Improve Highway Safety to Cherish the Life Project

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Improve Highway Safety to Cherish the Life Project

- General information
- Project Progress
- Application of road assessment
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Background

Rapid development
- economy
- mobilization
- expressway 120,000km
- road network of 4.5 million km

Road safety situation:
- death toll is still high in the region
  (annual average death toll is 60,000)
- many road sections especially on rural roads
Highway Safety Enhancement Project (From 2004):

Focused on:
- High risk roads on the national and provincial highways;
- Total investment: 30 billion CNY (5 billion USD) to improve the safety facilities (barriers, improve sight distance);
- Total enhanced mileage: 350,000 km;
Background

Road safety challenge still:

- Gap between increasing traffic demand and insufficient traffic facilities
- High accident rate compared to other countries in the world;
- Annually, more than 10 fatal crashes with group deaths (10+ fatalities per crash) still occurred;
- Many crashes happened on rural roads

No. 30 Notice issued by the State Council: *Opinions on Strengthening Road Safety*

Requirement: keep improving road safety condition, elevating rural roads safety and traffic environment.
From 2014, **Improve Highway Safety to Cherish the Life Project** is initiated at national level.
Main Features

• Improve Highway Safety to Cherish the Life Project focuses on:
  – scope of project: improving infrastructures on expressway, national and provincial trunk roads, and rural roads
  – type of roads: existing roads, new built roads, and reconstructed roads.
  – principles and countermeasures
    • principle 1: Existing roads - Eliminating the current hazardous road sections
    • principle 2: New-built roads - no more new hazardous roads should be added during the designs and constructions stage
    • countermeasures: Decision making process changes: single-index based method to ChinaRAP.
Implementation Objectives

--By the end of 2015, finish 30,000 km of safety treatment.

--By the end of 2017, 65,000 km treatment of high risk sections (such as sharp curve and steep slopes, cliff and riverside road sections.)

--By the end of 2020, finish safety treatment for county-level roads
Implementation Procedure and Plan

Dynamic assessment

- Information collection
- Network screening
- Categorize road, and buildup database
- Make implementation plan
- Engineering design
- Engineering construction
- Completion check
- Evaluation
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Direction and guideline.
Training: More than 2000 relative personals were trained in course or in the field.
QQ group is used to exchange knowledge

More than 1300 member in QQ group cover most of the areas.
A data MIS and data quality check tool were developed.
• Hazardous segments identification were finished.
• Whole data analysis is being done and detailed investment plan will be made.
• Demonstration construction projects will be implemented in 6 provinces in next year
• Already some construction is happening in some provinces such as Beijing
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Risk assessment was defined as a method to define hazardous segments.

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<th>Traffic accident risk assessment</th>
<th>Black spot identification</th>
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<th>Road condition analysis</th>
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Risk assessment was defined as a method to define hazardous segments.
• More than 100,000km National and provincial roads in Beijing Shandong Guangdong Jilin Hubei Henan Chongqing Fujian Zhejiang Guizhou Yunan XinJiang were assessed.

• More than 100 staff take part in the survey

• More than 300 take part in the coding and quality checking
图例
V级
IV级
III级
II级
I级

Ⅴ级. 8.14%
Ⅳ级. 8.07%
Ⅲ级. 34.04%
Ⅱ级. 34.27%
Ⅰ级. 15.48%

永川 S109观测点 K58.3,A->B方向速度

实测速度
限速 值
v85速度 值
Results table: Typical road attributes and plan countermeasures and estimated cost.

| 序号 | 省 | 市 | 县 | 公路名称 | 公路编号 | 技术等级 | 方向 | 附注 | 起点 | 终点 | 路段长度 | 路段分类 | 综合指标 | 合格标准 | 符合标准否 | 符合标准否 | 符合标准否 | 符合标准否 | 符合标准否 | 符合标准否 | 符合标准否 | 符合标准否 | 符合标准否 | 符合标准否 | 符合标准否 | 符合标准否 |
|------|---|---|---|---------|---------|---------|-----|-----|------|------|-----------|----------|-----------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1 | 湖北省 | 鄂州市 | 黄石市 | 鄂黄 | Y020 | 4 | 2 | 1 | E7-000 | E7-100 | 100 | 高速公路 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
- 贵阳市G210
  位置：K2262+900
  分类：A

- 遵义市S205
  位置：K29+700
  分类：A
THANKS!