

CLOCS: Summary report

Summary report on fatal or serious injury collisions between HGVs and Vulnerable Road Users on GB roads

A report summarising key road safety statistics to inform and inspire positive action by all key stakeholders to significantly reduce or even eliminate Work Related Road Risks.

This report is based on an expert and detailed analysis of the last seven years of annual GB Road Safety Statistics data from 2010 to 2016. That dataset is comprehensive and robust as it arises from the standardised traffic incident reports completed by the police for every reported injury collision involving vehicles on public roads in England, Wales and Scotland - a dataset collectively known as STATS19. Except where otherwise specified, these figures are derived from MAST Online and provided to CLOCS by Road Safety Analysis. A copy of the spreadsheet used in this analysis has also been provided.

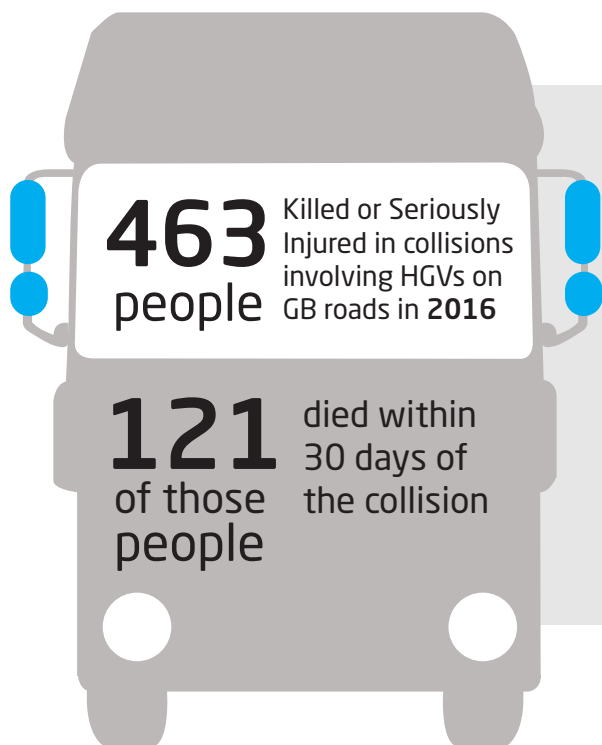
This report and spreadsheet should help inform corporate strategies and policies of The Crown Estate - an organisation with commercial interests in construction, development, retail, quarrying and other areas, as well as particularly strong public governance responsibilities in its quest to provide brilliant places through conscious commercialism.

The Crown Estate is a CLOCS Champion, indeed it became the 500th CLOCS Champion in September 2017. Construction Logistics and Community Safety (CLOCS) exists to eliminate fatal or serious injury collisions between HGVs (over 3.5 t mgw) and Vulnerable Road Users (VRUs) - pedestrians, cyclists and motorcyclists. CLOCS brings together regulators, construction clients, site operators, fleet operators, vehicle/equipment manufacturers and communicators. Together they encourage and/or require their customers, suppliers, and competitors to implement the national *CLOCS Standard* on all site and fleet operations.

Taking action is a corporate and ethical responsibility, as it helps saves lives, protects reputations and reduces costs. **One London borough saw a 47% reduction in fatal & serious collisions between HGVs & VRUs within 2 years of implementing CLOCS in its planning and procurement policies¹.**



How big is the problem?



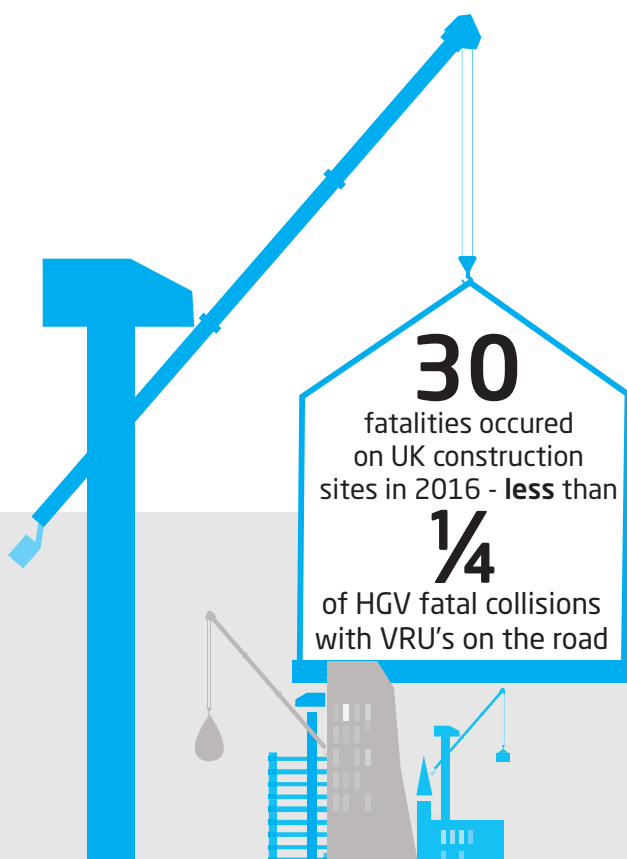
In 2016, 463 Vulnerable Road Users (pedestrians, cyclists and motorcyclists) were Killed or Seriously Injured in collisions involving HGVs on GB roads; in 2012 it was 493. Of those 463, 121 died within 30 days of the collision. Of those 463 VRUs killed or seriously injured in collisions involving HGVs in 2016 ...

- 40% were pedestrians
- 38% were motorcyclists
- 21% were pedal cyclists

HGVs are disproportionately involved in collisions with Vulnerable Road Users. In 2015, HGVs comprised only 4% of urban traffic miles in London but involved with 20% of pedestrian fatalities and 78% of cyclist fatalities; HGVs were involved in 53% of Vulnerable Road User fatalities across Great Britain in 2016.

Construction-related HGVs comprised 38% of morning peak HGV traffic in a 2015 London road-side survey on 14 key freight corridors - more than any other sector².

Contrast that with the 30 fatalities on all UK construction sites³. Considerable and sustained corporate and regulator effort has seen fatalities and reportable injuries on construction sites fall significantly from 154 in 1990, to 105 in 2000 to 30 in 2016 - demonstrating collaborative industry action delivers results.

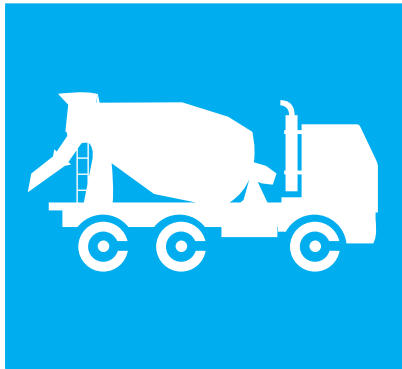


¹Source: London Borough of Camden

²Source: Transport for London

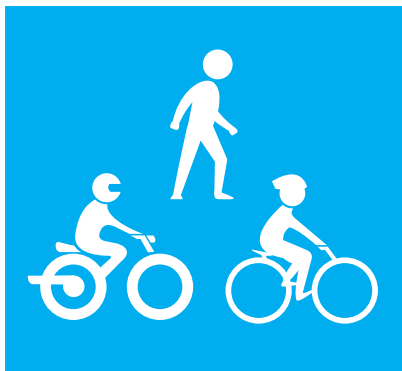
³Source: Health & Safety Executive

What defines a Heavy Goods Vehicle (HGV)?



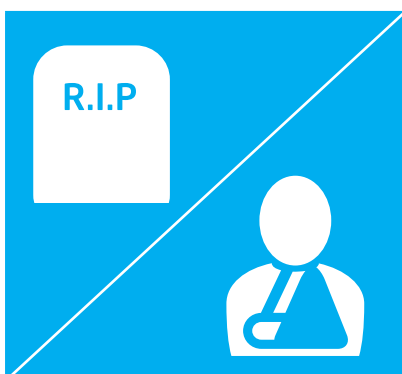
- Weight - at least 3.5t mgw (maximum gross weight) and designed principally for the transport of goods (i.e. excluding vehicles designed primarily for other purposes, such as coaches and agricultural vehicles)
- Rigid or articulated (tractor and trailer unit)
- Typical examples include tractor and trailer, truck, curtain sider, tipper, flat-bed lorry, insulated van, skip loader, tanker, concrete mixer, etc.

What is a Vulnerable Road User (VRU)?



- Definition - anyone using the public highway that doesn't have protection from injury by their own vehicle's structural form
- Typical/prominent examples are pedestrians, cyclists and motorcyclists, but can also include mobility scooters and equestrian riders; roller skaters and skateboarders are categorised as Pedestrians

What defines a KSI collision?



- Killed - casualties that died at the scene or within 30 days as a consequence of the collision
- Seriously Injured - injury resulting from a collision which was worse than cuts, bruises, whiplash and/or shock; this could range from severe permanent disability including loss of limbs through to broken bones.

Regional trends

Where are these collisions happening?

- Every region, everywhere.
- The following table demonstrates that all GB regions have an unacceptable number of collisions.
- Population size/density isn't a distinguishing factor as the ratio of KSIs per million population demonstrates.
- Over half (54%) of the 463 VRUs that were Killed or Seriously Injured in collisions with HGVs were injured on urban roads in 2016 - compared to just 17% of other KSI casualties in the same collisions



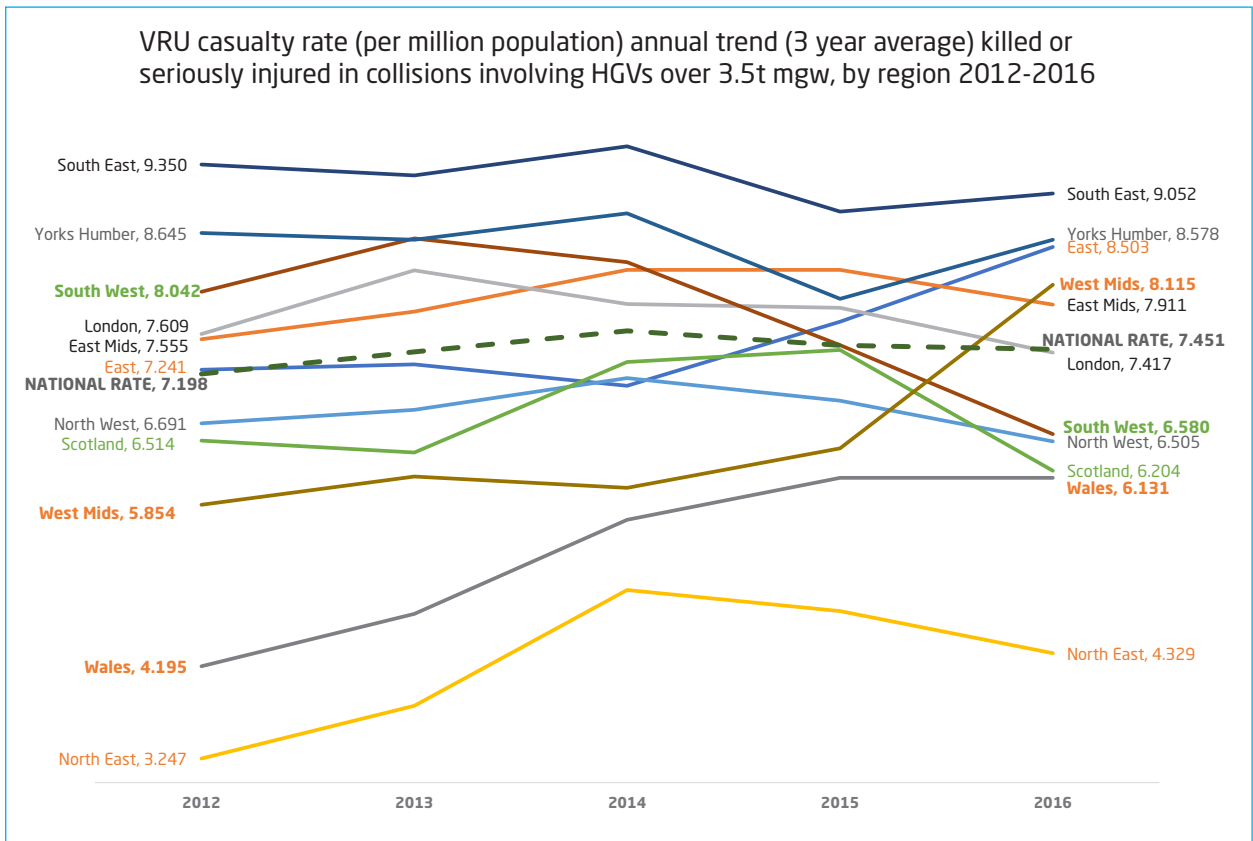
VRU type: GB Region:	Pedestrians		Pedal Cyclists		Motorcyclists		Total	
	KSIs/annum	Share of region's total	KSIs/annum	Share of region's total	KSIs/annum	Share of region's total	Total KSIs/annum	KSI pa per million population
East	17.0	34%	11.5	23%	21.5	43%	50.0	8.23
East Midlands	14.5	39%	7.3	19%	15.5	42%	37.3	7.96
London	33.3	50%	17.5	26%	16.0	24%	66.8	7.70
North East	5.5	40%	4.3	31%	4.0	29%	13.8	4.46
North West	19.5	41%	12.0	25%	15.8	33%	47.3	6.59
Scotland	20.5	59%	6.0	17%	8.0	23%	34.5	6.42
South East	28.5	36%	19.5	24%	32.3	40%	80.3	8.97
South West	14.0	37%	8.5	22%	15.5	41%	38.0	6.95
Wales	7.0	39%	4.3	24%	6.8	38%	18.0	5.81
West Midlands	22.5	51%	10.0	23%	11.3	26%	43.8	7.61
Yorkshire And The Humber	15.8	38%	11.5	28%	14.5	35%	41.8	8.46
GB	198.0	42%	112.3	24%	161.0	34%	471.3	7.45

VRU KSI collisions involving HGVs: 4 year annual average (2013 to 2016)

Many GB regions have seen significant increases in their VRU KSI casualty rate over the last five years - 46% increase in Wales, 39% increase in West Midlands, 33% increase in the North East.

Helpfully some GB regions, including London and South West, have seen small but sustained reductions - likely to reflect sustained investment by strategic transport organisations and collaborative action by progressive businesses driven by corporate conscience and in some cases regulation e.g. planning requirements. The London Borough of Camden saw a 47% reduction over two years when it implemented CLOCS, though absolute cause-effect cannot yet be proved.

47%
REDUCTION
 IN CASUALTY RATE
 WHEN IMPLEMENTING
CLOCS

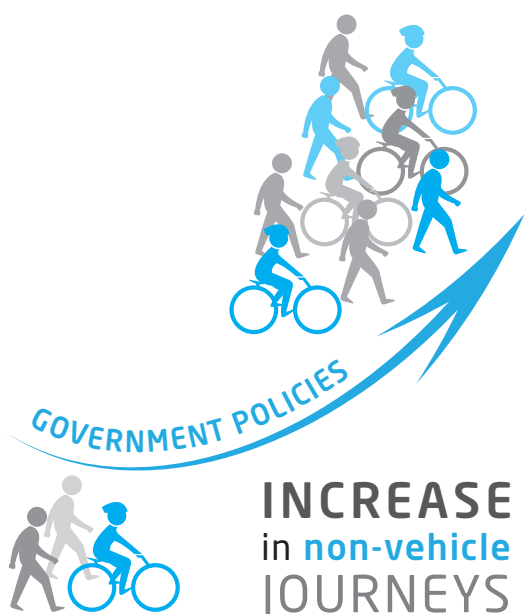


But without action, many more people will unnecessarily be killed or seriously injured in the next 5 and 10 years, as government and corporate policies unintentionally combine to create a 'perfect lethal storm'.....

Many more Vulnerable Road User journeys generated by central, regional and local government policies to improve air quality, reduce obesity and congestion. Most city regions incl. London, Greater Manchester and West Midlands have all published ambitious targets to increase non-vehicle journeys - some five-fold, some more, with London seeking 80% of all people journeys will be by foot, bike or public transport by 2041.



Many more HGV journeys generated by increased construction activity to deliver the homes & infrastructure. However, these journeys can be reduced through effective Construction Logistics Plans and planned measures such as off-site production, construction consolidation centres, use of waterways & rail to reduce road mileage and so reduce the risk of collisions between HGVs and Vulnerable Road Users



INACTION



2,500 KSI?

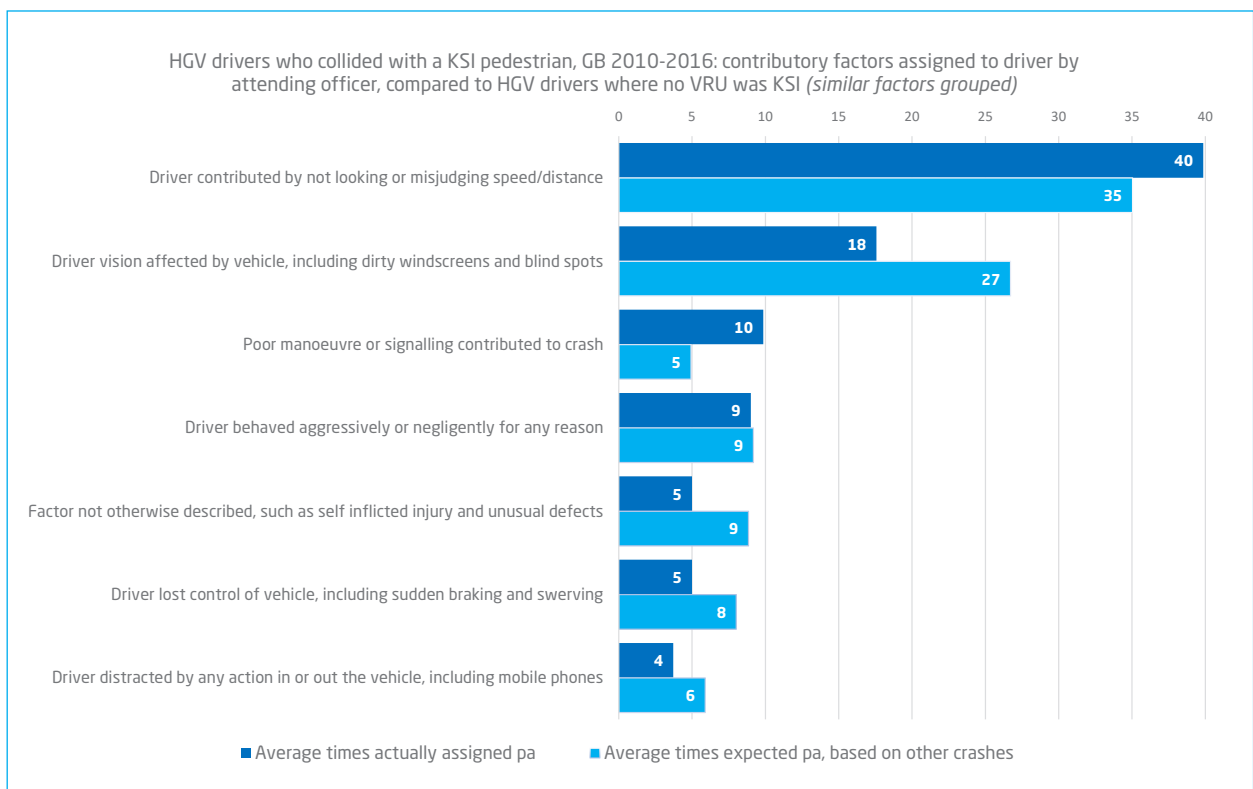
Key contributory factors attributed to the HGV drivers and/or casualty

The following chart summarises the key contributory factors attributed to the HGV driver. The second and third charts show the key contributory factors attributed to the pedestrian and motorcyclist. The charts show that the failure of the driver or the pedestrian/motorcyclist to look properly or misjudging speed/distance are the commonest attributed factors in these fatal or serious collisions.

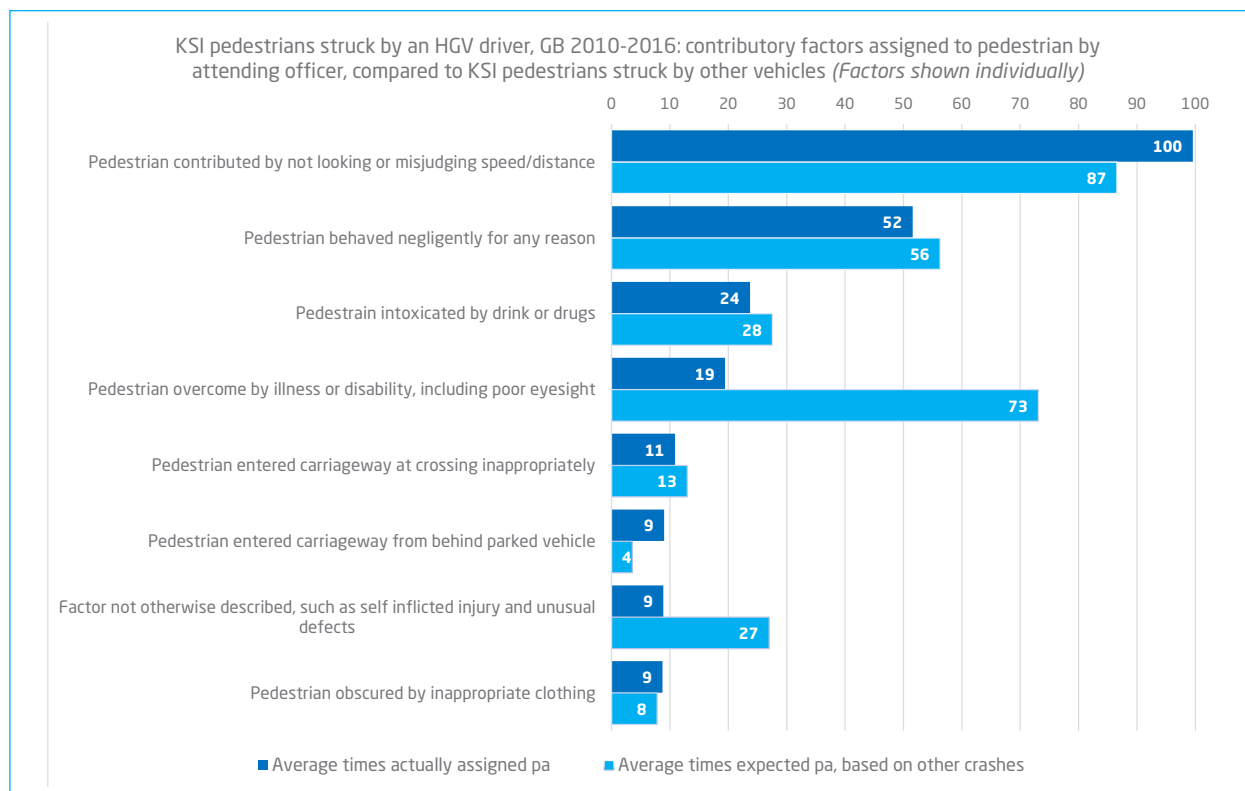
It is worth noting that these are the factors attributed by the police officer attending the collision, rather than proven causes identified through inquests. But they can be generally relied upon given the sheer number of collisions and consequent collective experience of police officers.



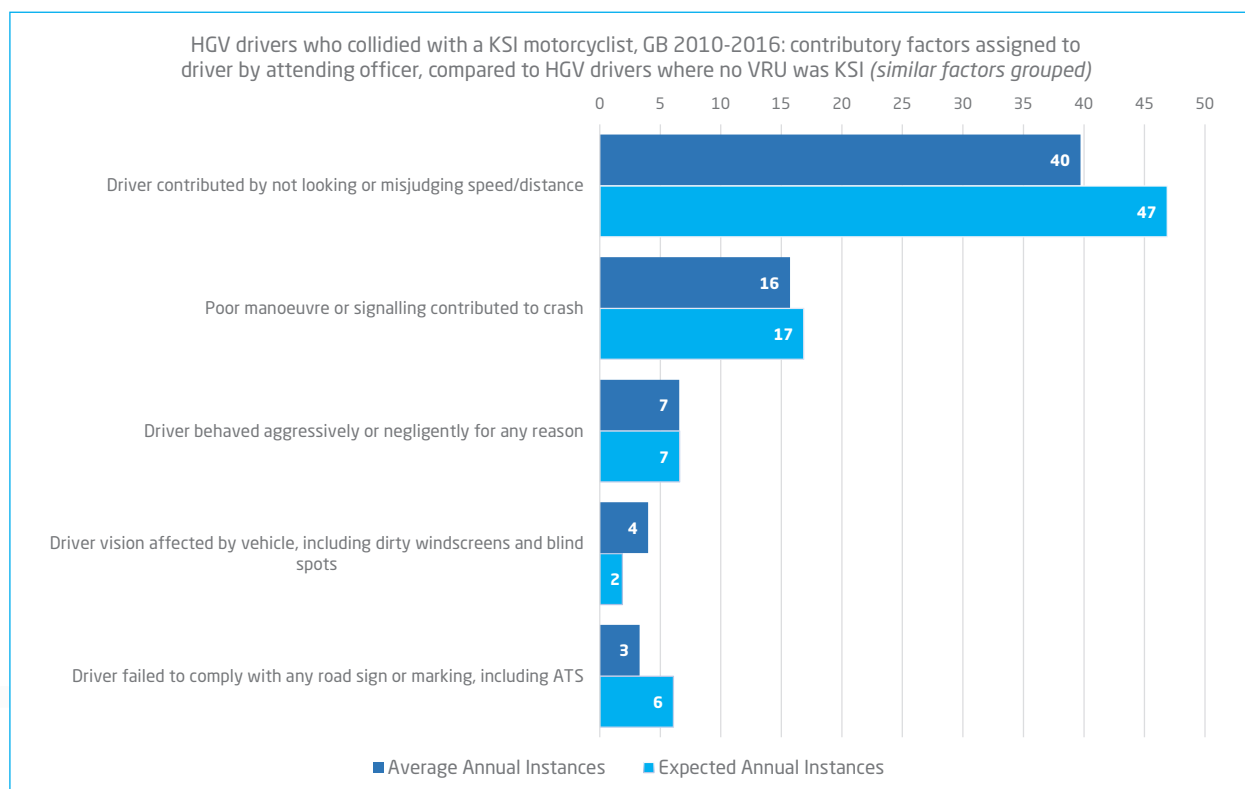
Key contributory factors attributed to the HGV drivers:



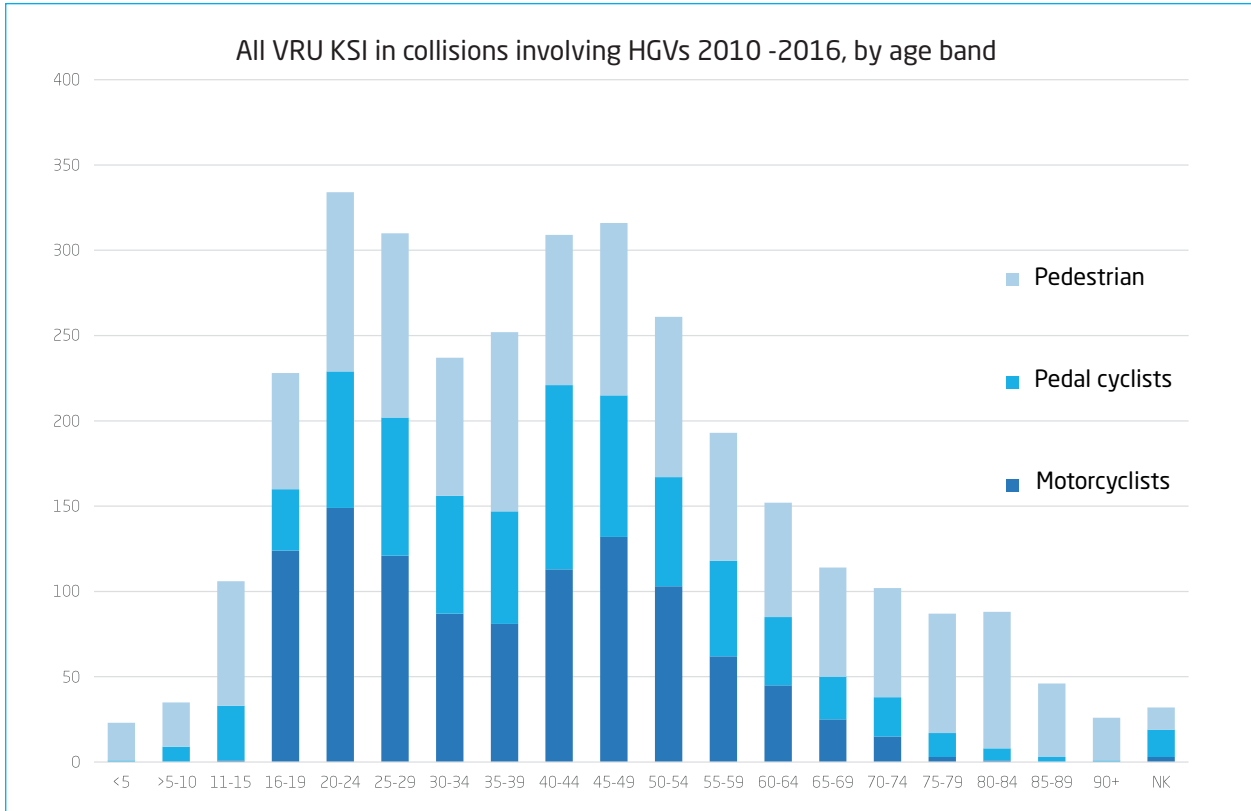
Key contributory factors attributed to the pedestrian casualty:



Key contributory factors attributed to the motorcyclist casualty:

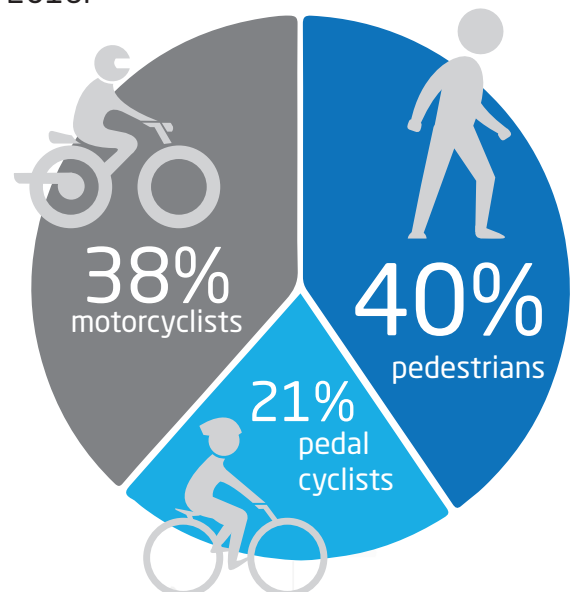


Who are the casualties?



The first peak at 20 to 24 is typical of all road user casualties, and of pedestrians and motorcyclists. The fall in casualties of people in their 30's also reflects general trends of transport requirements of a young family. Whilst pedestrian casualties tend not to rise for 20 to 50 year olds, HGV-pedestrian collisions do increase. Motorcyclist and pedal cyclists casualties tend to generally peak again for people in their forties, but the data shows middle-aged two-wheeler users are at notably higher risk of HGV collisions.

Of the 463 VRUs killed or seriously injured in collisions involving HGVs in 2016:

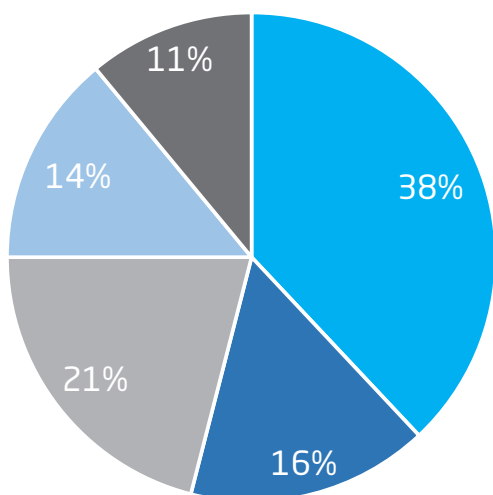


Sector analysis

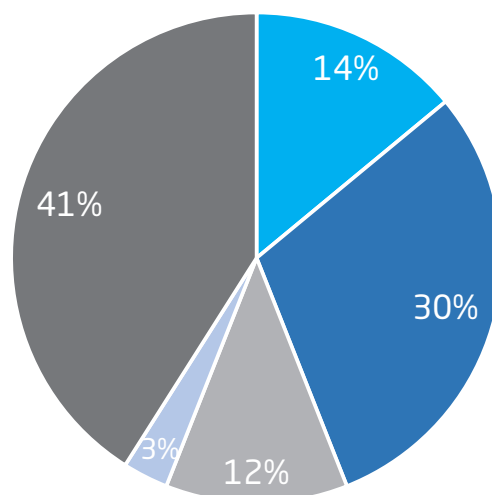
Definitive data on which sectors are responsible for journeys of HGVs involved in fatal or serious injury collisions is extremely difficult to obtain, as police officers attending a collision are not required or asked to record the vehicle journey's purpose or its payload unless it is a material fact to the collision. Details of vehicle ownership are held at DVSA but are confidential and cannot be obtained without high level authorisation.

However, a roadside survey at 14 locations in London in 2015 recorded that visibly construction-related HGVs accounted for approximately 38% of morning peak-time HGV traffic, reducing to 35% during daytime traffic. Food and drink accounted for 21% of HGV journeys observed, General distribution a further 16%, Utilities 14%, and Office/other accounting for the remaining 11%. The same set of road-side surveys identified a different sector split for Light Goods Vehicles.

Revised sectors - HGV



Revised sectors - LGVs



- Construction
- General distribution
- Food & drink
- Utilities & support
- Office, light & service

Other road-side surveys for other major cities, towns or rural areas will almost certainly exist but were not identified in producing this report. Further searches

and/or surveys in key locations are required to inform key decisions, or recognise the risk of relying on this indicative sector data.



Construction
Logistics and
Community Safety

For more information about this report
call **01189 207 200**

For more information, to download
the *CLOCS Standard* and for all CLOCS
guides:

www.clocs.org.uk

