New Directions for Data-Driven Transport Safety

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Objectives

• Identify and document innovative solutions
• Explore data sharing opportunities (find leverage)
• Raise awareness among policy makers
• Identify regulatory barriers and make recommendations
Method

• Workshop with industry leaders

• Desk research, inc. material provided by existing networks (IRTAD, FERSI, etc.)

• Delivery to ministers in May 2019

• The ITF Corporate Partnership Board supports the production of 3 such reports a year
New Directions for Data-Driven Transport Safety

- Crowd-sourced data
- Surrogate safety metrics
- Sensor data
- Forensic data
- Speed
Reducing speeding is key to reducing fatal and serious casualties

Insurers, fleet operators and governments all have an interest in speed data

New sources of speeding data: vehicle telematics, mobile phone apps
Event Data Recorders (EDR) can store pre- and post-crash vehicle data.

Are we using this technology to its full potential? Shall we create a standard for data exchange?

Will video feeds be recorded on EDRs?
Individuals can report:

- distracted or aggressive driving by vehicle operators (e.g. bus or ride-hail drivers)

- infrastructure defects, illegal parking on pedestrian or cycling infrastructure, etc.
ABS and EPS activations or fog/rain sensors may serve to identify singularities on networks...
... but also to report crashes, tailbacks and slippery road surfaces in real time.

On-board or roadside video, LIDAR or other feeds, can also highlight exceptional and potentially dangerous situations.
Idea: identify and count near-misses. These occur much more frequently than crashes and could help diagnose hotspots, make the case for interventions and quantify their benefits.

Another idea is to analyse photos taken at street-level, derive the infrastructure safety performance from a set of rules, and derive an estimation of mode shares at the same time.

Machine-learning and AI algorithms will speed up detection of safety issues.
How to contribute?

Do contact the ITF with material or thoughts to share, especially about:

- Innovative use cases
- Opportunities for sharing data
- Regulatory barriers
Thank you

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