

Date: 20 June 2018

Item: Improving Cyclist Safety in London

This paper will be considered in public

1 Summary

1.1 This paper presents an overview of recent trends in cyclist casualties in London, and the areas of focus for future activity, covering conflict types, vehicles involved and other contributory factors. The paper sets out the Mayor and TfL's programme to improve cyclist safety under the banner of the Vision Zero approach. The paper focusses on the future programme of junction safety improvements, the Direct Vision Standard and TfL's proactive marketing and communications portfolio.

2 Recommendation

2.1 The panel is asked to:

- (a) **note the progress to date in improving cyclist safety and reducing danger in London and the challenges to reducing cyclist injury in future; and**
- (b) **note the approach to delivering safer cycling in London and the programme highlights, as part of activity under the Mayor's Vision Zero approach.**

3 Background

3.1 At the Safety, Sustainability and Human Resources Panel on 28 September 2017, the Panel requested a future update from TfL on cyclist safety.

3.2 TfL has made considerable progress since 2000 in delivering a significant increase in the number of people cycling on London's roads (almost tripling), while concurrently achieving a slight reduction (two per cent) in the number of cyclist deaths and serious injuries.

3.3 However, eight people were killed and 446 were seriously injured whilst cycling in London in 2016. This represents over 18 per cent of all deaths and serious injuries, whilst cycling represents two per cent of trips made in London. These concerning figures show that much more needs to be done to reduce the risks faced by these road users on London's roads.

- 3.4 The Mayor's Transport Strategy sets the target for 80 per cent of all Londoners' trips to be made on foot, by cycle or by public transport by 2041. With 'fear of traffic' given as the main reason for not cycling more¹, an ambitious and comprehensive programme is required, in order to reduce cyclist deaths and serious injuries to zero, whilst improving perceptions of safety to encourage more and safer cycling.

4 Vision Zero and Cycle Safety

- 4.1 The Mayor's Transport Strategy also sets out the Mayor's ambition to adopt a Vision Zero approach to road safety, which puts the elimination of road danger at the heart of the transport system, with the ambition that no-one will be killed or seriously injured on London's roads by 2041.
- 4.2 The draft Vision Zero action plan sets out the progress to date in reducing casualties, but also the considerable challenges to continuing this downward trend, and therefore the need for Vision Zero, a step-change in ambition for reducing road danger. It also sets out TfL's plans for intelligence-led action to reduce risk on our streets, which will prevent further deaths and serious injuries amongst cyclists and all road users.

5 Improving Cycle safety in London

- 5.1 In order to deliver maximum value from a programme to reduce cyclist deaths and serious injuries, TfL needs to understand what the evidence shows as the locations, conflict types and vehicles involved, in order to prioritise action.
- 5.2 Figures show that 79 per cent of all deaths and serious injuries for people cycling happen at or near a junction, with 'failing to look' and excess speed as the most frequent contributory factors assigned to the other vehicle(s) involved. Taxis and private hire vehicles as well as HGVs are disproportionately involved in these incidents.
- 5.3 The programme to deliver improvements in the safety of cyclists follows the Safe System approach and contains actions across the Safe System themes to directly reduce numbers of collisions and road risk – safe speeds, safe streets, safe vehicles and safe behaviours – as well as actions to improve post-collision learning and criminal justice for collision victims.
- 5.4 With our step change in ambition also comes a change in the focus of our programme, through tackling the danger that cyclists experience, rather than seeking to change their behaviour.
- 5.5 There are also areas where TfL needs the help of Government and others to support our activity to reduce risk to cyclists, including through a campaign to generate a groundswell of public awareness and support to reduce danger on London's roads.

¹ Attitudes to Cycling, TfL, 2016

List of appendices to this report:

Appendix 1 – Improving Cyclist Safety in London

List of background papers:

None

Contact Officer: Christina Calderato, City Planning
Number: 020 3054 7104
Email: ChristinaCalderato@tfl.gov.uk

Contact Officer: Simon Bradbury, City Planning
Number: 020 3054 4716
Email: SimonBradbury@tfl.gov.uk

20 JUNE 2018

Appendix 1

Improving Cyclist Safety in London

Delivery Planning
City Planning, TfL



EVERY JOURNEY MATTERS

Purpose

- The deck updates the Safety Sustainability and Human Resources Panel on:
 - achievements, current challenges, and areas of focus for cyclist safety; and
 - current and future initiatives to improve cyclist safety.
- The Safety, Sustainability and Human Resources Panel is asked to:
 - **Note** the progress to date in improving cyclist safety and reducing danger in London and the challenges to reducing cyclist injury; and
 - **Note** the approach to delivering safer cycling in London and the programme highlights, as part of activity under the Mayor's Vision Zero approach.



Improving the safety of cyclists is central to Mayoral and TfL strategy and policy as part of the Vision Zero approach

Make cycling and walking safer, with more segregated cycle routes, action on dangerous junctions, and safer lorries.

I'm determined to make getting around safer for everyone - walkers and cyclists.

Minimising road danger is fundamental to the creation of streets where **everyone feels safe** walking, cycling and using public transport.



Adopting Vision Zero ... will be central to the overall **success** of the Healthy Streets Approach.

London is adopting Vision Zero for the whole transport network. The approach is in line with TfL's vision: *Everyone home safe and healthy every day.*



SADIQ KHAN FOR LONDON

A Manifesto for all Londoners



The Mayor's Transport Strategy sets a bold ambition for increasing cycling, whilst reducing deaths and serious injuries to zero

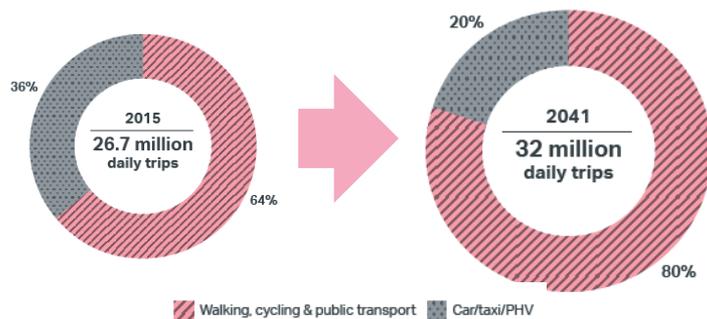


The Mayor's Transport Strategy (MTS) sets the aim of achieving Vision Zero:

- “The aim of Vision Zero is the elimination of all deaths and serious injuries on London’s transport system.”

Whilst also delivering an increase in cycling trips across London, in support of the target for:

- 80% of all Londoners’ trips to be made on foot, by cycle or by public transport by 2041



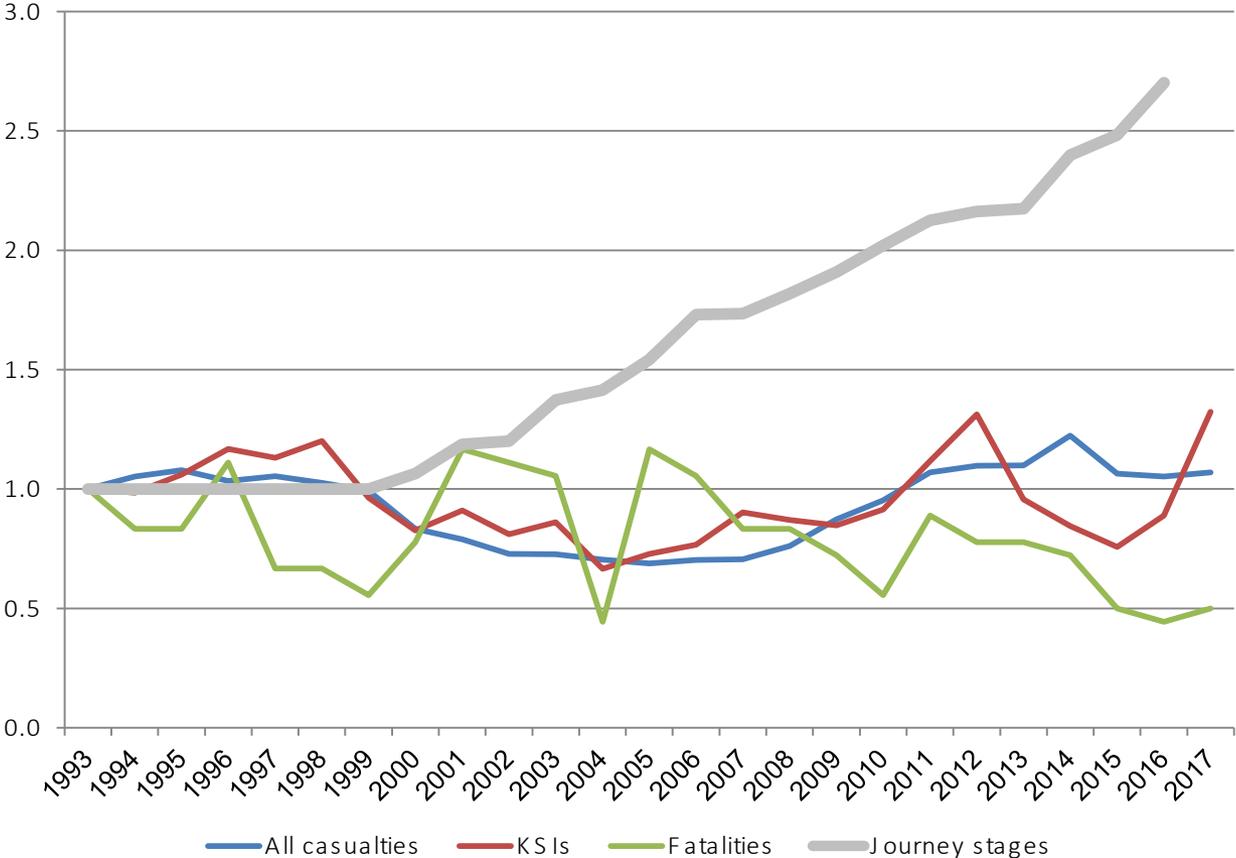
- Fear of traffic is the main reason people give for not cycling more¹, and so an ambitious and comprehensive programme is required, in order to reduce cyclist deaths and serious injuries to zero, whilst improving perceptions of safety to encourage more and safer cycling.

¹Attitudes to Cycling, TfL, 2016



Over recent years, cyclist deaths and serious injuries have reduced slightly, whilst London's roads have seen a dramatic increase in cycling

Change in cyclist casualties and journeys travelled* (Index 1993 = 1.0)



The recent uplift in cycling KSIs partly reflects improvements in police reporting of injury severity and the introduction of on line self reporting

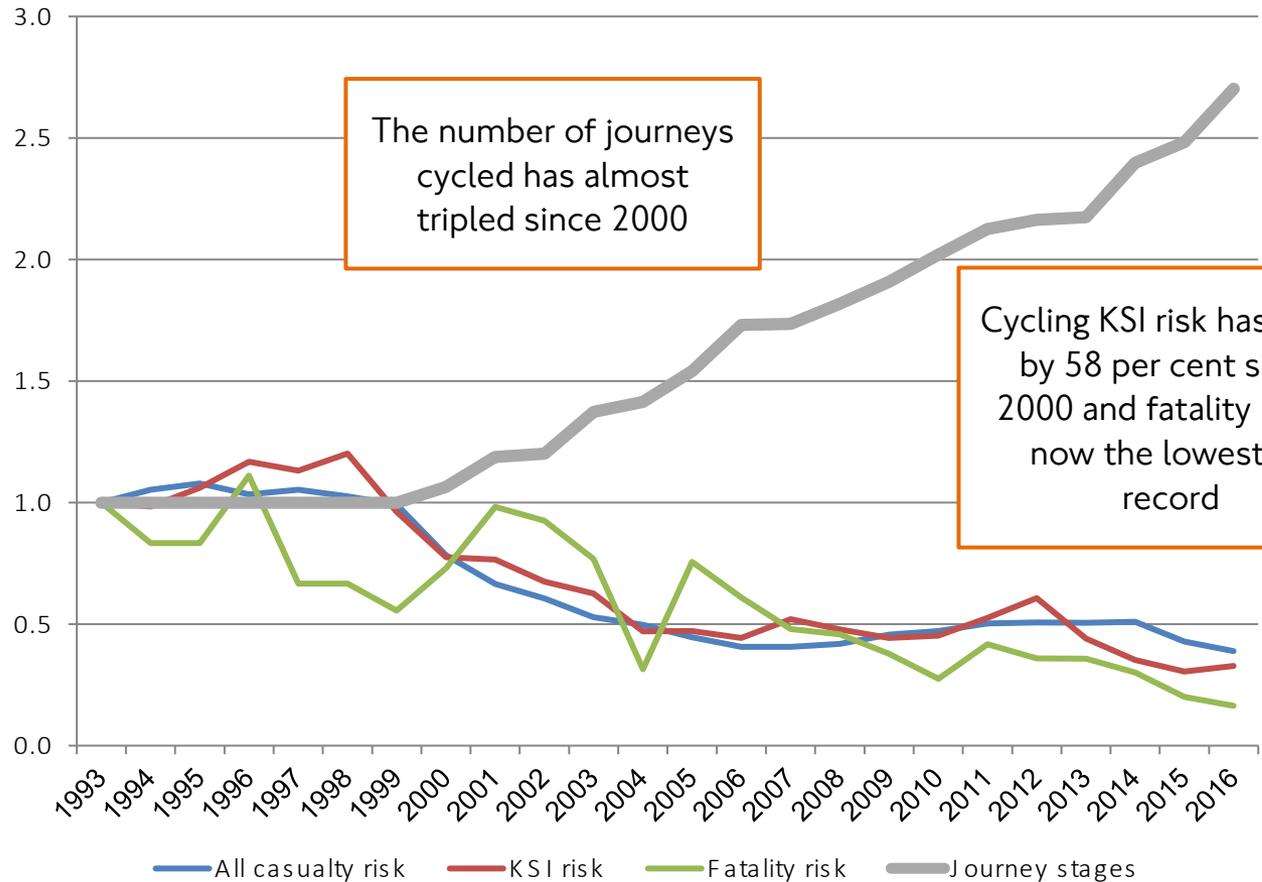
There have been three cyclist fatalities so far during 2018 (to 12 June) which is the lowest level on record. However both fatalities involved an HGV.



* Most recent journey stage data available to 2016

This has resulted in substantial reductions in cycling risk, however reductions in cycling death and serious injury risk have levelled in recent years

Change in cyclist casualties and journeys travelled* (Index 1993 = 1.0)



The number of journeys cycled has almost tripled since 2000

Cycling KSI risk has fallen by 58 per cent since 2000 and fatality risk is now the lowest on record

Risk is measured as the number of journeys cycled on London's roads for each cyclist KSI. The greater the number of journeys cycled before a KSI the smaller the risk.

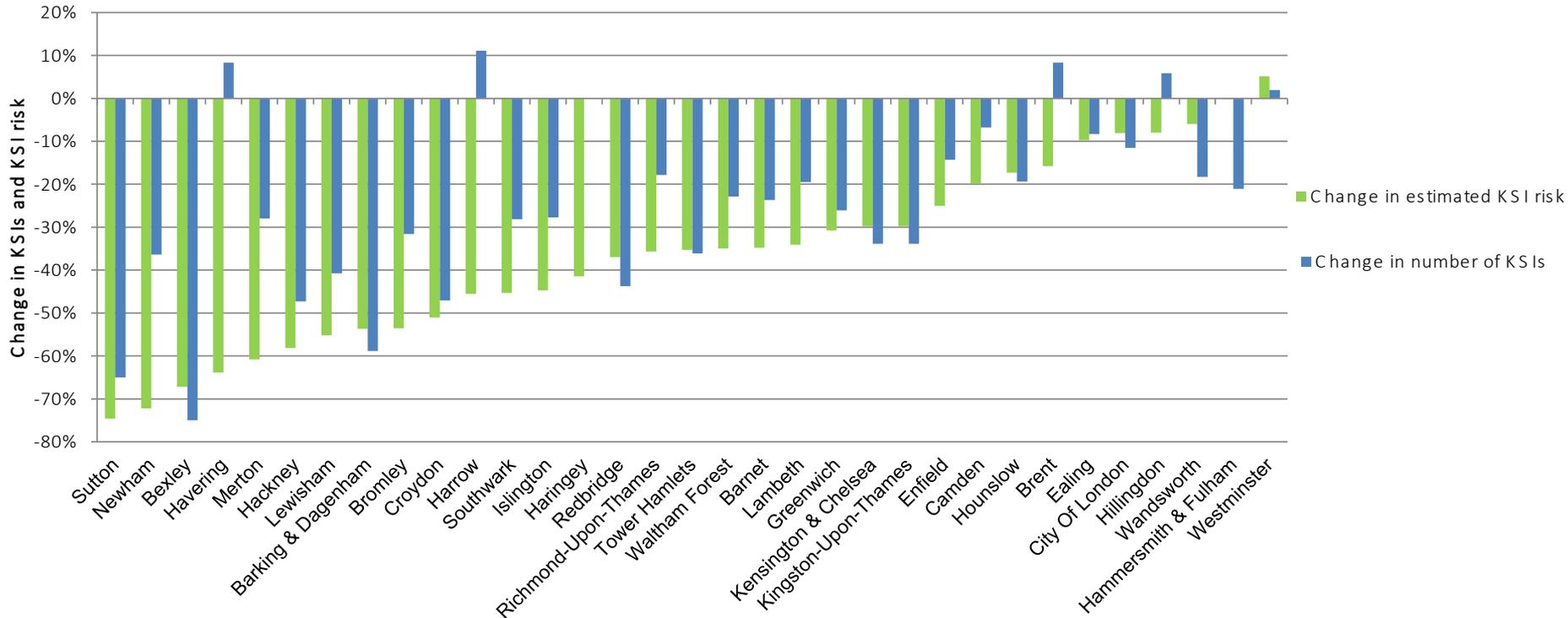
However, reductions in cycling KSI risk have recently levelled



* Most recent journey stage data available to 2016

Cyclist KSI risk has fallen amongst all London boroughs with the exception of Westminster

- Change in cycling KSIs and KSI risk* (2013/14 to 2015/16 compared to previous 3 years)



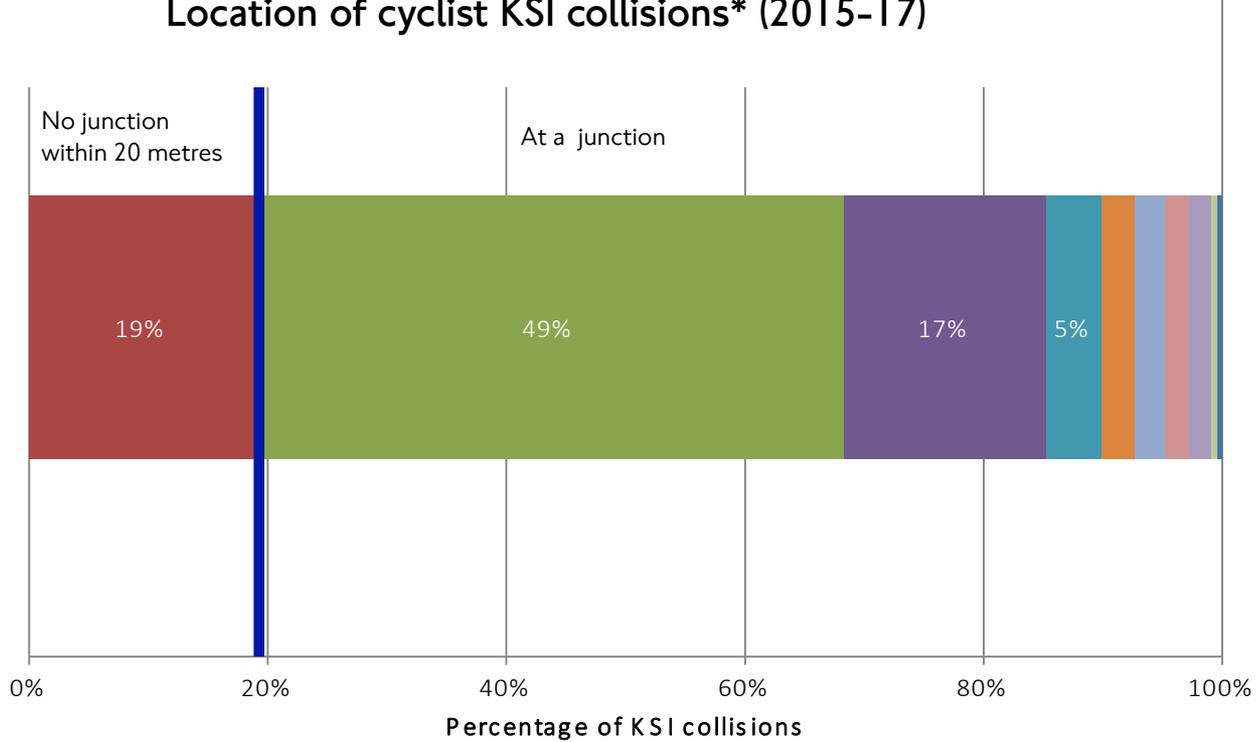
- Despite increases in cyclist KSIs in some London boroughs, taking into account increases in cycling, cyclist KSI risk has fallen in all London boroughs with the exception of Westminster.
- In order to deliver maximum value from a programme to reduce cyclist deaths and serious injuries, we need to understand what the evidence shows as the **locations, conflict types and vehicles involved to prioritise action.**



* Most recent journey stage data available to 2016

The majority of cyclist fatal and serious injury collisions occur at junctions, reflecting the complex vehicle interactions that occur at these locations.

Location of cyclist KSI collisions* (2015-17)



79 per cent of cyclist KSI collisions and 84 per cent of all cyclist collisions occur at junctions.

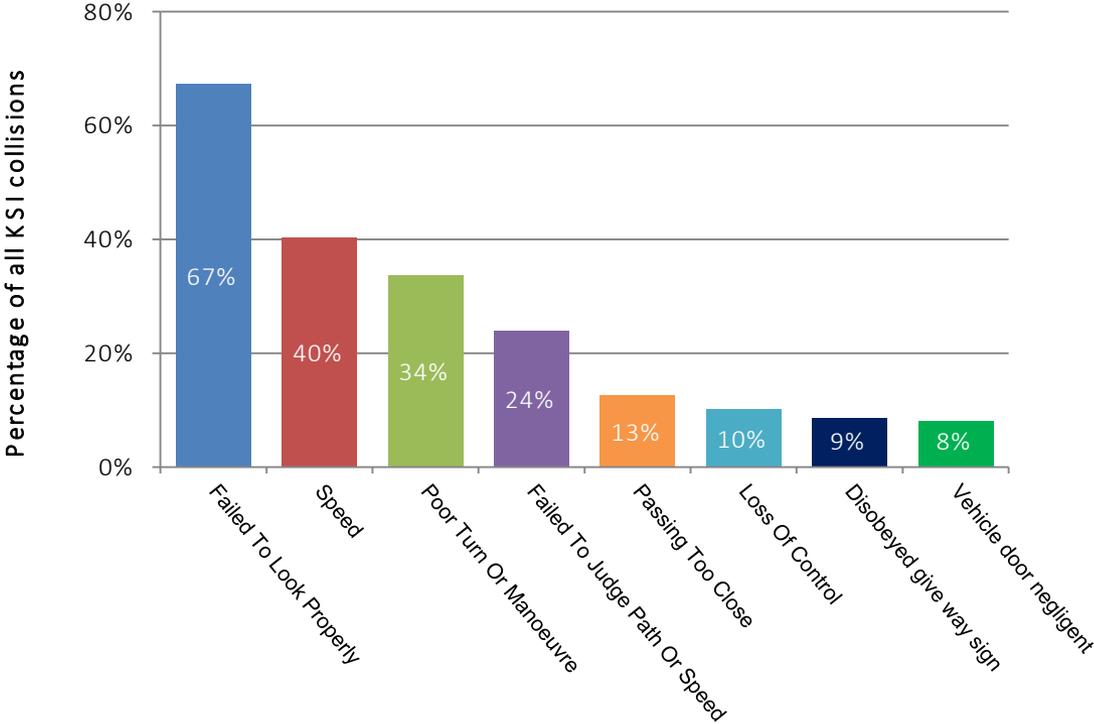
Of the cyclist KSI collisions at junctions, the majority occurred at T or staggered junctions, followed by cross roads and roundabouts.



* Most recent provisional collision data to end of August 2017

Risky manoeuvres result in the greatest number of cycling deaths and serious injuries, however speed is involved in 40 per cent of cycling KSIs

Top 8 contributory factor assigned to cyclist KSI collisions* (2015 - 2017).



The majority of cyclist KSI collisions involve the other vehicle undertaking a risky manoeuvre.

- These include failure to look, poor turn or manoeuvre, failure to judge path and speed and passing too close to the cyclist.
- Speed is a contributory factor in 40 per cent of collisions resulting in a cyclist KSI, and we know that there is significant underreporting of this as a factor.

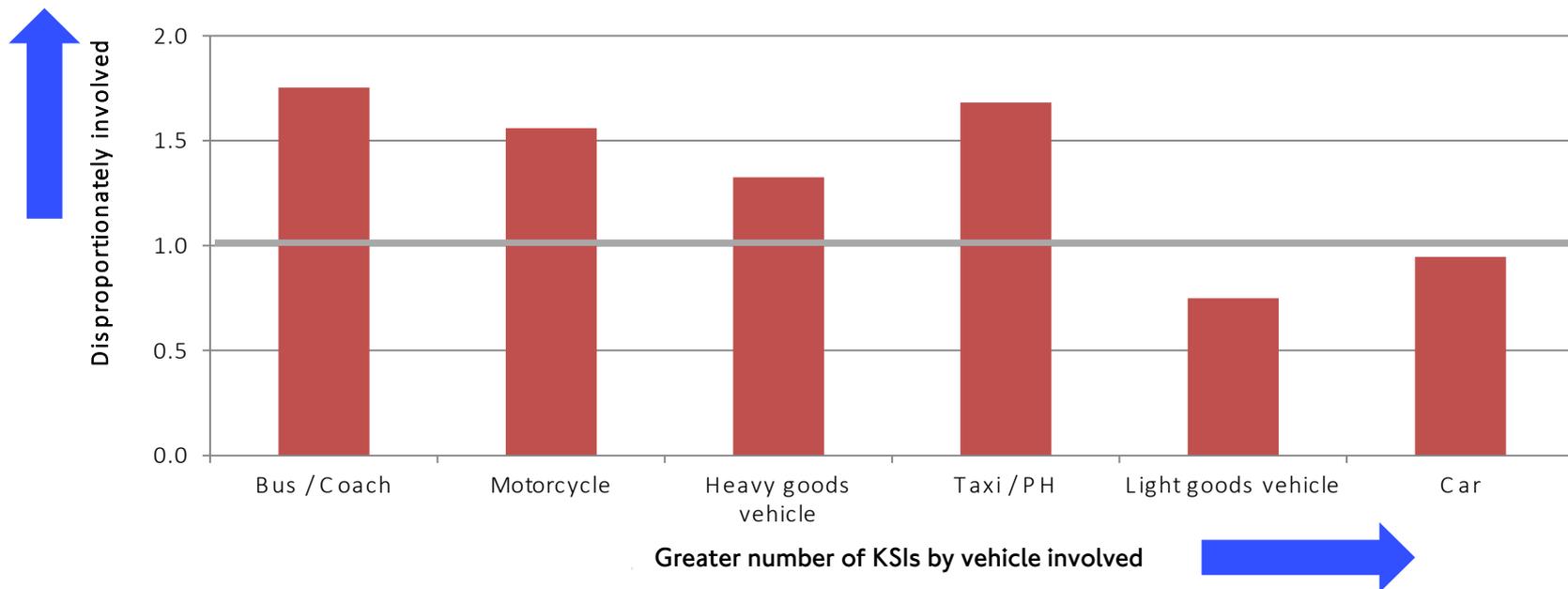
More than one contributory factor can be assigned to each collision



* Most recent provisional collision data to end of August 2017

Heavy goods vehicles and taxis / private hire vehicles are involved in a disproportionately high number of cyclist deaths and serious injuries

Vehicle involved in collisions resulting in death and serious injury: for people cycling (2014-2016)



- Cars are involved in 69 per cent and light goods vehicles in 11 per cent of collisions resulting in a cyclist KSI.
- However, taxis and private hire vehicles are involved in 9 per cent and heavy goods vehicles 5 percent of cyclist KSIs, and are disproportionately involved in these collisions given their traffic share in London.



The programme to improve cyclist safety is integral to the Vision Zero approach to reducing road danger, with its Safe Systems approach

- The evidence from the casualty data shows that the programme to reduce cyclist deaths and serious injuries needs to focus particularly on:
 - Tackling inappropriate speed
 - Improving junction safety
 - Improving the safety of the largest vehicles
 - Improving motorist behaviour on London's roads

Guiding principles of Vision Zero

A fundamental conviction that **loss of life and serious injuries are not acceptable nor inevitable**

Requires **reducing the dominance of motor vehicles** and the targeting of **road danger at source**

Ensuring **road danger reduction is a common priority** central to all transport schemes

Programme themes under the Safe System approach

Safe Systems: people make mistakes so the system needs to accommodate human error and ensure impact energy levels are not sufficient to cause fatal or serious injury.



Safe Speeds



Safe Streets



Safe Vehicles



Safe Behaviours

Post-collision learning and criminal justice



With our step change in ambition comes a change in focus – tackling the danger that cyclists experience, not seeking to change their behaviour

ROAD SAFETY

- The traditional approach with interventions focused on the vulnerable.
- Addresses areas with collision history, not high risk areas.
- Does not help to transform locations that cyclists avoid.



REACTIVE



ROAD DANGER REDUCTION

- Emphasis on tackling danger at source



- Recognises that collisions are not the whole picture.
- More holistic.

PROACTIVE

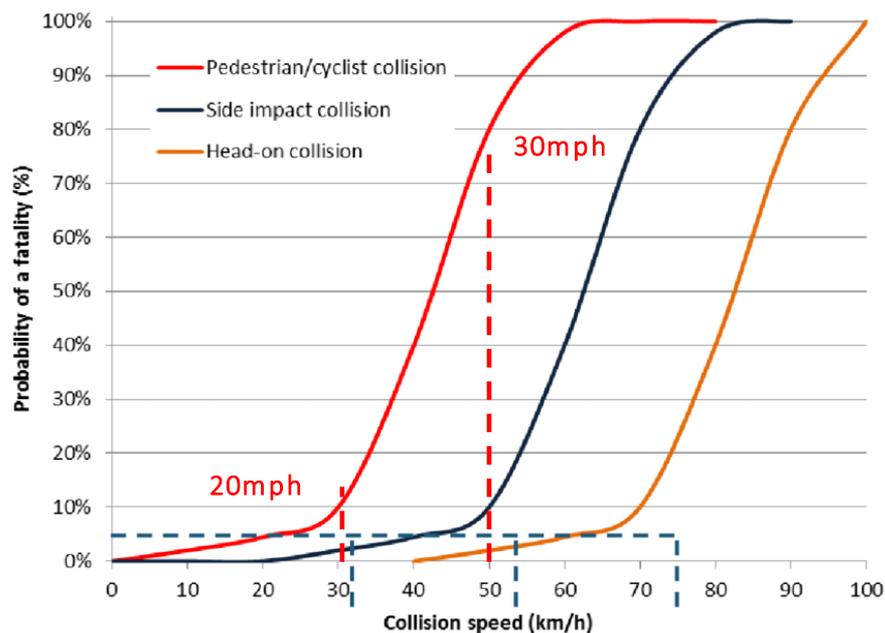
- A focus on reducing road danger and risks to cyclists will be key to preventing deaths and serious injuries whilst improving perceptions of safety and encouraging further trips by bike.



Improving cyclist safety through Safe Speeds

- Cyclist safety will be improved through reducing the speeds that vehicles across London travel by:
 - Delivering **lower speed limits** in London, across borough and TfL roads; and
 - Lowering speeds using **street design** where necessary.
- Encouraging compliance through **speed-limiting technology**, starting with all **buses by 2022**; and
- Introducing **enforcement, marketing and behaviour change** interventions.

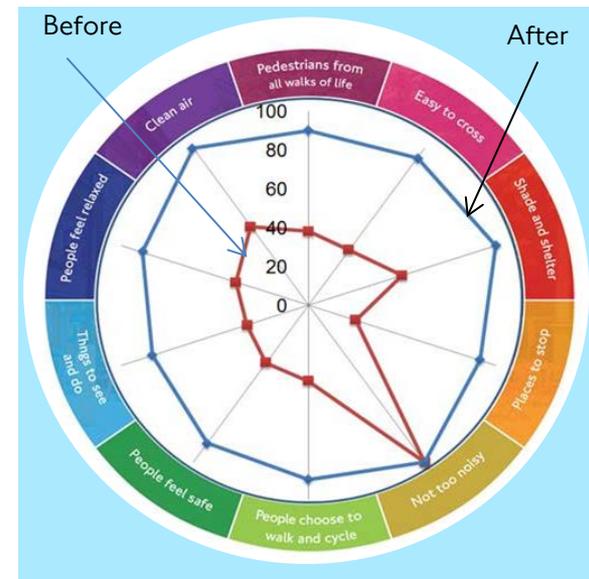
A person is four times less likely to be fatally injured if hit at 20mph than at 30mph.



Safe Streets for cyclists



- Implementing a Vision Zero approach to creating safer streets for cyclists includes:
 - **Targeting dangerous locations** – focussing on key junctions and hotspots;
 - Delivering the next-generation of **high-quality cycle routes**;
 - Targeting infrastructure schemes based on danger that discourages walking and cycling, not just casualty history; and
 - Ensuring schemes tackle danger through the **Healthy Streets Check** for designers.



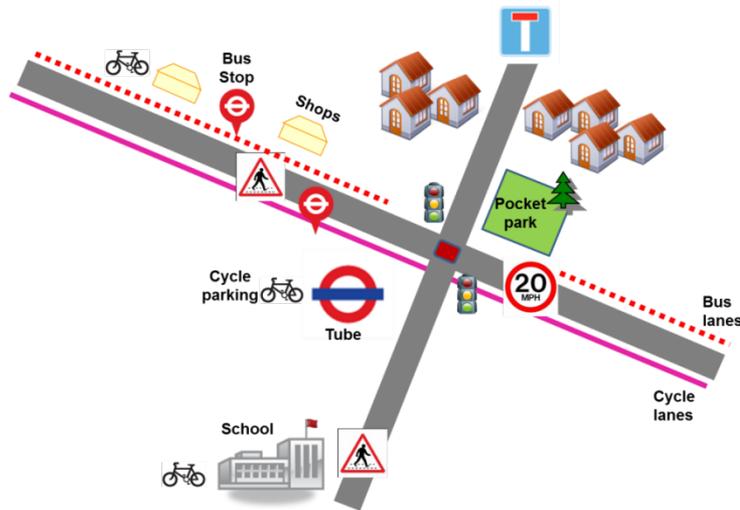
Healthy Streets Check



Focus on the Safer Junctions programme

- TfL has identified 73 junctions on the TLRN where major safety improvements can be made to the highest risk junctions for cyclists. Of these:
 - 21 of these locations have already been improved;
 - 33 are currently funded within TfL's 2017 Business Plan; and
 - A further 19 junctions will follow, with possible improvements, following investigation.

The Safer Junctions programme will transform and improve junction layouts for pedestrians and cyclists and reduce road danger.



- The programme represents a significant investment of £54 million over the Business Plan period.
- The programme will lead to reductions in road danger to cyclists at these key locations, as well as improvements to promote additional walking and cycling trips.
- We will also work with boroughs to ensure they target similar high risk junctions on their roads.

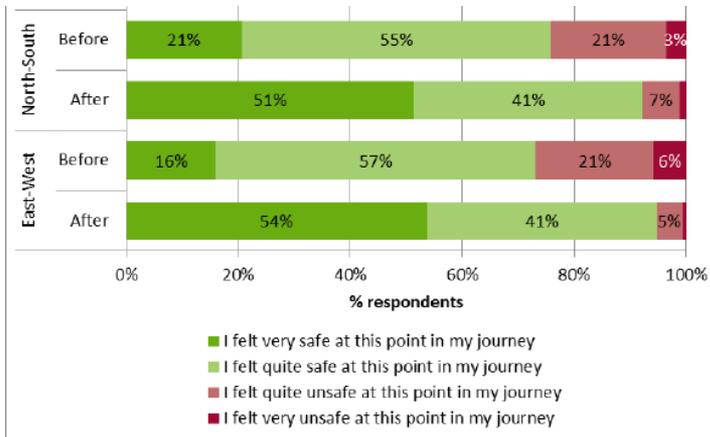


Focus on Cycle Superhighways: Progress made so far

- Cycling has continued to grow in London. In 2016, 730,000 cycle journeys were made each day – more daily journeys than the Overground and DLR combined.
- This represents an overall nine per cent increase in cycling journeys from 2015, boosted by investment in new infrastructure:

Cycle Superhighways: Impact on feeling of safety*

Feeling of safety at that point in the journey



Source: Strategic Cycle Monitoring Surveys – Autumn 2016 (Q27 Base: Before 437 respondents, After 1,241 respondents (unweighted))

- These significant increases in levels of cycling have been prompted by improved perceptions of safety amongst cyclists using the route.

* A minimum of 3 years of 'after' casualty data is required to determine actual improvements in safety

54% increase in cycling levels on **East-West Cycle Superhighway**



32% increase in cycling levels on **North-South Cycle Superhighway**



38% increase in people feeling very safe when using the **East-West Cycle Superhighway**

30% increase in people feeling very safe when using the **North-South Cycle Superhighway**



Safe Vehicles to reduce risks to cyclists on London's streets

- Implementing a Vision Zero approach to vehicles means improving the safety of vehicles that pose the highest risk to cyclists on London's streets. Initiatives include:
 - **Freight** vehicles – HGV Safety Permit Scheme as part of the world's first **Direct Vision Standard**;
 - **Bus Safety Standard** working to ensure vehicle specification in contracts for all new buses; and
 - **Vehicles used for work** – promoting the use of a London set of work-related road safety standards.
- TfL and the GLA family must lead by example with vehicles they manage in their own supply chain.
 - All vehicles in our supply chain must meet and be operated to the highest safety standards.



Focus on the Direct Vision Standard (DVS) for HGVs

- To protect cyclists from the risks of large vehicles, we are developing the world's first and only Direct Vision Standard (DVS) for HGVs.
- It's an **objective measurement** of the 'volume of space' weighted by risk to other road users.



- This measurement is converted to a “star rating” from zero (worst) to five (best).

- The Direct Vision Standard:
 - Informs operator purchasing decisions – encouraging the most suitable vehicle for the city environment;
 - Prompts manufacturers to use it to improve future designs; and
 - Influences future European regulations governing HGV designs – we want an **International DVS**.
- Methodology has been finalised and star ratings for Euro VI HGVs have been reviewed and validated by truck manufacturers, so operators can now contact their vehicle manufacturers to find out about the star rating of their Euro VI HGV.



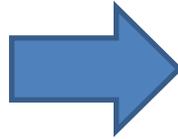
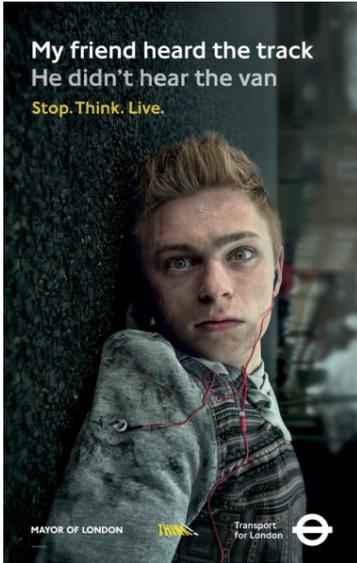
Encouraging Safe Behaviours to reduce the risks posed to cyclists on our roads

The Vision Zero approach to encouraging safe road user behaviour is threefold:

- Directly tackling high-risk behaviours, irrespective of mode;
- Upholding the greater responsibility of those driving and riding for a living; and
- Filling knowledge or skills gaps of those at most risk through education and training.



Focus on our marketing and communications portfolio that has changed to incorporate a pro-active road danger reduction approach



- The recently launched 'Risk Up' campaign is a fresh new approach to engage with motorists and motorcyclists and encourage them to recognise that inappropriate speed presents risks to cyclists and other road users.



There are areas where we need the help of Government and others to support our activity to reduce risk to cyclists

- TfL is limited in its powers to prevent risk to cyclists on London's roads and there are areas where we need the support of Government through regulatory and policy reform. These areas include:

Proposal	Rationale
Granting further powers to TfL to enforce infringement of mandatory cycle lanes and advanced stop lines	To improve safety of cyclists and increase effectiveness of dedicated infrastructure
Reviewing, updating and reissuing the Highway Code	To help people understand risk better and better reflect the needs of those cycling in an urban environment
Amending the default urban speed limit to 20mph	To create an urban street environment where lower speed limits are expected, and limits above 20mph require justification, rather than the opposite
Extending the range of prescribed sanctions for driving and cycling offences	To more effectively address law-breaking among road users.

- Delivery of the Vision Zero ambition and improvements to cyclist safety cannot be delivered by TfL alone. We need to secure the **support of a broad range of other partners**, including our policing partners, other emergency services, the NHS, and the London boroughs.
- However, we also need a **groundswell of support** from local communities and the public to recognise that deaths and serious injuries are neither acceptable nor inevitable and that action is needed to prevent these tragic events from occurring.



Next steps

- Publish a **Vision Zero Action Plan** this summer that sets out an ambitious programme to reduce danger to cyclists and all road users. The action plan will set the programme and timescales for the delivery of key activity to improve cyclist safety.
- **Further lobbying** of Government and the EU over changes to regulation to keep cyclists safe.
- Identify and deliver a programme to deliver **lower speed limits** in London across TfL's road network.
- Roll out a **wider PR campaign** aimed at motorists and other road users, to raise awareness of Vision Zero with all Londoners.
- The Vision Zero approach will be **embedded across TfL** and be at the heart of all we do, overseen by a new Director of Vision Zero.

