Interactive analysis tool to better understand collisions between Vulnerable Road Users and Goods Vehicles – particularly those widely used in the construction sector

Over 5,500 pedestrians, cyclists and motorcyclists were unnecessarily injured in a collision with construction vehicles* on Britain's roads in 2018 – over 28,000 in last 5 years. In 2018 alone, 1,884 were killed or seriously injured. You can help prevent more trauma and cost.

CLOCS, FORS and MPA collaborated with Agilysis to allow their members and the wider sector to interrogate the annual GB Road Safety Statistics published by DfT (latest is 2018) which is based on police reports made on every road collision they attend.

*Ahead of any other sector, construction has identified and used its most common vehicle body types to enable a refined filter of wider HGV (over 3.5t) and LGV (3.5t or under) data.

When a user sets the data filters to 'Involved a Construction Vehicle' [yes] and 'Involved an HGV' [all] and "Involved an LGV" [all], they 'include' (or 'exclude' as the user defines) and aggregate the data to give results for all construction HGVs and LGVs for their selected years; the graphs respond to show the scale and trends for these defined collisions.

Contents:

Dashboard Report created for CLOCS March 2020 by Agilysis Ltd

If you require any further information regarding this dashboard or have any feedback, please contact Lyndsey Owen, Analytics Manager, Agilysis Ltd. lyndsey.owen@agilysis.co.uk

Key statistics for personal injury collisions between Vulnerable Road Users (VRUs) and Goods Vehicles – particularly those widely used in the construction sector

Over 5,500 pedestrians, cyclists and motorcyclists were unnecessarily injured in a collision with construction vehicles* on Britain's roads in 2018 – over 28,000 in last 5 years. In 2018 alone, 1,884 were killed or seriously injured. You can help prevent more trauma and cost.

The following highlight some other key findings (according to DVLA recorded vehicle body type) – remembering every number is a real person with real injuries, traumatising the casualty, their family, the driver and witnesses:

- Fatal and serious injury collisions between VRUs and heavy/light goods vehicles used widely in UK construction rose by over 16% between 2014-2018 (from 1,621 to 1,884)
- 46% of those Killed or Seriously Injured (KSI) were pedestrians, 32% motorcyclists and 22% pedal cyclists
- Across all sectors, VRU KSIs involving HGVs rose by 11% from 2014-18 to 540;
- West Midlands has suffered the fastest and greatest increase in the absolute number of people killed/injured in collisions with HGVs – up 78% since 2014-18 as proportion of regional population – and only slightly more than South East, East and London.
- Driver observation errors (misjudging speed, not looking properly) remain the commonest contributory factor identified by the attending police officer. Pedestrian's behaviour remains similarly prevalent.
- Relative to construction output, VRU KSIs involving construction vehicles is declining – but not fast enough as 1 traumatised family is too many and 1,884/annum is 8 casualties every working day

Using the filters:

a. **"Select All"**, then this filter has no effect at all (i.e. it never filters anything out, and the other two filters decide what is shown)
b. **"No"**, then collisions which involve such vehicles are EXCLUDED unless they satisfy one or both of the other two filters
c. **"Yes"**, then collisions which involve such vehicles are always INCLUDED, regardless of whether or not they satisfy the other two filters

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DASHBOARD POWERED BY ROAD SAFETY ANALYSIS | ENGINEERED BY AGILYSIS

Vulnerable road users involved in collisions

Filters

Year of Collision

Multiple selections

Casualty Severity

Multiple selections

Involved Construction Vehicles

Yes

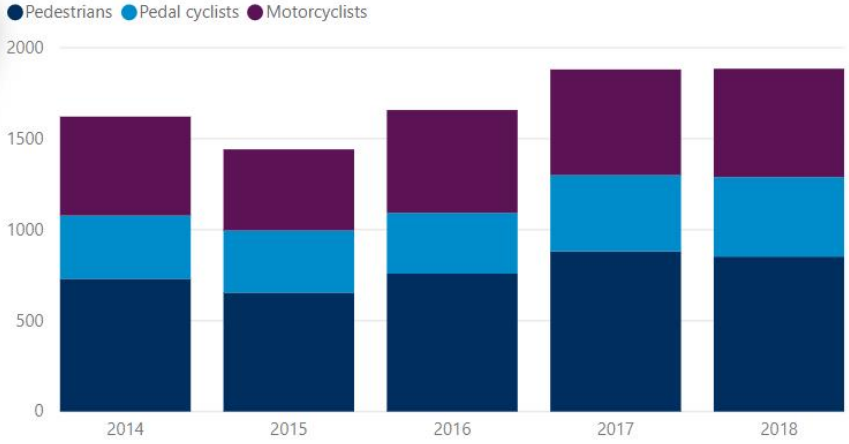
Involved Heavy Goods Vehicle

All

Involved Light Goods Vehicle

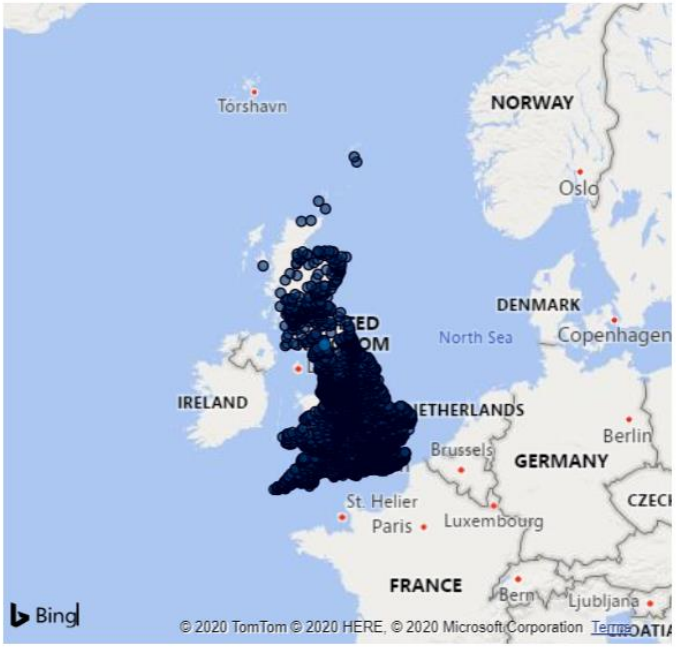
All

VRU casualties by year



Region	Pedestrian casualtes	Pedal cyclist casualties	Motorcyclist casualties	VRU casualties
Yorkshire And The Humber	371	177	225	773
West Midlands	294	132	199	625
Wales	85	36	59	180
South West	256	147	274	677
South East	533	377	543	1453
Scotland	350	107	145	602
North West	462	195	268	925
North East	156	44	68	268
London	828	359	454	1641
East Midlands	246	124	207	577
East	293	179	290	762
Total	**3874**	**1877**	**2732**	**8483**

Location of VRU's involved in collisions



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Who are the casualties injured in construction vehicle collisions?

Filters

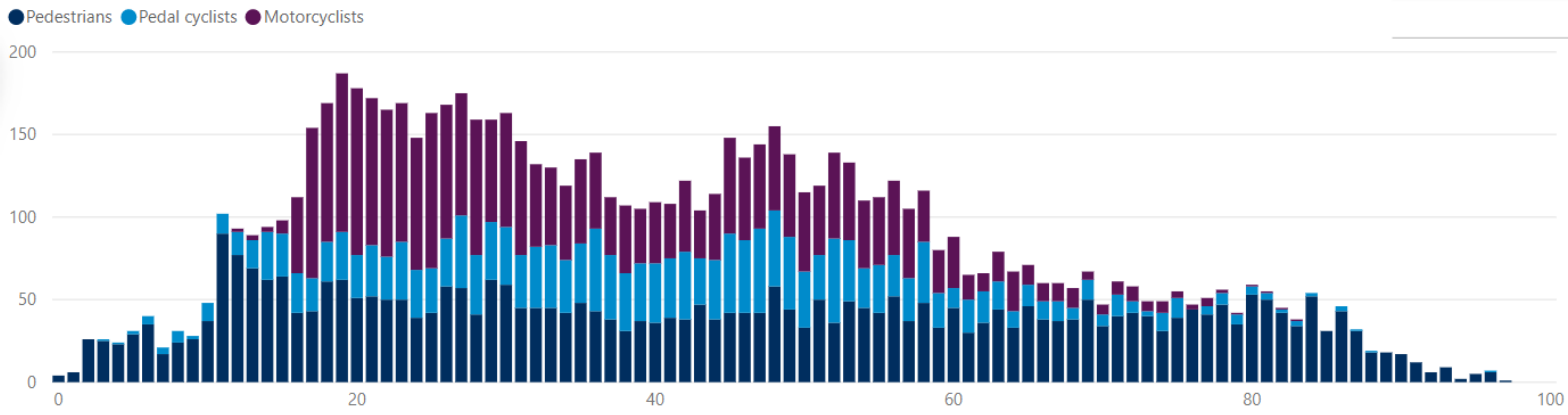
Year of Collision

Multiple selections

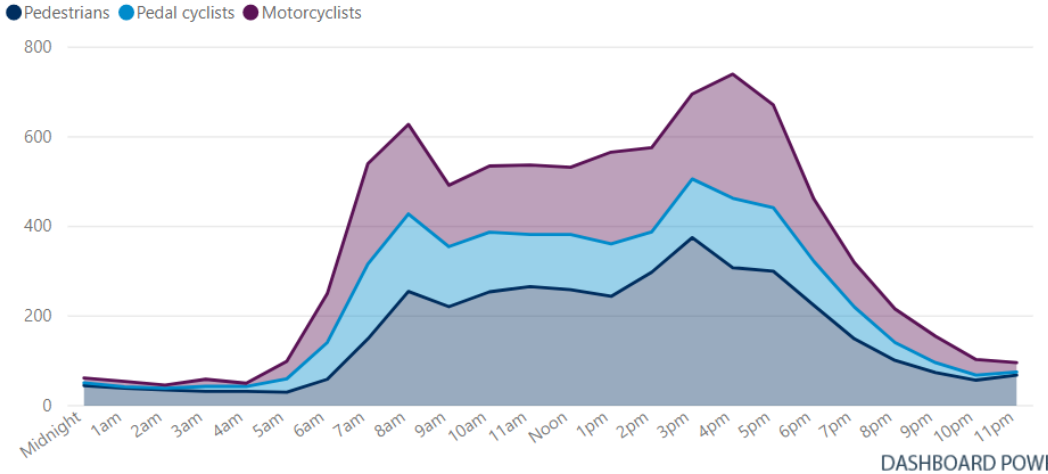
Casualty Severity

Multiple selections

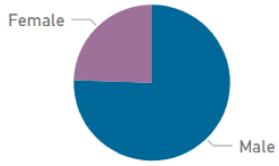
VRU casualties by casualty age



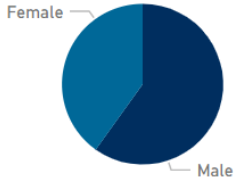
VRU casualties by time of day



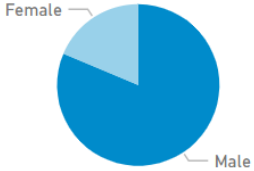
VRU casualties by gender



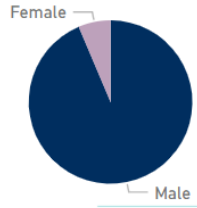
Pedestrian casualties by gender



Pedal cyclist casualties by gender



Motorcyclist casualties by gender



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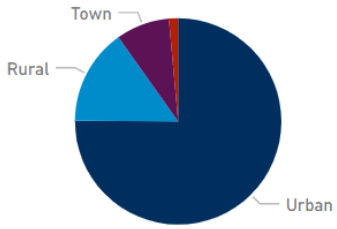
Construction vehicles involved in collisions with KSI VRU casualties

Filters

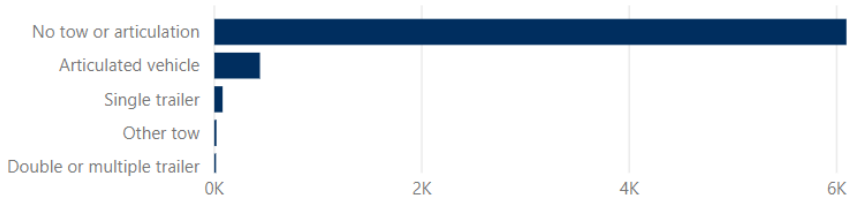
Year of Collision

Multiple selections

Involved construction drivers by rurality

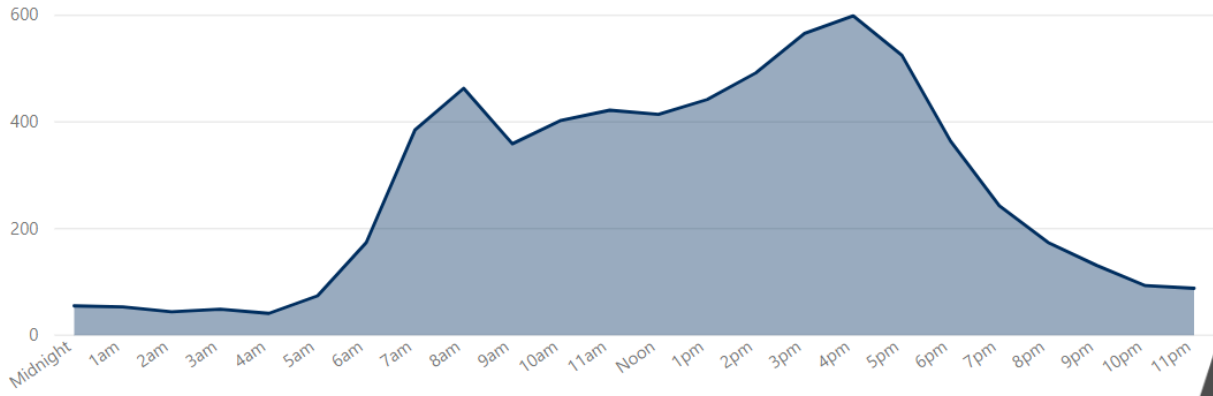


Involved construction drivers by articulation

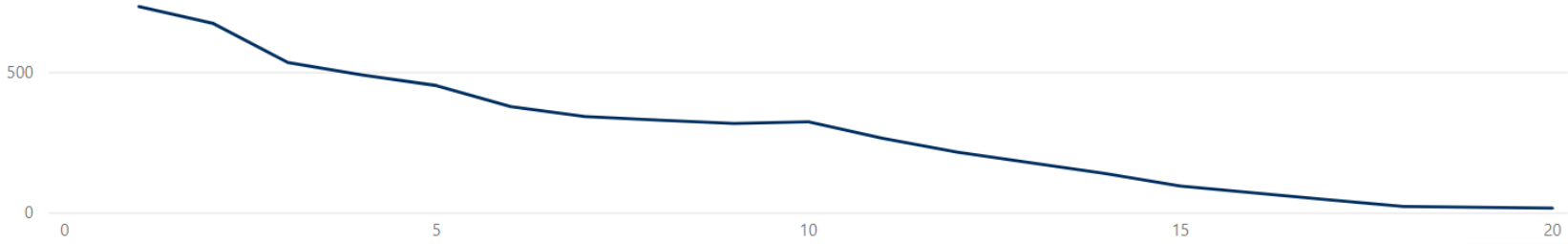


Involved construction drivers by whether vehicle was left hand drive

Involved construction drivers by time of day



Age of Vehicle Involved



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How are pedestrian casualties involved in collisions with construction vehicles?

Filters

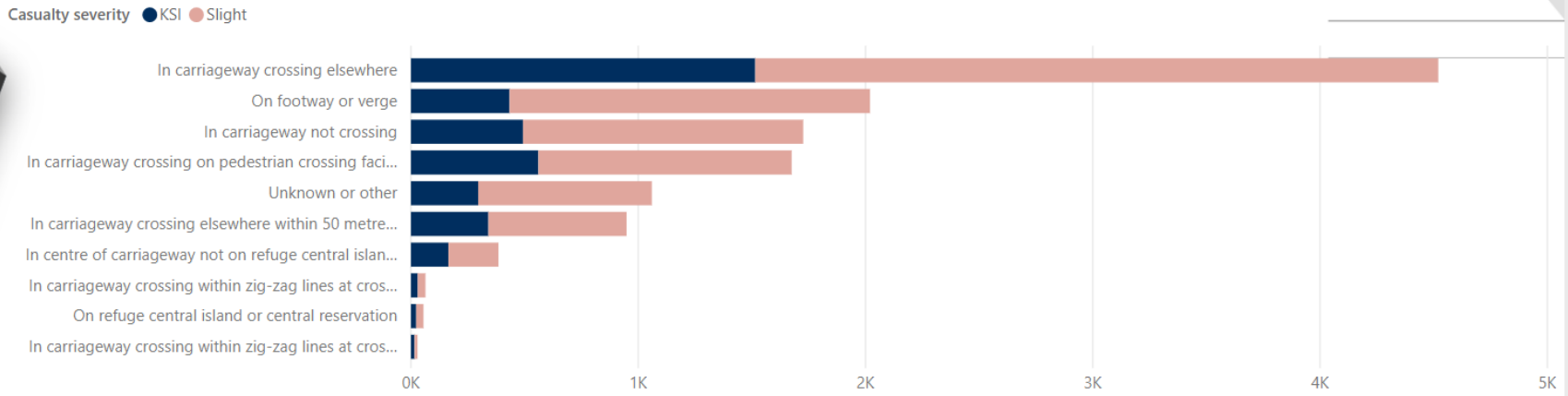
Year of Collision

Multiple selections

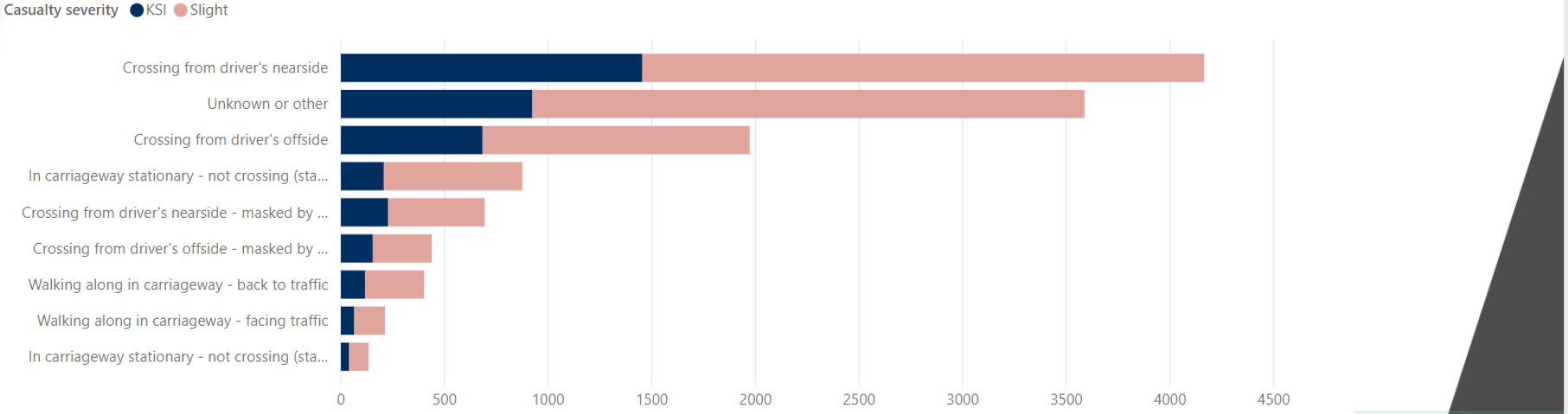
Casualty Severity

All

Pedestrian casualties by pedestrian location and casualty severity



Pedestrian casualties by pedestrian movement and casualty severity



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Contributory Factors (CFs) most attributed by police to the casualty or driver/vehicle (in collisions between VRU's and construction vehicles)

Filters

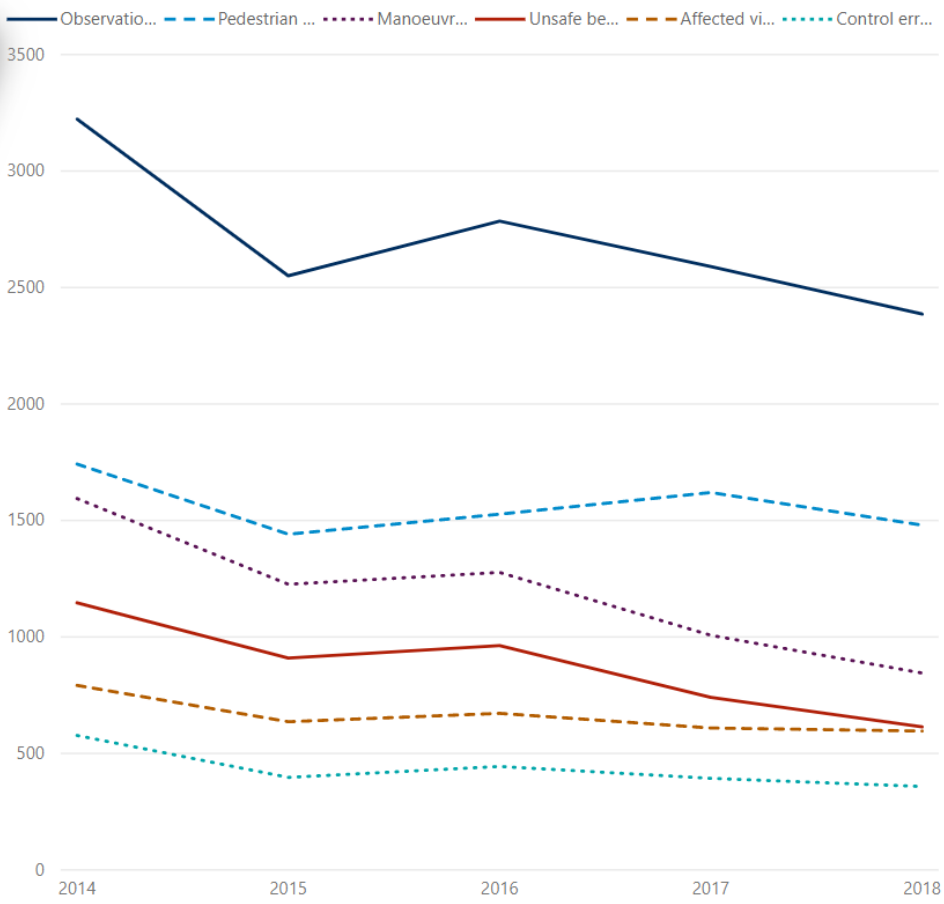
Year of Collision

Multiple selections

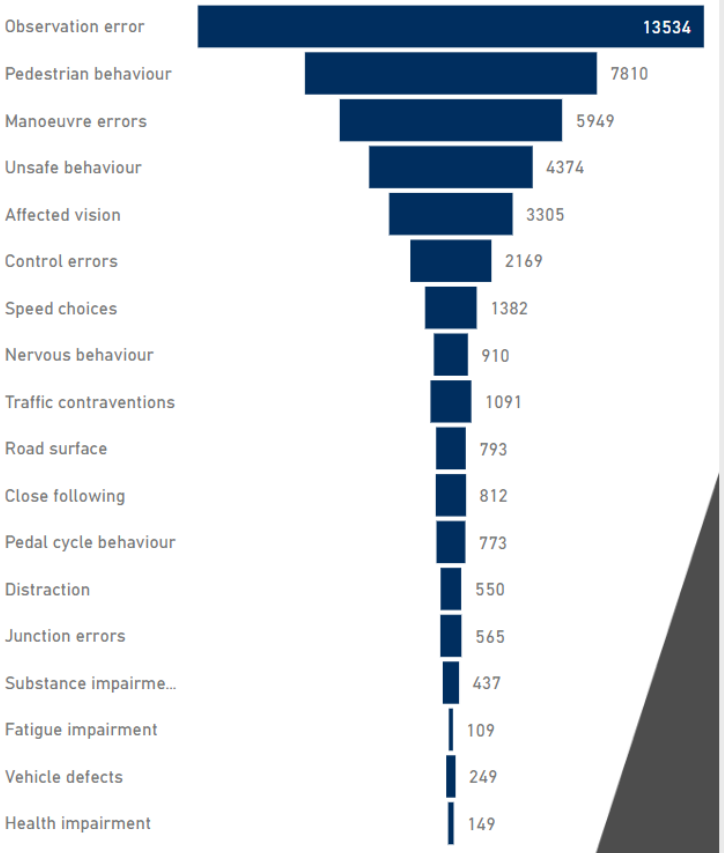
Casualty Severity

All

Casualty trends for collisions attributed CFs *



VRU casualties by CF attributed to crash *



* See Appendix on Page 9 for full CF Groupings

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VRU casualties in construction vehicle collisions relative to construction activity

Filters

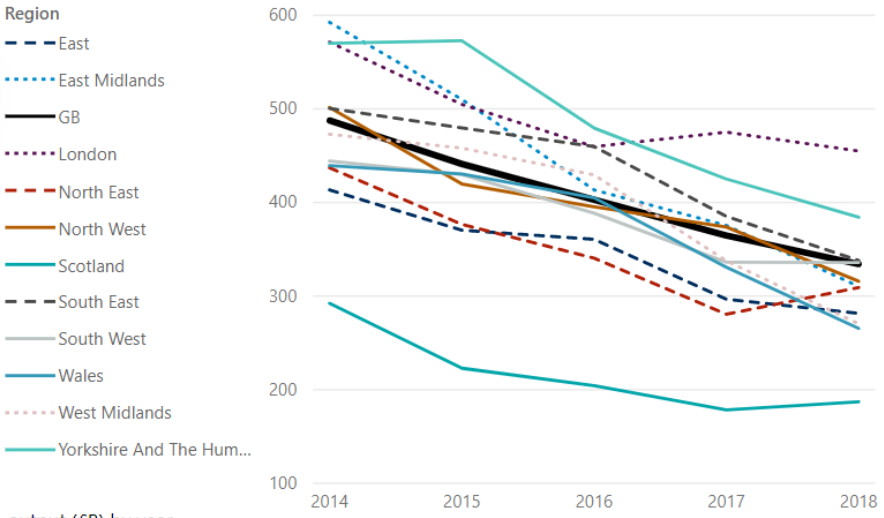
Year of Collision

Multiple selections

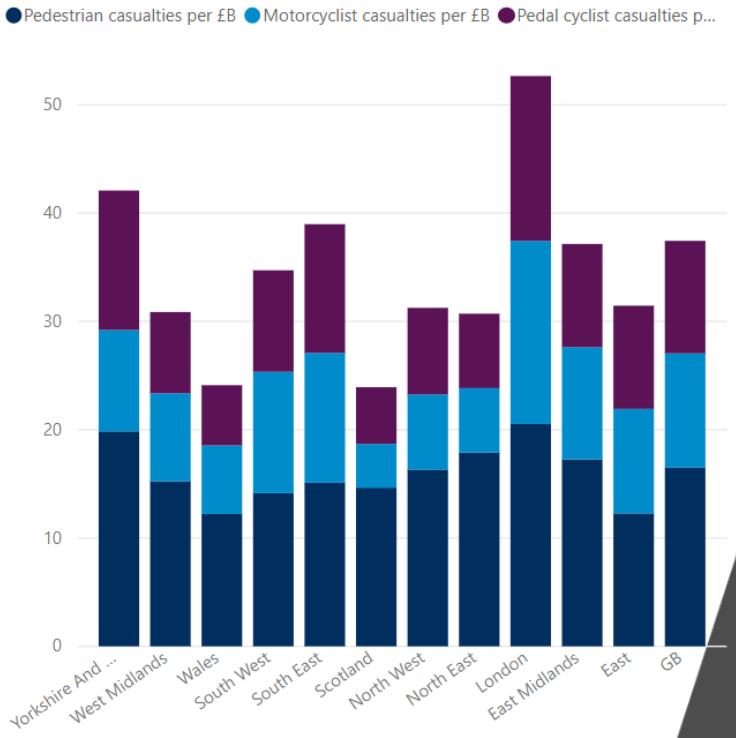
Casualty Severity

All

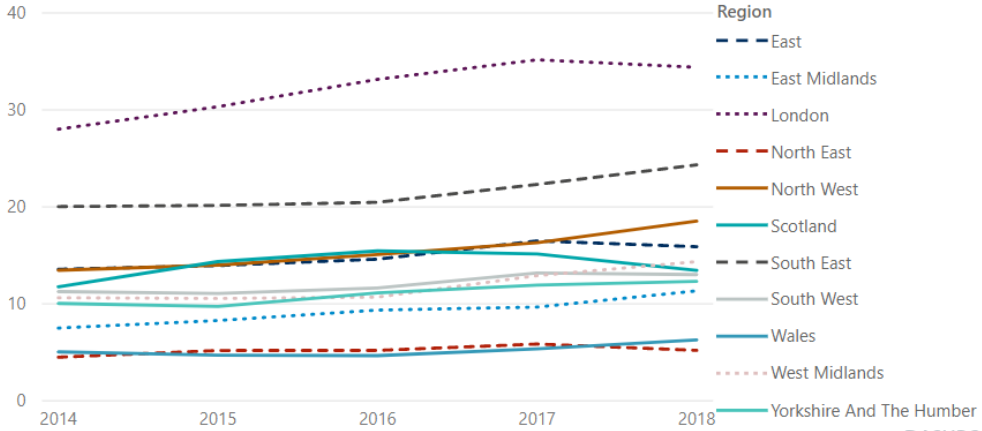
Regional VRU casualties per £B of construction output by year



VRU casualties per £B of construction output, 2014-2018



Construction output (£B) by year



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Appendix - Contributory Factor Groupings

Injudicious Action	Driver Errors or Reactions	Driver Impairment or Distraction	Behaviour or Inexperience	Other
Traffic Contraventions	**Manoeuvre Errors**	**Substance Impairments**	**Nervous Behaviour**	**Vehicle Defects**
Disobeyed automatic traffic signal	*Poor turn or manoeuvre*	*Impaired by alcohol*	*Nervous, uncertain or panic*	*Tyres illegal, defective or under-inflated*
Disobeyed double white lines	*Failed to signal or misleading signal*	*Impaired by drugs (illicit or medicinal)*	*Learner or inexperienced driver/rider*	*Defective lights or indicators*
Disobeyed 'Give way' or 'Stop' signs or markings	*Passing too close to cyclist, horse rider or pedestrian*		*Inexperience of driving on the left*	*Defective brakes*
Disobeyed pedestrian crossing facility			*Unfamiliar with model of vehicle*	*Defective steering or suspension*
Illegal turn or direction of travel				*Defective or missing mirrors*
				Overloaded or poorly loaded vehicle or trailer
Speed Choices	**Control Errors**	**Distraction**	**Unsafe Behaviour**	**Road Surface**
Exceeding speed limit	*Sudden braking*	*Driver using mobile phone*	*Aggressive driving*	*Poor or defective road surface*
Travelling too fast for conditions	*Swerved*	*Distraction in vehicle*	*Careless, reckless or in a hurry*	*Deposit on road (e.g. oil, mud, chippings)*
	Loss of control	*Distraction outside vehicle*		*Slippery road (due to weather)*
Close Following	**Observation Error**	**Health Impairments**	**Pedal Cycle Behaviour**	**Affected Vision**
Following too close	*Failed to look properly*	*Uncorrected, defective eyesight*	*Vehicle travelling along pavement*	*Stationary or parked vehicle(s)*
	Failed to judge other person's path or speed	*Illness or disability, mental or physical*	*Cyclist entering road from pavement*	*Vegetation*
			Not displaying lights at night or in poor visibility	*Road layout (e.g. bend, winding road, hill crest)*
			Cyclist wearing dark clothing at night	*Buildings, road signs, street furniture*
	Junction Errors	**Fatigue Impairment**	**Pedestrian Behaviour**	*Dazzling headlights*
	Junction overshoot	*Fatigue*	*Crossing road masked by stationary or parked vehicle*	*Dazzling sun*
	Junction restart (moving off at junction)		*Failed to look properly*	*Rain, sleet, snow or fog*
			Failed to judge vehicle's path or speed	*Spray from other vehicles*
			Wrong use of pedestrian crossing facility	*Visor or windscreen dirty or scratched*
			Dangerous action in carriageway (e.g. playing) *Careless, reckless or in a hurry* *Impaired by alcohol* *Impaired by drugs (illicit or medicinal)* *Pedestrian wearing dark clothing at night* *Disability or illness, mental or physical*	*Vehicle blind spot*