
A STEP CHANGE FOR VISION ZERO IN LONDON

The ambition to eliminate deaths and serious injuries on London’s roads by 2041 is under threat, especially for the most vulnerable people on streets – those walking, cycling and riding motorcycles.

Action Vision Zero urges the candidates for the 2020 Mayoral elections to commit to bold, far-reaching and connected policies to end road danger and transform London’s streets into safe, healthy and thriving places where people want to spend time. At its heart, Vision Zero must be about tackling the source of danger; the number and nature of motor vehicles on our streets and the harm they cause.

ACTION VISION ZERO MANIFESTO ASKS

Vision Zero is a wide-ranging ambition that demands action and collaboration across a range of policy areas. As such, Action Vision Zero supports the calls from organisations including London Cycling Campaign, Living Streets, Sustrans and RoadPeace for safe streets and a fair balance for all road users. Action Vision Zero’s particular focus is on:

Less traffic. Research now underlines the link between the amount of traffic on our streets and the number of people injured. Less traffic must be a key tool in the Vision Zero armoury, with the traffic reduction targets in the Mayor’s Transport Strategy now integral to its Vision Zero policies.

Cultural change. Unlike air pollution or climate change, London’s road danger crisis has struggled to be at the forefront of politicians’ and communities’ minds. Vision Zero must be part of decision-making across the GLA including housing, planning, environment, regeneration and health as well as transport. This requires joined-up thinking to link Vision Zero with healthy streets, active travel, air pollution and the climate emergency.

Safe speeds. The time has come for a 20mph default speed limit across London. This requires TfL to use Local Implementation Plans to enable all boroughs to adopt default 20mph limits, in particular in town centres and to deliver comprehensive measures to ensure compliance with 20mph limits. This includes a London standard for working vehicles by 2024, mandatory speed limiters on all working vehicles and a programme of enforcement, all supported by road engineering that limits the speed of vehicles.

Main roads. Almost two-thirds (64%) of collisions where people are killed or seriously injured occur on London’s main ‘A’ roads. TfL and the boroughs must redouble their efforts to deliver safe speeds in these locations along with safe crossings, world-class cycling infrastructure, all carefully integrated with public transport.

1 In 2018, in its Vision Zero Action Plan, TfL announced an interim target to reduce death and serious injury by 65% (from the 2005-09 average) by 2022. While its 2022 targets are within reach for vehicle occupants, they will be far harder to achieve for those cycling, walking and using motorcycles. In 2018, a total of 4,065 people were seriously injured or killed on London’s roads, including 1,366 people on foot (almost twice the 2022 target of 712), 782 people cycling (three times the 2022 target of 260) and 1,080 motorcycle riders (double the 2022 target of 492).
ACTION VISION ZERO MANIFESTO ASKS TO MAYORAL CANDIDATES – SUMMARY
(for full details see pages 4 to 7)

1. Less Traffic. Research shows the link between traffic volumes and the numbers of people who are seriously and fatally injured on our roads and the potential positive impact of reducing traffic volumes. This will be most effectively delivered by distance-based road pricing across London and trials of this should occur during the next Mayoral administration. But London requires faster action, so we propose a range of policies including the expansion of the ULEZ to all 33 London boroughs and enabling local borough-based Congestion Charging in the meantime to deliver a minimum of 10% reduction (from the 2015 baseline) in traffic volumes by 2024.

2. Safe Speeds. London needs to move to a default 20mph limit and improved compliance with lower speed limits. This includes:
   a) Use of Local Implementation Funding to enable boroughs to adopt 20mph default speed limits.
   b) 20mph limits in all town centres and High Road locations (including the TfL Red Route Network (TLRN)) enforced by speed and red-light cameras.
   c) Testing of average speed cameras on 30mph and 20mph roads.
   d) Enhanced officer enforcement (by PCs and newly empowered PCSOs) at high-risk locations; supported by Community RoadWatch.
   e) Roll-out of mandatory speed limiters on all London buses and working vehicles across London.

3. Safe Cycling. As called for by the London Cycling Campaign, delivery of at least half of the Strategic Cycle Connections (top, high and medium potential connections) identified in the Strategic Cycling Analysis by 2024 along with a programme of Low Traffic Neighbourhoods and backed by 20mph default speed limits.

4. Safe Freight. A fund for delivering borough-led sustainable freight strategies to increase use of cargo/e-bikes. This covers large, existing logistic companies, new last-mile logistic companies and SMEs or sole traders to deliver products or carry equipment (e.g. bakers, plumbers). This will be further aided by improvements to HGV safety through the TfL Safe System approach and Direct Vision Standard.

5. Safe Crossings. People walking are most at risk when trying to cross the road. Their safety relies on a range of policies that will enable them to cross safely at junctions, existing crossings and other busy locations and desire lines where no formal crossings currently exist.

6. Motorcycles. Motorcycle riders are at great risk on London’s roads themselves and pose excessive risk to people on foot. Policies to reduce danger from and to motorcycles include charging motorcycles within the existing Congestion Charge zone and in any new road pricing schemes, emissions-based parking charges and higher levels of rider training especially for food delivery riders.

7. Enforcement & Traffic Justice. The close working of TfL and the Metropolitan Police is a core strength for reducing road danger in London and the Vision Zero Action Plan envisages a step-change in levels of enforcement. Our proposals aim to ensure enforcement supports Vision Zero as effectively as possible.

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2 Excluding trunk roads
The Action Vision Zero manifesto comprises three sections:

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<td>4</td>
<td>2. A Step-change for Vision Zero: what is needed. The detailed asks that Action Vision Zero is proposing to address these dangers along with their estimated impact (where that can be quantified) if implemented.</td>
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1. Serious and fatal injuries on London’s roads: the current position.

- Using the back-estimated figures from TfL (reported in Travel in London 12³), it is clear from the 2018 data shown in the chart below that a step-change is required in the delivery of Vision Zero particularly in relation to the numbers of pedestrians, people cycling and motorcycling who are killed or seriously injured. The numbers of people killed and seriously injured on London’s roads needs to fall dramatically if the targets for 2022 and for 2041 (of zero fatal and serious injuries) are to be achieved.

Chart 1. Progress towards the 2022 Mayor’s Transport Strategy (MTS) targets – fatal and serious injuries on London’s roads

- Overall, the picture is one of the 2022 target of a 65% reduction in the numbers of those killed and serious injuries being achievable for vehicle occupants but currently not being feasible for people cycling, walking and motorcycling.
- The performance of each of the individual boroughs in relation to road safety is summarised in a series of Borough Fact Sheets that TfL has produced⁴.

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⁴ https://tfl.gov.uk/corporate/publications-and-reports/road-safety (Borough fact sheets)

Action Vision Zero Mayoral Elections 2020 Manifesto Asks in Detail. We call on the Mayoral candidates to implement the following policies during the next administration in order to achieve the 2022 Vision Zero target by the end of their administration in May 2024.

1. Less Traffic. As outlined in Appendix 4, reducing traffic volumes reduces exposure to road danger and the risk of injury. The adopted Mayor’s Transport Strategy (MTS) envisages declining traffic volumes; however, traffic volumes across London and in particular in Outer London are increasing. Ideally in the longer term reduced traffic volumes will be delivered by the introduction of next generation road pricing for the whole of London (as mooted in the adopted MTS) and trials of road user charging should take place during the 2020-24 Mayoral administration. However, without the introduction of road pricing in its entirety in the next 4 years, we propose a reduction in traffic volumes in London (excluding trunk roads) of a minimum of 10% (compared to the MTS target of a reduction of 11.4% by 2024) using the following measures:

a) The expansion of the ULEZ to all 33 London boroughs (estimated 3% traffic volume reduction).

b) Encouragement for boroughs to introduce local Congestion Charge – projected take up by 2024 of 1 borough per year from 2022 = 3 boroughs by 2024; estimated per borough traffic volume reduction of 20%.

c) Owing to the potential of improvements in public transport to reduce the numbers of people who are seriously and fatally injured, improve as a matter of urgency Public Transport Access Levels (PTAL) levels in high pedestrian risk, high place function locations in Outer London.

d) The introduction of measures to address the proliferation of PHVs across London where it is understood that there are now some 108,000 licensed minicabs. This proliferation is contrary to all of the measures that TfL is seeking in the MTS and through its Healthy Street agenda.

e) Safe Residential Streets. So that main roads traffic is not displaced onto residential roads and to address the 28.1% of serious and fatal injuries which occur on these roads, we propose the rapid and comprehensive roll-out of Low Traffic Neighbourhoods across London as pioneered by Waltham Forest and now being explored by a number of other boroughs. We propose that TfL sets up with immediate effect a specific and significant Low Traffic Neighbourhood (LTN) Fund to facilitate boroughs to design and deliver borough-wide LTN programmes (potentially this could be part of an expanded Liveable Neighbourhood programme).

Estimated reduction in the number of people who are fatally and seriously injured in 2024:

- From London-wide and borough-specific interventions (a-d above), a total of 252 (107 pedestrians, 61 people cycling and 84 motorcyclists) – representing 8% of the people who were fatally and seriously injured in 2018.
- From safe residential streets and Low Traffic Neighbourhoods (e above) 326 (138 pedestrians, 79 people cycling and 109 motorcyclists) – representing 10% of the people who were fatally and seriously injured in 2018.

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5 Where potential casualty savings are quantified, these represent an estimate of the proportion reduction in current fatal and serious casualties (typically of vulnerable road users but in some situations (e.g. protected cycle lanes) of a specific mode) in 2024 from the 2018 levels. It is assumed that ongoing improvements to vehicle safety will continue to reduce casualties amongst vehicle occupants to at least target levels and that TfL’s Bus Safety Standard will deliver casualty savings to targeted levels for bus occupants. For the detail on the estimated impacts of interventions proposed below, see Appendix 3 and for the rationale as to their impact, see Appendices 1, 2 and 4

6 NB based on the research that we have identified and outlined, we are estimating that each 1% reduction in traffic will result in a 1% reduction in the number of people who are seriously and fatally injured

2. Safe Speeds. Wider 20mph limits and improving compliance with lower speed limits. 20mph limits are a key component of safer streets BUT a) wider 20mph limits are needed and b) the maximum speeds on them need to be reduced to much closer to 20mph. We propose:

- To ensure that LIP3 enables and more clearly encourages all currently non-20mph boroughs to adopt a 20mph default speed limit (with appropriate exceptions for arterial roads).
- 20mph Town Centres. Identification of all high-risk town centre and high road/street locations across London and accelerated delivery of TfL Lower Speeds Toolkit/Town Centre Pedestrian Safety schemes to develop interventions which limit general traffic to a maximum of 20mph. Many of these are covered in Safe Crossings below and flow from the TfL Lower Speeds Toolkit.
- Enhanced (police and potentially local authority) officer enforcement at high-risk locations.
- Roll-out (as planned) of mandatory ISA on all London buses (along with the other elements of the Bus Safety Standard). Use of 15mph speed limits encouraged in high-risk pedestrian locations/other locations of high pedestrian and cyclist usage and public transport interchanges.
- Development and roll-out of a standard for vehicles that are working in London which would envisage mandatory Intelligent Speed Assistance (ISA) to be fitted on all working motor vehicles (including taxis, PHVs, HGVs, Council vehicles, car share/club vehicles, delivery vans and other working vans) in London by 2024 (either through purchase of new ISA enabled models (post 2022) or retro-fitting earlier models).

Estimated reduction in the number of people who are fatally and seriously injured in 2024 is 565 (298 pedestrians, 116 cyclists and 152 motorcyclists). This figure of 565 represents 17% of the people who were fatally and seriously injured in 2018.

3. Safe Cycling. The core requirements for safe cycling that a growing and diverse range of people will want to take up are: a) a network of protected cycle routes, b) the development of Low Traffic Neighbourhoods and c) 20mph default speed limits. Action Vision Zero proposes the delivery of at least half of the Strategic Cycle Connections (top, high and medium potential connections) identified in the Strategic Cycling Analysis by the end of the next Mayoral term.

Estimated reduction in the number of people cycling who are fatally and seriously injured in 2024 in totals 464 (274 cyclists, 136 pedestrians and 54 motorcyclists) - 14% of the people who were fatally and seriously injured in 2018.

4. Safe Freight. We propose that TfL sets up a fund for boroughs to bid for the development and delivery of sustainable freight strategies that shift the vehicles moving freight from large motor vehicles (HGVs and LGVs) to cargo/e-bikes (which will have less kinetic energy than a motor vehicle and can now carry up to 2,500L volumes and 300kgs). This would aim to facilitate: a) large and established logistic companies switching to cargo bikes for the last mile section, b) new logistic companies that focus on the last mile sector and solely or mostly use bikes and c) SMEs or sole traders using bikes to deliver their products or carry the equipment needed for their services (e.g. bakers, plumbers). This will be further aided by improvements to HGV safety through the TfL Safe System approach and Direct Vision Standard. Casualty savings are included in 20mph limits, improving compliance and standards for working vehicles.

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http://content.tfl.gov.uk/strategic-cycling-analysis.pdf (page 53; fig 5.1)
5. Safe Crossings. The vast majority of injuries to people on foot occur when people are crossing the road. This is highlighted in the concentration of injuries to pedestrians in town centres and along High Roads\(^9\). A large number of actions are needed to make crossing the road safer for people on foot in London:

- Addressing the a) 239 signalised junctions across London where there is no pedestrian crossing provision, b) the 902 out-of-date Pelican crossings\(^{10}\), c) continuing to roll out Countdown Indicators (currently provided on only 1,400 (out of 6,400) signalised crossings) and d) signalised junctions where one or more arms do not have pedestrian crossing facilities (unknown number).
- Reducing ‘wait times’ for pedestrians at signalised crossings and implementing the new, more accurate DfT assumed walking speeds to crossing timings of 1 metre/second (m/s) rather than the current 1.2 m/s. Ideally the speed would be 0.8m/s, however, in order to provide safe crossing facilities for people with limited mobility.
- Ensuring roads are easy to cross through a) frequent/regular provision of formal crossings (signalised/zebra) throughout the length of busy roads, b) direct and single-phase (rather than staggered) crossings and c) consideration of innovations such as i) closing off side road junctions to motor traffic (filtered permeability), ii) zebra crossings at side road junctions (Manchester Beelines), iii) Copenhagen crossings (continuous footways) and iv) the creation of pedestrian crossings adjacent to bus stops (where there is no other formal crossing nearby). Estimated reductions of the number of people who are injured are included within 20mph town centres.

6. Motorcycles. As we have seen, serious and fatal injuries to people riding motorcycles are a particular problem in London, reflecting both their generally high power-to-weight ratio and the lack of protection to riders. It is not clear how the numbers can be reduced fully to target levels although it is evident from manifesto asks 1 to 3 above that inroads can be made. Consideration should also be given to:

- Appropriate charging for motorcycles; this would include their being included in any future road pricing scheme and their inclusion in existing Congestion Charging schemes.
- On-street parking charges commensurate with the space motorcycles take up and, in relation to emissions-based charging, costs that are linked to those levied on other motor vehicles.
- A dedicated 2-wheel based police enforcement team that operates on high risk arterial commuter routes (including TLRN) and a focus for the new generation mobile speed cameras on motorcycle enforcement on main roads.
- As outlined in the Mayor’s Transport Strategy, enforcement action against the loudest vehicles.
- Working with the (food) delivery companies to ensure higher levels of training prior to undertaking work and a greater duty of care for the welfare of delivery riders.
- Design changes to main route roads to reduce the risk of right turns across the path of motorcycle riders – removing turns or designing safer facilities (including better street lighting).

\(^9\) See Appendix 5
\(^{10}\) where the Green Man authorising people to start crossing starts flashing with pedestrians still on the carriageway and simultaneously the motor traffic signals switch to flashing amber.
7. Enforcement & Traffic Justice. The Metropolitan Police (MPS) and TfL work together closely through the Roads & Transport Policing Command (RTPC) and the TfL Vision Zero Action Plan was notable for RTPC commitment to Vision Zero; this included a new three-tier approach to roads policing across London along with increased investment in camera-based enforcement. Proposals are made below to build on this and ensure that enforcement is effective in supporting other Vision Zero policies.

- **Priority and joint plan.** TfL needs at least to maintain its investment in the MPS RTPC. This should include the MPS Cycle Safety squad which is now only a fraction of its former size.

- **Harm reduction.** Road traffic offences which pose the greatest risk to others will be prioritised. This includes speeding, red light running, mobile phone use by drivers, careless and dangerous driving, drink and drug driving as well as uninsured and disqualified drivers.

- **Speed.** Speed enforcement plays a key role in reducing crash risk and severity and intimidation. Speed enforcement needs to be expanded with:
  - PCOSs empowered to give speeding tickets and the potential for boroughs to adopt some speed enforcement responsibilities.
  - Police trained on the importance of speed reduction.
  - Community Road Watch programmes supported with training, resources and awards.
  - Drivers speeding near pedestrian crossings to be prosecuted at court, including with dangerous driving, as in West Midlands.

- **Transparency.** TfL, MPS and the City of London Police now publish annual statistics on local enforcement activity with sanctions outlined by borough. This practice could be improved with:
  - Preliminary statistics produced on a quarterly basis, as road casualty statistics are. Annual reports will continue to be based on finalised data.
  - Road traffic crime dashboard to be developed, as the Mayor’s Office for Policing and Crime (MOPAC) has with other crimes.
  - Statistics shared and discussed at local community meetings with police and councillors — where other crime is discussed.
  - The inclusion of enforcement activity hours by borough, data on close passing operations, RoadSafe reports, motor vehicles confiscated, London Freight Enforcement Partnership and Exchanging Places activity.
  - Outcomes of investigations into fatal and serious injury collisions.
  - Activity and data continue to be shared via police press releases and twitter.

- **Accountability.** The MPS and TfL have recently introduced an Enforcement Stakeholder Advisory group. This should be continued and developed with:
  - Agreed clear enforcement key performance indicators.
  - An annual review, ideally in a public meeting.
  - Agreed point of contacts for community liaison within each borough for queries and requests for additional enforcement.
  - Police surveys to include confidence in police keeping vulnerable road users safe.

- **Collision investigation.** The MPS will continue to demonstrate best practice in fatal and serious injury investigation. And investigation will continue to contribute to prevention of future deaths.

- **Criminal prosecution.** For London to be the safest city in the world requires unsafe drivers to be taken off our roads. TfL will continue to call for national reform of road traffic offences so that they better support active travel. TfL will also advocate greater use of driving bans and wider use of vehicle confiscation, including for offences other than uninsured driving.

- **Victim support.** Road crash victims will be treated as victims of crime, until the contrary is proven. Crash victims will be signposted to support services, including those funded by MOPAC. Crash victims will be surveyed on their experience and satisfaction with the police response.

Appendix 1. People who are killed and seriously injured on London’s roads: understanding the current position

- The 2019 Travel in London 12 Report (TiL12) describes (in section 8) progress in relation to the Vision Zero targets that were originally set out in the adopted 2018 Mayor’s Transport Strategy (MTS) and were re-asserted in the TfL Vision Zero Action Plan of 2018. These state that by 2022, a) 65% fewer people will be killed or seriously injured against 2005-09 levels and b) 70% fewer people will be killed or seriously injured in, or by, London buses against 2005-09 levels.

- Owing to changes in the reporting of road casualties (and serious casualties in particular), TfL has undertaken significant revisions to previously reported statistics and, in order that they are aligned with the new reporting regime and the data for the most recent years (2017 and 2018), has developed back-estimates for the baseline years of 2005-09.

- Using the back-estimated figures (as reported in TiL12), the table below attempts to set out progress towards the 2022 targets by mode. It is clear that for walking, cycling and motorcycling, current performance falls far short of the 2022 target and for those modes a large reduction is still needed.

Table 1. Core elements by mode in relation to the Vision Zero 2022 interim targets (65% decline)

<table>
<thead>
<tr>
<th>Back-Estimated Number of People Killed &amp; Seriously Injured (2005-09 Average)</th>
<th>Pedestrians</th>
<th>Pedal Cycle</th>
<th>Powered Two Wheelers</th>
<th>Car</th>
<th>Bus or Coach</th>
<th>Other Vehicle Occupants</th>
<th>Total</th>
</tr>
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<tr>
<td>2,021</td>
<td>737</td>
<td>1,397</td>
<td>1,773</td>
<td>277</td>
<td>197</td>
<td>6,403</td>
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| 2018 Figures (STATS19) | 1,366 | 782 | 1,080 | 623 | 112 | 102 | 4,065 |

| 2018 figure in relation to the 2005-09 back-estimated figure | -32.4% | +6.1% | -22.7% | -64.9% | -59.6% | -48.3% | -36.5% |

| Target 2022 (basis 70% reduction in bus casualties; 65% overall reduction in the number killed & seriously injured) | 712 | 260 | 492 | 625 | 83 | 70 | 2,241 |

| Change required between 2018 and 2022 (numbers of people killed & seriously injured) | -654 | -522 | -588 | 2 | -29 | -32 | -1,824 |

| Change required between 2018 and 2022 (numbers of people killed & seriously injured as a % of 05-09 back-estimated figure) | -32.4% | -70.9% | -42.1% | 0.1% | -10.4% | -16.4% | -28.5% |

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13 A number of caveats are required with this table – in particular: 1) the single year of 2018 is used for comparison and there can be significant variation around a single year’s casualty data; 2) the target for reduction for London buses envisages fewer people killed or seriously injured in, or by, London bus whereas the table above only covers those injured in them. For the purposes of this work we envisage that casualty reductions to those injured BY London buses will be covered in the reductions to casualty numbers in the other modes (principally pedestrians and pedal cycles); and 3) it is assumed that, aside from London buses, a consistent level of decline is targeted and across the other modes - walking, cycling, powered two-wheelers, car occupants and other vehicle occupants (ie just under a 65% decline from the 2005-09 base).
Appendix 1. People who are killed and seriously injured on London’s roads: understanding the current position (cont’d).

From the table above, we can see that:

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| Overall Target         | By 2022, a 65% reduction target in the numbers killed & seriously injured on London’s roads (from the back-estimated 2005-09 average (6,403)), requires a figure of no more than 2,241 in the numbers killed and seriously injured on London’s roads.  
                        | The 2018 figure was 4,065. To achieve the target, a further fall of 1,824 in the numbers killed and seriously injured is required over the remaining four years (2019-22).                                                                                                                                                 |
| Car Occupants          | For car occupants, the 2022 target is within reach.                                                                                                                                                                                                                                                                                                        |
| People on Foot         | For people on foot, a dramatic decline in the numbers of people who are killed and seriously injured is required with the current numbers (1,366 in 2018) being almost twice the 2022 target of 712. It should be noted that the number of walking trips in Greater London has increased by 12.2% between 2009 and 2018.                                                                                           |
| People Cycling         | Among those cycling, a dramatic decline in the numbers of people who are killed and seriously injured is required although it should be noted that the numbers cycling have increased by 44% between 2009 and 2018. The current number of people killed and seriously injured cycling stands at 782 (a figure that is actually higher than the back-estimated 2005-09 annual average of 737). A decline of more than two-thirds (71%) is required to achieve the 2022 target of 260 people fatal and seriously injured. |
| Motorcycle Riders      | Amongst powered two-wheeler riders, a further 42% decline is required in the numbers of people who are killed and seriously injured if the 2022 target of 492 is to be achieved from the 2018 figure of 1,080.                                                                                                                                                     |
| Bus & Coach Users      | For bus or coach users, in 2018 a total of 224 people were killed or seriously injured in or by a bus or coach. This is made up of 107 bus/coach passengers (inside the vehicle) and 117 people outside the vehicle. The vast majority of these (people injured outside the vehicle) were pedestrians (95 people); there were 12 people cycling and 10 users of other modes.                                                |
| Occupants of Other Vehicles | Although the numbers killed or seriously injured as occupants of other vehicles has risen recently and in 2018 stood at 102, this still represents a decline of almost half (-48%) from the back-estimated 2005-09 annual average (197) and is within reach of the 2022 target of 70.                                                       |
Appendix 2. Seriously and fatal injuries amongst vulnerable road users – key themes

- The total length of London’s roads is 9,201 miles\(^{14}\). This is made up of 38 miles of Motorways (0.4% of all roads), 1,085 miles of ‘A’ roads (11.8%), 314 miles ‘B’ roads (3.4%), 540 miles of ‘C’ roads (5.9%) and 7,224 miles of Unclassified roads (78.5%). The TfL-controlled TLRN (the Red Route network) is principally made up of ‘A’ roads and is 360 miles in length (3.9% of London’s road network) and carries around 30% of the vehicle mileage in the Capital\(^{15}\). Some 28% of those who are killed and seriously injured in London occur on the TLRN. A total of 28.1% of serious and fatal injuries occur on ‘residential’ roads (here defined as ‘C’ and Unclassified roads).

- The 11.8% of ‘A’ roads are responsible for 63.3% of all fatal and serious injuries\(^{16}\) and the 3.4% of ‘B’ roads a further 7.9%. If the numbers of people who are killed and seriously injured on these roads could be halved in a short period (without the injuries migrating to smaller adjacent roads), then the Vision Zero target would be achievable.

- Although Heavy Goods Vehicles account for a relatively small number of road casualties, owing to their size, they are far more likely to be involved in collisions which result in serious or fatal injuries to people walking or cycling\(^{17}\). In addition, the increase in deliveries by Light Goods Vehicles (LGVs) is making a significant contribution to the increase in total traffic volumes in London; the average annual increase in annual vehicle mileage for vans across Greater London over the period 2000 to 2018 has been 1.6%.

- Amongst each group of vulnerable road users, there are a number of themes which give pointers as to how the numbers of injuries could be reduced significantly; each of these reinforces the importance of reducing the numbers of people who are killed and seriously injured on the more major roads (the patterns of injuries are mapped in Appendix 5):

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| **Pedestrians** | - Together the ‘A’ and ‘B’ roads (15.2% of all London roads) are responsible for 68.9% of serious and fatal injuries to people on foot.  
- Particular concentration in town centres and along high roads\(^{18}\) which also act as linear shopping streets. Pedestrians are especially exposed to danger from motor vehicles owing to the need to cross the road. |
| **People Cycling** | - Together the ‘A’ and ‘B’ roads are responsible for 71.3% of serious and fatal cycling injuries.  
- Concentrations around junctions owing to left- and right- hook dangers. |
| **Motorcyclists** | - Together the ‘A’ and ‘B’ roads are responsible for 77.3% of serious and fatal injuries to motorcycle riders. Some 36% of serious and fatal injuries to motorcycle riders occur on the TLRN.  
- Motorcycle riders are over-represented in collisions with people on foot; this appears related to filtering through traffic and collisions with pedestrians crossing the road. |

\(^{14}\) [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/801086/rdl0102.ods](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/801086/rdl0102.ods); since 2015, traffic volumes have fallen by 1.2% in the Central sub-region and 0.4% in the South sub-region. They have increased by 0.2% in the North and West and by 2.3% in the East sub-regions.


\(^{16}\) All of the following calculations of fatal and serious casualties in relation to road classification and highway authority are taken from the Collision Data Extracts from the TfL Road Safety webpage ([https://tfl.gov.uk/corporate/publications-and-reports/road-safety](https://tfl.gov.uk/corporate/publications-and-reports/road-safety)). The years analysed are 2012, 2013, 2015, 2016, 2017 and 2018 where highway authority and road classification data are available. Data is of low quality (many casualties have been grouped into Unclassified roads) for 2014 and has been omitted.

\(^{17}\) Vision Zero Action Plan pp58/59; figs 14 and 17 - 5.46 times more likely relative to their share of traffic to be involved in a fatal collision with a pedestrian and 15.14 times in relation to someone cycling.

\(^{18}\) TFL Street types – City Hubs, City Streets, High Streets and High Roads.
Appendix 3. The estimated impact (by 2024) of the Action Vision Zero proposals. This is shown by mode and in comparison to the current (2018) position and the 2022 MTS target (of a 65% reduction in road casualties from the 2005-09 back-estimated base).

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<tbody>
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<td>782</td>
<td>1,080</td>
<td>623</td>
<td>112</td>
<td>102</td>
</tr>
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1. Wider 20mph limits & improving compliance.

- Implementation of 20mph default limit by all but 4 of the remaining boroughs (current 19 boroughs = 10 new boroughs (by 2024) so by then just 4 of the 33 boroughs will not have a 20mph default limit) with 10% casualty reduction in implementing boroughs.
- Implementation of 20mph default limit inside the CCZ (by May 2020) the 37 20mph limit schemes that TfL proposes in TLRN locations. Estimated 2% casualty reduction through the delivery of the 20mph schemes in the 37 TLRN locations (outside the CCZ) and 0.5% reduction from the 20mph limits (with associated calming) inside the CCZ.

20mph Town Centres/High Roads

- Pedestrians: 60% all pedestrian injuries in these locations X 50% implementation across London X 30% injuries reduced in the locations where this is implemented.
- Cycling: 40% all cycling casualties X 50% implementation across London X 20% casualties reduced.
- Motorcycling: 30% all motorcycling casualties X 50% implementation across London X 20% casualties reduced.

Speed Cameras & Officer Enforcement - targeting A roads (outside town centres)

- Pedestrians: 20% all pedestrian casualties occur in these locations X 25% coverage of this intervention across London X 20% casualties reduced in locations where introduced.
- Cycling: 30% all cycling casualties X 25% coverage across London X 20% casualties reduced.
- Motorcycling: 35% all motorcycling casualties X 25% coverage across London X 20% casualties reduced.

Roll-out of London Bus Safety Standard

- Pedestrians: 7% all pedestrian casualties X full implementation across London X 50% casualties reduced.
- Cycling: 2% all cycling casualties X full implementation across London X 50% casualties reduced.
- Motorcycling: 0.5% all motorcycling casualties X full implementation across London X 50% casualties reduced.
- London Working Vehicle Standard; 11% of pedestrian and cyclist and 5.5% of all motorcycling KSIs occur from a collision with a goods vehicle X estimated 25% reduction in these types of casualties.

2. Safe Cycling

- Implementation of at least half Top, High and Medium SCA routes: 35% reduction in cycling, 10% reduction pedestrian and 5% reduction in motorcycling KSIs.

3. Less Traffic

- London-wide ULEZ: 6% traffic reduction = 6% casualty reduction.
- Local CCZ: 3 boroughs X 20% traffic reduction.
- Safe Residential Areas. Location of 28.1% of all KSI casualties reduced by 60% LTN coverage across London X 60% casualty savings in the areas covered by them.

B. Total casualty reduction (1 to 4 above)

<table>
<thead>
<tr>
<th></th>
<th>679</th>
<th>530</th>
<th>399</th>
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C. Achievement 2024 (A-B)

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D. Target 2022 (MTS)

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<th>260</th>
<th>492</th>
<th>625</th>
<th>83</th>
<th>70</th>
</tr>
</thead>
</table>

E. Gap

|                  | 25  | 7   | (189) | -   | -  | -  |
Appendix 4. Reducing the numbers of people killed and seriously injured on the road: what works, what is needed.

- Research identifies a number of interventions which can have an impact:

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Impact</th>
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</table>
| **Less traffic**               | - There appears to be a link between traffic volumes and the number of people fatally and seriously injured. Research around the London Congestion Charge Zone gives an example of a 14% reduction in traffic being linked to a decline in traffic casualty (injury or death) rates of 25%\(^{19}\).  
  - The adopted Mayor’s Transport Strategy\(^{20}\) envisages the number of trips made every day by car, taxi or PHV declining from 9.9m in 2015 to 6.6m in 2041 a total decline of 33.2% or 1.3%pa. In fact, total vehicle miles travelled in London (excepting truck roads) has increased by 0.5% between 2015 and 2018\(^{21}\).   |
| **Safe speeds**               | - Achieving a maximum speed of 20mph in built-up areas is linked with a reduction in the number of people fatally and seriously injured of 42%\(^{22}\). Two steps are required; a) setting a 20mph limit and b) achieving compliance with that limit (see below).  
  - Out of the 33 London boroughs (i.e. including the City of London), more than two-thirds have adopted a default 20mph speed limit on their borough-managed roads. TfL has recently brought in a 20mph speed limit for all TLRN roads within the Congestion Charge Zone and proposes a further 37 on other stretches of the TLRN in Inner and Outer London where people and vehicles mix. |
| **Safe space for cycling**    | - The development of the highest quality network of protected/separated cycle facilities across a city is linked to a 44% reduction in the fatal crash rate and a more than 50% drop in the fatal/severe injury crash rate\(^{23}\).  
  - At present, just 1.5% of the roads in London (by length) provide protected (fully or lightly segregated) cycle lanes. |
| **Safe vehicles**             | - The trial of Intelligent Speed Assistance (ISA) on London buses (2015) saw 97-99% compliance with the 20mph limits\(^{24}\). The introduction of ISA on all new London buses (from 2018) is linked to a 38% reduction in speeding incidents.  
  - Concerns also exist about the increasing size of vehicles\(^{25}\) and the proliferation of SUVs. There is evidence from the US of increasing pedestrian danger associated with these larger vehicles\(^{26}\). |
| **Safe behaviours & enforcement** | - Speed cameras are linked with a reduction in fatalities of between 58 to 68 per cent within 500 metres of the cameras\(^{27}\). Average speed cameras cut the number of in the number of people fatally and seriously injured by 25-46%\(^{28}\). |

\(^{19}\) https://actionvisionzero.org/what-to-campaign-for/less-traffic/  
\(^{22}\) https://actionvisionzero.org/what-to-campaign-for/safe-speeds/  
\(^{23}\) https://actionvisionzero.org/what-to-campaign-for/safe-space-for-cycling/  
\(^{25}\) https://twitter.com/LordBikebot/status/1075866912951799809?s=19  
Appendix 5. Crashmaps. The locations where people are fatally and seriously injured (2016 to 2018)

Serious and Fatal Pedestrian Injuries

Serious and Fatal Cycling Injuries

Serious and Fatal Motorcycling Injuries