# GUIDELINES FOR CONDUCTING ROAD SAFETY DATA REVIEWS Report Launch Webinar

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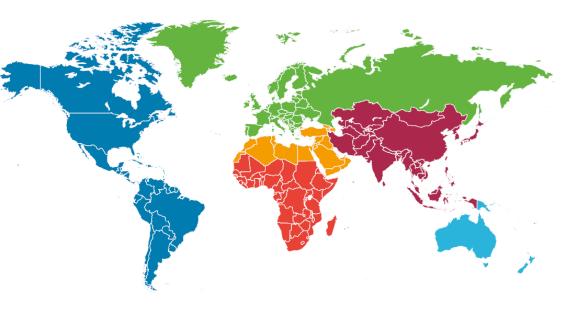






# > Data Challenge

- 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, drinkdriving, safety equipment)



#### **GLOBAL TOTALS:**

Number of countries

175

Total population (000s)

7296943

Total reported deaths

629 365

Total WHO estimation

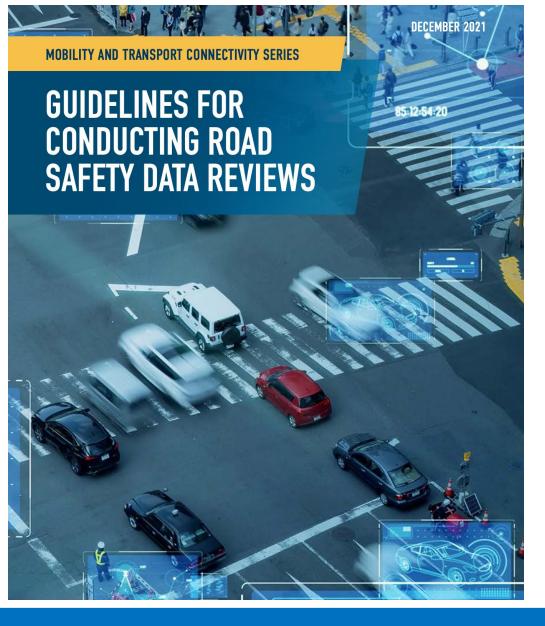
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#### **Objectives**

- 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









#### Define problems **Identify** risk Monitor factors and performance priorities **Formulate Implement** strategy and strategy set targets

#### Reliable safety and traffic data are essential to:

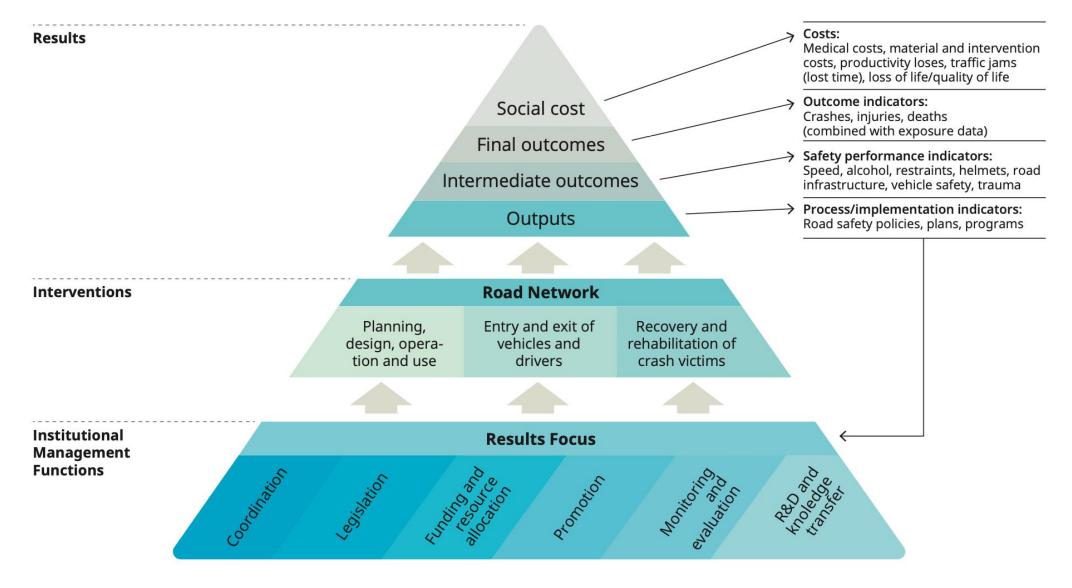
- Prioritize road safety vis a vis other public health issues
- Assess the full nature of the road safety problem (who is at risk? When? Why?)
- Assess the real economic costs associated with road crashes
- If the problem is underreported, less likely to receive the right level of investment
- Design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















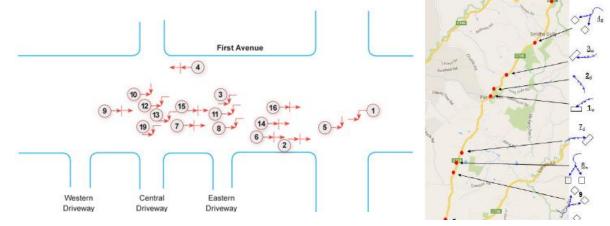


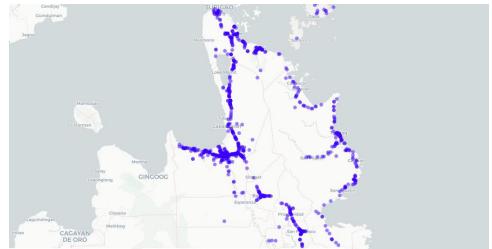




## **Crash and Casualty Data**

- 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



Target 1: By 2020, all countries establish a comprehensive multisectoral national road safety action plan with time-bound targets.

instruments.



countries accede to one or more of the core road safety-related UN legal



Target 3: By 2030, all new roads achieve technical standards for all road users that take into account road safety, or meet a three star rating or better.



Target 4: By 2030, more than 75% of travel on existing roads is on roads that meet technical standards for all road users that take into account road safety.



Target 5: 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.



Target 6: By 2030, halve the proportion of vehicles travelling over the posted speed limit and achieve a reduction in speedrelated injuries and fatalities.



Target 7: By 2030, increase the proportion of motorcycle riders correctly using standard helmets to close to 100%.



standard child restraint systems to close to 100%.



Target 9: By 2030, halve the number of road traffic iniuries and fatalities related to drivers using alcohol, and/or achieve a reduction in those related to other psychoactive substances.





Target 10: By 2030, all countries have national laws to restrict or prohibit the use of mobile phones while driving.



Target 11: By 2030, all countries to enact regulation for driving time and rest periods for professional drivers, and/or accede to international/regional regulation in this area.



Target 12: By 203 countries establis achieve national in order to minim time interval bet road traffic crash the provision of fi professional eme care.

50% 🕮 🎏	<b>\</b>
	50%

Target 8: By 2030,
increase the proportion (
motor vehicle occupants
using safety belts or
ctandard child rectraint



SO, all sh and targets nize the tween and first ergency	

Target		Safety Performance Indicator	Collection Methods		
<b>√</b> I.	Halve the proportion of	Free-flow average speeds and disaggregated by vehicle type, road type, and time-of-day	Observational studies or spot surveys		
50%	vehicles exceeding the posted speed limit	85 <sup>th</sup> percentile speeds disaggregated by vehicle type, road type, and time-of-day	Observational studies or spot surveys		
		Percentage of vehicles exceeding the speed limit	Spot surveys, enforcement data		
50%	Halve injuries and fatalities related to drink-driving	Number and percentage of severe injuries and fatalities that are caused by at least one road user that has a BAC exceeding the legal limit	Crash data		
1003	Increase seat belt and child restraints usage to close to 100%	Percentage of drivers and passengers wearing a seatbelt by vehicle and road type	Observational studies or spot surveys		
100%	Increase motorcycle riders correctly using helmets to close to 100%	Percentage of motorcyclists appropriately wearing an appropriate helmet by road type	Observational studies or spot surveys		
	New roads should have at least 3-star iRAP rating	iRAP star rating per road type and road user type; percentage of new roads that meet a three-star rating or better	iRAP data		
753	More than 75% of travel on existing roads is on roads that meet a three-star safety rating or better	iRAP star rating per road type and road user type; percentage of new roads that meet a three-star rating or better	iRAP data		
10x 6.1	100% of new and used roads meet high quality standards such as the UN vehicle safety standards	Percentage of vehicles in the fleet with high quality safety standards	Vehicle registration and inspection data		









# **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

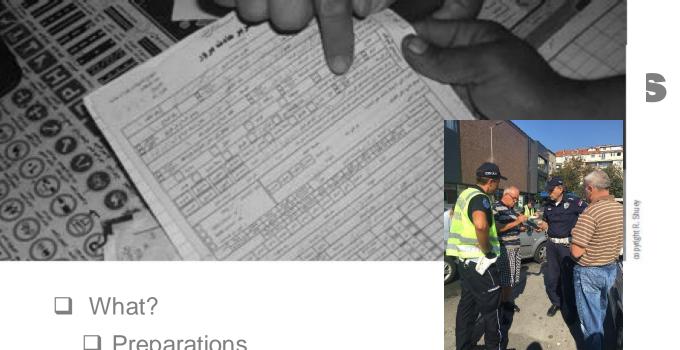
- Vehicles checked
- Vehicles admitted after improvements





Emergency medical services

- Crash scenes attended
- Average time to arrive at scene



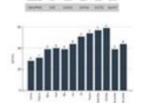






- Stakeholders
- ☐ Interviews
- □ Reporting















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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









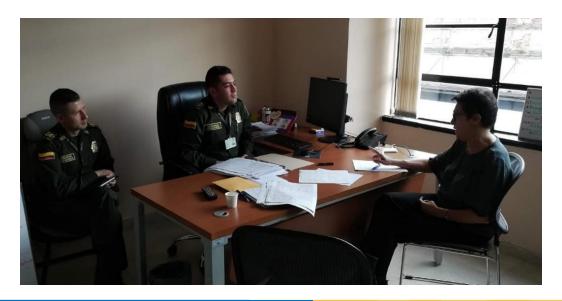
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## Stakeholders

- 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!

http:// roadsafetyfacility.org









# GUIDELINES FOR CONDUCTING ROAD SAFETY DATA REVIEWS Report Launch Webinar

**Wendy Weijermars** 

Research manager, SWOV

Alina F. Burlacu

Senior Transport Specialist, World Bank GRSF









23 February 2022



### **Experience from Cambodia**

- o 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

















Preparation of review



Review mission



Reporting

Desk research

Meetings

Inception report

Semi-structured interviews

Analysis of crash data

High level meeting

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









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# 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
- o Reserve time to discuss ins and outs with experts that analyze data









# Lessons learned Reporting and road map

- o 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

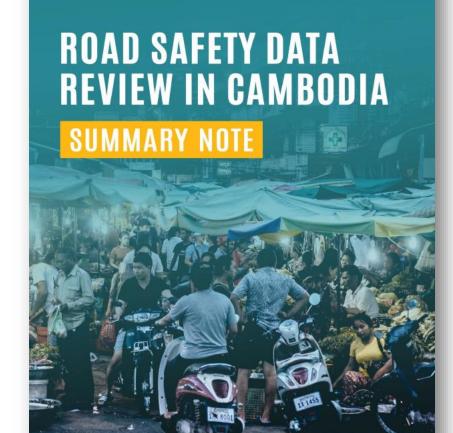
o The World Bank financed "Cambodia Road Connectivity Improvement" project (US\$100mil) is supporting the upgrade of the current road crash database, based on the findings from the World Bank GRSF and ITF study, by using modern data application enabling geospatially recording and analyses of road crashes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

https://www.roadsafetyfacility.org/publications/road-safety-data-review-cambodia-summary-note























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# GUIDELINES FOR CONDUCTING ROAD SAFETY DATA REVIEWS Report Launch Webinar

#### **Carla Media Araos**

Head of the Road Safety Observatory
National Road Safety Commission (CONASET), Chile

#### Álvaro Gómez Méndez

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.















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# 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.









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