Rail Accidents and Level Crossing Safety Statistics

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Overview

• Publication of UNECE rail accidents
• Decision on collection method
• Collection of level crossing safety statistics
• Level crossing data collected
• Decision on continuing data collection
• Challenges of comparing safety across all modes
Rail accidents: Background

• WP.6 decided in 2016 to send a questionnaire on rail accidents to non-EUAR countries
• Sent in February 2017
• Data for nine countries provided: Armenia, Bosnia, Canada, Georgia, Kazakhstan, FYR Macedonia, Moldova, Serbia, USA
• WP.6 in 2017 decided to make this data collection permanent
Dataset published

• Data published in December 2017:
  w3.unece.org/PIXWeb2015/pxweb/en/STAT/STAT__40-TRTRANS__06-TRRAILACC

• Combined with EUAR data, so data for 36 countries in total are available
Uses of the data

• In addition to rail safety analysis, can be combined with activity data to make comparisons with other modes

• But... include pedestrian fatalities in car figures or not? If not, then should level crossing users and trespassers be excluded from rail? This is typically the majority of “rail” fatalities

• Rail (+ bus, metro) accidents also tend to be infrequent incidents but with mass casualties, so multiyear averages need to be considered
Cross-modal safety

- Provisional analyses, fatalities for **vehicle occupants** per billion passenger-km (latest year for car occupants, three-year average for rail occupants)
Level Crossing Safety Statistics

• Recommendation of Group of Experts of Safety at level Crossings (WP.1/GE.1), WP.6 agreed in 2016 to send a pilot questionnaire on safety at level crossings

• Questionnaire sent in July 2017

• By December, responses from 10 countries (8 with some relevant data)

• Albania, Azerbaijan, Canada, Georgia, Moldova Russia, Serbia, USA
Data verification with rail accidents

• Level crossing users (car occupants, pedestrians) sometimes excluded from the rail accidents dataset, otherwise both datasets broadly agreed

• Suicides should be excluded from both datasets.
Decisions and future plans

• Forthcoming: SDG paper on cross-modal safety

• Rail accidents: incorporate into the Web Common Questionnaire or keep as excel? When is best time of year to send this questionnaire?

• Level Crossings: continue collection as a pilot? Make permanent? (Or integrate into rail accident collection?)