



# Collisions and casualties on London's roads: Annual Report 2014

MAYOR OF LONDON



**TRANSPORT  
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# CONTENTS

|   |           |
|---|-----------|
| <b>1. Summary</b>                           | <b>4</b>  |
| <b>2. Collisions and casualties in 2014</b> | <b>6</b>  |
| <b>3. Safe roads</b>                        | <b>16</b> |
| <b>4. Safe vehicles</b>                     | <b>22</b> |
| <b>5. Safe people</b>                       | <b>27</b> |
| <b>6. Delivering in partnership</b>         | <b>31</b> |
| <b>7. Road user risk in London</b>          | <b>33</b> |
| <b>8. Conclusion</b>                        | <b>37</b> |

## Foreword

The safety of London's road users is a top priority for me and for everyone who works for Transport for London. The Capital's population growth and continued popularity as a destination for tourists and visitors means that today there are more people than ever before in the city. We want to work with all stakeholders to ensure their safety.

We need to be ever more proactive and vigilant in our work to ensure that deaths and serious casualties on London's roads continue to decline, as they have done in recent years.

I am pleased to say that after another year of outstanding effort in improving the safety of London's roads, the results have been very encouraging. In 2013, the Mayor published Safe Streets for London, a document that set out the wide-ranging programme of road safety activity that TfL, together with our partners, will deliver over the coming years. A target was set to reduce the number of people killed or seriously injured on London's roads by 40 per cent by 2020, from the 2005-2009 baseline. That target was met in 2014, six years early, resulting in the lowest number of people killed or seriously injured on the Capital's roads since records began. This verifies the excellent progress TfL and our partners have made in making a safer, more livable city.

The success of this programme depends on the continued support and involvement of our partners including the London boroughs, the Metropolitan Police Service, operators within the freight and construction industries, and many other stakeholders and groups that offer us insight, advice and resources.

The Mayor has now stretched this target to achieve a 50 per cent reduction in people being killed or seriously injured on London's roads by 2020. This is a challenging target to reach, considering the projected population increases London will see in the next decade, and also the increase in pedestrians and cyclists we will see in coming years.

Challenging as it may be we cannot be complacent. I am confident that the approach that TfL and our partners have taken so far will continue to deliver these world leading results.

Mike Brown MVO

Commissioner

# 1. SUMMARY

The Mayor's Safe Streets for London plan, published in 2013, set out the long-term ambition of working together towards roads that are free from death and serious injury. In support of this ambition, Transport for London (TfL) committed to reducing the number of people killed or seriously injured (KSI) on London's roads by 40 per cent by 2020. This target was met in 2014, six years early. In 2014, there were 2,167 KSIs, down from 2,324 in 2013. This is the lowest annual number of KSIs on London's roads since records began.

While this is a great achievement, there remain too many deaths and serious injuries on London's roads. The Mayor and TfL announced a new stretched target for a 50 per cent reduction in KSIs by 2020.

Sustaining reductions in KSIs remains challenging but achievable. The Capital's population is forecast to increase to 9.1 million by 2021. Active encouragement of walking and cycling, modes that we know to be disproportionately represented in current collisions, will continue to put pressure on our achievement of further KSI reductions.

We are confident that through our wide-ranging programme set out in Safe Streets for London, the vulnerable road user action plans and our Six Commitments, and by working with our partners, the ambitious target will be met.

The Six Commitments published in February 2014 are:

1. To lead the way in achieving a 50 per cent reduction in the number of people killed or seriously injured on the Capital's roads by 2020 – with a longer term ambition of freeing London's roads from death and serious injury
2. To prioritise the safety of the most vulnerable groups – pedestrians, cyclists and motorcyclists – which make up 80 per cent of those affected by serious and fatal collisions
3. To provide substantial funding for road safety, invested in the most effective and innovative schemes
4. To increase efforts with the police and enforcement agencies in tackling illegal, dangerous and careless road user behaviour that puts people at risk
5. To campaign for changes in national and EU law to make roads, vehicles and drivers safer
6. To work in partnership with boroughs and London's road safety stakeholders to spread best practice and share data and information

We will publish an updated version of these Six Commitments later in 2015, to reflect the progress made in KSI reduction and the new stretched target.

Much of the work laid out in Safe Streets for London is already well under way, including:

- Major infrastructure improvements as part of the Mayor's £4bn investment in the Road Modernisation Plan, including: the Better Junctions Programme, in which 33 of the worst performing junctions for cyclists will be redesigned; and the North-South and East-West Cycle Superhighways
- Road safety and cycle training across all 33 London boroughs
- Road safety operations with the Metropolitan Police Service Roads and Transport Policing Command (RTPC), where hundreds of officers are deployed to junctions across London to advise road users and enforce the rules of the road
- Targeting the most dangerous commercial vehicles through the Industrial HGV Task Force, funded by TfL and the Department for Transport (DfT). In 2014, the Task Force conducted roadside operations that stopped 2,928 vehicles, issued 1,174 penalty notices and seized 25 vehicles
- Plans for the Safer Lorry Scheme are complete; from 1 September 2015 all HGVs over 3.5 tonnes must be fitted with additional safety mirrors and side-guards in order to drive in London
- Improving freight safety with the design of safer urban construction vehicles that reduce deadly blind-spots and improving drivers' direct vision to give maximum visibility of vulnerable road users. Earlier this year, 15 new or modified vehicles with hugely reduced blind-spots were exhibited in London and are now being trialed by a range of companies
- Wide-ranging awareness campaigns that target the main causes of death and serious injury on London's roads

The actions in Safe Streets for London are organised by the following sections: **Safe Roads, Safe Vehicles, Safe People** and **Delivering in Partnership**. These same sections in this document summarise the casualty data from 2014 and describes in more detail progress on key projects and programmes. It is a combination of all of this activity that has contributed to our successful reduction of KSIs on London's roads.

This document fulfils the commitment in Action 55 of Safe Streets for London to provide a comprehensive annual account of progress on collision and casualty reduction in London.

## 2. COLLISIONS AND CASUALTIES IN 2014

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 updates on progress in delivering our Safe Streets for London, London's Road Safety Plan, and highlights new areas of work to further drive down casualties.

This document provides information on personal injury road traffic collisions and casualties in Greater London during 2014, compared with both 2013 and the average for 2005-2009

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**

A total of 25,992 road traffic collisions, involving personal injury within Greater London, were reported to the Metropolitan and City of London Police during 2014. This is a 13 per cent increase in collisions compared with 2013. These resulted in 30,785 casualties, an increase of 13 per cent compared with the 27,199 recorded in 2013. In 2014, 127 people were fatally injured, 2,040 were seriously injured, and 28,618 were slightly injured in Greater London.

In considering casualties in more detail, fatalities fell by four per cent (132 to 127), to the second lowest level since recent records began while KSI casualties also decreased by seven per cent in 2014 (2,324 to 2,167) compared with 2013 (to the lowest number since records began). Within KSIs, the number of serious injuries decreased by seven per cent (2,192 to 2,040). Slight injuries increased by 1 per cent (24,875 to 28,618) in 2014, compared with 2013. This is the highest level recorded over the past 10 years. Vulnerable road users (pedestrians, pedal cyclists and powered two-wheeler users) made up just over half (52 per cent) of casualties of all severities on London's roads in 2014.

Comparing the number of casualties in 2014 against the longer term 2005-09 baseline, fatal casualties were down by 40 per cent, KSI casualties were down by 40 per cent and, within this group, the number of child KSI casualties have decreased by half (50 per cent). Slight casualties increased by 12 per cent whereas child slight casualties fell by four per cent against the baseline. When considering different vulnerable road user groups over this period, pedestrian KSIs were down by 36 per cent and powered two-wheeler user KSIs were also down by 34 per cent against the baseline during 2014. Pedal cyclist KSI casualties were up three per cent against the 2005-09 baseline in 2014, however this increase should be seen in the context of a considerable increase in cycling over a number of years.

The most recent figures available from the DfT for 2014 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 as a whole, fatalities increased by four per cent and KSIs by five per cent in 2014 compared with the previous year. In addition, the number of KSI casualties nationally increased among all vulnerable road user groups; with pedestrian KSIs up by two per cent and motorcyclist and pedal cyclist KSIs up by eight per cent respectively. The number of child KSIs was also up by five per cent in Great Britain despite the four per cent reduction seen in London.

Using the latest DfT figures, the cost to the community from collisions in Greater London for the year 2014 is estimated to be around £1.93bn at 2013 prices.

This is the 28th 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 [tfl.gov.uk/roadsafety](http://tfl.gov.uk/roadsafety).

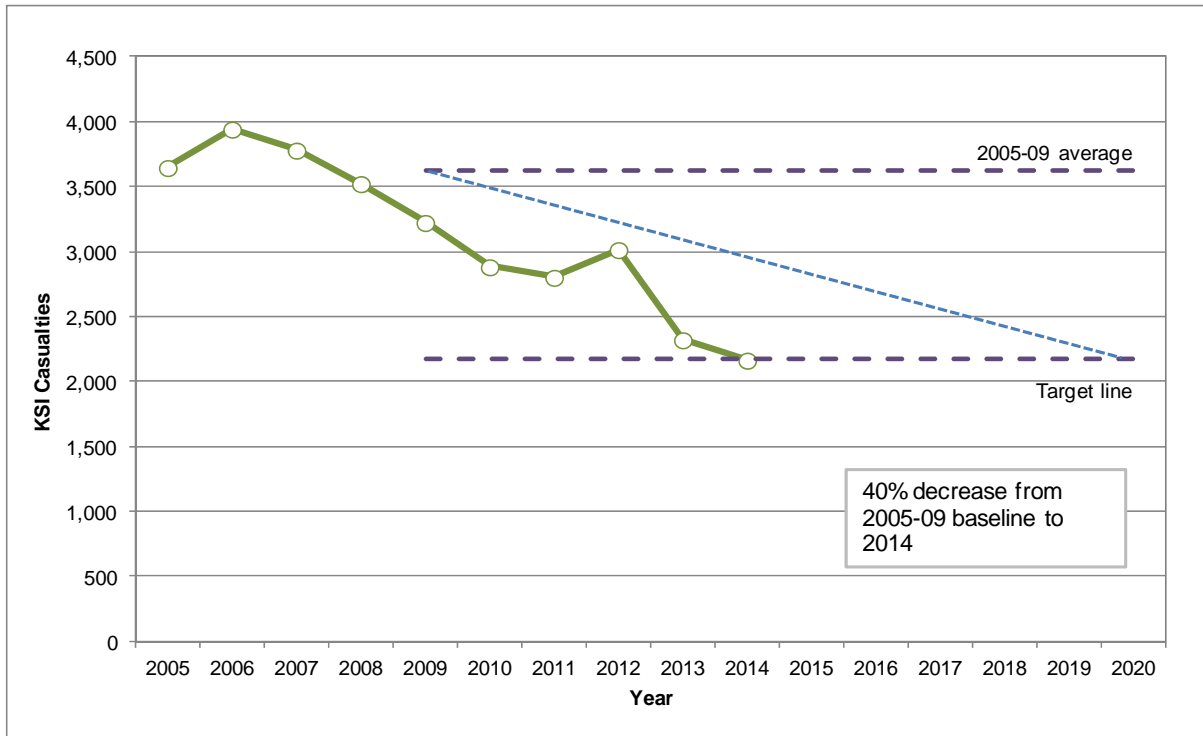
### **London's road safety target**

In 2014, the number of KSIs in London was at its lowest level since records began. This decrease means that the target set out in Safe Streets for London for KSI casualty reduction by 2020 has already been achieved. This was down to close partnership working and the dedication of TfL with our road safety stakeholders.

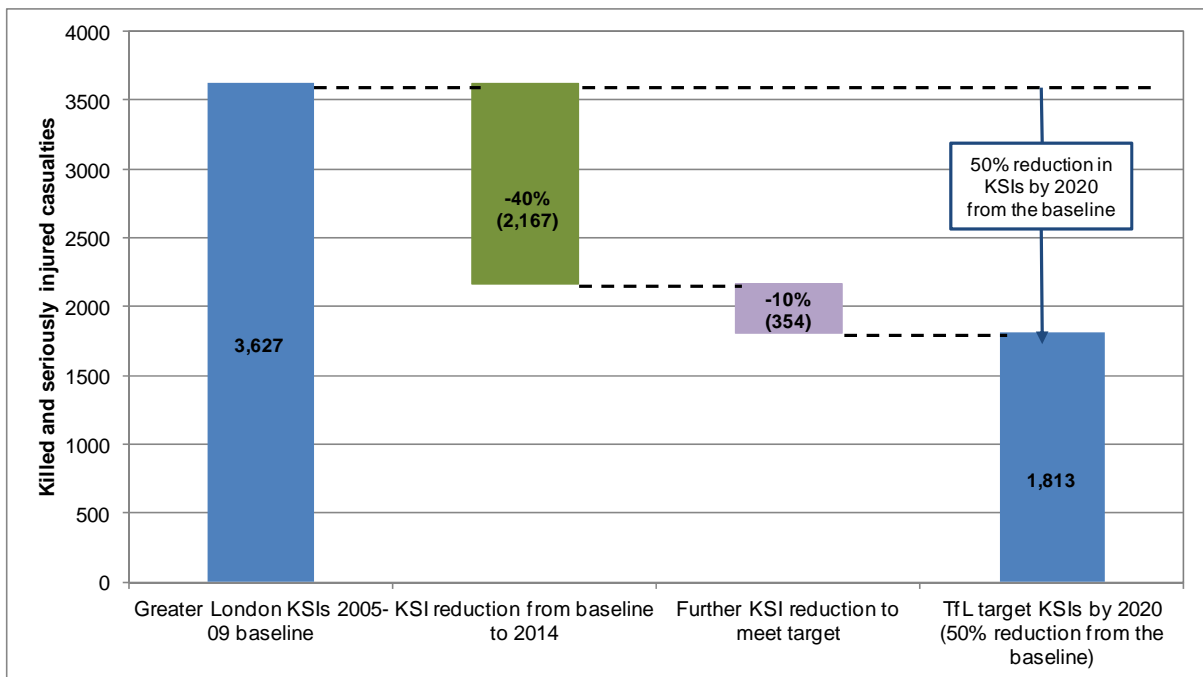
In June 2015, the Mayor therefore announced a new more robust target that will halve the number of people killed or seriously injured on London's roads by 2020, compared with the 2005-2009 baseline. Meeting this target would mean a reduction of around 10,000 deaths and serious injuries between 2015 and 2020.

Figure 1 shows the trend in KSI casualties between 2005 and 2014, and Figure 2 presents progress towards the 40 per cent KSI reduction target and the trajectory of the new additional 10 per cent reduction needed to achieve the new target of a 50 per cent reduction in KSIs.

**Figure 1: Trend in KSI casualties between 2005 and 2014 and to target**



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





## Casualties in 2014 in London

This section reports casualties in Greater London during 2014 compared with 2013 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. Please see the annex for definitions of casualty severity.

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

Annual changes in collisions and casualties during 2014 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 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 overall fatalities fell by four per cent between 2013 and 2014 to the lowest level on record, with serious casualties down seven per cent. However, all casualties increased by six per cent, led by increases in those slightly injured. The rise in pedal cycle casualties should be seen in the context of considerable increases in cycling in London over a number of years. Child fatalities and serious injuries in 2014 are the lowest on record.

Table 2 shows casualties injured on the TLRN. The number of KSI injuries overall (including children) in 2014 are the lowest on record. Numbers for all severities have again increased, led by a rise in slight casualties. The number of people cycling on the TLRN has increased by 92 per cent between 2005/06 and 2013/14 and has more than tripled since 2000/01.

Table 3 shows casualties injured on roads that are managed by London's 33 boroughs. Fatalities and serious injuries, including those involving children, are the lowest on record. Again, slight casualties are increasing particularly among vulnerable road users which are driving the rise in total numbers.

Table 4 shows casualty numbers for roads managed by the Highways Agency that fall within the Greater London boundary the M1, M4, M11 and M25. Numbers tend to be small owing to the limited number of motorways in London, however casualty figures are generally reducing on these roads.

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

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

| Casualty severity                | User group                       | Casualty numbers  |               |              | Percentage change in 2014 over |                   |
|----------------------------------|----------------------------------|-------------------|---------------|--------------|--------------------------------|-------------------|
|                                  |                                  | 2005-2009 average | 2013          | 2014         | 2013                           | 2005-2009 average |
| <b>Fatal</b>                     | Pedestrians                      | 96                | 65            | 64           | -2%                            | -33% *            |
|                                  | Pedal cyclists                   | 17                | 14            | 13           | -7%                            | -22%              |
|                                  | Powered two-wheeler              | 43                | 22            | 27           | 23%                            | -38% *            |
|                                  | Car occupants                    | 49                | 25            | 19           | -24%                           | -62% *            |
|                                  | Bus or coach occupants           | 2                 | 1             | 0            | -100%                          | -100%             |
|                                  | Other vehicle occupants          | 3                 | 5             | 4            | -20%                           | 25%               |
|                                  | <b>Total</b>                     | <b>211</b>        | <b>132</b>    | <b>127</b>   | <b>-4%</b>                     | <b>-40% *</b>     |
| <b>Children (under 16 years)</b> |                                  | <b>12</b>         | <b>6</b>      | <b>3</b>     | <b>-50%</b>                    | <b>-74% *</b>     |
| <b>Serious</b>                   | Pedestrians                      | 1,120             | 773           | 715          | -8%                            | -36% *            |
|                                  | Pedal cyclists                   | 404               | 475           | 419          | -12%                           | 4%                |
|                                  | Powered two-wheeler              | 748               | 488           | 499          | 2%                             | -33% *            |
|                                  | Car occupants                    | 900               | 310           | 297          | -4%                            | -67% *            |
|                                  | Bus or coach occupants           | 137               | 89            | 71           | -20%                           | -48% *            |
|                                  | Other vehicle occupants          | 107               | 57            | 39           | -32%                           | -63% *            |
|                                  | <b>Total</b>                     | <b>3,416</b>      | <b>2,192</b>  | <b>2040</b>  | <b>-7% *</b>                   | <b>-40% *</b>     |
| <b>Child fatal and serious</b>   | Child pedestrians                | 232               | 153           | 139          | -9%                            | -40% *            |
|                                  | Child pedal cyclists             | 33                | 17            | 13           | -24%                           | -60% *            |
|                                  | Child car passengers             | 42                | 7             | 6            | -14%                           | -86% *            |
|                                  | Child bus/coach passenger        | 12                | 4             | 5            | 25%                            | -57%              |
|                                  | Other child casualties           | 12                | 6             | 3            | -50%                           | -75% *            |
|                                  | <b>Children (under 16 years)</b> | <b>330</b>        | <b>187</b>    | <b>166</b>   | <b>-11%</b>                    | <b>-50% *</b>     |
|                                  | <b>Slight</b>                    | Pedestrians       | 4,214         | 4,343        | 4834                           | 11% *             |
| Pedal cyclists                   |                                  | 2,718             | 4,134         | 4714         | 14% *                          | 73% *             |
| Powered two-wheeler              |                                  | 3,806             | 3,992         | 4707         | 18% *                          | 24% *             |
| Car occupants                    |                                  | 12,427            | 9,850         | 11487        | 17% *                          | -8% *             |
| Bus or coach occupants           |                                  | 1,430             | 1,381         | 1508         | 9% *                           | 5%                |
| Other vehicle occupants          |                                  | 1,005             | 1,175         | 1368         | 16% *                          | 36% *             |
| <b>Total</b>                     |                                  | <b>25,600</b>     | <b>24,875</b> | <b>28618</b> | <b>15% *</b>                   | <b>12% *</b>      |
| <b>Children (under 16 years)</b> |                                  | <b>1,889</b>      | <b>1,677</b>  | <b>1811</b>  | <b>8% *</b>                    | <b>-4%</b>        |
| <b>All severities</b>            | Pedestrians                      | 5,430             | 5,181         | 5613         | 8% *                           | 3% *              |
|                                  | Pedal cyclists                   | 3,139             | 4,623         | 5146         | 11% *                          | 64% *             |
|                                  | Powered two-wheeler              | 4,598             | 4,502         | 5233         | 16% *                          | 14% *             |
|                                  | Car occupants                    | 13,376            | 10,185        | 11803        | 16% *                          | -12% *            |
|                                  | Bus or coach occupants           | 1,569             | 1,471         | 1579         | 7%                             | 1%                |
|                                  | Other vehicle occupants          | 1,115             | 1,237         | 1411         | 14% *                          | 27% *             |
|                                  | <b>Total</b>                     | <b>29,227</b>     | <b>27,199</b> | <b>30785</b> | <b>13% *</b>                   | <b>5% *</b>       |
| <b>Children (under 16 years)</b> |                                  | <b>2,219</b>      | <b>1,864</b>  | <b>1977</b>  | <b>6%</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 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 2014 compared with the 2005-09 average and 2014**

| Casualty severity              | User group                       | Casualty numbers  |              |             | Percentage change in 2014 over |                   |
|--------------------------------|----------------------------------|-------------------|--------------|-------------|--------------------------------|-------------------|
|                                |                                  | 2005-2009 average | 2013         | 2014        | 2013                           | 2005-2009 average |
| <b>Fatal</b>                   | Pedestrians                      | 30                | 19           | 25          | 32%                            | -17%              |
|                                | Pedal cyclists                   | 7                 | 7            | 7           | 0%                             | -3%               |
|                                | Powered two-wheeler              | 15                | 11           | 8           | -27%                           | -45%              |
|                                | Car occupants                    | 12                | 11           | 6           | -45%                           | -51%              |
|                                | Bus or coach occupants           | 0                 | 0            | 0           | -                              | -100%             |
|                                | Other vehicle occupants          | 2                 | 1            | 3           | 200%                           | 88%               |
|                                | <b>Total</b>                     | <b>66</b>         | <b>49</b>    | <b>49</b>   | <b>0%</b>                      | <b>-26%</b>       |
|                                | <b>Children (under 16 years)</b> | <b>1</b>          | <b>2</b>     | <b>2</b>    | <b>0%</b>                      | <b>43%</b>        |
| <b>Serious</b>                 | Pedestrians                      | 266               | 202          | 155         | -23% *                         | -42% *            |
|                                | Pedal cyclists                   | 121               | 159          | 121         | -24% *                         | 0%                |
|                                | Powered two-wheeler              | 267               | 182          | 176         | -3%                            | -34% *            |
|                                | Car occupants                    | 247               | 83           | 85          | 2%                             | -66% *            |
|                                | Bus or coach occupants           | 32                | 17           | 17          | 0%                             | -48% *            |
|                                | Other vehicle occupants          | 35                | 20           | 16          | -20%                           | -54% *            |
|                                | <b>Total</b>                     | <b>968</b>        | <b>663</b>   | <b>570</b>  | <b>-14% *</b>                  | <b>-41% *</b>     |
| <b>Child fatal and serious</b> | Child pedestrians                | 33                | 26           | 15          | -42%                           | -55% *            |
|                                | Child pedal cyclists             | 4                 | 2            | 1           | -50%                           | -75%              |
|                                | Child car passengers             | 11                | 2            | 1           | -50%                           | -91% *            |
|                                | Child bus/coach passenger        | 2                 | 0            | 1           | -                              | -55%              |
|                                | Other child casualties           | 1                 | 1            | 0           | -100%                          | -100%             |
|                                | <b>Children (under 16 years)</b> | <b>52</b>         | <b>31</b>    | <b>18</b>   | <b>-42%</b>                    | <b>-65% *</b>     |
| <b>Slight</b>                  | Pedestrians                      | 818               | 918          | 982         | 7%                             | 20% *             |
|                                | Pedal cyclists                   | 791               | 1,285        | 1366        | 6%                             | 73% *             |
|                                | Powered two-wheeler              | 1,341             | 1,427        | 1764        | 24% *                          | 32% *             |
|                                | Car occupants                    | 3,556             | 3,160        | 3554        | 12% *                          | 0%                |
|                                | Bus or coach occupants           | 401               | 396          | 436         | 10%                            | 9%                |
|                                | Other vehicle occupants          | 342               | 448          | 503         | 12%                            | 47% *             |
|                                | <b>Total</b>                     | <b>7,249</b>      | <b>7,634</b> | <b>8605</b> | <b>13% *</b>                   | <b>19% *</b>      |
|                                | <b>Children (under 16 years)</b> | <b>319</b>        | <b>322</b>   | <b>353</b>  | <b>10%</b>                     | <b>11%</b>        |
| <b>All severities</b>          | Pedestrians                      | 1,114             | 1,139        | 1162        | 2%                             | 4%                |
|                                | Pedal cyclists                   | 919               | 1,451        | 1494        | 3%                             | 63% *             |
|                                | Powered two-wheeler              | 1,622             | 1,620        | 1948        | 20% *                          | 20% *             |
|                                | Car occupants                    | 3,815             | 3,254        | 3645        | 12% *                          | -4% *             |
|                                | Bus or coach occupants           | 434               | 413          | 453         | 10%                            | 4%                |
|                                | Other vehicle occupants          | 378               | 469          | 522         | 11%                            | 38% *             |
|                                | <b>Total</b>                     | <b>8,282</b>      | <b>8,346</b> | <b>9224</b> | <b>11% *</b>                   | <b>11% *</b>      |
|                                | <b>Children (under 16 years)</b> | <b>371</b>        | <b>353</b>   | <b>371</b>  | <b>5%</b>                      | <b>0%</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 2014 compared with the 2005-09 average and 2014**

| Casualty severity                | User group                       | Casualty numbers  |               |              | Percentage change in 2014 over |                   |
|----------------------------------|----------------------------------|-------------------|---------------|--------------|--------------------------------|-------------------|
|                                  |                                  | 2005-2009 average | 2013          | 2014         | 2013                           | 2005-2009 average |
| <b>Fatal</b>                     | Pedestrians                      | 66                | 46            | 38           | -17%                           | -42% *            |
|                                  | Pedal cyclists                   | 9                 | 7             | 6            | -14%                           | -36%              |
|                                  | Powered two-wheeler              | 28                | 11            | 19           | 73%                            | -33%              |
|                                  | Car occupants                    | 35                | 14            | 13           | -7%                            | -63% *            |
|                                  | Bus or coach occupants           | 2                 | 1             | 0            | -100%                          | -100%             |
|                                  | Other vehicle occupants          | 1                 | 3             | 1            | -67%                           | -29%              |
|                                  | <b>Total</b>                     | <b>142</b>        | <b>82</b>     | <b>77</b>    | <b>-6%</b>                     | <b>-46% *</b>     |
| <b>Children (under 16 years)</b> |                                  | <b>10</b>         | <b>4</b>      | <b>1</b>     | <b>-75%</b>                    | <b>-90% *</b>     |
| <b>Serious</b>                   | Pedestrians                      | 854               | 568           | 560          | -1%                            | -34% *            |
|                                  | Pedal cyclists                   | 283               | 316           | 298          | -6%                            | 5%                |
|                                  | Powered two-wheeler              | 475               | 305           | 319          | 5%                             | -33% *            |
|                                  | Car occupants                    | 633               | 220           | 209          | -5%                            | -67% *            |
|                                  | Bus or coach occupants           | 104               | 72            | 54           | -25%                           | -48% *            |
|                                  | Other vehicle occupants          | 69                | 37            | 22           | -41% *                         | -68% *            |
|                                  | <b>Total</b>                     | <b>2,417</b>      | <b>1,518</b>  | <b>1462</b>  | <b>-4%</b>                     | <b>-40% *</b>     |
| <b>Child fatal and serious</b>   | Child pedestrians                | 198               | 127           | 124          | -2%                            | -37% *            |
|                                  | Child pedal cyclists             | 29                | 15            | 12           | -20%                           | -58% *            |
|                                  | Child car passengers             | 30                | 5             | 5            | 0%                             | -83% *            |
|                                  | Child bus/coach passenger        | 9                 | 4             | 4            | 0%                             | -57%              |
|                                  | Other child casualties           | 11                | 5             | 3            | -40%                           | -72% *            |
|                                  | <b>Children (under 16 years)</b> | <b>277</b>        | <b>156</b>    | <b>148</b>   | <b>-5%</b>                     | <b>-46% *</b>     |
|                                  | <b>Slight</b>                    | Pedestrians       | 3,396         | 3,424        | 3852                           | 13% *             |
| Pedal cyclists                   |                                  | 1,927             | 2,849         | 3348         | 18% *                          | 74% *             |
| Powered two-wheeler              |                                  | 2,451             | 2,551         | 2936         | 15% *                          | 20% *             |
| Car occupants                    |                                  | 8,595             | 6,539         | 7780         | 19% *                          | -9% *             |
| Bus or coach occupants           |                                  | 1,015             | 983           | 1071         | 9%                             | 6%                |
| Other vehicle occupants          |                                  | 626               | 702           | 842          | 20% *                          | 34% *             |
| <b>Total</b>                     |                                  | <b>18,010</b>     | <b>17,048</b> | <b>19829</b> | <b>16% *</b>                   | <b>10% *</b>      |
| <b>Children (under 16 years)</b> |                                  | <b>1,560</b>      | <b>1,347</b>  | <b>1454</b>  | <b>8% *</b>                    | <b>-7% *</b>      |
| <b>All severities</b>            | Pedestrians                      | 4,315             | 4,038         | 4450         | 10% *                          | 3%                |
|                                  | Pedal cyclists                   | 2,219             | 3,172         | 3652         | 15% *                          | 65% *             |
|                                  | Powered two-wheeler              | 2,954             | 2,867         | 3274         | 14% *                          | 11% *             |
|                                  | Car occupants                    | 9,263             | 6,773         | 8002         | 18% *                          | -14% *            |
|                                  | Bus or coach occupants           | 1,121             | 1,056         | 1125         | 7%                             | 0%                |
|                                  | Other vehicle occupants          | 696               | 742           | 865          | 17% *                          | 24% *             |
|                                  | <b>Total</b>                     | <b>20,569</b>     | <b>18,648</b> | <b>21368</b> | <b>15% *</b>                   | <b>4% *</b>       |
| <b>Children (under 16 years)</b> |                                  | <b>1,837</b>      | <b>1,503</b>  | <b>1602</b>  | <b>7%</b>                      | <b>-13% *</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 4: Monitoring casualties on Highways Agency roads in London**

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

| Casualty severity              | User group                       | Casualty numbers  |            |            | Percentage change in 2014 over |                   |
|--------------------------------|----------------------------------|-------------------|------------|------------|--------------------------------|-------------------|
|                                |                                  | 2005-2009 average | 2013       | 2014       | 2013                           | 2005-2009 average |
| <b>Fatal</b>                   | Pedestrians                      | 0                 | 0          | 1          | -                              | 150%              |
|                                | Pedal cyclists                   | 0                 | 0          | 0          | -                              | -                 |
|                                | Powered two-wheeler              | 0                 | 0          | 0          | -                              | -100%             |
|                                | Car occupants                    | 2                 | 0          | 0          | -                              | -100%             |
|                                | Bus or coach occupants           | 0                 | 0          | 0          | -                              | -                 |
|                                | Other vehicle occupants          | 0                 | 1          | 0          | -100%                          | -100%             |
|                                | <b>Total</b>                     | <b>3</b>          | <b>1</b>   | <b>1</b>   | <b>0%</b>                      | <b>-67%</b>       |
|                                | <b>Children (under 16 years)</b> | <b>0</b>          | <b>0</b>   | <b>0</b>   | <b>-</b>                       | <b>-100%</b>      |
| <b>Serious</b>                 | Pedestrians                      | 0                 | 3          | 0          | -100%                          | -100%             |
|                                | Pedal cyclists                   | 0                 | 0          | 0          | -                              | -                 |
|                                | Powered two-wheeler              | 6                 | 1          | 4          | 300%                           | -35%              |
|                                | Car occupants                    | 20                | 7          | 3          | -57%                           | -85% *            |
|                                | Bus or coach occupants           | 0                 | 0          | 0          | -                              | -100%             |
|                                | Other vehicle occupants          | 3                 | 0          | 1          | -                              | -71%              |
|                                | <b>Total</b>                     | <b>30</b>         | <b>11</b>  | <b>8</b>   | <b>-27%</b>                    | <b>-74% *</b>     |
| <b>Child fatal and serious</b> | Child pedestrians                | 1                 | 0          | 0          | -                              | -100%             |
|                                | Child pedal cyclists             | 0                 | 0          | 0          | -                              | -                 |
|                                | Child car passengers             | 1                 | 0          | 0          | -                              | -100%             |
|                                | Child bus/coach passenger        | 0                 | 0          | 0          | -                              | -                 |
|                                | Other child casualties           | 0                 | 0          | 0          | -                              | -                 |
|                                | <b>Children (under 16 years)</b> | <b>2</b>          | <b>0</b>   | <b>0</b>   | <b>-</b>                       | <b>-100%</b>      |
| <b>Slight</b>                  | Pedestrians                      | 1                 | 1          | 0          | -100%                          | -100%             |
|                                | Pedal cyclists                   | 0                 | 0          | 0          | -                              | -100%             |
|                                | Powered two-wheeler              | 15                | 14         | 7          | -50%                           | -54%              |
|                                | Car occupants                    | 275               | 151        | 153        | 1%                             | -44% *            |
|                                | Bus or coach occupants           | 14                | 2          | 1          | -50%                           | -93% *            |
|                                | Other vehicle occupants          | 37                | 25         | 23         | -8%                            | -37% *            |
|                                | <b>Total</b>                     | <b>342</b>        | <b>193</b> | <b>184</b> | <b>-5%</b>                     | <b>-46% *</b>     |
|                                | <b>Children (under 16 years)</b> | <b>10</b>         | <b>8</b>   | <b>4</b>   | <b>-50%</b>                    | <b>-62%</b>       |
| <b>All severities</b>          | Pedestrians                      | 2                 | 4          | 1          | -75%                           | -38%              |
|                                | Pedal cyclists                   | 0                 | 0          | 0          | -                              | -100%             |
|                                | Powered two-wheeler              | 22                | 15         | 11         | -27%                           | -50% *            |
|                                | Car occupants                    | 297               | 158        | 156        | -1%                            | -48% *            |
|                                | Bus or coach occupants           | 14                | 2          | 1          | -50%                           | -93% *            |
|                                | Other vehicle occupants          | 40                | 26         | 24         | -8%                            | -40% *            |
|                                | <b>Total</b>                     | <b>375</b>        | <b>205</b> | <b>193</b> | <b>-6%</b>                     | <b>-49% *</b>     |
|                                | <b>Children (under 16 years)</b> | <b>12</b>         | <b>8</b>   | <b>4</b>   | <b>-50%</b>                    | <b>-67% *</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 2014**

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 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 5 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 2014 and the percentage change between 2014 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 2014.

**Table 5: Borough LIP road safety targets and KSI casualties by borough in 2014 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* | 2014 KSIs | % change in 2014 over borough baseline |
|------------------------|-------------------------|-----------------------|-------------------------------------|---|-----------|--|
| City of London         | 2004-08                 | 49                    | 2020                                | 25 (-50%)   | 55        | 11.3%                                  |
| Westminster #          | 2006-08                 | 284                   | 2018-20                             | 171 (-40%)  | 138       | -51.4%                                 |
| Camden #               | 2007-09                 | 123                   | 2018-20                             | 92 (-25%)   | 70        | -43.1%                                 |
| Islington              | 2006-08                 | 89                    | 2020                                | 55 (-38%)   | 93        | 4.1%                                   |
| Hackney #              | 2007-09                 | 131                   | 2030                                | 80 (-39%)   | 60        | -54.1%                                 |
| Tower Hamlets          | 2007-09                 | 134                   | 2018-20                             | 85 (-37%)   | 88        | -34.3%                                 |
| Greenwich #            | 2004-08                 | 120                   | 2020                                | 89 (-26%)   | 40        | -66.6%                                 |
| Lewisham #             | 2007-09                 | 116                   | 2018-20                             | 97 (-17%)   | 63        | -45.8%                                 |
| Southwark #            | 2004-08                 | 140                   | 2018-20                             | 93 (-34%)   | 69        | -50.7%                                 |
| Lambeth #              | 2004-08                 | 175                   | 2020                                | 118 (-32%)  | 98        | -43.9%                                 |
| Wandsworth #           | 2004-08                 | 137                   | 2020                                | 92 (-33%)   | 81        | -41.0%                                 |
| Hammersmith and Fulham | 2006-08                 | 110                   | 2028-30                             | 51 (-54%)   | 69        | -37.3%                                 |
| Kensington and Chelsea | 2006-08                 | 116                   | 2029-31                             | 46 (-60%)   | 69        | -40.3%                                 |
| Waltham Forest #       | 2004-08                 | 99                    | 2020                                | 66 (-33%)   | 61        | -38.3%                                 |
| Redbridge #            | 2006-08                 | 92                    | 2020                                | 68 (-26%)   | 48        | -48.0%                                 |
| Havering #             | 2006-08                 | 111                   | 2018-20                             | 74 (-33%)   | 46        | -58.6%                                 |
| Barking and Dagenham # | 2004-08                 | 66                    | 2019-20                             | 44 (-34%)   | 40        | -39.8%                                 |
| Newham                 | 2004-08                 | 92                    | 2020-21                             | 62 (-33%)   | 64        | -30.7%                                 |
| Bexley #               | 2007-09                 | 87                    | 2020                                | 61 (-30%)   | 24        | -72.3%                                 |
| Bromley #              | 2006-10                 | 133                   | 2020                                | 86 (-35%)   | 50        | -62.3%                                 |
| Croydon #              | 2006-08                 | 146                   | 2028-30                             | 110 (-25%)  | 71        | -51.5%                                 |
| Sutton #               | 2004-08                 | 71                    | 2025                                | 47 (-34%)   | 29        | -59.4%                                 |
| Merton                 | 2007-09                 | 60                    | 2018-20                             | 45 (-25%)   | 50        | -17.1%                                 |
| Kingston #             | 2007-09                 | 55                    | 2020                                | 40 (-28%)   | 39        | -29.5%                                 |
| Richmond               | 2006-08                 | 81                    | 2020                                | 27 (-67%)   | 54        | -33.3%                                 |
| Hounslow #             | 2004-08                 | 121                   | 2020                                | 81 (-33%)   | 62        | -48.8%                                 |
| Hillingdon             | 2006-08                 | 111                   | 2020                                | 82 (-26%)   | 84        | -24.3%                                 |
| Ealing                 | 2006-08                 | 132                   | 2031                                | 72 (-46%)   | 81        | -38.8%                                 |
| Brent                  | 2006-08                 | 101                   | 2020-21                             | 71 (-29%)   | 85        | -15.6%                                 |
| Harrow                 | 2006-08                 | 55                    | 2020                                | 40 (-27%)   | 51        | -7.3%                                  |
| Barnet #               | 2004-08                 | 152                   | 2020                                | 102 (-33%)  | 98        | -35.4%                                 |
| Haringey               | 2004-08                 | 100                   | 2020                                | 60 (-40%)   | 85        | -15.0%                                 |
| Enfield #              | 2006-08                 | 106                   | 2020                                | 86 (-19%)   | 52        | -50.9%                                 |

\* 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.

# These boroughs have already reached their target number of KSIs

## 3. SAFE ROADS

### High priority sites for road safety engineering

We use collision data to identify roads and junctions on the TLRN that have the highest vulnerable road user collisions. Each year a review of the previous three years of collision data is carried out to identify those locations that are most in need of a road safety intervention. We then sponsor engineering improvements at these sites. This data is shared with the boroughs so that they too can prioritise their road safety engineering programme on the borough road network.

In 2014, more than 20 collision investigation reports have been completed for high priority locations and a number of road safety schemes have been initiated through this approach. Detailed collision investigations are now under way at further high priority locations with scheme design and implementation to follow.



### 20mph limits

We have continued to work with London boroughs to support and fund the introduction of 20mph limits on borough roads and on parts of the TLRN.

In July 2014, two 20mph sites were introduced in the City of London on an experimental basis to further understand the impacts of 20mph limits in reducing speeds on the TLRN. These routes are:

- a) Blackfriars Bridge, New Bridge St, Farringdon St (up to Charterhouse Street)
- b) London Bridge, King William Street, Gracechurch Street, Bishopsgate, Norton Folgate (up to Worship Street)

Further work has gone into identifying and planning for the implementation of 20mph routes along the TLRN. These locations have been identified by taking into account collision rates, Roads Task Force street types, borough support, and existing TfL works programmes. We are working to introduce these 20mph speed limits at eight sites, including: Upper Street and Holloway Road (Between Pentonville Road and Seven Sisters Road); the Shoreditch Triangle and Commercial St (From Old Street



roundabout to Whitechapel High Street); Westminster Bridge, Stamford Street and Southwark St (Between Victoria Embankment to Borough High Street).

### **The Mayor's Cycling Vision**

A total of £913m, set out in the Mayor's Cycling Vision, is being invested in a range of schemes to protect cyclists on our roads. This includes more than 50km of fully segregated cycle ways and measures to improve HGV safety.

Work on the North-South and East-West Cycle Superhighways is due to be completed next year. The North-South Cycle Superhighway will run between Elephant and Castle and Farringdon Street and provide safer cycle routes through some of the Capital's key junctions and gyratories. The East-West Cycle Superhighway will run through central London from Lancaster Gate to Tower Hill.

We are substantially redesigning 33 locations known as 'Better Junctions'. These are the largest, highest-profile and worst performing junctions and gyratories for cyclists and pedestrians across London. They include Elephant and Castle Northern Roundabout, Old Street Roundabout, Archway Gyratory, Oval Triangle, Wandsworth Town Centre Gyratory and other key locations. The aim is not only to provide substantial cycling infrastructure improvements, but also to offer improvements for other vulnerable road users and to enhance the urban realm and create places that people will want to visit. We are committed to delivering 10 junction improvements by 2016.

In 2014, we organised public consultations at a number of locations including Oval Triangle, Stockwell Cross, Old Street Roundabout, Archway Gyratory, Elephant and Castle Northern Roundabout, Wandsworth Town Centre Gyratory and Vauxhall Cross. Construction is now under way at Oval, Aldgate, Vauxhall and Elephant and Castle.



## London Cycle Design Standards

As part of Safe Streets for London, we made a commitment to develop and re-issue the London Cycle Design Standards (LCDS), to incorporate new innovations and best practice, and to enable new initiatives.

The revised version of LCDS was published on 19 December 2014 on our website and is now recognised as the reference source for cycle infrastructure design in London, replacing the 2005 version of the document. We will keep the document up-to-date online, particularly as new schemes and innovations are developed through the Mayor's Vision for Cycling.

The standards have also been included on the DfT's 'Cycle proofing' webpage for all cycle challenge cities and local authorities across the country to refer to and use the standards.



## Pedestrian countdown signals

Pedestrian countdown at traffic signals was first introduced on London's roads in 2010. It is designed to reduce pedestrian uncertainty and allows more informed crossing decisions to be made. We have already reached the new target, set in the Pedestrian Safety Action Plan, to double the number of pedestrian countdown signals installed from 200 to 400 by the end of 2015. Following the successful and fast roll-out of countdown and its popularity, the original target has been increased to reach 800 installations by the end of 2016.

## Pedestrian and Cyclist SCOOT

In 2014, we trialed a new system called Pedestrian SCOOT (Split Cycle Offset Optimisation Technology). The technology detects the number of pedestrians waiting at a crossing, and allows a longer crossing time for large numbers of people. Following this trial, in June 2015 TfL and the Mayor announced a further development, using this technology to detect the number of cyclists travelling along a route. Using this information, the system can automatically increase the amount of

time for the cyclists to cross a junction on a green light at busy times. The Cycle SCOOT trials are measuring how effectively the technology is able to detect the cyclists, and is running on Cable Street on Cycle Superhighway 3.

### **Speed Camera Replacement Programme and average speed cameras**

We are upgrading existing safety cameras from wet film technology to digital. This is necessary to maintain the existing road safety benefits of our current safety camera network.

By the end of 2014, 160 of 419 spot speed cameras and 160 of 248 red light cameras had been upgraded to digital cameras. We are on target to replace the remaining cameras by October 2016.

In addition, the first of four trial average speed corridors began with installation on the A40 which is due to be complete and operational in October 2015. The A406, A316 and A2 will follow over the next two years, helping to further reduce the number of KSIs on these routes through improved speed management.



## **Pedestrian town centre pilots**

As part of our commitment to reduce the number of people being killed or seriously injured while walking or cycling, one of the actions in the Pedestrian Safety Action Plan was to pilot a new approach to pedestrian safety in two town centres. Our analysis shows that around 20 per cent of all incidents where pedestrians were killed or seriously injured in London between 2011 and 2013 occurred in a town centre environment. Through a data-led approach, we have identified town centres with relatively high pedestrian risk of being involved in a KSI collision, and a high absolute number of pedestrian KSIs. In July 2015, it was announced that Tooting and Peckham will be the two pilot locations. Wandsworth and Southwark boroughs are already working with us to introduce these programmes.

We will be providing a budget of up to £5m per town centre for this project. This will include physical improvements to the public realm that will enhance pedestrian safety and comfort, and also behavioural change initiatives for those using the town centre such as awareness of pedestrian safety issues.

## **New road safety audit procedure**

Following an action set out in the Safe Streets for London document, we are committed to ensuring that worldwide best practice in road safety audit is defined by London. To support this, we commissioned a detailed review of the TfL Road Safety Audit Procedure, its usage and application in London and a review of international best practice examples. The results of this report will be built into our procedures and key findings disseminated to boroughs to enable wider best practice in road safety auditing in the Capital.

## 4. SAFE VEHICLES

### Industrial HGV Task Force

In 2014 HGVs accounted for four per cent of all traffic but 38 per cent of cyclist deaths and 25 per cent of pedestrian deaths. A longer term study shows that between 2008-2014 HGVs accounted for 53 per cent of cyclists deaths. In October 2013, TfL, the Metropolitan Police Service (MPS), City of London Police and the Driver and Vehicle Standards Agency (DVSA) joined forces to create the Industrial HGV Task Force. The aim was to crack down on non-compliant HGV operators and drivers in the Capital. In 2014, 2,928 vehicles were stopped, and 1,174 fixed penalty notices were issued for roadworthiness, mechanical problems, driver offences or for the condition of the vehicle's bodywork and equipment, and 25 vehicles were seized.

In addition to the HGV Task Force, the City of London Police Service Commercial Vehicle Unit has been created, which is fully funded by TfL. Operating in the square mile of the City of London, officers on a range of transport including motorcycles and pedal cycles have stopped 5,000 vehicles including cars, vans and HGVs. More than 800 PG9s and over 800 fixed penalty notices have been issued, and 46 vehicles not suitable to be on the roads were seized.

Owing to the intelligence used when targeting which vehicles to stop, almost three quarters of the stops made have found the vehicles to be unsatisfactory in some way. The most common issues found relate to exceeding driver hours, insecure loads, oversized or overweight vehicles, insurance and licensing, and a range of mechanical issues.



## Safer Lorry Scheme

The Safer Lorry Scheme, designed to improve cyclist and pedestrian safety, is the result of collaboration between TfL, London Councils and Heathrow Airport. The scheme legally requires every vehicle in London weighing more than 3.5 tonnes to be fitted with:

- Class V and Class VI mirrors, giving the driver a better view of cyclists and pedestrians around their vehicles
- Side guards to protect cyclists from being dragged under the wheels in the event of a collision

The relevant Traffic Regulation Orders made by TfL, London Councils and Heathrow Airport went live on 1 September 2015. From this date, the scheme will be enforced by the MPS, City of London Police and the DVSA through their role in the Industrial HGV Task Force.

'Safer HGV Zone' signs are being installed at the Low Emission Zone boundary, and extensive communications are under way to ensure all lorry drivers and owners who may operate in London are informed and have sufficient time to make appropriate modifications to vehicles. The success of getting the scheme up and running is an excellent example of how we are working in partnership with other organisations to deliver road safety improvements.



MAYOR  
OF LONDON



London  
Councils



LONDON  
COUNCILS



METROPOLITAN  
POLICE



CITY OF LONDON  
POLICE



TRANSPORT  
FOR LONDON



EVERY JOURNEY MATTERS

## HGV safety technology

In December 2013, TfL and the industry published new Construction Logistics and Cycle Safety (CLOCS) standards. These standards represent a ground-breaking approach that will lead to more construction vehicles being fitted with side guards and blind spot vision equipment, and more drivers being trained to consider the safety of vulnerable road users.

In September 2014, CLOCS Manager was launched. This is an online collision reporting and analysis tool that is fully supported by the insurance industry. Despite its recent launch it is already being used by more than 100 companies.

In February 2015, 15 new and modified vehicles were unveiled, demonstrating much improved driver vision. Since CLOCS was started, more than 17,500 vehicles have been retro-fitted with important safety features, including side guards, blind spot minimisation equipment and left turn audible warnings.



## Fleet Operator Recognition Scheme

We continued to promote the Fleet Operator Recognition Scheme (FORS) to improve the safety performance of fleets that operate in London. In November 2014, we included clauses in our contracts with suppliers about Work Related Road Risk (WRRR), to ensure all supplier contracts are fully aligned with CLOCS and FORS. We are stepping up our compliance monitoring by recruiting a new compliance team to advise and monitor suppliers, in addition to the monitoring of quarterly certification sent in by suppliers. This TfL team will work with the GLA, other public sector organisations and the CLOCS community to help them adopt our approach.



## **Bus technology trials**

In 2014, we trialled a technology that could be fitted to London's buses that helps to detect cyclists and pedestrians. Following this, a new project is being planned to determine the role of safety technology in preventing vulnerable road user injury on London's roads.

Our trial of Intelligent Speed Assistance (ISA) on buses was launched in June 2015. The technology, which limits vehicles to the speed limit of the road on which it is driving, is being fitted to all 47 buses on routes 19 and 486. These routes include a variety of different road environments, with differing speed limits, which will allow the new technology to be fully tested.

The trial will allow us to understand the effectiveness of ISA in promoting speed compliance across the road network, and therefore improving safety. The trials, which run until autumn 2015, will also seek to understand the attitudes that drivers and passengers have towards the technology.

In European research, ISA has been shown to improve road safety by reducing incidences of speeding for all road users, allowing drivers to focus on looking out for potential issues on the road rather than checking their speed limit. If this trial confirms that this technology could be beneficial to the safety of London's roads, it could be introduced across all of the Capital's 8,700 buses.



## 5. SAFE PEOPLE

### **Roads and Transport Policing Command**

In January 2015, TfL and the Metropolitan Police Service (MPS) launched the Roads and Transport Policing Command (RTPC), a single police command created to further improve the safety and security of London's roads, bus network and other surface transport services. With more than 2,300 officers, the RTPC is the largest single police command in the UK.

Operation Safeway was launched on the 25 November 2013 to address the increase in cyclist deaths on London's roads and growing public concern. Officers from the RTPC, which is part funded by TfL, are deployed at key junctions across the Capital, enforcing road safety and giving advice to all road users during rush hours. The targeted operations have raised awareness of road safety among all road users, providing a balanced operation which reminds everyone of their duty to take care of each other while out on the roads.

During 2014, Operation Safeway was in action on at least two days every month. On each day, there was an average of approximately 400 police officers deployed, and on occasion there were as many as 1,000. More than 20,000 Fixed Penalty Notices (FPNs) have been issued since Operation Safeway began for offences such as: contravening traffic signals; using a mobile phone while driving; using a pedal cycle without lights at night; careless driving; and failing to wear a seatbelt.

Of the FPNs issued, around three quarters were issued to motorists, and a quarter issued to cyclists. The most common offences where motorists were issued FPNs are contravening traffic signals (this would include crossing an advanced stop line), using a phone while driving and failing to wear a seatbelt. The majority of cycling FPNs were issued for contravening traffic signals, cycling on the footway, and using a pedal cycle without lights.

### **Drug driving**

The RTPC is committed to catching those that choose to put others at risk by driving under the influence of drink or drugs. In March there were changes in legislation that now make it possible to obtain evidential samples for drug testing at the road side. The RTPC is working with TfL to trial different devices type approved by the Home Office to evaluate their long term viability for enforcing against drug drivers.

### **20mph speed awareness course**

To support the roll-out of 20mph speed limits in London, TfL and the MPS have worked with suppliers to make a speed awareness course available for drivers who have been found to have breached the limit by a relatively small margin. This course aims to reduce the speed at which people drive by encouraging them to alter their attitudes and behaviours towards excessive or inappropriate speeds. More serious offences will still be dealt with via FPNs or a court summons.



## **Exchanging Places**

Exchanging Places is an initiative that educates cyclists and HGV drivers about the common causes of collisions between the two modes. It has won the Prince Michael International Road Safety Award in the Education and Training category, and is highly acclaimed by the industry and by the people taking part. Since May 2014, more than 4,800 people have taken part in around 100 events. By the end of the year every borough will have held these events.

## **Road safety campaigns**

Road safety campaigns in 2014 continued to promote the message that behaviour change across all road users is needed. This balanced approach ensured maximum cohesion, integration and effectiveness were achieved. In 2014, safety campaigns were aimed at young drivers, motorists, teen pedestrians, and motorcycle and cyclists.

The Share the Road campaign has continued to be successful in encouraging greater empathy and respect between road users.

## **Children's Traffic Club**

The Children's Traffic Club is a programme run for three to four-year-olds within nurseries and pre-schools across the Capital. It uses interactive resources to introduce them to road safety and help them to learn the necessary skills needed to take care of themselves while travelling. A total of 91,049 pre-school children enrolled during 2014/15, with 45,945 registering from high deprivation boroughs and black, Asian and minority ethnic groups. This is of particular importance because children from these backgrounds are disproportionately represented in collision statistics.

Children's Traffic Club is followed up with additional education resources for children aged five to seven. The A-Z of Traffic Tales brings together all relevant road safety messages, along with personal, social, emotional and citizenship issues. For children aged between seven and 11 Just a Journey is a road safety resource that

encourages safer attitudes and behaviours among children at a time when their independence and responsibilities are increasing.

### **Junior Travel Ambassador (JTA) scheme**

The JTA scheme is a free resource available to all primary schools in London. It encourages peer-to-peer engagement to promote road safety and active, independent travel within the school community in a fun and engaging way. An important part of JTA's work is to promote safe independent travel to fellow Year 6 pupils, and their parents, as they prepare to start secondary school. In many cases this is when children start travelling independently for the first time and complete longer journeys. The JTA scheme is now being run in more than 650 primary schools, with over 1,800 ambassadors delivering road safety messages.

### **Youth Travel Ambassador (YTA) scheme**

The YTA is the secondary school equivalent of the JTA scheme. It is a pupil-led education project aimed at young people aged between 11 and 19 years. The project is targeted predominantly at secondary schools and sixth form colleges where groups of around 12 students are appointed to represent their peers and their school community. YTA teams research, develop and deliver bespoke education campaigns to their school's community that are delivered in a variety of ways, including films, posters and assemblies, to highlight road safety messages to their peers.

There are currently 131 secondary schools involved, with more than 1,100 youth travel ambassadors representing their 124,000 peers.

### **Education and training activities**

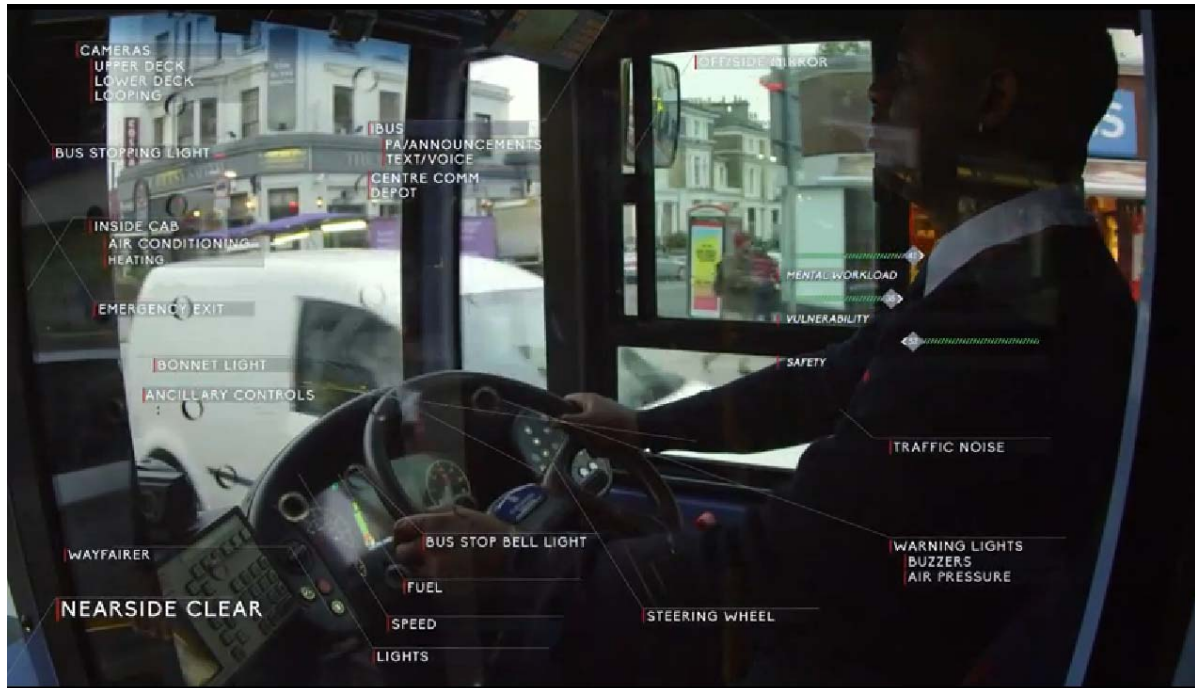
There are now 1,375 schools on the STARS (Sustainable travel: Active. Responsible. Safe) accreditation scheme for schools (45 per cent of London schools). Five hundred of these are secondary schools and this is increasing with the support of the YTA scheme. A total of 23,000 pupils are achieving both Level 1 and Level 2 BikeAbility training and 8,297 adult cyclists are receiving cyclist training. We are working with a number of boroughs to promote BikeAbility Plus pilots to expand the reach of this training.

In September 2014, we launched our Business Engagement initiative Cycling Workplaces. This is a London-wide initiative aimed at improving cycle safety through workplace interventions and employees. The initiative includes offering on-site cycle safety seminars, cycle safety checks, cycle training sessions and distributing cycle safety information and maps. Between April 2014 and March 2015, 259 London employers were engaged.

We are also working with then boroughs to promote BikeSafe-London, offering sponsored Rider Skills Days to motorcycle riders who live, work or study in their borough.

## In The Zone bus driver training programme

As part of the Mayor's objectives to make the streets a safer place for cyclists and vulnerable road users, we have been working closely with London's bus operators to develop a new type of training for bus drivers. Called In the Zone, it encourages greater awareness of the human factors and driving behaviours that lead to accidents. The aim is to train all of London's 24,500 bus drivers.



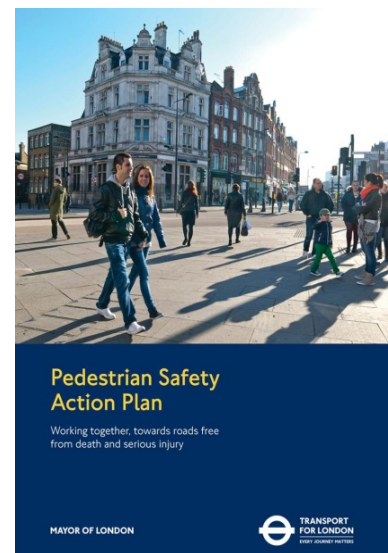
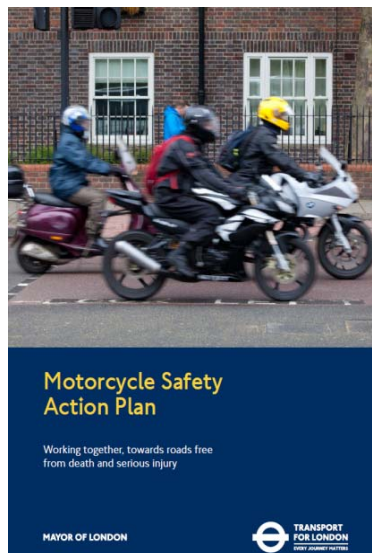
## 6. DELIVERING IN PARTNERSHIP

### Vulnerable road user action plans

To ensure that London's road safety programme is focused on protecting the most vulnerable users, TfL and the Mayor have created three specific action plans to address the safety of pedestrians, cyclists and motorcyclists respectively.

In March 2014, we published the Motorcycle Safety Action Plan. Drawing on best practice from across London, the UK and Europe, the document outlines 29 key actions that will directly target the key factors that lead to motorcyclist casualties. In the past year we have: started to create a motorcycle design handbook and associated training; been promoting the use of personal protective equipment (PPE) at the Motorcycle Show and British Superbike Championships; targeted enforcement in Lambeth, Westminster, Southwark, Wandsworth, and Hammersmith & Fulham.

The Pedestrian Safety Action plan was published in July 2014 following consultation in the spring. There are 31 actions, including: innovative trials of collision detection software and Intelligent Speed Assistance technology on London's buses; a commitment to double the number of pedestrian crossings operating 'pedestrian countdown'; and an updated digital speed limit map for London to spur innovation, revolutionize speed management and improve driving technology.



We published a new Cycle Safety Action Plan in October 2014, building on the previous plan released in 2010. This action plan contains 33 new actions that we, the MPS, London boroughs and other organisations will work together to deliver between now and 2020. The actions include: delivering the major infrastructure programmes outlined in the Mayor's Vision for Cycling, emphasising the importance of cycle safety on the Capital's roads; working with regulators and the automotive

industry to explore how improvements to HGV design could further protect cyclists, such as increased direct visibility in cabs, the independent evaluation of blind spot safety technology to help inform HGV operator buying decisions; and doubling the number of adult cyclists receiving advanced skills training by creating a dedicated London Virtual Skills Hub.

### **Working with the boroughs**

We held our first annual road safety conference in January 2014. And in February 2015, we hosted the event for the second time. The events focus on working in partnership, not only with the boroughs but also the emergency services and road safety interest groups. Talks from TfL, the boroughs and the MPS provided best practice examples of working together to improve road safety and these were backed up with problem-solving workshops using real-life examples to identify areas where everyone can work together to drive down casualties.

This year we have offered free MAST training to all borough officers. MAST is an online road safety analysis tool that uses collision data and socio demographic profiling to support an intelligence-led approach to road safety. MAST allows the analysis of variables otherwise difficult to directly relate to one another. It is a web-based tool that gives boroughs free access to analyse road safety statistics within their borough and wider areas.

### **Lobbying for road safety Improvements**

Lobbying for national and European regulatory and legislative change is an important part of our work in making our roads safer. By working with the DfT, European Commission and industry, we have generated significant momentum in the development of safer vehicle design. We will continue to lobby to get these changes mandated. We are encouraging the European Commission to accelerate the take-up of advanced vehicle safety technology, such as Intelligent Speed Assistance and Pedestrian Autonomous Emergency Braking. We will look for opportunities to work with other UK and European cities in order to maximise its lobbying impact.

We have campaigned for a mandatory and meaningful road safety element in training programmes for commercial drivers and there has been significant progress on this too. We are also asking the DfT for more flexibility in allowing us to make decisions about signals, signage and road markings in London, and for the updated TSRGD to be published.

### **Road safety research**

To further understand collisions and casualty causation factors, trends and dynamics we have a programme of continuing road safety research. This includes projects investigating the trend in increasing slight injuries to road users since 2007; establishing the level of technologies in London's car fleet; and the potential casualty savings from Intelligent Speed Assistance technology and Pedestrian Autonomous Emergency Braking.

## 7. 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.

Safe Streets for London investigated collision and casualty figures and added to this analysis with a deeper understanding of risk.

Analysis of risk controls for changes in mode shares and helps to normalise for different levels of exposure between road users and helps identify where road user risk is owing to user behaviour and the road environment, among other factors.

The analysis and publication of road user risk profiles in the Road Risk and Vulnerable Road User Working Paper<sup>1</sup> has been refreshed here to include changes in risk over time.

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 6 shows the number of vulnerable road users killed or seriously injured for every billion passenger kilometres travelled in London in April 2010 to March 2014, the most recent data available, compared with April 2006 to March 2010. This shows that there has been a statistically significant reduction in KSI risk among vulnerable road users with KSI risk having fallen by about 18 per cent between these two time periods.

**Table 6: Change in KSI risk by vulnerable road user and time period**

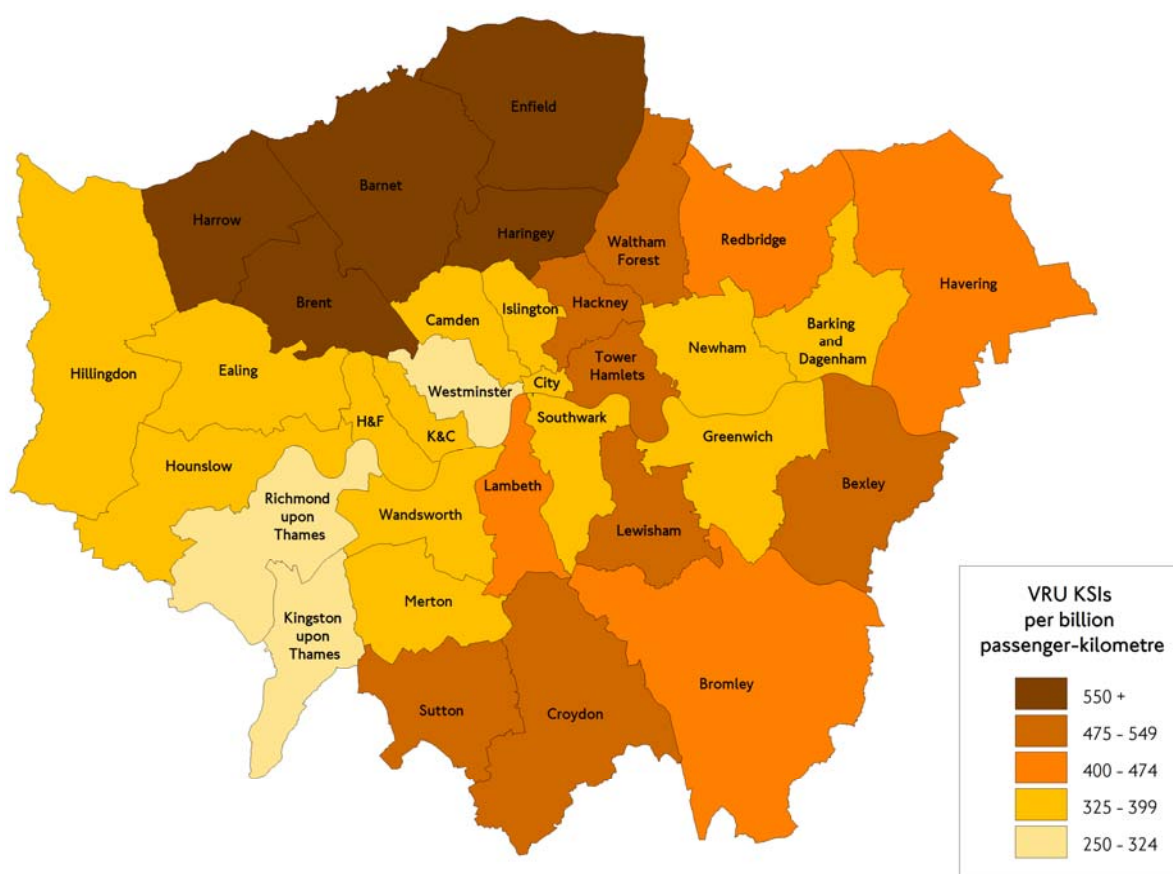
| User Group                         | KSI casualties<br>per billion passenger-kilometre |                        | Change      |
|------------------------------------|---|------------------------|-------------|
|                                    | Apr 2006<br>- Mar 2010                            | Apr 2010<br>- Mar 2014 |             |
| Pedestrians                        | 299   | 241                    | -19%        |
| Pedal cyclists                     | 740   | 677                    | -9%         |
| Powered two-wheeler                | 2026  | 1551                   | -23%        |
| <b>Vulnerable road users (VRU)</b> | <b>484</b>  | <b>397</b>             | <b>-18%</b> |

<sup>1</sup> <https://tfl.gov.uk/corporate/safety-and-security/road-safety/safe-streets-for-london>

### 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. Note that these risk figures have a level of uncertainty (see figure 4) so in some cases apparent differences may not be statistically significant at a sufficient level to merit action. This is particularly the case for the London borough of Harrow.

**Figure 3: Heatmap showing KSI risk for vulnerable road users by borough (April 2008 to March 2014)**

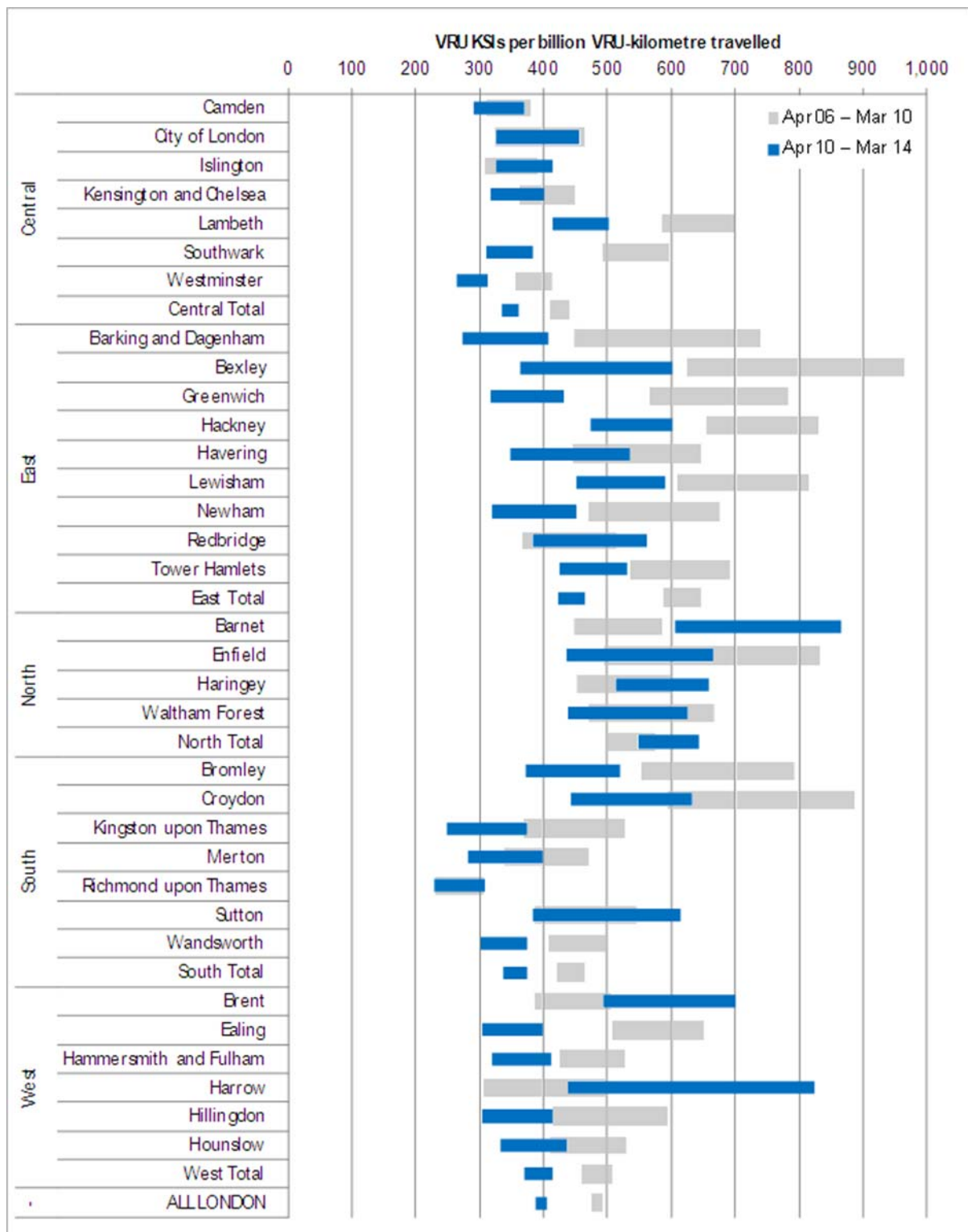


### Risk to vulnerable road users by London borough over time

Risk can be monitored over time; each borough has had two consecutive four-year period casualty rates calculated. This information is plotted in Figure 4 using horizontal bars that represent confidence intervals. The more data that is available, the more confident we can be with the estimation of risk, and the shorter the bar will appear on the chart. This explains why the confidence interval is smaller in London overall than it is for individual boroughs. The blue bars correspond to the most recent time period whereas the grey bars represent the older period. For a given borough, where there is no overlap between two bars, we can be confident that the level of risk has changed. Figure 4 indicates that most boroughs have become significantly safer in recent years.



**Figure 4: KSI risk to vulnerable road users by borough and time period, with 90 per cent confidence intervals, controlling for changes in mode share Heatmap**



## **Open data**

The analysis of risk in London is not limited to examining casualties at the KSI level. The risk of slight casualties or a fatality can also be calculated. We are looking for ways to make more of such data available to stakeholders and the public, offering them the opportunity to examine risk figures by severity, year, town centre, London sub-region, time of day, day of the week, age and gender.

Data on the people injured on London's roads in 2014 is now available at [www.tfl.gov.uk/corporate/publications-and-reports/road-safety](http://www.tfl.gov.uk/corporate/publications-and-reports/road-safety).

## **How risk information is being used**

We use risk figures alongside absolute casualty figures to prioritise interventions and identify where the most casualty reductions can be made. We also use this wide range of data analysis to monitor the effect of these interventions. Engineering, education, training, marketing and enforcement campaigns are taking advantage of this additional level of intelligence to better target locations or age groups.

Among other sources of information, casualty rates are used in the borough engagement process, as they help identify if a particular user group is over-represented in casualty statistics in an individual borough.

## **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 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 [enquire@tfl.gov.uk](mailto:enquire@tfl.gov.uk).

Data extract files giving attendant, casualty and vehicle information, and other reports, are available at [tfl.gov.uk/roadsafety](http://tfl.gov.uk/roadsafety).

## 8. 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 casualty reductions for KSI casualties for pedestrians and pedal cyclists in 2014 were very positive but the increase in the overall number of motorcyclist injuries is an area of continuing concern. We continually monitor casualty trends in London and target activity at the most important locations and user groups and will adapt our road safety programme accordingly.

This annual report has provided an update on the wide range of road safety activity that is under way and illustrates how it will support progress towards the new 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.