GUIDELINES FOR CONDUCTING ROAD SAFETY DATA REVIEWS

Report Launch Webinar

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Varying degrees of underreporting, completeness and lack of meaningful analysis for road safety interventions

Lack of standardization and integration of multiple datasets, definitions, and collection methods

Need for streamlining of processes, leveraging technology, bridging gaps in capacity and resources, and addressing barriers in notification of fatalities and injuries

Road safety indicators are not used (e.g. speed, drink-driving, safety equipment)
Objectives

• Support review teams in the assessment of road safety data collection ("detective work")
• Harmonize assessments
• Identify needed preparations (stakeholders to consult, activities, documents to review)
• Identify international standards
• Self-evaluation tool for observatories

Scope

• Whole data collection process (crash investigations, reporting and registration, checking completeness and consistency, storage, analysis, use, and accessibility)
• Primary focus is crash data although other types of road safety data are considered
Reliable safety and traffic data are essential to:

• Prioritize road safety vis a vis other public health issues
• Assess the full nature of the road safety problem (who is at risk? When? Why?)
• Assess the real economic costs associated with road crashes
• If the problem is underreported, less likely to receive the right level of investment
• Design the most (cost) effective road safety interventions
• Monitor progress and adjust work plan
• Develop and implement a systematic approach to road safety
Crash and Casualty Data

- Should provide full picture of road risk, fatal and serious injury most important
- Completeness and notification
- Uniformity of definitions and collection
- Crash location
- Registration, transmission, and sharing
- Data storage
- Data querying, visualization, and analysis
- Leveraging other datasets, augmenting data
## Safety Performance Indicators

<table>
<thead>
<tr>
<th>Target</th>
<th>Safety Performance Indicator</th>
<th>Collection Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. 2020</strong></td>
<td>Target 1: By 2020, all countries establish a comprehensive multi-sectoral national road safety action plan with time-bound targets.</td>
<td>Observational studies or spot surveys</td>
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<tr>
<td><strong>2. 2020</strong></td>
<td>Target 2: By 2020, all countries accord to one or more of the core road safety-related UN instruments.</td>
<td>Observational studies or spot surveys</td>
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<tr>
<td><strong>3. 2030</strong></td>
<td>Target 3: By 2030, all new roads achieve technical standards for all road users that take into account road safety.</td>
<td>Observational studies or spot surveys</td>
</tr>
<tr>
<td><strong>4. 2030</strong></td>
<td>Target 4: By 2030, more than 10% of new roads meet technical standards for all road users that take into account road safety.</td>
<td>Spot surveys, enforcement data</td>
</tr>
<tr>
<td><strong>5. 2020</strong></td>
<td>Target 5: By 2020, 100% of new (defined as produced, sold or imported) and used vehicles meet high quality safety standards, such as the recommended priority UN regulations, Global Technical Regulations, or equivalent recognized national performance requirements.</td>
<td>Crash data</td>
</tr>
<tr>
<td><strong>6. 2030</strong></td>
<td>Target 6: By 2030, 100% of new (defined as produced, sold or imported) and used vehicles meet high quality safety standards, such as the recommended priority UN regulations, Global Technical Regulations, or equivalent recognized national performance requirements.</td>
<td>Observational studies or spot surveys</td>
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<tr>
<td><strong>7. 2030</strong></td>
<td>Target 7: By 2030, increase the proportion of motor vehicle occupants using safety belts or standard child restraint systems to close to 100%.</td>
<td>Observational studies or spot surveys</td>
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<tr>
<td><strong>8. 2030</strong></td>
<td>Target 8: By 2030, increase the proportion of motorcycle riders correctly using standard helmets to close to 100%.</td>
<td>Observational studies or spot surveys</td>
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<tr>
<td><strong>9. 2020</strong></td>
<td>Target 9: By 2020, halve the number of road traffic injuries and fatalities related to drivers using alcohol, and/or achieve a reduction in those related to other psychoactive substances.</td>
<td>Observational studies or spot surveys</td>
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<tr>
<td><strong>10. 2020</strong></td>
<td>Target 10: By 2020, all countries have national laws to restrict or prohibit the use of mobile phones while driving.</td>
<td>Observational studies or spot surveys</td>
</tr>
<tr>
<td><strong>11. 2030</strong></td>
<td>Target 11: By 2030, all countries accord to one or more of the core road safety-related UN instruments.</td>
<td>Observational studies or spot surveys</td>
</tr>
<tr>
<td><strong>12. 2030</strong></td>
<td>Target 12: By 2030, all countries establish a comprehensive multi-sectoral national road safety action plan with time-bound targets.</td>
<td>Observational studies or spot surveys</td>
</tr>
</tbody>
</table>

- **Halve the proportion of vehicles exceeding the posted speed limit**
- **Halve injuries and fatalities related to drink-driving**
- **Increase seat belt and child restraints usage to close to 100%**
- **Increase motorcycle riders correctly using helmets to close to 100%**
- **New roads should have at least 3-star iRAP rating**
- **More than 75% of travel on existing roads is on roads that meet a three-star safety rating or better**
- **100% of new and used roads meet high quality standards such as the UN vehicle safety standards**
Other Data

- Mobility Data
- Road Safety Interventions
- Reports from Regional Road Safety Observatories

Safety engineering
- Road sections with improved iRAP star rating
- Number of intersections improved
- Number of speed camera operational
- Length of road with section control for speeding

Enforcement
- Number of tickets delivered
- Number of drivers checked
- Hours spent on check

Education
- Number of downloads for educational material
- Number of children taught a course

Promotional activities
- Number of clicks on promotional video
- Minutes of air time for a spot

Driver training
- Driving lessons taken by students
- Exams attempted/exams passed

Vehicle testing
- Vehicles checked
- Vehicles admitted after improvements

Emergency medical services
- Crash scenes attended
- Average time to arrive at scene
The review process

- Objective of guidelines
- Support
- Harmonization

- What?
  - Preparations
  - Stakeholders
  - Interviews
  - Reporting
Preparations

- Determine scope and objectives of the review
- Request relevant data and documentation from the host country
- Organize meetings ahead of the visit
- Identify stakeholders and government organization structure
- Undertake a literature review of published studies and reports
- Review existing documentation, forms, and reports
- Inspect crash data
- Assess SPIs and mobility data
- Develop a preliminary assessment and insight
- Prepare interview questions and presentations
Stakeholders

- Ministries and Government Departments
- Police
- Hospitals
- Statistics Office
- Coroners
- Insurance Companies
- Road Safety Advocacy Groups and Journalists
- Research and Academia
Interviews

- What?
  - Organisation of data collection
  - Resources
  - Data storage and accessibility
  - Data use

- How?
  - Trace the whole chain
  - Look for tangible evidence
  - Check for consistency
Reporting

- Evaluation
  - Completeness
  - Quality
  - Uniformity

- Recommendations
  - Organization of data collection
  - Use of road safety data
  - Additional data to collect
THANK YOU!

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23 February 2022
Experience from Cambodia

- Review of collection and processing of crash data in Cambodia: identify strengths and weaknesses
- Provide recommendations to further improve crash data collection and analysis
- Develop a detailed road map to strengthen crash data system over next three years
Process

Preparation of review
- Desk research
- Meetings
- Inception report

Review mission
- Semi-structured interviews
- Analysis of crash data
- High level meeting

Reporting
- Draft report and presentation on findings
- Development and presentation of road map
Lessons learned

Preparation

Preparation is very important!

- Information on data collection process, relevant stakeholders, possible strengths and weaknesses → starting point for semi-structured interviews

- Helpful to meet with people that visited country and are familiar with processes

- Planning of interviews: difficult to arrange all interviews in short review period
Lessons learned

Review mission

- Very helpful to involve a local consultant for organization, translation, transport
- Semi-structured interviews worked quite well, yet questions needed to be updated after first interviews
- Try to ask very specific questions and check whether the interpretation of the questions and answers is correct
- Go through data collection process and check for potential losses of data.
- Be flexible: try to meet as many relevant people as possible, yet accept that scheme changes last-minute and cannot be perfect
- Reserve time to discuss ins and outs with experts that analyze data
Lessons learned
Reporting and road map

- Careful formulation of findings, conclusions and recommendations is very important.

- Discuss recommendations and road map with local stakeholders → what works and what doesn’t work in local situations.

- It was very helpful to have experts from the World Bank involved, as they are experienced in managing sensitive activities, have knowledge on the local situation and can create opportunities for financing of implementation of recommendations.
Next steps
Implementation of recommendations

- The World Bank financed “Cambodia Road Connectivity Improvement” project (US$100mil) is supporting the upgrade of the current road crash database, based on the findings from the World Bank GRSF and ITF study, by using modern data application enabling geospatially recording and analyses of road crashes to support evidence-based road safety analysis and policy making.

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Head of the Road Safety Observatory
Directorate General for Road Traffic (DGT), Spain
Road Safety Data Review: Chile

- Importance of road safety data for Chile.

- DGT and CONASET are members of IRTAD as well as OISEVI, cooperation is key to raise data standards and practices in Chile and the region.

- The review helped improve the data Chile reported to IRTAD and other organisations (WHO), and to also communicate the importance of the data other country organizations collect for road safety.

- Police increased reporting times and the Ministry of Health signed a cooperation agreement with police to work on fatalities up to 30 days.

- We are currently working on greater technological integration between both institutions as well as with other sources of data.
Road Safety Data Review: Colombia and Costa Rica

- Harmonisation of road safety data.
- Benefit of promoting the cooperation between sectors and stakeholders.
- Key role of vital registrations (coroners) and need for linking health and police data.
- Guidelines as a necessary framework for preparing and conducting the review. Crucial role of question sets (Annex B).
- Need for improving data on non-fatal crashes, exposure and SPIs.
- Dissemination of good practices coming from countries under review.
THANK YOU!

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Transport Mobility and Connectivity series