Road Safety – an ADB Perspective

Oleg Tonkonogjenkov, M.Sc., Ph.D.
Transport Specialist
South Asia Department
Asian Development Bank

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ADB Vision and Long Term Strategy

- ADB Vision: Asia and Pacific free of poverty
- ADB Strategy 2020 - 5 core operational areas:
  - Infrastructure
  - Environment
  - Regional cooperation and integration
  - Finance sector development
  - Education
- Road safety is aligned with ADB Vision and Strategy:
  - Road safety is factor affecting poverty and it must be integral to road infrastructure
Is Current Road Safety Assistance Adequate?

- UN Commission for Global Road Safety has recommended that all development banks include in road projects a minimum of 10% for road safety.
Growing Need for Road Safety Assistance

- Between 2000 and 2020, road traffic fatalities in Asia will increase by more than 80%.
- By 2020 road casualties will become the third highest contributor to global disease and injury.
- In Asia and the Pacific:
  - 44% of global road deaths
  - 16% of the world’s motorized vehicle fleet.
Example: India

- The road mortality rate
  - 7 times higher than in developed countries

- The number of people killed in road crashes
  - Exceeds casualties from TB, AIDS and Malaria combined.

- If no full scale action is taken now, then:
  - by year 2015 the number of fatalities and serious injures in road crashes will exceed 150,000 and 3 Mln., respectively

- A study by the Planning Commission in 2002:
  - Social cost of road accidents in India constitutes 3% of the GDP.

- 70% of families that lost their main earner in road accidents fall below the poverty line
Road Safety Thinking

- **Old thinking**
  - "Road casualties are inevitable cost of mobility"
  - "Accidents are fault of road users"
  - *Mobility Versus Safety*

- **New thinking**
  - "Road casualties are preventable"
  - "Road user errors can be prevented or minimized"
  - "Consequences of road users errors can be reduced"
  - *Designers and operators of road transportation system are responsible for safety*
  - *Mobility Plus Safety*

- **Transition**
Fatality Rate and Engineering Measures (Canada)

Fatality Rate and Non-Engineering Measures (Canada)

If the governments spend only 10% of the costs of road crashes on safety, they can prevent 70% of those costs.

Source: Ayati, E, Young, M. *The cost effectiveness of investments in traffic safety projects in Iran*. TES, September 2002
How to Step Up ADB Road Safety Assistance

- Limited budget
- Investment in road safety should give visible results
- Investment projects should be readily replicated
- Stand-Alone, High Cost Road Safety Projects
Stand-Alone Road Safety Projects: Concept

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<th>PHASE 2</th>
<th>PHASE 3</th>
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<td><strong>Implementation</strong></td>
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Other Corridor Programs
Why Target High-Risk, High-Volume Corridors?

20% of roads account for 79% of traffic and 87% of social cost of crashes

10% of roads account for 56% of traffic and 74% of social cost of crashes

What Can be Done in the Corridors?

**MEDIUM-COST**
- bus stop bays, pedestrian sidewalks, sealed shoulder, rumble strips, speed management, lighting, roadside hardware, clear zones, road widening etc

**LOW-COST**
- road marking, delineation and signing, rural-urban thresholds etc

**HIGH-COST**
- frontage roads, roundabouts, divided roadways, bypasses, cantilever ped sidewalks, bridge widening, ped overpasses, grade separation, curve flattening etc

Road safety capacity of road agencies in charge
- Coordination of counterparts and community involvement
- Safety conscious planning, operation and maintenance

**HIGH-RISK CORRIDOR**
- Road Safety and Traffic Enhancement Engineering
- Enforcement
- Accident Information System
- Emergency Response System
- Dispatch center, 911 number, rescue network (cranes, ambulances, hospitals), equipment, staffing, training

**Training**
- New MVA Police Record Form, software and hardware
- Institutional arrangements, staffing and training
- Equipment and software

**Fully equipped and staffed stationary traffic police posts**
**Fully equipped and staffed mobile patrol units**
before

after

Source: Ross, A; Baguley, C; Hills, B; McDonald, M; Silcock, D (1994) Towards Safer Roads in Developing Countries. Transport Research Laboratory, Ross Silcock Partnership; Overseas Development Administration
before

after

Right photo: courtesy of Ross, A; Baguley, C; Hills, B; McDonald, M; Silcock, D (1994) Towards Safer Roads in Developing Countries. Transport Research Laboratory, Ross Silcock Partnership; Overseas Development Administration
before

after
before

after
before

after

Right photo/scheme: courtesy of Ross, A; Baguley, C; Hills, B; McDonald, M; Silcock, D (1994) Towards Safer Roads in Developing Countries, Transport Research Laboratory, Ross Silcock Partnership; Overseas Development Administration
Illustrative Concept for Team of Experts Phase 1 – Policy and Advisory TA

- Multi-Sectoral team
- Paring of National/International
Illustrative Organizational Structure

- **PROJECT STEERING COMMITTEE**
  - **CHAIR**
  - **MEMBER** (Road Safety Engineering)
  - **MEMBER** (Vehicles and Drivers)
  - **MEMBER** (Emergency Medical Care)
  - **MEMBER** (Accident and Traffic Data)
  - **MEMBER** (Transport Corridor Management)
  - **MEMBER** (Police Enforcement)
  - **MEMBER** (Research and Education)
  - **MEMBER** (Road Safety Standards and Guidelines)

- **Future Dedicated Road Safety Agency**
  - **Task Force on Road Safety Engineering**
  - **Task Force on Vehicles and Drivers**
  - **Task Force on Emergency Medical Care**
  - **Task Force on Accident and Traffic Data**
  - **Task Force on Transport Corridor Management**
  - **Task Force on Police Enforcement**
  - **Task Force on Road Safety Research and Education**
  - **Task Force on Road Safety Standards and Guidelines**

- **PROJECT DIRECTOR**

- **ASIAN DEVELOPMENT BANK**

- **CONSULTANT**
Major Challenges

- Organizational structure in place
- Support to the team of experts
  - Access to data, dialogue, review & feedback
  - Commitment and ownership of the lead road safety agency or its prototype
- Qualifications of the team of experts
  - Road Safety and Traffic Engineering Qualification
  - Knowledge of international road safety practices and local conditions
- Old vs. New road safety thinking
End of Presentation

Thank you