

**To:** Place Directorate

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Subject: Essential Evidence on a page: No 167 Speed & Crash Risk:

OECD's recommendations

Top line: Excessive speed is a cause of deaths and injuries across all motorised societies. Through a Safe Systems approach to road safety, with lower speed limits, the evidence is that deaths & serious life-changing injuries can be reduced, while improving quality of life.

The International Transport Forum of the Organisation for Economic and Cultural Development (OECD) is a leading body in the understanding, development and promotion of Safe Systems Road Safety¹ across much of the developing and developed world. It's Speed and Crash Risk report summarised the latest international evidence.² Research consistently shows that lower speeds reduce deaths and injuries, not least because there is more time to react. For example, the risk of being killed is almost 5 times higher in collisions between a car and a pedestrian at 50km/h (31mph) compared to the same type of collisions at 30 km/h (18.6mph) reports OECD. It's four key recommendations were:

**Set speed limits according to Safe System principles:** The design of the road system and the speed limits set for it must consider the forces the human body can tolerate and survive. Working towards a Safe System, reasonable speed limits are 30 km/h in built up areas where there is a mix of vulnerable road users and motor vehicle traffic. In other areas with intersections & high risk of side collisions 50 km/h is appropriate. On rural roads without a median barrier to reduce the risk of head-on collisions, a speed limit of 70 km/h (43.4mph) is appropriate. In urban areas, speeds above 50 km/h are not acceptable, with the exception of limited access arterial roads with no interaction with non-motorised traffic. Where motorised vehicles and vulnerable road users share the same space, such as in residential areas, 30 km/h is the recommended maximum.

Reduce the speed on roads as well as speed differences between vehicles: To reduce road trauma, governments need to take actions that will reduce the speed on roads as well as speed differences between vehicles sharing the same road. For individuals, the risks of a severe crash might seem small, but from a societal point of view there are substantial safety gains from reducing mean speeds on roads

**Improve infrastructure and enforcement if speed limits are to be increased:** If speed limit increases are envisaged, stricter enforcement or an upgrade of the infrastructure is recommended to compensate for the increased risk from higher mean speed. Without such compensatory measures, more deaths and more injured road users can be expected.

Use automatic speed control to reduce speed effectively: Experience worldwide has proven the effectiveness of automatic speed control systems in reducing speed, and in turn road crash frequency. Section control (using measurement of average speed over a section of road) is a relatively new measure, which seems to be very effective not only in reducing speed but also in contributing to more homogenised traffic flow.

<sup>&</sup>lt;sup>1</sup> See <a href="https://travelwest.info/project/ee-15-vision-zero">https://travelwest.info/project/ee-15-vision-zero</a> Sweden was the first country to develop the approach which is termed Vision Zero in Sweden.

<sup>&</sup>lt;sup>2</sup> International Transport Forum/OECD, 2018 Speed and Crash Risk. Paris: OECD <a href="https://www.itf-oecd.org/sites/default/files/docs/speed-crash-risk.pdf">https://www.itf-oecd.org/sites/default/files/docs/speed-crash-risk.pdf</a> accessed 12th April 2018