



# Collisions and casualties on London's roads: Annual Report 2015

MAYOR OF LONDON



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# 1. COLLISIONS AND CASUALTIES IN 2015

This Annual Report includes a summary of progress to date towards meeting London's road safety target, plus a detailed breakdown of road casualties, collisions and vehicle details. It also updates on the types of conflicts that occurred in collisions involving vulnerable road users during 2015 and changes in road safety risk.

Data is presented for personal injury road traffic collisions occurring on the public highway, and reported to the police, in accordance with the STATS 19 national reporting system. The Greater London area comprises the 32 London boroughs and the City of London. It is the largest metropolitan area in Great Britain.

## SUMMARY AND GENERAL TRENDS

This document provides information on personal injury road traffic collisions and casualties in Greater London during 2015, compared with both 2014 and the average for 2005-2009.

A total of 25,193 road traffic collisions, involving personal injury within Greater London, were reported to the Metropolitan and City of London Police during 2015. This is a three per cent decrease in collisions compared with 2014. These resulted in 30,182 casualties, a reduction of two per cent compared with the 30,785 recorded in 2014. In 2015, 136 people were fatally injured, 1,956 were seriously injured, and 28,090 were slightly injured in Greater London.

In considering casualties in more detail, fatalities rose by seven per cent (127 to 136), to the highest level since 2011 when 159 fatalities occurred on London's roads. The number of people Killed or Seriously Injured (KSI) decreased by three per cent in 2015 (2,167 to 2,092) compared with 2014, to the lowest number since records began. Within KSIs, the number of serious injuries decreased by four per cent (2,040 to 1,956), again to the lowest level on record. Slight injuries decreased by two per cent (28,618 to 28,090). Vulnerable road users (pedestrians, pedal cyclists and powered two-wheeler users) made up just over half (51 per cent) of casualties of all severities on London's roads in 2015.

Child KSI casualties (aged 15 years old or less) fell by 11 per cent to the lowest on record in 2015 at 147 KSIs, compared to 166 KSIs in 2014. Within this total, the number of children seriously injured also fell, from 163 KSIs in 2014 to 142 KSIs and the lowest level on record. Child fatalities increased from 3 in 2014 to 5 in 2015 and the number of child slight injuries increased from 1,811 in 2014 to 1,848 in 2015.

Comparing the number of casualties in 2015 against the longer term 2005-09 baseline, fatal casualties were down by 36 per cent, KSI casualties were down by 42 per cent and within this group the numbers of child KSI casualties more than halved. Slight casualties increased by 10 per cent whereas child slight casualties fell by two per cent against the baseline. When considering different vulnerable road user groups over this period, pedestrian KSIs were down by 40 per cent and powered two-wheeler user KSIs were also down by 32 per cent against the baseline during 2015. Pedal cyclist KSI casualties were down eight per cent against the 2005-09 baseline. This decrease should be seen in the context of a considerable increase in cycling in London over recent years, with the number of journeys cycled almost doubling in the last decade to 645,000 each day in Greater London<sup>1</sup>.

The most recent figures available from the Department for Transport (DfT) for 2015 show that casualties in Greater London accounted for 16 per cent of those in Great Britain as a whole, with KSI casualties accounting for nine per cent. In Great Britain (excluding London), fatalities decreased by three per cent and KSIs by three per cent in 2015, compared with the previous year. In addition, the number of KSI casualties nationally decreased among all vulnerable road user groups during 2015; with pedestrian KSIs down by two per cent, pedal cyclist KSIs down by four per cent and motorcyclist KSIs down by five per cent. The number of child KSIs were also down by five per cent in Great Britain (excluding London). Slight casualties of all modes saw a decrease in Great Britain (excluding London) and a five per cent decrease overall.

Using the latest DfT figures, the cost to the community from collisions in Greater London for the year 2015 is estimated to be around £1.4bn at 2014 (the latest available) prices.

This is the 29th road safety annual report published by TfL and our predecessor organisations. Further analysis of London's collision and casualty data, including data extract files, can be found at [www.tfl.gov.uk/roadsafety](http://www.tfl.gov.uk/roadsafety).

## LONDON'S ROAD SAFETY TARGET

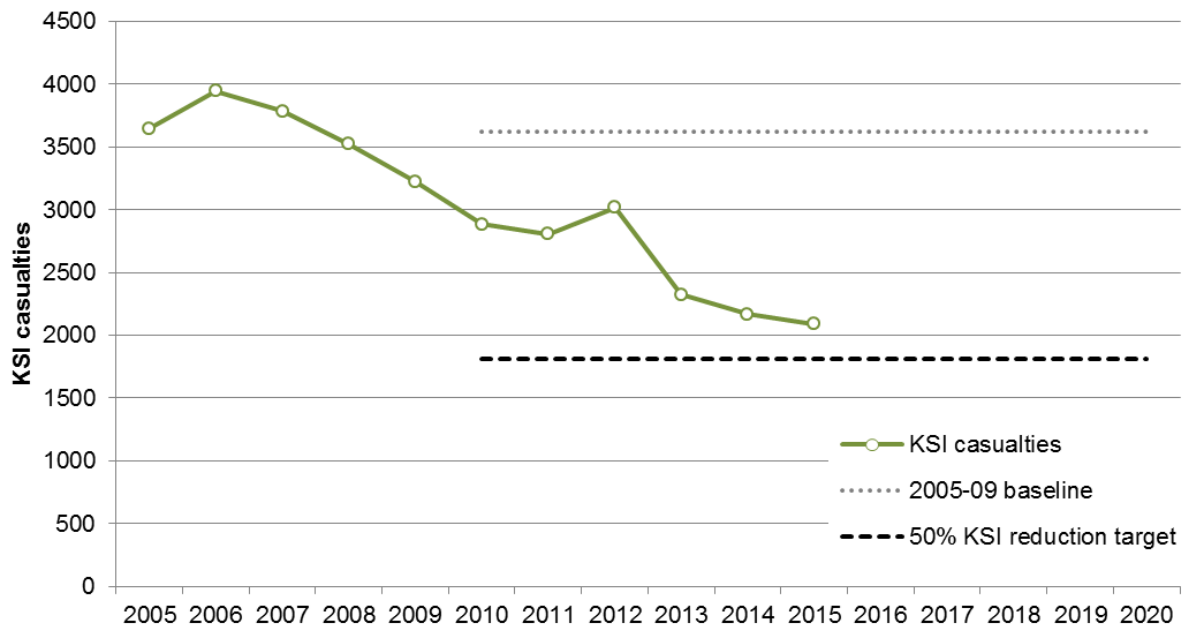
The previous target of a 40 per cent decrease in the number of people killed or seriously injured on London's roads by 2020 was met six years early in 2014. Therefore, in June 2015, a new target was set that will halve the number of people killed or seriously injured on London's roads by 2020, compared with the 2005-2009 baseline. Meeting this target would mean a reduction of around 10,000 deaths and serious injuries between 2015 and 2020.

Figure 1 shows the trend in KSI casualties between 2005 and 2015, and Figure 2 presents progress towards the 50 per cent KSI reduction target by 2020 from the 2005-09 baseline.

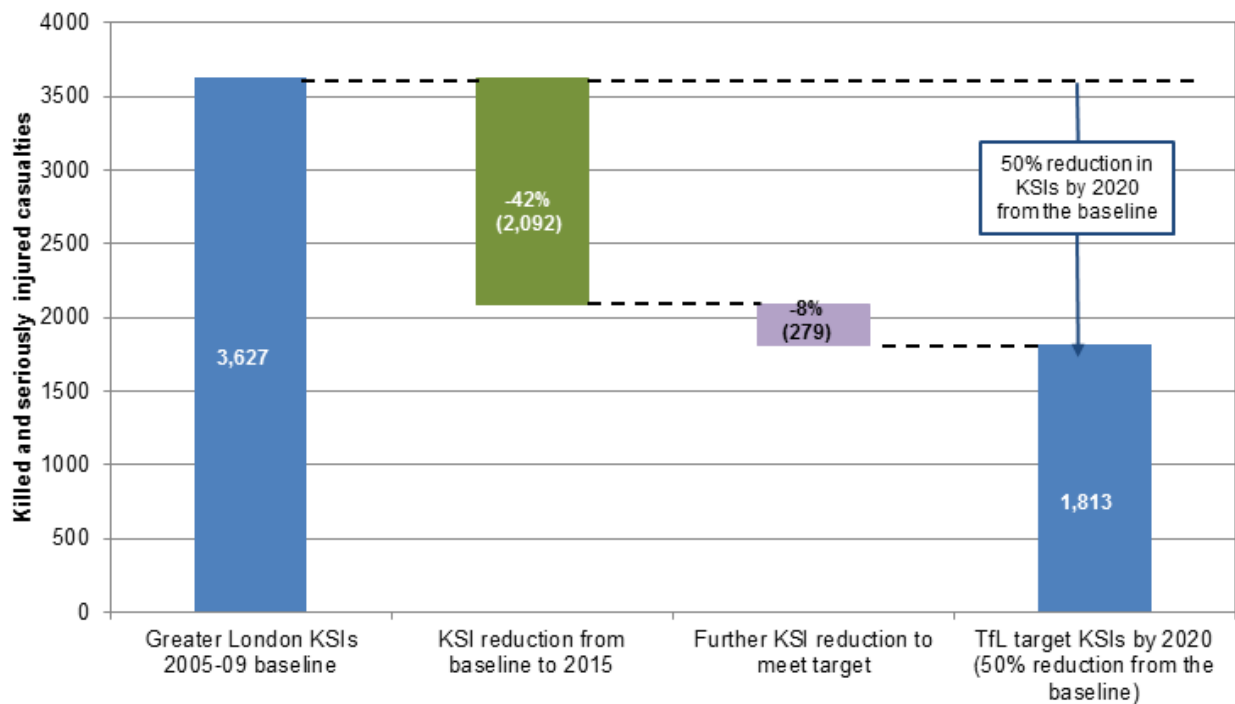
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<sup>1</sup> Transport for London, Travel in London Report 8, journey stages

**Figure 1: Trend in KSI casualties between 2005 and 2015 and to target**



**Figure 2: Trajectory of KSI casualty reductions and new target to 2020**



## CASUALTIES IN 2015 IN LONDON

This section reports casualties in Greater London during 2015 compared with 2014 and against the 2005-09 baseline. Casualties are defined as all persons killed or injured in a collision. Fatal casualties are defined as those where death occurs within 30 days of the collision.

Casualty figures are presented for all roads in London and by London's major roads, the Transport for London Road Network (TLRN), and borough roads.

Annual changes in collisions and casualties during 2015 should be considered in the context of long-term casualty trends in London, as year-on-year fluctuations are not always indicative of longer term trends. It should also be noted that large percentage changes in small numbers may not necessarily be statistically significant and that statistically significant year-on-year changes do not imply a longer term trend. The asterisks (in the tables below) indicate where changes are significant at the 95 per cent confidence level. Significance testing helps to identify where change may be associated with randomness or not.

Table 1 shows that the number of fatalities increased by seven per cent (nine fatalities) between 2014 and 2015. The number of KSI casualties (including children) decreased three per cent, to the lowest level on record, and slight casualties saw a statistically significant two per cent decrease between 2014 and 2015.

Table 2 shows casualties injured on the TLRN. Fatalities fell from 49 in 2014 to 41 in 2015 to the lowest level on record. The number of KSI casualties, including child KSIs, also fell by 6 per cent in 2015 compared to 2014 to the lowest level on record. In 2015 slight casualty numbers were four per cent below 2014, a significant reduction but 14 per cent above the 2005-09 baseline.

Table 3 shows casualties injured on roads that are managed by London's 33 boroughs. Fatalities increased from 77 in 2014 to 94 in 2015. However KSIs, including those involving children, fell by three per cent to the lowest level on record. Slight casualties decreased by a significant one per cent from 2014, but are nine per cent above the 2005-09 baseline.

Increases in slight casualties partly reflect growth in both London's population and the number of journey travelled. Between 2005 and 2015 there was a 16 per cent increase in London's population, to over 8.6 million people, whilst the number of journeys travelled each day on the road network also increased by over 11 per cent.<sup>2</sup>

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<sup>2</sup> Transport for London, Travel in London Report 8, journey stages

**Table 1: Monitoring casualties in London - all roads**

**Casualties in the year 2015 compared with the 2005-09 average and 2014**

Casualty severity	User group	Casualty numbers			Percentage change in 2015 over	
		2005-2009 average	2014	2015	2014	2005-2009 average
<b>Fatal</b>	Pedestrians	96	64	66	3%	-31% *
	Pedal cyclists	17	13	9	-31%	-46%
	Powered two-wheeler	43	27	36	33%	-17%
	Car occupants	49	19	20	5%	-60% *
	Bus or coach occupants	2	0	1	-	-58%
	Other vehicle occupants	3	4	4	0%	25%
	<b>Total</b>	<b>211</b>	<b>127</b>	<b>136</b>	<b>7%</b>	<b>-36% *</b>
	<b>Children (under 16yrs)</b>	<b>12</b>	<b>3</b>	<b>5</b>	<b>67%</b>	<b>-57%</b>
<b>Fatal and serious</b>	Pedestrians	1,216	779	730	-6%	-40% *
	Pedal cyclists	421	432	387	-10%	-8%
	Powered two-wheeler	791	526	540	3%	-32% *
	Car occupants	949	316	314	-1%	-67% *
	Bus or coach occupants	140	71	71	0%	-49% *
	Other vehicle occupants	110	43	50	16%	-54% *
	<b>Total</b>	<b>3,627</b>	<b>2,167</b>	<b>2,092</b>	<b>-3%</b>	<b>-42% *</b>
	Child pedestrians	232	139	111	-20%	-52% *
	Child pedal cyclists	33	13	17	31%	-48% *
	Child car passengers	42	6	12	100%	-72% *
	Child bus/coach passengers	12	5	4	-20%	-66% *
	Other child casualties	12	3	3	0%	-75% *
	<b>Children (under 16yrs)</b>	<b>330</b>	<b>166</b>	<b>147</b>	<b>-11%</b>	<b>-55% *</b>
<b>Slight</b>	Pedestrians	4,214	4,834	4,653	-4% *	10% *
	Pedal cyclists	2,718	4,714	4,087	-13% *	50% *
	Powered two-wheeler	3,806	4,707	4,903	4%	29% *
	Car occupants	12,427	11,487	11,491	0%	-8% *
	Bus or coach occupants	1,430	1,508	1,523	1%	7%
	Other vehicle occupants	1,005	1,368	1,433	5%	43% *
	<b>Total</b>	<b>25,600</b>	<b>28,618</b>	<b>28,090</b>	<b>-2% *</b>	<b>10% *</b>
	<b>Children (under 16yrs)</b>	<b>1,889</b>	<b>1,811</b>	<b>1,848</b>	<b>2%</b>	<b>-2%</b>
<b>All severities</b>	Pedestrians	5,430	5,613	5,383	-4% *	-1%
	Pedal cyclists	3,139	5,146	4,474	-13% *	43% *
	Powered two-wheeler	4,598	5,233	5,443	4%	18% *
	Car occupants	13,376	11,803	11,805	0%	-12% *
	Bus or coach occupants	1,569	1,579	1,594	1%	2%
	Other vehicle occupants	1,115	1,411	1,483	5%	33% *
	<b>Total</b>	<b>29,227</b>	<b>30,785</b>	<b>30,182</b>	<b>-2% *</b>	<b>3% *</b>
<b>Children (under 16yrs)</b>	<b>2,219</b>	<b>1,977</b>	<b>1,995</b>	<b>1%</b>	<b>-10% *</b>	

\* Statistically significant changes at the 95 per cent confidence level

Significance testing helps to identify where change may be associated with randomness and where it may not be. Given a set of two different numbers, the difference between these numbers is statistically significant where we are 95 per cent confident that this is not due to randomness. Changes in the number of casualties over time are modelled following the Poisson distribution.

**Table 2: Monitoring casualties on the TLRN**

**Casualties in the year 2015 compared with the 2005-09 average and 2014**

Casualty severity	User group	Casualty numbers			Percentage change in 2015 over		
		2005-2009 average	2014	2015	2014	2005-2009 average	
<b>Fatal</b>	Pedestrians	30	25	15	-40%	-50% *	
	Pedal cyclists	7	7	4	-43%	-44%	
	Powered two-wheeler	15	8	16	100%	10%	
	Car occupants	12	6	5	-17%	-59% *	
	Bus or coach occupants	0	0	0	-	-100%	
	Other vehicle occupants	2	3	1	-67%	-38%	
	<b>Total</b>	<b>66</b>	<b>49</b>	<b>41</b>	<b>-16%</b>	<b>-38% *</b>	
	<b>Children (under 16yrs)</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>-100%</b>	<b>-100%</b>	
<b>Fatal and serious</b>	Pedestrians	296	180	170	-6%	-43% *	
	Pedal cyclists	128	128	107	-16%	-17% *	
	Powered two-wheeler	281	184	206	12%	-27% *	
	Car occupants	259	91	67	-26% *	-74% *	
	Bus or coach occupants	33	17	19	12%	-42% *	
	Other vehicle occupants	36	19	15	-21%	-59% *	
	<b>Total</b>	<b>1,034</b>	<b>619</b>	<b>584</b>	<b>-6%</b>	<b>-44% *</b>	
		Child pedestrians	33	15	12	-20%	-64% *
		Child pedal cyclists	4	1	2	100%	-50%
		Child car passengers	11	1	2	100%	-82% *
		Child bus/coach passengers	2	1	2	100%	-9%
		Other child casualties	1	0	0	-	-100%
		<b>Children (under 16yrs)</b>	<b>52</b>	<b>18</b>	<b>18</b>	<b>0%</b>	<b>-65% *</b>
<b>Slight</b>	Pedestrians	818	982	941	-4%	15% *	
	Pedal cyclists	791	1,366	1224	-10% *	55% *	
	Powered two-wheeler	1,341	1,764	1771	0%	32% *	
	Car occupants	3,556	3,554	3395	-4% *	-5% *	
	Bus or coach occupants	401	436	435	0%	8%	
	Other vehicle occupants	342	503	521	4%	52% *	
	<b>Total</b>	<b>7,249</b>	<b>8,605</b>	<b>8287</b>	<b>-4% *</b>	<b>14% *</b>	
	<b>Children (under 16yrs)</b>	<b>319</b>	<b>353</b>	<b>333</b>	<b>-6%</b>	<b>5%</b>	
<b>All severities</b>	Pedestrians	1,114	1,162	1111	-4%	0%	
	Pedal cyclists	919	1,494	1331	-11% *	45% *	
	Powered two-wheeler	1,622	1,948	1977	1%	22% *	
	Car occupants	3,815	3,645	3462	-5% *	-9% *	
	Bus or coach occupants	434	453	454	0%	5%	
	Other vehicle occupants	378	522	536	3%	42% *	
	<b>Total</b>	<b>8,282</b>	<b>9,224</b>	<b>8871</b>	<b>-4% *</b>	<b>7% *</b>	
	<b>Children (under 16yrs)</b>	<b>371</b>	<b>371</b>	<b>351</b>	<b>-5%</b>	<b>-5%</b>	

\* Statistically significant changes at the 95 per cent confidence level

Significance testing helps to identify where change may be associated with randomness and where it may not be. Given a set of two different numbers, the difference between these numbers is statistically significant where we are 95 per cent confident that this is not owing to randomness. Changes in the number of casualties over time are modelled following the Poisson distribution.



**Table 3: Monitoring casualties on borough roads in London**

**Casualties in the year 2015 compared with the 2005-09 average and 2014**

Casualty severity	User group	Casualty numbers			Percentage change in 2015 over		
		2005-2009 average	2014	2015	2014	2005-2009 average	
<b>Fatal</b>	Pedestrians	66	38	51	34%	-22%	
	Pedal cyclists	9	6	5	-17%	-47%	
	Powered two-wheeler	28	19	20	5%	-30%	
	Car occupants	35	13	14	8%	-60% *	
	Bus or coach occupants	2	0	1	-	-50%	
	Other vehicle occupants	1	1	3	200%	114%	
	<b>Total</b>	<b>142</b>	<b>77</b>	<b>94</b>	<b>22%</b>	<b>-34% *</b>	
	<b>Children (under 16yrs)</b>	<b>10</b>	<b>1</b>	<b>5</b>	<b>400%</b>	<b>-50%</b>	
<b>Fatal and serious</b>	Pedestrians	919	598	560	-6%	-39% *	
	Pedal cyclists	292	304	280	-8%	-4%	
	Powered two-wheeler	503	338	333	-1%	-34% *	
	Car occupants	668	222	240	8%	-64% *	
	Bus or coach occupants	106	54	50	-7%	-53% *	
	Other vehicle occupants	70	23	35	52%	-50% *	
	<b>Total</b>	<b>2,559</b>	<b>1,539</b>	<b>1498</b>	<b>-3%</b>	<b>-41% *</b>	
		Child pedestrians	198	124	99	-20%	-50% *
		Child pedal cyclists	29	12	15	25%	-48% *
		Child car passengers	30	5	9	80%	-70% *
		Child bus/coach passengers	9	4	2	-50%	-79% *
		Other child casualties	11	3	3	0%	-72% *
		<b>Children (under 16yrs)</b>	<b>277</b>	<b>148</b>	<b>128</b>	<b>-14%</b>	<b>-54% *</b>
<b>Slight</b>	Pedestrians	3,396	3,852	3712	-4% *	9% *	
	Pedal cyclists	1,927	3,348	2862	-15% *	49% *	
	Powered two-wheeler	2,451	2,936	3125	6% *	28% *	
	Car occupants	8,595	7,780	7880	1%	-8% *	
	Bus or coach occupants	1,015	1,071	1085	1%	7%	
	Other vehicle occupants	626	842	880	5%	41% *	
	<b>Total</b>	<b>18,010</b>	<b>19,829</b>	<b>19544</b>	<b>-1% *</b>	<b>9% *</b>	
	<b>Children (under 16yrs)</b>	<b>1,560</b>	<b>1,454</b>	<b>1509</b>	<b>4%</b>	<b>-3%</b>	
<b>All severities</b>	Pedestrians	4,315	4,450	4272	-4% *	-1%	
	Pedal cyclists	2,219	3,652	3142	-14% *	42% *	
	Powered two-wheeler	2,954	3,274	3458	6%	17% *	
	Car occupants	9,263	8,002	8120	1%	-12% *	
	Bus or coach occupants	1,121	1,125	1135	1%	1%	
	Other vehicle occupants	696	865	915	6%	31% *	
	<b>Total</b>	<b>20,569</b>	<b>21,368</b>	<b>21042</b>	<b>-2% *</b>	<b>2%</b>	
	<b>Children (under 16yrs)</b>	<b>1,837</b>	<b>1,602</b>	<b>1637</b>	<b>2%</b>	<b>-11% *</b>	

\* Statistically significant changes at the 95 per cent confidence level

Significance testing helps to identify where change may be associated with randomness and where it may not be. Given a set of two different numbers, the difference between these numbers is statistically significant where we are 95 per cent confident that this is not owing to randomness. Changes in the number of casualties over time are modelled following the Poisson distribution.

## **BOROUGH LOCAL IMPLEMENTATION PLAN (LIP) TARGETS AND PROGRESS BY 2015**

As part of the Local Implementation Plan (LIP) process, London boroughs have set interim and long-term road safety targets. The most recent targets were set in October 2014.

To assist the boroughs in targeting their road safety resources to where they are most needed, we have provided them with information that identifies the locations on their roads where the largest number of pedestrians, cyclists and motorcyclists are being injured. The latest LIP guidance emphasises the importance of working on reducing casualties at these locations.

Table 4 shows the baseline periods that boroughs have chosen to mark their progress against, the average number of KSI casualties per year over these periods, the long-term target year or period that the KSI casualty target will be met, the number of casualties predicted to occur in 2020 based on the boroughs target, the number of KSI casualties in 2015 and the percentage change between 2015 and the baseline period. Some boroughs have low numbers of KSI casualties and care should be taken in interpreting large percentage changes. Overall progress in KSI casualty reduction shows continued reductions against borough baselines in 2015.

**Table 4: Borough LIP road safety targets and KSI casualties by borough in 2015 compared with borough LIP baseline periods**

Borough name	Borough baseline period	Borough baseline KSIs	Borough long term (LIP) Target Year	Borough forecast KSI casualties in 2020 and % change*	2015 KSIs	% change in 2015 over borough baseline
City of London	2004-08	49	2020	25 (-50%)	43	-13%
Westminster #	2006-08	284	2018-20	171 (-40%)	135	-52%
Camden #	2007-09	123	2018-20	92 (-25%)	76	-38%
Islington	2006-08	89	2020	55 (-38%)	89	0%
Hackney	2007-09	131	2030	80 (-39%)	82	-37%
Tower Hamlets #	2007-09	134	2018-20	85 (-37%)	68	-49%
Greenwich #	2004-08	120	2020	89 (-26%)	54	-55%
Lewisham #	2007-09	116	2018-20	97 (-17%)	53	-54%
Southwark #	2004-08	140	2018-20	93 (-34%)	89	-36%
Lambeth #	2004-08	175	2020	118 (-32%)	99	-43%
Wandsworth #	2004-08	137	2020	92 (-33%)	74	-46%
Hammersmith and Fulham	2006-08	110	2028-30	51 (-54%)	62	-44%
Kensington and Chelsea	2006-08	116	2029-31	46 (-60%)	52	-55%
Waltham Forest #	2004-08	99	2020	66 (-33%)	48	-51%
Redbridge #	2006-08	92	2020	68 (-26%)	55	-40%
Havering #	2006-08	111	2018-20	74 (-33%)	67	-40%
Barking and Dagenham #	2004-08	66	2019-20	44 (-34%)	30	-55%
Newham	2004-08	92	2020-21	62 (-33%)	72	-22%
Bexley #	2007-09	87	2020	61 (-30%)	30	-65%
Bromley #	2006-10	133	2020	86 (-35%)	77	-42%
Croydon #	2006-08	146	2028-30	110 (-25%)	65	-56%
Sutton #	2004-08	71	2025	47 (-34%)	22	-69%
Merton #	2007-09	60	2018-20	45 (-25%)	36	-40%
Kingston #	2007-09	55	2020	40 (-28%)	29	-48%
Richmond	2006-08	81	2020	27 (-67%)	38	-53%
Hounslow #	2004-08	121	2020	81 (-33%)	67	-45%
Hillingdon #	2006-08	111	2020	82 (-26%)	66	-41%
Ealing #	2006-08	132	2031	72 (-46%)	63	-52%
Brent	2006-08	101	2020-21	71 (-29%)	81	-20%
Harrow	2006-08	55	2020	40 (-27%)	46	-16%
Barnet #	2004-08	152	2020	102 (-33%)	92	-39%
Haringey	2004-08	100	2020	60 (-40%)	62	-38%
Enfield #	2006-08	106	2020	86 (-19%)	70	-34%

# These boroughs have already reached their target number of KSIs

\* Many boroughs have road safety targets for a single calendar year, however some have average number of casualties over several years (denoted 2018-20) or a financial year (denoted 2019/20). Where a borough has a target based on an average over a number of years the 2020 forecast has been calculated to give the mean KSI figure over the period.

## 2. CONFLICT ANALYSIS

The information recorded for each collision where a vulnerable road user (pedestrian, pedal cyclist and powered two wheeler user) was killed or seriously injured is presented below. This information is analysed to determine the vehicles involved, the direction of travel and manoeuvres, to help establish how collisions occur. The resulting pictograms showing vehicle movements are used to identify the conflicts that occurred in collisions on London's roads.

The diagrams show the five most common conflict types for collisions involving vulnerable road users who were killed or seriously injured in London during 2015. The first vehicle in collision with the casualty is noted and if a collision involved more than two vehicles.


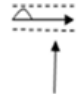

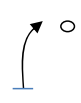
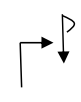
### PEDESTRIANS

In 2015 there were 728 collisions resulting in 730 pedestrians being killed or seriously injured. This represents a six per cent reduction in pedestrian KSI casualties compared to 2014, and is the lowest level of pedestrian KSIs recorded in London.

Table 5 shows that the most common type of collision noted for pedestrian KSIs in 2015 was where a vehicle was going ahead and the collision occurred away from a formal crossing point. More than two thirds (67 percent) of these collisions involved a car. This corresponds with pedestrian fatalities, where 21 (of the 66 fatal pedestrian collisions) involved a vehicle going straight ahead and 12 of these involved cars.

The overall pattern of conflicts in collisions involving pedestrian fatal or serious injury during 2015 was similar to those that occurred during 2014.

**Table 5: Ranked analysis on the five most commonly occurring conflicts between vehicles in collision with a pedestrian being killed or seriously injured in London during 2015**

Conflict	Description	First conflict between pedestrian and:										Total Collisions	Percentage of total KSI collisions %
		Pedal cycle	Powered 2 wheeler	Car	Taxi/Private Hire	Goods under 3.5t	Goods 3.5 to 7.5t	Goods over 7.5t	Bus or coach	Other vehicle	Multiple vehicle *		
	Vehicle going ahead, pedestrian crossing (not on formal crossing)	14	25	179	7	17	4	6	16	0	9	268	36.8%
	Vehicle going ahead, pedestrian crossing (on formal crossing)	12	17	59	6	7	2	0	11	0	2	114	15.7%
	Vehicle going ahead, pedestrian crossing within 50M of formal crossing	2	8	36	7	8	3	2	10	0	2	76	10.4%
	Vehicle moving off, pedestrian on footpath or verge	4	3	11	0	3	0	0	8	0	4	29	4.0%
	Vehicle turning right, ped crossing (not on formal crossing)	0	0	19	3	3	0	0	0	2	0	27	3.7%



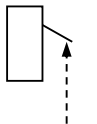
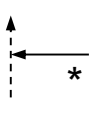

\*collisions involving three or more vehicles - the main vehicle in such collisions is recorded in the relevant column

## PEDAL CYCLISTS

In 2015 there were 387 collisions where a pedal cyclist was killed or seriously injured, a reduction of 10 per cent compared to 2014. The most common type of collision noted for pedal cyclists KSIs in 2015 was where a vehicle turned right across the path of the cyclist. Most of these involved conflict with a car (37 collisions). Looking at fatalities only, five out of nine involved a left turn manoeuvre and all were recorded as being a goods vehicle over 3.5t.

There are some differences comparing pedal cyclist KSI conflicts in 2014 and 2015. The highest number of KSI collisions in 2014 involved a vehicle opening its door into the path of the cyclist, the majority involving a car. Fatal conflicts in 2014 were also more varied, with four of the 13 collisions occurring where another vehicle turned left, and all of these involving a Heavy Goods Vehicle (HGV).

**Table 6: Ranked analysis on the five most commonly occurring conflicts between vehicles in collisions resulting in a pedal cyclist being killed or seriously injured in London during 2015**

First conflict between pedal cycle and:														
Conflict	Description	Pedal cycle	Powered two wheeler	Car	Taxi/Private Hire	Goods under 3.5t	Goods 3.5 to 7.5t	Goods over 7.5t	Bus or coach	Other vehicle	No other vehicle	Multiple vehicle *	Total Collisions	Percentage of total KSI collisions %
	Other vehicle turns right across path of P/C	0	0	37	1	7	2	0	0	0	0	1	47	12.1%
	Other vehicle turns left across the path of P/C	0	0	24	1	6	5	8	1	0	0	0	45	11.6%
	P/C hits open door / swerves to avoid open door of other vehicle.	0	0	23	6	4	0	0	0	0	0	4	33	8.5%
	Other vehicle fails to give way or disobeys junction control & collides with P/C	1	0	17	0	3	0	0	0	1	0	0	22	5.7%
	Other vehicle collides with P/C or loses control while overtaking	0	1	13	1	2	0	0	3	0	0	0	20	5.2%

\*collisions involving three or more vehicles - the main vehicle in such collisions is recorded in the relevant column


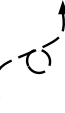
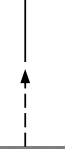


## POWERED TWO WHEELERS

In 2015 there were 535 collisions resulting in 540 powered two wheeler users being killed or seriously injured, a three per cent increase compared to 2014. The most common type of collision noted for powered two wheeler KSIs in 2015 was where a vehicle turned right across the path of the injured motorcyclist, which made up 18 percent of KSI collisions (84 of these 99 collisions involved a car). For fatalities only in 2015, 12 of the 35 fatal collisions recorded were the result of the motorcyclist losing control, and 11 involved no other vehicle.

Analysis of 2014 data shows a similar pattern of conflicts as in 2015. In 2014, 15 per cent of all KSI collisions involved another vehicle turning right across the path of the motorcyclist, and a similar number involved the motorcyclist losing control, mainly

with no other vehicle being recorded. Loss of control was also recorded in eight of the 27 fatal collisions in 2014, five of which involved no other vehicle.

**Table 7: Ranked analysis on the five most commonly occurring conflicts between vehicles in collisions resulting in a powered two wheeler user being killed or seriously injured in London during 2015**

First conflict between powered two wheeler and:														
Conflict	Description	Pedal cycle	Powered two wheeler	Car	Taxi/Private Hire	Goods under 3.5t	Goods 3.5t to 7.5t	Goods over 7.5t	Bus or coach	Other vehicle	No other vehicle	Multiple vehicle *	Total Collisions	Percentage of total KSI collisions %
	Other vehicle turns right across path of P2W	2	0	84	4	7	1	0	1	0	0	3	99	18.4%
	P2W loses control (and may hit other vehicle)	0	1	11	0	2	0	0	3	0	59	1	76	14.2%
	P2W runs into rear of other vehicle	0	0	29	3	6	1	0	2	2	0	5	43	8.0%
	Other vehicle disobeys junction control and turns right into path of P2W	0	0	36	3	2	0	1	1	0	0	2	43	8.0%
	Other vehicle u-turns into path of P2W	1	0	25	7	0	0	1	0	0	0	2	34	6.3%

\*collisions involving three or more vehicles - the main vehicle in such collisions is recorded in the relevant column

### 3. ROAD USER RISK IN LONDON

Road safety analysis has traditionally focused on casualty and collision numbers as key indicators of safety and to prioritise interventions. While it is important to focus on absolute numbers – as they directly reflect the suffering and loss of life associated with road collisions – it is also important to view those numbers in the context of overall travel patterns across the Capital.

Analysis of risk controls for changes in mode shares and helps to normalise for different levels of exposure between road users. The approach taken has been to calculate the number of casualties per billion kilometres of travel, in other words, a casualty rate. The casualty rate provides an indication of the risk associated for different road user groups. Road users in a group experiencing 100 casualties per billion kilometres are at a lower risk than those in a group experiencing 1,000 per billion kilometres.

#### CHANGE IN ROAD USER RISK IN LONDON

Table 8 shows the number of vulnerable road users killed or seriously injured for every billion passenger kilometres travelled in London in April 2011 to March 2015, the most recent travel data available, compared with April 2007 to March 2011. This shows that there has been a considerable reduction in KSI risk among vulnerable road users, with KSI risk having fallen by 18 per cent between these two time periods.

**Table 8: Change in KSI risk by vulnerable road user and time period**

User group	KSI casualties per billion passenger kilometres		Change
	Apr 2007 – Mar 2011	Apr 2011 – Mar 2015	
Pedestrians	287	229	-20%
Pedal cyclists	747	608	-19%
Powered two wheelers	1,819	1,606	-12%
Vulnerable road users (VRU)	457	377	-18%



## RISK TO VULNERABLE ROAD USERS BY LONDON BOROUGH

The road environment varies substantially across London, as does the mix of road user types. To understand whether these geographical variations have an impact on risk, it is useful to calculate risk at a borough level. Figure 3 below shows the KSI casualty risk by borough among vulnerable road user groups in London. Change in risk over time by borough can be found in the supporting tables published alongside this report<sup>3</sup>.

**Figure 3: Heatmap showing KSI risk for vulnerable road users by borough (April 2011 to March 2015)**



<sup>3</sup> Table 4.1 KSI casualty rate by borough per billion kilometers

## 4. CONCLUSION

Improving road safety in London will contribute to better, safer streets that everyone can use and contributes to creating the most liveable city in the world. Central to the road safety programme and Safe Streets for London is a focus on the most vulnerable of road users, pedestrians, pedal cyclists and motorcyclists. Increasing safety for these people is critical to achieving this change.

Overall reductions in casualties amongst pedestrians and pedal cyclists during 2015 are encouraging, with the number of people killed or seriously injured on London's roads at the lowest level on record. However increases in casualties, in particular amongst motorcyclists, are an area of continuing concern. We continually monitor casualty trends in London and target activity at the most important locations and user groups and adapt our road safety programme accordingly.

This annual report has provided an update on road safety during 2015, alongside our most recent analysis and research, and illustrates how this information will support progress towards the target of a 50 per cent reduction in KSIs by 2020. Achieving this target cannot be realised by us alone and many partners will continue to make significant contributions to reducing casualties in future years.

### MORE INFORMATION ON THIS REPORT

The processing and analysis of road traffic collision and casualty data within our organisation is the responsibility of the Research and Data Analysis team in Surface Strategy and Planning.

The tables and graphs in this report and supporting tables are those most commonly requested and not an exhaustive list of possible analysis of the data. Additional tables of collision, casualty and vehicle factors associated with personal injury collisions may be available on request.

Requests for collision and casualty information can be made by e-mailing [collisiondata@tfl.gov.uk](mailto:collisiondata@tfl.gov.uk).

Our research reports and factsheets can be found on the Road Safety webpages [www.tfl.gov.uk/roadsafety](http://www.tfl.gov.uk/roadsafety), along with data extracts of the road safety data giving attendant, casualty and vehicle information.

You can also view casualties on our Collision Map where you can search by location and filter casualty mode, severity and age: <https://tfl.gov.uk/corporate/safety-and-security/road-safety/london-collision>