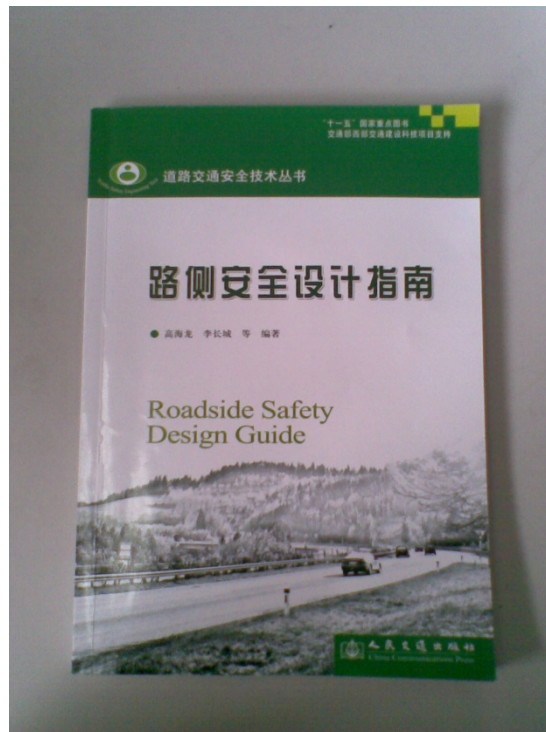
Roadside Safety Evaluation Software



Fundamental researches

Roadside Safety

In 2008, RSRC published Roadside Safety Design Guide.





**Thank you for
your attention!**

