



**IRF WORLD ROAD
MEETING 2017**

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**Applying Global Road Safety
Lessons in World Bank
Projects in South Asia**

Arnab Bandyopadhyay
Lead Transport Specialist
World Bank
abandyopadhyay@worldbank.org

SUPPORTING FORMULATION OF ROAD SAFETY LEAD AGENCIES

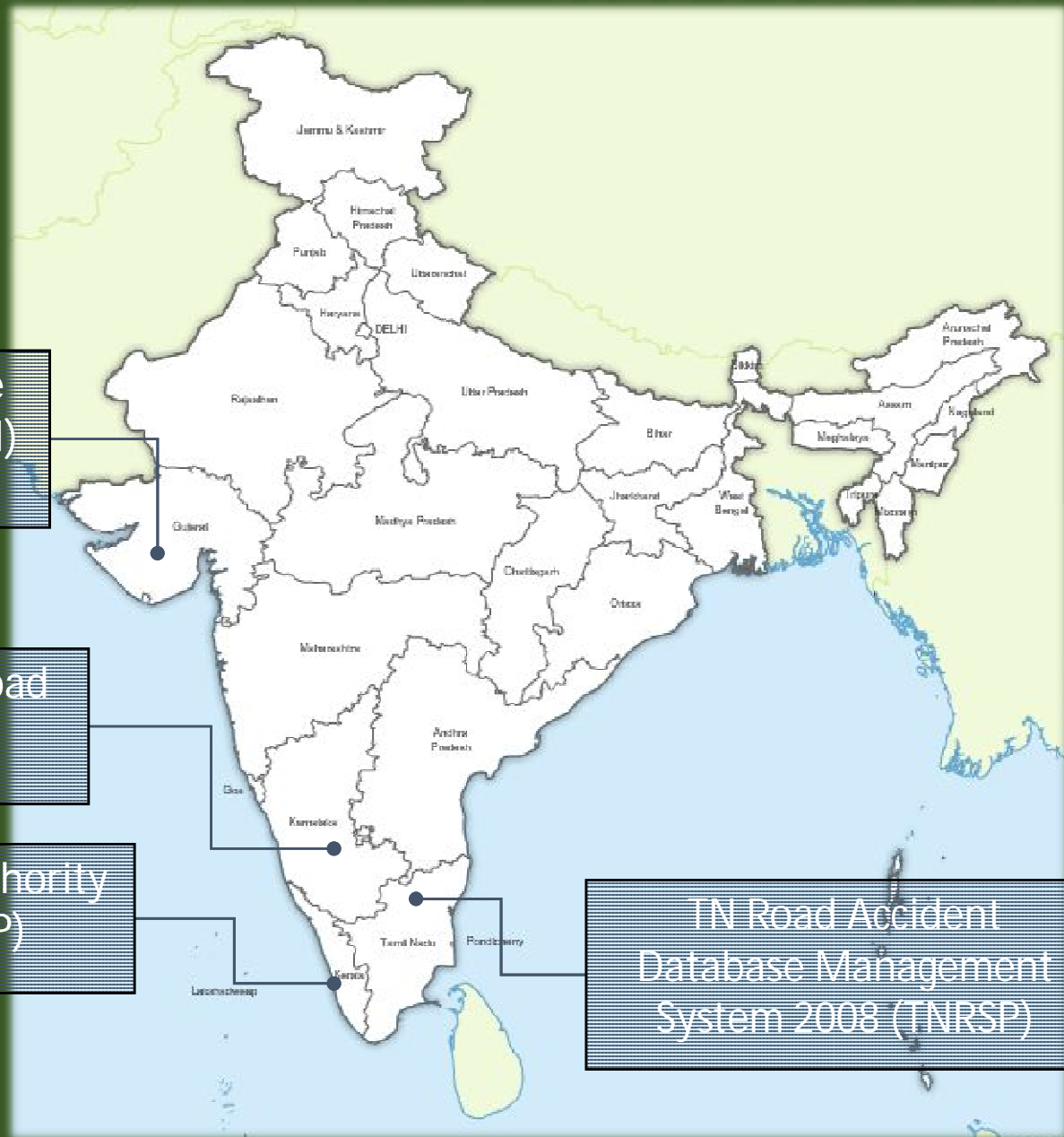
NOTABLE LEAD AGENCY INITIATIVES

Gujarat Steering Committee
for Road Safety, 2012 (GSHPII)

Karnataka Traffic and Road
Safety Cell, 2011
(KSHPII)

Kerala Road Safety Authority
& Fund 2007 (KSTP)

TN Road Accident
Database Management
System 2008 (TNRSP)

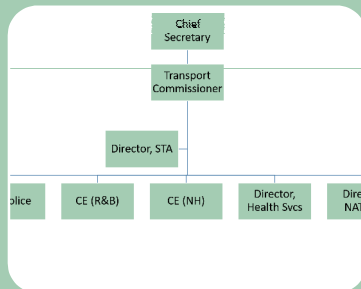


KERALA – ROAD SAFETY AUTHORITY



Established through the Kerala Road Safety Act (KRSA), 2007 through technical assistance from World Bank's Kerala State Transport Project (KSTP)

First of its kind in India and now being considered as a model for other states for overall road safety management



Structure

- Headed by State's Chief Secretary
- Representatives from Police, Roads (NH & SH), Health and others (NATPAC, KELTRON)
- District Road Safety Councils



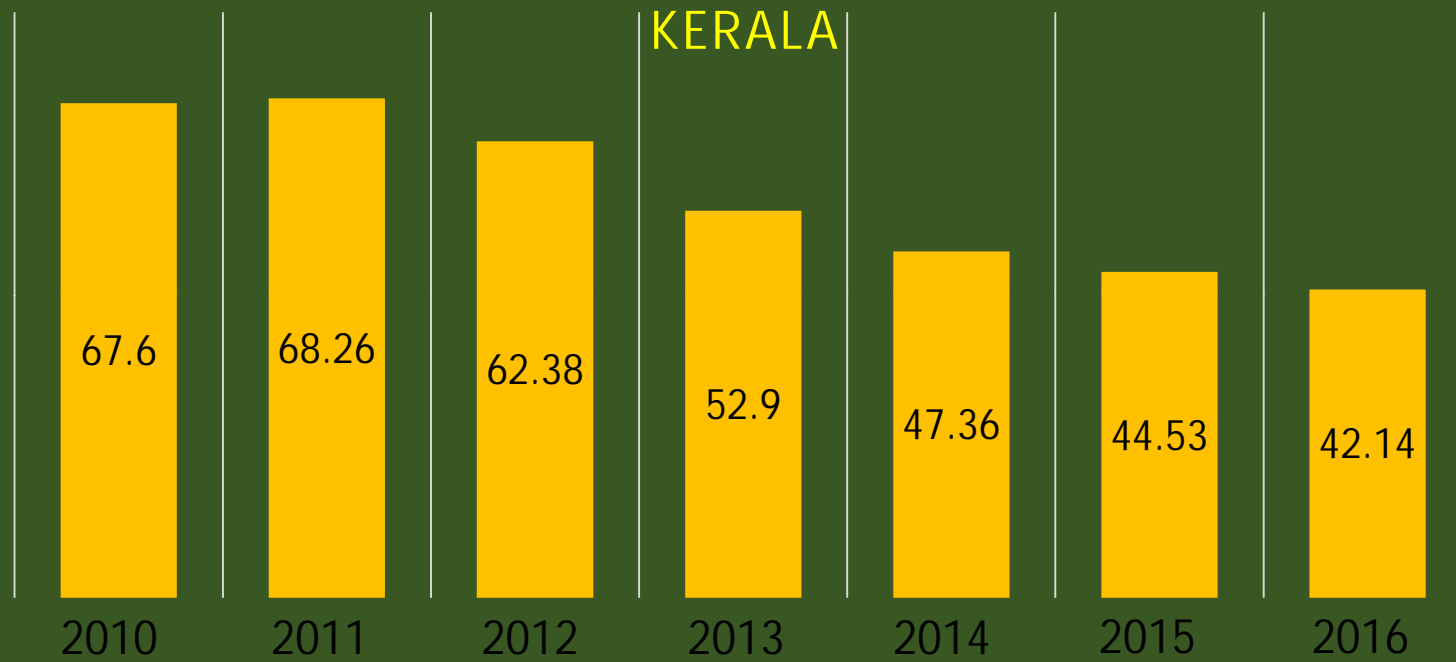
Financing

- One-time cess through KRSA and 50% of compounding fees from traffic penalties
- Grants and contributions from government and others
- Allocated about INR 145 crore for safety activities (till 2017-18)

KRSA INITIATIVES

- Formulated State Road Safety Policy and Action Plan and initiated road safety audits in all state road projects
- Established Road Safety Cells in Roads, Police, Health, Transport and Education Departments for formulating state-wide road safety proposals and effective monitoring of their implementation
- Established state-level Accident Review Committee with representatives from Police, Roads and Transport to review serious crashes
 - District level committees to review and analyse all crash sites with more than two fatalities
- Recently strengthened with a specialised Technical Solutions Group and enhanced M& E Focus

RATE OF FATALITIES PER 100,000 REGISTERED VEHICLES 2010-2016



SAFE CORRIDOR DEMONSTRATION PROJECTS

SAFE CORRIDOR DEMONSTRATION PROJECTS

World Bank Project	State(s)	Status	Length (km)
	AP		138
Andhra Pradesh & Telangana Road Sector Project	Telangana	Ongoing	124
Assam State Road Project	Assam	Ongoing	46
Gujarat State Highway project II	Gujarat	Ongoing	30
Karnataka State Highway Improvement Project II	Karnataka	Ongoing	60
Rajasthan Road Sector Modernization Project	Gujarat	Ongoing	165
Second Kerala State Transport Project	Kerala	Ongoing	80
Tamil Nadu Road Sector Project II	Tamil Nadu	Ongoing	100
Total			743

KARNATAKA – SAFE CORRIDOR DEMO PROJECT

Multi-sectoral
interventions on
about 60 km of road
function
improvements
Better Truck Parking
speed calming
Raised Pedestrian
Crossings
Better bus bays and
shelters
Ghat section
improvements



Belgaum to Yaragatti

SCDP – SOME SNAPSHOTS



Traffic Calming at all Major Junctions



Better Delineation



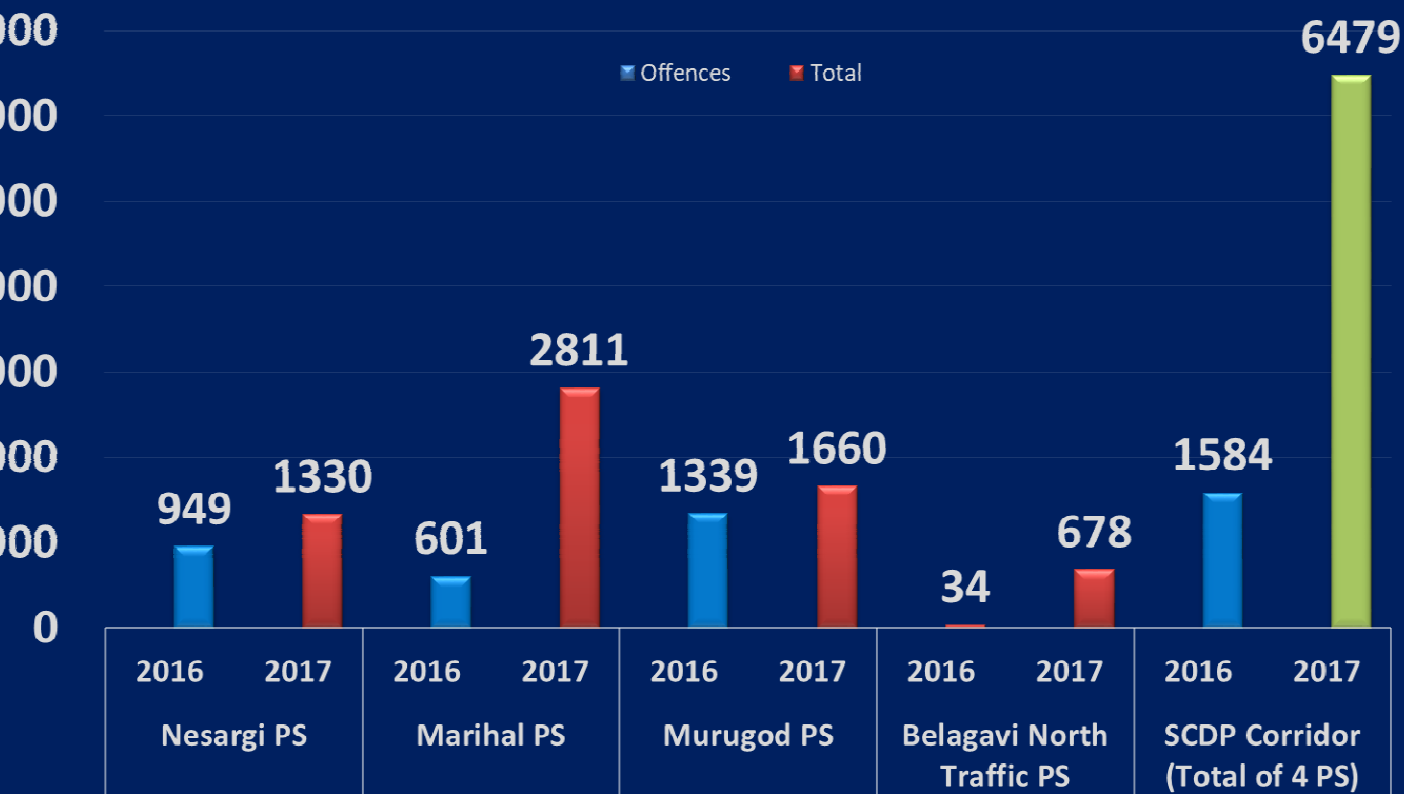
Better Pedestrian and Bus Facilities



Better Truck Parking Facilities

SCDP – INCREASED ENFORCEMENT ACTIVITY

Traffic Cases Booked

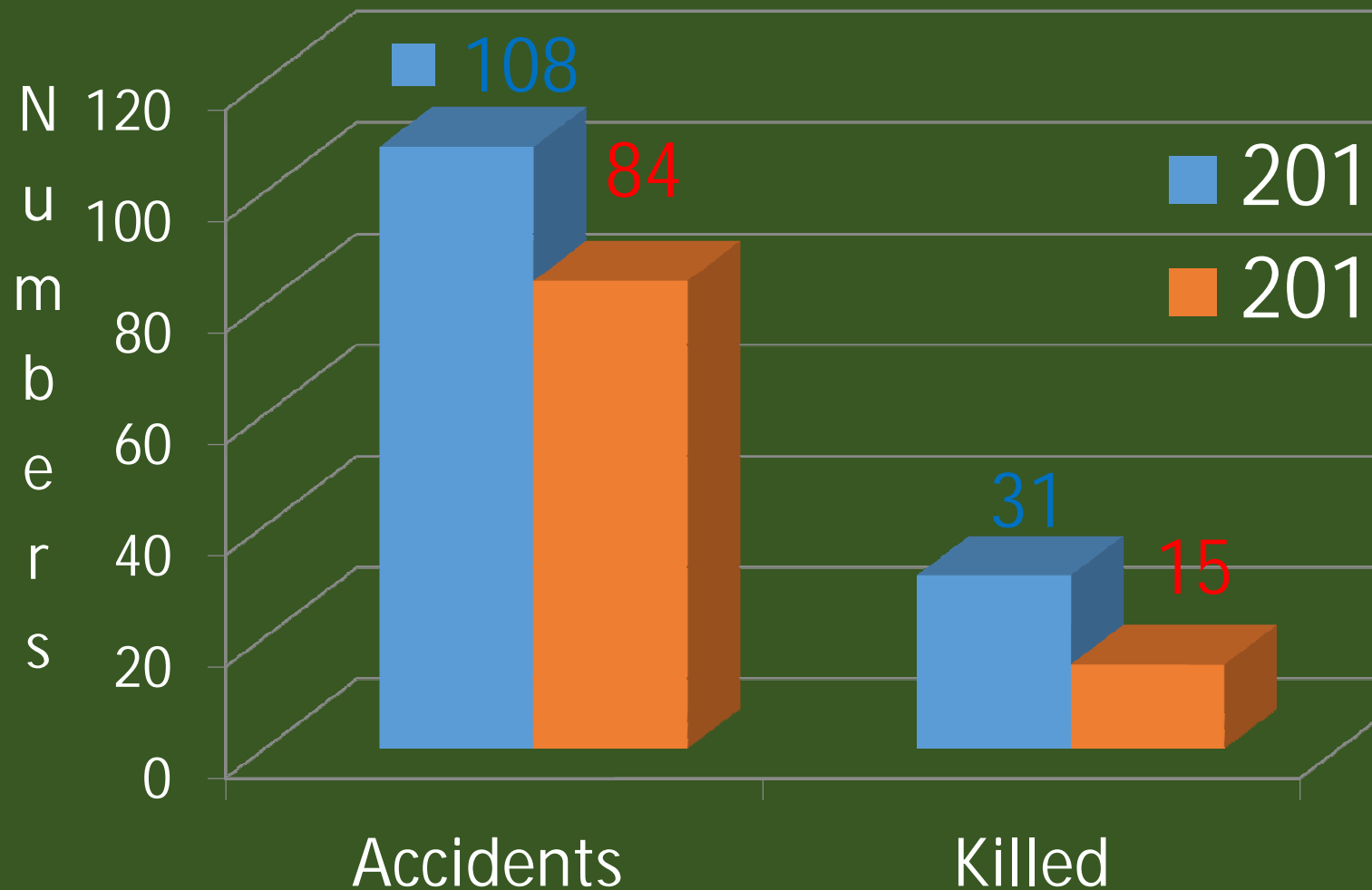


SCDP – ROAD SAFETY OUTCOMES

Accidents and Persons Killed in 2016 and 2017
Jan 16 to Sep 16 vs Jan 17 to Sep 17

Almost 50%
reduction in road
fatalities in January-
June 2017 as
compared to same
period in 2016

Increased
compliance with
posted speeds and
helmet wearing



INTEGRATED SOLUTION FOR CLEAN AIR AND SAFETY CHALLENGES

Integrating Clean Air and Road safety Initiatives

Clean Air & Sustainable Environment (CASE)

Project DHAKA

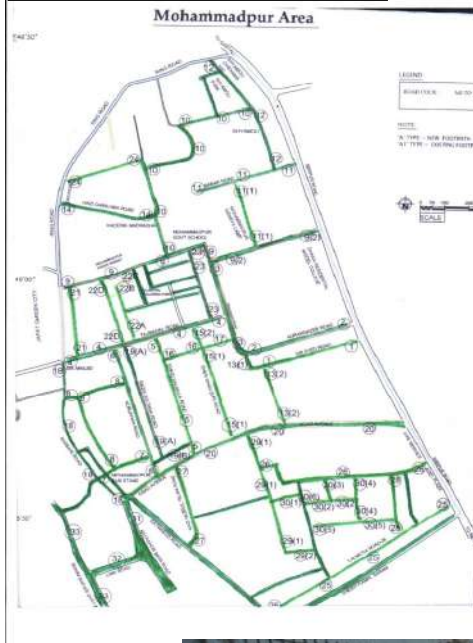


Transport Component \$65.7M:

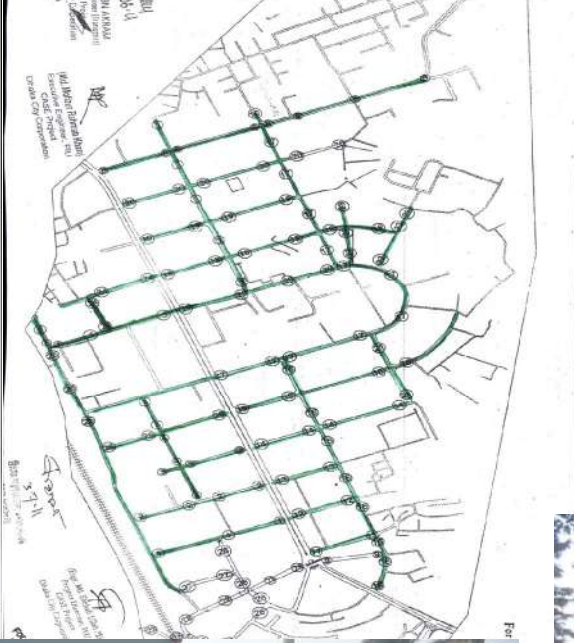
- Sidewalk improvement with drainage (88km)
- Foot-Over-Bridges (FOBs) (23)
- Intersection improvement (39 intersections)
- Traffic signals (91 intersections)
- Awareness campaigns
- Studies for BRT
- Pilot improvement for people with limited mobility

Sidewalk: 60kms have been improved to create pedestrian friendly

Mohammedpur



Tejgaon



15 FOBs have been completed to allow pedestrians cross busy roads safely

Location	Before FOB (# of people crossing road)	After FOB	
		FOB	Road
Banani	14,800	13,073	1725
Metro Shopping Complex	21,125	18,626	1940



32 Intersections improved, 62 traffic signals installed.

- Physical alignment of intersections improved to streamline movement of vehicles and pedestrians.
- Traffic signals will be synchronized at major corridors.



Hand signaling by police

Installed traffic signal with countdown timer



Awareness Raising Campaign

List of Activities	
National Bengali & English newspapers	
Outdoor activities (campaign, posters, etc)	
National Road Safety Day outdoor rally, TV talk show etc	
Poster, sticker, souvenir, leaflet	
TV video clip	
Radio documentary	
Website	



T-Shirt



Engagement with Police

- Capacity Building in traffic signal operation and on traffic management
- Study tours to China and India (Delhi and Mumbai)
- Equipment for traffic management
- Piloting Driver system for crash data collection

INTEGRATED ROAD ASSET MANAGEMENT AND SAFETY ENHANCEMENT PROGRAMS



Implementation of road safety measures in project roads (as part of OPRC, upgradation and rehabilitation works)



Punjab State Road Sector Project:

Road Safety Assessment of 4539 km of State Highway Network

Targeted Program of road safety improvement work (consistent application of standard layouts and treatments)



Focus on:

- Minor junctions (5715)
- Curves (3957)
- Villages - gateway treatments (1108)
- School zones (678)



Punjab State Road Sector Project



Blackspots
Program
(290
blackspots)



CUSTOMISED ROAD SAFETY SOLUTIONS LEVERAGING OTHER GLOBAL INITIATIVES / FUNDING

Nepal – Improving Road Infrastructure re Safety

- Increased focus on improving connectivity through all-weather roads led to high toll of road crash fatalities (1,816 road fatalities in 2013)
- Very low motorization rate (4.5 vehicles/1000 pop.), yet very high fatality risk of 14.3 road deaths/10,000 vehicles (40 times more dangerous than UK)
- Elevated risk of high-fatality crashes (>30 deaths/crash) on long-distance hilly roads – run-off over steep cliffs with no side-barrier protection
- Heavy vehicles, particularly buses, involved in 70% of fatal crashes on highways
- High risk for pedestrians sharing the road when passing through communities

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DfID (UK) support through WB grant to reduce risk of departure crashes



W-beam crash barrier installation along cliff side Khodpe Bajhang Road



Drainage improvement in Pokhara



Footpaths in villages along
Siddhartha Highway

- Crash barrier installation on high risk locations on the 700 km of Strategic Road Network (grant: 6.7m USD)
- Project allowed for increased technical capacity of the local road departments/local contractors
- GoN planning on expanding the road safety screening to 5,000 km of SRN to scale up current interventions

Strengthening of institutional capacity & road safety policy reform in Nepal

A second portion of the grant (0.8 m USD) was used for operationalizing the Nepal Road Safety Action Plan:

- Cabinet approval secured for the formation of the Nepal Road Safety Council & Secretariat
- Commitment to use 10% of road maintenance budget for safety treatment upkeeping
- Introduction of graduate level road safety course at the Institute of Engineering
- Development of a crash database management system
- Amendment drafts prepared for the Motor Vehicle Traffic Management Act and Regulations, under review by the Ministry of Law and Justice.



THANK YOU