Mainstreaming Road Safety in ADB Operations: Draft Action Plan

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Road Safety Problem

- Road traffic crashes will become the fifth leading cause of death by 2030
  - Between 2000 and 2020, road traffic fatalities in Asia will increase by more than 80%.

- Factor in Poverty:
  - In India, 70% of families that lost their main earner in road accidents fall below the poverty line
Global Call for Action in Road Safety

- UN General Assembly in February 2010:
  - Proclaimed the period 2011-2020 as the Decade of Action for Road Safety
    - Sets the goal: to stabilize and then reduce the forecast level of road traffic fatalities around the world
    - Invites MDBs to providing adequate and additional funding to activities relating to the Decade
How Effective Are Road Safety Interventions?

- **Road Safety Audits**
  - In UK the average fatal and injury crash frequency at the audited project sites drops almost 5 times more than at comparable non audited sites

- **Centreline rumble strips**
  - Can reduce the frequency of head-on crashes by 21%

- **Energy-absorbing barrier end treatments**
  - Reduce probability of fatalities in a crash by up to 78 per cent

- **Graduated licensing systems**
  - Reduce fatal crashes by 7%-35% across different countries, jurisdictions and target groups

- **Seat belts**
  - Reduce the risk of being killed in an accident
    - for a driver and front seat passenger by 40-50%
    - for a back seat passengers by 25%

- **Decrease in ambulance waiting time from 11-20 min to 1-10 min**
  - Leads to 50% decrease in the risk of a fatality
Effect of Engineering Measures (Canada)

Effect of Non-Engineering Measures (Canada)

ADB Sustainable Transport Initiative and Mainstreaming Road Safety

- STI will build up a portfolio of projects to support sustainable transport.

- STI identified four emerging needs:
  - regional cooperation and integration;
  - urban transport;
  - climate change and energy efficiency, and
  - road accidents and emerging social issues.

- STI will be implemented through specific action plans in each focus area.
Road Safety in ADB Operations: Key Issues

- Limited ADB capacity on road safety
  - Hampers policy dialogue with DMCs
  - Hampers preparing and managing of road safety TAs and loan components

- No system for incorporating road safety throughout ADB project cycle
  - Little or no guidance available to ADB staff
  - No safeguards to ensure road safety

- Road safety share in ADB road projects is 1–2%

- Assistance is provided mainly through road safety components of road infrastructure projects
  - Localized effects
  - Systemic issues with road safety in DMCs are not addressed.
  - Often suffer from the low quality design of components
  - Low quality use of available tools, such as road safety audits
  - Mainly limited to infrastructure measures
Action Plan: Focus, Objective and Scope

- **Focus:** actions that are internal to and within the control of ADB

- **Objective:** to establish a system ensuring sustainable and high quality incorporation of road safety in ADB operations

- Different from Action Plans on road safety in DMCs
  - contain country-specific physical and non-physical measures aiming at reducing road casualties in DMCs or jurisdictions

- Will put ADB in a better position to assist DMCs on road safety

- Confined to most urgent actions over the next 5 years

- Will be updated annually based on reviews of progress
Action Plan: Key Areas

A: Strengthen Internal Road Safety Management Capacity

B: Develop and operationalize procedures, guidelines and related tools to incorporate safety at each stage of the ADB project cycle

C: Strengthen and expedite implementation of existing road safety components

D: Identify opportunities for scaling up road safety in country strategies

E: Launch standalone road safety pipelines
A: Strengthen Internal Road Safety Management Capacity

A1: Establish Road Safety Group

A2: Launch systematic road safety training
   - For ADB professional staff
   - External/in-house training
     - Develop in-house training programs

A3: Create a pool of ADB staff consultants
   - To support road safety work in concerned divisions

A4: Create a retainer of qualified road safety consulting firms
   - To conduct road safety TAs
Proposed Institutional Arrangements

- TCOP
  - Road Safety

- Road Safety Group (ADB STAFF):
  1. all-round
  2. engineering
  3. non-engineering

- RSID

- STI FUND (Road Safety Portion)

- REGIONAL DEPARTMENTS
  - CONCERNED DIVISIONS
    - NON-ADB STAFF OF RSG:
      2. Long-term consultants
      2-3. Short-term consultants
    - POOL OF QUALIFIED CONSULTANTS
    - RETAINER OF CONSULTING FIRMS
      8-10 firms
TOR of Road Safety Group

- **Created in RSID**
  - guided by TCOP advisory team on road safety,
  - in charge of road safety work across ADB.

- **Tasks**
  - assisting divisions in road safety work at each stage in the project cycle
  - building internal road safety management capacity
  - developing and assisting with the implementation of procedures, guidelines and tools
  - developing, updating and monitoring the implementation of ADB road safety action plans.
RSG: Collective Qualification Requirements

- Road safety training
- Road safety audit at different stages
- Road safety inspections
- Road network screening
- Safety impact assessment
- Blackspot management
- Quantitative assessment of safety of design alternatives
- Quantitative assessment of societal costs of road trauma
- Country/jurisdiction strategies and action plans
- Accident data management
- Assessing/building road safety management capacity
- Highway rescue
- Enforcement
- Road safety legislature
- Road user education
- Driver licensing systems
- Awareness campaigns
- Road safety through ITS
- Positive guidance
- Passive/active vehicle safety
- Roadside hardware
B: Develop and Operationalize Procedures, Guidelines and Tools

B1: Develop

B2: Operationalize

B3: Develop and implement performance measures and monitoring/reporting system
   - To enable monitoring of ADB performance on road safety
Existing Situation

- **Little or no guidelines:**
  - on the incorporation in the ADB project cycle of the road safety tools already available
    - RSAs, Road Safety Inspections, Black Spot Management, Network Safety Management etc
  - on how to conduct the non-engineering road safety work
    - such as assessment of road safety management capacity of EAs
    - establishment of proper institutional arrangements and capacity for road safety in DMCs
    - establishing effective highway rescue system
    - enforcement
    - awareness campaigns
    - education
    - accident data collection/management
Available Tools for Incorporation in Road Infrastructure Project Cycle

- **Planning**
  - Road Safety Impact Assessment: Networks
    - SafeNET, EMME2, EXPLORER
  - Road Safety Audit: Networks, Roads, Elements
    - EasyAudit, FHWA RSA software, IBI Video-GIS mapping
  - IRAP: Roads, Road Networks
    - iRAP toolkit

- **Preliminary Design**
  - Road Safety Audit: Roads, Elements
    - EasyAudit, FHWA RSA software, IBI Video-GIS mapping
  - Quantitative Safety Evaluation of Design Alternatives and Societal costs of Road Trauma
    - IHSDM, SafetyAnalyst
  - Road Safety Audit: Roads, Elements
    - EasyAudit, FHWA RSA software, IBI Video-GIS mapping

- **Construction**
  - Road Safety Audits/Checks
    - Road Safety Audit: Roads, Elements
      - EasyAudit, FHWA RSA software, IBI Video-GIS mapping

- **Operation & Maintenance**
  - Accident Data Management: Collection, Verification, Storage, Retrieval, Processing
    - TRL MAAP etc
  - Traffic conflict analyses, Positive Guidance toolkits etc
  - Road Safety Audit: Roads, Elements
    - EasyAudit, FHWA RSA software, IBI Video-GIS mapping
  - Quantitative Road Safety Assessments
    - Statistical techniques for distribution analysis and overrepresentations
  - IRAP: Roads, Road Networks
    - iRAP toolkit
  - Road Network Screening
    - SafetyAnalyst, GLIM
  - Blackspot, Route and Area Safety Management
    - SafetyAnalyst, SURE, Risk Manager
  - Road Safety Audit: Networks, Roads, Elements
    - EasyAudit, FHWA RSA software, IBI Video-GIS mapping

- **Pre-Opening**
  - Traffic conflict analyses, Positive Guidance toolkits etc
  - Accident Data Management: Collection, Verification, Storage, Retrieval, Processing
    - TRL MAAP etc
  - Road Safety Audit: Roads, Elements
    - EasyAudit, FHWA RSA software, IBI Video-GIS mapping

- **Final Design**
  - Road Safety Audit: Roads, Elements
    - EasyAudit, FHWA RSA software, IBI Video-GIS mapping
Guidelines and Procedures to Incorporate Safety in ADB Project Cycle

- How to build strong case for road safety
  - Template TA/project proposals
  - Best experiences from other projects, countries
  - Coordinating with other Donors

- How to incorporate safety in planning, preliminary design, final design, operation and maintenance
- How to ensure sustainability
  - Model TORs, concept papers, components, etc
  - Accounting for societal cost of road trauma in feasibility studies
  - Checklists

- How to check if safety is incorporated in the project design
- How to ensure that safety is implemented as designed
- How to evaluate if project was successful in terms of safety
Milestones

- **Assessment of:**
  - Applicability and relevance of the tools
  - Needs for adjustments to specific conditions of DMCs
  - Needs for development of new tools

- **Development/adjustment of tools**
  - Include template institutional arrangements ensuring implementation and sustainability
  - Include Template TORs/project components to incorporate in ADB project cycle
  - Testing

- **Changes to the ADB Operations Manual**
  - To ensuring the incorporation in the ADB project cycle.
C: Strengthen Existing Road Safety Components

C1: Conduct inventory
   • With input from concerned divisions
   • Progress achieved, issues, potentials to expand, assistance needed, etc

C2: Propose measures
   • To address issues
   • To revive/strengthen

C3: Implement measures
D: Identify Opportunities for Scaling up Road Safety in Country Strategies

D1: Build strong case for road safety
   • Highlight problem (Country Data, Global Call for Action)
   • Promotional videos
   • TA/project/component proposals
   • Road safety pipelines proposals
   • Best experiences from other projects, countries
   • Coordinating with other MDBs/Donors

D2: Make the topic mandatory in the Agenda of Country Programming Missions
   • RSG to participate in CP missions as needed
## E: Launch Standalone Road Safety Pipelines

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<th>Year 1</th>
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<td><strong>PATA on Road Safety</strong></td>
<td><strong>PPTA Preparing standalone Road Safety Project</strong></td>
<td><strong>Implementation of Road Safety Investment Project</strong></td>
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<td><strong>Prefeasibility level</strong></td>
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<td>Advisory support, on-the job training, knowledge transfer</td>
<td>Selection and feasibility study of components</td>
<td><strong>Component A (Investment):</strong> Selected components of the road safety programs</td>
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<td>National/Jurisdiction Road Safety Action plans</td>
<td>Design of the Road Safety Investment Project</td>
<td><strong>Component B (Non-Investment):</strong> Advisory support, training, knowledge transfer</td>
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<td>Mass actions &amp; road safety programs in selected high-risk corridor(s)/blackspots</td>
<td>Advisory support, on-the job training, knowledge transfer</td>
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Next steps

○ Discussions with the directors of relevant departments
  ● Transport, Urban
  ● Completed by August 2010?

○ Final version
  ● By September 2010?

○ Management approval
  ● By November 2010?
End of Presentation

Thank you!