



Fleet survey report 2013

Part 2: speed



Brake provides guidance specifically for fleet managers working to reduce their road risk. This guidance reports on a survey by Brake of fleets' risk management of speeding and speed-related incidents, and gives guidance on the management of these risks.

Inappropriate speeds (driving too fast for the conditions or breaking speed limits) increase risk of crashing; and crashes at higher speeds cause more severe injuries.¹ It is estimated that just a 1km/h reduction in average speed would save 2,200 lives each year across Europe.²

Previous Brake surveys of drivers have found consistently that fleet drivers are more likely to report being in a hurry, speeding, and undertaking risky speed-related manoeuvres such as overtaking, than drivers who do not drive for work.³ Therefore managing speed is a key concern to fleet managers.

The survey focussed on issues of particular relevance to fleet managers, namely the use of technology to monitor and control speed, and two specific types of crashes frequently caused by inappropriate speed (rear-end shunts and crashes involving people on foot and bicycles). 220 organisations from around the globe responded to the survey. These organisations operate fleets of all sizes and vehicle types and are responsible for thousands of drivers and vehicles. Respondents included subscribers to Brake as well as non-subscribers.⁴



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Monitoring speed using telematics

More than a quarter of respondents to Brake's survey (26%) admitted to not knowing what proportion of their collisions involved one of their vehicles driving in excess of the speed limit.

This is unsurprising. Without on-board monitoring technology it can be challenging to prove, post-crash, a precise speed of a vehicle.

When asked if respondents monitored speed through telematics, almost two thirds (61%) of managers of large numbers of vehicles (more than 50) said they monitored driver speed, which is encouraging. However, only one in three (32%) managers of smaller numbers of vehicles (fewer than 50) said they did this, which is disappointing.

ADVICE FOR MANAGERS

Fleet managers of all sizes of fleets are recommended to use on-board monitoring technology firstly to monitor drivers' speed at all times, to help achieve safer and fuel efficient travel, and secondly obtain accurate information about speeds at the time of any crash or near miss. Driver behaviour should of course be monitored on an ongoing basis, through on-board monitoring systems and other means. Data gathered should be used to tackle problem behaviour such as speeding before a collision occurs.

Controlling speed using ISA

Many fleet managers are now familiar with Intelligent Speed Adaptation (ISA), which enables an on-board GPS system to connect the vehicle to a digital road map that knows the speed limit on all roads. The on-board system either advises the driver of the speed limit (advisory ISA) or controls the vehicle's speed to below the speed limit (mandatory ISA).

ISA is dependent on the availability of digital road maps. These are available in some European countries, including Sweden and Finland.⁵ A digital road map for London was launched in 2009 for an ISA trial.⁶

Brake's survey found a significant level of interest in ISA technology; nearly half (49%) expressed interest. Given ISA's obvious benefits in enabling drivers to comply with the law and drive at safer slower speeds, it is disappointing the support for ISA wasn't greater, although this may be an indication that some fleet managers are unaware of the benefits of ISA.

ADVICE FOR MANAGERS

Mandatory and advisory ISA systems are ground-breaking safety measures and should be welcomed by fleet managers. Fleet managers should lobby governments for digital road maps in their countries to enable ISA to be implemented. Fleet managers should of course comply with all legal requirements to fit commercial vehicles with speed limiters, and, in addition, consider fitting speed limiters voluntarily, particularly to high-performance cars. Technology like this can help ensure compliance with company policy on speed when implemented alongside other measures, including: driver education; awareness-raising; route and journey planning; and not penalising late arrival.

Slowing down to prevent rear-end collisions

Rear-end collisions (a driver running in to the back of another vehicle) are often due to drivers driving too fast for the conditions and not leaving a big enough gap between their vehicle and the vehicle in front. Rear-end collisions were the most common first cause of crashes in the USA in 2011, accounting for 32% of all crashes and 28% of fatal and injury crashes, and causing approximately 420 injuries per 1,000 crashes.⁷

A significant number of respondents to Brake's survey (41%) said more than 1 in 10 of their crashes involved a rear-end shunt.

ADVICE FOR MANAGERS

Drivers in a hurry often do not leave an adequate gap between their vehicle and any vehicle in front. They drive too close, in an attempt to encourage the driver in front to speed up, or in preparation to overtake, sometimes dangerously. Fleet managers should educate drivers about the importance of 'hanging back', keeping a good distance from the vehicle in front and not overtaking unless it is entirely safe to do so (for example, advising drivers to only overtake if it is a long straight wide road and the vehicle being overtaken is very slow moving, such as a tractor). Drivers should keep a "two-second gap" between their vehicle and the vehicle in front, and in bad weather conditions increase this to 10 seconds. This is a driver's braking space in a crisis.



Educating drivers about slowing down to protect vulnerable road users

The most important thing fleet managers can do to protect people on foot, bicycles, horses and motorcycles is to reduce drivers' speeds. The chance of a driver being able to stop in time if someone is in the road reduces markedly as speeds increase, even when speeds increase only by a small amount.

Government road crash data consistently shows vulnerable road users are often the victims of road death and injury, and countries are struggling to reduce these deaths and injuries. Road crash figures published by the UK Department for Transport showed a 10% increase in cyclist deaths in 2012 compared with 2011.⁸ The most effective way to stop vulnerable road user casualties is to provide off-road facilities for vulnerable road users; particularly cycle paths and pavements. Where there are no such facilities, fleet managers have a duty to ensure their drivers are driving slowly enough to protect vulnerable road users.

Two thirds of respondents to Brake's survey (65%) said they provided some level of education to drivers on looking out for vulnerable road users.

Hearteningly, a not insignificant number (11%) went above and beyond their immediate responsibilities and said they also worked in their communities to campaign for safer cycle routes and lower speed limits.

However, managers of smaller vehicles (cars, vans, motorcycles) were much less likely than managers of larger vehicles (trucks, buses) to educate drivers about vulnerable road users. More than three quarters (78%) of managers of fleets including large vehicles educated drivers on looking out for pedestrians and cyclists, compared to just over half (55%) of managers of fleets that did not include these vehicles. Almost half (44%) of managers of fleets including large vehicles educated drivers on driving slowly around cyclists, compared to a quarter (24%) of managers of fleets not including these vehicles.

ADVICE FOR MANAGERS

Managers of all kinds of fleets and fleet sizes are recommended to ensure employee support for reducing speeds by educating their drivers about the life-saving importance of driving slowly to protect vulnerable road users in particular. The **Brake Pledge** is a campaign to help managers to do this, by highlighting the dangers of speed to pedestrians and cyclists and asking drivers to pledge to drive slowly. Additional educational resources on speed and the dangers it poses to vulnerable road users are available from many government road safety websites.

Managers are also recommended to do what they can to support local and national campaigns to separate vulnerable road users and roads, through the building of cycle paths and pavements, and to support reduced speed limits, particularly in communities and on rural roads used by vulnerable road users. Speed limits of 20mph (30km/h) are appropriate in communities. Managers can support such campaigns by communicating with politicians, or even by sponsoring the construction of cycle paths and pavements.

Case study Tesco Dotcom manages speed with the help of telematics



Tesco Dotcom is a UK online grocery delivery service, operating a fleet of 3,500 vehicles across 307 sites, travelling more than 120 million miles per year. This fleet includes 2,500 delivery vans.

Speed management

Tesco Dotcom introduced a telematics system in 2010 to monitor driver behaviour including speed. Drivers who exceed the speed limit must explain themselves in a one-to-one meeting with their manager, who will decide if further training or other performance management is required.

The company uses Google maps to show drivers where their speed violations were recorded, and highlight where they might have posed a risk to vulnerable road users, especially children: for example, near schools or playgrounds. This has been effective in getting drivers to think about the possible consequences of speeding.

Results

In summer 2010 Tesco Dotcom's telematics were recording 9,000 speeding incidents per month across 2,500 vans. After working with drivers to educate them on speed and address persistent offenders, this fell to 100 incidents per month by late 2011.

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Please note: figures quoted in this case study are approximate.



Conclusions

To manage the risks of driving at inappropriate speeds, fleet operators should:

- educate drivers about keeping a “two-second gap” between their vehicle and the vehicle in front, or 10 seconds in bad weather, to reduce the risk of rear-end shunts;
- educate drivers about the life-saving importance of driving slowly to protect vulnerable road users in particular, using initiatives and resources such as Brake’s Pledge;
- gather data about all crashes and near misses in order to understand the extent of their drivers’ speeding, and target problem behaviour such as speeding before collisions occur;
- where possible, use on-board monitoring technology to monitor drivers’ speed, and to obtain accurate information about speeds at the time of any crash or near miss;
- investigate the benefits of advisory or mandatory ISA, and lobby governments for digital road maps in their countries to enable ISA to be implemented;
- comply with all legal requirements to fit commercial vehicles with speed limiters, and consider fitting speed limiters voluntarily, particularly to high-performance cars;
- support local and national campaigns to separate vulnerable road users and roads, for example by sponsoring the building of cycle paths and pavements; and
- support reduced speed limits, particularly in communities and on rural roads used by vulnerable road users, for example by communicating with politicians or running awareness campaigns.

Further reading

Brake has published guidance reports for fleet managers on speed and other related road risk management topics, including:

- Managing driver speed (published 2012)
- Managing road risk: back to basics (published 2013)
- Keeping your distance (published 2008)

These and our library of more than 50 similar reports are all available for free to Brake subscribers. Other subscriber benefits include: significant discounts on our seminars, webinars and conferences; driver resources; and a regular e-bulletin of relevant road safety research and initiatives. Subscribe online, or contact Brake on +44 (0)1484 559909 or admin@brake.org.uk.

End Notes

- 1 Department for Transport (2009). *Understanding inappropriate high speed: a qualitative analysis*. Road safety research report 94 [online]. Available at: <http://web.archive.nationalarchives.gov.uk/20100304070241/http://www.dft.gov.uk/pgr/roadsafety/research/rsrr/theme2/analysis.pdf> [accessed 23 July 2013]
- 2 European Transport Safety Council (2010) *PIIN Flash 16: Tackling the Three Main Killers on the Road* [online]. Available at: <http://www.etsc.eu/documents/05.05%20-%20PIN%20Flash%2016.pdf> [accessed 23 July 2013]
- 3 Brake and Direct Line (2012) *Report 8: at-work drivers. Reports on Safe Driving 2009-12* [online]. Available at: http://www.brake.org.uk/assets/docs/dl_reports/DLreport8-At-work-2012-complete.pdf [accessed 11 July 2013]
- 4 78 respondents (35%) were subscribers, 101 (46%) were non-subscribers, 41 (19%) did not state
- 5 Transport for London (2006). *Intelligent Speed Adaptation: literature review and scoping study* [online]. Available at: <http://www.tfl.gov.uk/assets/downloads/Intelligent-Speed-Adaptation-Literature-Review-and-Scoping-Study-Jan-2006.pdf> [accessed 22 May 2013]
- 6 Transport for London (2009). *London speed limit map available to download*. Press release, 19 February [online]. Available at: <http://www.tfl.gov.uk/static/corporate/media/newscentre/archive/11227.html> [accessed 22 May 2013]
- 7 National Highway Traffic Safety Administration (2012). *Traffic Safety Facts 2011* [online]. Available at: <http://www-nrd.nhtsa.dot.gov/Pubs/811754AR.pdf> [accessed 22 May 2013]
- 8 Department for Transport (2013) *Reported Road Casualties in Great Britain: Main Results 2012* [online]. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/208736/reported-road-casualties-in-great-britain-main-results-2012.pdf [accessed 28 June 2013]