

New Directions for Data-Driven Transport Safety

Alexandre Santacreu

Objectives

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

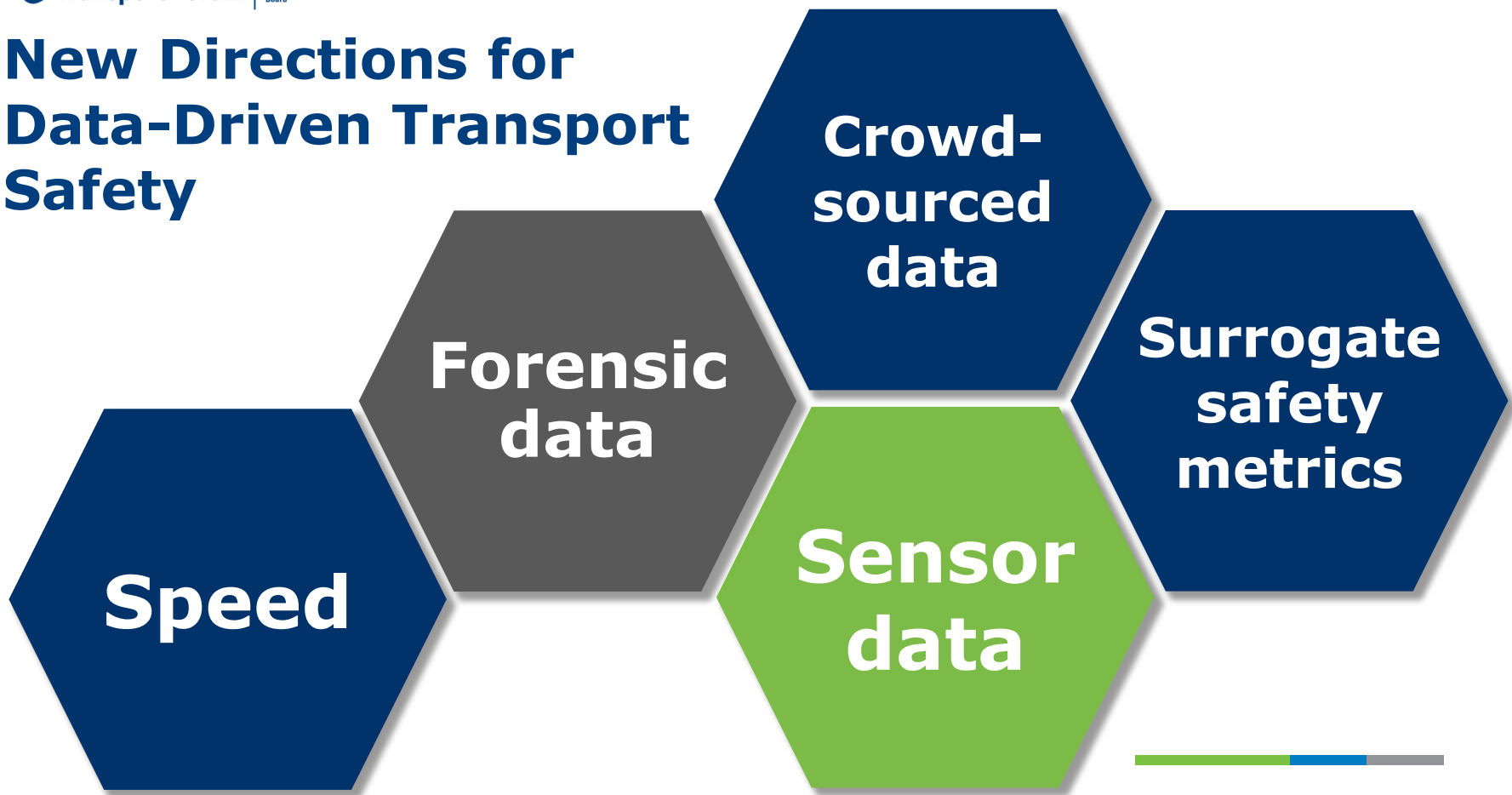


Method

- 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

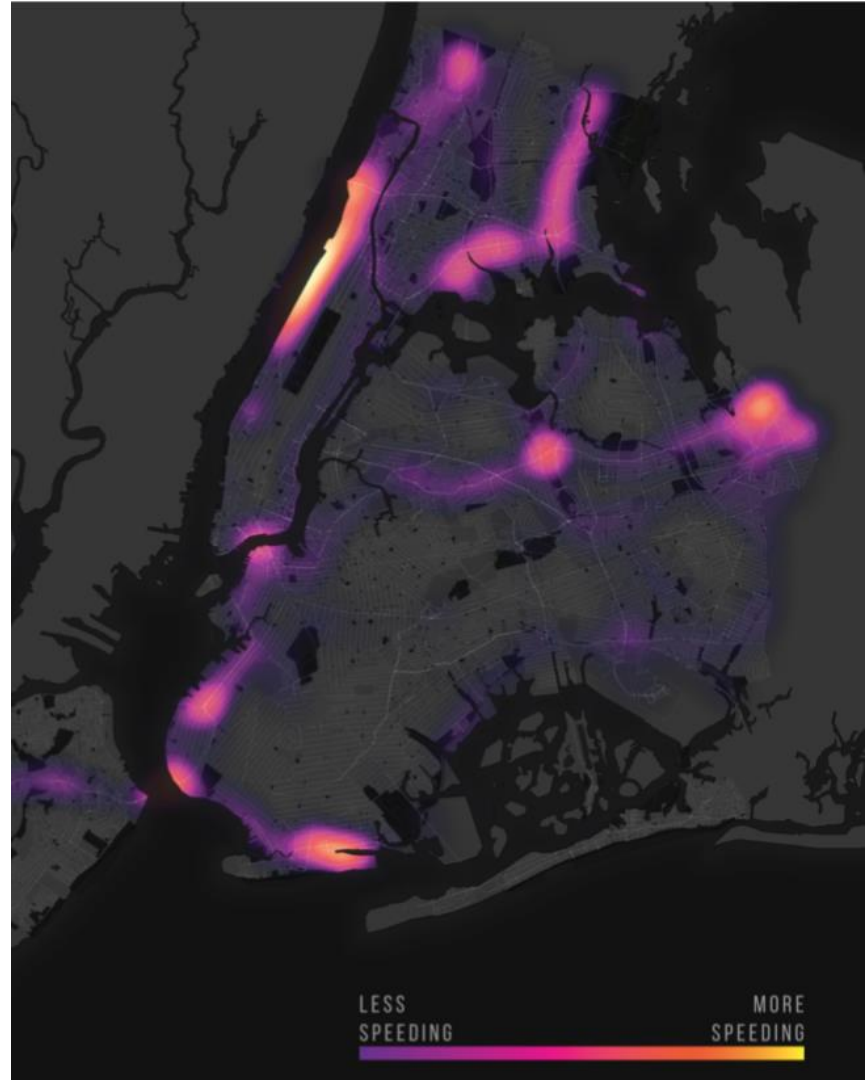


Speed

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



Forensic data

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?

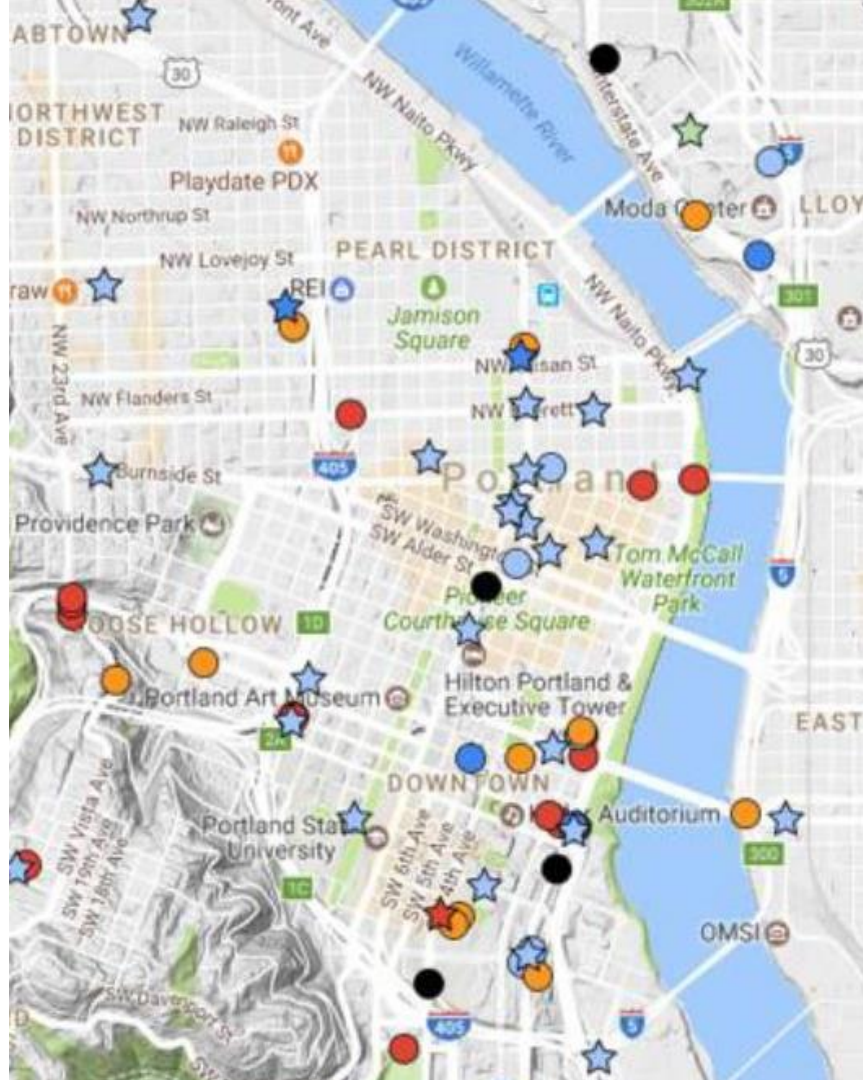
Will video feeds be recorded on
EDRs?



Crowd-sourced data

Individuals can report:

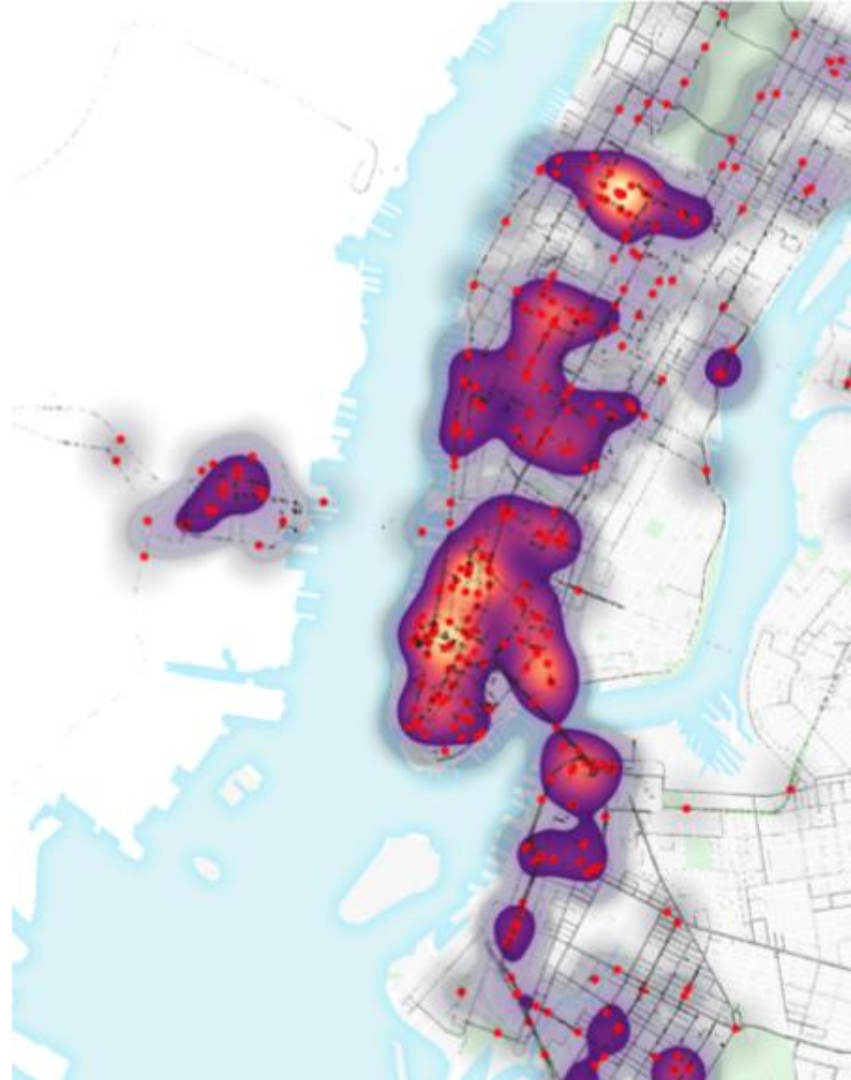
- distracted or aggressive driving by vehicle operators (e.g. bus or ride-hail drivers)
- infrastructure defects, illegal parking on pedestrian or cycling infrastructure, etc.



Sensor data

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.

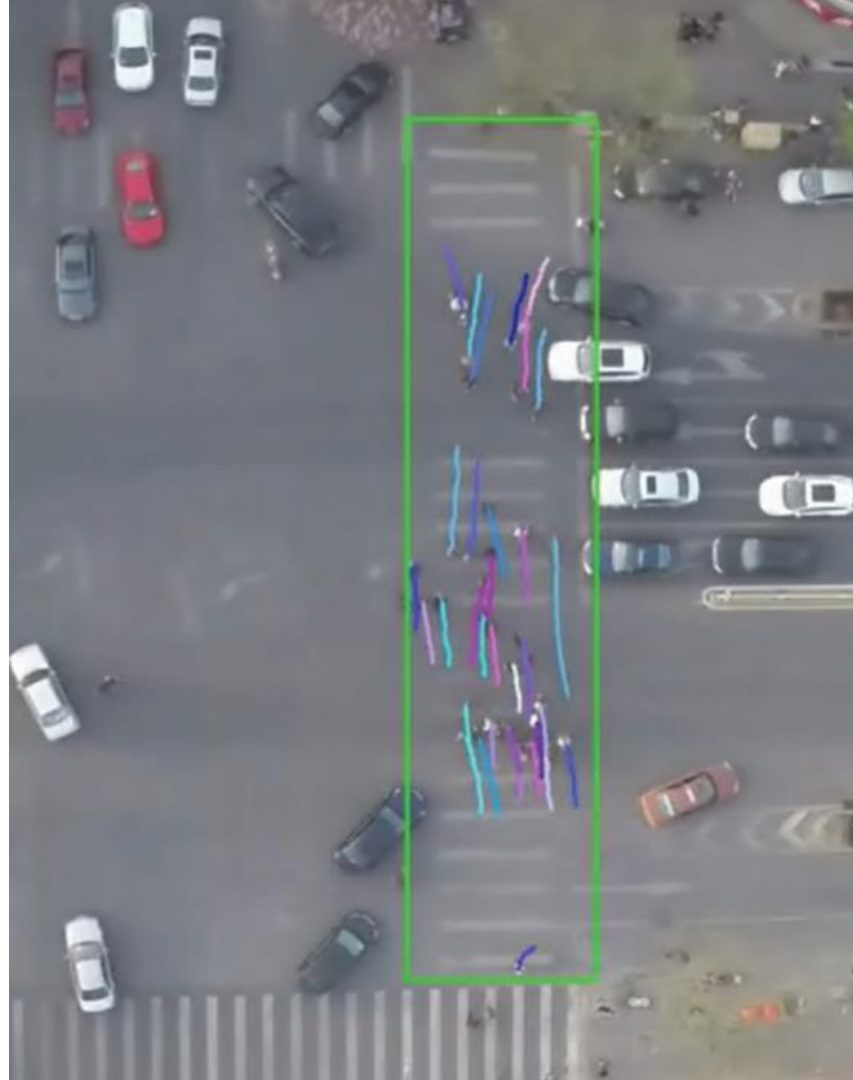


Surrogate safety metrics

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

Alexandre Santacreu
alexandre.santacreu@itf-oecd.org

www.itf-oecd.org