

14 JUNE 2016

London's road safety priorities – the role of safer vehicles

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Overview

- TfL's road safety strategy for London
- London's success in reducing casualties
- Key achievements so far
- Improving Truck Safety in London
- Improving Bus Safety in London
- Vehicle technology research: solutions for the London vehicle fleet
- Summary



Safe Streets for London: The London road safety plan



2013 *Safe Streets for London* was launched in 2013

2020 An ambitious plan to reduce the number of KSI casualties by 40% by 2020 (2005-9 baseline)

1 Ambition: **“Working together, towards roads free from death and serious injury”**

5

6

Key actions themed by Safe Roads, Safe Vehicles, Safe People and Delivering in Partnership

3

Published 3 further action plans focused on improving safety for vulnerable road users

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Achieved the Mayor’s road safety target and set a new target to reduce KSIs by **50% by 2020**

EVERY JOURNEY MATTERS



Safe London streets

- In October 2015, TfL published 'Safe London streets: Our approach'
- Five main sources of road danger
 - Travelling too fast
 - Becoming distracted
 - Undertaking risky manoeuvres
 - Driving under the influence of alcohol or drugs
 - Failing to comply with the laws of the roads
- A need to understand the system better: how, when and where collisions and casualties can be prevented before they happen
- TfL's programme is themed by Safe Roads, Safe Vehicles, Safe People and Delivering in Partnership



Safe System

Safe Roads

Safe Vehicles

Safe People

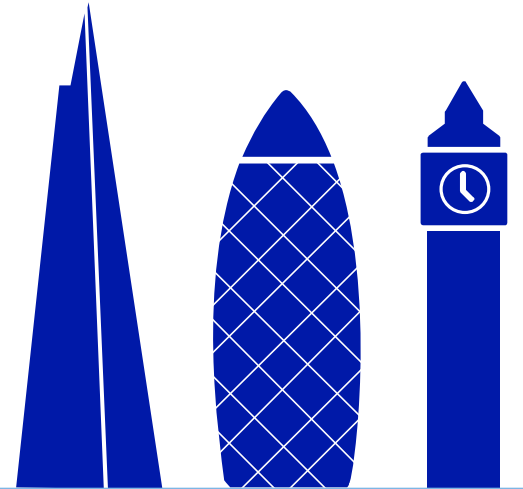
Delivering in Partnership

Three central principles underpinning TfL's 'safe system' approach

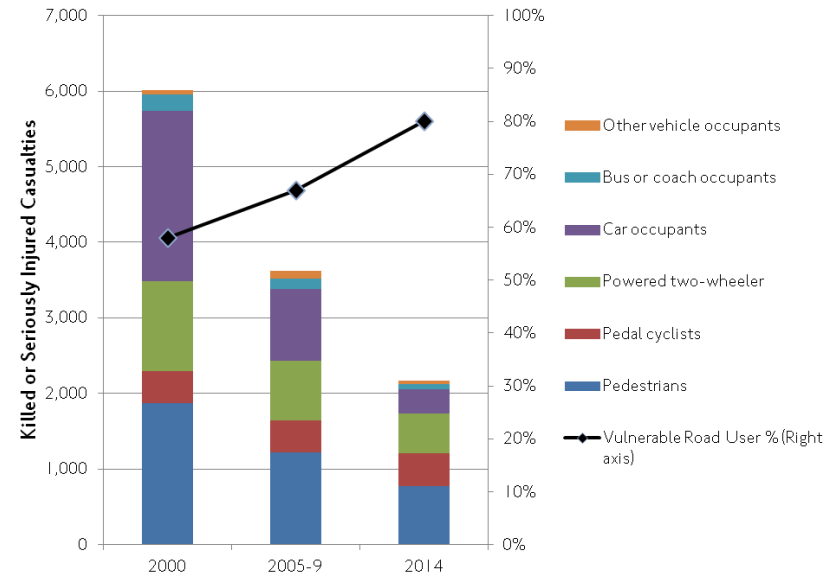
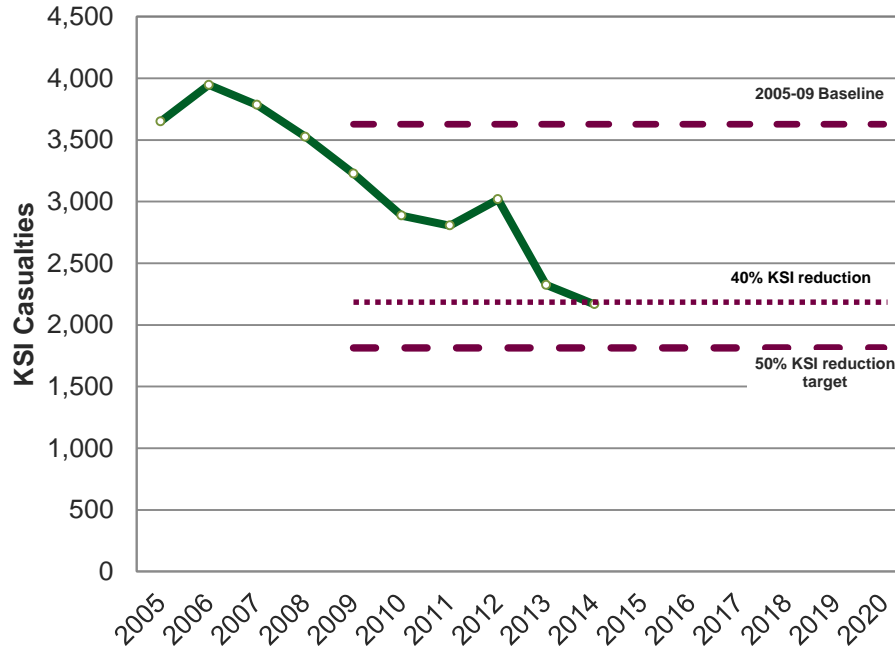
1. People make mistakes
2. There are physical limits to what the human body can tolerate
3. We all have a responsibility to improve safety



London's success in
reducing casualties



Continuing reductions in KSI casualties



- Number of KSIs fell seven per cent during 2014 to lowest levels since records began
- In 2014, pedestrians, motorcyclists and cyclists made up **80 per cent of KSIs in London**

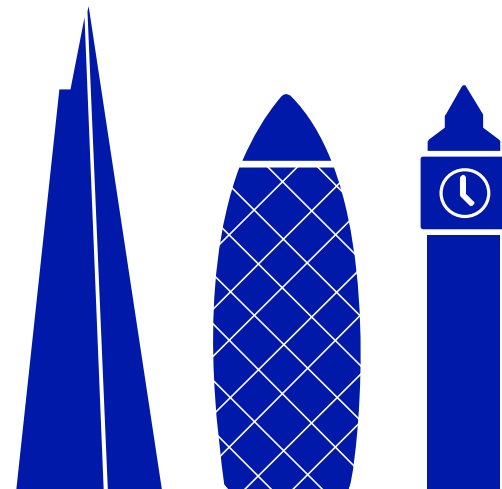


Improving safety of vehicles on London's roads

- Analysis of collision data – disproportionate risk
 - In 2014, HGVs were involved in **25%** of pedestrian fatalities and **38%** of cyclist fatalities in London, despite only making up around **4%** of the miles driven in London.
 - Buses are **four times more likely** to be involved in a KSI collision with a pedestrian than would be expected for their share of traffic.
- Focus on trucks and buses
- Opportunity to influence the safety of vehicles
- Working in partnership achieves the best results



Targeting vehicle
safety –
a multi-pronged
approach



Safer Vehicles: Approach

Improving truck safety



Safer Lorry Scheme
(and consulting on next steps)

Direct vision trucks



Safe Urban Driving

Safer buses

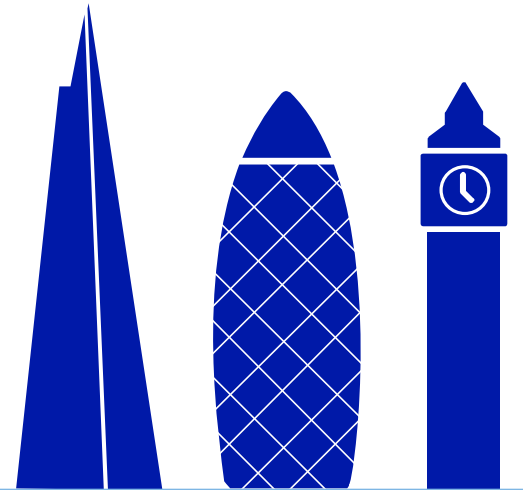
Bus ISA trial



Bus Technology Trials



Improving Truck Safety in London



Improving Truck Safety

Reducing blindspots on trucks on London's roads

Additional
mirrors/
cameras/
sensors

vs

Direct
vision



Managing overload of driver attention



Working together on safety

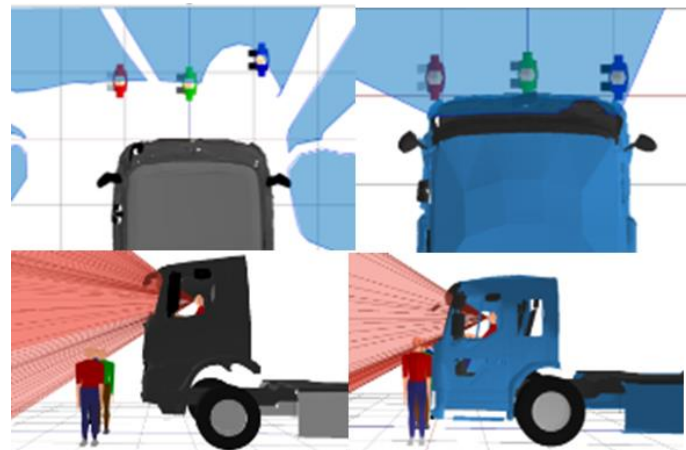


Looking out
for vulnerable
road users



Improving the safety of the current and future fleet

- Addressing the visual limitations of the current fleet
- TfL has commissioned research that expects to further our understanding



MIO MIVUE 538 DELUXE DRIVE DIGITAL DVR VIDEO RECORDER

MIO MIVUE 538 Deluxe has an integrated GPS receiver that enables tracking of the vehicle covered, calculating the engine, direction, speed and geographical coordinates and then synchronizing them with digital maps. This is the answer to the safety camera alerts. With the free unlocker system for the dashboard, MIO MIVUE 538 comes with a recording recording mode that allows you to position the video camera in any direction as well as an anti-shock lock filter. And not to be out of place, the 538 Deluxe comes with a memory card of 16GB in the box, so you are ready to go right out of the box.

Top features

- Lifetime Safety Camera Updates
- GPS Tracking
- Engine F1 & 2 spro
- Video Full HD recording
- Emergency recording
- Parking Mode

Effectiveness	Ease of use	Value for money
5 stars	5 stars	5 stars
4 stars	4 stars	4 stars
3 stars	3 stars	3 stars
2 stars	2 stars	2 stars
1 star	1 star	1 star

Word Recommendation: Good service and communication

- Need to **reduce blindspots** with trucks fit for use in dense urban environments
- Working with manufacturers to develop safer, lower vehicles with improved direct visibility



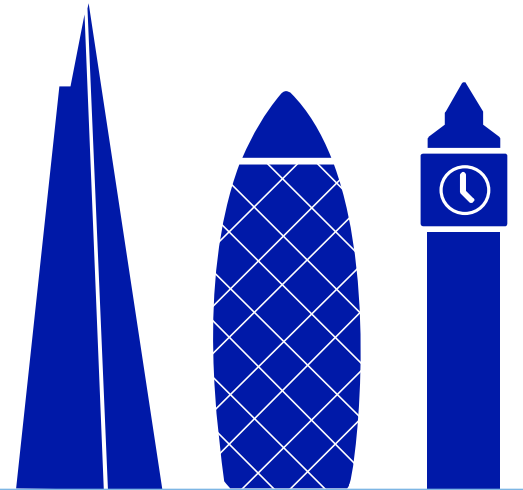
Safer trucks ARE possible



Lower, with more panoramic **direct vision**, allowing more **direct eye contact** between the driver and other road users



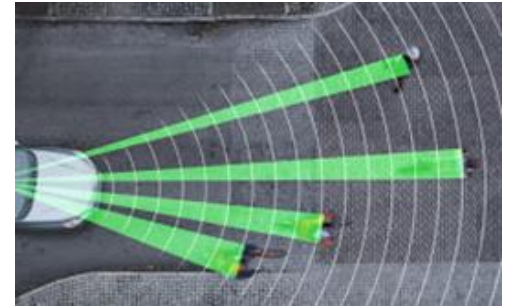
Improving Bus Safety in London



Safety technology trials on Buses

Pedestrian and Cyclist Detection - 2014

- Complex, developing technology
- Trialled retrofit of sensor technology on London buses



Intelligent Speed Assistance (ISA) – 2015/16

- Successful in speed limiting the vehicle (limits acceleration only)
- Particularly effective in 20mph speed limits
- Points of manufacture not retrofit - roll out on all new buses
- Results to be published this summer

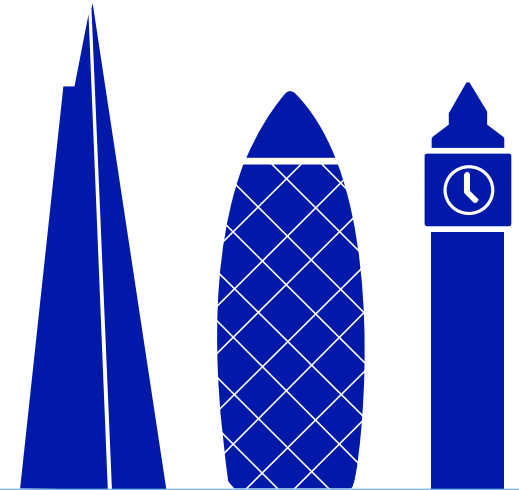


Bus Safety Programme: Bus Safety Standard

- Six workstreams in the Bus Safety Programme
- Bus Safety Standard focuses on vehicle technology and design improvements for London Buses which will set a new standard for bus safety – for passengers and vulnerable road users
- Evidence based – STATS19 collision data and bus incident report data
- Effective solutions for real challenges

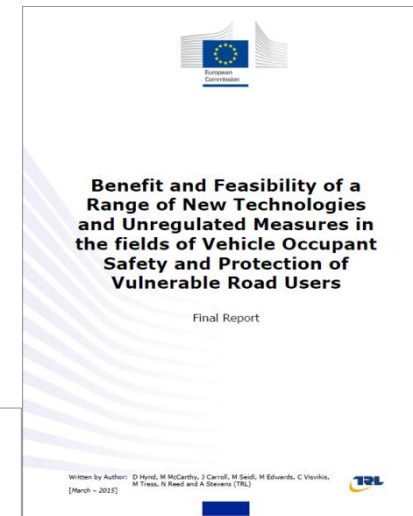
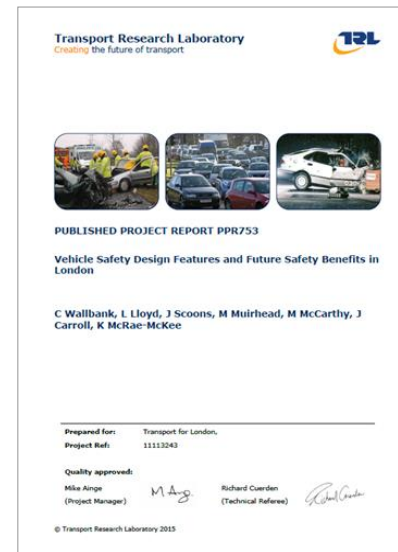


Vehicle technology
research: solutions for
the London vehicle
fleet



Research: The benefits of vehicle safety technologies in London

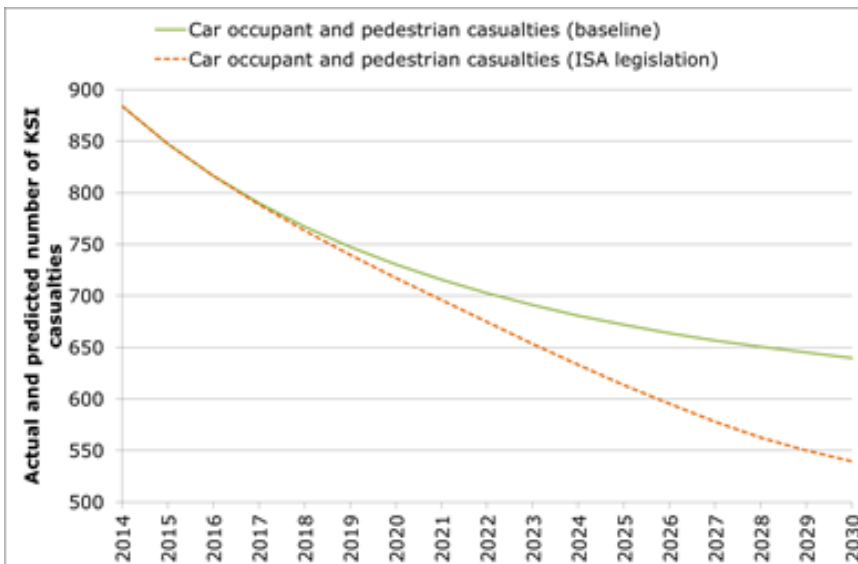
- TfL keen to better understand the role of safety technologies in the wider London fleet
- Report builds upon research for the European Commission
- Technologies identified as having the greatest benefit to reducing casualties in London were
 - Intelligent Speed Assistance
 - Pedestrian Autonomous Emergency Braking
 - Pedestrian secondary safety features
 - Alcolocks



Vehicle safety technologies to reduce casualties in London

- **Intelligent Speed Assistance:** prevention of up to **649** car occupant and pedestrian KSI casualties in London by 2030

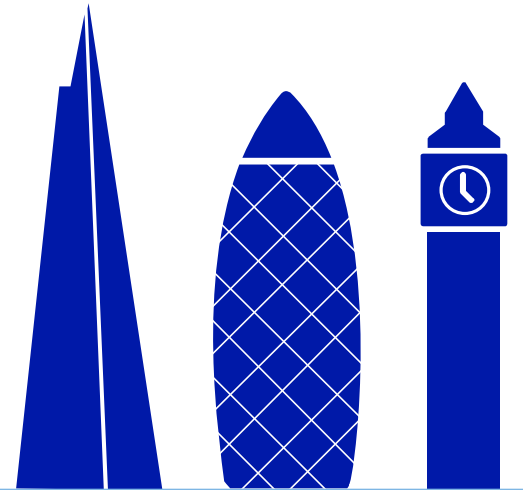
- **Pedestrian AEB system:** prevention of up to **328** pedestrian KSI casualties by 2030
- **Improved pedestrian secondary safety measures:** prevention of up to **183** pedestrian KSI casualties by 2030
- **Alcohol Interlocks:** prevention of up to **108** KSI casualties from drink drive collisions by 2030



	ISA		Pedestrian secondary safety		Pedestrian AEBs		Alcolocks	
	2015-2020	2015-2030	2015-2020	2015-2030	2015-2020	2015-2030	2015-2020	2015-2030
KSI Casualty saving	26	649	7	183	12	328	5	108



Next steps/
conclusions



Summary

- Real progress made in reducing KSI casualties in London
- A strategy fit for a modern road safety agenda
- Continuing to harness new technologies to improve safety of vehicles
- Delivering road safety in collaboration with our partners
- Influencing national and international legislators to improve safety in London





Thank you

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