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8th Regional Knowledge Sharing Event, Chongqing PRC

SHAANXI MOUNTAIN ROAD SAFETY DEMONSTRATION PROJECT, PRC

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Road Safety and the SDGs

SDGs is more demanding than UN Decade of Action

SUSTAINABLE DEVELOPMENT GOAL 3

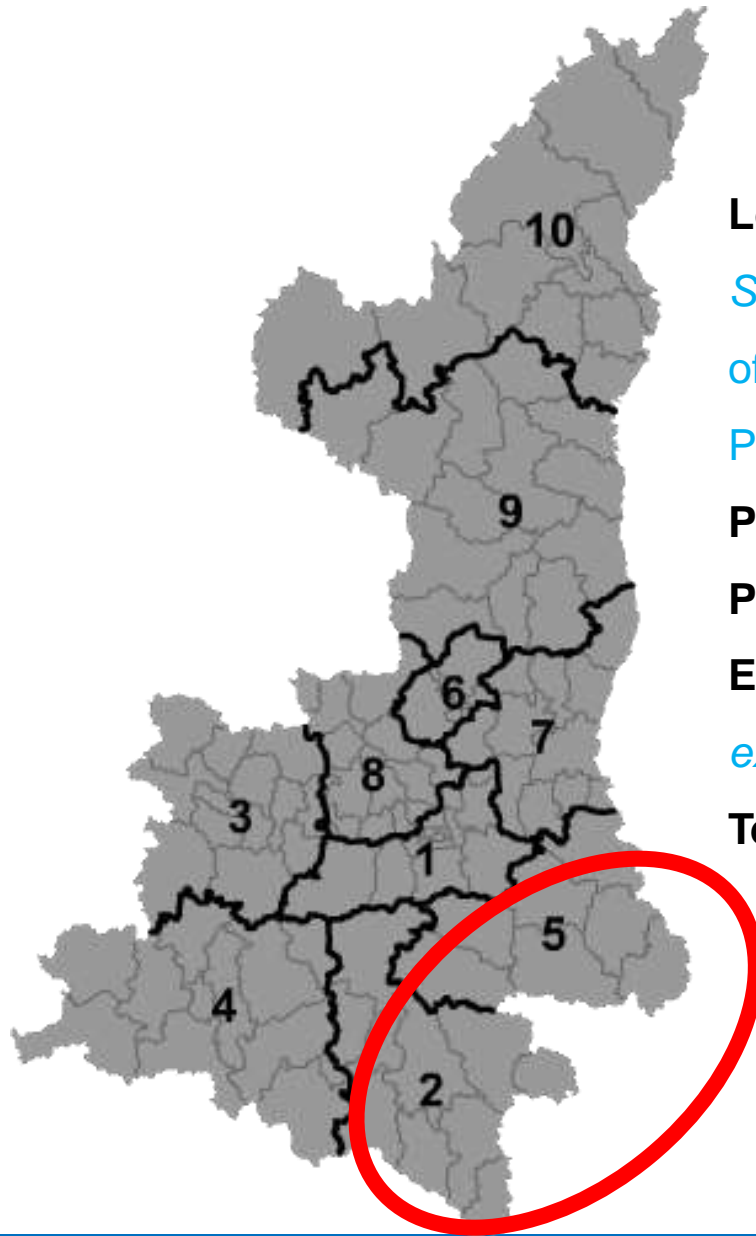
Ensure healthy lives and promote well-being for all at all ages:

3.6. By 2020, halve the number of global deaths and injuries from road traffic accidents.

SUSTAINABLE DEVELOPMENT GOAL 11

Make cities and human settlements inclusive, safe, resilient and sustainable:

11.2. By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.



Location: *Angkang County (2) and Shangluong County (5), Southeast of Shaanxi Province, Northwest PRC*

Population: *>5 million people*

Poverty rates: *>35% (2011)*

Economy: *agriculture, mineral extraction, and tourism*

Terrain: *Mountainous*

THE ROAD SAFETY PROBLEM



>50 fatalities per year

>450 injuries per year;

>1000 crashes per year

Unsafe and unforgiving design and conditions



4x national average crash rate

12x national average fatality rate

High Risk Roads



>50% of crashes ends in deaths



Vulnerable Road Users



THE PROJECT



Approved in 2015, implementation April 2016

Rehabilitation with safety enhancement on *201.9km trunk roads; 139.7 km of rural roads*

Road safety improvements on 566.3 km of rural roads

\$50 million road safety program

Expected to reduce fatalities and serious injuries by 7,099 over 20 years



ADDRESSING THE CHALLENGE

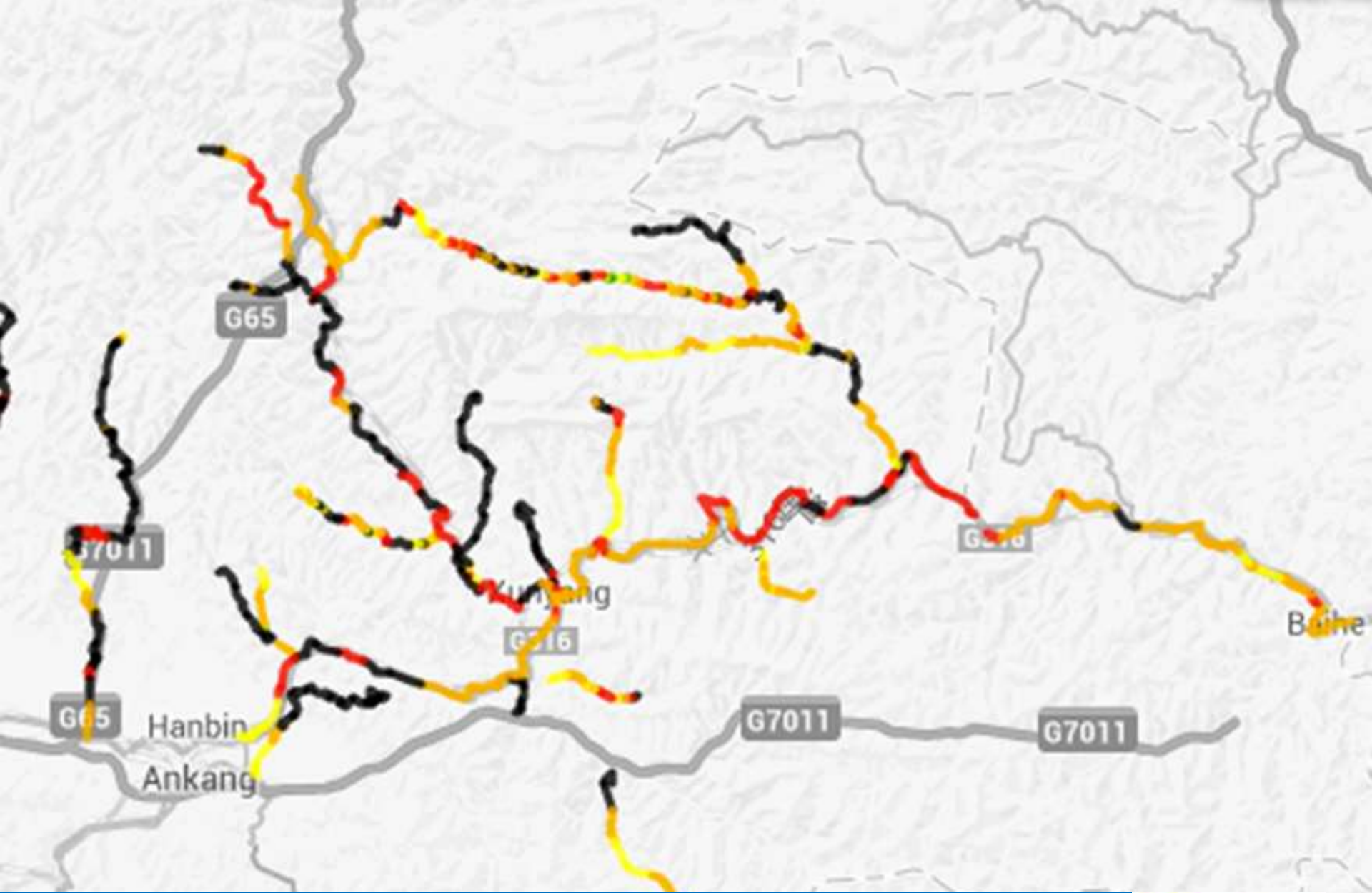


Addressing the challenges

- **Improve safety** for designs of project roads
- Incorporate **road safety design tools and performance measures**
- **Build capacity** of government safety unit and local bureaus
 - *Improve enforcement at local police level*
 - *Education campaign for drivers and area residents*
- Capacity building in **road safety education and community awareness program**

Road Safety Methodology

- **iRAP methods transferred** to Research Institute of Highway, operates as ChinaRAP
 - *iRAP tools and methodology adapted to evaluate and improve safety designs*
 - *upgrade roads to minimum iRAP's 3 star rating where possible*
- **Safety improvements** selected based on economic returns
 - *3 star may not be justified on low volume roads.*
- **Develop investment plan** to achieve *lower crash rates and save lives*
- **Build capacity of government** to use data-driven approach to improving safety



Project and surrounding roads (Before)

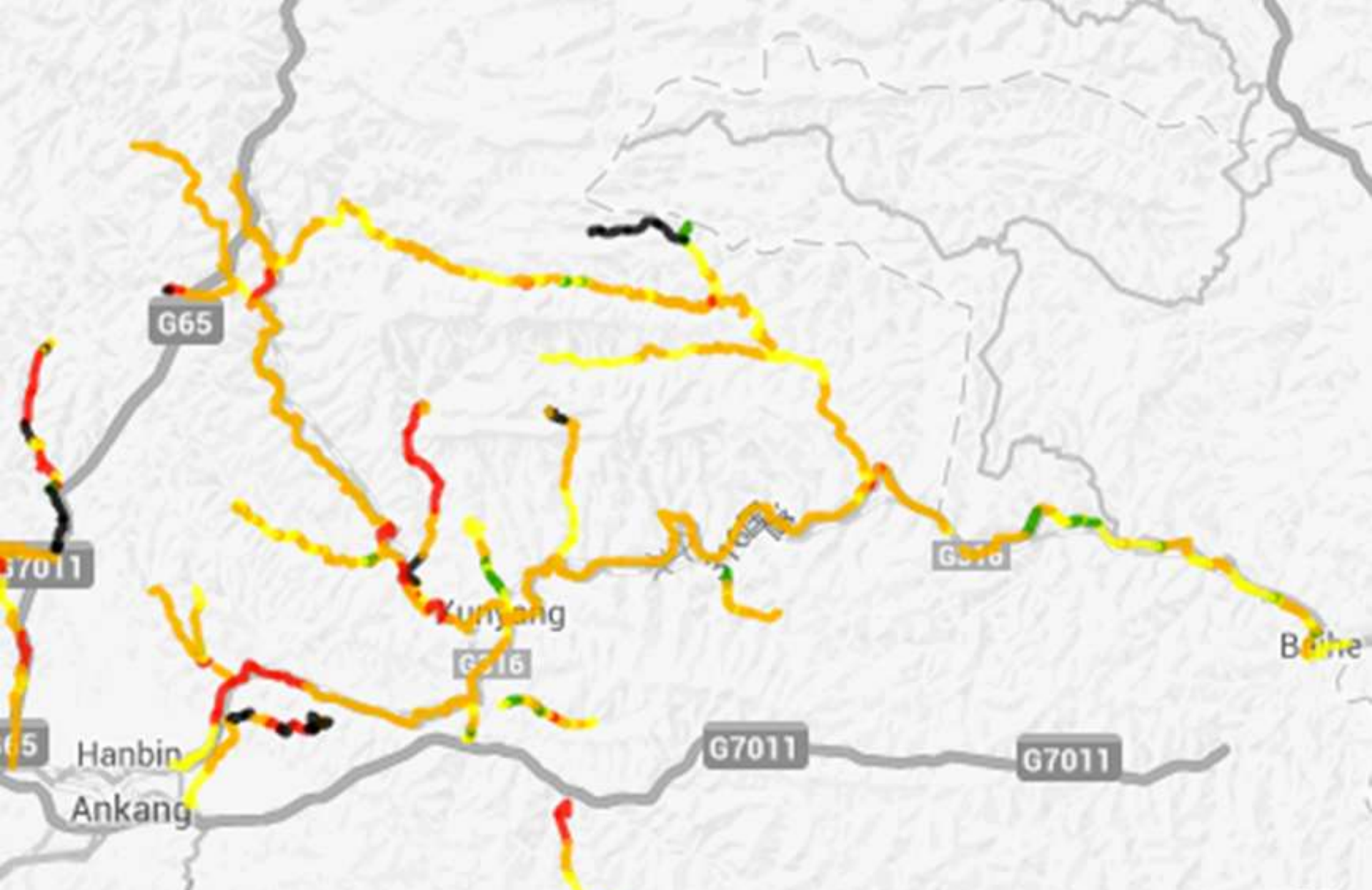


Safe road investments

- Junctions, roadside parking/ rest areas, hillside slow vehicle lanes, safety barriers, signage and road marking, roadside safety barriers, paved shoulders, realignments, enhanced skid resistance, traffic calming and pedestrian crossings
- Trials of countermeasure types not commonly used in PRC
 - *vehicle activated signs, flexible delineator posts, and colored pavement treatments*

Special downhill slow vehicle lane





Project and surrounding roads (After)



Road Safety Education - Walk Wise



- School-based education
- Community education
- Ownership and capacity building
- Monitoring & Evaluation

Lessons Learned

- **iRAP methodology** has been used in *PRC, Bangladesh, India, and Nepal.*
- **Improved road safety** in detailed design by loan inception
- Very early stages of project implementation
 - *Road safety consulting services recruitment in progress*
 - *Construction scheduled to began July – October 2016*
- **Government support** is key to a successful pilot projects

Conclusion

- Congratulations to the organizers– ADB is honored to take part in the 8th Regional Knowledge Sharing Event
- ADB has a strong commitment to deliver sustainable transport projects–safety is an essential component to sustainable transport
- ADB thanks the Shaanxi Provincial Government for its support to pilot this project.

THANK YOU

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