TRANSPORT SAFETY COMMISSION

UK Transport Safety: *Who is responsible?*

March 2015

Contents

The Transport Safety Commission

The Transport Safety Commission was established in the autumn of 2013 partly in response to a House of Commons Transport Committee recommendation.[1] The role of the Commission is to inquire into transport safety matters, in order to assist with the development of policies that will reduce risk and bring about continued reduction in transport-related casualties. The Commission is an independent body with members drawn from the UK Parliament and from the air, rail and road safety professions and related sectors.

Co-Chairs

- Sir Peter Bottomley MP, Member of Parliament for Worthing West (Conservative), House of Commons
- Professor Stephen Glaister CBE, Director, RAC Foundation

Commission Members

- John Abbott, Director of National Programmes, Rail Safety & Standards Board (RSSB)
- Professor Richard Allsop OBE, Emeritus Professor of Transport Studies, University College London
- Jeanne Breen OBE, Principal, Jeanne Breen Consulting (resigned 19 March 2015)
- Kate Carpenter, Divisional Director (Operational Road Safety), Jacobs / The Chartered Institution of Highways & Transportation
- Dr Nicola Christie, Director of the Centre for Transport Studies, University College London
- Keith Conradi, Chief Investigator, Air Accidents Investigation Branch
- Chief Constable Suzette Davenport, Association of Chief Police Officers
- Dr Rob Hunter, Head of Flight Safety, British Airline Pilots Association
- Dr Julian Huppert MP, Member of Parliament for Cambridge (Liberal Democrat), House of Commons
- Ben Johnson, Senior Delivery Planning Manager, Road Safety, Transport for London
- Professor Mike Kelly, Director of the Centre for Public Health, National Institute for Health and Care Excellence (retired)
- Dr David Pencheon, Director Sustainable Development Unit, NHS England and Public Health England
- Barry Sheerman MP, Member of Parliament for Huddersfield (Labour/Co-operative), House of Commons
- Jason Torrance, Policy Director, Sustrans

[1] House of Commons Transport Committee: *Ending the Scandal of Complacency: Road Safety beyond 2010*, Eleventh Report of Session 2007-08, HC460, October 2008

The Inquiry

The Commission's inquiry *UK Transport Safety: Who is responsible?* was into the legal framework and institutional responsibilities in the UK for transport safety (road, rail and aviation).[2] The aim was to compare and contrast the different responsibilities and accountabilities for transport safety with reference to identified international good practice, to highlight strengths and weaknesses of current approaches and to determine whether lessons are transferable from elsewhere and from one transport mode to another.

We invited evidence on the following questions:

- Leadership, responsibility and coordination: Are there clear lines of responsibility for transport safety? How is responsibility structured currently across the different modes and for different system providers? Is national leadership in transport safety evident in all the modes?
- Objectives and targets: What transport safety results are currently being sought for the different modes and which agencies are accountable on behalf of government for achieving them? What is the role and nature of aims and targets? Should the long-term Safe System goal and strategy be adopted for all transport modes? How can road safety goals be aligned with other transport objectives such as sustainability, public health and active travel measures to achieve co-benefits?
- Perceptions and culture: How do we gauge public perception of risk, public acceptability of effective measures; and public and corporate acceptance of liability? How can a greater culture of safety be achieved among employers, transport users and others?
- Funding: What are the current levels of funding for transport safety? Are annual funding mechanisms and resource allocation procedures appropriate?
- Promotion: Is transport safety receiving adequate promotion and championing?
- Monitoring and evaluation: How should trends in safety be monitored and by whom? What is the case for an independent road safety or collision investigator?
- Research: What provision is made for keeping abreast of effective global practice? What provision is made for transport safety in R&D budgets?

The inquiry was co-chaired by Sir Peter Bottomley MP and Professor Stephen Glaister CBE. The inquiry had been made possible by generous donations from the Safer Roads Foundation and the Rees Jeffreys Road Fund.

The Commission is very grateful to all the organisations and individuals who appeared as witnesses or provided written evidence or assisted in other ways. The Parliamentary Advisory Council for Transport Safety (an All-Party Parliamentary Group),[3] provided the secretariat, particularly David Davies (Executive Director), Amy Napthine, Constantinos Regas and Heather Ward.

The programme for oral evidence witnesses and a list of written evidence received are provided at Appendix 1; written evidence and transcripts of oral evidence can be found at http://www.pacts.org.uk/transport-safety-commission/.

2 Marine transport was outside of our expertise and we did not specifically inquire into it.
3 For information about PACTS see http://www.pacts.org.uk/about/

Executive Summary

The Commission's inquiry *UK Transport Safety: Who is responsible?* was into the legal framework and institutional responsibilities in the UK for safety of transport by air, rail, and road in the UK.

Responsibilities for safety in aviation and rail transport are well established and the Commission through this inquiry has no recommendations concerning safety in these modes.

The small number of deaths in rail and air transport over a period of years contrast sharply with an average of nearly five per day on the UK's roads. The Commission heard that the level of risk we face on the roads would not be tolerated in aviation, railways or, for that matter, in the workplace.

There needs to be a long, hard look at our present arrangements for roads to take advantage of learning from the experience in the rail and aviation sectors and in the road safety management practices of other leading countries. The historical successes in reducing road casualties have not happened by chance but through the assiduous activity of the Department for Transport (and its predecessors), local highways agencies and other governmental effort. The work of the private and voluntary sectors has also been crucial. But we cannot rest on our laurels and progress in the future will become progressively harder unless our current fragmented arrangements are improved.

The complex structure of responsibility for safety in the case of roads is far from transparent to the public and professionals alike. It is hardly surprising that accountability and leadership in road risk management can become diffuse.

The rail and air transport safety regimes are based on a systems approach with a strong emphasis on safety management by the system providers and operators. We recommended that all authorities adopt a systems approach and pursue road casualty reduction towards goals within a recognised risk management system which allows for the measurement, targeting and monitoring of outcomes. This will actively and coherently address shortcomings in the road system, in vehicles, in user behaviour and in the care of people injured in collisions. The Safe System is such an approach that has gained international acceptance and is described in an Appendix.

To achieve further significant casualty reduction and safe active travel requires re-establishment of clear leadership at national government level. The lack of a coherent approach across government departments is also seen at the local level.

We are concerned that in recent years those bodies with the relevant roads responsibilities may have become distracted, particularly by the difficulties of dealing with fiscal austerity and a view that national road safety targets are no longer necessary. The rise in road casualties in 2014 – against the long-term trend of year-on-year reductions – shows that casualty reduction cannot be taken for granted.

We call for adequate, dedicated resourcing for road safety, at the least returning to levels that prevailed between 1987 and 2009. We recommend restoring the capacity of those with current statutory responsibilities. The funding levels for air and rail safety and the sum recently awarded to Highways England for additional safety measures on the strategic network demonstrate that additional funds could be found for road safety on local roads.

Currently there are no national casualty reduction targets for local roads in England. The balance of opinion we received was strongly that national targets are helpful and necessary.

We recommend that national Government sets ambitious targets for casualty reduction on the path towards zero deaths and serious injuries. Target setting needs to be grounded on sound analysis informed by the underlying principle of making risks as low as reasonably practicable (ALARP) and underpinned by intermediate outcome targets and indicators which can be adopted by local government and other responsible bodies according to their road safety and other travel objectives.

The greatest influence on preventing death and serious injury is through design of roads and vehicles, and better speed management. But measures that engage directly with road users and effect behaviour change through enforcement, education and campaigning are also needed.

If we are to continue to drive down casualty numbers there needs to be leadership in enforcement, education and campaigning, demonstrated publicly through placing an emphasis on shared responsibility among the different system providers as well as personal responsibility.

Some road transport activities involve higher levels of risk and these users would like to feel safer, regardless of casualty statistics: cyclists, parents of young children and of young drivers, older drivers and motorcyclists are examples. Making active travel – walking and cycling – less risky and so more attractive would have major health and environmental benefits. This can be achieved by increasing action to reduce actual risks and to improve the accuracy of the perception of risks for all vulnerable road users in order to encourage safe active travel.

In implementing its commitments made in September 2014 the Ministry of Justice should make sure that all victims of road traffic crime benefit equally with victims of other crimes from their implementation.

The number of deaths resulting from road travel in the course of work greatly exceeds the number occurring in the workplace.

We are disappointed by the approach of the Health and Safety Executive (HSE) in this vital area of workplace safety. HSE's priorities do not include work-related road safety. We recommend that the HSE changes policy so that employers have to report when someone has been injured whilst using the road for work or when someone driving or riding for work injures a member of the public. This and other measures would help ensure these injuries are managed and investigated consistently with those injuries sustained in a fixed workplace.

Arrangements for accident investigation vary. The air and rail sectors have similar arrangements with specialist, dedicated accident investigation bodies. There is total separation from any relevant regulatory or operator body as it is to these that the majority of safety recommendations are directed. However they are not necessarily the only investigation into an accident and legislation allows for parallel (but separate) investigations including the judiciary. Accident investigation is focused on learning and is separate from any prosecution (which may still proceed). The reports are compiled in a consistent format, published and usually acted upon.

It is different for roads. Road collisions resulting in death are investigated, but not necessarily from the right point of view for the understanding of causes. The police investigate to establish whether an offence has been committed and the highway authority investigates to establish whether there has been a failure of the road infrastructure. The HSE might investigate to see if health and safety law has been breached but in practice this rarely happens.

Coroners investigate road deaths (and others including deaths in aviation and rail accidents) to establish the cause of death. They may produce Reports to Prevent Future Deaths which can include recommendations for action. They may be advised by technical safety experts but the process is not comparable to that of an investigation in aviation or rail.

The investigation procedures into road deaths are not standardised; findings from these investigations are not sufficiently accessible; the responsibility for responding to recommendations is not clear; and arrangements for corporate learning of the lessons are not adequate. Responsibility for acting on the findings needs to be clearer and more comprehensive.

The collection, interpretation and dissemination of data and information is vital to our understanding of what works and, at least as importantly, what does not work so that avoidable harm is not imposed upon workers and members of the public. Good quality and accessible information is the bedrock that supports better decision making.

In roads the UK has a long and excellent research record. But research and learning, like transport and health, are global activities and whilst the UK output is highly regarded there is much to be learned from international good practice and example.

This has been recognised in the health sector where Public Health Observatories have been set up to provide a single gateway to a vast range of high-quality and trustworthy public health intelligence, expertise and support for practitioners, policy makers and the wider community. Their expertise lies in turning information and data into meaningful health intelligence whereby they can act as a learning network.

Professional experts and the victims of drivers breaking traffic laws feel strongly that there needs to be better transparency and completeness of process and data relating to road crime. We support this.

There is a need to support better knowledge transfer including synthesis and dissemination of safety research reports and briefings from across academia, government departments, the three main transport modes, the third sector, and from the various bodies in health, police, and insurance companies.

Further progress requires better professional mobilisation to improve governmental understanding of the factors leading to death and serious injury on our roads and ways of mitigating the consequences. Presently there is an uncoordinated patchwork of effort across government to understand these factors and we need to know in what ways a re-allocation of effort might be productive, or what the return might be from changing the way we do things.

Whilst independent investigation of individual incidents in rail and air is a vital part of the risk-management process, on its own it is not enough. The institutional arrangements aim for an overall understanding of the context and what the systematic study of individual incidents can tell us about the properties of the whole system. In the context of roads, police investigations and coroner's reports are valuable, but the difficulty in abstracting the lessons contained within them make them less productive than they could be if they were digested by a single co-ordinating body.

We believe the systematic principles, practice and follow up which are used in the investigation of air and rail accidents should be applied in appropriate ways to road collisions. In particular, there needs to be a learning process which is kept separate from any criminal investigation.

We recommend the creation of an advisory body for road safety independent of government to provide continuity of knowledge and be an authoritative source of expertise, dissemination, advice and intellectual leadership in risk management in road use.

Road collision investigation could be a function it supervises. The high frequency of incidents is no excuse for failing to be systematic.

We do not envisage that it would have executive or enforcement powers. It would not necessarily supplant any existing activities or responsibilities. It would achieve results by establishing itself by reputation for analysis and argument; an impartial, advisory body to which executive authorities look to and respect.

The safety investigation authorities in the air, rail and marine sectors liaise and share learning. We recommend that the head of any road accident investigation body is a member of the Chief Accident Inspectors Board.

Further consideration is necessary to determine an appropriate scope and scale of activity and cost. However, we reject any simplistic objection that this proposal would cost money at a time of austerity unless it can be demonstrated that this new body would be unlikely to achieve a commensurate saving of death and injury. There is so much to be done and so much to gain that we think that unlikely.

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1. Safety in UK transport

The Commission has inquired into responsibility for safety of transport by air, rail, and road in the UK.

The numbers of deaths, the circumstances and casualty rates vary considerably across the main modes but are considerably higher for road transport.

> *When we talk about transport safety it is overwhelmingly a road safety problem*
> [J Dawson, Road Safety Foundation: ev sess 6]

We illustrate this in Table 1 below.

TABLE 1: DEATHS IN UK AIR, RAIL AND ROAD TRANSPORT, 2013

	Air [4]	***Rail*** [5,6]	***Road*** [7]
User Deaths	30	4	1,769
Value of prevention [8]	£52m	£7m	£3,083m

In the case of large commercial air transport aircraft there has not been a passenger fatality on a UK civil aircraft since 1999[9] although the Air Accidents Investigation Branch investigates on average 20 fatalities each year. These are predominantly private flights or offshore oil and gas helicopter accidents.

In 2013 there were no fatalities to passengers on mainline trains.[10] There has not been a passenger death in a train accident[11] since Greyrigg in 2007. The four rail passenger deaths in the table above occurred on the train-platform interface; these include falls between the train and platform and being struck by a moving train when standing close to the platform edge.

On the mainline railway network 279 suicides were recorded in 2013-14. There were a further 29 deaths, 8 of which were at level crossings and the remainder were likely trespassers. There are known to be about 54 suicides or attempted suicides on the strategic road network in that period.[12] We do not know about the number of suicides on all-purpose roads because the STATS19 record of road casualties explicitly excludes suicides.

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[4] http://www.aaib.gov.uk/cms_resources.cfm?file=/AAIB%20Annual%20Safety%20Report%202014.pdf
[5] ORR 2013-2014 Annual Statistical Release: Safety Key Statistics These cover mainline only i.e. exclude private railways
[6] There were 27 fatalities on the London Underground network (2013-2014) 3 fatalities on Non mainline railways (2013-2014). Data available: http://orr.gov.uk/__data/assets/pdf_file/0006/14784/key-safety-statistics-release-2013-14.pdf
[7] User deaths— https://www.gov.uk/government/publications/reported -road-casualties-great-britain-annual-report-2013 + PSNI figures http://www.psni.police.uk/updates_road_traffic_statistics
[8] Based on value of preventing a fatal casualty £1.7m based on 2013 prices and values. RAS60001 https://www.gov.uk/government/publications/reported -road-casualties-great-britain-annual-report-2013
[9] http://www.caa.co.uk/default.aspx?catid=2200&pagetype=90&pageid=15071
[10] This is the national rail network and excludes private railways.
[11] The definitions of 'accidents' as used in rail and aviation can be found in Appendix 2.
[12] Road worker deaths— Highways Agency Annual Report 2014
Suicides— Highways Agency Suicides Analysis for the Transport Safety Commission, unpublished, 2015

In 2013 three deaths of rail workers were recorded and none of road workers on the strategic road network or of those working in the aviation sector.

The small number of deaths in rail and air transport over a period of years contrast sharply with the 1,769 deaths in just one year on the UK's roads—an average of nearly five per day.

Of the 1,769 deaths 48 were children or young people under the age of 16 years. We have now reached a point where mortality in young people is no longer dominated by childhood illnesses. Unintentional injuries are the leading cause of death in children after their first year of life, and transport injuries are responsible for 41% of deaths in 1-9 year olds and 77% for those aged 10-18 years.[13]

> *…..we produced an atlas of who dies of what and where for everybody who dies in Britain. And this was about five or six years ago, ….and the thing that shocked me about that atlas was suddenly discovering what proportion of children were still dying on the roads because all other forms of death for children had reduced faster, things like childhood leukaemia and so on, have had faster reductions*.[D Dorling, University of Oxford: ev sess 1]

The Commission has heard that the level of risk we face on the roads would not be tolerated in aviation, railways or, for that matter, in the workplace. In the UK in 2013, in addition to those killed on the roads, 22,377 were recorded as seriously injured and nearly 169,000 more as slightly injured, with corresponding loss to society in human and material terms valued at £15bn.[14] About 30% of deaths and serious injuries occur in the course of work. These losses do not include the consequences of many unrecorded collisions and incidents or the daily impact on travel of disruption following collisions. Nor do they include thousands more pedestrians being seriously injured from falls on the footway, with many of these sustaining permanent disabilities and some dying from their falls.

[13] Royal College of Paediatrics and Child Health & University College London. Child Health Research UK – Clinical outcomes review programme. Overview of child deaths in four UK countries. 2013. London. RCPCH

[14] All GB figures from RRCGB: 2014. For NI see http://www.psni.police.uk/updates_road_traffic_statistics

2. Responsibility for transport safety

The thrust of our inquiry was into responsibilities and not interventions.

The Secretary of State for Transport is ultimately responsible for safety of the transport system in England and Wales; it is the Transport Minister in Scotland. Lead responsibility for road safety in Northern Ireland lies with the Department of the Environment. The detail of the legislation and powers of the UK jurisdictions and major transport bodies can be found in Appendix 3.

Over the last couple of decades, the rail industry has developed a systematic, science-based set of processes for risk reduction. Whilst Parliament is involved in setting and amending the legislative and administrative framework, leadership now comes from within the rail industry itself. And enforcement and audit are achieved through its strong and independent specialist bodies.

The Office of Rail Regulation (ORR) acts as the regulator for infrastructure and train operators. The ORR is responsible for regulating both the safety and economic aspects of the rail network. It offers advice to operators and acts as an enforcement authority if it considers this necessary. ORR incorporates the Railway Safety Directorate (formerly the HM Railway Inspectorate) and is able to prosecute breaches of the Health and Safety at Work etc. Act (1974). It is also able to issue improvement notices to encourage better performance within the industry.

The Rail Safety and Standards Board (RSSB) is an industry-led body maintaining railway standards and developing and promoting good practice within the industry. It has overall responsibility for the industry's research programme.

The Civil Aviation Authority (CAA) is the specialist aviation regulator. The CAA is independent of government, and is funded by the aviation industry. Air accidents are investigated by the Air Accidents Investigation Branch (AAIB). The AAIB is part of government and is independent from the aviation industry and the CAA.

In general terms the characteristics are:

- a body of legislation and a system of regulation that identifies hazards in advance; sets rules and responsibilities for the safe operation of the system; defines unacceptable behaviour, defines the records that must be kept, and sets out the safety performance framework;
- an inspectorate that is independent of government that seeks to ensure compliance;
- a body that is independent from industry with powers and duties to investigate the causes of incidents and make recommendations concerning prevention and learning from experience; and
- a body independent of government with a duty to ensure that, within reason, these recommendations are implemented.

Responsibilities for safety in aviation and rail transport are well established and the Commission through this inquiry has no recommendations concerning safety in these modes. Deaths and serious injuries in rail and air transport still occur and there may be room for improvement. Continued vigilance and adequate funding are necessary. But the safety regime in those industries is highly-developed and closely managed. The roles of the key institutions and lines of accountability seem clear, and responsibility for accident prevention, investigation and action lies within the system.

The safety regimes in road transport are very different from those in rail and air.

On an operational level, responsibility for leadership and administration of road risk management in England[15] is divided "horizontally" between central government, the Highways Agency (Highways England from 1 April 2015), local government, voluntary bodies, the vehicle manufacturers and private individuals as users. It is also split "vertically" between bodies such as the Department for Transport, the Department for Communities and Local Government, the Ministry of Justice, the Home Office, the Department of Health, the Health and Safety Executive, elected Police and Crime Commissioners, the coroners and others.

In the devolved administrations, the Scottish and Welsh Governments, the Northern Ireland Assembly, the Greater London Assembly/Mayor of London, the Scottish Police Authority, the Northern Ireland Policing Board and others have these road safety roles and responsibilities to varying degrees (see Appendix 4).

The Department for Transport takes the lead in road safety on behalf of the UK in international harmonisation and other work and liaises with the Scotland and Wales Governments on road safety strategy for Great Britain.

It is evident that there are many organisations with leadership roles in relation to investigating and managing risk on the roads, with powers and to a lesser extent with duties. These arrangements, established over many years, have worked to a degree. They have been successful in reducing casualties to an extent that has attracted favourable comment from the international community. However, from the evidence we received and from international best practice, we are clear that they could be improved.

The complex structure of responsibility for safety in the case of roads is far from transparent to the public and professionals alike and it is hardly surprising that accountability and leadership in road risk management can become diffuse. Various bodies have powers and duties but in roads these are neither comprehensive nor sufficiently well-defined. In evidence we heard examples of how these bodies sought to define their jurisdictions and duties—on occasion seeking to pass them to others. Table 2 seeks to show the complexity of these bodies and their responsibilities

> *..there is no separation between the responsibilities for providing safe roads and the responsibility for speaking for safe roads. So if you write to the Minister with a problem about safety on the road, the person who is responsible for producing the road will give you the reply, which is a very strange thing to happen if you think about it. Where is the separation you would expect and you get in the other transport modes?* [J Dawson, Road Safety Foundation: ev sess 6]

[15] Different arrangements apply in the Devolved Administrations – See Appendix 4

TABLE 2: BODIES WITH RESPONSIBILITIES FOR TRANSPORT SAFETY

Overall safety authority		***Road***	***Rail***	***Air***
International				International Civil Aviation Organization (ICAO)
European		European Commission DG MOVE	European Railway Agency (ERA)	European Aviation Safety Agency (EASA)
UK		Department for Transport (DfT) Devolved administrations		Civil Aviation Authority (CAA)
	Standards	DfT Driver and Vehicle Standards Agency (DVSA) Highways Agency (HA): Design Manual for Roads and Bridges (DMRB)	Rail Safety and Standards Board (RSSB)	CAA
	Regulator	DVSA Traffic Commissioner Office of Rail Regulation (and Passenger Focus)	Office of Rail Regulation (ORR)	CAA
	Certifying	Vehicles Certification Agency (VCA) Driver and Vehicle Licensing Agency (DVLA)	Network Certification Body (NCB)	CAA
	Investigatory	Coroner [cause/responsibility] Police [investigation – illegality] DfT: e.g. Road Accident In-Depth Studies (RAIDS)[learning] HA [road death investigation guidance] Local authorities [learning countermeasures]	Rail Accident Investigation Branch (RAIB)	Air Accidents Investigation Branch (AAIB)

	Enforcement	Police	ORR	CAA
	Incident reporting (Confidential)	CLOCS (formerly Construction Logistics and Cyclist Safety) [voluntary]	Confidential Reporting and Analysis System (CIRAS)	Confidential Human Factors Incident Reporting Programme(CHIRP)
	Incident Reporting (Standard)	Police (STATS 19) HA National Incident Liaison Officer (NILO) reporting HA Command & Control data (Managing Agent/Asset Support Contracts data)	Safety Management Information Systems (SMIS)	CAA
	Operators	All organisations and individuals operating one or more vehicles	Network Rail Train Operating Companies	Each respective airline
Devolved Juris-dictions[16]	***Scotland***	Scottish Government	UK Government	CAA
	Wales	Welsh Government	UK Government	CAA
	Northern Ireland	Transport Northern Ireland (NI)	Department for Regional Development (NI)	CAA
	London	Greater London Authority (GLA)	GLA through TfL for underground and overground	CAA

[16] The road safety powers of the devolved administrations are set out in Appendix 4

Transport is also a workplace

The Health and Safety Executive (HSE) has an overarching role in safety arrangements in workplace safety. It exercises this role in respect of rail, air and in road worker safety. However, in relation to work related road use it plays a minor role. Its priorities, as set out in the former Health and Safety Commission's Strategic Plan, do not include work-related driving activities.

> *The police will, in most cases, continue to take the lead on the investigation of road traffic incidents on the public highway. Enforcement action by HSE will usually be confined to incidents where the police identify that serious management failures have been a significant contributory factor in the incident.*[17]

We are concerned that this issue is not receiving sufficient attention and we address it further below.

The arrangements relating to the railways were described in written evidence by the ORR

> *Within the rail industry there are clear lines of responsibility for health and safety which are defined by law and regulated and enforced by the ORR as the national safety authority for railways in England, Wales and Scotland.*
>
> *Under health and safety law in Britain all employers have a legal duty to manage risk to their staff and anyone else affected by their operations. 'Duty holders' within the railway industry have clear responsibilities defined by legislation to manage risks arising from their operations that could affect workers, passengers and/or members of the public, so far as is reasonably practicable, and have a duty of cooperation to work with other duty holders and relevant stakeholders, such as the Highways Agency and local authorities in respect of level crossings, to ensure that related systems and cross-modal interface risks are also managed effectively.*

Proposals for ORR to take responsibility for monitoring the efficiency of Highways England take effect from 1 April 2015 with the title Highways Monitor (now Office of Rail and Road). This new role will not include specific health and safety responsibility, which will remain with the police and other highway regulatory authorities including HSE for work-related road safety matters. Under the Statutory Guidance to the Highways Monitor "where mutually agreed between the Monitor and the Secretary of State, it may be appropriate under normal circumstances for the Monitor to monitor compliance with a specific provision by assessment by the Secretary of State, or by a third party agreed between the Monitor and the Secretary of State (such as the Health and Safety Executive)."[18]

The Civil Aviation Authority performs this role in respect of air transport through its safety management systems and memorandum of understanding between it and the HSE.

Safety Management

There needs to be a long, hard look at our present arrangements for roads to take advantage of learning from the successful experience in the rail and aviation sectors and in the road safety management practices of other leading countries. The historical successes in reducing road casualties have not happened by chance but through the assiduous activity of the Department for

[17] HSE and DfT (2014) Driving at Work: managing work related road safety *http://www.hse.gov.uk/pubns/indg382.pdfhttp://www.hse.gov.uk/pubns/indg382.pdf*

[18] Statutory guidance to the highways monitor and Office of Rail Regulation, March 2015, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/411076/statutory-guidance-on-fines.pdf

Transport (and its predecessors), local highways agencies and other governmental effort. We cannot rest on our laurels and progress in the future will become progressively harder unless our current fragmented arrangements are improved.

> *Road safety problems occur across the road safety management system - whether in the level of road safety results achieved (the levels of deaths, serious injuries, costs; levels of drinking and driving, speeding, seat belt use etc), in the scope of the intervention set (improving the safety quality of infrastructure, vehicles, user behaviour, and the emergency medical response) or in the quality of institutional management arrangements (goal and target-setting, coordination, legislation, funding, promoting, monitoring and evaluation, R&D and knowledge transfer) which provide the foundation for producing improved road safety.*[19]

The rail and air transport safety regimes are based on a systems approach with a strong emphasis on safety management by the system providers and operators. At the global level the World Health Organization and World Bank produced *World report on road traffic injury prevention.* This was a catalyst for international action culminating in UN resolutions and the Decade of Action for Road Safety launched in May 2011. It has been influential globally and brought to the world's attention the five pillars of action of the *Safe System* approach.[20]

This approach

- recognises that, despite preventive efforts, road users are fallible, collisions and injuries will continue to happen;
- aims for a transport system better able to accommodate human error and to manage forces that arise in collisions so that no road user is exposed to forces likely to result in death or serious injury;
- places shared responsibility upon providers of the transport system and users of the system for safety in the system and its use;
- directs interventions to long term safety goals pointing towards zero death and serious injury; and
- aligns road safety management with wider goals including social, economic, environmental and health goals.

This will actively and coherently address shortcomings in the road system, in vehicles, in user behaviour and in the care of people injured in collisions.

There is focus on targeting intermediate outcomes that are causally related to death and serious injury, for example average speeds; seat belt use; sober driving; the safety quality of roads and vehicles; and the emergency medical system response.

[19] COWI (2010) Technical Assistance in support of the Preparation of the European Road Safety Action Programme 2011-2020, Final Report. http://ec.europa.eu/transport/road_safety/pdf/prepar_ersap_final_report.pdf

[20] http://www.who.int/violence_injury_prevention/publications/road_traffic/world_report/en/

To an extent this approach has been accepted by important organisations in road transport – Highways England,[21] TfL, the Scottish Government and the DoE Northern Ireland have recently endorsed it. But it has not found governmental acceptance in England:

> *Para 1.20: We have used a combination of these approaches [the systems approach and the public health approach] with most focus upon the public health approach. The other feature of our approach has been a strong emphasis on prioritisation of the most serious problems and highest risk areas and groups and then focussing efforts upon tackling these. We will continue to refine these approaches and ensure that they can be developed to work within the new emphasis on more local devolved decision making.*[22]

On the other hand, safety organisations such as PACTS, Road Safety Foundation, Institute of Advanced Motorists (IAM), and BRAKE advocate its adoption. A wide range of international organisations such as WHO, OECD, ISO, World Bank, IRF promote *Safe System* to all countries and we describe it in Appendix 6. There is inadequate recognition at present that a systematic approach with a strong emphasis on management would pay safety, health and social dividends.

It is recommended that all authorities adopt a systems approach and pursue road casualty reduction towards goals within a recognised risk management system which allows for the measurement, targeting and monitoring of outcomes.

[21] Department for Transport (2014) Road Investment Strategy: Strategic Vision, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/383145/dft-ris-strategic-vision.pdf
[22] Department for Transport, Strategic Framework for Road Safety 2011. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/8146/strategicframework.pdf

3. Leadership and coordination

Although the UK is one of the better-performing nations – *"Our roads are amongst the safest in the world."*[23] – the level of death and injury on the road that remains warrants systematic and determined effort. There is a concern that in recent years those bodies with the relevant responsibilities may have become distracted, particularly by the difficulties of dealing with fiscal austerity and a view that national road safety targets are no longer necessary. The rise in casualties in 2014 – against the long-term trend of year-on-year reductions – confirms there is no room for complacency.

The Commission heard that safety leadership does exist in rail and is exercised through:

- The ORR as regulator and its responsibilities for prosecuting under the Health and Safety at Work etc Act 1974;
- The RSSB for setting Standards; and
- The RAIB for investigating rail accident and incidents.

There are corresponding leadership functions in aviation through the CAA and AAIB.

There is demand from many witnesses for stronger government leadership on road safety matters in England.[24] The lack of a coherent approach across government departments is also seen at the local level.

> *A cross-government strategy document is required which everyone would be heeding to and everyone would be involved in pulling together as well. But how you get people to buy into that afterwards is quite difficult without some sort of senior level leadership* [N Grieg, IAM: ev sess 3]

The message in relation to roads that came across in the evidence, again and again, was reflected in this:

> *Many people in the UK are doing good—they are dedicated and energetic. They are investigating, collecting and analysing data. But they lack critical review and external assessment. And nobody is bringing their work together* [R Cuerden, TRL: ev sess 5]

Nor is anybody at UK governmental level giving an adequate lead in carrying it through systematically into action. We heard that

> *… the key issue here is leadership. There is clearly a role for Government here. The Government needs to set the tone that other organisations can follow, that's what governments are for, to set priority for road safety within road policing for instance.*[R Geffen, CTC: ev sess 3]

A parallel view is that organisations outside Government also have a strong role to play:

> *… in terms of road safety leadership then government should be persuaded to put the trust in those professionals who exist in bodies … to encourage bringing those*

[23] Robert Goodwill in http://www.theguardian.com/world/2015/feb/05/figure-for-child-road-deaths-and-serious-injuries-rises-for-first-time-in-20-years
[24] This report mainly addresses the Westminster Government. The diversity of policy and devolved responsibilities can be found in Appendix 4

> *bodies together and providing that very leadership….. it's getting government to recognise that and to buy into it rather than just putting it at sort of arm's length…. In terms of motorcycle leadership we have started that process... discussing with DfT with the aim of seeking support for our leadership….So leadership's the word but I don't think we should constantly look to government for that, this is an area perhaps we need to provide ourselves.* [C Carey-Clinch, Motorcycle Industry Association: ev sess 3]

As with other policy issues, public opinion can be divided on road safety; here speed management is a good example. Government needs to consider the views of proponents and of opponents. This requires leadership and sometimes governments have to make difficult decisions regarding public health and safety. The ban on smoking is a case in point.

> *It is useful to compare transport safety with regulation of food, alcohol and smoking. If limits on sugar in food are discussed, the perception is that the state is interfering. While it is acceptable to highlight the dangers of drink-driving, bans on drinking on buses and carrying of alcohol on buses are less acceptable to the public. The smoking ban was preceded by strong evidence of harm and accompanied by huge social pressure for smokers to go outside.*
>
> *...it seems to me that the smoking ban was possible because people came to believe that their behaviour harmed others rather than it being the nanny state telling you what to do, ……..this is also important in safety areas, so speed limits, when you're emphasising that you're a danger to others, drunk driving, and there was a campaign on this basis to get people to wear seatbelts in the back seats of cars* [J Wolff, University College London: ev sess 1].

To achieve further significant casualty reduction and safe active travel requires re-establishment of clear leadership at national government level.

Objectives, goals and targets

Good safety management involves continually targeting system failures by taking action on the key factors known to be causally related to death and serious injury and setting interim targets and goals for their reduction. This should be the focus of all those involved in policy and practice.

In the rail sector there are three levels of 'targets':

- ALARP (the principle of seeking to make risks as low as reasonably practicable). *ALARP is a process where a risk is weighed against the trouble, time and money needed to control it. The decision is weighted in favour of health and safety because the presumption is that the duty holder should implement risk reduction measures*;[25]
- the ORR seeks zero industry-caused casualties; and
- the EU seeks to maintain current safety levels and over time to bring all member states' performance up to the standards of the best.

The aviation sector also has targets but these are globally set by the International Civil Aviation Organization (ICAO). They are expressed as at most $5x10^{-9}$ fatal accidents per flight hour (vertical separation) and at most $2.5x10^{-9}$ fatal accidents per flight hour (mid-air collisions).

[25] Risk management: ALARP "at a glance" HSE http://www.hse.gov.uk/risk/theory/alarpglance.htm

Currently there is a lack of national targets for local roads in England, which is controversial and has attracted considerable comment amongst the evidence we received. The balance of opinion expressed to the inquiry was strongly that national targets are helpful and necessary.

The (Labour) Government which had preceded the coalition had a road safety strategy *Tomorrow's Roads, Safer for Everyone* that included targets.[26] But when that expired the Coalition Government published a *Strategic Framework for Road Safety*[27] that did not set targets. The view was that local communities are best able to decide priorities and it is not for central government to dictate targets

> *I think local authorities are perfectly free to set themselves a target. Indeed, if a local authority is intending to invest money in cycling provision, is intending to put in more 20mph zones in residential areas or outside schools then I think that they are probably in a better position than central government looking at the whole variety of different transport modes in our roads to actually say that we could end up – we will reduce by 10% the number of people killed or seriously injured on the roads in our city because we are doing x, y and z. We're doing A through to Z and it is difficult I think to put them altogether to predict what's going to happen. What I think we do need to do is look at each individual area.* [R Goodwill, Under Secretary of State for Transport: Ev Sess 7]

The situation is summarised in Table 3.

[26] http://webarchive.nationalarchives.gov.uk/20100104171434/http:/www.dft.gov.uk/pgr/roadsafety/strategytargetsperformance/tomorrowsroadssaferforeveryone
[27] Op.cit DfT Strategic Framework for Road Safety

TABLE 3: CASUALTY REDUCTION TARGETS

		Road Casualty Reduction Targets
World		Halve the burden due to global road traffic collisions by halving the number of fatalities and serious injuries by 2030 compared to 2010. http://www.sustainabledevelopment2015.org/index.php/timeline/203-uncategorised/1498-summary-targets-from-proposals-in-sdgs-einventory#FA10
Europe		50% reduction in deaths from 2010 base by 2020 and then, by 2050, the total should be close to zero deaths. (Endorsed by UK Government)
UK		No overall UK target
	England	No overall target from DfT *Highways England*, killed or seriously injured: 40% reduction on 2005-09 average by 2020 on the strategic road network. DfT Road Investment Strategy *Public Health England* has an indicator in the Public Health Outcomes Framework to reduce killed or seriously injured casualties/100,000 population on England's roads
	Scotland	Killed: 40%; Seriously Injured: 55%; reductions from 2010 to 2020. (Transport Scotland: Road Safety Framework to 2020) *"with an ultimate vision that no-one is killed on Scotland's roads"*
	Wales	40% KSI reduction on 2004-2008 average by 2020 (Road Safety Framework)
	Northern Ireland	Reduction of 60% killed and 45% seriously injured on 2004-2008 average by 2020. (Northern Ireland's Road Safety Strategy to 2020)
	London	Reduction in killed or seriously injured of 40% on 2005-09 average by 2020. (TfL: Safer Streets for London)

Public Health England's *Public Health Outcomes Framework* includes public health indicators which directly or indirectly have transport relevance. For example, active travel improves mental health and reduces obesity, whilst the direct indicators relate to reducing hospitalisations due to intentional and unintentional injury to children and young people and to reductions in killed or seriously injured road casualties. The rationale for this indicator is that road safety has implications for the safety of communities and the long term costs to the health and social care systems as well as to the wider economy. It is defined as the number of people killed or seriously injured on the

roads, all ages, per 100,000 resident population based on STATS19 casualty data and Office for National Statistics mid-year population estimates.[28]

Whilst there are no national road safety targets many local authorities have developed their own to focus action, to help road safety compete for resources and be held to account by public and politicians alike.

> *I know the current government didn't like the targets and that's fine but the targets in road safety, the 50% reduction and 40% reduction of KSIs for children and adults, from 2000 to 2010, we met those targets and surpassed them but I think the reason why is because the targets were in place, and everybody said in 2000 they're just unattainable, we can't do this, it's just too grand an ambition, because those targets were in place a lot of local authorities said to themselves, 'We too must meet those targets. We don't want to be the ones that don't meet the targets. We've got to contribute to it.' And wherever I went I met people saying, 'This is where we are with our targets,' and helping the national target. That has gone. People don't say that anymore, even local authorities, because there are no targets.* [D Jamieson, West Midlands Police and Crime Commissioner: ev sess 7]

> *… the issue ...about targets,…. objectives should be very well contained in each authority's local transport plan about safe and efficient use of the highway network. And within the local transport plan there should be clear guidance on what targets are that the authority are setting in terms of casualty reduction targets. …the current road safety strategy doesn't have any strict guidance on what targets there ought to be and left it largely to the decision making of each individual council. ….you could almost look at those targets that have been presented in the local transport plans and the casualty reduction targets to see what sorts of ambitions they've got. …there should be no excuse; every authority should be aiming for the higher performance that's being announced in the road safety strategy. .. Budgets are so tight that we're going to have to think of innovative ways of using those budgets to implement road safety practice and schemes. But I think there is merit in having a national road safety target.*

> *I think the thing that is probably missing ... is the accountability to the general public and how they understand what should be being achieved.* [M Ashworth, ADEPT: ev sess 7]

International evidence among OECD countries shows that those setting quantitative targets showed improved road safety performance:

> *... because such targets are intended to serve as a useful tool to motivate timely road safety measures by the road authorities and others.*[29]

> *It is important to have binding targets. The European Commission has a road deaths reduction target. The UK does not. Sweden has a vision zero target, with management by objectives. In the Netherlands there are 6 government bodies responsible for transport safety.* [E Townsend, ETSC: ev sess 5]

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[28] Public Health Outcomes Framework: technical specifications (2014) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/382115/PHOF_Part_2_Technical_Specifications_Autumn_2014_refresh_02.12.2014_FINAL.pdf

[29] Allsop RE, SZE NN and SC Wong (2011) An update on the association between setting quantified road safety targets and road fatality reduction. AA&P 43 (2011) 1279-1283

We note and welcome that the key performance indicators set out in Highways England's new *Strategic Business Plan*[30] includes a road safety target to achieve a 40% reduction by 2020 in the numbers of people killed or seriously injured on the strategic road network (see Table 2). We endorse the long-term vision, adopted by Highways England and others, of moving towards zero deaths or serious injury.

We note that ALARP has been found to be helpful and productive in many industries including railways and the workplace. Even in particular situations where zero can be closely approached, ALARP remains relevant to the allocation of finite resources among large numbers of practicable casualty-reducing mechanisms. ALARP is not applied systematically in the UK to roads. There are ways in which it should be.

> *ALARP does not mean that every measure that could possibly be taken (however theoretical) to reduce risk must be taken as there is often more than one way of controlling risk. ALARP does not represent zero risk.*[31]

We recommend that national Government sets ambitious targets for casualty reduction on the path towards zero deaths and serious injuries. Target setting needs to be grounded on sound analysis informed by the underlying principle of making risks as low as reasonably practicable (ALARP) and underpinned by intermediate outcome targets and indicators which can be adopted by local government and other responsible bodies according to their road safety and other travel objectives.

Injury is not the only consequence of some road collisions; families and friends are also affected by the death or injury of someone close to them. All bereaved families and those facing life-changing injury deserve sympathy and support, but some victims of drivers breaking traffic laws also face the stress of criminal proceedings. We have heard that such victims are inadequately supported compared with victims of other crimes such as murder or manslaughter. This has been recognised by the Ministry of Justice in the *Getting it right for victims and witnesses: government response (2012).*[32]

> *We acknowledged in the consultation document that more could be done to support victims of road traffic crime. There was strong support for immediate assistance to be made available to those bereaved by fatal road accidents and those seriously injured on the roads. We remain of the view that more can be done to support victims of road traffic offending who meet our criteria for prioritisation and we will work with stakeholders to identify and examine the options for doing so. We do not consider it feasible to extend coverage broadly to anyone bereaved through a road traffic accident or seriously injured by one.*

They further comment that such support for victims of road traffic crime should be commissioned locally and not nationally. Following on from this, the Northamptonshire Police and Crime Commissioner has introduced a new support system for those affected by serious and fatal road collisions.[33]

[30] https://www.gov.uk/government/publications/highways-england-strategic-business-plan-2015-to-2020
[31] http://www.hse.gov.uk/risk/theory/alarpglance.htm
[32] https://consult.justice.gov.uk/digital-communications/victims-witnesses/results/a-gov-response-getting-right-victims-witnesses.pdf
[33] http://www.northantspcc.org.uk/#!/VictimsandWitnesses/23311

In their September 2014 document *Our Commitment to Victims,*[34] the government states it is to enshrine victims' rights with a Victims Law. But they are not proposing to change the definition of a victim. Thus those injured by drivers committing summary motoring offences will still not qualify as victims of crime and thus not be entitled to the services provided by the Ministry of Justice's Code of Practice for Victims of Crime. The EU Victims Directive, which comes into force on 15 November 2015, uses a wider definition of victim of crime which includes road accident victims.[35]

In implementing its commitments made in September 2014 to victims of crime, the Ministry of Justice should make sure that all victims of road traffic crime benefit equally with victims of other crimes from their implementation.

Promoting a safety culture

There appear to be important cultural differences in attitudes towards safety on roads and the other modes.

> *Within the rail and air sectors passengers expect a high level of safety. In the case of rail a series of high profile multi-fatality accidents (Southall, Ladbroke Grove, Hatfield and Potters Bar) and the ensuing public inquiries and trials brought the safety performance of the industry into the spotlight.* [J Cartledge: written evidence]

London Travel Watch is the statutory consumer consultative body covering all modes of public passenger transport procured or licensed by Transport for London and this includes the main line rail network in and around London and all users of Transport for London services including the TLRN (Transport for London Road Network), cyclists and pedestrians.

Passenger Focus is the comparable statutory body covering the rail network in Great Britain and bus and coach passengers in England. From the outset, it is important to note that, when asked, passengers expect a high level of safety when using public transport but that, unless specifically prompted, passengers also assume that the network will be safe to begin with. On 1 April 2015 Passenger Focus is to begin to give users of Highway England's Strategic Road Network a voice though and will be named Transport Focus. Safety of the network will be covered along with road users' views on maintenance and performance.

Both organisations survey passengers and users and provide regular feedback on success of campaigns on their behalf through monthly newsletters and social media.

The road network is a complex open system and has inherent and known risks. Its users span all age groups, and all modes of transport from those on foot and bicycle to drivers and passengers of heavy goods and passenger carrying vehicles. Relative risks of use of different parts of the network and the risks to users and to others associated with some user behaviours such as mobile phone use, failure to wear a seatbelt, drink/drug driving and speeding are not always well perceived or understood. This makes management of risk on the road more challenging but underlines the need for approaches which can influence and assist safe behaviours through changes to the road environment and vehicle. Without high quality information of the risks involved and high level championing of solutions to mitigate them, it is understandable that the public misperceive the risks

[34] https://www.gov.uk/government/publications/our-commitment-to-victims-september-2014
[35] http://ec.europa.eu/justice/criminal/victims/rights/index_en.htm and Labour has recently produced its Victims' Taskforce Report http://www.yourbritain.org.uk/uploads/editor/files/Victims_Taskforce_Report.pdf--see p8 and they are supportive of widening the definition of a victim of crime.

to themselves and do not take account of the risks they pose to others; or to the health costs they impose on the rest of society.

The THINK! campaigns run by the DfT are well regarded an used by local authorities but the two thirds cut funding since 2010 has reduced the number of these.

Witnesses have argued for road safety outcomes to be built into core curriculum subjects throughout a child's education. Education, training, public information and advocacy are all factors in improving road user behaviour for people of all ages.

Drivers are being educated through the courses now being introduced to address and improve a number of driving behaviours beyond just exceeding the speed limit. Two new national NDORS (National Driver Offender Retraining Scheme) courses are 'What's Driving Us?' and 'Driving 4 Change' addressing the issues arising from, for example, seatbelt non-use, mobile phone misuse and why they matter.

> *We look forward to seeing how effective these courses are once they are up and running – they have been carefully constructed with professional design and content. Quality control of delivery is crucial so that people know what they are paying for and that it works.* [Road Safety GB: written evidence]

The effectiveness of promotional and educational campaigns cannot be taken for granted and they should be more consistently scrutinised to confirm that the level of resource devoted to them is appropriate.

We have heard how social media are providing new ways for members of the public to contribute to road safety policy and to local road safety interventions.

These days the public can influence policy, including at the European level. One of the first EU Citizens' Initiative petitions related to transport safety. It was a proposal to introduce 30 km/h (20 mph) zones. Social media can play a role in drawing attention to accident blackspots but also in advancing policy more generally. The cycling lobby is probably the most active on social media.

> *Twitter is a policy-making tool in Brussels* [E Townsend, ETSC: ev sess 5]

However, these channels are used by a minority of individuals and their views cannot be assumed to be representative. Governments and other authorities need to work out how best to make use of these new sources of information and opinion and take account of the views of the less vocal groups and of objective evidence.

Sentencing policy is another expression of judicial and public opinion and seeks to influence behaviour.

> *I think what I would say is that the evidence of the deterrent effect of sentencing is fairly limited. …I think the main deterrent, in our view, would be being caught……There's also some good evidence around the introduction of automatic number plate recognition, so things like driving without insurance or driving without tax, the chances are you'll get caught much more quickly, and some indications that that's led to a change. If you cause death by dangerous driving*

> *almost every single person who commits that offence is likely to go to prison for quite a long period of time. And that balance is actually quite difficult. Over time, 20 years (ago) the maximum penalty for causing death by dangerous driving was just 5 years, it's now 14 years. And again, if you listen to the people would suggest do we need to go higher again? My view is if you look at that time series again has there been a really serious change in behaviour, about increasing those maximum penalties? Not really.* [M Jones, Ministry of Justice: ev sess 6]

All these are examples of mechanisms that are somehow at work in influencing evolving patterns of behaviour by road users, especially drivers and riders, but in the context of promotion of a road safety culture that is oriented towards casualty reduction, there is a lack of clear evidence about the size and sometimes even the direction of the various mechanisms.

Changing public attitudes to risk on the roads

Perhaps the largest difference between road transport and other modes is in how the behaviours of those who use the road system can be influenced. By 2018, when all train drivers will need to be licenced, there will be about 15,000[36] train drivers licenced to use the rails and about 50,000 commercial and private pilots[37] licenced to use the airspace of the United Kingdom. Their skills, behaviours and knowledge are developed and managed through their professions – employers, professional associations, continual professional development and standards.

> *There are strict rules [in rail and aviation] concerning fitness for duty, alcohol and drugs and medical fitness tests etc. On the Highway networks, there are some controls on some professional drivers e.g. HGV, PSV and taxi licence holders and those within large fleets but the majority of drivers of cars and LGVs are not within such systems and the network itself has no controls beyond those of infrastructure and signs and lines and the final sanction of police enforcement. Once a driver has passed their driving test, they are free to drive without further training or checks until they reach significant age and even then they self-report fitness to drive.* [H Byford, Road Safety GB: ev sess 4]

> *Operator's licences are required for vehicles over 3.5 tonne - Traffic Commissioners have the powers to issue licences and to take them away if certain undertakings are not reached. From September 2014 the Driver CPC is also required which can be removed by the Traffic Commissioners for infringements and poor driving behaviour.* [J Hookham, Freight Transport Association: ev sess 3]

The greatest influence on preventing death and serious injury is through design of roads and vehicles, and better speed management. But measures that engage directly with road users and effect behaviour change through enforcement, education and campaigning are also needed.

If we are to continue to drive down casualty numbers there needs to be stronger leadership in enforcement, education and campaigning, demonstrated publicly through placing an emphasis on shared responsibility among the different system providers as well as personal responsibility. Similarly, any institutional arrangements and governance approaches need to recognise the critical

[36] Information to the inquiry from ORR
[37] http://www.caa.co.uk/default.aspx?catid=175&pagetype=90&pageid=11764

importance of means to influence road user behaviour without placing undue blame on the victims of road collisions.

Vulnerable road users

The benefits of walking and cycling substantially outweigh the potential harms from injury but the safety of these modes needs to be improved.

> *The UK is a relatively poor performer in cycling safety compared with many of our continental neighbours but the risks are perceived to be even higher* [R Geffen, CTC: ev sess 3].

There was broad support from CTC and Living Streets for 20 mph limits in urban areas to encourage people to walk and cycle more.

We have cultural issues around risk in the UK that some of our near neighbours see differently.

> *The Dutch and the Danes, they just don't have that sense that the roads are dangerous places, keep the children away, they've designed their streets so that they feel like places where you would expect children to be playing, and children do play in the streets in a way that we've forgotten in this country, that's partly about the design [where designated residential streets are designed to be safer] and it's partly about culture [R Geffen, CTC: Ev sess 3]*

The Commission recognises the threat to public health (mortality and morbidity) associated with inactivity and obesity, and the central role that walking and cycling can play in addressing this. It has been estimated that over 20 years increased physical activity from walking and cycling could save the NHS £17bn (2010 prices) through reductions in the seven most common diseases associated with inactivity and after allowing for an increased risk in road traffic injuries.[38] The WHO has developed HEAT (Health Economic Assessment Tool) to allow estimation of the value of reduced mortality that results from specific amounts of walking or cycling.[39]

Motorcyclists also form part of the user population who are less well protected than other vehicle occupants. Motorcyclists account for 1% of road traffic but around 19% of road deaths. The motorcycle user fatality rate per billion vehicle miles has seen a 27% reduction since 2005-09 compared with 30% reduction in fatality rate per billion vehicle miles for other kinds of road user.[40]

Implementation of safety management systems and an appropriate regulatory framework as recommended below would underpin provision for safe travel for all road users – including pedestrians and cyclists. These recommendations offer the prospect of combining economic benefits associated with reduction in the numbers and severities of road traffic collisions, with reductions in health and social care costs.

Rail and air users expect and demand a level of safety from their system which is much higher than road users appear to expect. This may highlight a different attitude to or perception of risk amongst users of rail, aviation and the roads. Some road transport activities involve higher levels of risk and these users would like to feel safer, regardless of casualty statistics: cyclists, parents of young

[38] http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(12)60766-1/Jarrett et al Volume 379, No. 9832, p2198–2205, 9 June 2012
[39] WHO HEAT http://heatwalkingcycling.org/
[40] RAS41001 p178 RCCGB 2013 https://www.gov.uk/government/publications/reported-road-casualties-great-britain-annual-report-2013

children and of young drivers, older drivers and motorcyclists are examples. Making active travel – walking and cycling – less risky and so more attractive would have major health and environmental benefits. **This can be achieved by increasing action to reduce actual risks and to improve the accuracy of the perception of risks for all vulnerable road users in order to encourage safe active travel.**

A greater culture of safety

The number of deaths resulting from road travel in the course of work greatly exceeds the number occurring in the workplace, where in 2011/12 there were 171 worker deaths and a further 148 to members of the public (excluding rail suicides).[41] Work-related road deaths may account for as much as 30% of all road deaths (around 600 in 2011).[42]

We do not have estimates for the numbers of people who drive for work which means it is difficult to estimate fatality rates per 100 000 workers or working drivers. The HSE have estimated the fatality rate for drivers of heavy goods vehicles (HGVs) over 7.5 tonnes to be 4.4/100,000 HGV drivers (based on 5 year average 2006/07-2010/11 with a 5 year average of 12 fatalities a year)[43] which is second only to agriculture with a death rate of 10.3 per 100,000 workers over the same period.

Work-related road safety is a key area which requires intervention to reduce the risk represented by use of the roads in course of work. The Health and Safety at Work etc. Act (1974) places a duty on all undertakings to manage risk and to reduce it to a level as low as reasonably practicable (ALARP). It also places a responsibility on employers and employees not to impose additional risk on third parties. This is enshrined in rail and air operational legislation.

> *If you look at the legislative framework for workplace safety, just look at the numbers dying. We've got the whole HSE apparatus and yet more people die on the [road] network every year than die in all workplace accidents put together. And you can add the rail and other modes into that, and you still get this huge disparity. So any proportionate response has actually to say the focus, above all, has to be on getting the roads right and moving that towards zero. The legislative control of road safety is weak, diffuse, and at least 50 to 75 years out of date in comparison with workplace safety, particularly product safety, let alone aviation and marine and rail.* [J Dawson, Road Safety Foundation: ev sess 6]

The HSE and DfT (2014) produced *Driving at Work: managing work related road safety.*[44] This document is directed at employers with employees who drive or ride a motorcycle or bicycle for work as well as at the self-employed. It is the guidance document best known and most likely to be used by employers.[45] In addition ISO 39001 (road-traffic-safety management-systems 2012)[46] was developed which specifies for employers how to reduce death and serious injury related to occupational driving by engaging top management in developing and implementing a road traffic safety management system which focuses on long-term, and interim safety objectives. Employers

[41] Fatal injuries in the workplace in Great Britain 2013. http://www.hse.gov.uk/statistics/
[42] Helman S, Christie N, Ward H, Grayson G, Delmonte E and R Hutchings (2014) *Strategic review of the management of occupational road risk* http://www.rospa.com/rospaweb/docs/Advice-Services/Road-Safety/morr-strategic-review.pdf
[43] http://www.hse.gov.uk/statistics/pdf/foi-reported-injuries-lgvs.pdf
[44] *http://www.hse.gov.uk/pubns/indg382.pdf*
[45] Helman S, at al *ibid*
[46] http://www.en-standard.eu/iso-39001-road-traffic-safety-rts-management-systems-requirements-with-guidance-for-use/
[46a] http://www.nidirect.gov.uk/news-jan15-road-safety-while-driving-at-work

should be encouraged to follow the HSE guidance and to adopt and follow ISO 39001. The Northern Ireland HSE and DOE have recently issued new safety guidance on driving at work.[46a]

Of particular concern is how to engender a better safety culture amongst small and medium enterprises (SMEs), and owner-drivers of vans and small HGVs. In addition there are approximately four million people, predominantly those in public sector occupations, who drive their own car on work business. Each of these groups is more difficult to reach compared with large organisations and the HSE should encourage all employers and the self-employed people to follow its guidance to raise the standard of safety management and focus on achieving results.

There are many examples of good practice which are industry led such as CLOCS (formerly Construction Logistics and Cyclists Safety) which was set up with support from TfL in response to cyclist fatalities involving heavy goods vehicles on London's roads.

> *….an industry led programme which aims to change the way the construction industry manages work related road safety, especially in relation to vulnerable road users: cyclists, pedestrians and motorcyclists.*
>
> *The industry is leading the way in this field but action and support from the government will strengthen and extend the impact that CLOCS can achieve on its own. We ask that work related road incidents be regarded, regulated, managed and investigated in an equivalent manner to those that happen in the workplace; that a consistent data collection and reporting system for work related road deaths is adopted along with national reduction targets; and that a common work related road risk code of practice for client bodies and operators is recognised by government* [CLOCS: written evidence].

Despite the official and voluntary initiatives, it remains the case that some employers do not take their responsibilities as seriously in relation to workers who drive as part of their job as for those in construction, mining, and factories. Nor is the intention of the Act pursued with the same vigour.

We are disappointed by the approach of HSE in this vital area of workplace safety. Despite the evidence presented to us, both oral and written, it is clear that employer responsibility for managing work-related road safety is not being addressed adequately but falling (or being passed) between the HSE, police, DfT, and other agencies that might intervene.

The HSE rejects the inclusion of road traffic incidents in RIDDOR (Reportable Injuries, Diseases and Dangerous Occurrences Regulations) as it is considered to be a duplication of STATS19 and that if HSE were to investigate it would be "disproportionately resource intensive".

> *[RIDDOR is] primarily an incident reporting mechanism which gives HSE the opportunity to investigate cases as appropriate. In the case of Work Related Road Risk, other regulators are better placed and have suitable law to deal with such incidents.'* [HSE: supplementary evidence]

HSE's priorities do not include work-related road safety.

> *In most cases the police will continue to take the lead on investigating road traffic incidents on public roads. HSE will usually only take enforcement action where the police identify that serious management failures have been a significant contributory factor to the accident* [HSE 2014 op.cit].

We recommend that the Health and Safety Executive (HSE) changes policy so that employers have to report on the RIDDOR (Reportable Injuries, Diseases and Dangerous Occurrences Regulations) **database when someone has been injured on the roads whilst using the road for work or when someone driving or riding for work injures a member of the public. In addition, employers should be encouraged by HSE to adopt and implement procedures for developing road safety management systems as laid down in ISO 39001** (road-traffic-safety management-systems 2012)**. This would help ensure these injuries are managed and investigated in commensurate manner to those injuries sustained in a fixed workplace.**

4. Funding for transport safety

DfT funds the RAIB (£4.8m pa) and AAIB (£6.7m pa) to undertake accident investigations. By contrast it does not fund local authorities specifically to investigate road safety but leaves them to allocate from their general funds resources to perform their statutory duty to carry out studies into collisions and take action to reduce and prevent them. They are therefore under pressure to confine investigation to relatively limited site specific investigations to establish faults in the highway or its associated equipment as a precursor to designing a countermeasure.

Through its research budget, DfT has for many years funded "on the spot" in-depth collision investigation (now Road Accident In-Depth Studies, RAIDS) at the Transport Research Laboratory and Loughborough University.

> *This has made important contributions to vehicle standards. Funding for the RAIDS programme currently ends in the summer of 2015. We hope that DfT will continue to fund this work, especially given the effort and cost required to set-up such collaborative research – it took nearly two years to establish agreements with police forces, medical ethics committees and to train the data collection teams.* [R Cuerden, TRL: ev sess 5]

Funding for this type of research should continue until it can be absorbed into the systematic approach to road collision investigation that we are recommending.

The cost of investigation of fatal collisions undertaken by the police can vary between about £10,000 to more than £20,000 according to the complexity of the collision and length of investigation.[47] There is no standard set up for a collision investigation unit. Some police forces have their own dedicated units, others collaborate or use trained civilians. The modus operandi determines the annual cost of investigation units.

Some witnesses argued that funding for transport safety and safe active travel need to be considered together

> *Living Streets have been using the Local Sustainable Transport Fund (LSTF) to run a walk to school programme which has increased the number of walking journeys [to and from about 2000 participating schools[48]] by about 26%. It has brought in capital funding from local authorities for crossings etc. The LSTF will end in the next couple of years and it has been influential in the area of active travel. ..Central government needs to replace it with another fund to promote active travel together with investment in good quality public realm and to improve perceived and actual risks which are barriers to safe active travel.* [K Golding-Williams, Living Streets: ev sess 3]
>
> *Cuts in funding have reduced the number of road safety professionals in local authorities but those who are left are following the strong culture of doing the best they can with limited resources.* [M Ashworth, ADEPT: ev sess 6]

[47] Information provided by ACPO and Institute of Traffic Accident Investigators
[48] http://www.livingstreets.org.uk/walk-with-us/walk-to-school

> *Funding is needed to increase and improve capacity of local authorities in relation to their statutory and road safety duties so that the weaker performers can be brought to the level of the best.* [R Gifford, Passenger Focus: ev sess 6]

Economics of safety

Transport safety bodies are often in competition for public funds; with one another and with other areas of public policy such as health and social services. This can lead to important decisions affecting risk management being taken with more attention to parochial political and budgetary considerations than the scientific evidence. Sometimes investment decisions are made as an ill-justified reaction to major incidents. On the other hand it is open to Ministers to intervene in furtherance of risk reduction in ways that are uncongenial to substantial groups of people or commercial interests.

A balance needs to be struck between: system performance; cost of improving safety; and risk of injury. But in the case of roads the information we have to quantify these three elements comes from disparate and often incompatible sources, is short on intermediate indicators and lacks the rigour and depth which come from detailed investigations.

There is inconsistency in government decision-making on how much should be spent to prolong a life, or indeed to prevent an injury or fatality.

> *So we use quality-adjusted life years (QALYs) when we're looking at medical interventions. When we're looking at health and safety in other areas we use the value of preventing fatality, which we don't adjust for quality and we don't adjust for length of life. And a number of chief economists thought that we ought to at least look at how these related to each other. At the moment in the health area we're using one measure, in the transport area we're using another, but what should be used, for example, in flood prevention? Should we use the transport methodology or the health methodology and there are a whole range of other agencies that are not clearly health and not clearly transport, what should they do? Why do we have two measures, and can we somehow reconcile the two measures against each other, what would happen if we only had one measure?* [J Wolff, University College London: ev sess 1]

In healthcare, the National Institute for Health and Care Excellence (NICE) assesses the evidence base for the efficacy of treatments and also evaluates their cost-effectiveness. It makes recommendations on what should and should not be funded by the NHS. Generally NICE will recommend funding an intervention in the range £20,000-£30,000 per QALY.[49] It also issues guidance on how those interventions should be implemented to best effect. There is no equivalent organisation looking at transport interventions across government.

> *Economic valuation in transport results in some trade-offs. For example, journey time savings are valued in monetary terms. Safety is also valued as monetary terms, with a value being assigned to a prevented fatality. This approach means that we consider it acceptable to allow a "statistical" person to die each year so that many thousands of people can save a minute on their journey times every working day over the course of a year.*

[49] https://www.nice.org.uk/proxy/?sourceurl=http://www.nice.org.uk/newsroom/features/measuringeffectivenessandcosteffectivenesstheqaly.jsp

> *Sometimes [investment is] positive for both: the Highways Agency focus has been junction improvements and queue prevention - both reduce journey times and safety risk.* [G Dalton, Highways Agency: ev sess 6]

The value of preventing a fatality is an important input to transport cost-benefit calculations and official guidance is to use the same valuation for all modes as well as by the HSE.[50] There is also a value of preventing an injury. Some road safety schemes have very good benefit:cost ratios but are not implemented because of lack of funding or lack of political or public acceptability or will. The decision can include consideration of environmental or economic factors. However, as we detail below, the amounts spent to prevent a death vary greatly across the modes with the lowest amount being for road deaths.

When considering reducing risk to as low as reasonably practicable (ALARP) a crucial issue is the interpretation of "Reasonably". Not all hazards should necessarily be seen as candidates for complete elimination even in the long run. There may come a point where the disadvantages of further reducing a particular hazard becomes disproportionate and in that sense unreasonable.

If a genuine attempt were made to reduce the currently high levels of hazard on the road to clearly below the orders of magnitude experienced in other aspects of daily life then the costs and disruption would be considerable. The public might judge that unreasonable and reject the approach.

In the *Safe System* approach the long term vision is that collisions that lead to death and serious injury are unacceptable. But not every systems approach has to aspire to completely remove the risk of death and serious injury.

Even in the *Safe System* approach the aim is not to remove all hazard, but to work towards the prevention of unacceptable risk, and for as long as it takes to achieve it acceptably and affordably. Sustainable Safety and Vision Zero treatments in Netherlands, Sweden, Norway and elsewhere have so far shown good ratios of benefits to cost and have proved to be publicly acceptable.

All analytical approaches agree that action to reduce risk of death and serious injury should be taken where opportunities can be found for public policy to reduce particular hazards at a reasonable cost: in particular, at a cost that is lower than rates already incurred in other activities. The evidence suggests that the hazards suffered by road users are higher than they experience elsewhere and that the cost per death or serious injury avoided can be significantly lower than in other policy areas (including rail and air).

The setting of periodic targets represents decisions on what results are challenging but achievable and affordable.

[50] In 2014 this is £1.7m

Current levels of funding for transport safety

Rail safety operations

The rail safety function is in three parts.

The Rail Standards and Safety Board maintains railway standards and develops and promotes good practice within the industry. It has overall responsibility for the industry's research programme, largely funded by the Department for Transport.[51] The budget for rail safety research in 2014-15 is £2.9m.

The Rail Accident Investigation Branch has a budget of £4.8m with a staff of 26 investigators and 16 support staff. During 2013 they received 360 notifications from industry relating to the occurrence of accidents or near misses. These resulted in 51 preliminary investigations of which 26 went to full investigation.

The Office of Rail Regulation's health and safety activity is funded through a safety levy on railway duty holders. The level is determined by what they need to do to discharge their legislative duties effectively and associated costs are apportioned based on the duty holders' turnover. In line with government policy they have worked in recent years to increase the value for money to industry. The safety budget for 2014-15 is £16.6m.

> *Duty holders are legally obliged to manage health and safety so far as is reasonably practicable and should therefore make available sufficient funds to effectively discharge this responsibility. Government may procure additional safety improvements through Network Rail's periodic settlement or through the Department for Transport passenger train operator franchise specification process.* [ORR: written evidence]

In its Final Determination 2014-2019, the ORR has made available £109m to improve level crossing safety (8 deaths in 2013/4)[52] and a further £250m for track worker safety (2 deaths in 2013/14).[53]

The newly formed Highways Monitor within the Office of Rail Regulation will comprise a small team with limited powers. They will not be responsible for safety enforcement which is a major difference from ORR's rail role. There is no indication (at the time of writing) of the budget available but DfT has been funding preparatory work.

Air safety operations

The legal duty of the Air Accidents Investigation Branch (AAIB) is to conduct independent safety investigations into all notifiable civil air accidents and serious incidents. It is fully funded by the DfT with a budget of £6.7m.

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[51] http://www.parliament.uk/documents/commons-committees/transport/10-2014-15-DfT-Main-Estimate-Memorandum.pdf
[52] http://orr.gov.uk/__data/assets/pdf_file/0006/14784/key-safety-statistics-release-2013-14.pdf
[53] http://orr.gov.uk/news-and-media/press-releases/2013/Britains-railways-between-2014-and-2019-ORRs-final-determination

During 2013 the AAIB received 654 notifications of accidents and incidents resulting in 213 correspondence investigations, 109 events overseas where they offered some form of assistance and 32 full UK deployment investigations. There were 30 fatalities in the UK from aviation accidents.

In aviation the CAA is the regulator:

> *Safety costs money, yes, and we pride ourselves on being a proportionate regulator but also efficient and effective, two of the five principles of better regulation. Aviation regulation doesn't cost the tax payer so it is funded by those we regulate……there is a very routine meeting of minds, the fees and charges group, where we set out the costs of regulation to that group so they understand what they are paying for. So I think all of that is very transparent. …….But is there a conflict between the economic settlement and the cost of safety? I would say absolutely not because we are crystal clear that so long as we are evidence based, so why are we doing this, and we can set out the cost of why we are doing that then the industry is happy to pay because, at the end of the day, nobody God forbid wants the cost of an accident either on their conscience or on their purse if you're a commercial operator.* [M Swan, CAA: ev sess 7]

Road safety

The DfT is the national lead agency for road safety in England and therefore is the lead funder for road safety research, providing grants to organisations to help promote road safety, funding the THINK campaigns, providing funding to local authorities for Bikeability cycle training and has set up a cycle safety fund.

Since 2009/10 funding for grants, research, and campaigns has decreased by two thirds from a total of £23.5m to £7.8m. See Table 4 below. In contrast there has been an increase in funding for cycling with Bikeability, and a new cycle safety fund introduced in 2013/14.

TABLE 4: DFT FUNDING FOR ROAD SAFETY MEASURES

Measure	*2009/10*	*2010/11*	*2011/12*	*2012/13*	*2013/14*	*2014/15*[54]
Road Safety Grants	£1.5m	£0.5m	£0.5m	£0.5m	£0.5m	£0.5m
Road Safety Research	£3.4m	£1.15m	£0.46m[55]	£1.73m	£1.77m	£1.80m
THINK! campaigns	£18.6	£2.3m	£4m	£3.6m	£3.3m	£5.5m
Bikeability	£5.4m	£11m	£11m	£11m	£11m	£11m
Cycle Safety Fund					£15m London £15m rest of England	£5m (rest of England)

SOURCE: DFT. JANUARY 2015

In addition to the direct road safety spend there is the integrated Transport Block Funding which is a capital grant for all local authorities to spend on small scale transport improvements which are much wider than but can include road safety. On the face of it this was cut from £451m in 2010/11 to £320m in 2012/13 before rising to £450m in 2014/15. However the funding allocation in 2010/11 had already been cut from £602m in the 2011 budget.

There is a lack of transparency about how much of the grant local authorities spent on road safety over this period. The Local Authority Comparison website, which covers English authorities, was set up by DfT to give the public, politicians and professionals information on

> *LHA performance that is easily accessible in a straightforward way, so that you can form your own assessment of performance.*[56]

In reality this information is difficult to find and to interpret. It is reported that this website is to close after two years of operation.[57]

DfT provides nearly £1.8bn pa to London to undertake its transport functions. The road safety funding commitments for the next 10 years laid out in *Safe London Streets* (Feb 2014)[58] include £913m investment for cycling, £100m for junction improvements, £47m for safety on red routes and some of the £147m allocated for London Boroughs through their Local Implementation Plans.

[54] Figures for 2014/15 are budgets rather than final spends.
[55] The funding for 2011/12 appears lower than that for other years, largely because some planned research was delayed until 2012, pushing the costs into that year instead.
[56] From Local authorities comparison website - local authorities comparison website
[57] http://www.bbc.co.uk/news/uk-politics-31843859
[58] http://www.tfl.gov.uk/cdn/static/cms/documents/safe-london-streets-our-six-road-safety-commitments.pdf

In Wales the budget for 2014-15 and 2015-16 is £4.24m for road safety improvements. In Northern Ireland in 2014-15 the spend on road safety education and promotion is £1.8m, to be cut to zero for the 2015-16 financial year. In Scotland the annual road safety budget is £3m with almost £1.9m pa to Road Safety Scotland and over £7m to the Safety Camera Partnership. In addition there is £1.3bn over three years for major infrastructure projects and network management on the strategic road network.[59]

Under the new arrangements for Highways England, funding of £105m has been approved for additional works on the strategic road network to be directed at improving safety for the five years from 1 April 2015.

Concern was expressed regarding funds for local roads:

> *97% of roads (local roads) will get frozen out in the new Highways England arrangement* [J Elliot, Local Government Technical Advisors Group: ev sess 4]

The different approaches to funding by the rail, air and road sectors within DfT are important. On the one hand the European and wider international nature of rail and air regulation requires a certain level of resource which is less applicable to the roads. It is extremely difficult to compare safety spending across the modes due to the diverse budgets and agencies involved in the road safety sector. However, we believe that in relation to the number of deaths across the modes the budgets for road safety appear to be low compared with other modes. They are also spread thinly among the many highway authorities and agencies.

We call for adequate, dedicated resourcing for road safety, at the least returning to levels that prevailed between 1987 and 2009. We recommend restoring the capacity of those with current statutory responsibilities. The high funding levels for air and rail safety and the sum recently awarded to Highways England for additional safety measures on the strategic network demonstrate that additional funds could be found for road safety on local roads.

[59] http://www.who.int/roadsafety/decade_of_action/plan/Scotland_Road_Safety_Framework_to_2020.pdf

5. Accident investigation, monitoring and research

Accident investigation

Arrangements for accident investigation vary across the transport modes.

The air and rail sectors have similar arrangements with specialist, dedicated accident investigation bodies which are independent of the transport operators. Although funded by Government they act independently. Road collision investigation differs in a number of crucial respects as we explain below.

The Air Accidents Investigation Branch (AAIB) was set up to achieve an acceptable level of safety in civil aviation through an "independent accident and incident investigation process" whose sole objective of "is the prevention of accidents and incidents and not the apportioning of blame or liability".[60] It has existed in various guises for almost a century, becoming part of the DfT in 2002.

Rail accidents are investigated by the Rail Accident Investigation Branch (RAIB) which is comparable with the marine and air accident investigation bodies.

> *Its role is to establish the underlying causes of accidents and to make recommendations to prevent their recurrence. It does not seek to apportion blame but to identify the causal factors for an incident. It publishes reports of specific events and also more generic reports and the lessons to be learned by the railway from these. It has also investigated near misses … enabling the industry to learn from those incidents which did not result in injury but which might be avoided in the future.* [TravelWatch/Passenger Focus: written evidence]

From an operational perspective, these investigations into air and rail accidents are fully independent and impartial with the Chief Inspector of each mode reporting directly to the Secretary of State for Transport. Of particular note is that there is total separation from any relevant regulatory or operator body as it is to these that the majority of safety recommendations are directed. However, they are not necessarily the only investigation into an accident and legislation allows for parallel (but very much separate) investigations including the judiciary.

It could hardly be more different for roads. Road collisions resulting in death[61] are investigated, but not necessarily from the right point of view for the understanding of causes. The police investigate to establish whether an offence has been committed and the highway authority investigates to establish whether there has been a failure of the road infrastructure. The HSE might investigate to see if health and safety law has been breached but in practice this rarely happens.

Coroners investigate road deaths (and others including deaths in aviation and rail accidents) to establish the cause of death. They may produce Reports to Prevent Future Deaths which can include recommendations for action.[62] They may be advised by technical safety experts but the process is not comparable to that of an investigation by the AAIB or RAIB. Under the Fatal Accidents and Sudden Deaths Inquiry (Scotland) Act 1976, Procurators Fiscal undertake about 50 or 60 Fatal

[60] ICAO Annex 13 Attachment F 1.3
[61] In some cases serious collisions are also investigated
[62] https://www.judiciary.gov.uk/subject/road-highways-safety-related-deaths/

Accident Inquiries each year for transport related deaths.[63] A Fatal Accident Inquiry is essentially a fact-finding exercise carried out in the public interest and not to apportion blame for the death in either the civil or criminal sense.

Transport journalist Christian Wolmar [ev sess 5] told us how the reactions of the public, media and politicians to air or rail accidents were very different compared to their reactions to road deaths. Any fatality to a rail passenger receives an immense level of public attention and a major incident provides a "platform for action". Meanwhile road fatalities occur at a rate of nearly five per day without generating a public outcry which could form the impetus for major reform. He said that the recent publicity for cyclist deaths in London was a notable exception.

We heard from safety researchers how the investigation procedures are not standardised; findings from these investigations are not sufficiently accessible; the responsibility for responding to recommendations is not clear; and arrangements for corporate learning of the lessons are not adequate.

> *..we are simply not doing enough to use and learn from the data we already have. Also data is not combined and (other than STATS19) is not readily accessible. As a consequence there is no routine feedback from crash investigations to highway operators and highway and vehicle designers.*
>
> *The Department for Transport has investigated road traffic collisions for many years to support strategies to make our roads safer. These investigations differ from those of the police because they are designed to understand how people are injured rather than necessarily determine responsibility for the collision. These micro studies typically have relatively small sample sizes, but involve detailed in-depth data collection. They have been used widely to improve road safety, including, but certainly not limited to, developing European type-approval regulations and the crash test scenarios used by Euro NCAP, improving the performance of road side vehicle restraints and to promote seat belt use.* [R Cuerden, TRL: ev sess 5].

It is clear to us that the roads sector has much to learn from the other transport sectors. In road safety various bodies have powers and duties for investigating collisions resulting in death or serious injury. However, these are not comprehensive or sufficiently well-defined. Responsibility for acting on the findings needs to be clearer and more comprehensive. The contrast with the arrangements now in operation on the railways and aviation is marked. Accident investigation there is undertaken by independent bodies, focused on learning and is separate from any prosecution (which may still proceed). The reports are compiled in a consistent format, published and usually acted upon.

We believe the systematic principles, practice and follow up which are used in the investigation of air and rail accidents should be applied in appropriate ways to road collisions. In particular, there needs to be a learning process which is kept separate from any criminal investigation.

Some witnesses[64] to our inquiry argued strongly in favour of establishing a road accident/collision investigation body on the model of the RAIB or AAIB. Others, such as RSGB, argued that this might cut across existing arrangements or simply be infeasible given the large number of road deaths each year. The context is also different. The road and its users are part of a bigger system which

[63] http://www.scotland.gov.uk/Topics/archive/law-order/fatalaccidentinquiries
[64] For example RoadPeace and Association of British Drivers written evidence

comprises the planning, design and maintenance of roads; vehicle design to mitigate human error and address human vulnerabilities; the setting and enforcement of regulation; quality and quantity of accident and emergency and trauma services; and support services for victims of road collisions.

We address the issue of whether there should be a dedicated road collision investigation body in the next chapter.

Monitoring and research

The collection, interpretation and dissemination of data and information is vital to our understanding of what works and, at least as importantly, what does not work so that avoidable harm is not imposed upon workers and members of the public. Good quality and accessible information is the bedrock that supports better decision making. It is necessary for:

- appraisal and evaluation of safety interventions;
- valuations of prevention of collisions or casualties and their interpretation in the light of the mix of material and human benefits;
- sound estimates of effects of interventions and communication of these estimates to decision-makers and the public;
- allocation of human and financial resources to interventions; and
- public acceptance of/compliance with interventions.

Much high quality research is undertaken in the UK funded both nationally and by the EU but, in the case of roads, links between Government and other international agencies is poor. There is recognition that policy and practice needs to be evidence based but funding cuts to the research budget tell a different story.

The UK Road Safety Observatory exists to provide public and professionals with summaries and reviews of research on a wide range of road safety issues, along with links to original road safety research reports from the UK and around the world. Despite its emergence it is evident that there is much more information that needs to be brought together, synthesised, and made available to all and that it is beyond the scope and resources of the Observatory to do this in its present form. The Project Board is investigating ways in which the Observatory can be continued and improved. This may include support from Highways England.

At the EU level the European Road Safety Observatory provides information on policy, knowledge and statistics. For rail there are opportunities for better coordination regarding research methods and findings. Some of the human factors research conducted for the railways can be directly applied to roads, for example that for level crossings.

In the aviation sector research is undertaken by a number of bodies. The CAA funds or jointly funds research into regulatory aspects but also safety research; in particular evacuation research (with the US Federal Aviation Administration) and the Helicopter Safety Programme (with Shell Aircraft and HSE). There are also several industry-led research initiatives.

The UK has a long and excellent record in carrying out research, disseminating new knowledge and implementing evidence-based intervention. But research and learning, like transport and health, are global activities and whilst the UK output is highly regarded there is much to be learned from international good practice and example.

This has been recognised in the health sector where Public Health Observatories have been set up to provide a single gateway to a vast range of high-quality and trustworthy public health intelligence, expertise and support for practitioners, policy makers and the wider community. Their expertise lies in turning information and data into meaningful health intelligence whereby they can act as a learning network. They not only collect research findings but monitor and forecast trends and turn raw data into formats usable by others and from these publish reports.

The police have an EU network established via TISPOL (European Traffic Police Network) and currently share effective practice. The TISPOL Action Plan for 2014 states:

> *the effective sharing and exchange of good practice remains a core value, and is a central pillar to effective policing today. The number of specific safety and security initiatives that have been applied successfully in other countries continues to grow. Promoting this area of TISPOL's work is also a key task.*[65]

DfT commissions research where the RULIS budget for 2014/15 is £1.8 million for road safety. The research commissioned by the Coalition Government is listed at: https://www.gov.uk/government/publications/road-safety-research-and-statistical-reports

Officials told us [ev sess 2] that implementation of research is based on whether there is a business case, funding and political acceptability.

The National Institute for Health Research (NIHR) funds public health research programmes which have direct relevance to reducing injury on the roads. It also funds the editorial panel of the Cochrane Collaboration's injury group who undertake systematic reviews of the literature through its international teams of voluntary reviewers. Many reviews are now dated and should be interpreted with care until they can be updated.

We can also learn more in relation to trauma care:

> *..much can be learned from joining together disparate data sets on accidents, treatments and outcomes .. there is a natural experiment in trauma care going on around Europe, as different countries adopt different approaches. Do helicopters make a difference? Is it more important to get to a scene fast or to get to a trauma centre fast? Trauma is a high cost area for NHS but relatively tiny research budget.* [T Coats, Trauma Audit Research Network (TARN): ev sess 6]

Data gaps

Appendix 5 outlines the data is available together with some of the major gaps which when filled would help our understanding.

Some serious traffic crimes, such as drink-driving or hit-and-run are not included in Home Office crime statistics nor is there any way of linking criminal justice data with STATS19 casualty data to enable identification of categories of road user as victims or offenders.

> *It was hoped that this inspection might produce evidence about the way in which road deaths involving cyclists are treated compared with those affecting other*

[65] https://www.tispol.org/system/files/TISPOL%20Action%20Plan%202014_1.pdf

> *road users. However the way in which the CPS registers its cases by the name of the defendant or suspect rather than the victim has made this impracticable. Neither does the CPS collect data that allows them to identify categories of road user either as offenders or casualties.*[66]

Professional experts and the victims of drivers breaking traffic laws feel strongly that there needs to be better transparency and completeness of process and data relating to road crime. We support this.

There is need to support better knowledge transfer including synthesis and dissemination of safety research reports and briefings from across academia, government departments, the three main transport modes, the third sector, and from the various bodies in health, police, and insurance companies.

[66] http://www.justiceinspectorates.gov.uk/cjji/wp-content/uploads/sites/2/2015/02/CJJI_FRTI_Feb15_rpt.pdf para 2.18

6. A new advisory body for road safety

Different responsibilities and accountabilities have been described and national and international good practice in safety management identified. Strengths and weaknesses of current approaches across the modes of road, rail and air suggest ways in which lessons are transferable from overseas and from one transport mode to another.

The inquiry has focussed on responsibilities and not interventions. The evidence received highlighted the strengths and weaknesses of institutional safety management and that the safety regimes in rail and air are very different from that in road transport in that their focus is on managing risks and behaviours across the whole system.

For roads we have heard how there is a broad range of activity in safety: campaigning, research, collection of data, incident investigation, and professional practice in securing compliance with key safety rules, vehicle safety, road safety engineering and in improvements in emergency medical access and care.

The UK's arrangements for managing road safety may be complex and imperfect but have been successful by international standards. That is why we have expressed concern that existing responsibilities may no longer be fully executed or adequately resourced. We have recommended restoring the capacity of those with current statutory responsibilities.

The historical successes in reducing road casualties are not enough and progress in the future will become progressively harder unless our current fragmented arrangements are improved. There needs to be a long, hard look at our present arrangements to take advantage of learning from the successful experience in non-roads sectors and in other leading countries.

There is demand for stronger leadership on road safety matters. The Department for Transport is, and will remain, the lead agency but other agencies and departments have responsibilities too:

- Home Office through policing policy;
- Ministry of Justice through sentencing and support for victims;
- Department for Health through provision of emergency and trauma services; and
- HSE through its responsibilities for health and safety at work.

All have major parts to play but their actions are uncoordinated leading to a weakened response to the challenge of reducing death and serious injury on the road.

It is not entirely about money. We believe that through better organisation of safety management at the institutional level, risks could be reduced within the level of resource being used at the moment.

Further progress requires better professional mobilisation to improve governmental understanding of the factors leading to death and serious injury on our roads and ways of mitigating the consequences. Presently there is an uncoordinated patchwork of effort across government to understand these factors and we need to know in what ways a re-allocation of effort might be productive, or what the return might be from changing the way we do things.

We know from decades of experience that systematic safety management is effective at reducing the frequency and severity of incidents in all transport modes as well as in the workplace. Therefore, all authorities should pursue road casualty reduction within a recognised risk management system which allows for the measurement of road safety results, introduction of the most effective

interventions, and leadership which embraces target and goal setting, coordination, legislation, funding, promotion, and monitoring of outcomes.

Whilst independent investigation of individual incidents in rail and air is a vital part of the risk-management process, on its own it is not enough. The institutional arrangements aim for an overall understanding of the context and what the systematic study of individual incidents can tell us about the properties of the whole system. So, in the context of roads, police investigations and coroner's reports are valuable, but the difficulty in abstracting the lessons contained within them make them less productive than they could be if they were digested by a single co-ordinating body—as is the case in the railways where the focus is on learning rather than prosecution.

The rail and air sectors have provided examples of transferable lessons in reducing deaths and serious injuries.

> *We have the air accident and investigation branch and maritime for quite a long time. …I have changed my view on this somewhat now in the last few years. I think we ought to have some sort of equivalent for roads. I think what happens very often with road crashes, particularly where there has been a death involved, there isn't a joined up way of learning from what's actually happened from an incident. And I don't think every incident should be examined but I think some of the incidents should be examined.*
>
> *..But the police made a good investigation into the crime [death of a pedestrian] but they were mainly looking for criminal evidence. They weren't so much looking as what actually caused the incident and could there be changes to the road construction, could there be changes to signs that could have made some difference. They also aren't looking at the punishment …….*
>
> *But I think if there was some sort of independent branch …looking at certain of those collisions and doing as the other investigation branches do is look at the detail, look at it dispassionately, they are not looking at a criminal investigation, they should be able to get open evidence from people, and then at the end of it what is missing now is recommendations to each of the bodies that could actually do something about it and make a change. So [now] the police will actually do their report but there's no imperative upon the local authority to take any notice of that report or for local councils to address it.* [D Jamieson, West Midlands Police & Crime Commissioner: ev sess 7]

The high frequency of incidents involving death is no excuse for failing to be systematic.

We recommend the creation of an advisory body for road safety independent of government to provide continuity of knowledge and be an authoritative source of expertise, dissemination, advice and intellectual leadership in risk management in road use.

We do not envisage that it would have executive or enforcement powers. It would not necessarily supplant any existing activities, though there is a quantity of research activity that might sensibly be transferred to it. Its ultimate role would be as a facilitator to assist existing bodies execute their responsibilities—which is generally what they want to do.

It could have powers to establish a system of road accident investigation that addresses root causes and means of prevention. It could also investigate, interview, and examine documents as it saw necessary in addition to but not in place of existing investigations. Sampling techniques are available in order to secure cost efficiency.

It would bring together relevant information and data from the various responsible bodies and involved organisations. The list of these should include:

- Departments for Transport, Communities and Local Government, of Health and for Education and international Development, the Home Office and Ministry of Justice;
- Transport Scotland and the Northern Ireland Department of the Environment and the Welsh Government;
- The HSE, Highways England, The Police, coroners, Child Death Overview Panels, Public Health England, Fire and Rescue Services, DVSA, the insurance industry;
- Local authorities, and bodies in England such as the Combined Authorities and Local Enterprise Partnerships which are gaining influence over road safety; and
- The European Commission and related sources of information from other European countries.

The body could be given a statutory right to receive reports, evidence and statistics, including statements of relevant policies and plans and associated progress reports from those that create them.

It would have a duty to consider this information with a view to evolving general understanding of how best to manage risk generated by the roads and ancillary services as a system. To do this would bring the process into line with rail and air transport safety, and with best overseas practice in road safety.

It would have a duty and an absolute right to publish its reports including an annual report to Parliament.

The lessons learned in these studies can be coordinated and used to build professional and organisational capacity and capability in the sector to overcome overlaps in duties, gaps in practice and knowledge, failure of knowledge transfer between organisations and to take more account of non-casualty impacts of travel upon health and well-being.

Since it would be non-executive and with limited powers it would have to achieve results by establishing itself by reputation as an impartial, advisory body to which executive authorities look to and respect.

The safety investigation authorities in the air, rail and marine sectors liaise and share learning through the public dissemination of investigation reports, safety recommendations and the response to safety recommendations.

We recommend that the head of any road accident investigation body is a member of the Chief Accident Inspectors Board.

Further discussion is needed to determine the detail. It could be a Board (the “National Road Safety Board”) of four or five individuals covering a range of skills and expertise, with five to seven years tenure. It would have a small permanent staff to procure research, conduct analysis, deal with public

affairs and provide IT services. The road accident investigation function could be created as a subsidiary organisation.

It would probably have to be funded by central government (as with a number of independent regulatory bodies), through a grant defined by the need to be able to fulfil its functions but, at the same time, it would be essential that it be kept independent of central and local government. There are a number of governance models in current use that could achieve this.

Further consideration is necessary to determine an appropriate scope and scale of activity and cost. However, we reject any simplistic objection that this proposal would cost money at a time of austerity: unless it can be demonstrated that this new body would be unlikely to achieve a commensurate saving of death and injury. There is so much to be done and so much to gain that we think that unlikely.

7. Recommendations

Responsibility for transport safety

Responsibilities for safety in aviation and rail transport are well established and the Commission through this inquiry has no recommendations concerning safety in these modes.

It is recommended that all authorities adopt a systems approach and pursue road casualty reduction towards goals within a recognised risk management system which allows for the measurement, targeting and monitoring of outcomes.

Leadership and coordination

To achieve further significant casualty reduction and safe active travel requires re-establishment of clear leadership at national government level.

We recommend that national Government sets ambitious targets for casualty reduction on the path towards zero deaths and serious injuries. Target setting needs to be grounded on sound analysis informed by the underlying principle of making risks as low as reasonably practicable (ALARP) and underpinned by intermediate outcome targets and indicators which can be adopted by local government and other responsible bodies according to their road safety and other travel objectives.

In implementing its commitments made in September 2014 to victims of crime, the Ministry of Justice should make sure that all victims of road traffic crime benefit equally with victims of other crimes from their implementation.

If we are to continue to drive down casualty numbers there needs to be stronger leadership in enforcement, education and campaigning, demonstrated publicly through placing an emphasis on shared responsibility among the different system providers as well as personal responsibility. Similarly, any institutional arrangements and governance approaches need to recognise the critical importance of means to influence road user behaviour without placing undue blame on the victims of road collisions.

Making active travel less risky and so more attractive can be achieved by increasing action to reduce actual risks and to improve the accuracy of the perception of risks for all vulnerable road users in order to encourage safe active travel.

We recommend that the Health and Safety Executive (HSE) changes policy so that employers have to report on the RIDDOR (Reportable Injuries, Diseases and Dangerous Occurrences Regulations) database when someone has been injured on the roads whilst using the road for work or when someone driving or riding for work injures a member of the public. In addition, employers should be encouraged by HSE to adopt and implement procedures for developing road safety management systems as laid down in ISO 39001 (road-traffic-safety management-systems 2012). This would help ensure these injuries are managed and investigated in commensurate manner to those injuries sustained in a fixed workplace.

Funding for transport safety

We call for adequate, dedicated resourcing for road safety, at the least returning to levels that prevailed between 1987 and 2009. We recommend restoring the capacity of those with current statutory responsibilities. The high funding levels for air and rail safety and the sum recently

awarded to Highways England for additional safety measures on the strategic network demonstrate that additional funds could be found for road safety on local roads.

We believe the systematic principles, practice and follow up which are used in the investigation of air and rail accidents should be applied in appropriate ways to road collisions. In particular, there needs to be a learning process which is kept separate from any criminal investigation.

There is need to support better knowledge transfer including synthesis and dissemination of safety research reports and briefings from across academia, government departments, the three main transport modes, the third sector, and from the various bodies in health, police, and insurance companies.

A new advisory body for road safety

We recommend the creation of an advisory body for road safety independent of government to provide continuity of knowledge and be an authoritative source of expertise, dissemination, advice and intellectual leadership in risk management in road use.

We recommend that the head of any road accident investigation body is a member of the Chief Accident Inspectors Board.

Appendix 1: List of Oral and Written evidence (available on website)

Oral evidence sessions

Date and themes	Witnesses
Session 1 10 April – Public Health	• Professor Danny Dorling, Halford Mackinder Professor of Geography, University of Oxford • Professor Jo Wolff, Dean (Faculty of Arts and Humanities), University College London • Dr Yvonne Doyle, Regional Director, London, Public Health England
Session 2 15 May – Government officials	• Jessica Matthew, Deputy Director, Road User Licensing, Insurance and Safety, Department for Transport • Iain Greenway, Director of Road Safety and Vehicle Registration Division, Department of the Environment, Northern Ireland • Len Porter, Former Chief Executive, , Rail Safety and Standards Board
Session 3 5 June – Transport Users	Panel 1 • Neil Grieg, Director of Policy and Research, The IAM • Kevin Golding-Williams, Public Affairs and Policy Manager, Living Streets • Roger Geffen, Campaigns and Policy Director, CTC • Craig Carey-Clinch, Public Affairs Officer, Motorcycle Industry Association Panel 2 • Jack Semple, Director of Policy, The Road Haulage Association • James Hookham, Managing Director- Research and Policy, Freight Transport Association.
Session 4 3 July – Transport providers	Panel 1: Devolved administrations • Jill Mulholland, Head of Transport Accessibility and Road Safety Branch, Transport Policy Directorate, Transport Scotland • Claire Bennett, Deputy Director Transport – Policy, Planning & Partnerships, Department for Economy, Science and Transport, Welsh Government Panel 2: Local Government etc. • John Elliott, Vice Chair, National Transport Committee, Local Government Technical Advisers Group. • Honor Byford, Chair, Road Safety GB • John Cartledge, Independent

Session 5 17 September – Media /digital democracy; EC and vehicle safety; and Accident investigation	Panel 1: Social media/digital democracy • Christian Wolmar, Transport writer and broadcaster Panel 2: EC and vehicle safety • Ellen Townsend, Policy Director, ETSC • Richard Cuerden, Technical Director for Vehicle Safety Engineering and Assurance, TRL Panel 3: Accident investigators • Alex Luck, Chair, Institute of Traffic Accident Investigators • Assistant Chief Constable Sean White, Cleveland Police • Carolyn Griffiths, Chief Inspector of Rail Accidents, RAIB • Richard Cuerden, Technical Director for Vehicle Safety Engineering and Assurance, TRL
Session 6 23 October – Highways bodies; Medical; Policing and Justice Policy	Panel 1: Highways • Graham Dalton, Chief Executive, Highways Agency • Mike Ashworth, Strategic Director, Derbyshire County Council/ ADEPT Transport Board • John Dawson, Advisor, Road Safety Foundation • Anthony Smith, Chief Executive & Rob Gifford, Safety Adviser, Passenger Focus Panel 2: Medical • Dr David Tovey, Editor in Chief of The Cochrane Library, Cochrane Injuries Group • Emma Sydenham, Managing Editor, Cochrane Injuries Group • Professor Tim Coats, Chairman, Trauma Audit and Research Network (TARN) • Martin Jones, Deputy Director Sentencing, Criminal Justice Group, Ministry of Justice
Session 7 20 November – Safety Regulators and Government	Panel 1: Safety regulators • David Jamieson, West Midlands Police & Crime Commissioner • Kevin Myers, Acting Chief Executive, Health & Safety Executive • Ian Prosser, Director for Railway Safety, Office of Rail Regulation • Mark Swan, Director of Safety & Airspace Regulation Group, Civil Aviation Authority Panel 2: Government • Robert Goodwill MP, Under Secretary of State for Transport

Written evidence received

1. Keith Peat
2. Derek Cozens
3. Brake
4. Institute of Advanced Motorists
5. Association of British Drivers
6. University of Plymouth
7. Michael Young
8. Living Streets
9. British Vehicle Rental and Leasing Association (BVRLA)
10. RAC Foundation
11. London Travel Watch
12. The Transport Safety Organisation
13. Road Safety GB
14. The Transport Safety Organisation (expanded)
15. CTC: National Cycling Charity
16. Len Porter; Letter to Patrick McLoughlin on the GB Rail Safety Situation
17. John Cartledge
18. Roger Geffen, Additional CTC Evidence
19. Technical Advisors Group (TAG)
20. Rail Accident Investigation Branch (RAIB)
21. RoadPeace
22. Transport API
23. European Transport Safety Commission (ETSC) (a)
24. ETSC (b)
25. ETSC (c)
26. Cochrane Injury Group
27. Cochrane Injury Group (Appendix)
28. ORR
29. Royal Society for the Prevention of Accidents (RoSPA)
30. Home Office
31. Pedestrian Safety
32. Construction Logistics and Cyclist Safety (CLOCS)
33. John Cartledge (Supplementary Evidence)
34. Health and Safety Executive (HSE)
35. Nicole and Chris Taylor
36. PACTS
37. Ministry of Justice (received 24th March 2015)

See also Appendix 3

Appendix 2: Definitions of "Accident"

The definition of "accident" varies across the different modes:

Rail

"accident" means an unwanted or unintended sudden event or a specific chain of such events which have harmful consequences; accidents are divided into the following categories: collisions, derailments, level-crossing accidents, accidents to persons caused by rolling stock in motion, fires and others.

"incident" means any occurrence, other than accident or serious accident, associated with the operation of trains and affecting the safety of operation;

(Railways and Transport Safety Act 2003 Section 1 and Section 2)

http://www.raib.gov.uk/cms_resources.cfm?file=/guidance_to_rair_regs_v2.pdf

Aviation

1. Definition of an accident

"Accident" means an occurrence associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight and such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:

(a) a person is fatally or seriously injured as a result of:

- being in the aircraft
- direct contact with any part of the aircraft, including parts which have become detached from the aircraft direct exposure to jet blast,

except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew

(b) an aircraft sustains damage or structural failure which adversely affects the structural strength, performance or aircraft flight characteristics of the aircraft and would normally require major repair or replacement of the affected component

(c) an aircraft is missing or is completely inaccessible.

2. Definition of a serious incident

"Serious Incident" means an incident involving circumstances indicating that there was a high probability of an accident and is associated with the operation of an aircraft, which in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft,

takes place between the time the aircraft is ready to move with the purpose of flight until such time it comes to rest at the end of the flight and the primary propulsion system is shut down.

http://www.aaib.gov.uk/reporting_an_accident/definition_of_accident_and_serious_incident.cfm

Road

Section 170(1) of the Road Traffic Act 1988 defines a reportable road traffic collision as an accident involving a mechanically-propelled vehicle on a road or other public area which causes:

- Injury or damage to anybody - other than the driver of that vehicle,
- Injury or damage to an animal- other than one being carried on that vehicle (an animal is classed as horse, cattle, ass, mule, sheep, pig, goat or dog).
- Damage to a vehicle - other than the vehicle which caused the accident.
- Damage to property constructed on, affixed to, growing in, or otherwise forming part of the land where the road is.

Black's Law Dictionary defines the term “accident” as:

"*an unintended and unforeseen injurious occurrence; something that does not occur in the usual course of events or that could not be reasonably anticipated... an unforeseen and injurious occurrence not attributable to mistake, negligence, neglect or misconduct*".

Appendix 3: Legal responsibilities and duties

Supplementary information kindly provided by the following organisations is reproduced below:

1. Department of Environment Northern Ireland (DOENI)
2. Transport Scotland
3. Department for Economy, Science and Transport, Welsh Government
4. Highways Agency (HA)
5. Health and Safety Executive (HSE)
6. Public Health England (PHE)
7. Civil Aviation Authority (CAA)
8. Air Accidents Investigation Branch (AAIB)
9. Office of Rail Regulation (ORR)
10. Passenger Focus
11. Greater London Authority

1. Department of the Environment Northern Ireland

DOE
Department of the Environment
www.doeni.gov.uk

David Davies
Executive Director
PACTS
Clutha House
10 Storey's Gate
Westminster
London SW1P 3AY

Road Safety and Vehicle Regulation Division

Clarence Court
10-18 Adelaide Street
Town Parks
Belfast
BT2 8GB
Telephone: (028) 9054 0843

Email: iain.greenway@doeni.gov.uk

Your reference:
Our reference:
Date: 26 January 2015

Dear David

Transport Safety Commission inquiry:
Clarification of legal duties and further information

Further to your email of 18 January 2015 I have outlined below details of the legal powers and duties of the Department of the Environment in respect of transport safety.

The Department of Environment is one of the 12 Departments which make up the Northern Ireland Executive, in accordance with section 21 of the Northern Ireland Act 1998. One of its strategic objectives is to deliver improved road safety and better regulation of the transport sector. The legislative framework for the Department's work in this area is contained in the following legislation:

- The Transport Act (NI) 1967;
- The Road Traffic (NI) Order 1981;
- The Road Traffic (Type Approval) (NI) Order 1985;
- The Road Traffic (NI) Order 1995;
- The Road Traffic Offenders (NI) Order 1996;
- The Road Traffic (New Drivers) (NI) Order 1997;
- The Road Traffic (Driving Disqualifications) (NI) Order 2003;
- The Road Traffic (NI) Order 2007;
- The Taxis Act (NI) 2008; and
- The Goods Vehicles (Licensing of Operators) Act (NI) 2010.

In particular, Articles 51 and 52 of the Road Traffic (NI) Order 1995 provide for the promotion of road safety. These provisions enable the Department to revise the

Highway Code, to disseminate information and advice relating to the use of the road and to carry out road safety training.

The Northern Ireland Road Safety Strategy to 2020 sets outs the NI Government's approach to improving road safety for all road users. It was developed and agreed by DOE and its road safety partner organisations: the Department for Regional Development; the Police Service of Northern Ireland; the Department of Education, the Northern Ireland Ambulance Service and the Northern Ireland Fire and Rescue Service.

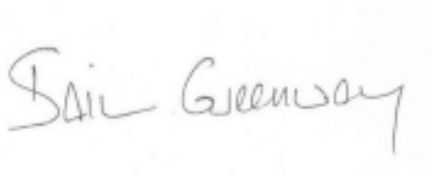
The Strategy sets out 4 strategic targets and 222 action measures to reduce deaths and serious injuries on our roads. The 4 strategic targets are:

- To reduce the number of people killed in road collisions by at least 60%;
- To reduce the number of people seriously injured in road collisions by at least 45%;
- To reduce the number of children (aged 0 to 15) killed or seriously injured in road collisions by at least 55%; and
- To reduce the number of young people (aged 16 to 24) killed or seriously injured in road collisions by at least 55%.

DOE takes the lead in reporting against the delivery of the Strategy. However implementation of each individual measure is the responsibility of the organisation with lead authority in that particular area.

I can also confirm that the powers and duties of the Department do not extend to investigation.

I hope that this information is helpful to you.



Iain Greenway
Director of Road Safety and Vehicle Regulation

2. Transport Scotland

Transport Scotland (TS) is an executive agency of the Scottish Government accountable to the Scottish Parliament through the Scottish Ministers. It is part of the Scottish Administration for the purposes of Part II of the Scotland Act 1998. TS operates in accordance with a Framework Document which is approved and reviewed by the Scottish Ministers (http://www.transportscotland.gov.uk/report/j232467-00.htm).

Powers and duties of Scottish Ministers as Roads Authority/Traffic Authority

In terms of section 2 of the Roads (Scotland) Act 1984, the Scottish Ministers have a general duty to manage and maintain trunk roads and other specified roads in their capacity as roads authority. In connection with that general duty, the Scottish Ministers have a number of specific powers and duties, under that Act, in relation to safety.

Other powers/duties in relation to roads

The Scottish Ministers are also given powers to provide for promoting road safety by disseminating information or advice relating to the use of roads (Road Traffic Act 1988). To this end, national road safety education and publicity initiatives are carried out by Road Safety Scotland which is part of TS's Road Safety Team.

In addition, following changes made by the Scotland Act 2012, Scottish Ministers have the power to set a Scottish national speed limit (as defined in section 64(2A) of the Road Traffic Regulation Act 1984 ("RTRA 1984")) and certain vehicle speed limits (section 86 of RTRA 1984). They also have the power to set the drink-drive limit for Scotland (see section 8 of the Road Traffic Act 1988).

Powers and duties relating to railway safety

The provision and regulation of railway services along with rail transport security are reserved matters for the purposes of the Scotland Act 1998. There are therefore no duties or powers directly imposed on Scottish Ministers in relation to railway safety.

However, tramway safety is a devolved matter and the Scottish Parliament passed a legislative consent motion in November 2014 in relation to provision contained within the UK Deregulation Bill which would bring the investigation of tramway accidents in Scotland within the remit of the UK Rail Accident Investigation Branch.

Safety targets

Scotland's Road Safety Framework to 2020, published in June 2009, includes distinct and challenging targets for reductions in road casualties by 2020. These are the first ever Scottish road safety targets: 40% reduction in fatalities; 55% reduction in serious injuries; 50% reduction in children killed and 65% reduction in children seriously injured based on a 2004-2008 average. This can be seen at: http://www.scotland.gov.uk/Resource/Doc/274552/0082161.pdf

Jill Mulholland
Transport Accessibility and Road Safety Policy, Transport Scotland

3. Department for Economy, Science and Transport; The Welsh Government

Please find below our response to your request:

1. Under what legislation or other legal framework your organisation is set up;
   The Government of Wales Act 2006.

2. Your organisation's principal legal duties with respect to transport safety (or which might be taken to include transport safety);
   Responsibility for trunk roads in Wales (Highways Act 1980); road traffic regulation of trunk roads, including the imposition of speed limits (Road Traffic Regulation Act 1984); general transport duty (section 1, Transport (Wales) Act 2004).

3. Your organisation's principal legal powers in respect of transport safety (or which might be taken to include transport safety);
   Provision of road safety grants (section 1, Road Safety Act 2006).

4. Please outline any transport safety targets or similar performance metrics that your organisation either sets for itself or has set for it by others. Please specify who the others are, if applicable.
   The Road Safety Framework for Wales (2013) specifies three casualty reduction targets on Welsh roads by 2020 against the 2004-2008 average:
   40% reduction in KSI casualties
   25% reduction in motorcyclist KSI casualties
   40% reduction in young people (16-24) KSI casualties

5. If your powers and/or duties include investigation, please provide indicative costs of such work, for different types (e.g. near miss, injury, fatal) and scales of investigation, where applicable.
   Not applicable.

Natalie Grohman

Trafnidiaeth - Polisi, Cynllunio a Phartneriaethau/ Transport - Policy, Planning and Partnerships
Adran yr Economi, Gwyddoniaeth a Thrafnidiaeth / Department for Economy, Science and Transport
Llywodraeth Cymru / Welsh Government

4. The Highways Agency

The Secretary of State as highway authority in relation to the strategic roads network – the duty to maintain the highway

Section 41 of the Highways Act 1980 contains the duty to maintain the highway, and, by section 41A, a duty to ensure, so far as reasonably practicable, that safe passage along a highway is not endangered by snow or ice.

Section 41 is a duty owed to those using the highway. It is not a guarantee that the highway will be safe. However, the highway has to be maintained in such a state of repair that it is reasonably passable for the ordinary traffic of the neighbourhood without danger caused by its physical condition. The standard of repair of the highway must reflect the type and level of use that is made of it.

The duty in s41 has to be read in the context of s58 of the Highways Act which provides a special defence if it can be proved that the highway authority took such care as in all the circumstances was reasonably required to secure that the part of the highway in question was not dangerous to traffic.

The particular duty contained in section 41A relating to snow and ice is, again, not an absolute duty; it is not always possible to clear snow and ice. But it does require the highway authority to devise a plan in accordance with best practice using sufficient quantities of salt to address the foreseeable risks.

5. The Health and Safety Executive

GENERAL PURPOSE

Mission statement: 'The prevention of death, injury and ill health to those at work and those affected by work activities[67]' (DWP/HSE Framework document)

Purpose of the HSE: Set up in order to 'support the Government's strategic aims and current targets for health and safety at work. Its main aim is to secure the health, safety and welfare of people at work and protect others from risks to health and safety from work activity'[68] (DWP/HSE Framework Document)

The general purposes are set out in Section 1 of the Health and Safety at Work etc. Act 1974 (HSWA)

SAFETY

The general duties on employers under HSWA overlap with other legislation and can be applied to work-related driving. HSE's long-standing policy is that it should not generally seek to enforce health and safety at work legislation where public and worker safety is adequately protected by more specific and detailed law enforced by another authority.

A small number of incidents involving specified work activities on, or adjacent to, the road (e.g. waste collection, hedge trimming, road works) are reportable to HSE under the Reportable Injuries,

[67] http://www.hse.gov.uk/aboutus/howwework/management/dwphse.pdf
[68] Ibid.

Diseases and Dangerous Occurrences Regulations [RIDDOR]. However, HSE generally defers primacy on work-related road incidents to those regulators with more specific powers and legislation (e.g. Police, Driver and Vehicle Standards Agency (DVSA), and Traffic Commissioners).

This policy is not intended to exclude the use of health & safety legislation in respect of all road traffic accidents. Where safety cannot be adequately regulated by other more specific legislation, such as the Road Traffic Acts and the Road Vehicles (Construction and Use) regulations, there may be a need to use health and safety legislation, particularly in cases of serious management failures.

The Police lead on investigations of road incidents but HSE stands ready to become involved when the Police identify significant management failings.

LEGAL FOUNDATION

HSE is established by Section 10 HSWA. HSE's powers and duties arise primarily from Part I of HSWA and Health and Safety Regulations made pursuant to Section 15 HSWA.

It has a general duty to do such things and make such arrangements as it considers appropriate for the general purposes of the act. (Section 11(1) HSWA).

It has specific duties to:

- Assist and encourage persons to further the general purposes of the act.
- Make such arrangements as it considers appropriate in relation to research and provision of training and information.
- Provide an information and advisory service
- Make proposals to the Secretary of State for the making of regulations as it considers appropriate.

It also has a duty under Section 18 HSWA to make adequate arrangements for the enforcement of the relevant statutory provisions.

It has powers to investigate which are set out in Section 20 HSWA. These include powers to enter premises (other than by force), to take samples of articles and substances, to require production of documents and to require persons to provide relevant information.

TRANSPORT SAFETY TARGETS / PERFORMANCE METRICS

HSE does not have specific targets for road transport. However, HSE is working within the HSE Strategy aiming to reduce the level of harm (fatalities, injuries and ill-health) caused by work activities:

HSE "The Health & Safety of Great Britain – Be part of the Solution" http://www.hse.gov.uk/strategy/strategy09.pdf

HSE engages with stakeholders, including fellow regulators, across a broad-spectrum of workplace transport activities. This is reflected in HSE's evidence- and risk-based strategy for the Logistics Sector, which targets key workplace transport issues across road transport, ports and mail/courier services.:
http://www.hse.gov.uk/aboutus/strategiesandplans/sector-strategies/logistics.htm

To promote improvements in health and safety performance across transport topics, including Work-Related Road Risk, HSE initiated the Logistics Strategic Forum which brings together: Trade Bodies (e.g. Road Haulage Association), other Regulators, employers and Trades Unions that deal mainly with workplace transport matters (including load safety).

HSE has also reviewed and revised key guidance for transport, including HSG 136 ("A Guide to Workplace Transport Safety"). To assist dutyholders in managing WRRS, DfT and HSE have published joint guidance on the subject "Driving at work – managing work-related road safety": http://www.hse.gov.uk/pubns/indg382.pdf

HSE and HSL are working with Trade bodies to produce new guidance and to provide technical support, across all aspects of Workplace Transport Safety, including load securing.

INVESTIGATION COSTS

HSE investigates a large number of work-related incidents, including those involving workplace transport. The investigations range in duration from a few hours to many months, or even years for some complex investigations. As a result, we do not have a meaningful figure to place on the cost of workplace transport investigations.

HSE now operates a Fee for Intervention (FFI) cost recovery scheme, which came into effect on 1 October 2012. Under The Health and Safety (Fees) Regulations 2012, those who break health and safety laws are liable for recovery of HSE's related costs, including inspection, investigation and taking enforcement action. The Fee for Intervention hourly rate is £124.

6. Public Health England

Public Health England was set up under the Health and Social Care Act 2012. It commenced work formally in April 2013. It has no legal duties in respect of transport as far as I am aware. It is an Arms Length Body of the Department of Health.

It does not regulate other bodies but may produce evidence or knowledge from time to time on topics related to transport for instance accident and injury profiles via its Knowledge and Intelligence Team.

Dr Yvonne Doyle,
Regional Director,
Public Health England London

7. Civil Aviation Authority

Safety Regulation Group
Group Director Safety Regulation

Civil Aviation Authority

David G Davies
Executive Director, PACTS
Parliamentary Advisory Council for Transport Safety (an All-Party Parliamentary Group)
Clutha House,
10 Storey's Gate,
Westminster, London
SW1P 3AY

30 January 2015

Dear Mark

Thank for your letter of 16 January 2015 regarding the Commission's inquiry *UK Transport Safety: Who is responsible?*

I have set out the answers to your questions below.

1. *Under what legislation or other legal framework your organisation is set up;*

Civil Aviation Act 1982
The Civil Aviation Authority (CAA) is a statutory corporation established under Section 2 of the Civil Aviation Act 1982. Section 3 of the Act sets out the functions of the CAA. These include functions set out elsewhere in the Act, functions set out in the Air Navigation Order and functions contained in any other legislation.

Transport Act 2000
The Transport Act 2000 establishes the CAA as the UK airspace regulator.

2. *Your organisation's principal legal duties with respect to transport safety (or which might be taken to include transport safety);*

Section 4 of the Civil Aviation Act 1982
Section 4 of the Act sets out general objectives for the CAA—
(a) to secure that British airlines provide air transport services which satisfy all substantial categories of public demand (so far as British airlines may reasonably be expected to provide such services) at the lowest charges consistent with a high standard of safety in operating the services and an economic return to efficient operators on the sums invested in providing the services and with securing the sound development of the civil air transport industry of the United Kingdom; and
(b) to further the reasonable interests of users of air transport services.

Section 70 of the Transport Act 2000
Section 70 of the Transport Act 2000 provides that the CAA must exercise its air navigation functions so as to maintain a high standard of safety in the provision of air traffic services; and that duty is to have priority over its other air navigation functions.

3. *Your organisation's principal legal powers in respect of transport safety (or which might be taken to include transport safety);*

Section 60 of the Civil Aviation Act 1982
Section 60 of the Civil Aviation Act 1982 permits an Air Navigation Order to be made. An Air Navigation Order can include provisions putting into force the annexes to the Chicago Convention and generally regulating air navigation.

The Air Navigation Order provides that the CAA is the aviation safety regulator for civil aviation in the UK for those matters regulated nationally.

Article 246 of the Air Navigation Order 2009 designates the CAA as the national aviation authority and the competent authority of the United Kingdom for the purposes of EU aviation safety regulations under which an increasing proportion of civil aviation is regulated.

Under both domestic and EU aviation safety legislation the CAA is responsible for the issue of the licences, certificates and approvals required by pilots, operators, aircraft, maintenance organisations, engineers, air traffic service providers and aerodromes. The CAA is also responsible for the oversight of such individuals and organisations.

4. *Please outline any transport safety targets or similar performance metrics that your organisation either sets for itself or has set for it by others. Please specify who the others are, if applicable.*

The International Civil Aviation Organisation (ICAO) requires a state to set a target level for safety in a state safety programme. The CAA has taken and published a position on this in our current State Safety Programme for the UK, CAP 1180, which is comprised of three safety performance targets:

1. Fatal accident rate 5 year rolling average is in the best 5% of States;

2. Safety Performance Indicators (SPIs) track the frequency of operational events regarded as potential precursors to fatal accidents, and indicate continuous improvement in reducing these risks; and

3. Compliance with ICAO Standards, Recommended Practices and Procedures (SARPs) of at least 90% with sound and considered rationale where differences have been filed.

For Air Traffic Management, the EU Single European Sky (SES) Performance Scheme sets Key Performance Indicators for safety, environment, capacity and cost-efficiency. There are EU targets contained in the Reference Period 2 (2015-2019) that the UK has to achieve.

5. *If your powers and/or duties include investigation, please provide indicative costs of such work, for different types (e.g. near miss, injury, fatal) and scales of investigation, where applicable.*

Safety investigation
While the responsibility for investigating accidents and serious incidents lies with the Air Accidents Investigation Branch (AAIB), the CAA receives reports of safety occurrences through the Mandatory Occurrence Reporting (MOR) scheme. The objective of the MOR Scheme is to contribute to the improvement of flight safety by ensuring that relevant information on safety is reported, collected, stored, protected and disseminated. The sole objective of occurrence reporting is the prevention of accidents and incidents and not to attribute blame or liability.

Not all MORs are investigated by the CAA as many have already been adequately dealt with by the reporting organisation. Where the CAA does investigate, in most circumstances this forms part of our overall oversight of a regulated organisation and it is therefore difficult to isolate an indicative cost of such investigations.

Criminal Investigation
A failure to comply with any of the requirements of the United Kingdom Air Navigation Order and its related Regulations or specified European aviation safety regulations is a criminal offence in the United Kingdom.

Article 241 of the Air Navigation Order 2009 specifies the criminal penalties applicable to specified provisions of the Air Navigation Order and of the EASA Regulations.

Section 20 of the Civil Aviation Act 1982, as amended, confers upon the CAA power to institute criminal proceedings in England, Wales and Northern Ireland. The CAA investigates alleged aviation offences and prosecutes in appropriate cases.

I hope that this provides the information that you need, but if you require any further detail please let me know.

Yours sincerely

Mark Swan

Mark Swan
Group Director Safety and Airspace Regulation

8. Air Accidents Investigation Branch

AAIB
Air Accidents Investigation Branch

Keith Conradi
Chief Inspector of Air Accidents

Mr David G Davies
Executive Director
Parliamentary Advisory Council for Transport Safety
Clutha House
10 Storey's Gate
Westminster SW1P 5AY

22 January 2015

Dear David,

In answer to the questions posed in your letter of 16 January:

1. The AAIB operates under European Regulation 996/2010 and is also subject to The Civil Aviation (Investigation of Air Accidents and Incidents) Regulations 1996.

2. The AAIB's principal legal duty is to conduct independent safety investigations into all notifiable civil air accidents and serious incidents.

3. The AAIB's principal legal powers are set out in the referenced legislation and include:

    - immediate unrestricted and unhampered access to the accident site and any wreckage
    - entitlement to examine any witnesses
    - access to all relevant information and records including flight recorders and their contents
    - access to the results of any autopsies and medical examination of people involved in the operation of the aircraft

4. The AAIB's target is to investigate 100% of all notifiable accidents and serious incidents as defined by EU 996/2010 in the UK and respond to 100% of notifications and requests from accident investigation authorities in other countries. The AAIB has a target of completing investigations within one year or putting out an annual statement of progress if that cannot be met.

5. The AAIB is fully funded by the DfT and currently has an annual budget of £6.7 million

Yours sincerely

KEITH CONRADI

9. Office of Rail Regulation

Transport Safety Commission – Supplementary Questions

1. Under what legislation or other legal framework your organisation is set up;

The Office of Rail Regulation (ORR) is an independent, non-ministerial government department led by a Board, having been established as such under the Railways and Transport Safety Act 2003. ORR has responsibility for both the safety and economic regulation of Britain's railway network and other key aspects of rail service. We also have consumer and competition law powers in respect of the railways.

The functions of the independent health and safety regulator for the railway industry were transferred to ORR from the Health & Safety Executive in 2006 following the implementation of the Railways Act 2005. As well as the mainline railway network in Britain, we regulate health and safety on London Underground and other rail systems including metro, light rail, trams and the heritage sector. It's our responsibility to ensure that those responsible comply with health and safety and other legislation to make Britain's railways safe for passengers and provide a safe place for staff to work. Our role includes:

- providing health and safety guidance and ensuring the industry conducts appropriate research to promote continuous improvement;
- publishing reports on the railway industry's health and safety performance;
- carrying out inspections to ensure that the train and freight operating companies and infrastructure managers, such as Network Rail manage both health and safety for passengers and the public and the health, safety and well-being risks to their staff appropriately;
- investigating breaches of health and safety regulation on the railways; and
- taking informal and formal enforcement action where appropriate and in the public interest, including improvement and prohibition notices as well as prosecutions in the courts.

2. Your organisation's principal legal duties with respect to transport safety (or which might be taken to include transport safety);

ORR must exercise its safety powers in accordance with a number of statutory duties. Section 1 of the Health and Safety at Work etc Act 1974 ('HSWA') sets out general health and safety objectives. These include "securing the health, safety and welfare of persons at work" and "protecting [others] against risks to health or safety arising out of or in connection with the activities of persons at work". These objectives are known as HSWA's general purposes.

Schedule 3 of the Railways Act 2005 sets out the purposes under HSWA for which ORR are responsible. These are termed the "railway safety purposes" and are so much of HSWA's general purposes as relate to the risks relevant to or connected with:

a. securing the proper construction and safe operation of railways, tramways etc;

b. securing the proper construction and safe operation of locomotives, rolling stock or other vehicles used, or to be used, on such systems;

c. protecting the public (whether or not they are passengers) from personal injury and other risks arising from the construction and operation of such systems;

d. protecting persons at work from personal injury and other risks so arising.

It is the railway safety purposes which we have to further by the use of our safety functions including doing such things and making such arrangements as we consider appropriate for such purposes and to assist and encourage persons concerned with matters relevant to any of those purposes to further them (see paragraph 2, Schedule 3 of the Railways Act 2005). They also extend to health and welfare of workers.

3. Your organisation's principal legal powers in respect of transport safety (or which might be taken to include transport safety);

ORR's safety powers are mainly found in the Railways Act 2005 and in the Health and Safety at Work etc Act 1974 (HSWA).

In summary, we are the enforcing authority for the HSWA, for the Railways and Other Guided Transport System Regulations 2006 and for various other pieces of railway specific legislation. We are also the National Safety Authority in the context of the European Railway Safety Directive.

As the health and safety authority for Britain's railways, we make arrangements for protecting the health, safety and welfare of workers, and for protecting others against health or safety risks relating to the activities of people at work.

The main responsibility for managing work-related health and safety risks rests with employers and the self-employed (known as 'duty holders'). We decide how effective they are at doing this by assessing their actions to get rid of or reduce the risks their activities may create. We do this by investigating incidents and complaints, inspecting samples of safety-management systems, and examining arrangements for managing risks. We use the information we gather to assess the effectiveness of the safety-management system and the organisation's management abilities and attitude.

The Health and Safety (Enforcing Authority for Railways and Other Guided Transport Systems) Regulations 2006 (EARR) set out the enforcement responsibilities of ORR. EARR was amended in 2008 to improve clarity in the division of enforcement responsibility. Activities or premises not allocated to ORR for enforcement under EARR Activities are subject to enforcement by either the Health & Safety Executive or Local Authorities according to the Health and Safety (Enforcing Authority) Regulations 1998.

Where we find significant failings, we use our powers to bring about improvement, including taking formal enforcement action. Inspections, audits, investigations and any associated enforcement (including prosecutions) are led by our inspectors. Inspectors are appointed and they carry a warrant as evidence of that appointment.

The decision to investigate an incident is normally taken by a principal inspector who, in doing so, will have regard to ORR's guidance on mandatory investigations. Whilst investigating, inspectors are able to exercise the coercive powers (e.g. enter premises, take measurements

and photos, ask questions, require documents to be produced etc) under section 20 of the Health and Safety at Work etc Act 1974.

Under HSWA, inspectors have powers to serve improvement (where there is a breach of certain legislation) and enforcement (where there is a risk of serious personal injury) notices and in making such a decision must have regard to ORR's Health and Safety Enforcement Policy (HSEP) and the Enforcement Management Model (EMM).

Where a prosecution is being considered, the investigating inspector will consider the evidence s/he has gathered against the two tests set out in the Code for Crown Prosecutors:

- Is there sufficient evidence to provide a realistic prospect of a conviction; and
- Is a prosecution in the public interest?

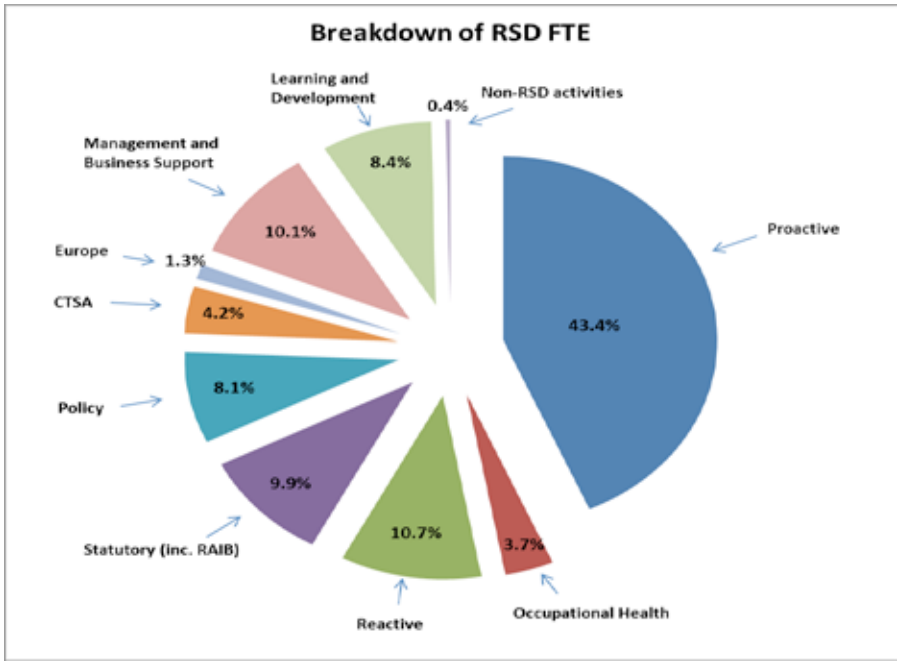
The Inspector will also consider the HSEP and EMM, along with a usual review by our legal team, and then ORR will if appropriate commence and conduct proceedings in the criminal courts.

4. Please outline any transport safety targets or similar performance metrics that your organisation either sets for itself or has set for it by others. Please specify who the others are, if applicable.

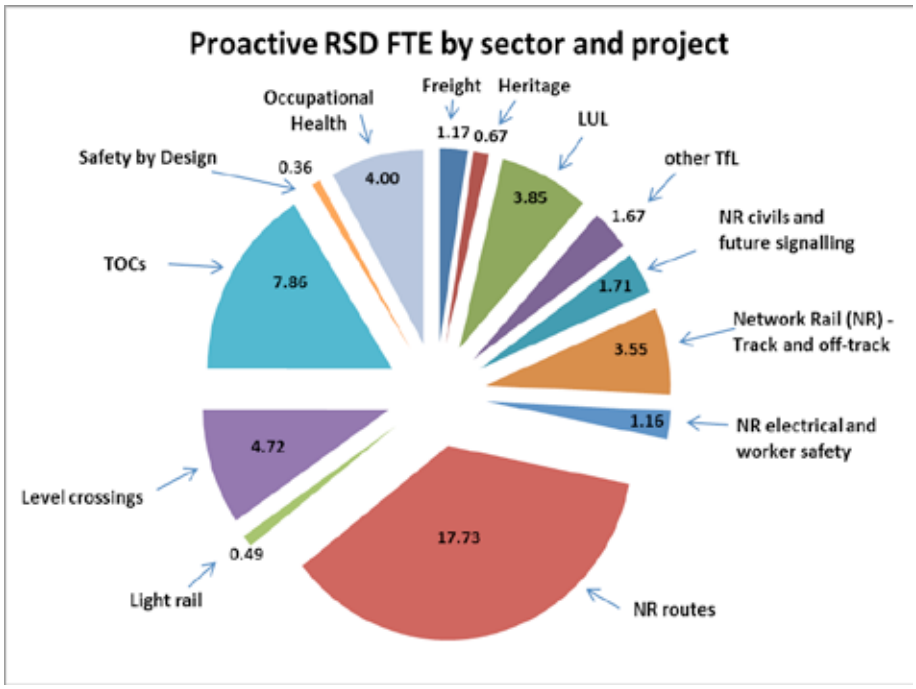
Our response to objectives and targets on 18 November 2014provides details of our and the rail industry's approach to transport safety targets.

5. If your powers and/or duties include investigation, please provide indicative costs of such work, for different types (e.g. near miss, injury, fatal) and scales of investigation, where applicable.

ORR's health and safety powers / duties include investigation, however we do not analyse our costs in the way that you define. As advised in our initial submission on 18 November 2014 our health and safety budget for 2014-15 is £16.6m and will be £16.4m in 2015-16. Our resource utilisation in 2015-16 is defined in the pie chart below, where 43.4% of our resources will be proactive inspection (focusing on key risks within the industry) and 10.7% of our resources (£1.75m) is expected to be utilised on reactive inspection (response to health and safety incidents where an incident has occurred and there is evidence that health and safety has not been managed effectively, and/or there has been an injury and/or a fatality. Our focus is therefore on ensuring that duty holders prevent incidents leading to injury or death.



Our proactive inspection is split as defined in the next pie chart as informed by our risk profiles for each sector.



10. Passenger Focus

1. Under what legislation or other legal framework your organisation is set up

Passenger Focus is governed by the Railways Act 1993 as amended by the Transport Act 2000 and the Railways Act 2005. These cover our remit with rail passengers in Great Britain.
In 2010 our remit was extended to include Bus, Coach and Tram passengers (in England but outside of London). This was delivered through *The Passengers' Council (Non-Railway Functions) Order 2010*Government is currently in the midst of giving us a role in representing road users interests on the strategic road network. This is being delivered through the Infrastructure Bill currently going through Parliament.

2. Your organisation's principal legal duties with respect to transport safety (or which might be taken to include transport safety)

We have no specific duties relating to safety, whether this be for rail, bus, coach or tram. The various strands of legislation give us much broader, more all-encompassing duties.
For example, for rail our duty it is to investigate any matter which relates to the provision of railway passenger services, or to the provision of station services – this extends to users or potential users. For bus coach and tram it is to investigate/keep under review road passenger transport services and facilities.

The proposed remit for road is similar with it being to 'carry out activities to protect and promote the interests of users of highways for which a strategic highways company is the highway authority'.

3. Your organisation's principal legal powers in respect of transport safety (or which might be taken to include transport safety)

We, again, have no specific legal powers in respect of safety. Our broader powers extend to the right to investigate issues, to request information and to make recommendations.

4. Please outline any transport safety targets or similar performance metrics that your organisation either sets for itself or has set for it by others. Please specify who the others are, if applicable

We do not set safety targets for rail, bus, coach or tram operators. Our research looking into passenger satisfaction for rail and bus passengers does include questions on personal security and we use these in our dealings with the respective industries but they do not form part of formal safety metrics. When talking to passengers about safety it is interesting to see that personal safety (in the context of anti-social behaviour, assault etc.) is a much more top of mind issue than safety in the sense of crashes/accidents.

5. If your powers and/or duties include investigation, please provide indicative costs of such work, for different types (e.g. near miss, injury, fatal) and scales of investigation, where applicable

We do not have specific investigatory powers/duties when it comes to accidents, injuries etc. We have, in the past however, been invited to attend coroner inquiries following rail crashes as 'interested persons'. This is, however, on request and is the gift of the Coroner rather than any right.

11. Greater London Authority

Road safety summary:

- Greater London Authority Act allocated responsibility for provision of a safe transport system to office of the mayor, and stated that the policies and proposals will be published within the Mayor's transport strategy
- Act also establishes Transport for London as a body for implementation of the transport strategy
- Act also includes a section specific to road safety (279 – below) that I believe states that TfL/boroughs must prepare and carry out programmes to improve road safety
- Safety is mentioned as part of the 6th objective within The London Plan , and also links in to objectives within the Mayor's Transport Strategy (which was published the year prior)
- London Plan policy 6.12 on road network capacity specifies that safety needs to be a consideration within any road network improvement scheme
- The Mayor's Transport Strategy looks at safety and security as a wider issue, with a number of proposals linked specifically to road safety (listed below)
- 'Reducing the number of road traffic casualties' is a specified desired outcome for the strategy, with 4 linked outputs (listed below), with the strategic outcome indicator being the volume of road traffic casualties

Greater London Authority Act 1999

141 General transport duty

(1)The Mayor shall develop and implement policies for the promotion and encouragement of safe, integrated, efficient and economic transport facilities and services to, from and within Greater London.

(2)The powers of the Authority under this Part shall be exercised for the purpose of securing the provision of the transport facilities and services mentioned in subsection (1) above.

142 The Mayor's transport strategy

(1)The Mayor shall prepare and publish a document to be known as the "transport strategy" containing—

(a)his policies under section 141(1) above, and .

(b)his proposals for discharging the duty under section 141(2) above.

Transport for London

154 Establishment

(1)There shall be a body corporate to be known as Transport for London.

(2)Transport for London shall have the functions conferred or imposed on it by this Act, or made exercisable by it under this Act, and any reference in this Act to the functions of Transport for London includes a reference to any functions made exercisable by it under this Act.

(3)Transport for London shall exercise its functions—

(a)in accordance with such guidance or directions as may be issued to it by the Mayor under section 155(1) below,

(b)for the purpose of facilitating the discharge by the Authority of the duties under section 141(1) and (2) above, and

(c)for the purpose of securing or facilitating the implementation of the transport strategy.

156 General powers

(1)Transport for London may form, promote and assist, or join with any other person in forming, promoting and assisting, a company for the purpose of—

(a)carrying on any activities which Transport for London has power to carry on, or .

(b)carrying on such activities together with activities which Transport for London does not have power to carry on.

279 Road safety information and training.

(1) Section 39 of the [1988 c. 52.] Road Traffic Act 1988 (powers of Secretary of State and local authorities as to giving road safety information and training) shall be amended as follows.

(2) For subsection (2) (duty of local authority to prepare and carry out measures to promote road safety etc.) there shall be substituted—

"(2) Each relevant authority—.

(a) if it is a local authority, must prepare and carry out a programme of measures designed to promote road safety, or

(b) if it is Transport for London, may prepare and carry out such a programme,

and may contribute towards the cost of measures for promoting road safety taken by other authorities or bodies."

(3) In subsection (3) (duty of local authority to carry out and act upon studies into accidents arising out of the use of vehicles on roads in their area, other than trunk roads) for the words preceding paragraph (a) there shall be substituted "Each relevant authority—".

(4) In paragraph (a) of that subsection (the duty to carry out the studies)—

(a)after “use of vehicles” there shall be inserted—

“(i) if it is a local authority,”;

(b)after “other than” there shall be inserted “GLA roads or”; and

(c)at the end there shall be added “or

(ii) if it is Transport for London, on GLA roads or parts of GLA roads,”.

(5) After subsection (3) there shall be inserted—

“(3A)The duties imposed by subsection (3) above are without prejudice to the generality of subsection (2) above; and—

(a) in the case of a local authority, are to be discharged in pursuance of their duty under subsection (2) above and—
(b) in the case of Transport for London, are to be discharged by exercising powers under subsection (2) (b) above.”
(6) In subsection (4) (definitions) the following definitions shall be inserted at the appropriate places—

““GLA road” has the same meaning as in the [1980 c. 66.] Highways Act 1980 (see sections 329(1) and 14D(1) of that Act);”;

“relevant authority” means a local authority or Transport for London.

The London Plan 2011

Sixth objective:

• A city where it is easy, safe and convenient for everyone to access jobs, opportunities and facilities with an efficient and effective transport system which actively encourages more walking and cycling, makes better use of the Thames, and supports delivery of all the objectives of this Plan.

6.3 The main source of policy on transport is the Mayor’s Transport Strategy (MTS). This sets six thematic goals, which link to the six themes of this Plan:

• Supporting economic development and population growth

• Enhancing the quality of life for all Londoners

• Improving the safety and security of all Londoners

• Improving transport opportunities for all Londoners

• Reducing transport’s contribution to climate change, and improving its resilience

• Supporting delivery of the London 2012 Olympic and Paralympic Games and its legacy.

Delivery of the Mayor's Transport Strategy will be essential to achievement of the vision and objectives of this Plan, which sets out the spatial development policies that will be needed for implementation of the MTS. Implementation of the policies and proposals in the two documents will be monitored in a co-ordinated way, and an integrated approach will be taken to their review, revision and alteration.

Policy 6.12

Road network capacity

Strategic

A The Mayor supports the need for limited improvements to London's road network, whether in improving or extending existing capacity, or providing new links, to address clearly identified significant strategic or local needs.

Planning decisions

B In assessing proposals for increasing road capacity, including new roads, the following criteria should be taken into account:

a) the contribution to London's sustainable development and regeneration including improved connectivity

b) the extent of any additional traffic and any effects it may have on the locality, and the extent to which congestion is reduced

c) how net benefit to London's environment can be provided

d) how conditions for pedestrians, cyclists, public transport users, freight and local residents can be improved

e) how safety for all is improved.

C Proposals should show, overall, a net benefit across these criteria when taken as a whole. All proposals must show how any dis-benefits will be mitigated.

The Mayor's Transport Strategy 2010

Improving the safety and security of all Londoners

36 The strategy will seek to continue the trend of reducing road traffic casualties and injuries. Increasing levels of cycling will lead to a virtuous circle of increased awareness among other road users and a reduced injury rate. Safety for public transport passengers will continue to be paramount. Implementation of best practice design guidance and improved surveillance through police officer patrols, staff visibility and CCTV) will reduce crime rates and improve perceptions of personal safety and security.

Goal: Improve the safety and security of all Londoners

Challenge: Improving road safety

Outcomes: Reducing the number of road traffic casualties

Outputs:

- *Safer roads including improved facilities for cyclists and pedestrians through better design and road safety engineering*
- *More considerate road user behaviour through road safety education and advertising*

- *Reduced speeding through the further implementation of average speed cameras and the development and rollout of intelligent speed adaptation in vehicles*
- *More deterrent to speeding, drink/drug driving, and driving without insurance through expanded and visible enforcement*
-

Proposals to improve safety and security

5.16 Improving road safety

5.16.1 Introduction

483 In recent years the number of casualties from road traffic collisions have fallen significantly (Figure 48), but despite the progress made London still has an unacceptable number of road casualties each year. The Mayor proposes to improve London's record, a commitment demonstrated by signing the European Road Safety Charter in July 2009.

484 Figure 49 shows the excellent progress achieved over the past decade by category of casualty. By 2004, London had achieved the national target – a 40 per cent reduction in the number of KSIs (killed or seriously injured) in road collisions, a 50 per cent reduction in the number of child KSIs and a 10 per cent reduction in slight casualties compared to the 1994 to 1998 average. Reaffirmed by the Mayor, more challenging targets were set in 2006 to be achieved by 2010. These included a 50 per cent reduction in total KSIs, 60 per cent reduction in child KSIs and for the slight injury rate to fall by 25 per cent by 2010. New targets were set for a reduction in pedestrian and cycle serious injuries and fatalities by 50 per cent.

487 By 2017, TfL's Business Plan commitments aim to achieve a 63 per cent fall in the total number of KSI casualties to approximately 2,470 KSIs per year, compared with the 1994 to 1998 average of 6,684 KSIs. Casualty reduction targets by 2020, compared to the 2004 to 2008 baseline are to be set for the UK by the DfT in 2010. Road user groups are likely to have individual targets and TfL will work towards achieving the new targets. If current funding levels are retained, it is estimated that casualty reductions over the new 2004 to 2008 baseline may continue to 2031. At the level of funding identified in the TfL Business Plan 2010 to 2017/18, an overall reduction in the KSI casualties of 50 per cent compound to a baseline from 2004 to 2008, is anticipated across London.

Proposal 64

The Mayor, through TfL, and working with the London boroughs, police, Highways Agency, road safety partnerships, and other stakeholders, will seek to achieve any new national road safety targets and such further road safety targets as the Mayor may set from time to time.

Proposal 65

The Mayor, through TfL, working with the police, Highways Agency, London boroughs, road safety partnerships and other stakeholders, will develop a new Road Safety Plan to reflect any new road safety targets to be set by the Government or the Mayor and review progress every five years.

Proposal 66

The Mayor, through TfL, will continue to monitor road safety schemes and publish road safety casualty reports and research.

Proposal 67

The Mayor, through TfL, and working with the London boroughs, police, DfT, and other stakeholders, will undertake public information and engagement to improve road user behaviours and reduce the risk of collisions.

Proposal 68

The Mayor, through TfL, the police and working with the DfT, London boroughs, road freight operators and other stakeholders, will improve safety for cyclists in the vicinity of HGVs and other vehicles, by:

a) Encouraging the Government to amend legislation and remove the current exemption for HGVs being fitted with sideguard protection

b) Working to increase the number of HGVs with sideguards or fitted with electronic warning devices that detect cyclists

c) Raising awareness among drivers of the safety benefits of advance stop line areas.

Proposal 69

The Mayor, through TfL and working with the DfT, London boroughs, road freight operators and other stakeholders, will seek enhanced vehicle and driver safety from organisations operating corporate fleets by working with the freight sector and other stakeholders, promoting increased membership of the Freight Operator Recognition Scheme, and encouraging operators to uptake and demonstrate freight best practice.

Proposal 70

The Mayor, through TfL, and by working with the DfT, London boroughs and Health and Safety Executive, will seek to improve road safety by developing initiatives and working with employers to increase work related road safety and to reduce casualties involving work-related vehicles and activities.

Proposal 71

The Mayor, through TfL, and working with the London boroughs, Highways Agency and other stakeholders, will implement targeted physical engineering and other design considerations to improve road safety across London's road network.

Proposal 72

The Mayor, through TfL, and working with the DfT, London boroughs, vehicle manufacturers and other stakeholders, will encourage the introduction of voluntary 'intelligent speed adaptation', subject to the outcome of trials in corporate fleets, including freight, passenger transport and company cars and vans.

Proposal 73

The Mayor, through TfL, and working with the police, London boroughs and other partners will continue implementing effective enforcement measures, targeted at locations with poor collision records across London's road network, including new average speed cameras which will be trialled subject to local consultation, for example, on main roads and for enforcing speed in 20mph zones.

Appendix 4: Road safety powers and devolution

1. This note sets out the powers which are devolved as at March 2014. It was compiled for PACTS by the Department for Transport, with assistance from Transport for London, Department of the Environment Northern Ireland, Transport Scotland, the Welsh Government and Road Safety GB. PACTS understands that there has been no significant change in these powers since this date.

International rules

2. The Westminster Government negotiates changes to international regulation (e.g. UN rules on vehicles) and European law on behalf of the United Kingdom.

3. EU directives require secondary legislation to be implemented. Where the responsibility for the issue has been devolved, the devolved administration is required to implement. So in practice the Westminster Government works in tandem with the relevant devolved administrations.

Northern Ireland

4. Northern Ireland is responsible for its own road traffic legislation, including driver and vehicle testing and driver licensing, road safety policy and legislation, and vehicle standards.

5. Vehicle licensing is an excepted matter with services delivered by Northern Ireland's Driver and Vehicle Agency under an agreement with the DVLA.

6. The Department for Regional Development's Transport NI is the sole unitary road authority for Northern Ireland, responsible for over 25,500 km of roads. All necessary infrastructure and speed limit powers are devolved to that Department, although to maintain consistency with the rest of the United Kingdom, most legislation and policy guidelines mirror those in effect in Great Britain and elsewhere.

7. The Police Service of Northern Ireland is responsible for operational policing, although policing policy is a reserved matter.

Great Britain

8. The Government in Westminster is responsible for the following areas, on behalf of all of Great Britain:

- The Highway Code.
- Some driving offences, including wearing of seatbelts and motorcycle helmets.
- Vehicle standards, including statutory requirements with regard to vehicle lighting and fitting of seatbelts.
- Driver training and testing.
- Driver and vehicle licensing, including medical conditions.
- Penalties for road traffic offences, including driver retraining schemes.
- Type approval of devices for detecting speeding and traffic signal offences (speed and red light cameras).
- Setting the national speed limit

- Regulation of street infrastructure, including making rules on design of pedestrian crossings and traffic signs.

Scotland

9. Road safety education and training; and payments for the treatment of traffic casualties which are covered in the Road Traffic Act 1988 are devolved to Scotland.

10. Scottish Ministers also have the power to set limits for drink and drug driving. The Government in Westminster has responsibility for the Drink Drive Rehabilitation Scheme in England and Scotland.

11. Scottish Minister also have the power to determine the level of the national speed limits on dual carriageways and motorways (currently 70 mph) and single carriageway roads (currently 60 mph), as well as associated vehicle speed limits in Scotland. The UK Government still has reserved responsibility for the national speed limit of 30 mph.

12. The Scottish Government is also responsible for managing Scottish trunk roads and has strategic responsibility for safety on all Scotland's roads. It issues its own guidance on setting local speed limits and has its own safety camera programme.

13. Police Scotland is responsible for roads policing in Scotland.

England and Wales

14. For England and Wales, the Westminster Government is additionally responsible for setting drink and drug driving limits.

15. Policing in England and Wales is divided into territorial forces, with the Westminster Government setting policing policy.

Wales

16. The Welsh Government is responsible for the Welsh trunk road network. It sets policy on safety cameras and issues guidance on setting local speed limits. The Welsh Government has responsibility for the drink drive rehabilitation scheme in Wales.

London

17. The Mayor also sets the strategic direction for transport in London through the Mayor's Transport Strategy.

18. Transport for London is responsible for the management of the "red routes" within London, whereas the London Boroughs are responsible for their roads.

19. TfL is responsible for licensing private hire vehicles and minicabs.

20. Policing in London is the responsibility of the Metropolitan Police Service (and the city of London Police). The Mayor's Office of Policing and Crime is responsible for setting policing priorities, whilst the Metropolitan Police Commissioner is responsible for operational matters and is required to account to MOPAC for them.

Local authorities

21. Local authorities are responsible for the management of local roads, within the rules set by Government.

22. Local authorities outside of London are responsible for licensing private hire vehicles and minicabs.

23. Local Authorities are required by statute to promote road safety; to undertake collision/casualty data analysis and to devise programmes, including engineering and road user education, training and publicity that will improve road safety.

Anybody

24. There are no rules on who may or may not set targets.

25. Providing funding for particular road safety initiatives and running public education campaigns may take place at any level of Government and from any part of Government (e.g. Transport, Health, etc).

Appendix 5: Principal sources of data related to road safety and gaps to be filled.

1 Road collisions and casualties

The principal source of data related to road collisions and casualties in Great Britain is known as STATS19; these data are collected by Police Forces and held by the Department for Transport. Counterpart data for Northern Ireland are held by the Police Service of Northern Ireland as Northern Ireland Police Recorded Injury Road Traffic Collision Data. Information about the STATS19 data and access to it are provided by the Administrative Data Liaison Service at http://www.adls.ac.uk/department-for-transport/stats19-road-accident-dataset/, on which the brief account that follows draws extensively.

STATS19 in essentially its present form has been collected since 1979, but collection of broadly similar data across Great Britain began soon after the Second World War. Data for each calendar year are issued in September of the following year, with some main results issued in June. Provisional data on total numbers of casualties are issued quarterly.

The Department for Transport has overall responsibility for the design and collection system of the STATS19 data. The Standing Committee on Road Accident Statistics (SCRAS) oversees the STATS19 collection process. Definitions of terms used in the STATS19 collection form are available to download from the above website. Results of many routine analyses are published annually as *Reported Road Casualties Great Britain* and results for Scotland and Wales as *Reported Road Casualties Scotland* and *Statistics for Wales Statistical Bulletin – Road Safety*.

Collisions or similar incidents on the public highway in Great Britain, reported to the police and which involve human injury or death, are recorded by police officers onto a STATS19 report form. The form records a wide variety of information about the incident (such as time, date, location, road conditions) together with information about each vehicle involved and its driver or rider, about each resulting casualty and about contributory factors to the incident (as interpreted by the police). The form is completed either by police at the scene of the incident, or when the incident is reported to the police.

STATS19 is not a complete record of all incidents on the roads resulting in injury, or of all resulting casualties, because not all such incidents are reported to the police. In particular, many collisions in which a pedestrian or cyclist is struck by a motor vehicle without involvement of a second motor vehicle are not reported to the police because there may be no legal obligation or practical reason to do so and it is more important to care for the injured pedestrian or cyclist. Incidents on public roads involving ridden horses or non-motor vehicles such as pedal cycles are in principle recorded in STATS19, regardless of motor vehicle or pedestrian involvement, but the level of recording of such incidents is unclear. STATS19 does not cover injurious or even fatal falls occurring to pedestrians on public roads without involvement of any vehicle.

Non-fatal casualties are classified in STATS19 as either *serious* or *slight* but this classification is prone to error due to the difficulties of assessment by non-experts at the scene of the incident or recollection when the incident is reported subsequently. The police definition of serious injury covers casualties admitted to hospital, as well as those with specific types of injury (for example fractures or severe cuts). This means that in theory all patients in the Hospital Episodes Statistics

(HES) admitted following a road traffic accident should also appear as seriously injured casualties in the police data, but this is not the case in practice. However, comparisons with death registration statistics show that very few, if any, road accident fatalities are not reported to the police.

Linking of STATS19 and HES data is the subject of continuing research and development, including work on implementation in the UK of a common European definition of serious injury based upon the Abbreviated Injury Scale that is used internationally in medical practice.

Alongside access to STATS19 that enables research organisations and individuals to augment routine published analyses of the data, commercial organisations provide a range of software services to help in the interpretation and presentation of the data either on its own or in conjunction with socio-economic and spatial data from other sources.

A complementary source of data about the extent of occurrence of road collisions and injury in them is the National Travel Survey (NTS), described at https://www.gov.uk/government/collections/national-travel-survey-statistics .

Since 2013, approximately 16,000 individuals in a sample of 7,000 households in England participate in the NTS each year; between 1988 and 2012 the survey covered the whole of Great Britain with a proportionately larger sample. The survey is primarily designed to track long-term development of trends in personal travel, as discussed in Section 2, below, but it has also provided estimates of proportions of adults since 2007 and children since 2010 who had been involved in the last 12 months and in the last 3 years in any road accident and in a road accident involving injury. For 3-year periods beginning 2007-2009 it provides for those involved in non-injury accidents the estimated proportions involved as each of the main types of road user and proportions for which the police were aware of the accident. For those involved in injury accidents it provides the same proportions together with the estimated proportions experiencing various types of injury and proportions obtaining medical attention in various ways.

The size of these proportions provides the basis for the estimate in *Reported Road Casualties Great Britain* that the total number of road casualties may be of the order of four times the number recorded in STATS19.

The main ways in which the coverage of STATS19 seems to need to be augmented in order adequately to inform road safety policy in respect of numbers of killed and seriously injured are to include (a) all cases of serious injury on the public roads in which a motor vehicle was involved, and (b) all cases of death or serious injury to pedestrians and cyclists on the public roads in which no motor vehicle was involved. Trying to extend the coverage of STATS19 for these purposes, would involve much wider reporting of incidents to the police. Instead, it would probably be more effective to establish a system for national collation of HES data concerning casualties occurring on the public roads, or a statistical sample thereof, in a way that would comply with the Code of Practice for Official Statistics, so that the resulting data would be designated as National Statistics

2 Amount of use of the roads

The three main and complementary sources of data about the amount of use of the roads nationally are the national system of counting of vehicular traffic, the national records of licensed vehicles and drivers, the Active People Survey (APS) and the National Travel Survey (NTS).

Annual estimates of amounts of traffic in vehicle-km or vehicle-miles by vehicle-type and by road class are provided at https://www.gov.uk/government/statistical-data-sets/tsgb07 . Also provided there are estimates of road length by road class for countries, regions and local authorities in Great Britain, and of vehicle speeds in free-flowing traffic by speed limit and broad vehicle type on built-up and non-built-up roads in Great Britain. The basis for the traffic estimates is explained at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/230427/free-flow-speeds-notes-and-definitions.pdf , the classification of roads is explained at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/230605/road-length-notes-definitions.pdf and the basis of the speed estimates is explained at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/230427/free-flow-speeds-notes-and-definitions.pdf .

Traffic statistics for Northern Ireland can be found at http://www.drdni.gov.uk/annual_road_traffic_estimates .

Statistics concerning numbers of licensed road vehicles and licensed drivers are provided at https://www.gov.uk/government/statistical-data-sets/tsgb09-vehicles .

Statistics concerning the prevalence among the population of walking and cycling and amounts of walking and cycling are provided at https://www.gov.uk/government/statistical-data-sets/walking-and-cycling-tsgb11 . These are derived from the APS and NTS as described at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/306652/walking-and-cycling-notes-and-definitions.pdf .

Statistics concerning personal travel of all kinds within England (within Great Britain until 1912) are provided by the NTS, see https://www.gov.uk/government/collections/national-travel-survey-statistics . This is a household survey which has been running continuously since 1988. It is designed to monitor long-term trends in personal travel and to inform the development of policy. The survey collects information on how, why, when and where people travel as well as some factors affecting travel such as car availability and driving licence holding. The data are collected via face-to-face interviews with people in their homes and a 7 day travel diary for each member of the household, allowing travel patterns to be linked with individual characteristics. The survey currently covers approximately 16,000 individuals in a sample of 7,000 household, and travel by people in all age groups, including children.

Statistics on travel in Northern Ireland can be found in the reports of the Travel Survey for Northern Ireland at http://www.drdni.gov.uk/northern_ireland_travel_survey.htm .

The NTS complements information from traffic counts firstly by covering walking and secondly for cycling and motor vehicle use by enabling aggregate amounts of vehicle use to be analysed by type of driver, rider and passenger and by kind of journey.

The principal relevance of information about amounts of road use to road safety is to provide measures of exposure to risk to help in the interpretation of numbers of collisions and casualties.

3 Road traffic offences

Numbers of fixed penalty notices issued by offence and numbers of breath tests administered and proportion positive or refused in England and Wales are published by the Home Office at https://www.gov.uk/government/statistics/tables-for-police-powers-and-procedures-england-and-wales-2012-to-2013 .

Numbers of recorded occurrences of Dangerous Driving and of the three Causing Death by Driving offences by Police Force Area or Community Safety Partnership are published by the Home Office at https://www.gov.uk/government/statistics/police-recorded-crime-open-data-tables .

Linking road safety data from STATS19 and Criminal Justice System – A project to be commissioned.

On 28 August 2013 the Transport Minister published this announcement: *All Party Parliamentary Cycling Group's Get Britain Cycling Inquiry HM Government Response*

Paragraph 11: "The Justice Sub-Group is commissioning research to investigate the link between police reported road traffic incidents where cyclists or pedestrians are killed or seriously injured (STATS19 data) and prosecutions, to better understand how the justice system works for these vulnerable road users."

Walking, cycling and road safety advocates have long been handicapped by the lack of data on how the criminal justice system responds to collisions.

STATS19 records what types of road users are involved in collisions of different severities (as well as the manoeuvres being made, the type of road/junction, time of day/year, weather etc). However, the only information that provides any indication about who is at fault for these collisions is the "contributory factors" data. Whilst this data is useful as an indicative source, it is acknowledged that this data cannot be relied on, as it only represents the view of the officer taking the report – it is not the outcome of any police investigation, let alone any legal process.

The aim of this project would be to link the STATS19 and criminal justice datasets, so as to be able to answer questions such as:

"How many [or what proportion of] cyclists' deaths [or pedestrians' injuries etc] resulted in the prosecution [or conviction] of a driver for a road traffic [or a dangerous /careless / other driving] offence?"

It should similarly be possible to answer questions about the sentencing of offenders in cases where specific user groups were injured or killed. In other words, the aim would be to be able to identify STATS19 records with certain specified criteria (e.g. cyclist injured, or pedestrian killed by a lorry) which were associated with a particular outcome or outcomes in the justice data (e.g. driver prosecuted for careless driving but found not guilty, or driver convicted and sentenced to more than 6 months imprisonment).

Conversely, it should also be possible to find out how many out of the total number of prosecutions (or convictions) for careless, dangerous or other types of driving offence had arisen from collisions where particular road user groups (pedestrians, cyclists, etc) had been injured or killed. In practical

terms, the data-searching process required would be the reverse of that described in the preceding paragraph.

A Scoping action plan

A scoping action plans is required to assess the opportunities to gather this information using existing databases. It may be possible to achieve the aim of this project in conjunction with either the CRIS or NICHE data projects. It would be first worth investigating if these two databases are able to link STATS19 and prosecution data. We understand that the Metropolitan Police has also made some progress on this issue, which may also provide a useful starting point.

Appendix 6: The Safe System goal and approach

The *Safe System* goal and strategy represents an ambitious safety performance level and current best practice Safety Culture in road safety. The approach has evolved over many years and derives most notably from the Swedish Vision Zero and Dutch Sustainable safety strategies and the concepts and good practice in other fields. Safe System embraces well-established safety principles and building on demonstrably effective practice using innovative solutions and new technologies. It is being taken up increasingly in Europe, Australasia and North America at regional, national levels and city levels.

Safe System/Vision Zero goals

Safe System/Vision Zero has a long-term goal for a road traffic system which is eventually free from death and serious injury. It involves an important paradigm shift from trying to prevent all collisions to preventing death and mitigating serious injury in road traffic collisions, a problem which is largely preventable based on current knowledge. It is backed up by interim quantitative targets to reduce numbers of deaths and serious injuries usually over a 10 year period. In *Safe System*, there is also focus on targeting intermediate outcomes that are causally related to death and serious injury e.g. average speeds, seat belt use, sober driving, the safety quality of roads and vehicles and emergency medical system response.

Safe System principles

Safe System is based on the underlying principles that:

- human beings make frequent mistakes that lead to road collisions;
- the human body by nature has a limited ability to sustain collision forces with known tolerance to injury thresholds; and
- it is a shared responsibility between stakeholders (road users, road managers, vehicle manufacturers, etc.) to take appropriate actions to ensure that road collisions do not lead to serious or fatal injuries.

Safe System intervention strategies

Safe System requires a systematic, multi-disciplinary and multi-sectoral approach which addresses the safety needs of all users; fatal and serious injury collision prevention, collision protection and mitigation and post-collision care and aligns with other policies for co-benefits such as health, occupational health and safety, sustainable development and poverty reduction. In a *Safe System* approach, mobility is a function of safety rather than vice versa. It involves the implementation of system-wide measures that ensure, in the event of a collision, that the impact forces remain below the threshold likely to produce either death or serious injury.

Safe System requires a proactive approach placing road safety in the mainstream of road traffic system planning, design and operation and use. *Safe System* interventions address common human errors and human tolerance to injury thresholds and in so doing aims to address the road safety

needs of non-motorised as well as motorised road users, younger and older users, male and female users. The key demonstrably effective strategies are:

Encouraging use of safer modes and safer routes

- Safety conscious planning and proactive safety engineering design
- Safe separation or safe integration of mixed road use
- Managing speeds to crash protection levels
- Providing crash protective roadsides
- Providing vehicles with collision avoidance and collision injury mitigation and protection
- Deterring dangerous behaviour and ensuring compliance with key safety rules by social marketing and increased highly visible police enforcement and use of camera technologies and by providing proven driver assistance safety technologies in motor vehicles to help drivers keep to speed limits, wear seat belts, and avoid excess alcohol.
- Managing risk via driver standards e.g. graduated driver licensing.
- Fast and efficient emergency medical help, diagnosis and care.

Safe System is a shared responsibility

Safe System is a shared responsibility between government agencies at different levels and a range of multi-sectoral agencies and stakeholders (road managers, vehicle manufacturers, emergency medical system providers, safety rule compliance managers, employers, road users) to take appropriate actions to ensure that road collisions do not lead to serious or fatal injuries. Given this complex multi-agency and multi-sectoral context, it requires careful leadership by government and top management of organisations.

Safe System strategy implementation requires strengthened institutional delivery and identified good practice for all these functions is set out in two international publications produced by the World Bank and the OECD. Road safety management capacity review is recommended as an initial first step to provide a framework for all key agencies to assess strengths and weaknesses of current approaches and to identify next steps.

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Transport Safety Commission

The role of the Transport Safety Commission is to inquire into transport safety matters in order to assist with the development of policies that will reduce risk and bring about continued reduction in transport-related casualties. The Commission is an independent body with 16 members drawn from the UK Parliament and from the air, rail and road safety professions and related sectors. It is co-chaired by Sir Peter Bottomley MP and Professor Stephen Glaister. The inquiry had been made possible by generous donations from the Safer Roads Foundation and the Rees Jeffrey's Road Fund. PACTS provides the secretariat.

The Inquiry

The Commission inquired into the legal framework and institutional responsibilities for transport safety (road, rail and aviation). The aim was to compare and contrast the different responsibilities and accountabilities for transport safety with reference to identified international good practice, to highlight strengths and weaknesses of current approaches and determine whether or not lessons can be identified and transferable from one mode to another. The inquiry is now concluded and the Commission is grateful to all who contributed.

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