CAREC:
Road Safety

Steven Lewis-Workman
Senior Transport Economist
Asian Development Bank

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Background

- Globally 1.2-1.3 million people killed, and between 20-50 million injured, in road collisions per year.
- Without action, annual road collision fatalities could rise to 1.8 million by 2020.
- UN General Assembly declared 2011-2020 to be the ‘Decade of Action on Road Safety’.
- In CAREC region alone, there are an estimated 60,800 fatalities and more than 600,000 injuries per year.
- Cost of road collisions in CAREC region amounts to approximately 4% of GDP.
- CAREC revised Trade and Transport Facilitation Strategy (TTFS) incudes a Regional TA on Road Safety (TA 152).

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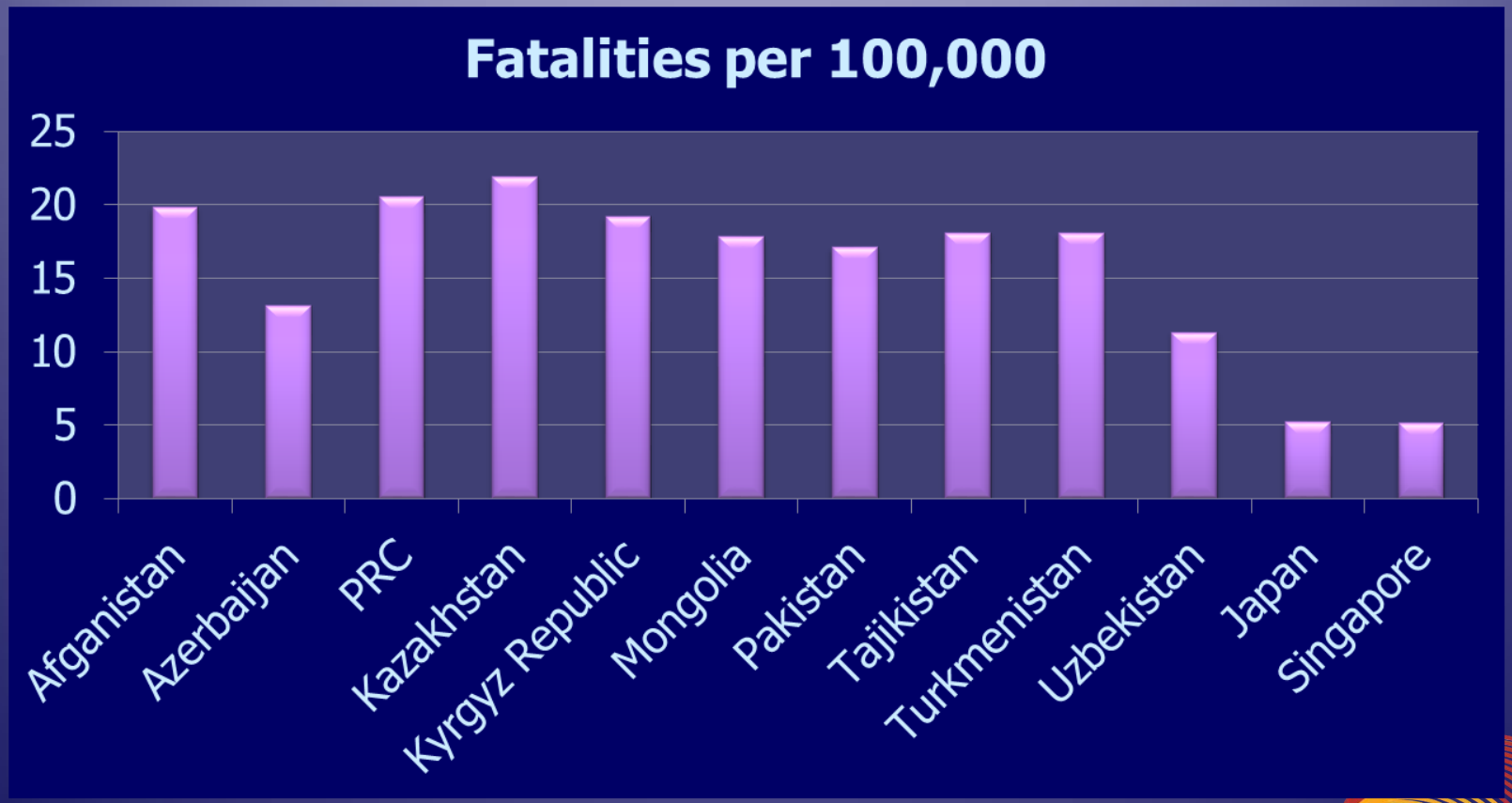
Road Fatalities Compared



Source: WHO (2013)

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Rationale

- Most CAREC countries have good laws and policies
- Relatively high fatality/injury rates
- Needs
  i. better institutional capability
  ii. road safety data collection and analysis
  iii. safer infrastructure
  iv. road user education
  v. more enforcement

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Objective and Outputs

- **Objective:**

  Improve Road Safety in CAREC countries.

- **Outputs:**

  i. Strengthened capacity to manage road safety activities
  ii. Improved data collection and road collision research
  iii. Improved core competencies in road safety engineering
  iv. Improved capacity to enforce road safety traffic laws
  v. Better urban road safety capabilities
  vi. Pilot projects

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Methodology

- Produce and disseminate training materials
- Regional 'train-the-trainer' workshops
  i. Road safety data collection and research
  ii. Targeting and implementing road safety solutions
  iii. Road safety engineering
  iv. Enforcement
  v. Urban road safety
- National workshops in CAREC countries to promote best practices in road safety
- Pilot / demonstration road safety projects to be identified and implemented

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Cost and Financing

- Initial RETA estimated at $1.5 million (source TBD)
- Need for follow on RETA (to be defined later) to further strengthen road safety, consolidate gains and ensure sustainability
- Counterpart support from CAREC governments (in-kind)
  - Staff support
  - Office accommodation
  - Data

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Implementation arrangements

- 27 person-months of international consultants time to be provided by individual consultants.
- National consultants from mainly CAREC countries may be engaged for up to 44 person-months to support work of international consultants.

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Implementation Schedule

- Submit proposal and terms of reference to TSCC for Endorsement (mid-May 2014).
- TA approval procedures (mid 2014).
- Management approval (mid 2014).
- Advance procurement of consultants (late 2014).
- Mobilization of individual consultants (late 2014).
- TA implementation period (late 2014 – 2016).

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Example: Incorporating Road Safety in ADB Financed Roads

- An Example from the People's Republic of China
- Shaanxi Mountain Road Safety Demonstration Project
- Proposed ADB loan 2015

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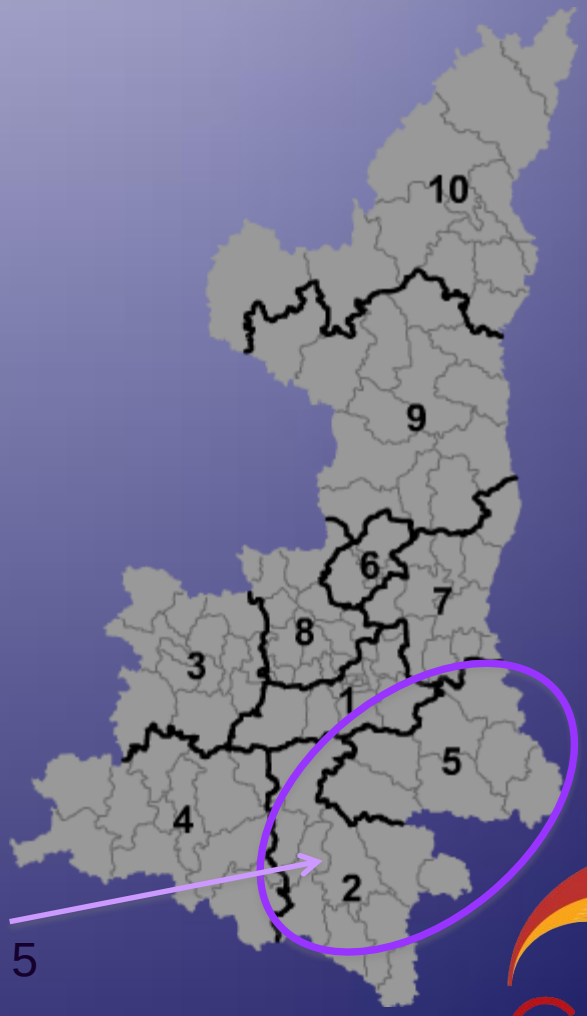
Project Area

- Southeast Shaanxi Province
  - Northwest PRC
  - Mountainous
  - Over 5 million people in area
  - Poverty rates over 35% (2011)
  - Economy based on agriculture, mineral extraction, and tourism



Project areas
Shangluo - 5
Ankang - 2

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Safety Problem

- Road designs/conditions unsafe
- High-risk roads (on 200 km)
  - Over 50 fatalities per year
  - Over 450 injuries per year
  - Over 1000 crashes per year
- 4 x national average crash rate
- 12 x national average fatality rate
- Injuries and fatalities concentrated among the poor (motorcycles/ pedestrians)

Lack of pedestrian protection

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Inadequate engineering

Unforgiving designs

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Safety Project

- Comprehensive approach
  - Improve designs of project roads (iRAP iterative assessment)
  - Safety targeted improvements on local roads (600+ km)
  - Build capacity (utilizing iRAP) of government safety unit and local bureaus
  - Improve enforcement at local police level
  - Education campaign for drivers and area residents

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Cooperation with iRAP/ChinaRAP

- iRAP tools to evaluate and improve safety designs
  - ADB and iRAP signed MOU to cooperate in DMCs
- ChinaRAP program underway
  - Transfer iRAP methods to Research Institute of Highway
  - Supported by iRAP with NGO funding
  - Shaanxi roads included in work program at ADB request
- All project roads already coded in iRAP software
- Preliminary assessment complete
- Ability to iteratively improve safety designs during project development and detailed design

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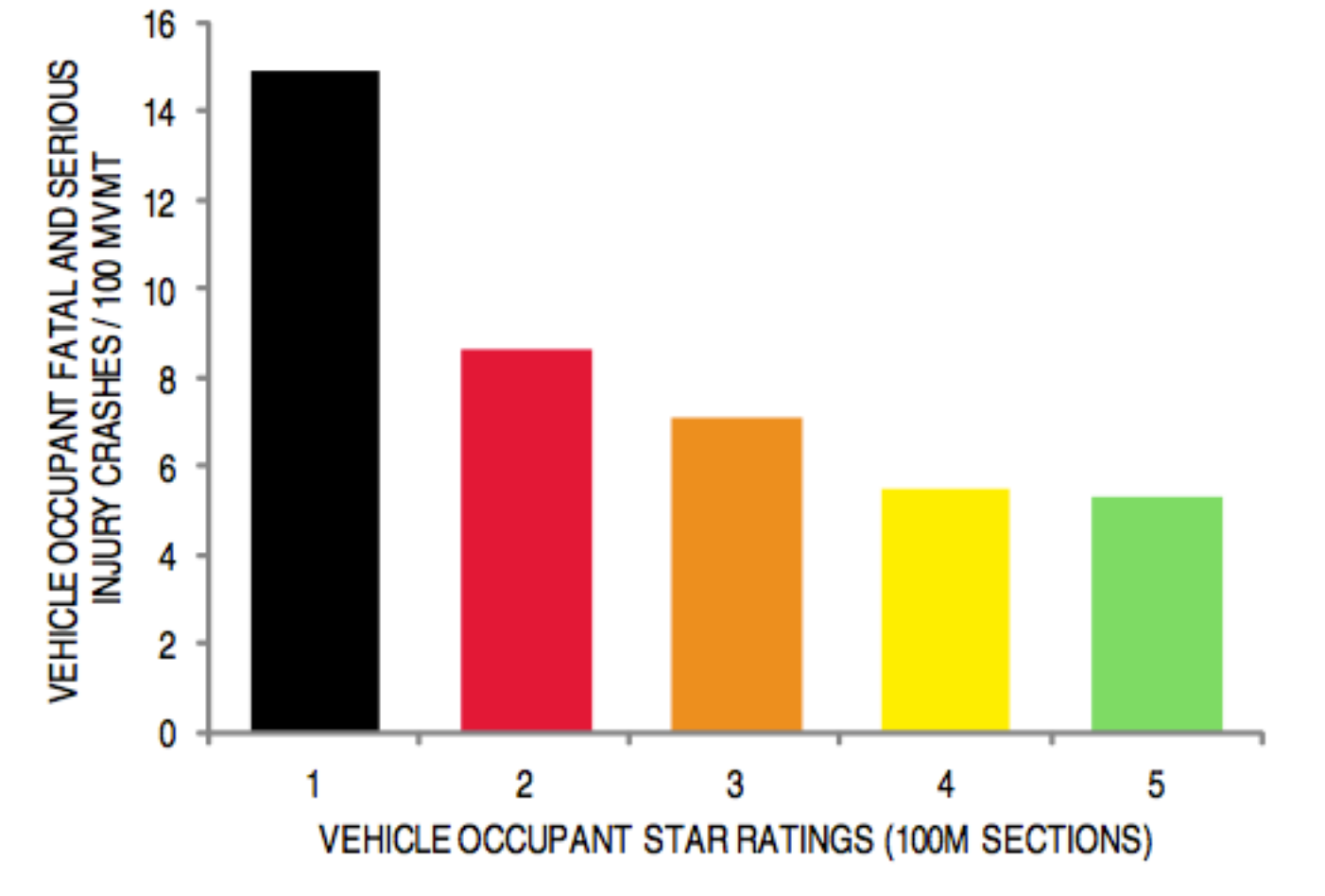
Star ratings and crash rates



Goal: Upgrade roads to iRAP 3 Star Rating where feasible

- Select safety improvements based on economic returns
  - For very low volume roads – 3 star may not be justified
- Develop investment plan to achieve lower crash rates and save lives
- Build capacity of government to use data-driven approach to improving safety
- Build up iRAP database in developing country context

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ChinaRAP Team in Field

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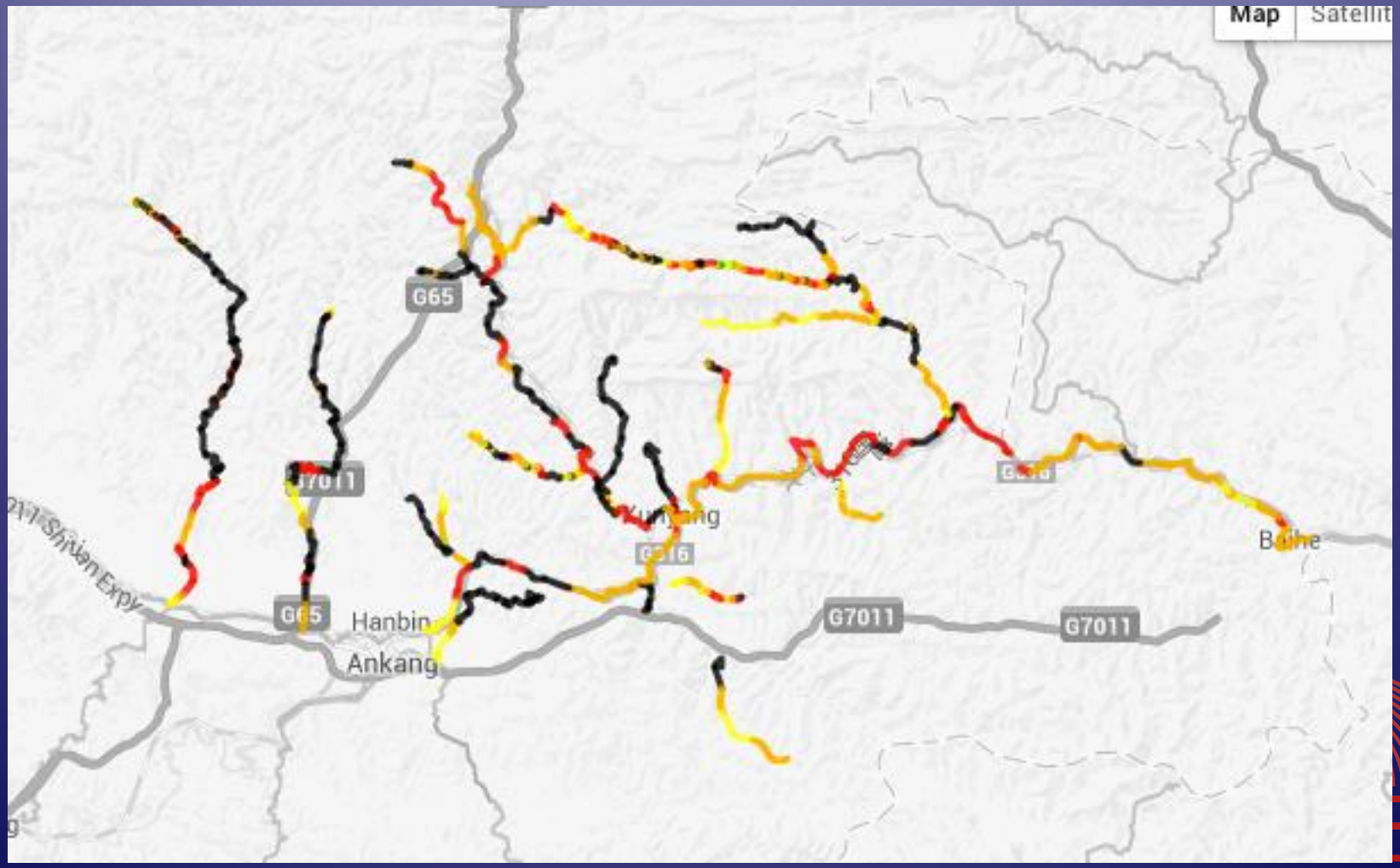
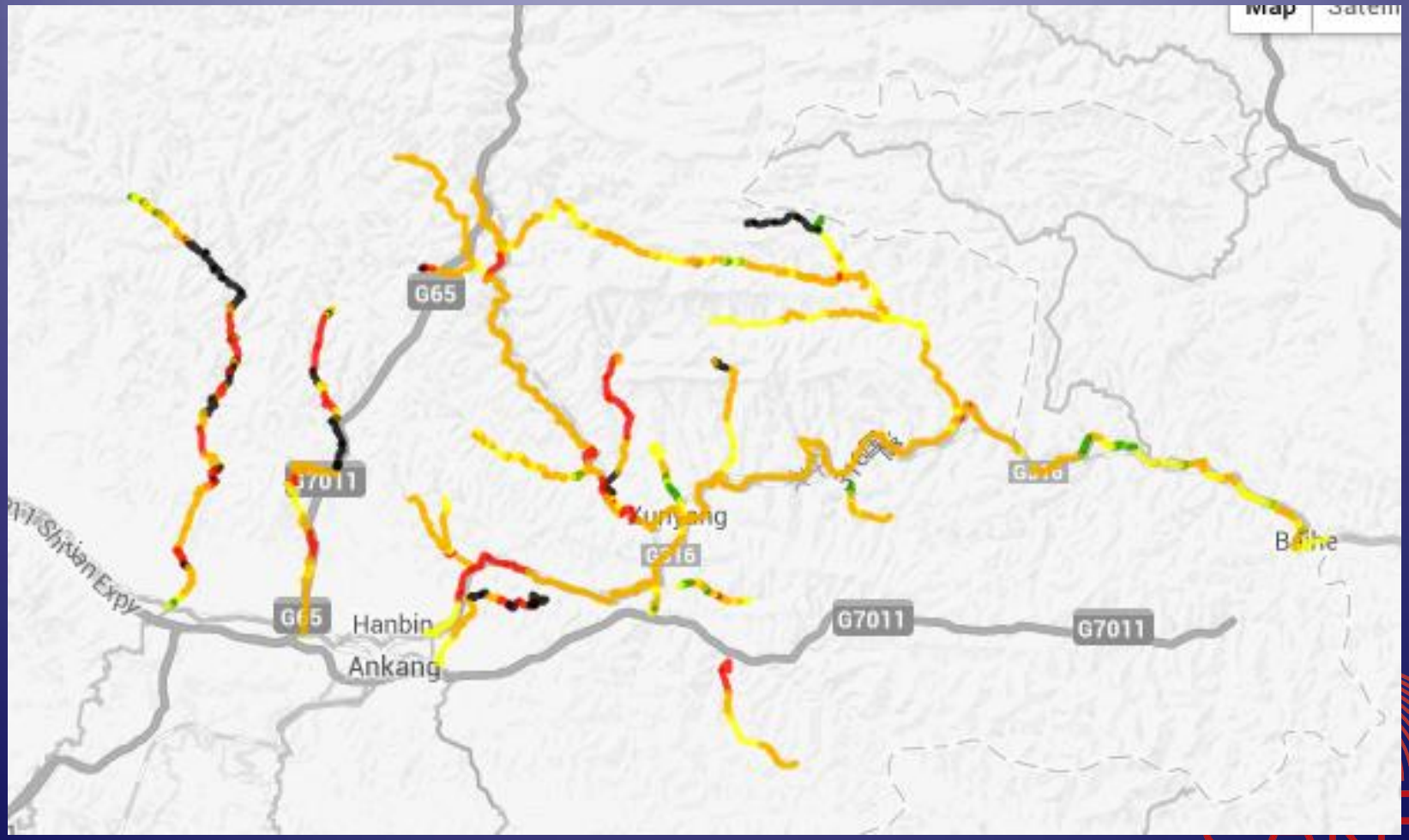
Example – Project and surrounding roads (Before)



Example – Project and surrounding roads (After)



Projected impact

- Potential investments identified across all project roads (1,000 km)
- Cost of CNY655 million
- Fatalities and serious injuries (FSI) saved: 7,099 over 20 years

- Expected ADB/Government approval in 2015

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