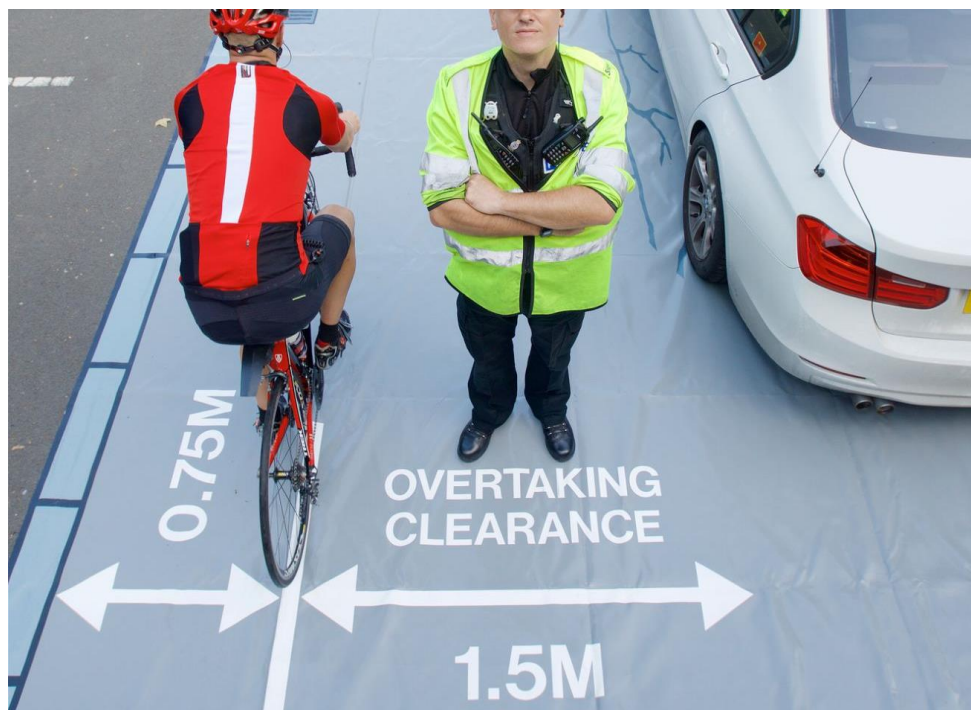
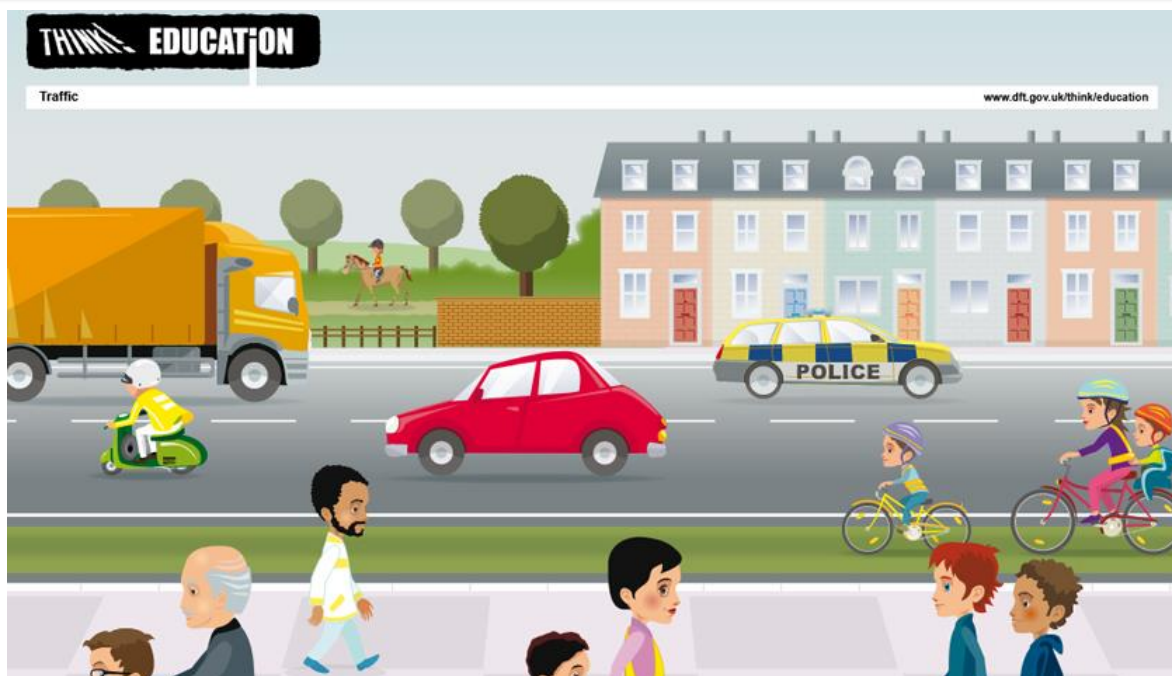


REPORTED ROAD CASUALTIES WEST YORKSHIRE



© Close pass operation (passing distance -West Midland Police)

Main Results in 2018



© Dft New THINK! road safety campaign launched to help cut child casualties

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Foreword

This publication presents statistics on personal-injury collisions and casualties in 2018 on public roads (including footways) in West Yorkshire that were recorded by the police. Figures are derived from the 'Stats 19' forms completed by the police officers who investigated the collisions. These forms compiled detailed data on individual personal-injury road collisions and cover the circumstances of the collision, the casualties and the vehicles involved. The resulting data are supplied to local authorities and to the Department for Transport.

*Only collisions resulting in **injury** are enumerated; 'Damage only' crashes are not included. Incidents that are not reported to the police, or reported 30 days or more after they took place, are also excluded.*

Figures for road deaths reflect the legal definition of a person who sustained injuries that caused their death at the time or within 30 days of the collision.

Summary statistics are published quarterly. This document contains a more comprehensive narrative analysis of the current year (2018) and focuses only on the trends related to major road-user categories. For detailed statistical breakdown and statistical tables in specific formats please get in touch with us (see end for contact details).

This report is organised in seven sections:

- 1. West Yorkshire summary results in 2018*
- 2. Characteristics of the collisions in the county; this provides some insights into the location, the road classes, and the main causation factors, including the effects of alcohol*
- 3. Discusses the 2018 totals by road-user categories.*
- 4. Road safety initiatives and campaigns undertaken during the year.*
- 5. Conclusion.*
- 6. Statistical tables for the county as a whole.*

The assistance of the West Yorkshire Police is acknowledged in providing data on injury road collisions to the Accident Studies team on behalf of the five West Yorkshire Authorities. Special thanks to the Major Collision Enquiry Team and the Central Process Bureau in Bradford for their help in validating RTC record.

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July 30, 2019

Definitions

Adults: Persons aged 16 to 59 (except where otherwise stated).

Agricultural vehicles: Mainly comprises agricultural tractors (whether or not towing) but also includes mobile excavators and front dumpers.

Built-up roads: Collisions on 'built-up roads' are those that occur on roads with speed limits (ignoring temporary limits) of 40 mph or less. 'Non-built-up roads' refer to those with speed limits over 40 mph. Motorway collisions are shown separately and are excluded from the totals for built-up and non-built-up roads.

Buses and coaches: Buses or coaches equipped to carry 17 or more passengers, regardless of use; also called public service vehicles (PSV).

Cars: Includes taxis, estate cars, three- and four-wheel cars and minibuses except where otherwise stated. Also includes motor caravans prior to 1999.

Casualty: A person killed or injured in a collision. Casualties are sub-divided into 'killed', 'seriously injured' and 'slightly injured'.

Children: Persons under 16 years of age (except where otherwise stated).

Collision: Involves personal injury occurring on the public highway (including footways) in which at least one road vehicle or a vehicle in collision with a pedestrian is involved and which becomes known to the police within 30 days. One collision may give rise to several casualties. 'Damage-only' collisions are not included here.

Darkness: From half an hour after sunset to half an hour before sunrise, i.e. 'lighting-up time'.

Daylight: All times other than darkness.

DfT: Department for Transport

Drivers: Persons in control of vehicles other than pedal cycles, motorcycles and ridden animals (see riders). Other occupants of vehicles are 'passengers'.

Elderly adults: People aged 60 and above.

Failed breath test: Drivers or riders who were tested with a positive result, or who failed or refused to provide a specimen of breath (see note on Table RAS51002 in 'Notes to individual tables' for the coverage of breath test data).

Fatal collision: A collision in which at least one person is killed.

Goods vehicles: These are divided into two groups according to vehicle weight. They include tankers, tractor units without their semi-trailers, trailers, articulated vehicles and pick-up trucks.

Heavy goods vehicles (HGV): Goods vehicles over 3.5 tonnes maximum permissible gross vehicle weight (gvw).

Light goods vehicles: Goods vehicles, mainly vans (including car derived vans), not over 3.5 tonnes maximum permissible gross vehicle weight.

Injury collision: A collision involving human injury or death.

Killed: Human casualties who sustained injuries that caused death less than 30 days after the collision; Confirmed suicides are excluded.

KSI: Killed or seriously injured.

Motorcycles or power two wheeler (PTW): Two-wheel motor vehicles, including mopeds, motor scooters and motor cycle combinations.

Motorways: Motorway and A (M) roads.

Built-up roads: Collisions on 'built-up roads' are those that occur on roads with speed limits (ignoring temporary limits) of 40 mph or less.

Non built-up roads: refer to speed limits over 40 mph.

Mobility scooter: A powered wheelchair or scooter with a maximum unladen weight of 150 kg and a maximum speed of 8 mph.

Other roads: All B, C and unclassified roads, unless otherwise noted.

Other vehicles: Includes ambulances, fire engines, trams, refuse vehicles, road rollers, agricultural vehicles, excavators, mobile cranes, mobility scooters and motorised wheelchairs etc., except where otherwise stated. Also included are non-motorised vehicles, including those drawn by an animal, ridden horse, wheelchairs without a motor, street barrows etc., except where otherwise stated.

Passengers: Occupants of vehicles, other than the person in control (the driver or rider); includes pillion passengers.

Pedal cyclists: Riders of pedal cycles, including any passengers.

Pedestrians: Includes children riding toy cycles on the footway, persons pushing bicycles, pushing or pulling other vehicles or operating pedestrian-controlled vehicles, those leading or herding animals, children in prams or buggies, and people who alight safely from vehicles and are subsequently injured.

Road users: Pedestrians and vehicle riders, drivers and passengers.

Serious accident/collision: One in which at least one person is seriously injured but no person (other than a confirmed suicide) is killed.

Serious injury: An injury for which a person is detained in hospital as an in-patient, or any of the following injuries whether or not they are detained in hospital: fractures, concussion, internal injuries,

crushings, burns (excluding friction burns), severe cuts, severe general shock requiring medical treatment and injuries causing death 30 or more days after the collision.

Severity: The severity of the most severely injured casualty (fatal, serious or slight). Of a casualty; killed, seriously injured or slightly injured.

Slight collision: One in which at least one person is slightly injured but no one is killed or seriously injured.

Slight injury: E.g. sprain (including whiplash), bruise, cut, slight shock requiring roadside attention or other minor injury not judged to be severe. This definition includes injuries not requiring medical treatment.

Vehicles: Vehicles (except taxis) are classified according to their structural type and not according to their employment or category of licence at the time of a collision.

Speed limits: Permanent speed limits applicable to the roadway.

Urban / rural roads: Urban roads are those within an area of population of 10,000 or more. Tables produced for years prior to 2017 are based on the 2001 Communities and Local Government definition of Urban Settlements. Tables produced for 2017 are based on the 2011 census data that uses a revised 2001 Communities and Local Government classification. Roads outside these areas will be classified as Rural.

Vehicles: Vehicles (except taxis) are classified according to their structural type and not according to their employment or category of licence at the time of an accident.

Vehicles involved in accidents: Vehicles whose drivers or passengers are injured, that hit and injure a pedestrian or another vehicle whose driver or passengers are injured or that contribute to the accident. Vehicles that collide, after the initial accident that caused injury, are not included unless they aggravate the degree of injury or lead to further casualties. Includes pedal cycles ridden on the footway.

A complete list of definitions can be found from the DFT web site as noted below:

<https://www.gov.uk/government/publications/road-accidents-and-safety-statistics-guidance>

Road Traffic Collisions in West Yorkshire 2018: Headline comments.

In 2018, the number of road users killed or seriously injured (KSI) rose by 3% from 851 to 873, while the reduction of all casualties is not impressive (-6% 5,804 to 5,440).

Numbers of all child casualties and those KSI fell 8% from 694 to 637 and 3% from 113 to 110 respectively; however, the number of children killed (4) remained the same as last year.

Serious injuries among pedestrians rose 4% from 253 to 264, while the reduction among all casualties is small (down 1% from 910 to 904). The number of pedestrian deaths (25), which is up for the third consecutive years, accounts for the overall KSI increase.

Cyclist casualties of all severities fell again this year, after the increase of 2016. Two cyclists were killed in 2018 (including one child); an increase in the number of those seriously injured contributed to an overall 6% increase in KSI (from 120 to 127).

Eight motorbike riders were killed in 2018, one less than last year, and there were fewer serious injuries (down 4% from 162 to 155), which contributed to the reduction in all KSI casualties.

The reduced number of car occupant casualties in 2018 consolidated the long-term downward trend; however the number of those KSI continues to fluctuate.

In 2018, the overall number of KSI (873) remains well above the target point (820) along the ideal trajectory towards the 2027 KSI target (515).

Fewer casualties of all severities were recorded on West Yorkshire's roads; this year's total consolidates the reduction of 2017 and overturns the increase of the three years prior to 2016. This is attributed to all the road user categories and is reflected across the districts.

The vulnerable road user (VRU) group comprising pedestrians (30%), cyclists (15%) and motorbike riders (19%), accounts for the majority of high severity casualties (63% in 2018). The number of those KSI in that group has increased by 6% from 544 to 554), with a particularly large increase amongst pedestrians and cyclists.

The breakdown of road casualties by age group shows a reduced number of all casualties among all the age groups of children (under 15 years) and adults (16-59). However, as shown in the table below, the number of casualties among adults aged 60-69 and 70+ increased in 2018.

Traffic volume in billions vehicle miles (10,199) has increased consistently since 1993 (8,060), but has not changed considerably since 2016 (10,251); however, the rate of casualties (KSI) per billion vehicle miles (86) increased by 3% from last year (83).











West Yorkshire KSI in 2018		
	 1.8%	% share 32% 276
	 4.3%	% share 30% 264
	 -4.7%	% share 19% 163
	 5.8%	% share 15% 127
Other	 19.4%	% share 5% 43
ALL KSI	 2.6%	873

Figure 1: KSI by type of road users

Reported Road Casualties West Yorkshire: Annual Report 2018

Unfortunately, the large majority of serious road collisions are due to human error, with not looking properly, badly judging other road users' speeds and poor manoeuvring being the most common causes.

Road casualties fluctuate considerably on a yearly basis at district and county level, and it is essential therefore to focus on long-term trends and encouraging safe and considerate road use by all.

Investment in road safety awareness campaigns, with a strong focus in particular on those that raise the awareness of motor vehicle drivers about vulnerable road users such as cyclists, pedestrians, motorcyclists, children and the elderly, needs to continue.

West Yorkshire	Severities	All Casualties (January-December)												
		2005~09 avg	2013	2014	2015	2016	2017	2018	Trend pattern 2013-2018	2018 vs last year	2018 vs Baseline	2018 vs avg-2015-17		
All	KSI	1084.2	863	926	920	887	851	873		2.6% ↑	-19.5% ↓	886	-1.5%	↓
	All severities	10008	6799	6938	7223	6798	5804	5,440		-6.3% ↓	-45.6% ↓	6,608	-17.7%	↓
Child	KSI	151.6	98	104	134	120	113	110		-2.7% ↓	-27.4% ↓	122	-10.1%	↓
	All severities	1115.8	769	772	826	791	694	637		-8.2% ↓	-42.9% ↓	770	-17.3%	↓
Pedestrian	KSI	325.6	225	279	278	246	253	264		4.3% ↑	-18.9% ↓	259	1.9%	↑
	All severities	1344.4	974	1074	1174	1058	910	904		-0.7% ↓	-32.8% ↓	1,047	-13.7%	↓
Cyclist	KSI	88.4	122	128	126	122	120	127		5.8% ↑	43.7% ↑	123	3.5%	↑
	All severities	480	635	682	628	637	567	552		-2.6% ↓	15.0% ↑	611	-9.6%	↓
PTW	KSI	207	180	184	177	178	171	163		-4.7% ↓	-21.3% ↓	175	-7.0%	↓
	All severities	653.4	558	552	558	502	437	415		-5.0% ↓	-36.5% ↓	499	-16.8%	↓
Car Occupant	KSI	420.6	282	302	276	310	271	276		1.8% ↑	-34.4% ↓	286	-3.4%	↓
	All severities	6771.6	4177	4176	4349	4195	3554	3,226		-9.2% ↓	-52.4% ↓	4,033	-20.0%	↓

Table 1: Trend of all casualties and KSI

West Yorkshire		2012	2013	2014	2015	2016	2017	2018	Trend Pattern	2018 vs 2017	2018 vs last 3-yr avg			Pop. Est. 2018	Cas. per 10,000 pop
Children	0-4yrs	199	185	166	190	178	139	131		-5.8% ↓	169.0	-22.5%	↓	154,303	8
	5-10yrs	302	252	255	280	249	240	216		-10.0% ↓	256.3	-15.7%	↓	186,908	12
	11-15yrs	364	335	351	356	365	315	290		-7.9% ↓	345.3	-16.0%	↓	135,633	21
	All Child	865	772	772	826	792	694	637		-8.2% ↓	770.7	-17.3%	↓	476,844	13
Adults	16-19yrs	755	580	623	633	526	522	410		-21.5% ↓	560.3	-26.8%	↓	112,561	36
	20-24yrs	1077	969	1051	1082	922	795	641		-19.4% ↓	933.0	-31.3%	↓	168,594	38
	25-59yrs	4292	3698	3673	3854	3751	3127	3061		-2.1% ↓	3577.3	-14.4%	↓	1,210,222	25
	60-69yrs	420	357	392	418	377	312	343		9.9% ↑	369.0	-7.0%	↓	234,741	15
	70+yrs	442	423	429	409	431	354	356		0.6% ↑	398.0	-10.6%	↓	268,981	13
	All Adults	6986	6027	6168	6396	6007	5110	4811		-5.9% ↓	5837.7	-17.6%	↓	1,995,099	24

Table 2: Road casualties by age groups

Section I: Reported Road Casualties in 2018

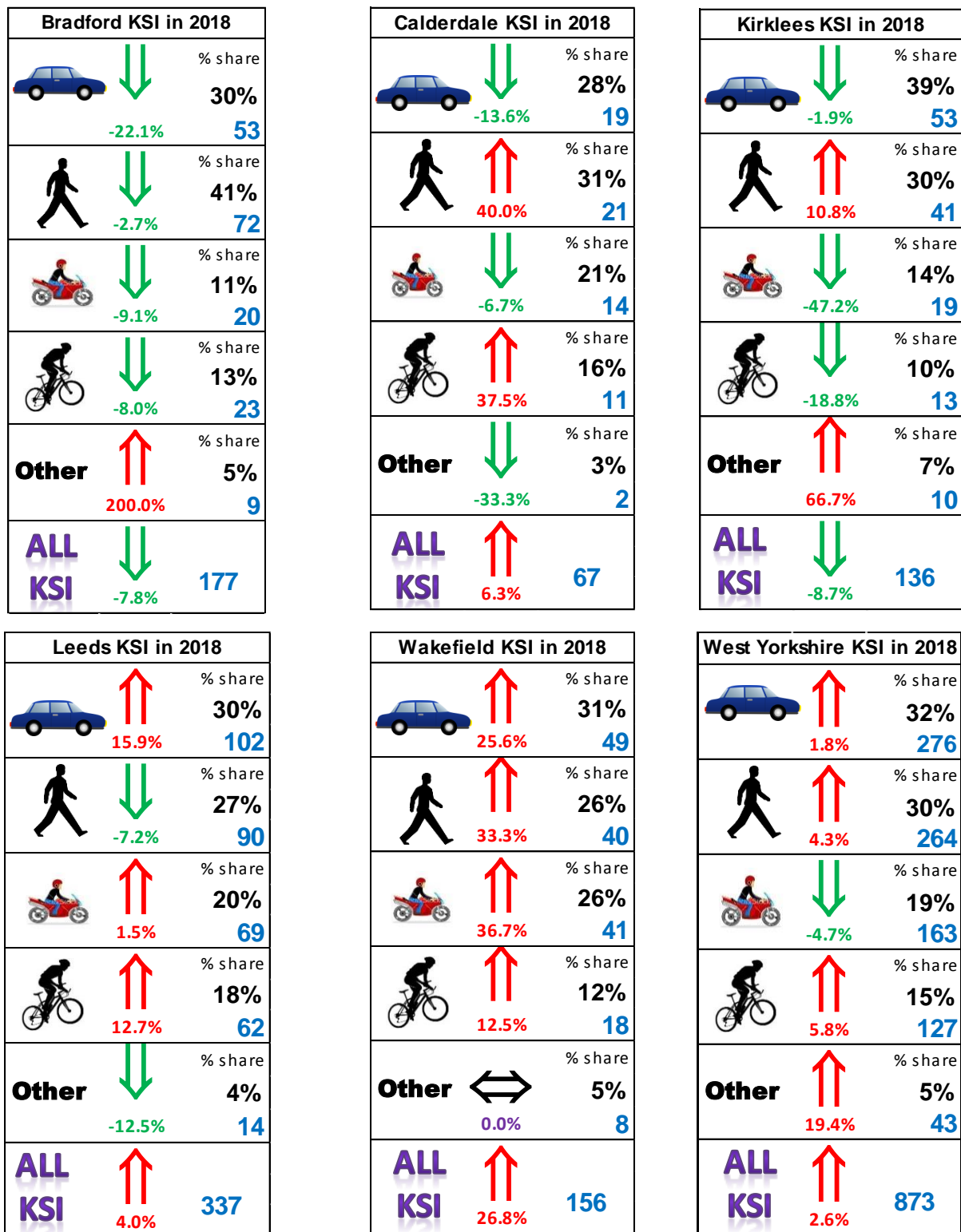


Figure 2: KSI by major road user classes in each of the five districts

I- KEY FINDINGS

All road collisions

The number of road collisions that resulted in a road user injury being reported to the police fell by 6% to 4,131 in 2018 from 4,372 in 2017. Collisions resulting in the death of at least one road user increased by 62% from 39 in 2017 to 63 in 2018, contributing to the increase in the overall number of those killed or seriously injured (KSI), which is up 3% from 781 (2017) to 801.

The number of people killed

In 2018, the number of road fatalities increased for the second consecutive year. A total of 70 road users were killed in 2018 against 43 in 2017. This is a setback, as road fatalities had been decreasing since 2013. Several multi-fatality collisions recorded between April and August 2018 contributed to the high number of deaths. Two of those collisions claimed the life of eight young people aged between 18 and 21 years. Among the road deaths were 25 pedestrians, 33 car occupants (18 drivers and 15 passengers), eight motorbike riders and two pedal cyclists.

The number of people killed or seriously injured

The number of road users seriously injured (803) fell 1% from last year (808). However, the total number of those killed or seriously injured (KSI), rose 3% to 873 in 2018. Those KSI comprise car occupants (32%), pedestrians (30%), PTW riders (19%) and cyclists (15%), which is similar to the 2017 (851) distribution.

The rate of decline in KSI slowed down in recent years and practically levelled off between 2010 and 2012. The reduction in 2013 briefly maintained the county in line with the desired trajectory towards the 2026 target; however, the overall number of KSI since 2014 has reinforced the flat trend of recent years. The slight reduction in 2017 and 2018 has not had an impact on that trend; the county remains 6% above the desired 2027 target trajectory and a reduction of 41% from this year is now needed to meet the 2027 target.

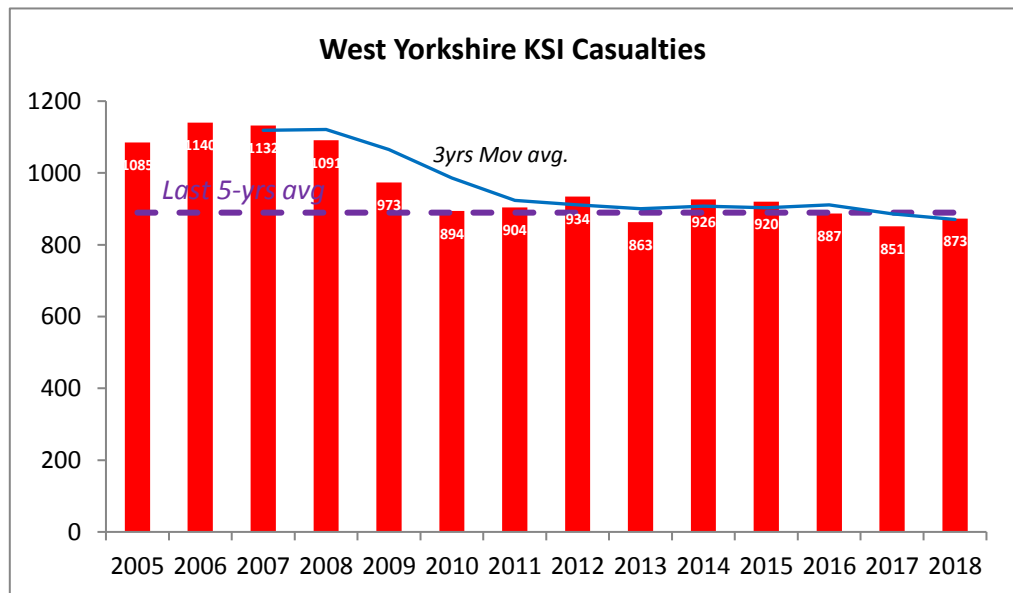


Figure 3: Killed or seriously injuries (KSI) in West Yorkshire since 2005.

All road traffic collision casualties (all severities)

There were 5,439 reported road casualties in 2018, the lowest ever total since 2005, and a reduction of 6% compared with 2017 (5,804). This year's total places the county 46% below the baseline average (2005-09) and 18% below the average of the last three years (6,608). In 2018, road casualties comprised car occupants (59%), pedestrians (17%), cyclists (10%) and PTW riders (8%). In the five years prior to

2016, the total number of road casualties hadn't changed that much, with a fairly flat trend. The reduction recorded in the last three years (2016-2018) consolidated the overall downward trend.

Child casualties (all severities)

In 2018, 637 children were injured on road collisions in the county, the lowest ever total and an improvement of 8% on the previous year's total (694). This was largely thanks to the reduction in the number of child cyclists injured, which fell by 34% from 101 in 2017 to 67 in 2018.

Figures for child KSI (110) fell for the third consecutive year despite the slight increase in the number of child pedestrians seriously injured, which increased 12% from 73 in 2017 to 82 in 2018. Four children (three pedestrians and one cyclist) were killed this year; there were two in 2017.

Pedestrian casualties (all severities)

Numbers of pedestrian casualties (904) barely changed from the total of last year (910), but it is pleasing to report a reduction since 2015. Fewer casualties among adults (down 3% from 611 to 596) reduced the effects of the increase in child pedestrian casualties, which rose by nine to 308 in 2018.

There were more deaths among pedestrians in 2018 (25) compared to last year (19). A total of 22 were adults, including 10 over 60 years old. Three of those killed were children (one child pedestrian was killed in 2017). The number of serious injuries remains almost unchanged in the last three years (236 on average), and it is the increase in the number of deaths that mostly contributed to the overall pedestrians KSI, which rose by 5% from 253 to 264.

Cyclist casualties (all severities)

In 2017, and for the first time since 2014, no cyclist was killed on West Yorkshire roads (six cyclists were killed in 2016 and two in 2015); in 2018, two cyclists (including one child) were killed. Serious injuries (125) have not changed since 2012 (122), and the trend for cyclists KSI in the most recent six years remains fairly flat, around an average of 124. KSI among adult cyclists (114) represent 90% of all cyclists KSI (127) and increased slightly from last year's total of 102. By comparison, only 13 child cyclists KSI recorded this year against 18 in 2017.

The number of cyclist casualties of all severities fell for the second consecutive year after a slight increase in 2016. The total (551) in 2018 however, remains above the baseline for both all severities and KSI, confirming an overall upward trend.

Motorbike rider casualties (all severities)

After a slight increase in 2015, the number of motorbike riders injured in 2018 (415) fell to its lowest level since records began. This year's total is 37% below the baseline (653.4) and 17% below the average of the last three years (499).

Eight motorbike riders were killed in 2018 (nine in 2017), but overall KSI figures (163) fell by 5% from last year (171) to the lowest level since 2010 (144).

Car occupant casualties (all severities)

Car occupant casualties, which represent 59% of all casualties in the county, fell by 9% from 3,554 in 2017 to 3,226 in 2018; this result consolidated the long-term downward trend.

In 2015, the number of fatal injuries among car occupants fell significantly from 32 the previous year to 14 (-56%). That total barely changed between 2016 (14) and 2017 (15), but doubled in 2018 (33). Two separate collisions claimed the lives of eight young people aged between 18 and 21 years.

Over the last five years, the number of KSI has varied quite considerably; the slight increase this year follows the reduction recorded between 2016 and 2017. The overall long-term trend, however, remains downward.

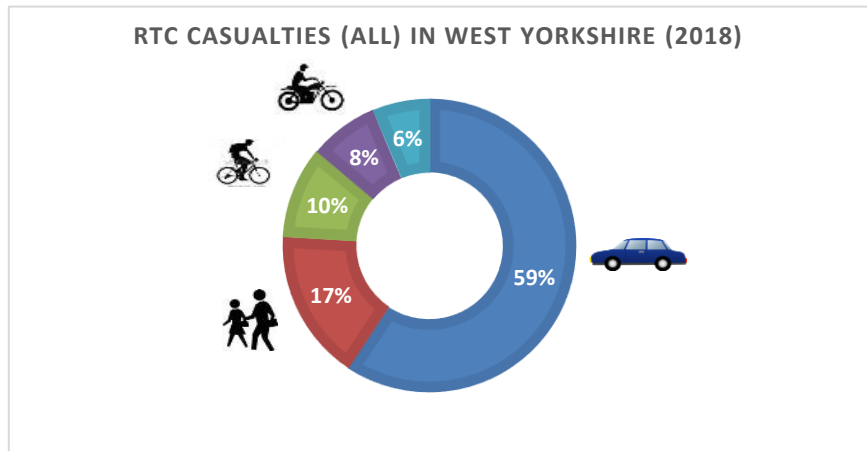


Figure 4-RTC casualties by road-user types

Age profile of drivers involved in fatal collisions

The table below shows the number of road users killed by the age of driver/rider since 2012. The large majority of road users killed in 2018 (19) was from collisions involving driver/riders aged 30-39. Young drivers (aged 20-24 years) were involved in collisions that killed 16 road users, the double of the total recorded last year. On average, 10 people are killed every year in collisions involving young drivers. The combination of youth and inexperience puts younger drivers at high risk. Young driver's inexperience means they are less able to spot hazards, and their youth means they are particularly likely to take risks.

To improve the safety of young people, solutions including better training and testing system for young people as well as investment in monitoring technology for young drivers can be explored (Brake, 2015).

Age of driver/rider	Fatal casualties							2018 vs 2017
	2012	2013	2014	2015	2016	2017	2018	
Under 16	1	0	0	0	0	5	1	-80.0% ↓
16-19	2	3	8	1	3	1	1	0.0% ↔
20-24	4	9	13	12	6	8	16	100.0% ↑
25-29	3	10	6	4	4	6	9	50.0% ↑
30-39	11	8	9	9	5	9	19	111.1% ↑
40-49	10	10	9	10	4	5	4	-20.0% ↓
50-59	14	3	6	4	5	5	7	40.0% ↑
60-80	4	9	4	4	5	1	8	700.0% ↑
Over 80	0	3	4	4	5	3	5	66.7% ↑
Total	49	55	59	48	37	43	70	62.8% ↑

Table 3: Age profile of drivers involved in fatal collisions since 2012

Table 4 below shows the breakdown of KSI by road-user groups in recent years. The results in 2018 are compared to the baseline (2005~09 average) and against the average of the recent three years (2015-2017).

The important increase in the number of fatalities in 2018 places the county well above the average of the last three years. The KSI increase among cyclists and pedestrians is noted and maybe a cause for concern, while KSI reduction among children, motorbike riders and car occupants is welcomed.

West Yorkshire	Baseline* (avg 05~09)	2015	2016	2017	Prev 3yrs avg	2018	2018 vs prev 3yrs avg		2018 vs baseline	
Fatal	94	48	37	43	43	70	64.1%	↑	-26%	↓
Serious	990	872	849	808	843	803	-4.7%	↓	-19%	↓
Slight	5722	6304	5911	4952	5722	4567	-20.2%	↓	-20%	↓
Total	6608	7224	6797	5803	6608	5440	-17.7%	↓	-18%	↓
KSI	1084	920	886	851	886	873	-1.4%	↓	-19%	↓
Child KSI	152	134	120	113	122	110	-10.1%	↓	-27%	↓
Pedestrian KSI	326	278	246	253	259	264	1.9%	↑	-19%	↓
Cyclist KSI	88	126	121	120	122	127	3.8%	↑	45%	↑
PTW KSI	207	179	182	171	177	163	-8.1%	↓	-21%	↓
Car Occ KSI	421	276	310	271	286	276	-3%	↓	-34.4%	↓
Other KSI	43	61	27	36	41	43	4%	↑	0.7%	↑

Table 4-Reported road traffic casualties by severity

Table 5 below provides the breakdown of KSI and all severities by district since 2013 and compares the position of each district and the county against the baseline (2005~09 average) and the average of the most recent three years (2015-2017). Overall, good progress can be noted in the five districts when this year's total is compared against the baseline for both all severities and KSI. When the 2018 total is compared against last year, the pattern is slightly different. The number of road users seriously injured increased in Calderdale, Leeds, and Wakefield and in the county as a whole. Bradford and Kirklees recorded their lowest total number of KSI since 2005.

As far as the 2027 target is concerned, only Calderdale achieved this in 2018; other districts now need to achieve a significant reduction in KSI if they are to meet the 2027 KSI target (see next page).

Reported Road Casualties West Yorkshire: Annual Report 2018

Local Authorities	Severities	All Casualties (January-December)													Road to target*	
		2005-09 avg	2013	2014	2015	2016	2017	2018	Trend pattern 2013-2018	2018 vs last year	2018 vs Baseline	2018 vs avg-2015-17			TP 2027	Reduc. Req
Bradford	KSI	248	190	205	188	178	192	177		-7.8% ↓	-28.6% ↓	186	-4.8%	↓	103	-41.8%
	All severities	2499	1,672	1,752	1,685	1,611	1,367	1,291		-5.6% ↓	-48.3% ↓	1,554	-16.9%	↓		
Calderdale	KSI	111.8	90	99	92	78	63	67		6.3% ↑	-40.1% ↓	78	-13.7%	↓	45	-32.8%
	All severities	875.2	566	623	556	555	450	411		-8.7% ↓	-53.0% ↓	520	-21.0%	↓		
Kirklees	KSI	200.4	139	168	159	152	149	136		-8.7% ↓	-32.1% ↓	153	-11.3%	↓	88	-35.3%
	All severities	1870.6	1,215	1,107	1,333	1,127	970	910		-6.2% ↓	-51.4% ↓	1,143	-20.4%	↓		
Leeds	KSI	356.6	294	334	338	332	324	337		4.0% ↑	-5.5% ↓	331	1.7%	↑	193	-42.7%
	All severities	3,440	2,433	2,532	2,664	2,550	2,203	1,995		-9.4% ↓	-42.0% ↓	2,472	-19.3%	↓		
Wakefield	KSI	167.4	150	120	143	147	123	156		26.8% ↑	-6.8% ↓	138	13.3%	↑	85	-45.5%
	All severities	1322.8	913	924	985	955	814	833		2.3% ↑	-37.0% ↓	918	-9.3%	↓		
West Yorkshire	KSI	1084.2	863	926	920	887	851	873		2.6% ↑	-19.5% ↓	886	-1.5%	↓	515	-41.0%
	All severities	10008	6,799	6,938	7,223	6,798	5,804	5,440		-6.3% ↓	-45.6% ↓	6,608	-17.7%	↓		

* Road to target- Reduc. Req.: reduction required from the current year to meet the 2027 target

Table 5-Reported road traffic casualties by severity

Table 6 below lists the total number of collisions and casualties as well as the position for each road-user group for the current and the previous five years. The current year results are now below the average of the most recent five years for all categories of road users. Despite the sharp increase in the number of fatal collisions and casualties in 2018, which put the district above the average of the last five years, the results from the table below confirm the general downward trend of the road traffic casualties in the county in recent years.

Collisions	2013	2014	2015	2016	2017	Average	2018
Fatal	52	53	43	35	39	44	63
Serious	714	793	782	758	742	758	738
Slight	4101	4197	4461	4176	3590	4105	3330
Total	4867	5043	5286	4969	4371	4907	4131
Casualties	2013	2014	2015	2016	2017	Average	2018
Fatal	55	58	48	37	43	48	70
Serious	808	867	872	849	808	841	803
Slight	5941	6013	6304	5911	4952	5824	4567
Total	6804	6938	7224	6797	5803	6713	5440
Road User Group Casualties	2013	2014	2015	2016	2017	Average	2018
Pedestrian	975	1074	1175	1058	910	1038	904
Pedal Cyclist	635	682	628	636	567	630	552
PTW Rider + Pillion	558	552	560	506	437	523	415
Car Driver	2691	2545	2785	2624	2288	2587	2136
Car Passenger	1493	1629	1567	1571	1265	1505	1090
Goods occupant	142	191	201	189	128	170	166
Bus occupant	277	230	252	181	182	224	175
Other	33	35	56	32	26	36	2
Total	6,804	6,938	7,224	6,797	5,803	6713	5,440

Table 6- West Yorkshire: Collisions, Casualties, road user group totals

II-TRANSPORT STRATEGY PERFORMANCE MANAGEMENT FRAMEWORK: KSI TARGET, CURRENT POSITION

The target for road users killed or seriously injured (KSI) has been developed based on previous experience with the West Yorkshire Local Transport Plan (WYLTP3). The WYLTP3 target was to reduce KSIs by 50% between 2011 and 2025. This target was ambitious given the already low rates of KSIs in West Yorkshire. Nevertheless, reducing KSIs further is a policy aim of the Transport Strategy and a new target for the KSI in West Yorkshire requires a 42% reduction in KSIs from 2016 levels¹. This is the level reflected in the chart below, and is recommended.

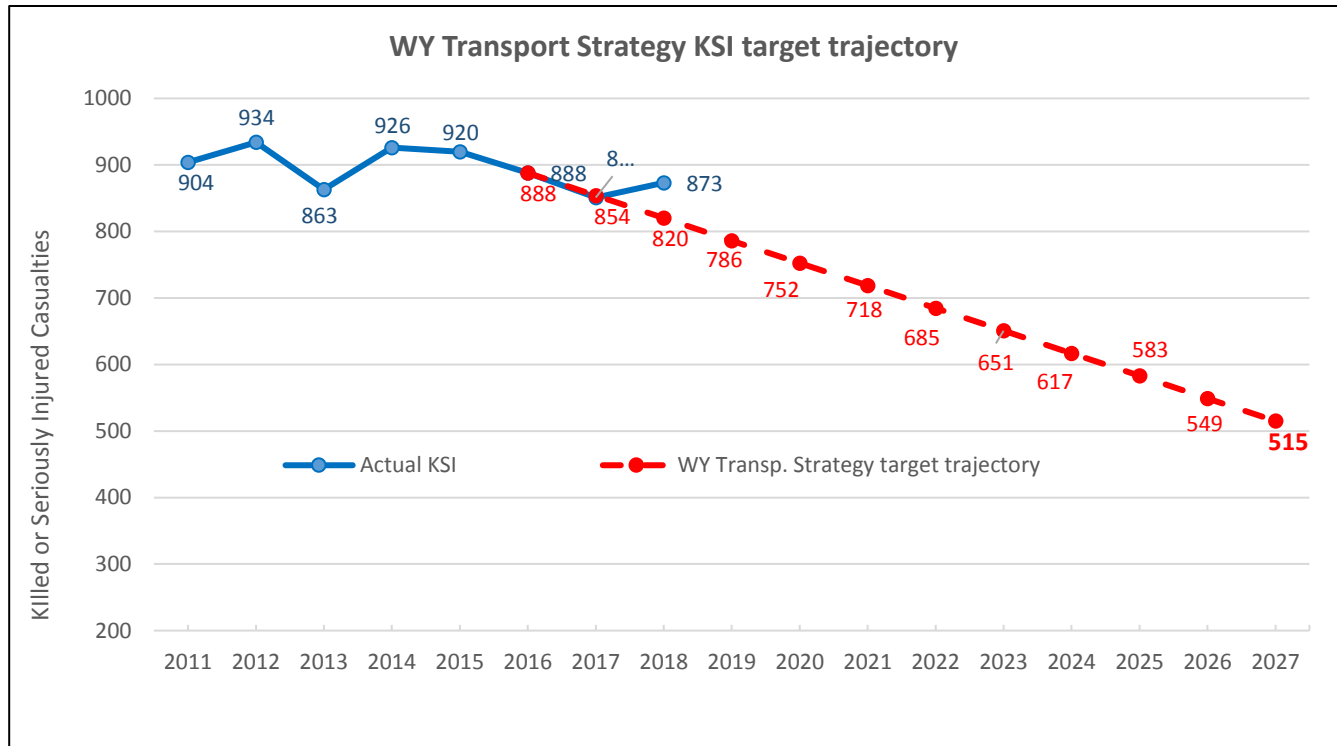


Figure 5: West Yorkshire transport strategy target

The table below shows the target for each of the five districts and the county as well as the progress towards meeting the 2027 target. It shows the change between current (2018) KSI level and the base (2016) KSI level, and calculates the reduction required from current position to meet the 2027 target.

Only two districts out of five are on track to meet the 2027 target. The number of KSI in Kirklees and Calderdale in 2018 is below the ideal trajectory to the target, indicating that, if this trend continues, both are currently on track to meet the target set for 2027. The number of KSI recorded in other districts and in the county as a whole is well above the ideal trajectory towards 2027. West Yorkshire as a whole needs to cut KSIs by 41% to meet the 2027 KSI target. Wakefield needs to achieve a reduction of 46%, Leeds 43%, Bradford 41%, Kirklees 35% and Calderdale 33%.

¹ 8a-Appendix 1 of the Transport Strategy Indicator and Target Final document : <https://westyorkshire.moderngov.co.uk/documents/s6122/item%205a%20Appendix%201%20FINAL.pdf>

West Yorkshire transport strategy target: current position

District	Base (KSI 2016)	2027 Target	Current KSI (2018)	Current vs Base	Trajectory 2018	Current vs Trajectory	Reduction to target	Comments
Bradford	178	103	177	-0.6%	164	7.9%	-41.8%	Above trajectory
Calderdale	78	45	67	-14.1%	72	-6.9%	-32.8%	on track
Kirklees	152	88	136	-10.5%	140	-2.9%	-35.3%	on track
Leeds	333	193	337	1.2%	308	9.4%	-42.7%	Above trajectory
Wakefield	147	85	156	6.1%	136	14.7%	-45.5%	Above trajectory
West Yorkshire	888	515	873	-1.7%	820	6.5%	-41.0%	Above trajectory

Table 7: Transport strategy target: current position

Section II- Traffic, Demography & Road Collisions



Figure 6: Typical traffic on a week day peak time in West Yorkshire

I- TRAFFIC LEVEL IN WEST YORKSHIRE

The more vehicles there are on the roads, the more collisions with other road-users are likely to occur, though the correlation is complex (DfT: RRCGB 2014 report). The increase in collisions and casualties in West Yorkshire could therefore be linked to the increase in traffic volume in the county, and so it is important to report and analyse road traffic collisions and casualties in the context of the level of traffic on the road network.

Before the economic downturn and recession in 2007, overall traffic levels in West Yorkshire had risen almost every year since 1993. Between 2007 and 2010, traffic levels fell 4% to 9,469 million vehicle miles. Since 2010, the level of traffic increased every year to its highest figure ever in 2016, with 10,251 million vehicles miles, before decreasing slightly in 2017 and again in 2018². Overall, the long-term trend clearly shows that traffic levels in the county rose in 2018 by 27% compared to 1993.

Road traffic levels are affected by a wide range of factors including population level and growth, personal travel choices, the demand for goods and services and the overall reduction in fuel cost; the change in traffic levels could be associated with all those factors.

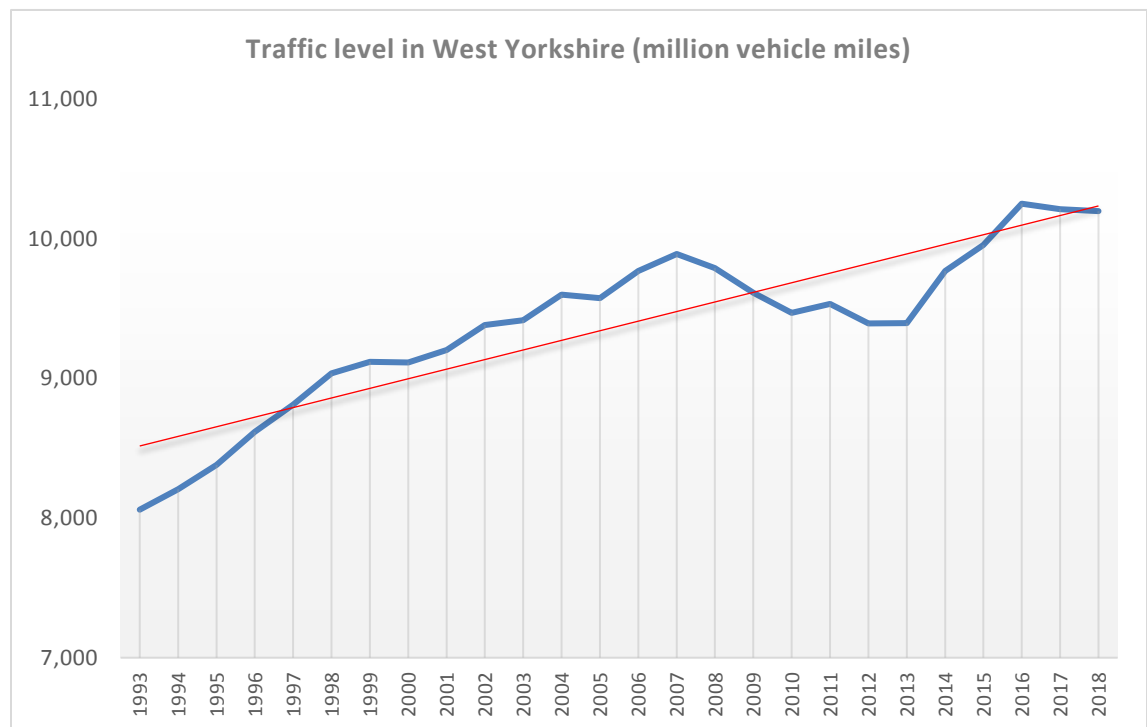


Figure 7: Traffic level in West Yorkshire

The index of change in traffic levels in each of the five districts is shown in the graph below and reveals some slight variation; overall, the level of traffic has barely changed in all of the five districts in the past three years.

² <https://www.gov.uk/government/statistical-data-sets/road-traffic-statistics-tra#traffic-by-local-authority-tra89>

When the level of traffic from 1993 is considered, there is a clear general upward trend, but the level of increase varies according to the district. Since 1993 to 2018, traffic levels have increased by 40% in Wakefield, by 29% in Leeds, by 25% in Kirklees, by 20% in Calderdale and by 13% in Bradford.

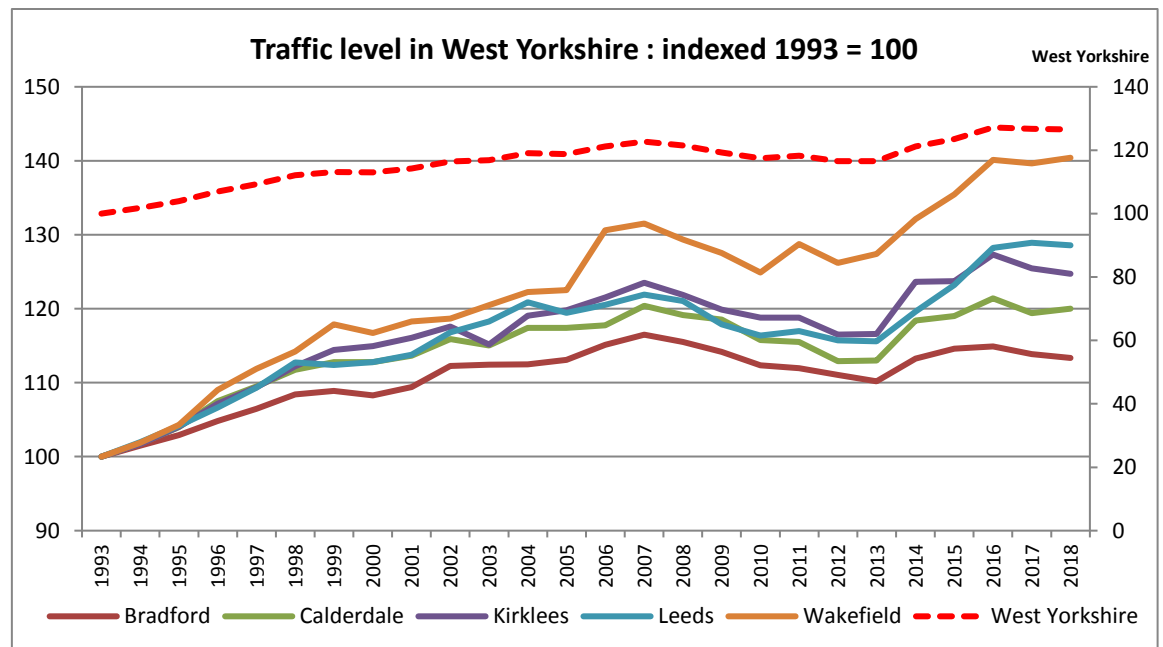


Figure 8: Change in traffic levels by district

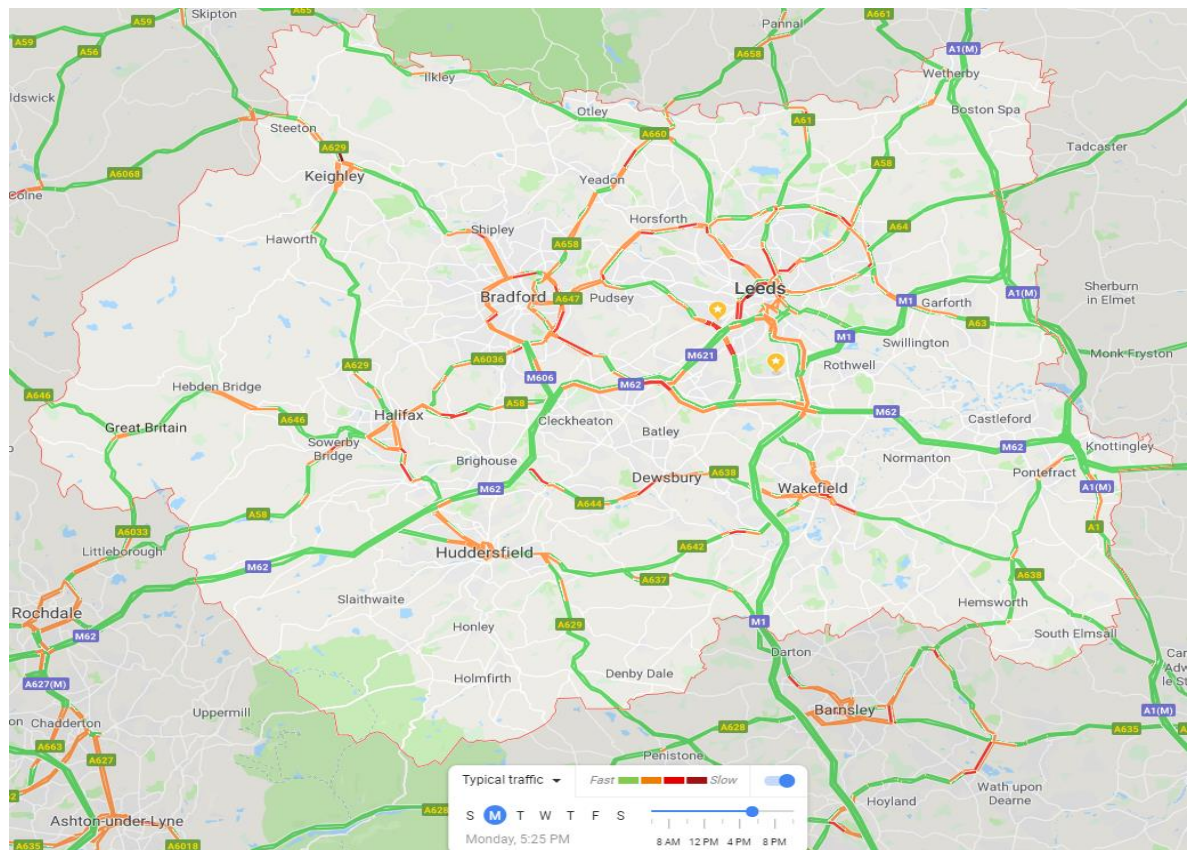


Figure 9: Typical peak time traffic in West Yorkshire - Monday @ 5:25 pm

II- TRAFFIC LEVEL, DEMOGRAPHY AND ROAD COLLISIONS IN WEST YORKSHIRE

The total number of collisions and casualties in 2018 should be viewed in the context of the continuing increase in the number of vehicles on the roads of West Yorkshire. Other factors include population dynamics and changes in demography, which could also be helpful in trying to understand road collision patterns and trends.

Traffic levels in West Yorkshire have increased by a notable amount in the last decade, consistently with the increase noted nationally. The analysis of mid-year estimated census data shows that the number of West Yorkshire residents increased in the last 10 years. Population changes, highlighted by the increase in the number of younger and older people, should also be considered when analysing road collisions. According to the DfT, the population of Britain has grown by 15 per cent since 1986, and road fatalities have fallen by 68 per cent in that same period (RRCGB, 2017).

Casualty rates per billion vehicle miles

Figures 10 and 11 below show the rates of KSI and all casualties per billion vehicle miles. The rates of KSI and all casualties per billion vehicle miles have fallen consistently in the county since 2006 despite the slight increase in 2018. The increase in traffic and the miles travelled is not accompanied by a simple increase in road collisions and casualties.

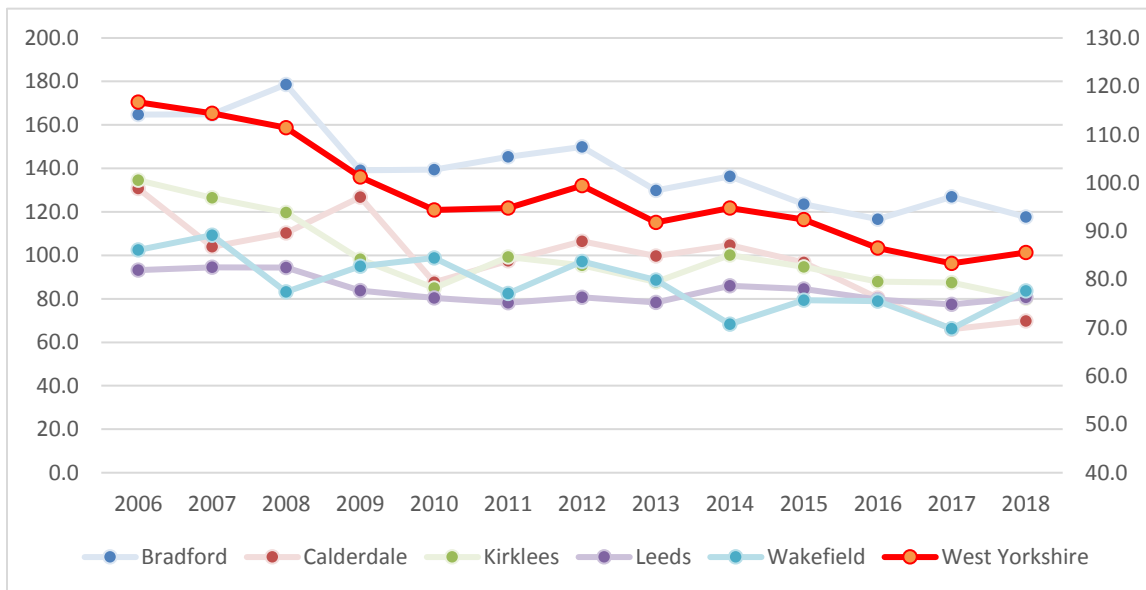


Figure 10: KSI rate per billion vehicle miles

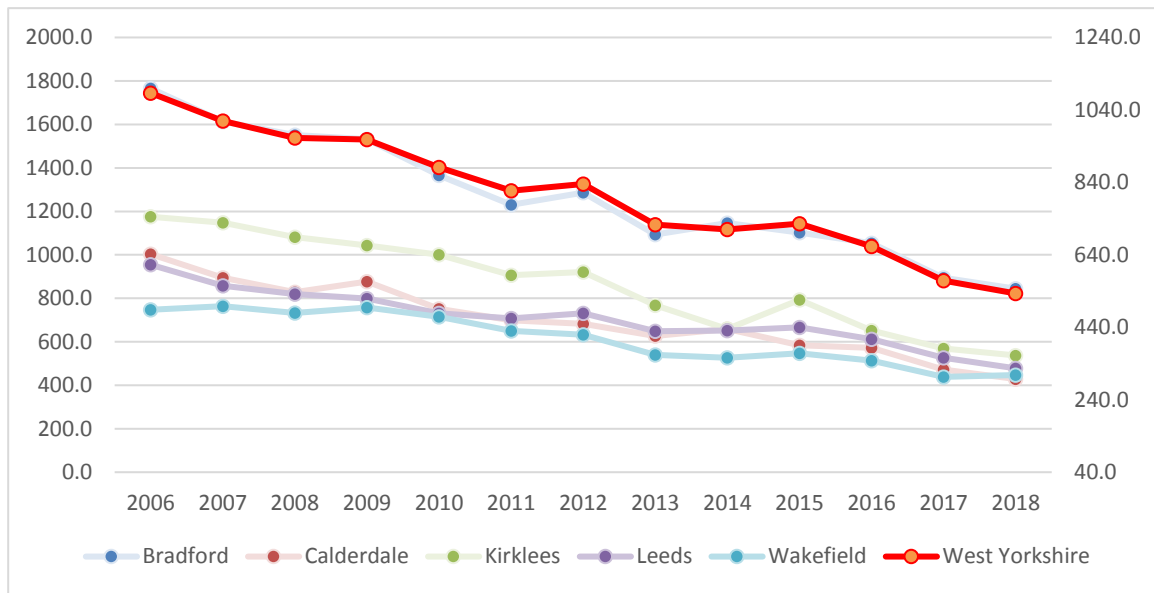


Figure 11: All casualty rate per billion vehicle miles

Casualty rates per million population

Figures 12 and 13 below show the rates of KSI and all casualties per million population. When serious injuries are analysed, West Yorkshire reported a higher KSI rate in 2018 compared to the previous year. The trend since 2008 is, however, decreasing. The rate of reduction is lower for KSI than for all casualties.

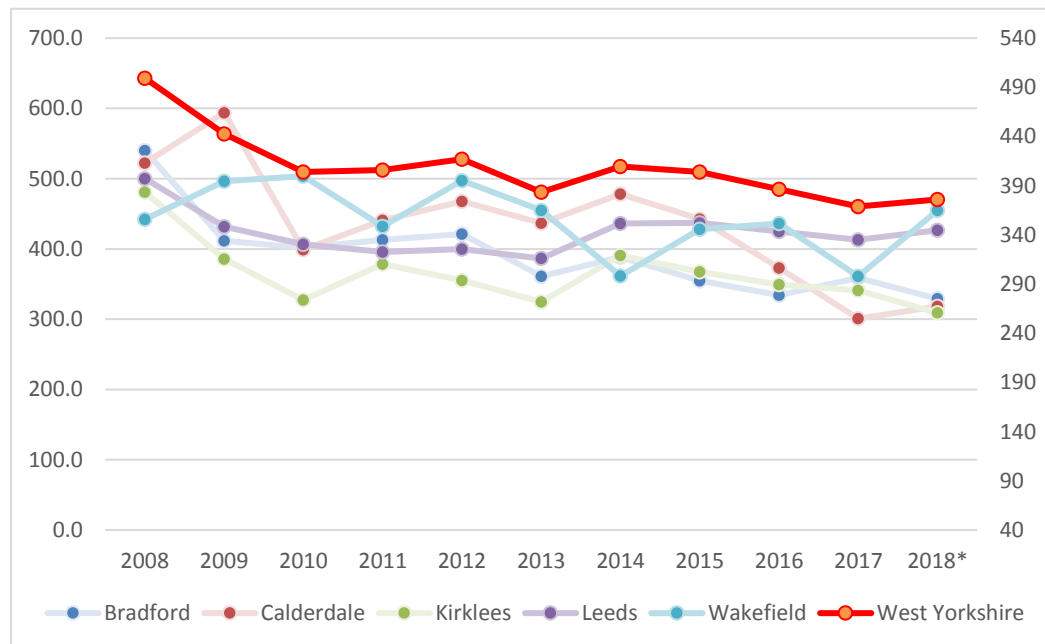


Figure 12: KSI casualty rate per million population

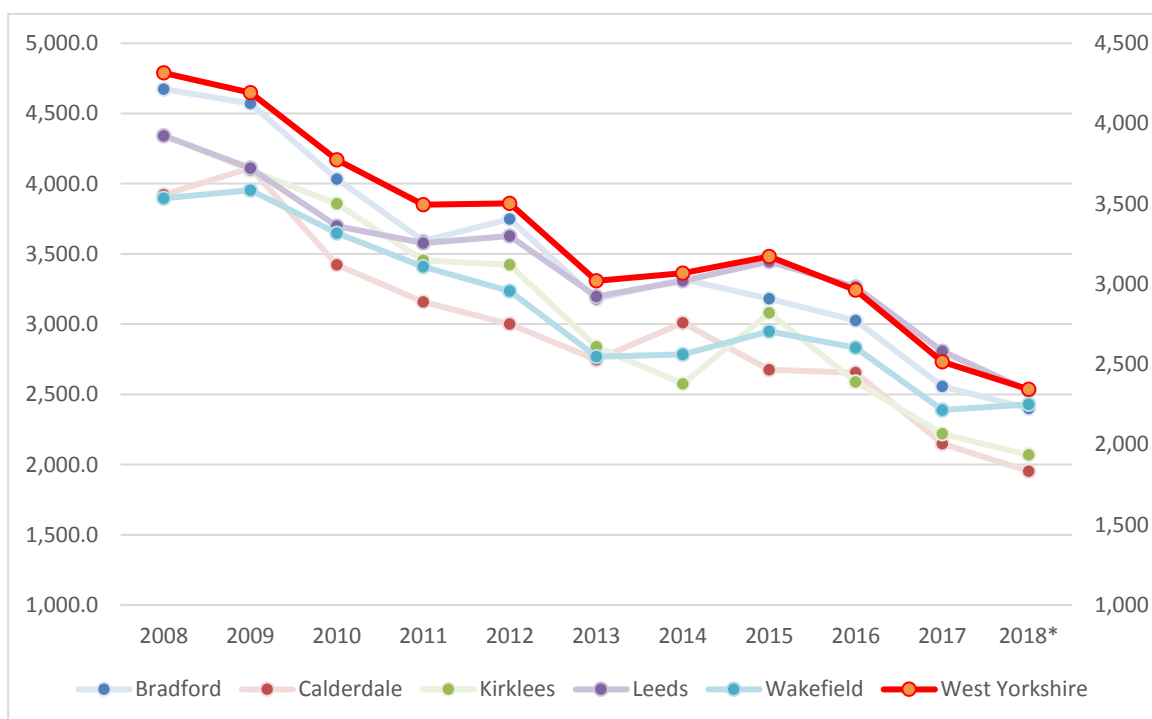


Figure 13: All casualty rate per million population

Child population and casualties, indexed 2008 = 100: 2008-2018

In the last decade, on average, 0.2 per cent of children were injured in road traffic collisions in West Yorkshire every year. In 2008, there were 2.3 children injured on road traffic collision for every thousand child residents of West Yorkshire. This rate fell by 43 per cent in 2018, when only 1.3 children were injured for every thousand children. These trends indicate that fewer children are injured on the roads, but that something else is happening above and beyond changes in the child population size. How much of this is due to genuine improvements in road safety, and how much to decreases in children's exposure to roads, especially in relation to walking and cycling, is not clear.

Figures 14-16 below highlight the gap between population growth and the number of road casualties since 2008. The number of child residents in West Yorkshire has increased consistently since 2008, while the number of child casualties has been decreasing quite rapidly over the same period. This is shown in figure 14 with a significant gap opening between the child population and casualty levels especially in the recent three years.

For 11-15 year olds (figure 15), even though both population and child casualties fell, the number of child casualties dropped more rapidly than the size of the population of that age group.

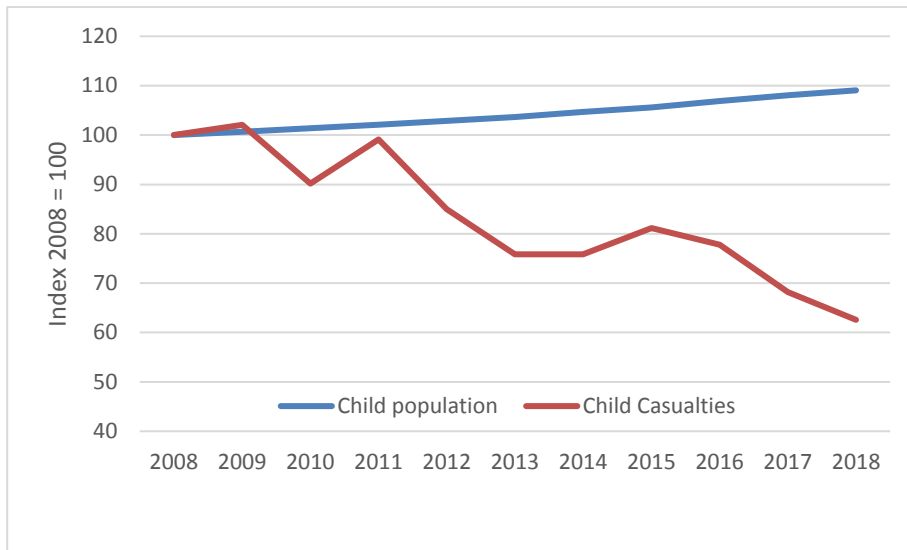


Figure 14: Child population, all casualties, indexed 2008 = 100

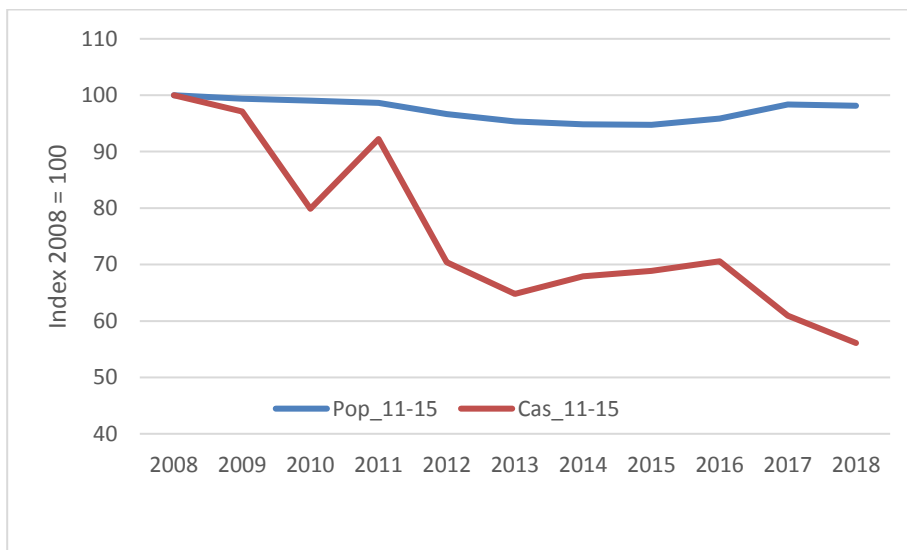


Figure 15: Children aged 11-15, population, all casualties, indexed 2008 = 100

For primary school children (5-10 years old), Figure 16 below shows that prior to 2011, both population and child casualties increased at a similar rate, but after 2011, the road casualties have fallen quite rapidly, while the number of residents continue to increase in West Yorkshire.

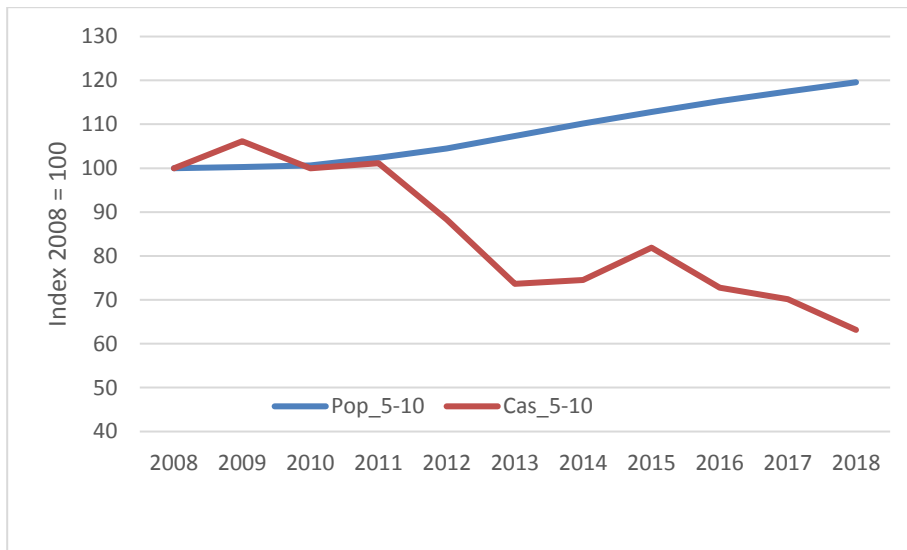


Figure 16: Children aged 5-10, population, all casualties, indexed 2008 =100

Elderly population and casualties, index 2008 = 100: 2008-2018

Between 2008 and 2018, on average, 0.2 per cent of older adults (60+years) were injured in road traffic collisions in West Yorkshire every year. In 2008, there was one older adult injured in road traffic collisions for every for every 2,000 West Yorkshire residents of that age. By 2018 this had fallen to 0.8 older adults per 2,000 residents. Figures 17-19 below highlight the gap between the population dynamism and changes in the number of casualties.

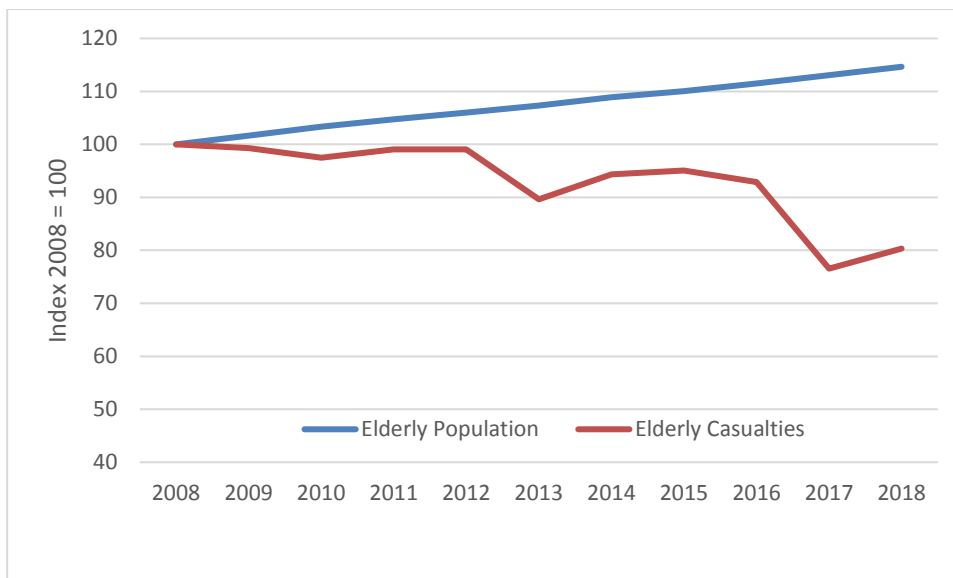


Figure 17: Over 60 years old: population, casualties indexed 2008 =100

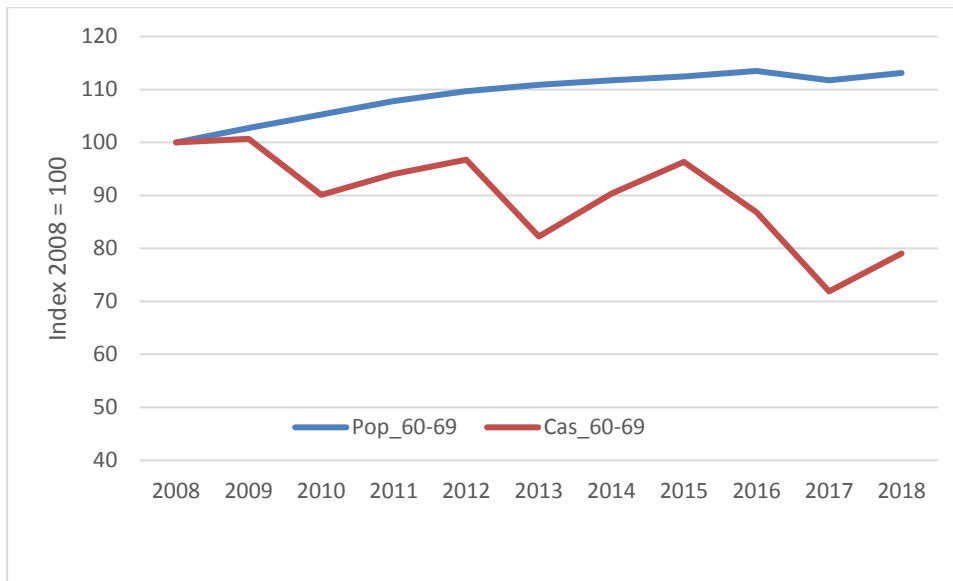


Figure 18: 60-69 years old, population, casualties indexed 2008= 100

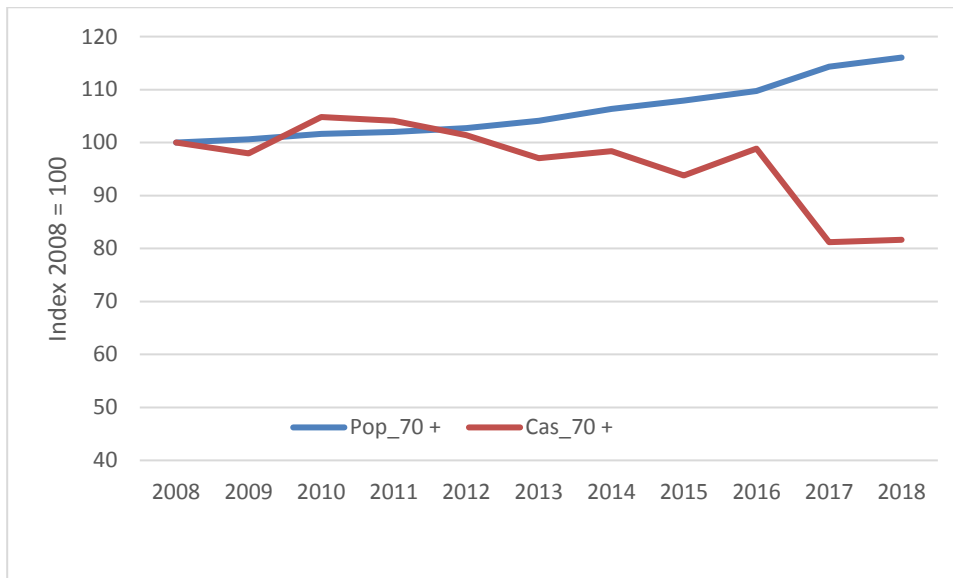


Figure 19: 70+ old population, casualties indexed 2008 = 100

As for the child casualties, the gap between the number of residents aged 60+ and the number of casualties may indicate a general improvement in road safety, but also other unknown factors. It would be interesting to assess older adult's perceptions of walking and cycling. Are those aged 60+ years not feeling safe walking or cycling on West Yorkshire roads?

III-COLLISIONS ON WEST YORKSHIRE ROADS: URBAN VS RURAL ROADS.

Collisions and casualties in urban areas

Collisions on built-up roads or urban roads are those that occur on roads with speed limits (ignoring temporary limits) of 40 mph or less; collisions on rural or non-built-up roads refer to those that occur on roads with speed limits over 40 mph. The DfT, in its *Reported Road Casualty Report 2017*, also defined urban roads as those within an area of population of 10,000 or more.

In West Yorkshire, most collisions and the casualties happened on built-up roads. Over three-quarters (88%) of total collisions recorded in 2016 were on built-up or urban roads, a proportion that remains unchanged in 2017 and in 2018. The casualty numbers reflect this closely, with a large majority reported from road collisions on built-up roads in the last three years; 2016 (86%), 2017 (86%) and 2018 (85%).

The collisions on built-up roads fell 6% from 3,847 in 2017 to 3,618 this year; a large proportion (84%) occurred on roads limited to 30 mph, and only 12% (434) on 40 mph roads. The number of collisions on roads limited to 20 mph fell by 15% from 179 in 2017 to 153 in 2018.

The number of road users fatally injured in collisions recorded in built-up roads rose by 20 from 34 in 2017 to 54 in 2018; a total of 38 were killed on 30 mph roads, while 15 were on 40 mph roads. The number of KSI (743) on built-up roads barely changed from last year (741). But it is pleasing to report a reduction by 4% of those KSI reported on 30 mph roads. In comparison, roads limited to 20 mph and 40 mph recorded more KSI casualties in 2018 (table 8). The total number of road traffic casualties fell in 2018 in built-up areas, regardless of the road speed limit.

The relatively high number of casualties in built-up roads highlights the complexity of road safety in urban areas and town centres in general. In these areas, various categories of roads users (car occupants, cyclists, motor bike riders, pedestrians and, in some cases, goods vehicles) share the same space, creating problems for those who are the most vulnerable. The aim of shared spaces – which are largely represented in urban areas – is for the harmonious and safe movement of people and goods; this is quite complex. Measures to encourage positive driving behaviour and improve facilities for vulnerable road users are essential to improving road safety in town centres.



Collisions and casualties on rural areas

There were fewer collisions on rural roads (over 50 mph) than on urban roads. This year, 512 collisions were recorded on rural roads, that's 12% of all road collisions in the county, with over half (271) recorded on motorways (70 mph).

Sixteen road users were killed on rural roads in 2018, against nine in 2017. A further 114 sustained serious injuries. On rural roads, the number of those KSI rose by 18% from 110 last year to 130 in 2018. The level of increase varies according to the speed limit. The number of those KSI on roads limited to 50 mph rose by 40% from 25 last year to 35 in 2018; while KSI on roads limited to 60 mph rose by 21% from 44 (2017) to 53 this year; the number of KSI (42) on the motorways network remained unchanged from last year (41).

In 2017, 'Failed to look properly', and 'Failed to judge other person's path/speed' were noted as the main cause for 53% of all collisions on rural roads. 'Lost control', 'Travelling too fast for conditions' and 'Following too close' account for around a third of all collisions. These factors are often related to speed; speed-related treatments and other solutions may improve road safety on rural roads.

Table 8 below highlights the collisions and casualties totals by road speed limit in 2017 and 2018. The number of collisions decreased regardless of the speed limit, with the exception of roads limited to 60 mph, which reported a 2% increase in 2018.

A large proportion of casualties are from collisions recorded on built-up roads with speed limited to 30 mph. More casualties were recorded on roads limited to 20 mph on built-up roads in 2018 compared to last year, while more serious injuries were recorded on rural roads limited from 50 mph.



Urban vs Rural Roads	Speed Limit	2017			2018			2018 vs 2017			
		KSI	All	% of KSI	KSI	All	% of KSI	KSI	All Cas.	All Coll.	
Built-up Roads (Urban)	20	33	218	3.9%	40	171	4.6%	21.2%	↑	-21.6%	↓
	30	614	4129	72.2%	590	3861	67.6%	-3.9%	↓	-6.5%	↓
	40	94	635	11.0%	113	604	12.9%	20.2%	↑	-4.9%	↓
	Urban rds.	741	4982	87.1%	743	4636	85.1%	0.3%	↑	-6.9%	↓
Non Built-up Roads (rural)	50	25	160	2.9%	35	147	4.0%	40.0%	↑	-8.1%	↓
	60	44	233	5.2%	53	209	6.1%	20.5%	↑	-10.3%	↓
	70	41	428	4.8%	42	447	4.8%	2.4%	↑	4.4%	↑
	Rural rds.	110	821	12.9%	130	803	14.9%	18.2%	↑	-2.2%	↓
Total		851	5803		873	5439		2.6%	↑	-6.3%	↓

Table 8: - All casualties per speed limit in West Yorkshire

IV-COLLISIONS AND ROADS CLASSIFICATION (MOTORWAYS VS OTHERS)

As in previous years, the large majority of casualties were recorded on unclassified roads. A detailed analysis (of the number of casualties by road classification) reveals a slight increase in the proportion of casualties on unclassified roads; this is half of all casualties in 2017 (50%), and 51% in 2018. In comparison, the proportion of casualties on A-roads remains at 35% like last year, while the motorway network aggregated slightly more casualties in 2018 (9%) compared to 2017 (8%). That distribution is quite similar when KSI are considered.

Five road users were killed on the West Yorkshire motorway network this year, a significant increase from 2017 (2) and the highest number of the last five years. It should be noted that the number of fatalities fluctuates considerably in the county. One death was recorded in 2016, none in 2015 and four in 2014. A total of 41 (40 in 2017) road users were seriously injured following collisions recorded on the network. Overall, only 9% (485) of all casualties in West Yorkshire were recorded on motorways, and 10% (46) of those were of high severity.

In 2018, a total of 1,900 (35%) casualties was recorded on the A-Roads of West Yorkshire, including 24 deaths, and 263 serious injuries. Overall, 33% (287) of all KSI were recorded on A-roads and 15% of all collisions on A-roads were of high severity. These results can be explained by the total length of A-Roads and the amount of traffic carried by the A-roads in the county.

A total of 291 (5%) casualties were recorded on B and C roads in 2018. A total of 70 (24%) were of high severity (KSI), and 221 were slight. 51% of casualties were recorded on unclassified roads.

The table 9 below summarises the number of casualties per road class and the respective severity ratio. The large proportion of casualties on unclassified roads is noted.

Road Class	Severity of Casualty			Total	% of total	Severity ratio
	Fatal	Serious	Slight			
Motorway	5	41	439	485	8.9%	9.5%
A	24	263	1,613	1,900	34.9%	15.1%
B & C	10	60	221	291	5.4%	24.1%
Unclassified	31	439	2,293	2,763	50.8%	17.0%
Total	70	803	4566	5439		16.1%

Table 9:-All casualties per road class in West Yorkshire

V- DISTRIBUTION OF COLLISIONS ACROSS THE ROAD NETWORKS

The total numbers of collisions and casualties, respectively, on each type of road (from ITN network) for the year 2018 were analysed and the outputs are shown in the figures below. The 'Other' class of road, includes C and unclassified roads. The results show that the vast majority of collisions occur on A-roads, C-roads and unclassified roads. Casualty numbers reflect these.

Figure 20 and Figure 21 below also show the number of collisions and casualties on each type of road on a per kilometre basis. Information about the total lengths of the different types of road within West Yorkshire was obtained from the National Statistics³.

There are more collisions reported on C-roads and unclassified roads, however, the figures show that there are more collisions and casualties per km on A-roads and motorways than on B-roads, C-roads and unclassified roads.

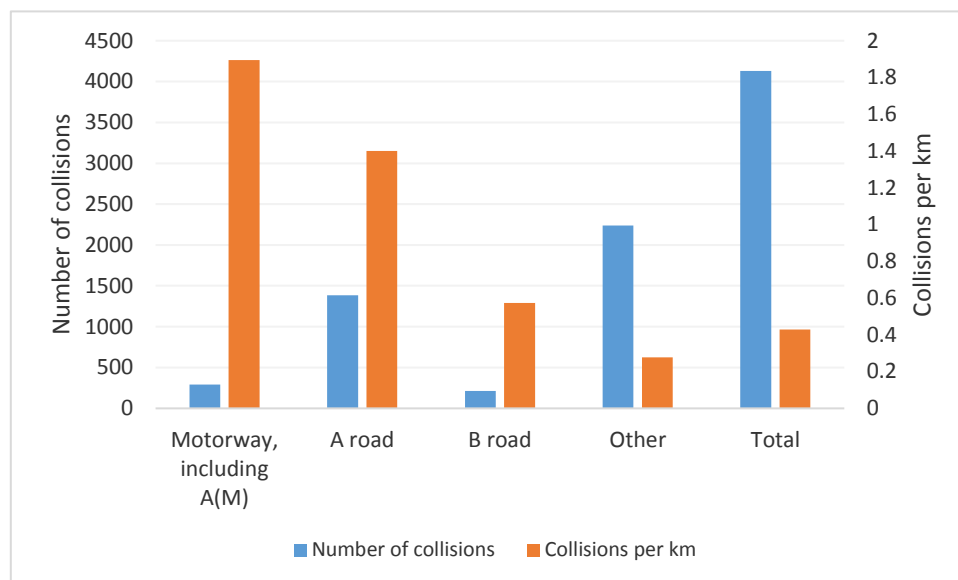


Figure 20. Number of collisions in 2018 for each type of road.

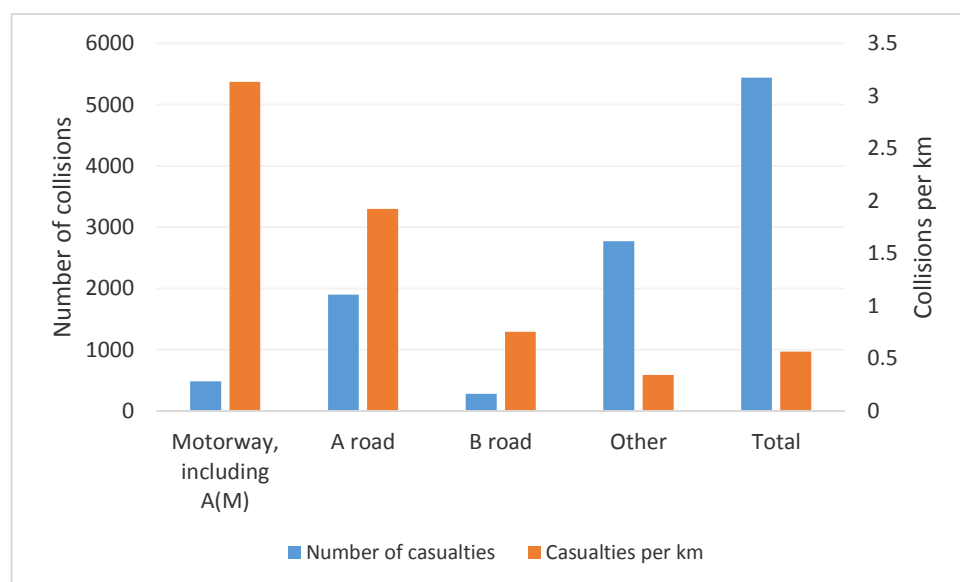


Figure 21. Number of casualties in 2018 for each type of road.

³ National Statistics, 2016. Road lengths in Great Britain: 2016. Available at: <https://www.gov.uk/government/statistics/road-lengths-in-great-britain-2016>.

VI- LOCATION WITH HIGHEST NUMBER OF PERSONAL INJURY COLLISIONS

The worst performing sites in West Yorkshire

Table 10 below identifies two sites within each of the five districts of West Yorkshire that recorded the highest number of collisions in the last five years (2014 to 2018). The table also contains a synopsis, for each location, of the present situation and provides recommendations on possible future actions to reduce the overall number of collisions and casualties in the site. The information in the table below was compiled from a more detailed report *Sites for Concern* published every year and available for four out of five districts of West Yorkshire⁴; Kirklees district has its own publication.

The number of collisions in each of the sites from 2014 to 2018 is shown in the table below. Between 2014 and 2018, the sites with the highest number of collisions are in Leeds. A total of 43 collisions (including five in 2018 alone) were recorded in the vicinity of the A58 Gelderd Road junction with A647 Canal Street (Armley Gyratory); while a total of 29 collisions occurred in the vicinity of A59 Roundhay Road junction with Easterly Road / B6159 Harehills Road.

The summary of the main collision types, detailed in the table below, reveals the collision types that are usually related to driver /rider injudicious actions such as signal violation, right turn conflicts, as well as inattention including nose to tail collisions, entering versus circulating conflicts and failure to give way.

DISTRICT	Location	Collision Total		Summary of main collision types	Current Recommendations
		2014 - 2018	2018		
BRADFORD	A647 Leeds Road jw A650 Shipley Airedale Road	33	12	Nose to tail collisions; Signal violations	Monitoring only
	A641 Manchester Road jw A6177 Smiddles Lane	25	5	Signal violations; nose to tail collisions	Monitoring only
CALDERDALE	M62 jw A644 Wakefield Road	24	9	Nose to tail collisions; lane change events	None, as current accident levels are moderate
	A58 Burdock Way / New Bank / Godley Road jw Beacon Hill Road	12	3	Nose to tail collisions; Failure to give way	Improvements to lining and signal infrastructure undertaken 2017 - 2019
KIRKLEES	John William Street / Kirkgate, Huddersfield	9	5	Collisions involving pedestrians	Possible footway build outs and lane narrowings
	Huddersfield St Peter's St, Huddersfield	15	3	Right turns across opposing traffic	No identified solution - continue to monitor
LEEDS	A58 Gelderd Road jw A647 Canal Street (Armley Gyratory)	43	5	Nose to tail collisions; lane change collisions	Possibility (long term) of junction re-configuration
	A59 Roundhay Road jw Easterly Road / B6159 Harehills Road	29	7	Signal violations; right turn conflicts	Bus improvement scheme proposed
WAKEFIELD	A639 Jubilee Way / Mill Hill Road jw A645 Southgate / Wakefield Road	24	6	Entering versus circulating conflicts	Recently re-designed; further action recommended
	A636 Denby Dale Road jw A638 Ings Road	18	2	Entering versus circulating conflicts; nose to tail collisions	Part of City Centre Ings Road Phase II proposal; work to commence in 2020

Table 10: - Locations with highest number of collisions

⁴ <https://www.leeds.gov.uk/parking-roads-and-travel/connecting-leeds-and-transforming-travel/road-safety>

The worst performing roads in West Yorkshire

Figures 22 to 24 below show the roads with the highest numbers of collisions and casualties in 2018, for the different types of roads. For this analysis, sections of a given A or B road with a different street name are not considered separately. For example, with reference to figure 23 below, the result computed for the A639 is for the full length of the A639 regardless of any section named separately.

When the motorway network is considered, a total of 293 collisions and 485 casualties were recorded in 2018. The figure 22 below lists the motorways roads on which four or more casualties were recorded. The M62 in its West Yorkshire section recorded 46% (136) of all motorways collisions (293) and 48% (232) of all casualties (485) reported in the network. In second position is the M1 with 54 collisions and 88 casualties.

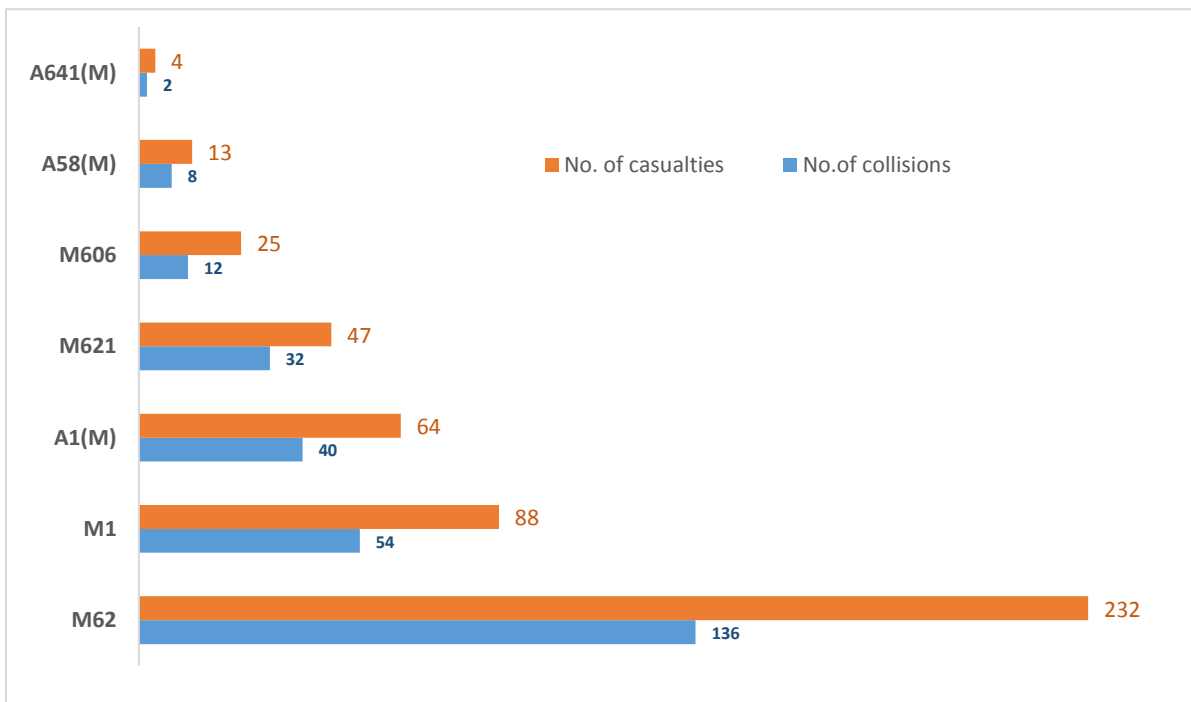


Figure 22. The motorways with the highest numbers of casualties and collisions in 2018.

When the A and B roads are considered, the figures 23 and 24 below summarise the segments with the highest number of collisions and casualties. For the A roads, the A639 recorded the highest number of collisions (83) and casualties (114), followed by the A643 with 76 collisions and 112 casualties reported in 2018.

For the B-roads, the B6144 (Bradford) tops the list with 101 collisions and 138 casualties followed by the B6409 (Dewsbury) with 91 collisions and 135 casualties reported in 2018.

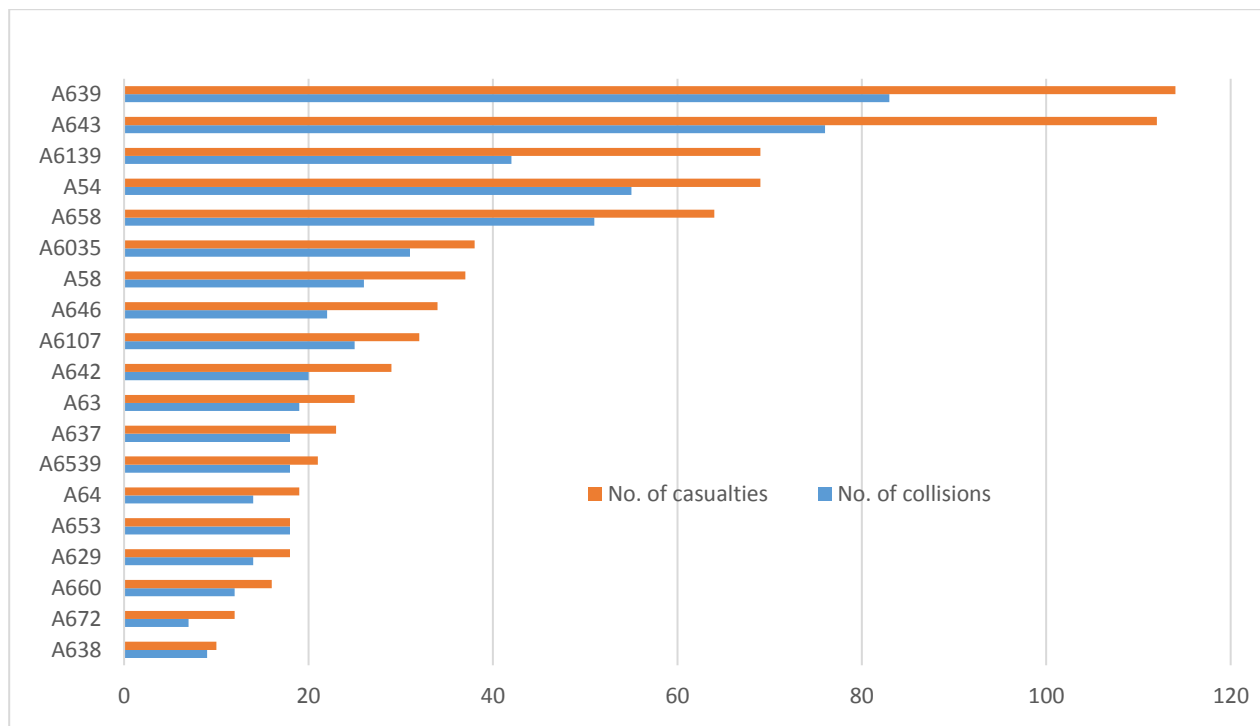


Figure 23. The A-roads with the highest numbers of casualties and collisions in 2018.

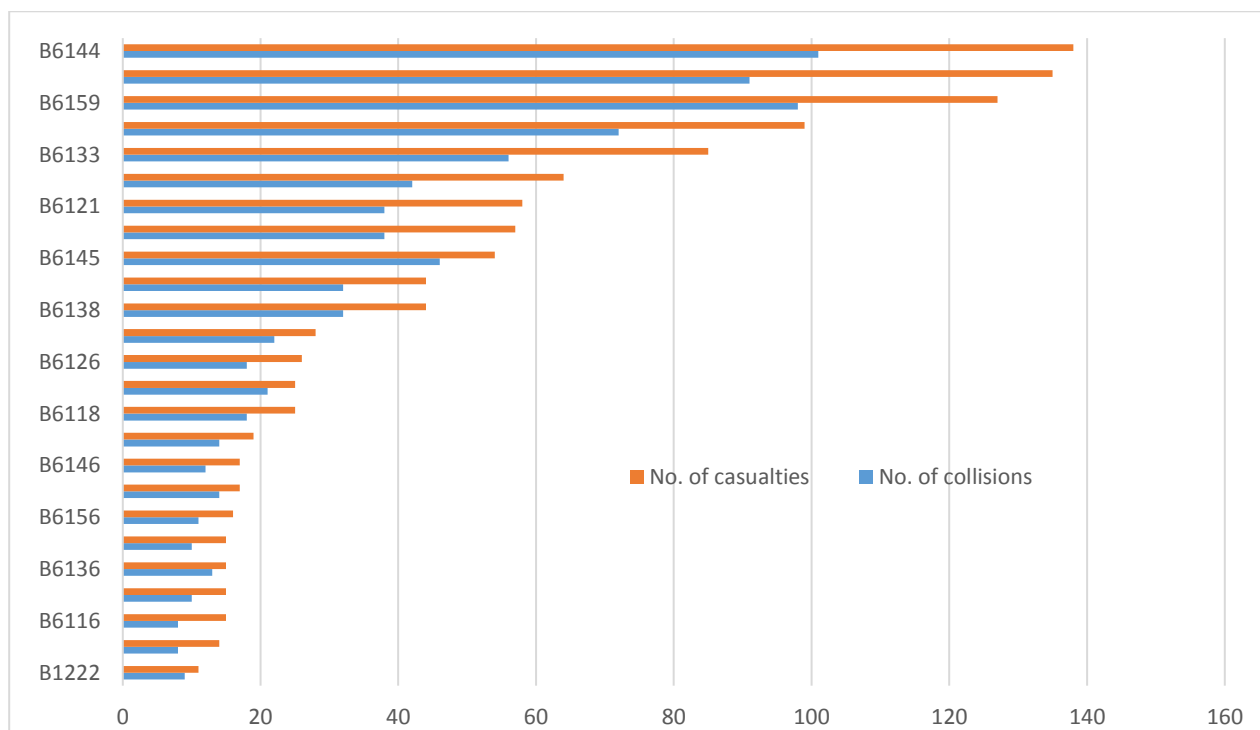


Figure 24. The B-roads with the highest numbers of casualties and collisions in 2018.

VII- CONTRIBUTORY FACTORS TO REPORTED ROAD COLLISIONS IN 2018

Since 2005, collision records have included additional details on contributory factors. These details are designed to provide more information into why and how road traffic collisions occur and to help explore measures to help prevent future collisions. A total of 77 categories of contributory factors is available. These provide information on the factors that the police officer attending the incident considers may have contributed to the cause of the collision.

The factors that drive road casualties are quite complex and it is not always possible to identify any single causal factor. There are a number of underlying factors and influences that contribute to road collisions and casualties. These include: the distance people travel (partly determined by factor related to the economy), the type and mode of transport, behaviour, weather conditions, road surface conditions and vehicle conditions.

Since 2005, one factor is more frequently cited as the cause of the collision than any other. In 2018, '**Driver/rider error or reaction**' was, once again, the cause of the majority of collisions. Out of the 5,439 casualties this year, 2,533 (53%) were from collisions involving some sort of driver or rider error or reaction. If we include all driver-related factors (injudicious action, impairment or distraction, behaviour or inexperience), that rises to 78%. Pedestrians were blamed for considerably fewer road casualties 10%). Collisions caused by pedestrians, however, account for 30% of KSI figures – double the number of KSI (14%, or 347 of the total) where a driver was to blame. This reflects the fact that drivers and other car occupants are often, to some degree, protected by their vehicles from the consequences of drivers' errors; unlike pedestrians, whose errors are twice as likely to result in serious injury or death.

Collisions caused by injudicious actions accounted for 11% of all casualties, while 7% of all casualties were from those involving impairment or distraction. Collisions involving special codes (stolen vehicles, vehicles in course of crime and, to some extent, emergency vehicles on call) aggregate 4% of all casualties, which is the same proportion as are caused by factors relating to the road environment.

West Yorkshire 2018: Contributory factors and casualty severities

Contributory Factor (main)	Fatal	Serious	Slight	Total	% of Total	Severity Ratio
Road Environment	0	35	176	211	4.4%	16.6%
Vehicle Defects	0	13	28	41	0.9%	31.7%
Injudicious Action	6	63	430	499	10.5%	13.8%
Driver/rider Error or reaction	24	323	2,186	2,533	53.3%	13.7%
Impairment or distraction	13	68	229	310	6.5%	26.1%
Behavior or Inexperience	3	58	278	339	7.1%	18.0%
Vision affected	4	23	127	154	3.2%	17.5%
Pedestrian only	5	132	326	463	9.7%	29.6%
Special code	9	24	169	202	4.3%	16.3%
Blank	6	64	617	687	14.5%	10.2%
Grand Total	70	803	4,566	5,439		16.1%

Table 11:- West Yorkshire 2017: Contributory factors and casualty severities

Among the most cited causation factors within the “Driver/rider error or reaction” group was ‘failed to look properly’, which was involved in nearly half (49%) of such collisions recorded in 2018. ‘Poor turn or manoeuvre’ was the second most quoted factor (18%) and ‘Failed to judge other person's speed’ the third (15%).

From the above distribution, it can be noted that in West Yorkshire, most collisions are caused not by the ability to drive, but mainly by driver /rider lack of attention or behaviour.

Driver/rider Error or reaction	Fatal	Serious	Slight	Total	% of Total	Severity Ratio
Junction overshoot	1	4	46	51	2.0%	9.8%
Junction restart	0	0	36	36	1.4%	0.0%
Poor turn or manoeuvre	4	53	393	450	17.8%	12.7%
Failed to signal	0	2	35	37	1.5%	5.4%
Failed to look properly (driver)	7	175	1,054	1,236	48.8%	14.7%
Failed to judge other person's speed (driver)	2	27	353	382	15.1%	7.6%
Passing too close to cyclist or pedestrian (driver)	0	6	21	27	1.1%	22.2%
Sudden braking	0	8	99	107	4.2%	7.5%
Swerved	1	11	45	57	2.3%	21.1%
Loss of control	9	37	104	150	5.9%	30.7%
Grand Total	24	323	2,186	2,533	53%	13.7%

Table 12:- West Yorkshire 2017: Contributory factors and casualty severities (Driver/Rider error)

VIII- REPORTED ROAD COLLISIONS INVOLVING SPEED

Speed is an important factor in transport. The effects of speed, both positive and negative, make speed a primary target for policy action. Speeds directly affect the mobility of persons and goods travelling from one location to another. Driving speeds also have a direct impact on the risk of the driver and other people being severely injured in a collision as well as on noise and pollutant emissions.

Excessive speed is a major problem in all motorised countries. An estimate for Norway shows that if all drivers drove within speed limits, the number of fatalities would fall by about 20%. Speed enforcement is therefore a main challenge for all governments (Elvik, 2011).

Reducing the number of collisions involving speed is both a national and a West Yorkshire Partnership objective and, due to its strong links to enforcement, it is analysed at a West Yorkshire level. This is explained by the fact that enforcement operations, supporting information and publicity campaigns are run throughout the whole county area.

The two contributory factors that relate to excessive or inappropriate speed are **exceeding speed limit** and **travelling too fast for conditions**. The table below shows the reported collisions and casualties by severities where speed was recorded as the main contributory factor.

Collisions involving speed (261) represent 6% of all collisions (4,130) and generated 7% (399) of all casualties (5,439) in West Yorkshire this year. When the districts are considered, the highest proportion of speed-related casualties were reported in Bradford (10%), followed by Calderdale (7%), Leeds (7%) and Kirklees (6%). The reduction of speed-related collisions is reflected across the five districts of West Yorkshire.

Facts about collisions involving speed

- 261 collisions involving speed were recorded in 2018, 14% (44) less than 2017 (305).
- 94 collisions reported in Leeds, 70 in Bradford, 41 in Kirklees, 35 in Wakefield and 23 in Calderdale.
- Over half (64%) of collisions were recorded on built-up roads with a 30mph speed limit.
- Only 12% (31) of speed-related collisions were recorded on the motorway network of the county.
- Casualties from speed-related collisions fell by 21% to 399 from 505 (2017) and serious injuries (KSI) fell by 7% to from 110 (2017) to 102, including 11 fatalities (12 in 2017).



© Skynews: Images of crash scene in West Yorkshire where four young people were killed (02.08.2018) from collision involving excessive speed.

Local Authorities	Speed related Collisions			Casualties from speed related collisions			All Road Traffic casualties	
	2017	2018	Change OPY	KSI	Slight	Total	All Cas	% of all cas
Bradford	80	70	↓	31	93	124	1,291	9.6%
Calderdale	23	21	↓	4	26	30	411	7.3%
Kirklees	51	41	↓	13	46	59	910	6.5%
Leeds	107	94	↓	39	98	137	1,994	6.9%
Wakefield	44	35	↓	15	34	49	833	5.9%
West York.	305	261	↓	102	297	399	5439	7.3%

Table 13- Road collisions and casualties involving speed in West Yorkshire

Figure 25 below shows the numbers of speed-related casualties on each type of road. This includes casualties associated with collisions whose contributing factors include either 'Exceeding speed limit' or 'Travelling too fast for conditions' as recorded by the police officer who attended the collision site and filled in the STAT19 form. These casualties make up around 9% of the total.

As shown in the graph below, the number of speed related casualties is greater on A-roads and other types (essentially on unclassified roads). When the speed-related casualties are analysed by the length of road, a greater proportion of casualties per km is recorded on A-roads, B-roads and motorways.

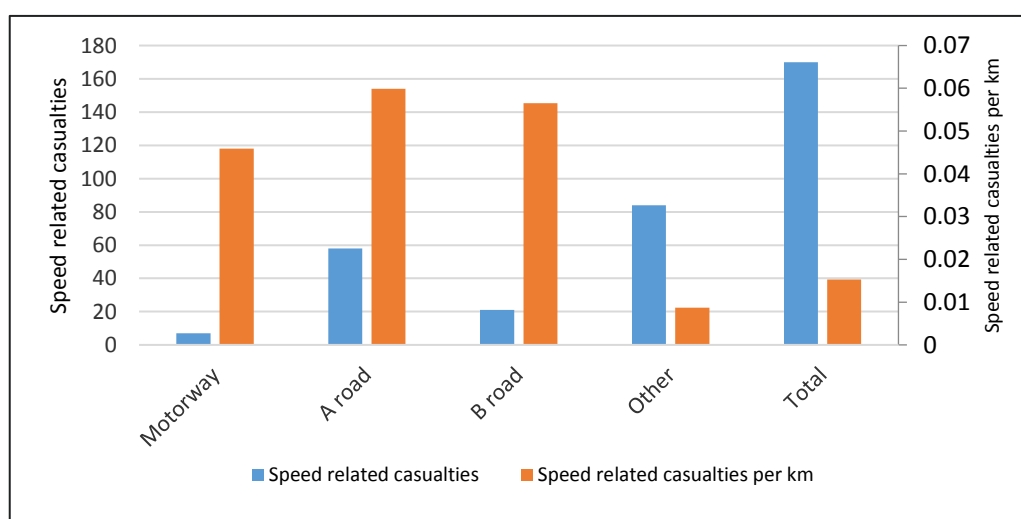


Figure 25. Number of speed-related casualties in 2018 for each type of road.

IX- REPORTED ROAD COLLISIONS INVOLVING ALCOHOL

According to the DfT and for the purposes of the drink-drive statistics, a drink-drive collision is defined as being a reported incident on a public road in which someone is killed or injured, and where at least one of the motor vehicle drivers or riders involved met one of the criteria below:

- refused to give a breath test specimen when requested by the police (other than when incapable of doing so for medical reasons).
- failed a roadside breath test by registering over 35 micrograms of alcohol per 100 millilitres of breath.
- died and was subsequently found to have more than 80 milligrams of alcohol per 100 millilitres of blood.

Drink and drive related records are gathered from two sources essentially: information about the level of alcohol in the blood of road accident fatalities aged 16 or over who die within 12 hours of a road accident is provided by coroner's office in West Yorkshire. The personal injury road accident reporting system (STATS19) completed by police provides data on injury accidents in which the driver or rider survived and was also breath tested at the roadside.

Reducing the number of collisions involving alcohol is both a national and a West Yorkshire Partnership objective and, due to its strong links to enforcement, it is analysed at a West Yorkshire level. This is explained by the fact that enforcement operations, supporting information and publicity campaigns are run throughout the whole county area.

In recent years, drink and drive collisions have increased between 2013 and 2015 before falling in the following three years; this is reflected in the number of related casualties. In 2018, the number of casualties (184) from drink-drive collisions didn't change significantly from last year (187), but the trend of recent five years remains downward.

The number of casualties from drink-drive related collisions increased in Kirklees, Leeds and Wakefield, and reduced elsewhere.

Facts about collision involving alcohol

- 126 drink and drive collisions in 2018 against 130 in 2017 and 147 in 2016.
- KSI collisions (44) are slightly up this year, compared to 2017 (41), but remain below the 2016 (53) total.
- Drink and drive collisions caused death to five road users in 2018, up from one in 2017, two in 2016 and three in 2015.
- Overall casualties from drink and drive collisions decreased slightly, from 187 in 2017 to 184 this year.
- 31% of drivers involved in drink and drive collisions are aged between 20 - 29 years. In comparison, 20% are aged 30-39 years.

As shown in table 14 below, a greater proportion of drink-drive related collisions and casualties were recorded in Leeds (47 & 62), Bradford (27 & 41) and Wakefield (27 & 41). These three authorities aggregate well over half of the total numbers of drink-related collisions and casualties in the county.

The age of drivers was analysed for drink-related collisions in the last five years (2014-2018). The outputs, summarised in Table 15 below, show that over the last five years, one in five car drivers involved in drink and drive collisions is aged between 16 and 24. When all vehicle types are considered, young drivers (age 20-24) comprise 17% of all drivers involved in drink-drive collisions. In comparison, one in five drivers involved in drink-drive collision is aged between 30 and 39.

When the type of vehicle is considered, over 68% of vehicles involved in drink-drive collisions are cars, followed by PTW (6%) and goods vehicles (5%).

Collisions													Casualties												
Districts	2014		2015		2016		2017		2018		2018 VS 2017		2014		2015		2016		2017		2018		2018 VS 2017		
	KSI	All	KSI	All	KSI	All	KSI	All	KSI	All	KSI	All	KSI	All	KSI	All	KSI	All	KSI	All	KSI	All	KSI	All	
Bradford	11	36	10	34	6	23	13	30	6	27	↓	↓	12	56	12	55	8	44	17	45	7	41	↓	↓	
Calderdale	4	19	7	15	7	14	6	14	6	13	↔	↓	5	24	9	33	8	24	8	21	7	19	↓	↓	
Kirklees	5	27	6	21	10	24	2	10	6	12	↑	↑	7	41	6	41	14	38	2	16	11	21	↑	↑	
Leeds	14	50	14	58	15	49	10	47	17	47	↑	↔	17	66	14	88	15	77	11	67	21	62	↑	↓	
Wakefield	9	33	6	27	15	37	10	29	9	27	↓	↓	10	53	6	41	23	59	12	38	11	41	↓	↑	
West Yorkshire	43	165	43	155	53	147	41	130	44	126	↑	↓	51	240	47	258	68	242	50	187	57	184	↑	↓	

Table 14- Reported drink-drive road traffic collisions and casualties

Age of driver	Pedal Cycle	PTW	Taxi	Car	PSV	Goods Veh.	Other Veh.	Total	%
16-19yrs	5	24	0	158	0	2	0	189	6.3%
20-24yrs	8	46	4	441	2	11	4	516	17.1%
25-29yrs	10	40	8	347	1	18	6	430	14.2%
30-39yrs	23	31	34	458	2	48	3	599	19.8%
40-49yrs	24	18	16	323	5	25	0	411	13.6%
50-59yrs	7	11	14	175	2	25	2	236	7.8%
60-69yrs	7	6	2	99	2	13	1	130	4.3%
70yrs+	1	1	0	58	2	0	1	63	2.1%
Age Unknown	0	16	1	399	2	28	1	447	14.8%
West York.	85	177	78	2059	16	142	17	3021	
	2.8%	5.9%	2.6%	68.2%	0.5%	4.7%	0.6%		

Table 15- Collisions involving alcohol: age of driver/rider and type of vehicles: 2013- 2017

X- REPORTED ROAD COLLISIONS INVOLVING CRIMINAL ACTIVITIES

Reducing the number of RTC casualties involving criminal activities is closely linked to enforcement and therefore has been analysed in the district and county.

Among the standard set of contributory factors introduced in 2005, are codes '901 stolen vehicle' and '902 vehicle in course of crime'. These codes are used where the fact that the vehicle was involved in criminal activity influenced the driver's behaviour and contributed to the collision.

Figure 26 below shows the number of casualties from collisions where a vehicle has been involved in criminal activity and was subsequently involved in a road crash in West Yorkshire. The figures include casualties from the vehicle involved in crime and from vehicles hit by the criminal.

The number of collisions arising from criminal activities in the county has increased consistently since 2013 to a total of 100 in 2016; it is pleasing to report a slight reduction in 2017 (91) and further reduction recorded in 2018 (84). The number of crime-related collisions also reduced in the districts – except for Bradford and Wakefield, where slightly more collisions and casualties were recorded this year compared to 2017. As shown in the Table 16 below, the number of crime-related KSI collisions have reduced slightly since 2014 from 25 to 20 in 2018.

The overall reduction in crime-related collisions is reflected in the reduced number of related casualties in 2018. A total of 124 road users were injured from road collisions linked to crime in the county in 2018; a reduction of 20% from 2017's total (155). This is despite a slight increase in Bradford (+6 to 49) and Wakefield. The number of casualties of high severity (KSI) also fell from 34 in 2017 to 25 this year.

Crime-related road casualty numbers in the county as a whole were more haphazard, with no clear pattern emerging until 2009. The reduction in two consecutive years (2010 and 2011) had set the start of a potential downward trend, which stopped with the 14% rise in 2012. A welcome reduced total in 2013 was overshadowed by the increase in 2014 and 2015. The slight reduction in 2016 and this year, contributes to a downward trend of the last five years.

Casualties from these incidents account for 2% of all casualties and 3% of all KSI in the county.

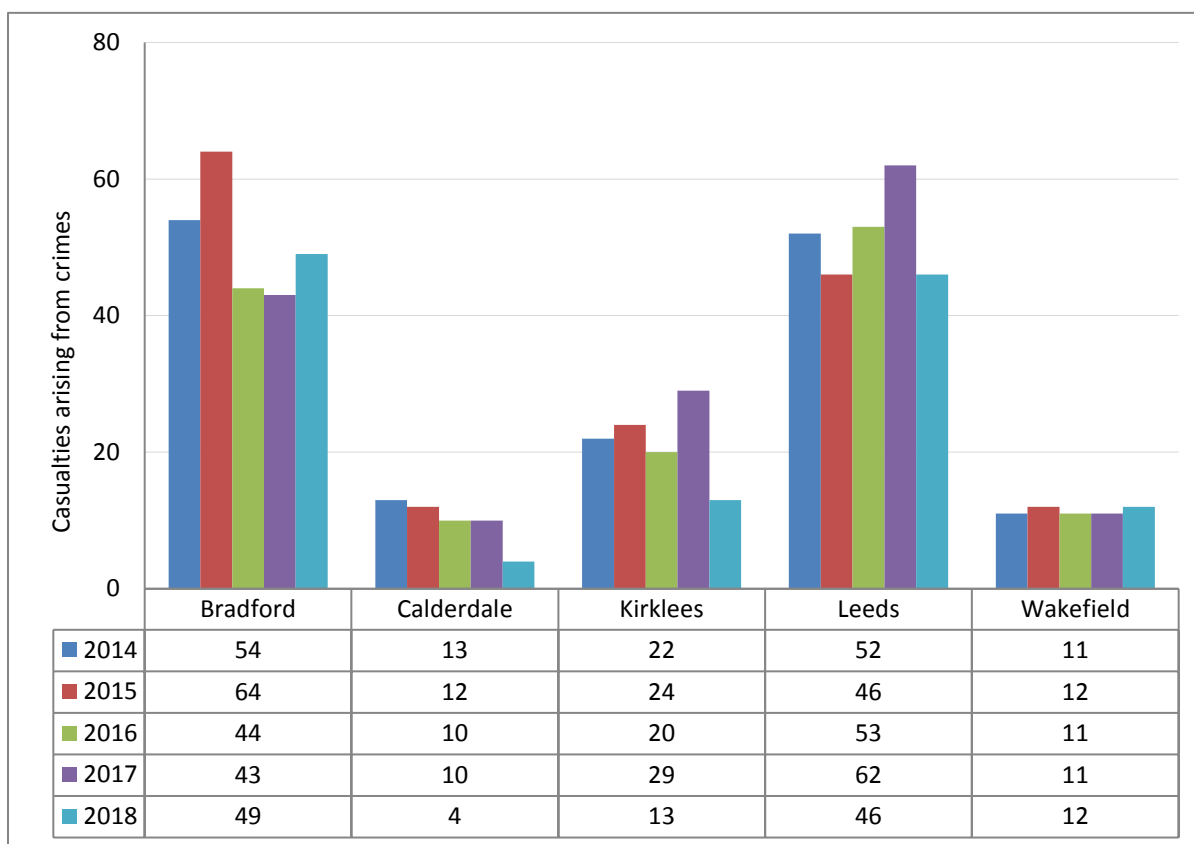


Figure 26- Road collisions involving criminal activities in West Yorkshire

Districts	Collisions												Casualties											
	2014		2015		2016		2017		2018		2018 vs 17		2014		2015		2016		2017		2018		2018 vs 17	
	KSI	All	KSI	All	KSI	All	KSI	All	KSI	All	KSI	All	KSI	All	KSI	All	KSI	All	KSI	All	KSI	All	KSI	All
Bradford	5	28	8	40	3	34	3	29	9	32	↑	↑	7	54	8	64	4	44	4	43	12	49	↑	↑
Calderdale	2	6	3	9	2	8	2	5	1	4	↓	↓	6	13	3	12	3	10	2	10	1	4	↓	↓
Kirklees	5	9	2	15	4	12	3	14	1	9	↓	↓	7	22	2	24	6	20	6	29	1	13	↓	↓
Leeds	8	31	8	28	9	38	13	37	8	31	↓	↓	8	52	14	46	9	53	19	62	10	46	↓	↓
Wakefield	5	8	1	7	5	8	2	6	1	8	↓	↑	5	11	1	12	6	11	3	11	1	12	↓	↑
West Yorkshire	25	82	22	99	23	100	23	91	20	84	↓	↓	33	152	28	158	28	138	34	155	25	124	↓	↓

Table 16- Crime-related collisions and casualties: 2012- 2018

Section III: Reported Road Casualties by Road User Types



© Courtesy of the MCET, West Yorkshire Police

I- CHILD CASUALTIES IN WEST YORKSHIRE

In 2018, the number of children injured from road traffic collisions fell for the third consecutive year. The total of 637 is the lowest ever total recorded in the county.

Child casualties fell from 865 in 2012 to 772 in 2013 and 2014 before increasing in 2015 (826). In 2016, the county reported fewer casualties than the previous years and the reduction continues in 2017 and 2018.

With 769 children involved in road traffic collisions in 2013, the county recorded its lowest ever total of child casualties. The slight increase in the following two years has not affected the overall downward trend, which is consolidated by the results of the last three years.

The reduction among the number of children killed or seriously injured (110) is not that great (only 3 fewer casualties compared to last year); however this year's total confirms last year's reduction and essentially put the district 10% below the average of the last three years (122).

The county overall reduction hides the disparities reported at district level. In the recent three years, child casualties have not improved in Wakefield (KSI and all severities) or in Leeds (KSI). This is particularly concerning as these two authorities districts have aggregated over half of all child casualties recorded in the county in 2018. By comparison, one in four children injured were in Bradford and one in six in Kirklees.

Almost half of children injured are pedestrians. In 2018, a total of 308 (48%) children were hit by a vehicle while walking either alone or with other children or adults. Most child casualties are those aged 5-10 and 11-15 as shown in the table below. Acting to reduce the number of pedestrian casualties will certainly contribute to reduce child casualties as a whole.

Facts about child casualties

- 637 children were injured in 2018, 8% fewer than last year (694).
- Among children injured were 308 pedestrians (48%); 234 car occupants (37%), 68 cyclists (11%);
- Four children were killed in 2018, same as last year; three pedestrians and once cyclist.
- Serious injuries (106) fell for the third year in row and overall child KSI barely changed.
- 19 child casualties per every 10.000 child residents are injured on traffic collisions.

Age of Casualty	2012	2013	2014	2015	2016	2017	2018
0-4yrs	178	161	145	166	160	115	94
5-10yrs	323	274	276	304	267	264	252
11-15yrs	364	334	351	356	365	315	291
All Child	865	769	772	826	792	694	637

Table 17: Child casualties by age

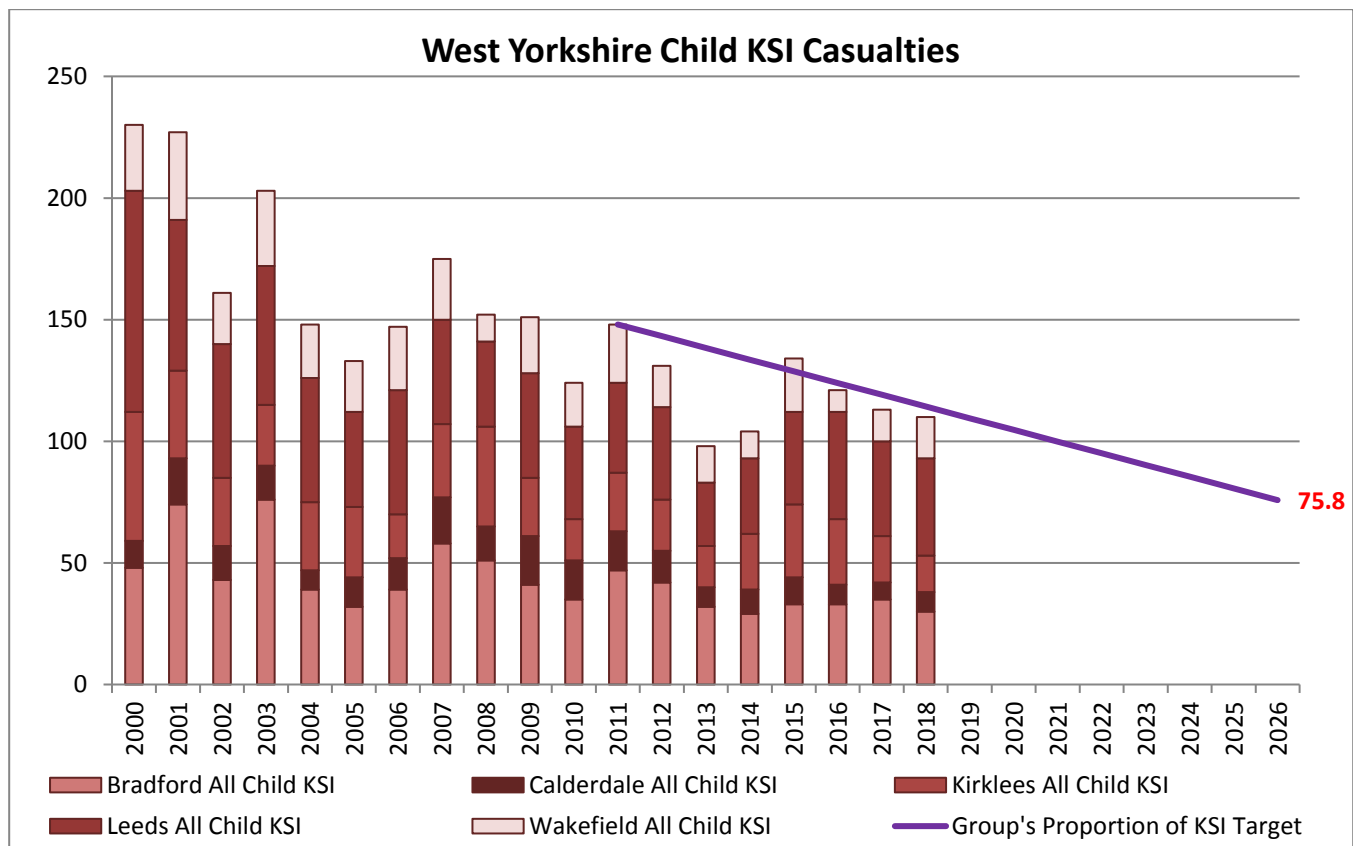


Figure 27- Road collision child casualties and target trajectory to 2026 - West Yorkshire

All Children KSI in West Yorkshire	Baseline (avg 05~09)	Previous 3 year average	2018	2018 change over 2005~09	2018 change over previous 3 year av	Previous 3 year av change over 2005~09
Pedestrian	107	80	82	-23%	2%	-25%
Pedal Cyclist	22	17	13	-41%	-24%	-23%
Car occupants	16	19	10	-39%	-48%	18%
Others	6	6	5	-22%	-17%	-6%
Boys	103	84	81	-21%	-3%	-19%
Girls	49	39	29	-40%	-25%	-20%
Age 0 to 4	23	16	14	-38%	-13%	-29%
Age 5 to 15	129	106	96	-26%	-10%	-18%
All children (0-15)	152	122	110	-27%	-10%	-19%

Table 18- Children killed or seriously injured by road user type – West Yorkshire

- From table 18 above, it can be seen that pedestrians represent the largest proportion of child KSI casualties, the increase against the recent three years is highlighted.
- The reduction in the number of cyclist and car occupant KSI casualties among children in the recent three years is encouraging.
- More boys are injured than girls, and the reduction of the number of boys injured is not that great; in comparison, significantly fewer girls were injured in recent years.
- Children aged 5-15 years account for the majority of those injured, but the slight reduction in 2018 is noted.

In general, there were fewer casualties among all the child age groups when comparing the current year to the baseline.

Table 19 below details the number of child casualties (all severity and KSI) recorded in each of the five districts since 2013.

- In 2018, child KSI and all casualties have increased substantially in Wakefield. Leeds and Calderdale have recorded more KSI casualties, while Bradford reported fewer KSI and all casualties.
- Child KSI and all casualties compares favourably against the baseline and against the average of the last five years.

As shown in the Table 19 below, the number of children injured from road collisions has been decreasing since 2012. Despite the upturn of 2015, the child casualty total in 2018 is 17% below the average of the previous three years.

Local Authorities	All Child Casualties (January-December)														
	Severities	2005~09 avg	2013	2014	2015	2016	2017	2018	Trend pattern 2013-2018	2018 vs last year	2018 vs Baseline	2018 vs avg-2015-17			
Bradford	KSI	44.2	32	29	33	33	35	30		-14.3% ⬇️	-32.1% ⬇️	34	-10.9%	⬇️	
	All severities	316.8	230	223	227	199	202	156		-22.8% ⬇️	-50.8% ⬇️	209	-25.5%	⬇️	
Calderdale	KSI	15.6	8	10	11	8	7	8		14.3% ⬆️	-48.7% ⬇️	9	-7.7%	⬇️	
	All severities	92.4	59	66	66	66	60	56		-6.7% ⬇️	-39.4% ⬇️	64	-12.5%	⬇️	
Kirklees	KSI	28.4	17	23	30	27	19	15		-21.1% ⬇️	-47.2% ⬇️	25	-40.8%	⬇️	
	All severities	213.8	133	151	171	127	104	105		1.0% ⬆️	-50.9% ⬇️	134	-21.6%	⬇️↕	
Leeds	KSI	42.2	26	31	38	43	39	40		2.6% ⬆️	-5.2% ⬇️	40	0.0%	↔️	
	All severities	346.8	244	253	254	299	239	217		-9.2% ⬇️	-37.4% ⬇️	264	-17.8%	⬇️	
Wakefield	KSI	21.2	15	11	22	9	13	17		30.8% ⬆️	-19.8% ⬇️	15	15.9%	⬆️	
	All severities	146	103	79	108	100	89	103		15.7% ⬆️	-29.5% ⬇️	99	4.0%	⬆️	
West Yorkshire	KSI	151.6	98	104	134	120	113	110		-2.7% ⬇️	-27.4% ⬇️	122	-10.1%	⬇️	
	All severities	1115.8	769	772	826	791	694	637		-8.2% ⬇️	-42.9% ⬇️	770	-17.3%	⬇️	

Table 19- Child KSI casualties in West Yorkshire in the recent five years

When child demography is analysed in relation to road casualties, West Yorkshire reported 1.3 child casualties for every thousand children in 2018. This is an improvement compared to 2012 which had a rate of 1.9 children injured for every thousand children. When broken down by age groups, the rate varies, but children aged 11-15 years have the highest rate: 2.1 casualties per 1,000 residents of that age group in 2018.

Overall, high school children (11-15 years old) remain the most vulnerable to road collisions since 2012 as shown in the graph below. It is however pleasing to report a slight reduction on the rate in the last two years. Prior to 2017, West Yorkshire reported over 2.5 high school children casualties per 1000 population of that age. This rate is the highest among children and can be a cause for concern especially when the analysis of census data reveal a reduction in the number of West Yorkshire residents of that age group in the last decade.

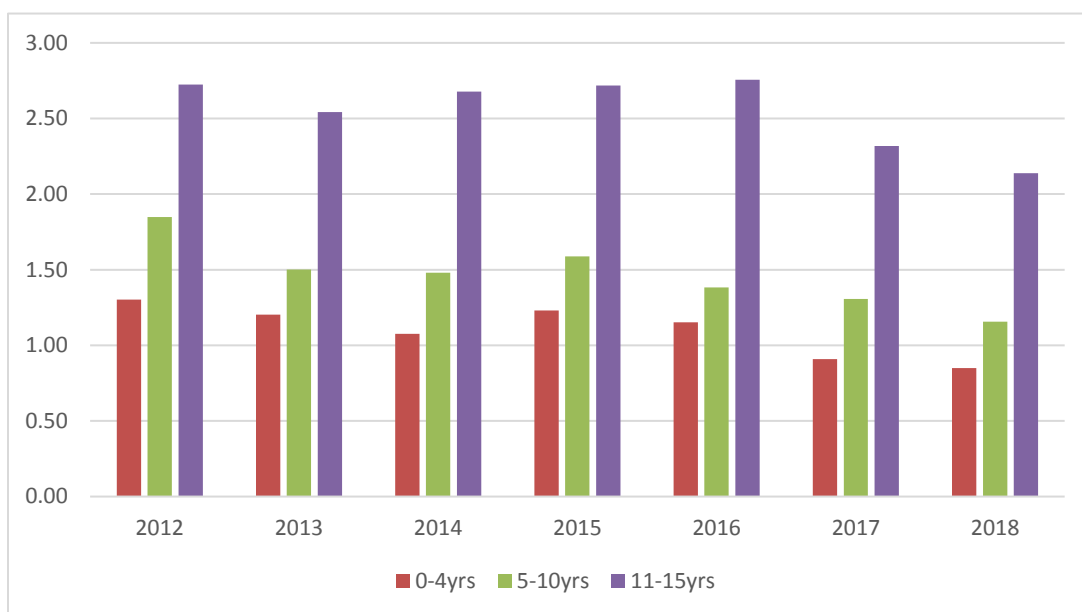


Figure 28: West Yorkshire: rates of child casualties per 1000 children

II- PEDESTRIAN CASUALTIES IN WEST YORKSHIRE

In 2018, 904 pedestrians were injured, down 1% from 910 in 2017. This year's total is the lowest ever recorded for West Yorkshire. This performance places the county 33% below the baseline (1,344), 14% below the average of the last three years and consolidates the slow but persistent decrease in recent years.

Pedestrian KSI totalling 364 in 2008 fell sharply to 291 (2011), before increasing the following year (300 in 2012). After a sharp reduction in 2013 (225), the number of KSI among pedestrian KSI remained unchanged in 2014 (279) and 2015 (278), essentially because of the rise in fatal casualties. The slight reduction in 2016 was quickly overturned by the increase in 2017 and again in 2018; which consolidates the flat trend of the last five years.

This year, 25 pedestrians died from a road collision involving a motor vehicle. Among them were 12 adults (age 16-59), 10 elderly adults (over 60) and three children (5-15). No child aged 4 or under was killed in the county in 2018. A further 239 pedestrians sustained serious injuries, up by five from 234 recorded last year.

Facts about pedestrian casualties

- 904 pedestrians injured from 877 collisions in 2018.
- Pedestrians represent 17% of all casualties and are involved in one in five road collisions.
- Collisions involving pedestrians occurred mostly during daylight (71%), in fine weather (86%), on dry road surface (76%) and not at crossing (75%).
- 25 pedestrians killed in 2018 against 19 in 2017 and 11 in 2016.
- Among those deaths were three children aged between 5-15, and 10 adults over 60.
- Pedestrian KSI (264) made a third of all KSI in 2018.

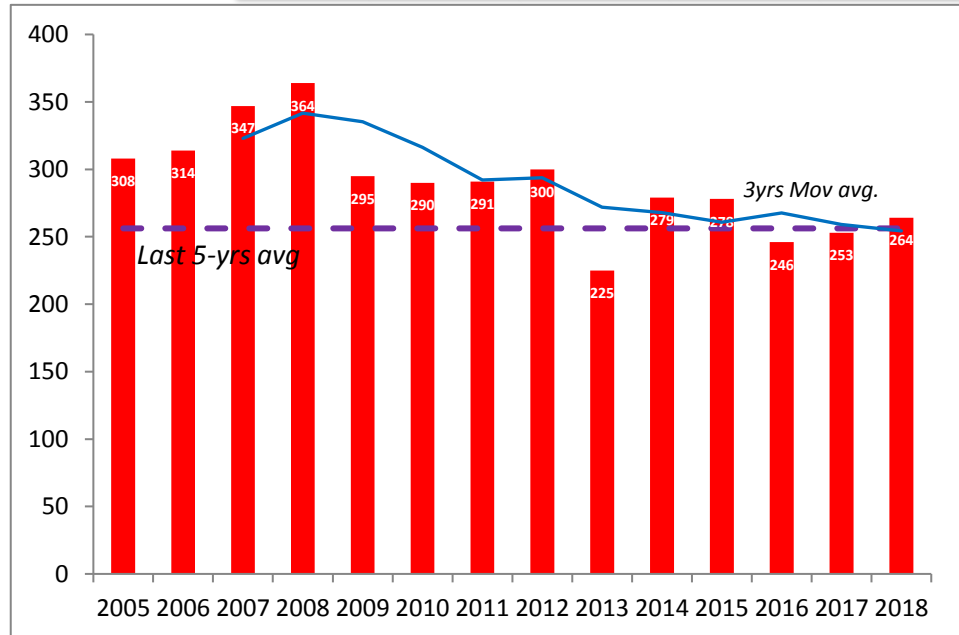


Figure 29: West Yorkshire pedestrian KSI casualties since 2005

In 2018, one in four pedestrians sustained injuries from collisions recorded in the vicinity of any sort of pedestrian crossing facility; 95 (11%) of them were near a pelican crossing, while 57 (6%) were on ped-phase, 50 (6%) on zebra crossings and 33 (4%) on refuge.

The table below summarises the number of casualties by type of vehicle. The majority of pedestrian collisions involved cars and taxis (87%), while goods vehicles and public service vehicles (bus/coach) were involved in 6% and 3% of all pedestrian injuries, respectively.

Pedestrian casualties	Fatal	Serious	KSI	Slight	Total
Pedal cycle	0	1	1	8	9
M/cycle	0	5	5	12	17
Car-Taxi and Minibus	19	206	225	563	788
Bus or coach	2	10	12	16	28
Good Vehicle <=3.5t	2	12	14	25	39
Goods vehicle -3.5t and 7.5t	0	0	0	6	6
Heavy Goods vehicle >= 7.5t	2	5	7	6	13
Mobility scooter	0	0	0	2	2
Other vehicle - specify	0	0	0	2	2
Total	25	239	264	640	904

Table 20: Pedestrian casualties and type of vehicle

During the 1990s, there was very little difference between the numbers of children and adults injured each year. Since 2002, however, the gap has widened considerably, such that there are now fewer children injured compared to adults. In the last five years, children form around a third of all pedestrian casualties. In 2018, of the total of 904 casualties, 34% (308) were children, predominantly those aged 5-15 years (271).

‘Failed to look properly’ is the most commonly quoted causation factor for collisions involving pedestrians in 2018. Other factors include ‘crossing road masked by stationary vehicles’ and ‘impaired by alcohol’. The breakdown of causation factors by the age of pedestrian casualties shows that children predominate in collisions caused by ‘Careless / reckless’; ‘Dangerous actions in road’, ‘Failed to look properly’ and ‘Crossed road masked by stationary vehicles’; while adults (aged 16-59) are largely represented on collisions caused by ‘Disability and illness’, ‘Impaired by alcohol’ and ‘Wrong use of pedestrian crossing’.

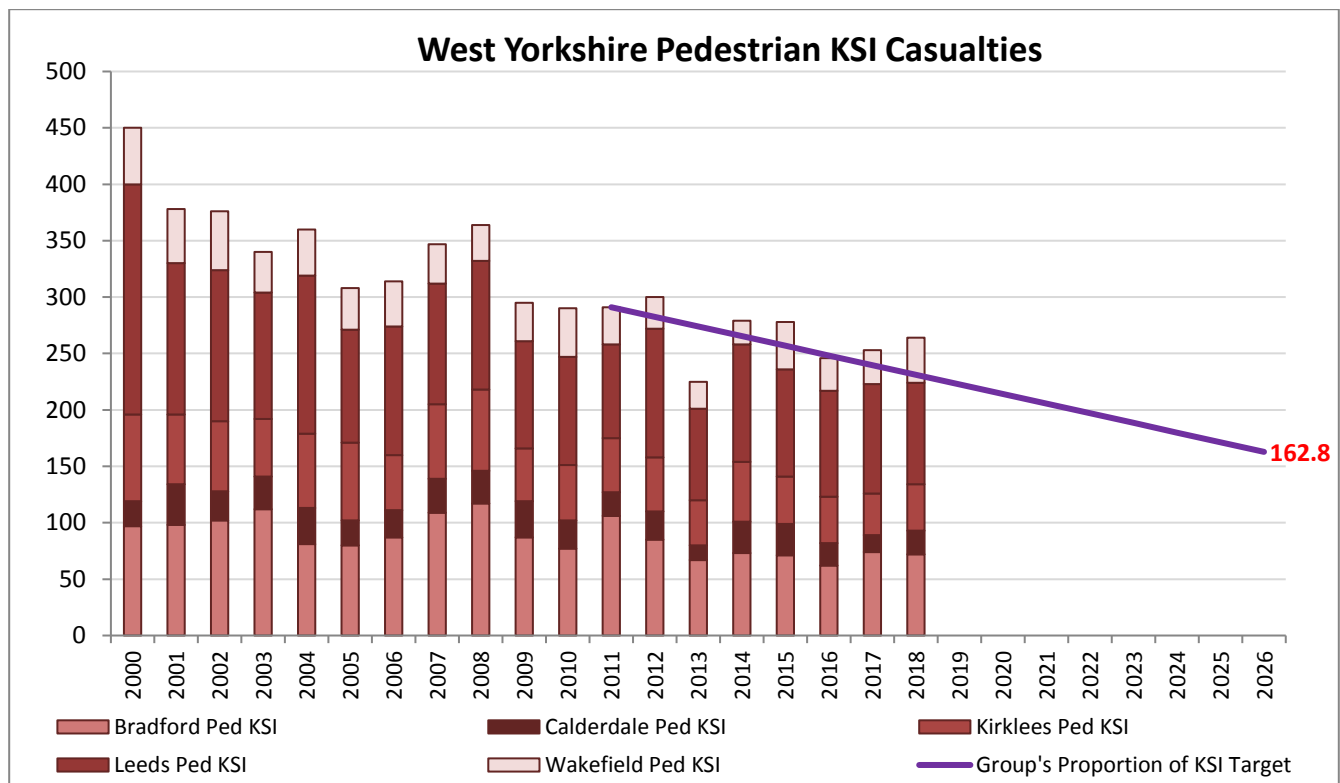


Figure 30- Road collision pedestrian casualties and target trajectory to 2026 – West Yorkshire

All Pedestrian KSI in West Yorkshire	Baseline (avg 05~09)	Previous 3 year average	2018	2018 change over 2005~09	2018 change over previous 3 year av	Previous 3 year av change over 2005~09
Age 0 to 4	19	13	12	-38%	-5%	-34%
Age 5 to 15	87	67	70	-20%	4%	-23%
All child (0 to 15)	107	80	82	-23%	2%	-25%
Age 16 to 19	31	13	13	-58%	0%	-58%
Age 20 to 29	43	30	25	-42%	-16%	-31%
Age 30 to 59	84	74	75	-11%	2%	-12%
Age 60 plus	61	63	69	13%	10%	2%
All pedestrian	326	259	264	-19%	2%	-20%

Table 21- Pedestrian Killed or Seriously Injured – West Yorkshire

Table 21 above shows how pedestrian KSI distribution has altered over the last decade.

- Children aged 5-15 account for the largest number of child casualties and the increase in the recent years is noted.
- The recent increase of the number of casualties among the elderlies (60+ years) and adults aged 30-59 need attention.
- A slight reduction in casualties amongst road users aged 20-29 is noted.

Table 21 below shows the total number of pedestrian casualties in the most recent five years and compares the current year and the baseline for the districts and the county as a whole.

- The increase in the number of pedestrian KSI in the county as a whole is essentially sustained by the increase in Calderdale (+40%), Wakefield (+33%), and Kirklees (+10%). Leeds district has recorded fewer casualties in 2018.
- When the current year is compared against the baseline and against the average of the last three years, the results vary according to the local authorities. The number of all pedestrian casualties reported in 2018 is well below the baseline in four districts. This year's increase puts the total for Wakefield district above the baseline.
- When the current year is compared against the most recent five years, there is a need for further reduction in pedestrian KSI in Bradford, Kirklees and Wakefield.











Local Authorities	All Pedestrian Casualties (January-December)															
	Severities	2005~09 avg	2013	2014	2015	2016	2017	2018	Trend pattern 2013-2018	2018 vs last year		2018 vs Baseline		2018 vs avg-2015-17		
Bradford	KSI	96	67	73	71	62	74	72		-2.7%	⬇️	-25.0%	⬇️	69	4.3%	⬆️
	All severities	366.8	275	295	326	270	259	242		-6.6%	⬇️	-34.0%	⬇️	285	-15.1%	⬇️
Calderdale	KSI	27.4	13	28	28	20	15	21		40.0%	⬆️	-23.4%	⬇️	21	0.0%	↔️
	All severities	109	76	97	102	104	79	72		-8.9%	⬇️	-33.9%	⬇️	95	-24.2%	⬇️
Kirklees	KSI	60.6	40	53	42	41	37	41		10.8%	⬆️	-32.3%	⬇️	40	2.5%	⬆️
	All severities	250.4	183	169	216	171	137	156		13.9%	⬆️	-37.7%	⬇️	175	-10.7%	⬇️
Leeds	KSI	106	81	104	95	94	97	90		-7.2%	⬇️	-15.1%	⬇️	95	-5.6%	⬇️
	All severities	464.2	336	406	385	388	321	315		-1.9%	⬇️	-32.1%	⬇️	365	-13.6%	⬇️
Wakefield	KSI	35.6	24	21	42	29	30	40		33.3%	⬆️	12.4%	⬆️	34	18.8%	⬆️
	All severities	154	104	107	145	125	114	119		4.4%	⬆️	-22.7%	⬇️	128	-7.0%	⬇️
West Yorkshire	KSI	325.6	225	279	278	246	253	264		4.3%	⬆️	-18.9%	⬇️	259	1.9%	⬆️
	All severities	1344.4	974	1074	1174	1058	910	904		-0.7%	⬇️	-32.8%	⬇️	1,047	-13.7%	⬇️

Table 22- Pedestrian KSI casualties in West Yorkshire in the recent five years

III- PEDAL CYCLIST CASUALTIES IN WEST YORKSHIRE

Cyclist injuries in West Yorkshire have increased consistently in the last decade. Between 2010 and 2014, the number of cyclist casualties of all severities rose by 39%. Since 2015, the pattern has changed slightly as fewer cyclist injuries were recorded in 2016 (637), 2017 (567) and 2018 (551). This pattern is also noticeable for the KSI as the reduction started in 2014, was confirmed in the following two years, consolidated in 2017 (120) before a slight increase in 2018 (127).

The numbers of adult cyclist casualties, which have almost doubled since 2001, contributed most to the increase seen in recent years; equally, the reductions in 2015, 2016 and 2017 are also attributed to the reduced number of adults injured

as cyclists. In 2018, the situation changed as the reduction is essentially down to fewer child cyclists injured on West Yorkshire roads. Child cyclist casualties fell 33% from 101 in 2017 to 68 this year; in comparison, the number of adult cyclists injured rose 4% from 466 to 484 in 2018.

This year, two cyclists, including one child, were killed in West Yorkshire. There were none last year and six in 2016. Serious injuries among cyclists, however, increased by five to 125, contributing to a slight increase of overall KSI in the county. Despite the improvement in recent years, cyclist injuries remain well above the baseline for both KSI and all severities in the county as a whole, but also in Bradford, Leeds and Wakefield.

Facts about cyclist casualties

- 552 cyclists injured in 2018 against 567 in 2017 and 637 in 2016.
- Over 87% of cyclists injured are adults; the number of children injured decreased by 33 to 68 from 101 (2017).
- One in five road collisions involving cyclists is recorded during commuting times, and over one in three occurred on weekdays.
- Two cyclists including a child were fatally injured in 2018; there were none in 2017 and six (all adults) in 2016.
- Serious injuries rose by five to 125, contributing to a total KSI which is up by seven to 127 in 2018.
- Over half of all cyclist casualties are recorded in Leeds (286), while 18% (102) were in Bradford, 12% (64) in Kirklees, 12% (67) in Wakefield and 5% (30) in Calderdale.

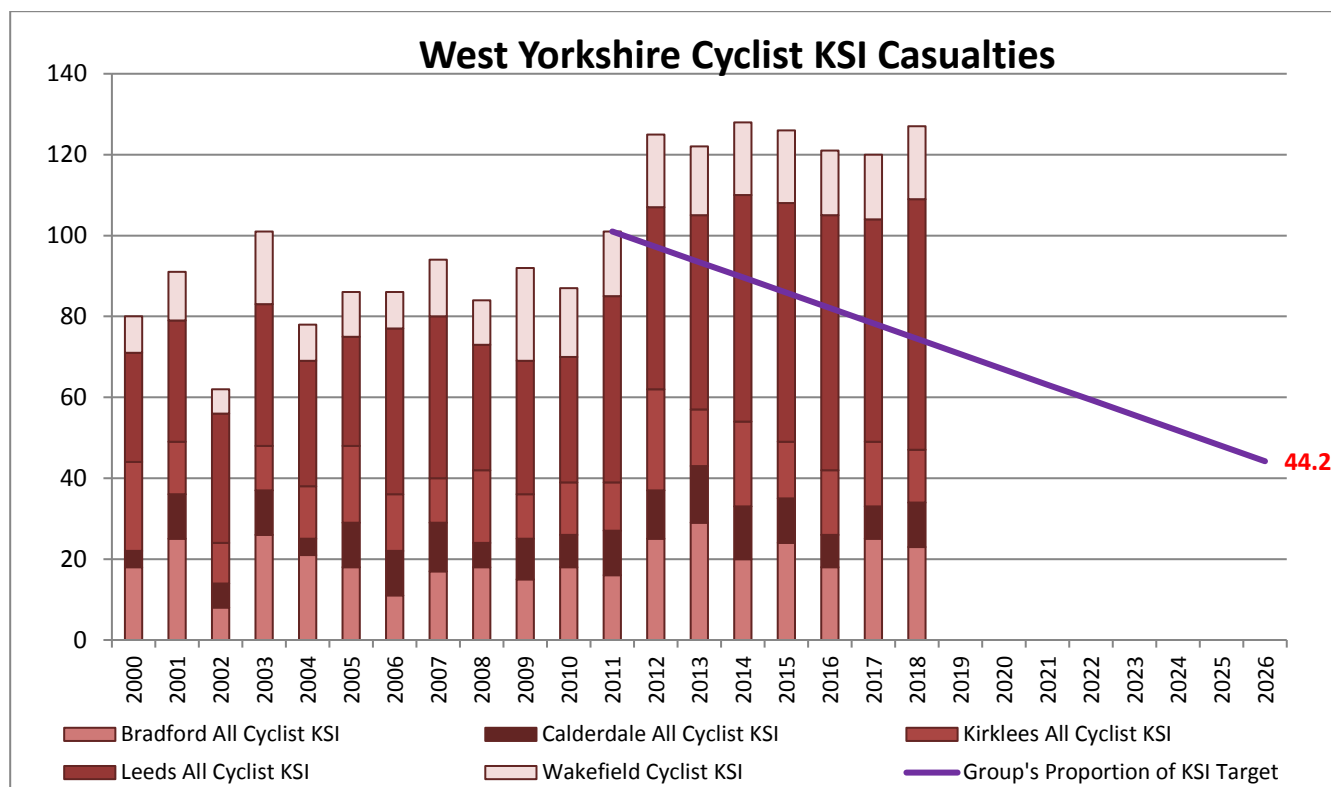


Figure 31- Road collision cyclist casualties and target trajectory to 2026 West Yorkshire.

The table below provides the figures for the most recent five years and the comparison between the current year and the baseline for the five districts. The increase in the overall KSI in the county as a whole is reflected in three of five local authorities.

Local Authorities	Severities	All Pedal Cycle Casualties (January-December)												
		2005~09 avg	2013	2014	2015	2016	2017	2018	Trend pattern 2013-2018	2018 vs last year	2018 vs Baseline	2018 vs avg-2015-17		
Bradford	KSI	15.8	29	20	24	18	25	23		-8.0% ↓	45.6% ↑	22	3.0%	↑
	All severities	85	123	130	121	97	109	102		-6.4% ↓	20.0% ↑	109	-6.4%	↓
Calderdale	KSI	10	14	13	11	8	8	11		37.5% ↑	10.0% ↑	9	22.2%	↑
	All severities	32.8	49	46	44	40	38	30		-21.1% ↓	-8.5% ↓	41	-26.2%	↓
Kirklees	KSI	14.6	14	21	14	16	16	13		-18.8% ↓	-11.0% ↓	15	-15.2%	↓
	All severities	81.6	75	93	77	78	72	64		-11.1% ↓	-21.6% ↓	76	-15.4%	↓
Leeds	KSI	34.4	48	56	59	64	55	62		12.7% ↑	80.2% ↑	59	4.5%	↑
	All severities	216.4	314	340	321	347	281	286		1.8% ↑	32.2% ↑	316	-9.6%	↓
Wakefield	KSI	13.6	17	18	18	16	16	18		12.5% ↑	32.4% ↑	17	8.0%	↑
	All severities	64.2	74	73	65	75	67	70		4.5% ↑	9.0% ↑	69	1.4%	↑
West Yorkshire	KSI	88.4	122	128	126	122	120	127		5.8% ↑	43.7% ↑	123	3.5%	↑
	All severities	480	635	682	628	637	567	552		-2.6% ↓	15.0% ↑	611	-9.6%	↓

Table 23- Pedal cyclist KSI casualties in West Yorkshire in the recent five years

The recent surge in the popularity of cycling may explain the persistent increase in cyclist casualties, which should therefore be viewed in a context of an increasing number of cycling trips in West Yorkshire and in the country as a whole.

The level of cycling reported as the number of cyclist per 1,000 residents reveals the overall increase in the proportion of residents who cycle for any purpose at least three times per week against the overall population of West Yorkshire. This is confirmed nationally as well. According to the DfT, (RRCGB, 2014- page 26), Pedal cycling road traffic rose by 4% to 3.25 billion vehicle miles in 2014, meaning that cycling traffic has risen by 27% since 2007. It is therefore likely that the increase in cycling resulted in more collisions as more cyclists are exposed to other vehicles.

The graph below derives from the computation of the three years rolling average of cycling trips measured on main roads of West Yorkshire. The generally upward trend of West Yorkshire, mirrored in Leeds and other districts, indicates a net increase in cycling popularity and cycling trips in the county.

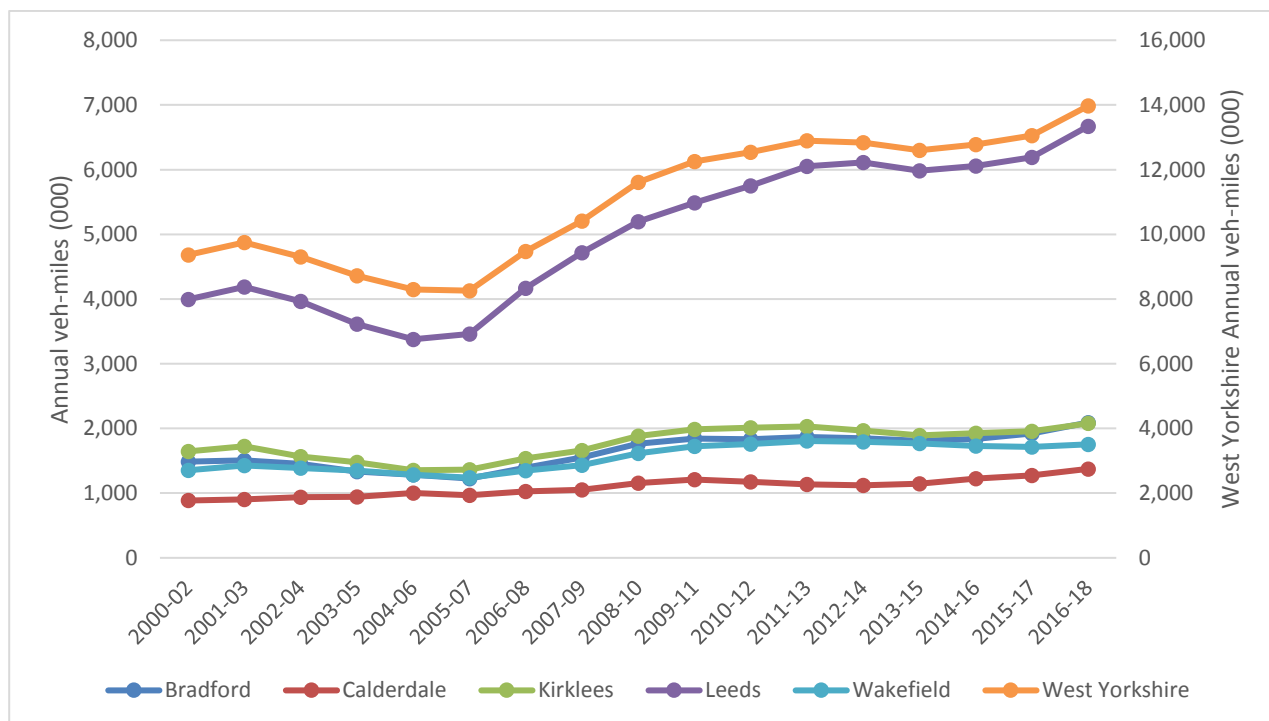


Figure 32: West Yorkshire cycling growth-Major Roads (rolling 3 years average)

IV- POWERED TWO WHEELERS (PTW) CASUALTIES IN WEST YORKSHIRE

Since 2010, injuries among PTW riders have not changed significantly in the county, fluctuating around an average of 556 between 2011 and 2015.

This year, 415 PTW riders were injured against 437 last year. The number of casualties decreased for the third consecutive year, and hopefully this is a beginning of a genuine downward trend.

When the size of vehicle is considered, bikes fitted with 50cc or less engine claimed 11% (46) of all PTW injuries, those fitted engine over 50cc and up to 125cc were involved in 43% (178) of all casualties, while riders of bikes over 125cc form 46% of all PTW casualties in 2018.

The reduction in the total number of PTW casualties in the county is reflected in the districts, with the exception of Bradford.

The number of motorbike riders fatally injured (9) fell by only one from last year's total (8), but serious injuries have gone down by seven from 162 (2017) to 155 this year, making an overall KSI of 163, which is the lowest ever for West Yorkshire.

The number of motor cyclists killed or seriously injured had not changed a great

deal between 2006 and 2009, and so the significant drop in 2010 was welcomed as it returned the total to the level of the early 1990s. The increases in subsequent years have somewhat overshadowed the 2010 performance. However, the overall reduction recorded after 2014 is welcomed as the number of PTWs KSI remains below the baseline and the average of the last three years. The reductions reported in 2017 and 2018 contribute to downward trend of the last five years.

Facts about PTW casualties

- PTW riders were involved in 10% of all collisions; they represented 8% of all casualties and 19% of all KSI in 2018.
- PTW rider casualties fell for the second year in a row, by 5% to 415 in 2018, the county's lowest ever total.
- Seven children were injured as PTW riders (three riders and four pillions), up from four (all pillions) recorded last year.
- Over half (54%) of PTW casualties were riding vehicles under 125cc, while 29% involved bikes over 500cc.
- Eight riders were killed in 2018, compared with nine in 2017; however, it's pleasing to report a slight reduction in the number of KSI, which fell by 5% to 163.
- KSI among riders of bikes over 500cc increased by 13 from 42 in 2017 to 55 in 2018; while KSI among riders of other type of bikes fell slightly in 2018.
- A large proportion of collisions are linked with commuting peak times of week days.

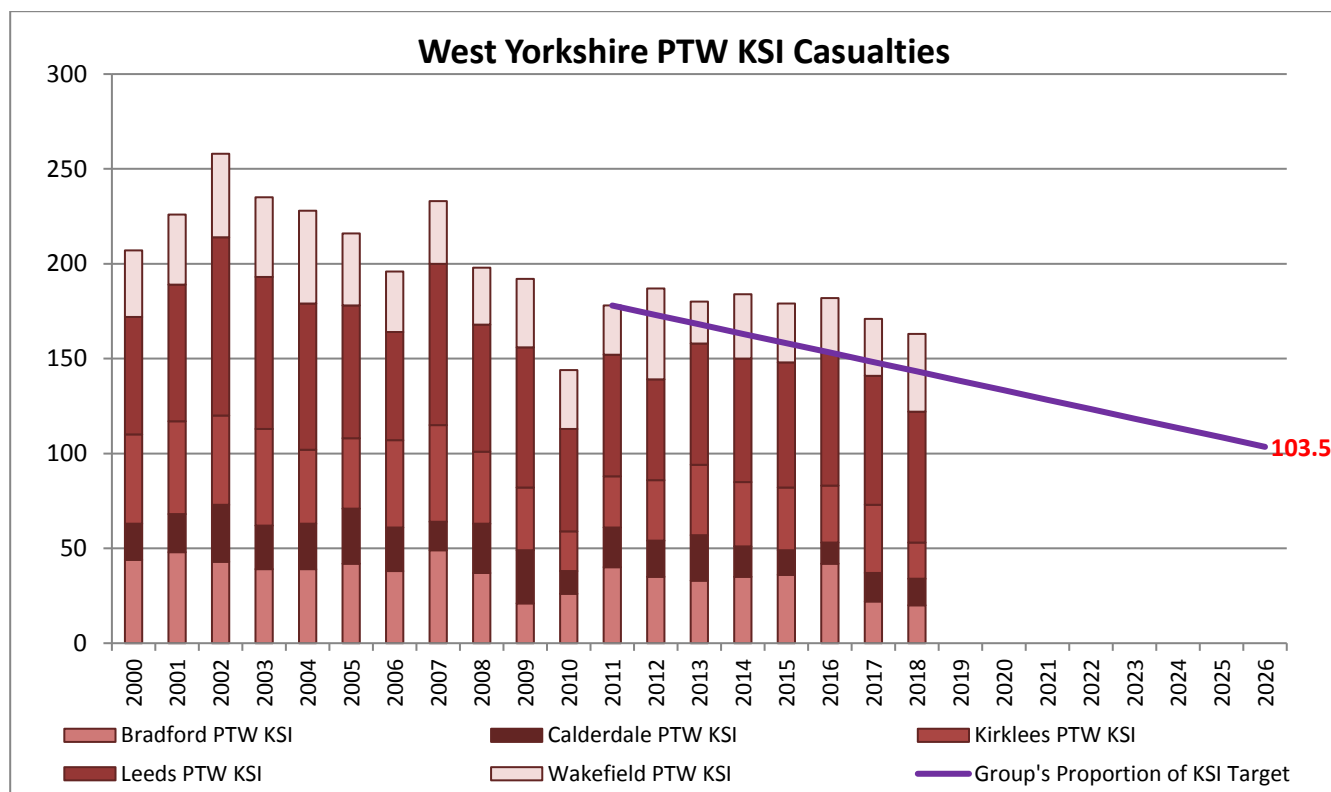


Figure 33- Road collision PTW casualties and target trajectory to 2026 – West Yorkshire

The table below shows the figures for the most recent five years and compares the results of current year against the baseline for the districts and the county as a whole. In 2018, the increase in the number KSI is noted in Leeds and Wakefield. Casualties of all severity have fallen everywhere except in Bradford, but this year compares favourably against the baseline for all the five local authorities.





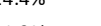
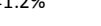
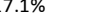

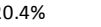


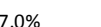
Local Authorities	All PTW Casualties (January-December)														
	Severities	2005~09 avg	2013	2014	2015	2016	2017	2018	Trend pattern 2013-2018	2018 vs last year	2018 vs Baseline	2018 vs avg-2015-17			
Bradford	KSI	37.4	33	35	35	40	22	20		-9.1% ↓	-46.5% ↓	32	-38.1%	↓	
	All severities	132	116	113	109	99	66	82		24.2% ↑	-37.9% ↓	91	-10.2%	↓	
Calderdale	KSI	24.2	24	16	13	11	15	14		-6.7% ↓	-42.1% ↓	13	7.7%	↑	
	All severities	74.8	50	51	51	39	33	31		-6.1% ↓	-58.6% ↓	41	-24.4%	↓	
Kirklees	KSI	41	37	34	32	29	36	19		-47.2% ↓	-53.7% ↓	32	-41.2%	↓	
	All severities	123.4	126	99	117	87	89	81		-9.0% ↓	-34.4% ↓	98	-17.1%	↓	
Leeds	KSI	70.6	64	65	66	70	68	69		1.5% ↑	-2.3% ↓	68	1.5%	↑	
	All severities	226	180	192	192	181	170	144		-15.3% ↓	-36.3% ↓	181	-20.4%	↓	
Wakefield	KSI	33.8	22	34	31	28	30	41		36.7% ↑	21.3% ↑	30	38.2%	↑	
	All severities	97.2	86	97	89	96	79	77		-2.5% ↓	-20.8% ↓	88	-12.5%	↓	
West Yorkshire	KSI	207	180	184	177	178	171	163		-4.7% ↓	-21.3% ↓	175	-7.0%	↓	
	All severities	653.4	558	552	558	502	437	415		-5.0% ↓	-36.5% ↓	499	-16.8%	↓	

Table 24- Motorbike rider casualties in West Yorkshire in the recent five years

V- CAR OCCUPANT CASUALTIES IN WEST YORKSHIRE

The overall downward trend in the number of car occupants injured is consolidated by the third consecutive reduction since 2015. With 3,226 car occupants casualties recorded in 2018, the county remains well below (-52%) the baseline and still compares favourably against the average of the previous three years (-20%).

The reduction recorded in the county as whole is also reflected in all districts with the exception of Wakefield. In 2018, car occupant casualties have remained unchanged in Wakefield (516).

The downward trend in the number of car occupants killed or seriously injured effectively levelled off between 2005 and 2008 before falling the following five years (2009-2013). That performance indicated a firmly established downward trend of car occupant casualties in the county. However, the increases in 2014 (302) and subsequently in 2016 (310) and 2018 (276) contributed to a general flat trend in the recent six years, highlighting the fact that serious injuries from cars remains an issue in the county as a whole, especially as car occupants have the largest share (32%) of all KSI in West Yorkshire.

The general drop in car occupant KSI casualties observed over the recent year is not distributed evenly amongst all age groups of car users. The number of casualties among young car drivers and passengers aged 16 to 29 has increased between 2013 and 2015, before reducing in 2016. However, in 2017 and 2018, more casualties were recorded among car occupants of that age.

Facts about car occupant casualties

- Car occupant injuries fell by 9% to 3,226.
- Injuries to car drivers fell 7% to 2,136 on 2017 (2,289), while passenger casualties decreased by 14% to 1,090.
- Car occupant fatalities doubled in 2018. There were 33 deaths (18 drivers and 15 passengers) this year against 15 in 2017.
- No children died as car occupants this year against three in 2017.
- The number of KSI is up by 5 to 276 in 2018, but still compares favourably against the baseline (-34%) and against the average of the last three years (-3%).
- Around one in four car occupant casualties was a young driver (16-24 years old).

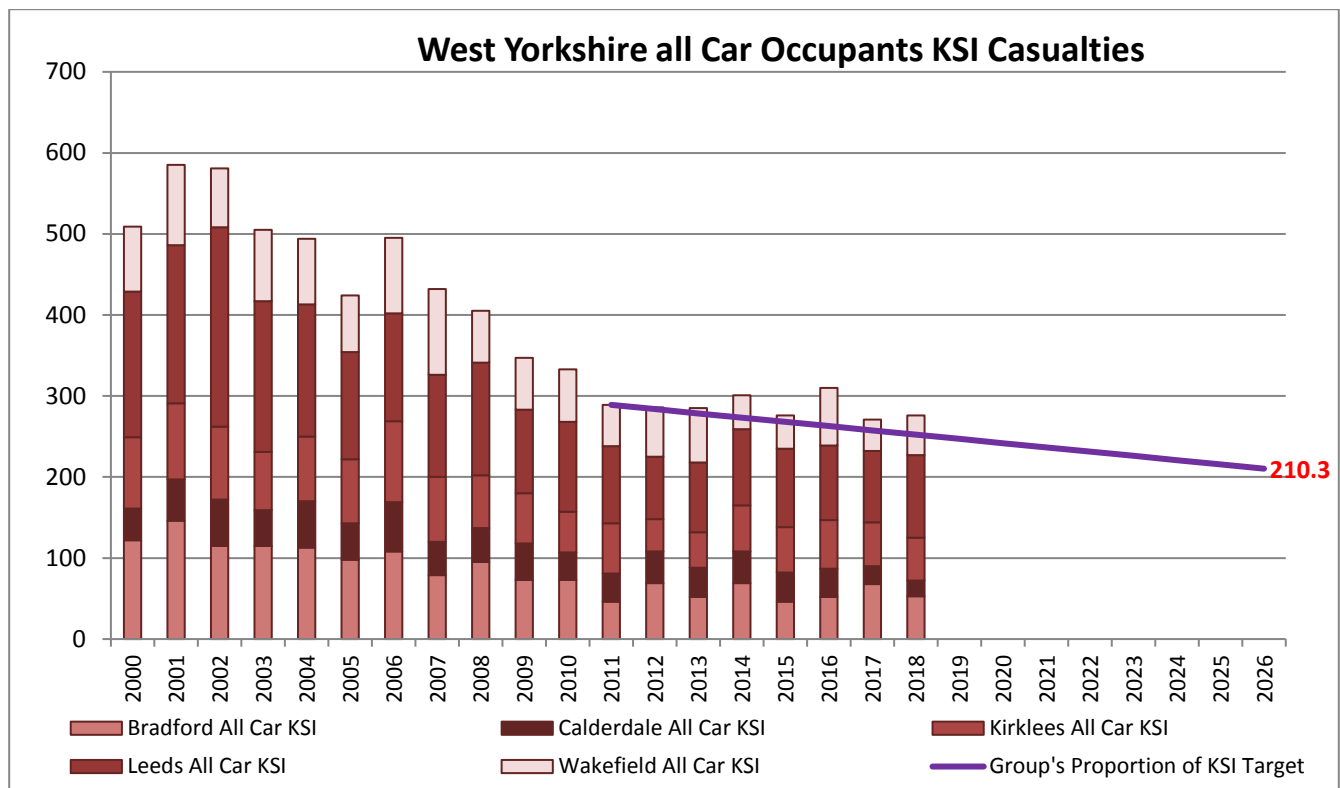


Figure 34- Road collision Car Occupant casualties and target trajectory to 2026 West Yorkshire

The table below provides the figures for the most recent five years as well as the comparison between the current year and the baseline for the districts and the county as a whole. KSI among car occupants have increased in Leeds (+16%) and Wakefield (+26%). For the five districts, the total number of casualties recorded in 2018 still compares favourably against the baseline.

Local Authorities	Severities	All Car Occupant Casualties (January-December)												
		2005~09 avg	2013	2014	2015	2016	2017	2018	Trend pattern 2013-2018	2018 vs last year	2018 vs Baseline	2018 vs avg-2015-17		
Bradford	KSI	90.6	52	70	46	52	68	53		-22.1% ↓	-41.5% ↓	55	-4.2%	↓
	All severities	1786.8	1073	1128	1046	1077	884	815		-7.8% ↓	-54.4% ↓	1,002	-18.7%	↓
Calderdale	KSI	46.8	36	39	36	35	22	19		-13.6% ↓	-59.4% ↓	31	-38.7%	↓
	All severities	621.2	361	401	335	338	287	256		-10.8% ↓	-58.8% ↓	320	-20.0%	↓
Kirklees	KSI	77.2	41	57	56	60	54	53		-1.9% ↓	-31.3% ↓	57	-6.5%	↓
	All severities	1283.4	745	673	823	717	614	567		-7.7% ↓	-55.8% ↓	718	-21.0%	↓
Leeds	KSI	126.6	86	94	97	92	88	102		15.9% ↑	-19.4% ↓	92	10.5%	↑
	All severities	2164	1,428	1,392	1,523	1,455	1,253	1,072		-14.4% ↓	-50.5% ↓	1,410	-24.0%	↓
Wakefield	KSI	79.4	67	42	41	71	39	49		25.6% ↑	-38.3% ↓	50	-2.6%	↓
	All severities	916.2	570	582	622	608	516	516		0.0% ↔	-43.7% ↓	582	-11.3%	↓
West Yorkshire	KSI	420.6	282	302	276	310	271	276		1.8% ↑	-34.4% ↓	286	-3.4%	↓
	All severities	6,772	4,177	4,176	4,349	4,195	3,554	3,226		-9.2% ↓	-52.4% ↓	4,033	-20.0%	↓

Table 25- Car occupant casualties in West Yorkshire in the recent five years

VI- OTHER ROAD USER CASUALTIES IN WEST YORKSHIRE

Goods Vehicles Casualties

The number of road users injured as occupants in all classes of goods vehicles fell for the third consecutive year. A total of 145 reported goods vehicle casualties is the lowest of the recent six years and puts the county well below the average of the last three years and the baseline.

Occupants of light goods vehicles (LGV-under 3.5 tonnes) account for the large majority of all casualties in this category, and the number of these casualties is slightly up in 2018 (from 98 in 2017 to 110).

The table below summarises the total number of goods vehicles occupant casualties since 2013. The reduction for all the districts in the recent three years and the positive comparison against the baseline confirm the downward trend of recent years.

Facts about Goods Vehicles casualties

- Collisions involving goods vehicles (121) account for 3% of all road traffic collisions and 3% (145) of all casualties.
- No road user was killed in 2018, but 20 people were seriously injured from collisions involving all classes of goods vehicles.
- Goods vehicle occupant casualties (109 drivers and 36 passengers) increased by 17 from 128 to 145 in 2018.
- No child was injured on board a goods vehicle in 2018; there were in 2017.
- A high proportion of casualties (76%) were occupants of light goods vehicles (≤ 3.5 tonnes) while 18% were occupants of heavy goods vehicles (over 7.5 tonnes).

Local Authorities	Baseline (2005-09 Av.)	2013	2014	2015	2016	2017	2018	2018 vs Av. last 3yrs	2018 vs Baseline
Bradford	89.6	52	46	30	30	21	21	-22.2% ↓	-76.6% ↓
Calderdale	23.2	18	17	11	21	10	14	0.0% ↔	-39.7% ↓
Kirklees	45	22	28	44	35	24	23	-33.0% ↓	-48.9% ↓
Leeds	89.6	52	66	77	78	53	61	-12.0% ↓	-31.9% ↓
Wakefield	41.8	25	34	36	25	20	26	-3.7% ↓	-37.8% ↓
West Yorkshire	289.2	169	191	198	189	128	145	-15.5% ↓	-49.9% ↓

Table 26- Goods vehicle occupant casualties (all severities) in West Yorkshire in the recent five years

Public Service Vehicles (Bus or Coach) Casualties

The trend of the public service vehicle (PSV) casualties over the most recent five years is clearly downward. The reduction of 2016 and subsequently in 2018 overshadowed the sharp increase of 2015.

When the total reported in each district is considered, the reduction is effective in three out of five local authorities. The increase in Wakefield is more pronounced than the reported rise in Calderdale, where injuries to PSV occupants have been broadly static since 2013.

Between 2012 (15) and 2013 (33), the number of KSI amongst PSV users doubled. The significant decrease in 2014 (-23) brought the county back in line with the total recorded in 2010, 2011 and 2012. However, the increase in 2015 (+7 to 17) was a setback which was overturned by the reduction in 2016 (-7 to 11). Time will tell if the slight reduction (from 14 in 2017 to 9 this year) is a one-off fluctuation or the start of a new downward trend.

Table 27 below shows how casualties from PSVs have changed since 2013 in all districts and in the county as whole. In 2018 more casualties were recorded in Calderdale and Wakefield.

It is important to note that the number of bus casualties tends to fluctuate, often widely, due to the potential number of casualties resulting from a single incident. Hence we are liable to see more year-on-year variation.

Facts about PSV casualties

- Casualties from collisions involving public service vehicles (PSV) fell by 4% to 175 in 2018, and account for 3% of all road collisions in West Yorkshire.
- No fatal casualty reported, but nine passengers sustained serious injuries from collisions involving PSV.
- Among the casualties (175) were 17 drivers and 158 passengers.
- 18 children were injured (all slight) on board of a bus in 2018, there were 19 (including 2 serious) in 2017.

Local Authorities	Baseline (2005-09 Av.)	2013	2014	2015	2016	2017	2018	2018 vs Av. last 3yrs	2018 vs Baseline
Bradford	71.2	49	29	43	25	23	24	-20.9% ↓	-66.3% ↓
Calderdale	15	9	9	4	10	3	6	5.9% ↑	-60.0% ↓
Kirklees	73.4	56	40	39	33	30	16	-52.9% ↓	-78.2% ↓
Leeds	260.8	115	124	147	94	115	111	-6.5% ↓	-57.4% ↓
Wakefield	40	48	28	19	19	11	18	10.2% ↑	-55.0% ↓
West Yorkshire	460.4	277	230	252	181	182	175	-14.6% ↓	-62.0% ↓

Table 27- PSV (all severities) casualties in West Yorkshire in the recent five years

Section IV- Road safety campaigns and initiatives



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©Close pass operation (passing distance -West Midland Police)

I- CAMPAIGNS AND INITIATIVES

Throughout 2018 the West Yorkshire Delivery Group continued to undertake a number of campaigns and initiatives developed as a result of collision analysis and casualty trends.

Radio campaigns were again used to promote key messages throughout the year using Radio Heart.

A thermal campaign, which is activated when temperatures drop below a certain level, highlighted the importance of being prepared for winter driving. Airing in the morning, the campaign aimed to reach drivers before they leave for work.

The 'WOW' package also continued to run throughout the year. The package features two (paid for) road safety messages every month, each message receiving two weeks' air time over the course of the month during Drive Time, with bonus messages (free) throughout the day. The data-led schedule again featured messages on key road safety themes including the 'fatal four' offences; excessive speed, drug and drink-driving, failure to wear seatbelts and the use of mobile phones and texting while driving. Messages also addressed the safety of vulnerable road users including children, pedestrians, cyclists and motorcyclists. All messaging is drawn up in line with the DfT Think! Campaign calendar and the National Roads Partnership campaign calendar and aired in line with national and local campaigns and events.

The School Gate Parking radio campaign (introduced in October 2017) continued to run, with air time focused on the days and weeks immediately after each school holiday. The campaign aims to address and discourage dangerous and inappropriate parking directly outside schools at drop-off and pick-up times.

Once again, having reviewed the casualty data, the group commissioned a Theatre in Education Programme for Y7 & 8 pupils in secondary schools. The statistics continue to highlight this age group as being particularly vulnerable, with 'failure to look properly' a major contributory factor. Schools in the highest casualty areas were targeted across the county. Consultation with the Kirklees Road Safety Champions highlighted this means of education as one of the preferred ways to deliver road safety messages to target this age group.

The aim of the performance is to influence student attitude and behaviour in relation to their safety as pedestrians, by increasing awareness and understanding of the issues faced and suggesting coping strategies. The core messages are around looking properly, avoiding distractions, safe use of mobile devices, handling peer pressure and risk-taking.

As in previous years, the group funded a range of materials and resources for distribution by local teams and partners. Materials included transition leaflets, which provide advice in preparation for new and independent travel to secondary school for Y6 pupils and parents; and 'Getting there Safely' car seat

information disks, which give advice and information on appropriate child restraints and the law. Additionally the group also purchased resources for older pedestrians to help them remain visible when out and about near roads, particularly during the autumn and winter months, along with other information aimed at helping them safely maintain their independence.

At a national level, immersive and 360 films are increasingly being used as a tool to encourage road safety. Immersing viewers in a life-like environment and presenting scenarios that would either be too costly, impractical or dangerous to create in a real-world setting, 360 films can be used as an educational tool and to engage people in conversations about road safety. In 2018, the group bought 15 headsets and began trialling the use of some films, in particular the award-winning Leicestershire young driver film and the Cycling UK Close Pass film.

After a successful trial in 2017, the cycling 'Close Pass' scheme initiative was rolled out across West Yorkshire, and we supported operations held in by the police in Leeds and Wakefield during the Spring / Summer of 2018. Resources, including the 'close pass mat' and information leaflets, were used at additional community events to spread the message about safe and considerate driving around cyclists. An immersive close pass film uploaded to headsets highlights to drivers the dangers that they pose to cyclists if they pass too closely. The covert camera lights bought in 2017 continue to be used by off-duty police for education and enforcement purposes.

All these campaigns appear to help towards improving the safety of cycling on the county's roads, as reported anecdotally by police. However, there is a need to carry out analysis to demonstrate their effectiveness more rigorously.



© Close pass operation (passing distance -West Midland Police).

Section V: -CONCLUSIONS

I- SUMMARY OF FINDINGS

This report summarises the statistics on road traffic collisions and casualties in West Yorkshire as well as key findings for each of the five districts of the county.

For the second time in the last 10 years, the number of fatalities recorded in the county increased in two consecutive years (2013 -2014 and 2017-2018). Deaths from road traffic collisions have increased by 63% from 43 in 2017 to 70 in 2018, mostly because of an increase in the number of car occupants (+18) and pedestrians (+6) killed.

KSI among the most vulnerable road users (pedestrians, cyclists and motorbike riders) have barely improved in recent years, despite the encouraging reduction among motorbike riders. Pedestrians and cyclist KSI figures rose in 2018. The rate of reduction of KSI slowed down in recent years and practically levelled off between 2010 and 2018. Collisions resulting in high severity injuries to all road users, but essentially to vulnerable road users, remain a priority and need to be actively and appropriately addressed.

Child casualties have fallen for the third consecutive year for both all severities and KSI. However, no real improvement has been recorded on serious injuries among cyclists and car occupants. The reduction recorded in both all severities and KSI is welcomed, but serious injuries among children are largely related to pedestrian collisions; with the vast majority of the under 16s being on foot. Children aged 5-8 and 12-15 are the most at risk.

In 2018, fewer casualties were recorded on West Yorkshire's roads compared to last year; the result confirms the reduction of 2016 and overturns the increase of the three years prior to 2016. The reduced number of casualties is attributable to all the road user categories and shared across all districts except for Wakefield (+3% from 814 in 2017 to 833 this year).

Total casualties have fallen from over 13,000 in 2000 to 5,803 in 2017, a fall of over 58%. This downward trend is reflected in sustained falls in pedestrian, car occupant and motor cycle casualties. In line with national trends, however, cycle casualties have not improved over this period, a trend that reflects greater usage of this mode of travel. While there are indications that the casualty rate is declining, this is nevertheless a cause for concern and is being closely monitored.

II- RECOMMENDATIONS

Collaborative working have been developed within the West Yorkshire Safer Roads Delivery Group, which undertook various campaigns and initiatives to mitigate the effects of funding cuts and to continue to provide education, training and publicity programmes to address the causes of collisions and casualties on our roads. There is a need to continue this and to include other services such as Public Health England, The NHS, the ambulance services and the fire services.

The aim of shared spaces – which are largely represented in urban areas – is for the harmonious and safe movement of people and goods; this is quite complex to implement and needs to be looked at closely and extended even further. Positive driving behaviour change and measures to improve facilities for vulnerable road users are essential to improve road safety in town centres.

Young drivers are at a much higher risk of crashing than older drivers with behaviour such as excessive or inappropriate speed, drink/drunk driving, mobile phone usage and not wearing seatbelt more likely to be the cause of collisions. There is a need for further analysis including behaviour analysis, young driver car ownership trend, distance travelled, and times of collisions to confirm and seek appropriate solutions.

Casualties among the most vulnerable road users (pedestrians, cyclists and motorbike riders) have barely improved in recent years, despite the encouraging reduction among motorbike riders. Pedestrian and cyclist KSI numbers rose in 2018. Overall, in the last decade, casualties among the most vulnerable road user have shown a slow but persistent rate of reduction. There is a need to continue strategies that focus on reducing the number of injuries to vulnerable road users. Road safety actions need to focus on this group, to significantly reduce those KSI and increase the chance of meeting the 2026 target.

Cyclists are among the most vulnerable road users as, like pedestrians, they don't enjoy the protection afforded to car occupants in the event of a collision. In West Yorkshire, despite the improvement in recent years, cyclist injuries remain well above the baseline for both KSI and all severities. Nationally, Government's statistics shows that cyclists are 46 times more likely to be killed or seriously injured per mile travelled, compared to car drivers in the UK. However, it has been demonstrated that cyclist exposure contributes to safety. The more drivers are exposed to cyclists, the safer those cyclists are; therefore it is important to continue policies and programmes that encourage cycling. Many new measures help keep cyclists safer, including the new cycling superhighways between Leeds and Bradford. The Lookout and Close Pass campaigns, radio adverts and a number of events to promote safer cycling are ongoing. More publicity around governmental cycling schemes such as Cycle to Work will help. There is therefore a scope for further analysis to highlight the level of cycling traffic and assess the effectiveness of the above measures.

The number of collisions and casualties in 2018 was far higher on roads with speed limits of 30 mph compared to those where the limit is 20 mph. This is to be expected, as most arterial roads in the county are 30 mph; the analysis of the casualty rate on those roads would be necessary for a proper comparison.

Section VI: - WEST YORKSHIRE TABULATIONS

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If a particular tabulation is required that is not presented in this report, please contact:

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END PAPERS

WEST YORKSHIRE TABULATIONS

West Yorkshire

Accidents

	2013	2014	2015	2016	2017	Average	2018
Fatal	52	53	43	35	39	44	63
Serious	714	793	782	758	742	758	738
Slight	4,101	4,197	4,461	4,176	3,590	4,105	3,330
Total	4,867	5,043	5,286	4,969	4,371	4,907	4,131

Casualties

	2013	2014	2015	2016	2017	Average	2018
Fatal	55	58	48	37	43	48	70
Serious	808	867	872	849	808	841	803
Slight	5,941	6,013	6,304	5,911	4,952	5,824	4,567
Total	6,804	6,938	7,224	6,797	5,803	6,713	5,440

Road User Groups

	2013	2014	2015	2016	2017	Average	2018
Pedestrian	975	1,074	1,175	1,058	910	1,038	904
Pedal Cyclist	635	682	628	636	567	630	552
PTW Rider + Pillion	558	552	560	506	437	523	415
Car Driver	2,691	2,545	2,785	2,624	2,288	2,587	2,136
Car Passenger	1,493	1,629	1,567	1,571	1,265	1,505	1,090
Goods occupant	142	191	201	189	128	170	166
Bus occupant	277	230	252	181	182	224	175
Other	33	35	56	32	26	36	2
Total	6,804	6,938	7,224	6,797	5,803	6,713	5,440

*

* The figures in the Average column of the following tables do not always sum to the total, due to rounding.

WY End table 1

REPORTED ROAD CASUALTIES IN WEST YORKSHIRE-2018

West Yorkshire

All Casualties

		Age Groups						All ages
		0 - 4	5 - 15	16 - 19	20 - 29	30 - 59	60+	
2013	Fatal	1	0	5	17	23	9	55
	Serious	12	85	93	204	309	105	808
	Slight	125	546	482	1,555	2,567	666	5,941
	Total	138	631	580	1,776	2,899	780	6,804
2014	Fatal	1	1	10	15	17	14	58
	Serious	21	80	83	199	346	138	867
	Slight	107	563	529	1,638	2,507	669	6,013
	Total	129	644	622	1,852	2,870	821	6,938
2015	Fatal	0	2	4	13	15	14	48
	Serious	20	112	91	204	304	141	872
	Slight	128	564	538	1,702	2,699	673	6,304
	Total	148	678	633	1,919	3,018	828	7,224
2016	Fatal	1	1	3	8	15	9	37
	Serious	16	102	60	207	318	146	849
	Slight	118	553	463	1,512	2,612	653	5,911
	Total	135	656	526	1,727	2,945	808	6,797
2017	Fatal	1	3	1	11	20	7	43
	Serious	10	99	94	193	288	124	808
	Slight	90	491	427	1,281	2,128	535	4,952
	Total	101	593	522	1,485	2,436	666	5,803
Average	Fatal	1	1	5	13	18	11	48
	Serious	16	96	84	201	313	131	841
	Slight	114	543	488	1,538	2,503	639	5,824
	Total	131	640	577	1,752	2,834	781	6,713
2018	Fatal	0	4	4	16	26	20	70
	Serious	14	92	62	153	338	144	803
	Slight	81	446	344	1,076	2,087	533	4,567
	Total	95	542	410	1,245	2,451	697	5,440

WY End table 2

REPORTED ROAD CASUALTIES IN WEST YORKSHIRE-2018

West Yorkshire

Pedestrian Casualties

		Age Groups						
		0 - 4	5 - 15	16 - 19	20 - 29	30 - 59	60+	All ages
2013	Fatal	1	0	0	5	6	1	13
	Serious	9	64	19	30	47	43	212
	Slight	54	221	61	114	201	99	750
	Total	64	285	80	149	254	143	975
2014	Fatal	1	1	1	2	7	7	19
	Serious	13	60	20	23	76	68	260
	Slight	37	249	63	123	203	120	795
	Total	51	310	84	148	286	195	1,074
2015	Fatal	0	0	0	3	5	9	17
	Serious	15	75	11	31	74	55	261
	Slight	32	253	86	157	255	114	897
	Total	47	328	97	191	334	178	1,175
2016	Fatal	1	1	0	0	4	5	11
	Serious	13	62	9	31	60	60	235
	Slight	36	212	71	139	239	115	812
	Total	50	275	80	170	303	180	1,058
2017	Fatal	1	0	1	1	11	5	19
	Serious	8	64	18	23	67	54	234
	Slight	31	195	54	104	199	74	657
	Total	40	259	73	128	277	133	910
Average	Fatal	1	0	0	2	7	5	16
	Serious	12	65	15	28	65	56	240
	Slight	38	226	67	127	219	104	782
	Total	51	291	82	157	291	165	1,038
2018	Fatal	0	3	0	2	10	10	25
	Serious	12	67	13	23	65	59	239
	Slight	25	201	46	94	183	91	640
	Total	37	271	59	119	258	160	904

WY End table 3

REPORTED ROAD CASUALTIES IN WEST YORKSHIRE-2018

West Yorkshire

Pedal Cycle Casualties

		Age Groups						
		0 - 4	5 - 15	16 - 19	20 - 29	30 - 59	60+	All ages
2013	Fatal	0	0	0	0	0	0	0
	Serious	0	13	7	22	71	9	122
	Slight	3	75	33	124	259	19	513
	Total	3	88	40	146	330	28	635
2014	Fatal	0	0	0	0	0	0	0
	Serious	0	11	4	24	79	10	128
	Slight	1	58	36	131	307	21	554
	Total	1	69	40	155	386	31	682
2015	Fatal	0	0	0	0	2	0	2
	Serious	0	13	8	26	65	12	124
	Slight	2	65	36	148	236	15	502
	Total	2	78	44	174	303	27	628
2016	Fatal	0	0	0	0	6	0	6
	Serious	0	20	4	20	60	11	115
	Slight	2	76	31	113	264	29	515
	Total	2	96	35	133	330	40	636
2017	Fatal	0	0	0	0	0	0	0
	Serious	1	17	7	16	72	7	120
	Slight	2	81	33	97	221	13	447
	Total	3	98	40	113	293	20	567
Average	Fatal	0	0	0	0	2	0	2
	Serious	0	15	6	22	69	10	122
	Slight	2	71	34	123	257	19	506
	Total	2	86	40	145	328	29	630
2018	Fatal	0	1	0	0	1	0	2
	Serious	0	12	5	13	83	12	125
	Slight	3	52	30	94	217	29	425
	Total	3	65	35	107	301	41	552

WY End table 4

REPORTED ROAD CASUALTIES IN WEST YORKSHIRE-2018

West Yorkshire

PTW Rider + Pillion Casualties

		Age Groups						
		0 - 4	5 - 15	16 - 19	20 - 29	30 - 59	60+	All ages
2013	Fatal	0	0	2	2	9	0	13
	Serious	0	3	34	45	77	8	167
	Slight	0	4	103	122	135	14	378
	Total	0	7	139	169	221	22	558
2014	Fatal	0	0	0	1	4	1	6
	Serious	0	2	34	62	73	7	178
	Slight	0	3	83	123	143	16	368
	Total	0	5	117	186	220	24	552
2015	Fatal	0	0	0	3	5	1	9
	Serious	1	5	36	60	60	8	170
	Slight	0	2	62	150	145	22	381
	Total	1	7	98	213	210	31	560
2016	Fatal	0	0	1	3	2	0	6
	Serious	0	2	24	62	77	11	176
	Slight	0	5	68	116	125	10	324
	Total	0	7	93	181	204	21	506
2017	Fatal	0	0	0	4	4	1	9
	Serious	0	1	26	65	65	5	162
	Slight	0	3	54	90	106	13	266
	Total	0	4	80	159	175	19	437
Average	Fatal	0	0	1	3	5	1	9
	Serious	0	3	31	59	70	8	171
	Slight	0	3	74	120	131	15	343
	Total	0	6	106	182	206	24	523
2018	Fatal	0	0	1	1	5	1	8
	Serious	0	4	19	52	76	4	155
	Slight	0	3	43	87	105	14	252
	Total	0	7	63	140	186	19	415

WY End table 5

REPORTED ROAD CASUALTIES IN WEST YORKSHIRE-2018

West Yorkshire

Car Driver Casualties

		Age Groups						All ages
		0 - 4	5 - 15	16 - 19	20 - 29	30 - 59	60+	
2013	Fatal	0	0	0	8	4	5	17
	Serious	0	0	13	40	72	15	140
	Slight	0	3	111	711	1,410	299	2,534
	Total	0	3	124	759	1,486	319	2,691
2014	Fatal	0	0	3	8	5	4	20
	Serious	0	0	12	50	78	30	170
	Slight	0	0	115	722	1,250	268	2,355
	Total	0	0	130	780	1,333	302	2,545
2015	Fatal	0	0	0	3	1	3	7
	Serious	0	1	10	52	62	33	158
	Slight	0	1	128	773	1,428	290	2,620
	Total	0	2	138	828	1,491	326	2,785
2016	Fatal	0	0	1	3	2	4	10
	Serious	0	0	8	46	75	34	163
	Slight	0	0	103	702	1,368	278	2,451
	Total	0	0	112	751	1,445	316	2,624
2017	Fatal	0	0	0	3	5	1	9
	Serious	0	2	13	50	52	30	147
	Slight	0	0	107	647	1,123	255	2,132
	Total	0	2	120	700	1,180	286	2,288
Average	Fatal	0	0	1	5	3	3	13
	Serious	0	1	11	48	68	28	156
	Slight	0	1	113	711	1,316	278	2,418
	Total	0	2	125	764	1,387	309	2,587
2018	Fatal	0	0	0	7	10	1	18
	Serious	0	0	6	39	79	41	165
	Slight	0	2	94	525	1,095	237	1,953
	Total	0	2	100	571	1,184	279	2,136

WY End table 6

REPORTED ROAD CASUALTIES IN WEST YORKSHIRE-2018

West Yorkshire

Car Passenger Casualties

		Age Groups						
		0 - 4	5 - 15	16 - 19	20 - 29	30 - 59	60+	All ages
2013	Fatal	0	0	2	2	4	1	9
	Serious	3	3	20	51	23	19	119
	Slight	55	220	155	420	386	129	1,365
	Total	58	223	177	473	413	149	1,493
2014	Fatal	0	0	6	4	0	1	11
	Serious	8	7	13	32	27	13	100
	Slight	57	230	218	448	420	145	1,518
	Total	65	237	237	484	447	159	1,629
2015	Fatal	0	2	2	1	2	0	7
	Serious	3	14	20	28	26	13	104
	Slight	78	227	210	397	412	132	1,456
	Total	81	243	232	426	440	145	1,567
2016	Fatal	0	0	1	2	1	0	4
	Serious	3	16	15	40	37	22	133
	Slight	70	248	176	372	432	136	1,434
	Total	73	264	192	414	470	158	1,571
2017	Fatal	0	3	0	3	0	0	6
	Serious	1	13	27	32	21	15	109
	Slight	48	198	165	284	343	112	1,150
	Total	49	214	192	319	364	127	1,265
Average	Fatal	0	1	2	2	1	0	7
	Serious	4	11	19	37	27	16	113
	Slight	62	225	185	384	399	131	1,385
	Total	66	237	206	423	427	147	1,505
2018	Fatal	0	0	3	6	0	6	15
	Serious	2	8	18	16	20	14	78
	Slight	45	177	124	236	314	101	997
	Total	47	185	145	258	334	121	1,090

WY End table 7

REPORTED ROAD CASUALTIES IN WEST YORKSHIRE-2018

West Yorkshire

Goods Occupant Casualties

		Age Groups						
		0 - 4	5 - 15	16 - 19	20 - 29	30 - 59	60+	All ages
2013	Fatal	0	0	0	0	0	1	1
	Serious	0	0	0	4	6	1	11
	Slight	0	1	4	38	81	6	130
	Total	0	1	4	42	87	8	142
2014	Fatal	0	0	0	0	1	0	1
	Serious	0	0	0	4	7	2	13
	Slight	0	4	6	54	107	6	177
	Total	0	4	6	58	115	8	191
2015	Fatal	0	0	0	0	0	0	0
	Serious	0	0	4	3	12	3	22
	Slight	1	5	7	39	114	13	179
	Total	1	5	11	42	126	16	201
2016	Fatal	0	0	0	0	0	0	0
	Serious	0	0	0	5	5	2	12
	Slight	2	3	7	45	104	16	177
	Total	2	3	7	50	109	18	189
2017	Fatal	0	0	0	0	0	0	0
	Serious	0	0	2	4	6	1	13
	Slight	1	2	3	35	68	6	115
	Total	1	2	5	39	74	7	128
Average	Fatal	0	0	0	0	0	0	0
	Serious	0	0	1	4	7	2	14
	Slight	1	3	5	42	95	9	156
	Total	1	3	6	46	102	11	170
2018	Fatal	0	0	0	0	0	2	2
	Serious	0	1	1	9	14	6	31
	Slight	0	1	3	23	91	15	133
	Total	0	2	4	32	105	23	166

WY End table 8

REPORTED ROAD CASUALTIES IN WEST YORKSHIRE-2018

West Yorkshire

Bus Occupant Casualties

		Age Groups						
		0 - 4	5 - 15	16 - 19	20 - 29	30 - 59	60+	All ages
2013	Fatal	0	0	1	0	0	1	2
	Serious	0	0	0	10	11	10	31
	Slight	13	20	13	21	87	90	244
	Total	13	20	14	31	98	101	277
2014	Fatal	0	0	0	0	0	0	0
	Serious	0	0	0	1	3	6	10
	Slight	12	18	6	27	67	90	220
	Total	12	18	6	28	70	96	230
2015	Fatal	0	0	0	0	0	0	0
	Serious	0	0	0	0	1	16	17
	Slight	14	9	8	28	96	80	235
	Total	14	9	8	28	97	96	252
2016	Fatal	0	0	0	0	0	0	0
	Serious	0	1	0	3	1	6	11
	Slight	8	9	7	18	65	63	170
	Total	8	10	7	21	66	69	181
2017	Fatal	0	0	0	0	0	0	0
	Serious	0	2	0	0	4	8	14
	Slight	8	9	11	18	64	58	168
	Total	8	11	11	18	68	66	182
Average	Fatal	0	0	0	0	0	0	0
	Serious	0	1	0	3	4	9	17
	Slight	11	13	9	22	76	76	207
	Total	11	14	9	25	80	85	224
2018	Fatal	0	0	0	0	0	0	0
	Serious	0	0	0	0	1	8	9
	Slight	8	10	4	17	81	46	166
	Total	8	10	4	17	82	54	175

WY End table 9

REPORTED ROAD CASUALTIES IN WEST YORKSHIRE-2018

West Yorkshire

Long Term Comparisons

Accidents	Year	Killed	Ser	KSI	Slight	Total	Pedestrians		Pedal Cyclists		PTW Users	Car Drivers	Car Pass	Car Users	Goods Users	Bus Users	Others
							All Ages	Child	All Ages	Child							
8364	1981-85	221	2325	2546	8108	10654	2728	1270	722	360	2046	2390	1996	4386	332	412	22
9157	1994-98	115	1369	1484	11391	12875	2200	988	664	266	559	5369	3144	8513	356	546	37.0
4760	2014-18	51	840	891	5549	6440	1024	334	613	83	494	2476	1424	3900	175	204	30
8495	2003	102	1136	1238	11566	12804	1595	678	488	167	830	5892	3022	8914	378	533	66
8038	2004	116	1099	1215	10816	12031	1526	595	440	129	782	5551	2754	8305	412	498	68
7277	2005	99	986	1085	9718	10803	1421	543	466	152	701	4917	2448	7365	294	509	47
7162	2006	113	1027	1140	9474	10614	1339	512	446	130	604	4821	2520	7341	290	535	59
6867	2007	103	1029	1132	8850	9982	1414	536	477	143	683	4388	2330	6718	235	394	61
6501	2008	71	1020	1091	8337	9428	1333	458	485	104	669	4017	2246	6263	186	445	47
6255	2009	84	889	973	8238	9211	1215	434	526	120	581	3954	2217	6171	218	419	81
5761	2010	58	836	894	7456	8350	1189	421	490	101	510	3533	2051	5584	200	314	63
5403	2011	65	839	904	6881	7785	1139	438	561	115	556	3168	1728	4896	203	386	44
5415	2012	49	885	934	6913	7847	1136	370	596	105	559	3117	1825	4942	201	356	57
4867	2013	55	808	863	5941	6804	975	349	635	91	558	2691	1493	4184	142	277	33
5043	2014	58	867	925	6013	6938	1074	361	682	70	552	2545	1629	4174	191	230	35
5286	2015	48	872	920	6304	7224	1175	375	628	80	560	2785	1567	4352	201	252	56
4969	2016	37	849	886	5911	6797	1058	325	636	98	506	2624	1571	4195	189	181	32
4371	2017	43	808	851	4952	5803	910	299	567	101	437	2288	1265	3553	128	182	26
4131	2018	70	803	873	4567	5440	904	308	552	68	415	2136	1090	3226	166	175	2

WY End table 10