Road Safety Countermeasures on Blackspots on National Highways of Bangladesh

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Presentation outline

- Institutional setup of RHD
- Overview of road sector and policy environment
- Priorities in road sector
- Identification of projects for implementation
- Challenges
RHD Road Network

National -- 3,570 km
Regional -- 4,323 km
Zilla -- 13,678 km
Total Roads 21,571 km

Bridges: 4,507 nos
Culverts: 13,678 nos

Source: HDM, Roads and Highways Department
Institutional Setup of RHD

Chief Engineer’s Office

Wings at HQ
- Planning and Maintenance Wing
- Management Services Wing
- Technical Services Wing
- Mechanical Wing
- Bridge Management Wing

Zones at Field
- Dhaka Zone
- Comilla Zone
- Rangpur Zone
- Barisal Zone
- Sylhet Zone
- Chittagong Zone
- Rajshahi Zone
- Khulna Zone
- Gopalganj
- Mymensingh Zone

Project Implementation Units
Identification of Blackspots

- Police Records at Filed
- Accident Database at BRTA
- Data Analysis by ARI, BUET
- RHD (209 Blackspots)

Field Visit by Road Safety Unit in 2011
Analysis of Data and Field Information
144 spots are selected for intervention
Selected blackspots for intervention

209 ARI, BUET
18 New Inclusion by
56 intervention included in other projects
27 intervened by field units
144 Finally selected for Intervention
Engineering countermeasures

Interventions
- Widening of Pavement
- T & Y Junction or Intersection development
- Easing of Curves
- Bus-Bay
- Bazar Area Development

Interventions
- Hard Shoulder Construction
- Construction of Road Divider
- Super Elevation Correction
- Foot-over Bridge
- Reflector Road Marking, Sign, Signal
Black Spots at T/Y Junctions

- Grade difference between National Highways and the side roads
- Lack of uniformity of construction by RHD & LGED
  - Road side activity
  - Illegal and on-street parking
- Side Impact or Rear-end Collision
Black spots at sharp curves

- Land Constraints
  - Built up Area
- Compromised Design
  - at curves
- Head-on Rear-end or
  - Side Impact Collision
Black Spots at Bazaar Areas

- Road Side Activity
- Frequent Pedestrian Crossing
- Presence of Mixed Traffic
- Head-on, Rear-end or Side Impact Collision
Routine works to mitigate Black Spots

- Mitigation of blackspots under maintenance budget
- Establishment of Sign, Signal, etc.
- Repainting of road marks
- Trimming of tress at inner bends
"Improvement of Road Safety at Black Spots on National Highways" (29 Mile Bus Stand) of Dhaka (Mirpur)-Utholi-Paturia-Kashinathpur- Bogra- Rangpur-Beldanga-Banglabandha Road under Road Division Thakurgaon.

Dandogaon 29 Mile Bus Stand.

Sub-Assistant Engineer, RHD,
Road Sub-Division, Thakurgaon.

Sub-Division Engineer, RHD,
Road Sub-Division, Thakurgaon.

Executive Engineer, RHD,
Road Division, Thakurgaon.

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Easing of curves

* Pedestrian Crossing should be placed at desired safe location.
  Thus local Road Division can change the Placement of Pedestrian
  Crossing location keeping all required features and signs and Marking.
"Improvement of Road Safety at Black Spots on National Highways" (Saidpur Bus Terminal, Sutkir Moor) of Dhaka (Mirpur)-Utholi-Paturia-Kashinathpur-Bogra-Rangpur-Beldanga-Banglabandha Road under Road Division Nilphamari.
Improvement of Road Safety at Black Spots on National Highways*
(Kamarpukur Bazar) of Dhaka (Mirpur)-Utholi-Paturia-Kashinathpur-
Bogra- Rangpur-Bidlanga-Banglabandha Road under Road Division Nilphamari.

SL. NO-01

Bazaar Area Development

SAIDPUR

NOTE

R.S : RUMBLE STRIPS
F5: LANE LINE - Traffic Signs Manual (Volume-1) Page-190
A26 : SPECIAL SPEED LIMIT - Traffic Signs Manual (Volume-1) Page-32
B35 : NARROW BRIDGE - Traffic Signs Manual (Volume-1) Page-84

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NJB : NEW JERSEY BARRIER
* BAZAR SIGN
Narail Intersection
S.L No. 02

* Pedestrian Crossing should be placed at desired safe location.
This local Road Division can change the placement of Pedestrian Crossing location keeping all required features and signs/Marking.

NOTE: If measurement(s) is (are) not shown in the drawing please measure the dimension(s) from drawing using AutoCAD.
Routine works to improve Road Safety

12 Backspots addressed on National Highway (NH-5) under Manikgonj Road Division
Outcome of Road Safety measures in RHD

Mortality Reduction in Dhaka-Aricha National Highway (NH-5)

117 (2011-12) → 88.89% Reduction → 13 (2012-13)
Thank you