Go Safe

on **Scotland's Roads**

it's **Everyone's**

Responsibility

Scotland's Road Safety Framework to 2020

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SCOTTISH GOVERNMENT

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Scotland's Road Safety Framework to 2020

The Scottish Government, Edinburgh 2009

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Scottish Government/CoSLA Joint Foreword

There is no doubt that excellent progress has been made towards achieving current road casualty reduction targets for 2010, set jointly with the UK Government and the Welsh Assembly. Figures for Scotland in 2007 show that the number of people killed or seriously injured was 45% below the level of the mid 1990s, the number of children killed or seriously injured was 67% below, and the slight casualty rate had declined by 35%.

However, every death and every serious injury on the roads is one too many. We need to maintain the huge effort made by many people in Scotland towards making our roads safer. Indeed, we need to take stock and see what more we can do. It is for this reason that the Scottish Government initiated this Road Safety Framework for Scotland to 2020. An Expert Panel was set up to help steer the direction of this Framework and it has made an excellent contribution to the debate. We have also carried out a comprehensive consultation exercise, and would like to thank both the Expert Panel and all respondents to the consultation, including the young people who participated in focus group exercises.

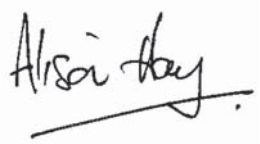
As Minister for Transport, and CoSLA's Spokesperson for Regeneration and Sustainable Development (including Transport) we have both been deeply concerned at the news of fatal and serious accidents – often involving young people – and the devastation that it has caused for relatives and people close to those who have been involved.

The Scottish Government and CoSLA believe that there is one fundamental message on road safety: it is not just the responsibility of central government or local authorities, the police, employers, or the many excellent road safety bodies; to make substantial progress in getting the number of deaths and injuries down, it is the responsibility of every single road user in Scotland. It is hoped this Framework will help cement across Scotland a very clear understanding of what particular responsibilities we all have because it is only in understanding and acting consistently on those responsibilities that we will continue to make real progress.

We welcome the commitments in this Framework and are confident that, as a package, they will help underpin greater responsibility among all road users and organisations concerned with road safety.

Partnership in this area is crucial. The Scottish Government and CoSLA are delighted to have the strong support from the Association of Chief Police Officers in Scotland, Road Safety Scotland and others. As the major organisations in Scotland promoting road safety, we must all work together in taking this Framework forward and ensure everyone understands their responsibilities to 'Go Safe on Scotland's Roads'.

Minister for Transport,
Infrastructure and Climate Change



Cllr Alison Hay
Convention of Scottish Local Authorities
(CoSLA)

Association of Chief Police Officers in Scotland (ACPOS) Foreword

On behalf of ACPOS I welcome the Scottish Road Safety Framework, which provides a comprehensive and sustainable framework for dealing with the many challenges facing the Scottish Police Service and our partners in road safety.

This document identifies the major threats to casualty reduction, recognises the many varied measures that are already in place, seeks to enhance those existing measures and provides guidance in other important areas.

By looking at all the information gathered about road crashes we must continue to evaluate the effectiveness of our approach to ensure casualty reduction is intelligence led. The Framework must continually evolve as a valuable source of reference.

The police are often seen as simply being the enforcement arm of road safety but it is important to understand that Scottish police forces also work closely with our partners to educate our young people about using our roads safely, help to find solutions to road safety problems and offer encouragement to all road users through local and national campaigns, all of which aim to deliver long term road safety solutions.

I believe that this Framework will further improve how the Scottish Police Service engages with our partner agencies and communities, in further reduction of casualties on our roads in the years ahead.

Chief Constable Kevin Smith
Central Scotland Police
Chair of the ACPOS Road Policing Business Area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Chapter One

Introduction

Road safety is an issue that affects everyone in Scotland. We all need to use the roads to get around – to school, to work, to the doctor, to the shops, to the cinema. Most of us use the roads every day, as drivers, passengers, cyclists and pedestrians, and for many people driving is the main part of their job. It is essential, therefore, to ensure that, as far as possible, we can all use the roads in safety.

1.1 Background

The Scottish Government and road safety partners are committed to the outcome of safer road travel in Scotland for everyone. To this end this document sets out the Framework for improving road safety in Scotland over the next decade. It describes the road safety vision for Scotland, aims and commitments, and the Scottish targets for reductions in road deaths and serious injuries to 2020.

The **target audience** is not only the road safety community but also the public as road users, employers, teachers, parents, relevant organisations and all others who have a role to play in road safety. With this in mind we have sought to make this both a forward looking document with commitments to further decrease casualties on the roads, and a transparent and practical guide to current laws, guidance and information concerning road safety.

A **Panel of Road Safety Experts** was set up to advise on measures that will contribute to reducing the tragic and wasteful toll of death and injury on the roads in Scotland. In addition, a public consultation was carried out to seek views on what the Framework should include. All of these contributions have been considered, alongside evidence gained through statistics and research, in formulating this Framework, which is also illustrated throughout with quotes from the public consultation and examples of road safety initiatives from Scotland and beyond.

This document firmly sets out the ambitions for a 'Safer Scotland' on the roads. These ambitions will not, however, be realised without the help of delivery partners, communities and road users themselves.

1.2 Structure of Document

Chapter Two sets out our vision for road safety in Scotland, numerical targets, a description of the benefits of achieving the targets, and the general approach, including links to the National Performance Framework and the National Transport Strategy. Chapter Three provides a brief review of the main organisations involved in road safety in Scotland, and Chapter Four highlights the critical role of evidence in defining the problems and helping to understand the solutions.

Scottish road safety priorities, issues and commitments are set out in Chapters Five to Nine. The chapters are:

- **Working Together for Safer Roads (Chapter Five):** discussing how the road safety community and other relevant organisations can, and in many instances already do, join together to help make Scotland's roads safer.
- **Being Responsible on the Roads (Chapter Six):** identifying the most vulnerable road users, and reinforcing the message that we all must assume greater responsibility for our own and other people's road safety.
- **Driving for Life (Chapter Seven):** detailing the key points in the life cycle of most drivers.
- **Reducing Risk on the Roads (Chapter Eight):** addressing the main areas of road risk.
- **Designing for Human Error on the Roads (Chapter Nine):** highlighting the part that vehicle technologies and road design can make to road safety.

In Chapter Ten, the commitments are brought together in tables referring to each Section and broken down into delivery timescales of short term (one to two years), medium term (two to five years) and long term (five to ten years).

The commitments largely fall within the traditional pillars of the road safety three Es – Education, Enforcement and Engineering. Two additional Es – Encouragement and Evaluation – bring in the possibility of Encouraging (or incentivising) good road safety, for instance, in partnership with the private sector and Evaluation, in recognition of the need – as expressed in the consultation exercise – for sound Evaluation to ensure that actions taken are effective in helping to reduce road deaths and serious injuries.


Introduction


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Chapter Two

What we want to achieve

This chapter states our high-level vision for road safety in Scotland and the main priorities. It sets Scottish road safety targets to 2020 and places the Framework within the wider policy context.

2.1 Vision

Scotland's road safety vision is that there will be:

"A steady reduction in the numbers of those killed and those seriously injured, with the ultimate vision of a future where no-one is killed on Scotland's roads, and the injury rate is much reduced."

The Scottish Government believes that this is an ambitious vision and one capable of being shared by all. It is not a vision for a single point in time, but is on-going and aspirational. Success in the timescale of this Framework can be measured through progress towards Scottish road safety targets. We believe that all partners and every road user has a contribution to make towards the vision. For this reason the title of the Framework is ***'Go Safe on Scotland's Roads – it's Everyone's Responsibility'***.

2.2 Priorities

Chapters Five to Nine contain our priorities to be addressed. These are national Scottish priorities which have been identified through our public consultation exercise, expert opinion, research and statistics. There may be other local priorities, not mentioned in this document, on which local partners will also wish to focus and we encourage them to do so.

The priorities are not ordered or ranked to allow flexibility for local circumstances and to allow for changing trends and advances in technology. However, there are specific topics on which we do want to focus:

- Leadership
- Sharing intelligence and good practice
- Children
- Drivers aged 17-25
- Rural Roads
- Drink Drive
- Seatbelts
- Speed

These are the priorities which partners consistently tell us are important and need to be addressed and are those which we believe most need to be tackled in order to achieve the Scottish road safety targets and make headway towards our vision.

2.3 Scottish Road Safety Targets

"Road safety priorities should be statistically led from reliable crash and casualty data; focused on reducing the number of road casualties requiring hospital treatment and set to give greater priority to killed or serious injury crashes over slight or non injury crashes." *(Local Authority)*

Great Britain road safety targets since 1987 have helped focus attention on the need to achieve significant casualty reductions.

Current targets to 2010 set for GB by the Department for Transport (DfT) in association with the Scottish and Welsh devolved administrations are:

- **A 40% reduction in the number of people killed or seriously injured (KSI) in road accidents;**
- **A 50% reduction in the number of children killed or seriously injured; and**
- **A 10% reduction in the slight casualty rate, expressed as the number of people slightly injured per 100 million vehicle kilometres.**

Against these targets, by 2007, Scotland had achieved, a 45% reduction in KSI, a 67% reduction in child KSI and a 35% reduction in the slight casualty rate. From a peak of 892 road

deaths in Scotland in 1969, the number of fatal casualties has fallen to 281 in 2007. This is set against a picture of increasing volumes of traffic with vehicle kilometres rising 16% over the last ten years.

The principle of targets for road casualty reduction is fundamentally sound and there is a strong case for setting fresh targets based on Scottish achievement.

To maintain alignment with GB targets we will continue to work towards them until 2010 when Scottish casualty reduction targets will commence.

Figure one shows what we want to achieve by 2015 and 2020, compared with the average Scottish figures for 2004/08:

Figure one: Scottish road safety targets to 2020, with milestones at 2015

Target	2015 milestone % reduction	2020 target % reduction
People killed	30	40
People seriously injured	43	55
Children (aged <16) killed	35	50
Children (aged <16) seriously injured	50	65

In addition, we will continue the previous **10% reduction target in the slight casualty rate to 2020**. We acknowledge partners' views of the value of gathering statistics and intelligence on this type of casualty as this may give an early indication of potentially more serious crashes.

We have concentrated on four Scottish targets which are aimed at reducing death and serious injury. We have separated deaths from serious injury as, in recent years, trends have been different for these with serious injuries falling steadily but deaths failing to achieve the same rate of decline.

The new targets are deliberately challenging, particularly for child deaths (which will be monitored using a three year rolling average due to the small numbers involved). Scotland's record for child deaths is proportionately worse than that of England and Wales and we want to rectify this. To help focus on our ambitious target, all child road deaths will be reviewed by key partners with recommendations for action, where appropriate, to help prevent the same set of circumstances repeating to cause the same outcome. Information from the reviews will be made available to Scottish Ministers.

We have included milestones at 2015 and this will be a key checkpoint for the Framework. However, we will also feedback progress towards the achievement of the targets annually.

The Scottish Government is asking partners to contribute to the overall achievement of the Scottish targets. We would also welcome recognition of the new Scottish road safety targets within the Single Outcome Agreements (see Section 2.5). This will serve to highlight the importance that is placed on making further progress on road safety across Scotland.

2.4 Benefits

Making progress on the targets makes sense on a number of grounds. Road accidents in which people are killed or injured result in high social and economic costs including a devastating impact on families, human pain and suffering, damage to vehicles and property, loss of productivity, demands on the emergency services, as well as medical and insurance costs.

To put the scale of the problem into perspective, the risk of death per hour while using the roads is over seven times higher than the risk of death per hour in the rest of everyday life. In addition, three times as many people die on the roads in Scotland as are killed in violent incidents. In an active life it is not possible to eliminate risk entirely but we believe it is unacceptable to tolerate such disproportionate risk in what is an unavoidable part of everyday life.[1]

The cost of fatalities

The cost per fatality in Scotland in 2007 was estimated to be in the region of £1.65 million.[2]

This **valuation of costs** is based on a 'willingness to pay human cost' approach. It is intended to encompass all aspects of the costs of casualties including both the human and direct economic costs. The human cost covers an amount to reflect the pain, grief and suffering to the casualty, relatives and friends and, for fatal casualties, the intrinsic loss of enjoyment of life. The economic cost covers loss of output due to injury and medical costs.

As part of an annual road safety budget of £3 million and to help implement the Framework, the Scottish Government has made an initial commitment of £1 million per year for the period 2008/09 to 2010/11. Additional ongoing resources are already allocated in Central Government, including almost £1.9 million annually to Road Safety Scotland and over £7 million to the Safety Camera Programme, and from partners' budgets according to their priorities and plans. The Scottish Government, through Transport Scotland, is also committed to spending £1.3 billion, in the current three year spending review (2008/09 to 2010/11), on major infrastructure projects and network management for Scotland's strategic road network. This ambitious programme has already seen significant projects delivered while others are currently under construction and many more are programmed which will contribute to road safety.

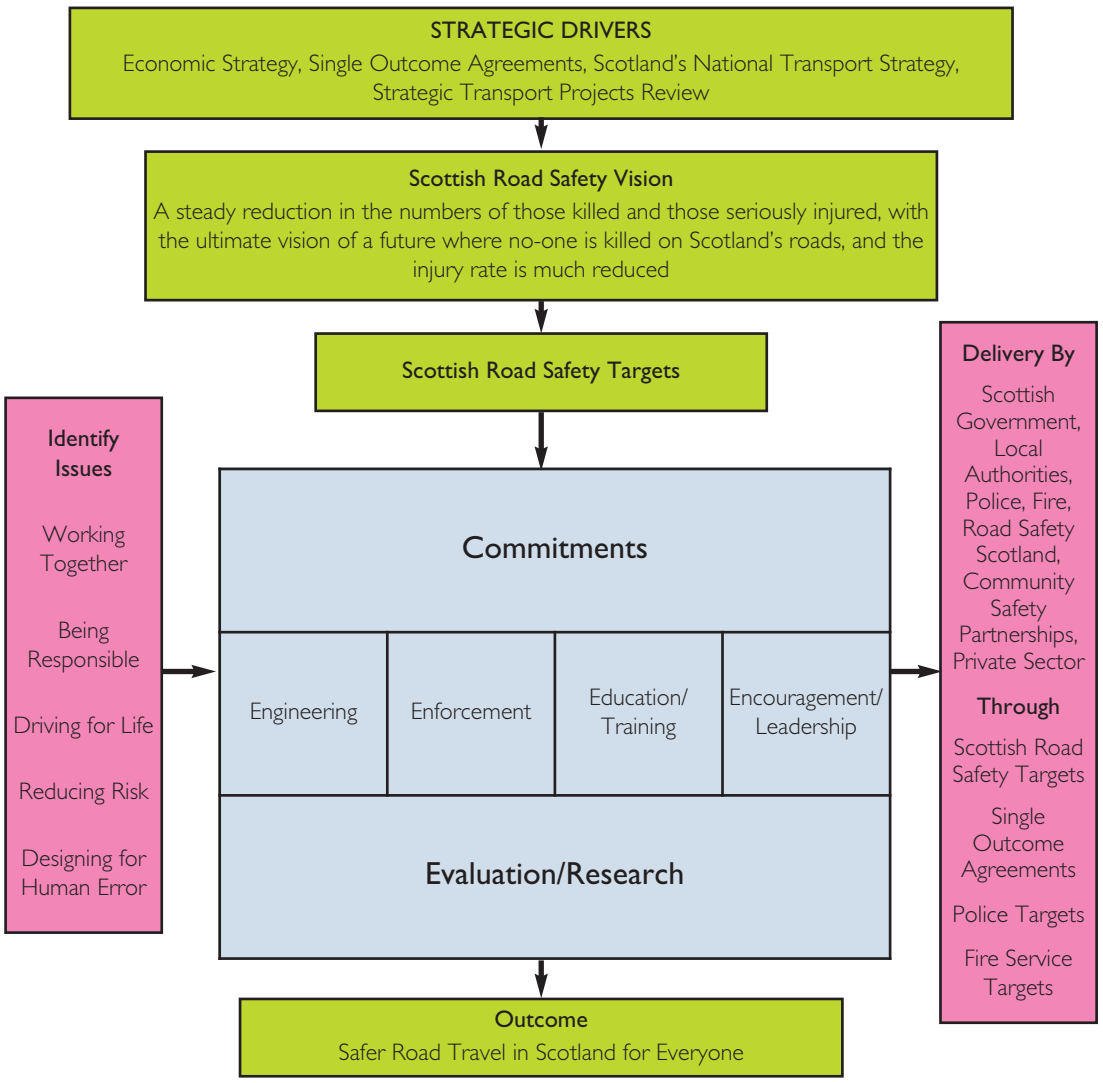
This is a sound investment. The financial and resource benefits of any reduction in loss of life or injury on Scotland's roads are plain to see. The costs to the emergency services alone from road deaths are extremely high. The Fire and Rescue Service in Scotland has stated that they now attend more road fatalities than fire fatalities.

The benefits of not losing your life or that of a loved one on the roads are even clearer.

2.5 Approach of the Framework

The **strategic diagram** at Figure two summarises the relationships between the aims of this Framework and key strategic, policy and delivery vehicles. It also shows the main disciplines under which we will deliver the commitments with Evaluation underpinning the others.

Figure two: Road safety strategic diagram



There are a number of key drivers for the Framework. The starting point for any document of this nature is the **Government's Economic Strategy**. This is predicated on maximising Scotland's richest resource, its people. In a Scotland where the **Purpose** is ***'to focus the Government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth'***, we must all do our best to help contribute to the Scottish Government's strategic objectives. In the context of this Framework, we are seeking to ensure a *Safer and Stronger* Scotland on the roads,

by working together to reduce the numbers of fatalities and seriously injured. This in turn will lead us towards a *Wealthier and Fairer* Scotland as the cost of lives lost and injuries sustained through traffic incidents is prohibitive both economically and emotionally. Whilst a *Healthier and Smarter* Scotland is one where we know how to take responsibility for our own safety on the road and where we also act responsibly towards other road users.

Scotland's National Transport Strategy, published in 2006, sets the context for all transport-related policies and this is reflected in this Road Safety Framework. Although, nationally, the car is a key focus of road safety, with car occupants accounting for approximately 62% of casualties each year, we will also focus on achieving a reduction in casualties from other modes of road travel, including pedestrian and cyclist casualties. We want these groups to make full use of the roads and to feel safe, confident and supported in doing so.

We have made a specific commitment in the Transport Strategy, carried through to the **Equally Well Implementation Plan**, to target children in disadvantaged areas who are at greater risk of injury in road accidents. We feel strongly that roads should be safe for all people, no matter where they live or what ethnicity, age or gender they are.

The **Strategic Transport Projects Review** (STPR), published in 2009, directly supports this Road Safety Framework through a work programme which includes Transport Scotland's Strategic Road Safety Plan, route management and targeted upgrades to roads and road safety improvements throughout Scotland's trunk road network. There is also support through improvements to the rail network providing more and better alternative options to travel on the roads and provision of strategic 'park and ride' and 'park and choose' sites to make public transport more competitive with the car.

The **Single Outcome Agreements** (SOAs) provide another impetus towards improving Scotland's road safety performance. SOAs are agreements between the Scottish Government and each council which set out how each will work in the future towards improving national outcomes for the local people in a way that reflects local circumstances and priorities. Many of the 2008/09 SOAs included reductions in road deaths and injuries as indicators of desired local outcomes. From 2009/10, all SOAs cover the range of **Community Planning Partnerships'** (CPPs) responsibilities including those of local authorities, the police and other partners in road safety. In some areas, local priority for road safety has been evidenced through **community safety audits** and captured in **local road casualty reduction strategies**. We know that road safety issues attract public attention at a national level but that issues can also be very localised and we have been careful to ensure that the Framework is flexible enough to accommodate this.

Making a contribution through this Framework to the **National Performance Framework**, National Transport Strategy and local outcomes set out in the SOAs will come through a series of commitments each of which can be grouped under the traditional road safety 3 Es (Education, Engineering and Enforcement) plus Encouragement and Evaluation. Importantly, the **commitments are brought together** under a number of **strategic aims** that we believe capture the main pre-requisites to improving road safety in Scotland in the future:

- Helping to **Join Up** the strands of road safety across the various delivery partners, so as to work more effectively;
- Reinforcing, at every opportunity, the message of the **Responsibility** of all road users for their own and other's safety on the roads;
- Encouraging a **Drive for Life** culture;
- Reducing the tolerance of **Risk** on the roads; and
- Upholding the **Rights** of all road users to expect safe road travel.

In the short term, we will work towards the achievement of the targets through the implementation of a series of proven measures. In the mid to long term we want to explore new ways of working together to join up the different functions of road safety to strengthen the impact of initiatives. We want to consider doing things which have been proven to work elsewhere, either in other parts of the United Kingdom or abroad. We are also keen to lead the way through piloting new road safety ideas and technologies in Scotland.

Road safety touches many areas of **Central Government** policy outwith Transport. Scottish Government Education, Health and Justice Directorates have contributed to this document. These contributions have included pressing the case with the UK Government for a reduction in the drink drive limit to ensuring road safety education produced by Road Safety Scotland (RSS) is compliant with the **Curriculum for Excellence** framework.

As to delivery, this Framework will inform **partners' road safety action plans**, ensuring that we have a joined up approach to road safety. Some, such as the **ACPOS Road Policing Strategy**, will follow on from the publication of this Framework. Others, such as Transport Scotland's Strategic Road Safety Plan and RSS's Education Strategy, are already in place but have been taken into account and reviewed when producing this Framework.

Finally, while it is wholly appropriate and indeed essential to have a Scottish Road Safety Framework to meet the needs of people using Scotland's roads, a number of the laws affecting road safety are reserved to the UK Parliament. The DfT is coming to the end of a ten year Strategy and will be looking to produce another **GB Strategy post 2010**. The Scottish Government is working closely with DfT to ensure a complementary approach to road safety.

There are, however, a few areas where we are calling for changes in legislation which is reserved to the Westminster Parliament, for example, a lowering of the drink-drive limit. Our support for these changes will be substantiated with evidence and fully discussed and debated with UK Government Ministers and officials. However, where the UK Government will not commit to evidenced changes to legislation at a GB level, we will ask for the powers to be transferred to the Scottish Ministers through the mechanism provided in the Scotland Act 1998.

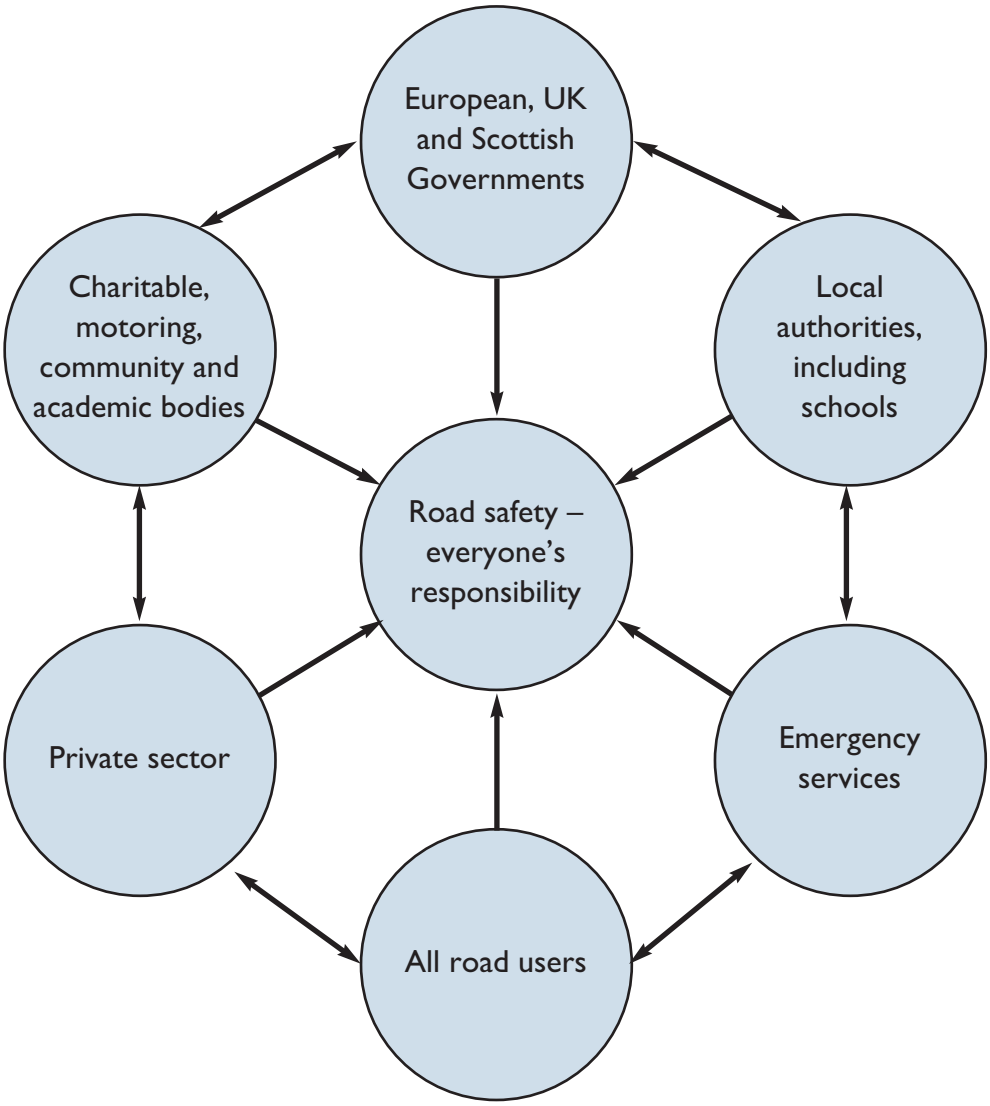
Chapter Three

Policy and delivery of road safety in Scotland

Organisation and responsibility for road safety policy and delivery is spread across several areas, including Government and other organisations.

The diagram at Figure three indicates the range of organisations and individuals with responsibility for road safety in Scotland, whether that be making policy, legislation, delivering road safety or simply ensuring personal safety and safety of others on the roads.

Figure three: Road safety stakeholders



Annex A provides a narrative account of the different organisations within these broad categories and their main responsibilities for road safety. Currently there are a number of key partnerships and dependencies required to deliver road safety initiatives coherently and effectively.

Different arms of government have critical roles to play. Some road safety responsibilities lie at European level. A substantial part also takes place at UK level – key amongst these are responsibilities in areas such as driver testing and drink drive legislation. The Scottish Government and local government also have considerable responsibilities in areas such as education, publicity, roads and related infrastructure.

Non-government organisations are extremely active in the road safety area. These range from motoring organisations, to employers, community groups and charities. The private sector is also increasingly involved in backing and helping to deliver road safety initiatives. The police and other emergency services have critical roles in enforcing road safety, in delivering education and publicity, and in dealing with road accidents.

The **academic sector** also makes a contribution to the thinking and delivery of road safety initiatives. As shown in later Chapters, there is a rich evidence base in the road safety area which is increasingly broadening the understanding of the problems that are faced and the potential solutions available. The **public** too are a wealth of information as road users.

The evidence base, and how the various organisations involved in road safety work together, are the subjects of Chapters Four and Five.









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Chapter Four

Evidence

Evidence has a major role to play in every stage of the policy making and delivery. This includes identifying and defining the key problems to be addressed, deciding how to tackle them in an effective and cost efficient way, and in evaluating the effectiveness of interventions.

It is this approach that has been adopted in the development of this Framework and will continue to be used in terms of its delivery. Future research and analysis, in the form of monitoring and evaluation, will tell us how effective we have been in meeting the challenges we have highlighted. There will often be substantial pieces of research undertaken at GB level which will be highly relevant to the circumstances in Scotland and, where practicable and relevant, we will collaborate with DfT in the commissioning of new research.

4.1 Consultation

Our **Public Consultation Exercise** attracted responses from members of the public and a wide variety of organisations including local authorities, road safety organisations and the police. The responses were analysed and summarised in a report published on the Scottish Government website.[3]

A clear message from the exercise was the fact that many of the right things are already being done but they could potentially have greater impact if there was a more joined up approach to road safety across the various disciplines and organisations. Chapter Five picks up on this.

Although one main area of concern was young drivers, there were no responses to the public consultation from young people themselves. To address this, the Scottish Government commissioned **focus groups of young people aged 16-25** to provide some insight into how they perceived road safety.[4] We have used their views and feedback at various points, but particularly in section 7.2 'Drivers aged 17-25'.

The **Road Safety Expert Panel** encouraged an ambitious road safety vision for Scotland; to set Scottish national targets; to work together to strengthen action; to have a strong focus on road safety education; to refuse to tolerate risk on the roads; to take a lifelong learning approach to driving; and to lead the way by testing and trialling new road safety measures. Membership of the Road Safety Expert Panel is at Annex B.

The Framework has also been influenced by leading **road safety strategies** from around the world including Sweden's 'Vision Zero'.

'Vision Zero'[5] – Sweden

While it is accepted that it is not possible to prevent all accidents, the goal is to minimize the effects so that they do not cause serious health impairments. The Vision is that by 2020 there will be no road deaths or serious injuries.

- Ethics: human life takes precedence over mobility and other objectives of the road traffic system;
- Responsibility: those who provide and regulate the road traffic system share responsibility with users of the system;
- Safety: the need for road traffic systems to make allowances for human fallibility and to reduce both the opportunity for errors and their effects;
- Mechanisms for change: providers and regulators are required to strive to ensure the safety of all road users: they must co-operate with road users and all must be prepared to change to achieve safety objectives.

Examples of initiatives include the introduction of a 30 km/h speed limit in built-up areas and the separation of opposing lanes of traffic on single carriageway rural roads.

The Swedish Road Administration (SRA) seeks to influence the purchasing strategies of companies that work with it, e.g. by encouraging staff to hire cars only from companies whose fleet have a good star rating on the EuroNCAP system. Similarly, taxi firms providing services under contract to SRA must be fitted with alco-locks.

4.2 Research

We have drawn on a range of research to ensure that the issues discussed in this document are the main issues affecting road safety in Scotland. Primarily we have focused on research carried out by the Scottish Government, particularly regarding publicity and education.

However, we have also included research from the rest of the UK and abroad where we believe that it is relevant to the road safety issues in Scotland. In some instances we have concluded that more research is needed to further define the issues and to point to solutions. We have referenced the research used and included a bibliography at Annex G.

4.3 Statistics

The Scottish Government publishes statistical data every year detailing road accident statistics from the previous calendar year in the publication Road Casualties Scotland.[6] An interim report on figures is also issued around June of each year. These publications draw on data taken from the Stats 19 form completed by the police at the scene of injury road accidents.

Stats 19

The Scottish Government collates information on injury road accidents from each police force in Scotland using the GB-wide 'Stats 19' data collection system. Statistical information is received around six to eight weeks after the end of a month and then undergoes a rigorous quality assurance process in conjunction with the relevant police force. These road accident statistics are essential for informing and monitoring road safety policy at local and national level.

The Stats 19 collection is jointly managed and owned by the Standing Committee on Road Accident Statistics (SCRAS)[7] comprised of DfT, police forces, local authorities and the devolved administrations. The Scottish Government supplies DfT with comparable Scotland figures which feed into their quarterly and annual UK published figures.

The figures include all accidents in which a vehicle is involved that occur on public roads (including footways) and result in personal injury, if they become known to the police. The statistical returns include the following types of information about the accident, the vehicles involved and the resulting casualties:

- Severity of injury (killed/serious/slight);
- Characteristics of casualty (gender/age/mode of travel);
- Road class and number (e.g. 'A1', 'M8', unclassified road, etc);
- Grid co-ordinates of the location (northing and easting);
- Police force area;
- Home post code for drivers/riders and casualties; and
- Factors that may have contributed to the accident.

Statistics are also used by partners to target action by identifying accident trends and helping to prove whether action is effective. There is more detail on this in Chapter Five.


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Chapter Five

Working together for safer roads

"With the many and wide range of organisations and agencies that are involved in road safety, from a national level through to regional level and down to local level, the important factor is that they must work together towards their common goal, to reduce the number of people killed and injured in road accidents." *(Local Authority)*

5.1 Organisation and Leadership

"Ensure all organisations with statutory duties for road safety adopt common approaches towards achieving an agreed objective to reduce duplication and provide a stronger road safety message." *(Local Authority)*

The Scottish Government has a major stake in ensuring the safety of all road users; so do local authorities and police forces, both of whom are fundamental to delivery at local level. Other organisations also play significant roles. It is important that the respective roles of Government and other bodies with a road safety interest complement each other.

To be effective in further reducing road deaths and serious injury there requires to be a co-ordinated effort from all partners. We believe that a strategic grouping can offer opportunities to drive the commitments in the Framework and to ensure joined-up working across Education, Engineering, Enforcement, Encouragement and Evaluation. This grouping would help to ensure that the Framework has high-level commitment and remains a priority for delivery bodies. Membership would be drawn from the key delivery organisations at a senior level. The Scottish Government would undertake to help produce an annual update from this grouping showing progress on the Framework commitments and Scottish road safety targets.

There is already excellent partnership working across Scotland, including working with the private sector. But it is important that we continue and build on this to further strengthen action on road safety.

Where lacking, we must establish effective links to local, area and functional partnerships. We are not proposing a reorganisation of road safety, but wherever possible, better interaction to ensure more effective lines of communication and responsibility across functions. We recognise that, within this process, there must remain the ability for local decision makers to decide how best to address local road safety issues.

Central Scotland Police, Diageo and Central FM Partnership

In 2006, a partnership between Central Scotland Police, Diageo (global drinks company) and Central FM (local radio station) was formed due to the substantial increase in drink driving and accidents involving alcohol in the Central Scotland Police area.

Both Diageo and Central FM are fully committed to the ethos of the campaign 'Clear Thinking, Responsible Drinking'. Subsequent campaigns consisted of greater high profile police enforcement, coupled with intense radio advertising paid for by Diageo.

Central FM has a listening audience of 83,000 adults, equivalent to 39% of the adult population in the Forth Valley area, and produced infomercials, sound bites and promotional material to support the campaign. At the end of the campaign research established that the average listener had heard the messages 149 times. Results, to 31 July 2008, showed that drink driving was down 30% and accidents involving drink were down 55% compared to the same period in the previous year.

The Automobile Association has recently joined the partnership and brought its considerable expertise and knowledge to the table. It has also given the campaign access to the 'Populous Panel' which allows it to gauge the views of local AA members.

The success of the campaign has been acknowledged nationally and, in 2008, the Partnership was awarded a prestigious Prince Michael International Road Safety Award.

To encourage networking, partnership working and to highlight the achievements in Scottish road safety, the Scottish Government will also explore the idea of supporting a Scottish Road Safety Week each year involving partners across Scotland. The Road Safety Week could help keep momentum high in delivery on this Framework and be used to celebrate examples of effective action. This, together with the recommendation on a new strategic grouping, is designed to strengthen leadership and improve awareness both across organisations and across Scotland, while retaining the essential local or regional nature of much activity.

A further example of what partnership working can achieve is shown by Northamptonshire.

Northamptonshire Casualty Reduction Partnership

The partnership comprises five key partners: Northamptonshire County Council; Northamptonshire Police; Highways Agency; Local Health Authorities; and Fire and Rescue Service.

By bringing together key agencies, taking ownership and sharing responsibility for all road safety issues, the partnership has been able to demonstrate dramatic and sustained casualty reductions in high risk areas.

For example:

- Killed and seriously injured casualties have reduced year on year from 773 per annum (1994-98 average) to 462 in 2007.
- Road deaths have reduced from 76 in 1999, to 56 in 2007.
- Killed and seriously injured child casualties have reduced 54% from the baseline average 1994-98.
- Through road safety actions targeted at deprived areas, casualties have started to reduce.

The partnership has received a variety of awards including the National Transport Award for Road Safety 2001, Institute of Highways and Transportation/BP Road Safety Award 2002, Institute of Advanced Motorists Dominic Fox Award for Young Drivers and four Prince Michael International Road Safety Awards. The partnership operates its own website with comprehensive information on its activities as well as general information and advice on road safety.[8]

5.2 Communication and Sharing Good Practice

"No one sector alone can as effectively produce results in improving safety as when sectors work together. It is therefore important that there are stronger links and good communications between all parties involved in this area of work." (Transport organisation)

Whilst Scottish road safety partners are already doing many things that work well, the public consultation also made it clear that delivery partners want evidence of what works before considering future investment in new initiatives.

To help with this, the Framework contains case studies of mainly Scottish road safety initiatives with a few from elsewhere in the UK and abroad. We also want to consider, for the future, ideas that, together with partners, we can trial or pilot in one area, evaluate and then share the results across Scotland to help spread best practice.

An existing vehicle for sharing good practice across the UK is the Road Safety Time Bank. Representatives from the scheme have been present at several road safety conferences in Scotland and some Scottish Road Safety Units have already signed up.

Road Safety Time Bank[9]

The Road Safety Time Bank offers road safety professionals and practitioners across the UK the opportunity to share information and good practice. Organisations or individuals using the Time Bank are asked to commit time to help other Time Bank users based on the number of hours/days they have obtained from others. It works on the principle that everyone has something to learn and something to give.

When a local authority joins the Road Safety Time Bank, it is given a homepage where it is able to promote its road safety practices, schemes and interventions. In building a homepage members have the opportunity to notify other members on areas of road safety where they are happy to offer help and assistance. Members are asked to write case studies about engineering schemes, education initiatives and enforcement strategies to support this. They are also encouraged to involve their road safety partners in order to bring about a complete approach to the system.

When a member searches the Time Bank for a solution to a new road safety problem it will receive a list of local authorities that are able to offer support and a list of case studies to read. On reading these case studies it is hoped the member will find an approach, method or complete solution to the problem and can then contact the 'provider' and make a 'trade'.

This 'trade' entails the member offering the solution giving their time for free to the member who needs the support. This time can either be over the phone, face to face or by simply sending through the necessary documentation. In return the 'provider' can then go to any other member and draw down from their support.

We want to explore with partners whether we can use existing data bases such as Time Bank or whether there is a need for a specific initiative in Scotland.

There are also initiatives sharing transportation practice, including road safety initiatives, across Europe. One of these – CONCEPT – was initiated by Aberdeenshire Council.

CONCEPT[10]

The CONCEPT project identifies and shares best transportation practice between European regions. CONCEPT disseminates learning about new and effective solutions for developing transportation policies, strategies and projects as part of the INTERREG IIIC programme.

The project idea was initiated by Aberdeenshire Council in early 2002 in response to the European Commission's Transport White Paper which had identified a number of issues that were required to be addressed for the sustainability and competitiveness of Europe's transportation system. Principal among these were the need to "place users at the heart of transport policy" and "shifting the balance between modes of transport" from road-based transport to rail, sea and inland waterways.

CONCEPT was formed by partners who shared common aims and objectives. Its central focus is to help the European Commission by encouraging and facilitating the transfer of good practice (projects and policies that have positive impacts for a region's population, its economy and its environment) in sustainable transport. Partnership and co-operation between regions are seen as ideal means of communicating good practice, and also mechanisms by which a region can learn about how others have developed their transportation strategies.

5.3 Intelligence

"In the broadest sense, priorities should be statistically led to ensure maximum reduction of casualties." *(Police)*

The intelligent use of statistical data by delivery partners is a key tool to understanding national and local issues and assessing how best to address these.

The gathering and reporting of Stats 19 road safety statistics is discussed in Chapter Four. It is a major source of data, providing valuable information on road accidents and the overall statistical evidence base is regularly assessed for quality. We are also keen to explore the use of other statistical evidence, such as hospital data, if it helps to give a clearer overall picture of road accidents in Scotland.

DfT is reviewing Stats 19, in consultation with delivery partners. The Scottish Government will be feeding into that review.

2008/09 Review

Under National Statistics[11] procedures, the Stats 19 collection is subject to regular quality reviews, the last of which was carried out in 2004 (with subsequent recommendations implemented in January 2005). The review examines all aspects of the statistics collection: usability; suitability; quality; burden; processes and procedures. The current review will be carried out over the course of 2009. A public consultation was launched on the DfT website on 5th February 2009. The review is led by SCRAS with a smaller project review working group managing the specific aspects of the review, on which there are three representatives from Scotland (police, local and central government).

The current Stats 19 form now requires the police to gather home post codes for drivers, casualties and vehicle owners. We believe that this information should also be made available to those involved in the delivery of road safety education and publicity. Traditionally, road accidents have been logged by geographical location thereby allowing engineers to monitor developing trends and to carry out any appropriate remedial measures on the physical environment. However, in order to effectively deliver education, training and publicity activity within a local authority, Road Safety Officers need to be aware of the range of road incidents being experienced by resident road users regardless of where they occur in Scotland. The Scottish Government will develop a system, possibly working with DfT, which will analyse casualty data by post code and make it available to Scottish local authorities and police forces.

In some areas delivery partners in Scotland are already using local intelligence to inform road safety issues and solutions. Strathclyde Police employ both Intelligence and Crash Analysis teams and feed information on emerging trends to the 12 West of Scotland local authorities.

We want to continue to encourage and support this type of intelligence-led road safety both at local and national level and we will discuss with partners how best to do that.

Commitments

In Government, and in partnership with other stakeholders, we will:

- Investigate the establishment of a strategic Scottish group which is representative of the major road safety disciplines and key delivery partners.
- Introduce a Scottish Road Safety Week after consultation with partners.
- Produce an annual public update on the delivery of the Framework.
- Help to promote existing information sharing fora and databases and consider whether there is a need for a specific initiative for Scotland.
- Consider, with partners, local pilots of initiatives for evaluation and promulgation of results across Scotland.
- Explore the inclusion/effectiveness of wider statistical evidence other than that of Stats 19.
- Ensure Scottish views are included in DfT Stats 19 reviews.
- Work with local authorities and police forces in order to identify their needs in relation to expanding Road Casualties Scotland to include casualty analysis by home post code.
- Encourage and support the use of intelligence-led road safety targeting.


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Chapter Six

Being responsible on the roads

Research, statistics and feedback tell us that there are particularly vulnerable groups on the roads on which we need to focus our attention. The following sections address our priority vulnerable groups.

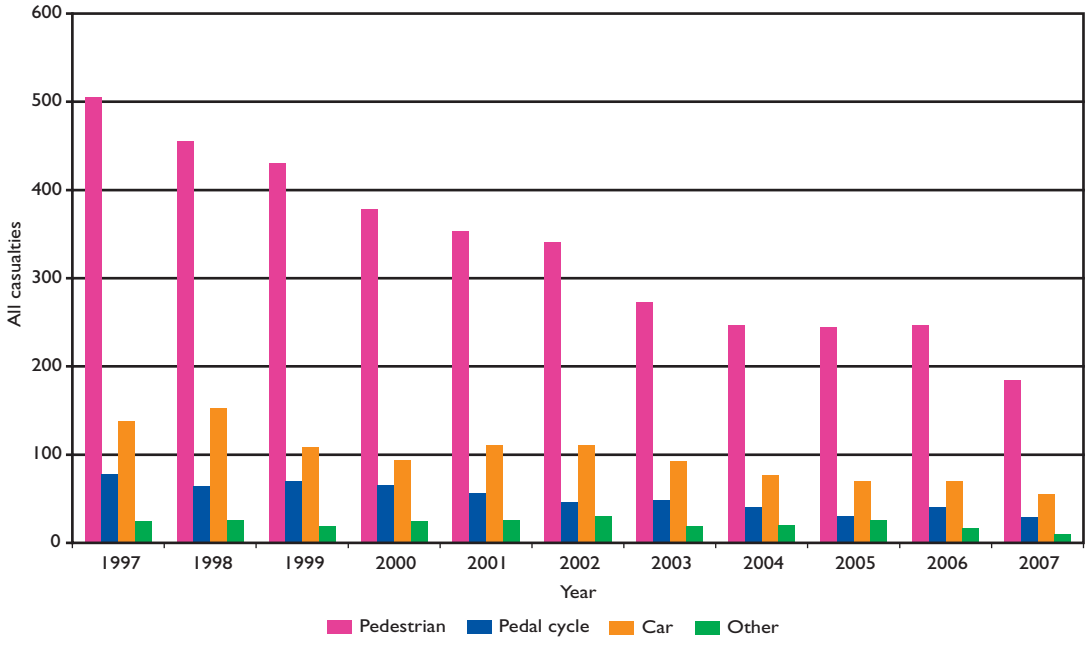
6.1 Children and Young People

The Issues

Children and young people are among the **most vulnerable road users**. Because of their age, many do not have the ability to make an accurate judgment about safe road use, while **lack of experience** of particular situations also means they are at greater risk. Children are often impulsive, easily distracted and unpredictable and for these reasons need special consideration by other road users.

Child casualties (i.e. under 16 years of age) killed and seriously injured (KSI) have fallen significantly over the last ten years, as can be seen in Figure four. In 2007 there were nine child fatalities and 268 children seriously injured on Scotland's roads. This has decreased from the 1997 figure of 26 child fatalities and 719 children seriously injured.

Figure four: Children and young people road accident KSI by mode, 1997/2007



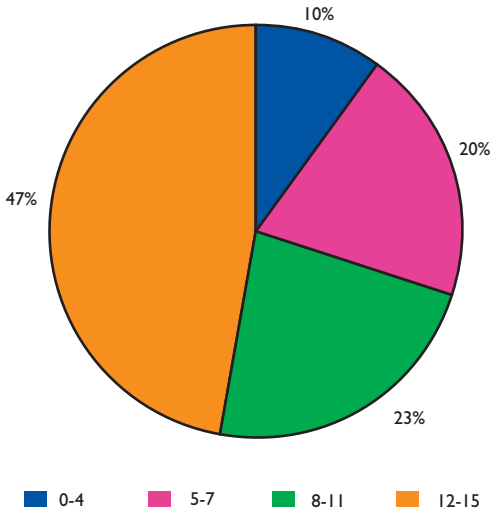
Despite the fall in child deaths and serious injuries, child deaths and the combined child KSI rate in Scotland in 2007 was higher per head of population than that of England and Wales, for both child pedestrians and child car passengers.

A review of road accident casualties, as part of research commissioned in 2007[12] by Road Safety Scotland (RSS) into the S1/2 road safety education resource, showed that:

- The number of casualties increases as children move from primary to secondary school: 30% more children are killed or injured in the S1/S2 years than in the P6/P7 years;
- The number of child casualties occurring on journeys to/from school peaks around the age of 12, increasing almost threefold from the age of 10 to the age of 12; and
- The number of male pedestrian casualties up to age 13 was significantly greater than female casualties.

Figure five shows that, as children enter their teenage years, their casualty rate increases. Research suggests that this may be due to their enhanced freedom, travelling further from home and being out in hours of darkness and in adverse weather conditions. Research carried out in 1998[13] highlighted that, although road safety knowledge among this age group was high, the application of this knowledge was poor.

Figure five: Child killed and seriously injured by age, 2007



A further issue relates to **children with additional support needs**. Learning to use the roads safely is a key life skill for such children as this can lead to greater independence. A study published in 2005[14] investigated the existing road safety education provision for young people within a wide spectrum of additional support needs. It suggested that these young people can be at higher risk of road accidents due to a variety of factors, including lack of awareness, inability to cope with change, difficulties putting theory into practice or specific difficulties with spatial awareness.

The study further explained that the travel patterns of children with additional support needs are often more restricted than those without, with travel to school predominantly by taxi, bus or car. There was some concern that, due to restricted travel patterns and methods, many children are missing out on the basics of road safety education.

Finally, research has shown that children in the **lowest socio-economic groups** are over four times more likely to be killed as pedestrians than those in the highest socio-economic group.[15] The risk of pedestrian injury is over 50% higher for children of single mothers compared with two parent families and significant differences in child pedestrian injury rates based on **ethnicity** have been identified, particularly for younger 'non-white' children.

What we do now

DfT published a **Child Road Safety Strategy** in 2007 www.dft.gov.uk/pgr/roadsafety/child/childrdsafetystrategy2007. The document describes actions specifically focused on children's road safety across the UK, including in Scotland. Road safety education and publicity are devolved issues. While supporting much of the content of the DfT document, RSS provides a cohesive and co-ordinated suite of educational resources for children in Scottish schools, as well as road safety publicity campaigns and materials.

RSS is implementing an overarching strategy for **road safety education**, www.road-safety.org.uk/education/national_strategy/index.asp, that sits within the Scottish Government framework for education – Curriculum for Excellence. The strategy covers all stages of a child's road safety education within both formal education and wider community settings, from pre-school through to secondary, and includes young people with additional support needs. It aims to ensure that a core of road safety is taught to all children, with overarching links to other areas within the curriculum.

RSS has also developed a range of resources that are available, free of charge, for use in all schools from early years through to secondary and college, school clubs, youth and community groups, outreach education, and faculties of education. They are also available to adult literacy classes in Scotland. A list of **RSS educational resources** is at Annex C. The resources enable children and young people to understand the nature of risk, employ safety strategies and perceive the road environment as a shared space. There are also a number of **websites designed by RSS** to support and enhance education resources and initiatives for children. A list of the web links is also included at Annex C.

In addition to classroom based learning, children benefit from practical training as pedestrians. Some local authorities have successfully implemented Kerbcraft, a child pedestrian training resource developed by the University of Strathclyde with funding from the UK Government, and initially piloted in the Drumchapel area of Glasgow.

'Kerbcraft' West Dunbartonshire

West Dunbartonshire is one local authority where Kerbcraft has been introduced. The scheme aims to teach children three pedestrian skills:

- Choosing Safe Places and routes to cross the road;
- Crossing Safely at Parked Cars; and
- Crossing Safely at Junctions.

The scheme is unique in that parents, grandparents and guardians volunteer to train the children after receiving training from the scheme co-ordinator.

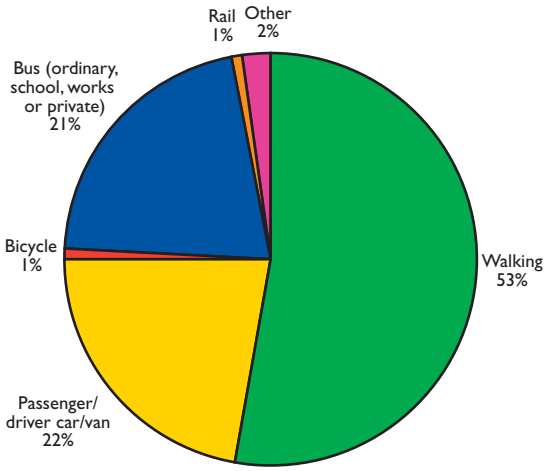
Kerbcraft has delivered training to over 1,200 children within West Dunbartonshire and has now become a firm favourite within the school timetable. The scheme helps not only to deliver key pedestrian skills, but also promotes health and well being.

42% of volunteers have utilised their Kerbcraft skills to enter into the workplace and further education. The training volunteers receive reaches further than just Road Safety. Training is provided for interview skills, time management, assertiveness, team building, interactive communication and presentation skills. These skills are often sought after by employers and further education establishments and have delivered real benefits to local people.

The Kerbcraft website can be accessed at: www.kerbcraft.org/

The Scottish Government is committed to encouraging those children who are able to walk and cycle to school. Currently one in five vehicles at peak times in the morning and afternoon is on the 'school run'. By promoting **active travel** we will improve children's health and well being as well as reducing congestion and CO_2 emissions. Figure six shows the different modes of transport, undertaken by pupils in full-time education, for school journeys in Scotland.

Figure six: Travel to school – usual method, 2007



Source: Scottish Household Survey 2007

If parents allow their children to walk and cycle to school they need to feel that their children will be safe in doing so. Many schools have produced **School Travel Plans** under the **Safe Routes to School** initiative. These are supported by **School Travel Co-ordinators** who are employed by some local authorities. Their main tasks can include encouraging and supporting the work of school travel teams; getting schools to sign up to developing a travel plan; supporting schools throughout the travel plan process; monitoring travel plans; and working directly in schools on their plans.

One example of a community led initiative to ensure safer travel to school as part of the school travel plan is the Strathyre Traffic Campaign.

Strathyre Traffic Campaign

In August 2007, the P4-7 children of Strathyre Primary School in Stirlingshire embarked on a traffic/safe routes to school campaign as part of their health programme. This involved investigating dangers in the environment and strategies for keeping themselves safe. The children decided to tackle the danger of traffic passing through their village at speed. It was decided that the lack of an adequate pavement in the village should also be addressed.

The children drew up a set of aims that included investigating the speed and volume of traffic passing through the village and exploring the possibility of an alternative route to school using an old existing railway track.

In order to gather the views of all families and local villagers, the children devised a questionnaire that was distributed to all interested parties. The children also carried out various traffic surveys, monitoring the speed, volume, types of traffic and times of high usage over a period of time. This information was the subject of a presentation to the local MSP, School Travel Co-ordinator, representatives from the Schools Partnership and parents in October 2007. Subsequently, a meeting took place with the Scottish Transport Minister and an action plan was drawn up.

An initial inspection of pavements has been carried out. Further traffic surveys have been conducted at different times of the week/year, as agreed with the Headteacher, to determine whether a pedestrian crossing is required at Strathyre. In addition, flashing 30 mph speed signs are to be installed at either end of the village.

The school will be consulted and the views of staff, parents, children and local villagers will be taken into consideration throughout the scheme, which will improve safety for children and other pedestrians in the village.

Local authorities have statutory responsibility for **school transport** provision. While Ministers cannot intervene in such decisions, nor set conditions on how the responsibilities are discharged, the Scottish Government provides guidance to education authorities on school transport issues. In March 2007, a publication on **School transport: survey of good practice** (www.scotland.gov.uk/Publications/2007/03/16091028/0) was issued. It sets out examples of good practice in school transport provision and examples of successful strategies for distancing cars from schools and encouraging walking and cycling.

Each day in Scotland, pupils are transported to and from school by **school bus**. Across the country, and particularly in rural areas, concerns have been expressed by parents over the safety of pupils getting on and off these buses at the **pick up and drop off** points (PUDOs). The Scottish Government is currently examining the potential for increased visibility of school buses and school children with Aberdeenshire Council. Suggestions for improvement include redesigning the current sign for school buses, putting in place additional signs, introducing high visibility clothing for pupils, and interactive signing to raise drivers' awareness of the presence of school buses and school pupils.

Given that the critical aspects of ensuring that pupils are transported safely relate to their own responsibilities, and that of their parents and other drivers, there is also a clear opportunity for all partners to maximise the use of the media to promote joint, co-ordinated messages to pupils, parents and drivers regarding the issue of road safety and school transport.

The Scottish Government has also encouraged and funded specific initiatives to protect child pedestrians, including a scheme to implement **20 mph limits around schools**. Nearly £50 million was made available to local authorities between 2003 and 2008 for the introduction of 20 mph schemes at schools. By March 2008, 20 mph speed limits were in place at 83% of schools. The Scottish Government continues to support and encourage children walking and cycling to school in safety through provision of funds to the Sustrans School Run Team and cycle training resources from RSS and Cycling Scotland.

What we need to do next

As noted earlier, Scotland compares less favourably with England and Wales regarding children killed and seriously injured in road accidents. We need to reduce these accidents further, in line with the child road safety targets outlined in Chapter Two.

RSS has gained national and international recognition for the excellence and relevance of its educational and publicity products. We want to maintain that excellence and continue to lead the way with innovative road safety education products and publicity messages.

In order to promote a *Fairer Scotland* we cannot tolerate any differences in road safety between children living in disadvantaged or affluent areas, nor any due to ethnicity, disability or any other equality issue. So we will continue to investigate how best to ensure that all children are safer on Scotland's roads.

To develop a *Healthier Scotland* we want to encourage our children to have a healthy lifestyle and, where possible, to walk or cycle to school. We want them to be able to do this in safety and we want everyone concerned to have the opportunity to be involved in planning how to do this.

Commitments

In Government, and in partnership with other stakeholders, we will:

- Aim to achieve our ambitious child casualty reduction targets by 2020 by scrutinising the circumstances of each child fatality and reporting to Scottish Ministers with recommendations for action.
- Fund Road Safety Scotland to develop innovative road safety educational resources (including a new Early Years' resource to replace the Children's Traffic Club in Scotland).
- Undertake an audit of our road safety education resources to ensure they address the specific issues which Scotland's child road casualty record presents and that they keep pace with educational developments and methods.
- Commission new research to investigate the links between road safety and disadvantaged children and those in ethnic minority groups and implement agreed action.
- Continue to support the use of school travel plans, fully involving the local community, through grant to the Sustrans School Run Team and cycle training resources from RSS and Cycling Scotland.
- Investigate, report and implement ways to help ensure schoolchildren's safety when getting on and off school buses.
- Call on the UK Government to consider any strengthening of legislation in relation to school transport.

What we all can do:

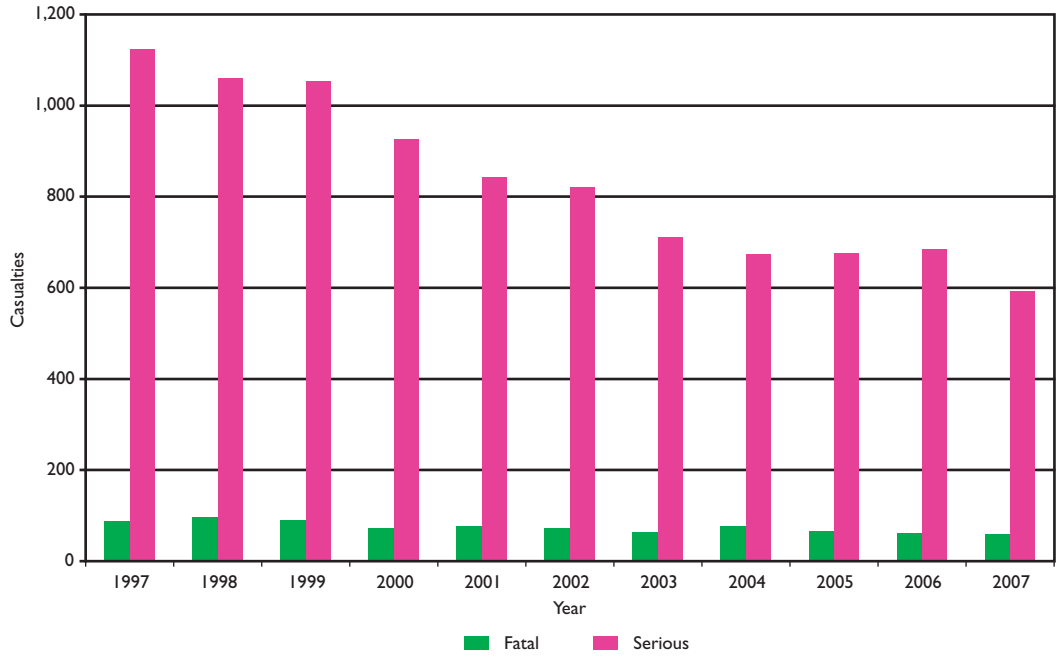
- Teach children never to cross the road before looking all around including behind them if at a junction.
- Teach them to use a pedestrian crossing, where available, and teach them not to assume that the driver has seen them and can stop.
- Be aware that children are greatly influenced by our behaviour on the roads: and so keep them safe by showing them how to use roads responsibly; give them as much practice as possible at being safe pedestrians; and help them improve their skills of judging speed and distance of moving vehicles and the decision making process of crossing the road.
- Be extra vigilant when driving or cycling in areas where there are children playing, cycling, walking, or alighting from school buses.

6.2 Pedestrians

The Issues

In 2007, 17% of all road casualties in Scotland were pedestrians. Figure seven shows a decrease in pedestrian casualties from a total of 87 deaths and 1,124 serious injuries in 1997 to 60 deaths and 592 serious injuries in 2007. Although a welcome decline, the vulnerability of pedestrians is illustrated by the fact that they are almost twice as likely as car occupants to be killed or seriously injured when involved in a road accident (652 KSI from a total of 2,696 pedestrian casualties compared to 1,270 KSI from a total of 10,054 car occupant casualties).

Figure seven: Pedestrian road casualties by severity, 1997/2007



We have already discussed child pedestrian casualties in Section 6.1. However, another age group which gives cause for concern is the **over 70s**. Perhaps because of the increased frailty of this age group there is a high number of pedestrian fatalities proportionate to the overall number of casualties.

Pedestrian fatalities and serious injuries have a particular predominance in **urban areas**. This points to a need to ensure that vulnerable road users are protected more in such areas and that pedestrians themselves act responsibly amongst traffic.

There is also a particular issue regarding **alcohol-impaired pedestrians**. Samples carried out by the Coroner & Procurators' Fiscal office show almost 40% of pedestrian road fatalities in Great Britain had alcohol levels over the legal limit for driving. Nearly three quarters of those killed in road accidents between 10pm and 4am were over the legal drink drive limit.[16] Figure eight shows the number of pedestrian casualties in Scotland in 2005 to 2007 where the reporting officer has thought their impairment through alcohol may have played a role in the accident.

Figure eight: Pedestrian road casualties in Scotland "impaired by alcohol" listed as contributory factor, 2005 to 2007

	Fatal	Serious	Slight	Total
2005	13	106	306	425
2006	16	125	295	436
2007	16	94	284	394

Source: Stats 19 Contributory Factors Data

We will monitor these figures to ascertain whether alcohol impairment continues to be an increasing contributory factor in pedestrian fatalities.

What we do now

The Scottish Government provides resources to local authorities, Sustrans, Living Streets and Cycling Scotland for various interventions that promote active travel. For example, funding is available through the **Cycling, Walking and Safer Streets** programme (CWSS) for crossing facilities for pedestrians and cyclists, improved footpaths and shared use paths, traffic free entrances outside schools, 20 mph limits and improved street lighting.

We know that more than half of pedestrian accidents occur within 2 kilometres of the casualty's home and we therefore need some focus on **residential areas**. We want new streets to be designed that take into account the needs of pedestrians and cyclists.

Designing Streets

Designing Streets is a Scottish Government document which, when published, will complement *Designing Places* by setting the policy and guidance for design, construction, adoption and maintenance of new streets; it is also applicable to existing streets subject to re-design. *Designing Streets* updates the link between planning, transportation policy and street design. It places particular emphasis on the importance and benefits that flow from good design and assigns a higher priority to pedestrians and cyclists. It also highlights the linkage between street design and a range of other policy objectives including, and especially, road safety as it reinforces the priority of pedestrians and cyclists and provides guidance on design in controlling and reducing vehicle speeds.

The Scottish Government has encouraged the use of **20 mph speed limits** in residential areas and, as mentioned in Section 6.1, around schools. Local authorities are well placed to decide on 20 mph speed limits in their areas and whether they should also be accompanied by speed calming measures such as road humps.

20 mph Speed Limits in East Ayrshire

East Ayrshire Council has provided full-time and part-time 20 mph speed limits on roads adjacent to 56 schools. In addition 20 mph speed limits have been introduced in 38 residential areas and there are 45 'Twenty's Plenty' Zones.

A questionnaire survey undertaken during the consultations on the Local Transport Strategy indicated that 92% of residents in East Ayrshire support reduction in speeds in residential areas. Two-thirds of residents that responded supported the use of road humps to help drivers reduce their speed.

The programme of introducing 20 mph speed limits is continuing in residential areas to reduce casualties, enhance the environment and make it easier for the elderly, disabled people and young people to move around residential areas in safety.

RSS provides an interactive education resource **a2bsafely** on-line and as a CD. It gives young people and young adults a safe place to explore the road environment as pedestrians. This is supported by RSS's **Step-by-Step** pocket booklet which has been produced in English, Gaelic and Polish, to provide a simple guide for students and parents.

What we need to do next

We need to continue to work with those responsible for designing and planning Scotland's road network. We want a consistent and appropriate standard that addresses the road safety needs of all who make journeys on foot (particularly children and the over 70s) and that also takes into account the safety requirements of disabled people such as the visually impaired.

We want to encourage people of all ages, abilities and diversities to walk in safety in order to make themselves healthier and to help improve Scotland's air quality through a decrease in vehicle use and corresponding emissions.

We want to investigate whether alcohol is playing a greater part in pedestrian casualties and, if it is, consider what we can do to reverse the trend.

Commitments

In Government, and in partnership with other stakeholders, we will:

- Publish guidance for Scottish roads authorities on designing streets, focusing on the needs of pedestrians of all abilities.
- Encourage local authorities to consider 20 mph speed limits in all residential areas.
- Investigate whether alcohol is playing a greater part in pedestrian casualties and, if it is, consider what we can do to reverse the trend.

What we all can do:

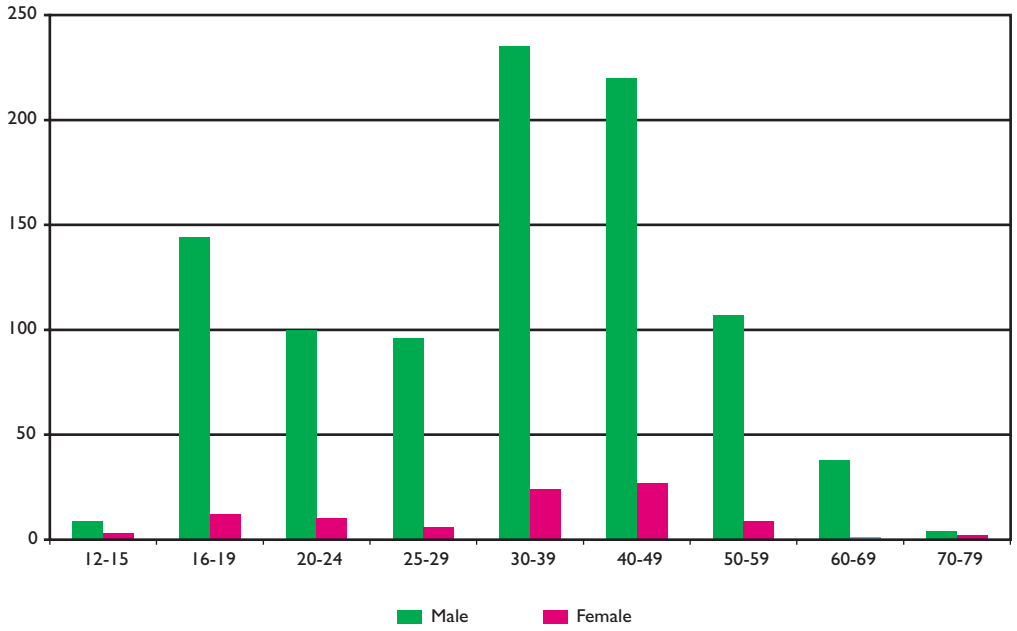
- Increase the number of journeys we make on foot and encourage others to do the same.
- Adopt safe practices in accordance with RSS publicity.
- Follow advice contained within the Highway Code.
- Pay greater attention to the vulnerability and needs of pedestrians when we cycle or drive.

6.3 Motorcyclists

The Issues

Increasingly, people are using motorcycles for **travel and recreation**. Unfortunately, this increased usage is also reflected in a rise in the number of motorcyclist casualties in Scotland. Evidence suggests more and more **middle-aged men** are buying motorcycles and there is a corresponding increase in motorcycle casualties for this age group as Figure nine shows.

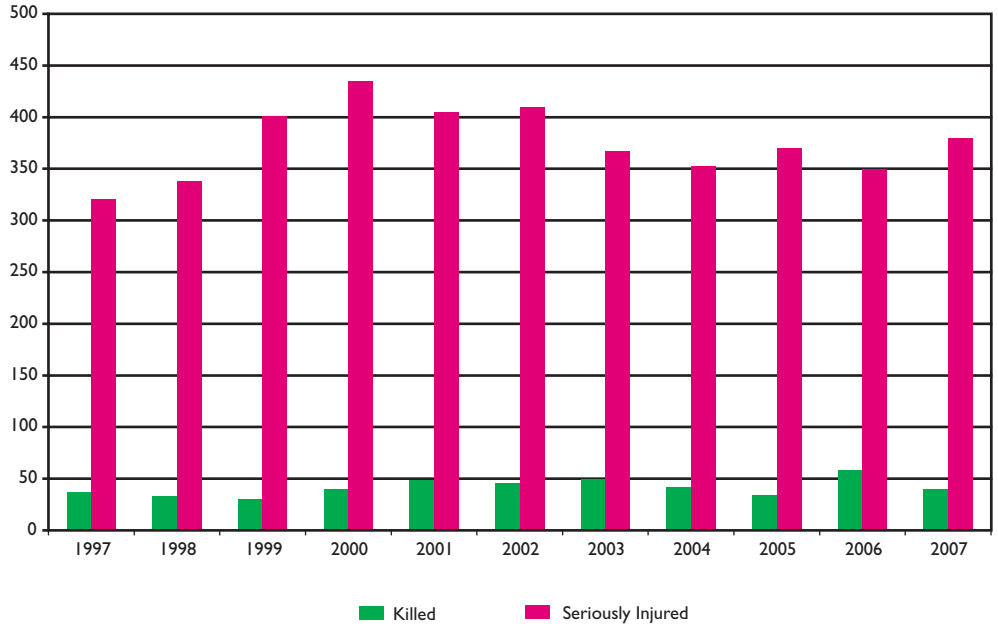
Figure nine: Motorcyclist casualties by gender and age, 2007



In terms of the number of casualties, motorcyclists come third after car occupants and pedestrians, but they are proportionately more at risk of being killed or injured in a road accident than any other type of road user.

As can be seen from Figure ten, the numbers of seriously injured motorcyclists peaked in 2000, but they do not show the same steady decline as that of other groups of road users.

Figure ten: Motorcyclists killed and seriously injured, 1997 to 2007



Two pieces of research commissioned by RSS have examined the issue of motorcycle accidents in recent years. The first, published in 2004,[17] studied 11 years of accident data and sought to investigate the surrounding circumstances of motorcycle accidents and identify behaviours or circumstances that increase accident risk. The second, published in 2006,[18] considered motorcyclists' attitudes to risk.

These studies provided valuable insight into motorcyclist safety issues, which is now informing publicity aimed at reducing casualties. Amongst the key findings were the fact that most accidents happen on rural roads, at the weekends and in the summer months reflecting the fact that recreational motorcycling is becoming more popular. The 2006 report also found that most riders have a reasonably realistic view of the risks involved in motorcycling but are willing to accept them.

What we do now

Guidance for road authorities in Scotland on motorcycling issues was published in 2007 on the Scottish Government website.[19] The guidance was prepared by the Scottish motorcycling community and endorsed by the Scottish Government.

An initiative called **Bikesafe** is run by police forces in conjunction with RSS, motorcycling groups and other partners. It seeks to provide an assessment of skills and extra theory training for those who are keen to improve their riding skills, and is aimed at lowering the number of motorcycle rider casualties. It is offered free of charge to participants.

Bikesafe provides presentations on many aspects of motorcycling, including professional riding techniques, the police system of motorcycle control, collision causation factors and defensive riding. Practical on road assessments and demonstration rides allow participants a further insight into advanced riding. By passing on their knowledge, skills and experience, police motorcyclists can help participants become safer and more competent riders. Further details are at www.bikesafe.co.uk/. Other organisations also offer additional and advanced training including the Institute of Advance Motorists (IAM) (www.iamtrust.org.uk) and RoSPA (www.roadar.org/).

In addition, police forces around the country are engaging with, and encouraging, motorcyclists to ride more safely. One initiative which has met with success is Lothian and Borders 'Around the Corner' campaign.

'Around the Corner' – Lothian and Borders Police

In the period 2003 to 2007, of all the drivers/riders killed in collisions on the roads in the Lothian and Borders Police (L & B) area, 26% were motorcyclists, with the greatest majority occurring in the Scottish Borders. Serious collisions increased by 46% between 2006 and 2007.

In 2007 L & B Police embarked on a campaign called 'Around the Corner' which was designed to interact with motorcyclists, those who live locally, as well as visitors. The objective was to influence rider behaviour through education, engagement, empathy and encouragement.

Road Policing resources, previously engaged solely in an enforcement role, are now utilised to engage with motorcyclists. At identified rest halts, and on the roads known to be used by bikers, Officers conducted high profile patrols but with the added task of stopping and engaging with riders. They are specifically tasked with encouraging safer riding, developing skills and signposting towards further rider education.

Pivotal to this campaign is a dedicated website. Based on roads where serious collisions occurred, routes were devised and published on the website and in the form of hand out 'snap fax'. The routes highlight, both in text and video footage, specific locations where incidents had occurred to advise on the nature of hazards and rider technique.

The campaign was launched at the Scottish Motorcycle Show in 2007 and again in 2008 by personalities from the motorcycling world who endorsed the campaign throughout the seasons.

Partners for the 'Around the Corner' campaign include Knockhill Race Circuit, Eastern & Western Motor Group, Scottish Borders Council and Lothian and Borders Safety Camera Partnership. The campaign also receives assistance and promotion through various motorcycle outlets throughout the Force area and retail outlets that bikers are known to frequent.

Independent assessment of the campaign and the website is very positive; in particular bikers welcomed the advice and interaction from their professional peers.

Future developments will include additional routes to provide further interest/guidance and riding tips along with new branding. Expansion of comprehensive riding techniques, motorcycle maintenance, etc will be a priority for the 2009 season. Rider first aid is also being considered.

The website can be accessed at www.aroundthecorner.org.uk.

There are a number of **websites for motorcyclists** that offer safety advice. RSS has undertaken to provide a portal for these to form a more cohesive package of information for the motorcyclist.

Motorcyclists can, of course, take steps to safeguard themselves, by wearing good quality **helmets and appropriate clothing**, and by ensuring that they are visible to other road users. Information is provided on the 'Directgov' website: www.direct.gov.uk/en/Motoring/LearnerAndNewDrivers/RidingMotorcyclesAndMopeds/DG_4022434.

There are also many **engineering initiatives** to help protect motorcyclists. Some of these are discussed in Chapter Nine.

What we need to do next

We want to reverse the trend in motorcyclist fatalities. We want to help ensure safe riding through education and training of both motorcyclists and drivers of other vehicles. We want to find ways to decrease the risks and risk taking without inhibiting the enjoyment of riding.

Commitments

In Government, and in partnership with other stakeholders, we will:

- Encourage training and support for motorcyclists, e.g. through Bikesafe and other advanced rider training schemes.
- Develop a website which provides a link to all sites providing information on a range of issues, including safety, of interest to motorcyclists.
- Through RSS, support targeted publicity campaigns aimed at motorcyclists.
- Consider the needs and vulnerabilities of motorcyclists when designing new roads and implementing safety features on existing roads.

What we all can do:

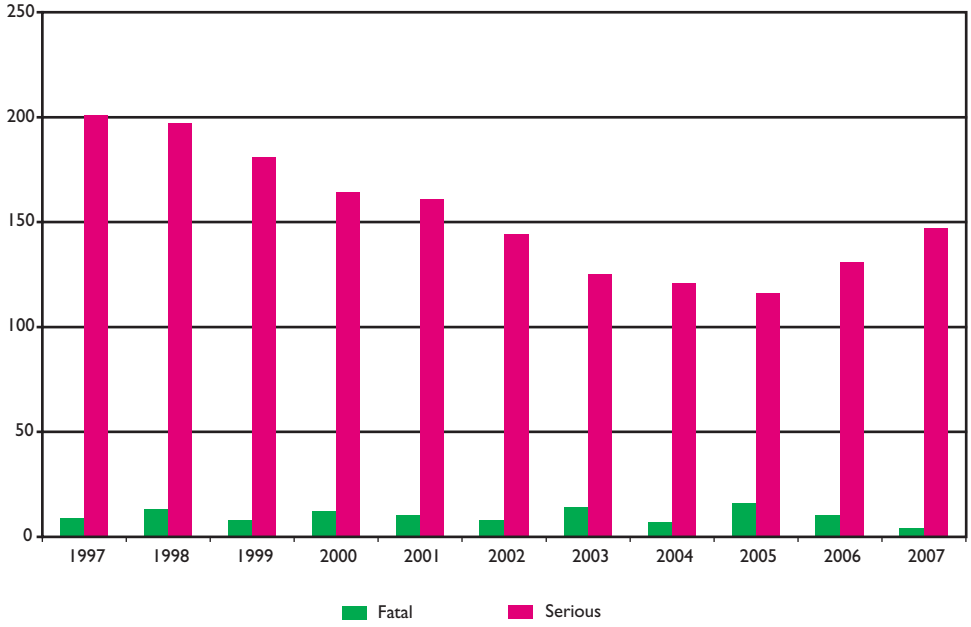
- Motorcyclists can ensure they are visible in traffic and wear appropriate protective clothing.
- Motorcyclists can take further training, including consulting websites such as those highlighted in this section, to enhance and advance their riding skills.
- Drivers can pay greater attention to the needs and vulnerability of motorcyclists.
- Drivers can ensure that they do not overfill diesel tanks as spillage is a significant hazard to motorcyclists.

6.4 Pedal Cyclists

The Issues

Figure eleven shows that cycling fatalities and serious injuries have fluctuated over the past ten years. Fatalities have decreased since 2005 with a total of four deaths in 2007, but there has been an increase in serious injuries in the same period.

Figure eleven: Pedal cyclists casualties by severity, 1997 to 2007



Research in 2005[20] confirmed that males were over three times more likely than females to be involved in cycling accidents and that only one-third of all cycling casualties resulted from 'on road' incidents. It also showed that adult cyclists were more likely than child cyclists to be involved in a collision with a car.

During the summer of 2008, an extensive consultation exercise was carried out to find out what should be included in a Cycling Action Plan for Scotland to encourage more people to cycle. The consultation found that the most significant reason why people did not cycle or did not cycle more often, was a perception of safety. Over three-quarters of respondents said that less traffic, and two-thirds said slower traffic would encourage them to cycle more often.

What we do now

As part of its education programme, RSS is responsible for maintaining the **Scottish Cycle Training Scheme** (SCTS) and co-ordinating the development and production of its materials. The SCTS was adopted as the principal child cyclist training resource in Scottish schools by all 22 road safety units in 2005. It is an introductory course designed to give P6/7 pupils the basic skills and knowledge they need to ride safely on the road.

Scottish Cycle Training Scheme, Argyll and Bute

Child cyclist training in Argyll and Bute was recognised as an example of good practice by Cycling Scotland in their National Assessment of Local Authority Cycling Policy, published in May 2008.

Child cyclist training takes place 'on road' in 74 of the 80 primary schools in Argyll and Bute and is seen as an integral part of road safety education. 'On road' training is considered as an investment in the future as it provides tomorrow's drivers with a more holistic appreciation of road safety.

Road Safety staff select each 'on road' site after carrying out a risk assessment and the location is logged along with photographs and a site plan.

Instructors, recruited by Head Teachers, are then trained by Road Safety staff to deliver SCTS. Instructors also visit the training site to be advised where the 'Child Cycle Training' warning signs should be located and of the necessity to wear high visibility clothing. New instructors are offered additional support visits.

Training is usually carried out over a six week period, starting off in the playground and moving to the road on week four. The pupil to instructor ratio is 8:1 with a minimum of two instructors.

Before the test, schools are asked to enter pupil names onto a spreadsheet which is downloaded to a Personal Digital Assistant (PDA). A formal test is conducted and data collected on the PDA. At the end, pupils and instructors are provided with feedback on their performance. Instructors are also encouraged to comment on the Scheme materials.

On completion of the test, all data is e-mailed from the PDA to office support staff who print test result sheets for all and certificates for successful candidates.

Data collected electronically can easily be analysed to identify instructor training needs or to measure annual performance.

Through Scottish Government funding to **Cycling Scotland**, around 120 cycle trainers are being trained each year to increase the numbers of those available to provide 'on road' cycle training tutorials and to increase the 10% of children who currently receive the training, as recommended by RoSPA. Cycling Scotland produces P5 and P7 resources to complement those of the SCTS.

RSS co-ordinates the **Safe Cycling Working Group**, whose membership is drawn from various organisations including Road Safety Units, Cycling Scotland, Sustrans and the Scottish Government's Sustainable Transport Team. The Group meets on average two or three times a year to consider how best to support the promotion of safer cycling in the road environment. In 2006, RSS commissioned the development of a micro-website, www.whereisthelove.tv, to engage with those cyclists and motorists who use the road on a daily basis. The main thrust was to remind road users that both cyclists and motorists have equal status on the road and that they should 'look out' for each other. The Group is also responsible for development of the SCTS and is currently preparing a resource which will standardise how SCTS instructors are trained.

What we need to do next

Responses to the consultation for this Framework were equally supportive of the need for cyclists to be responsible on the roads and the need for other road users to act responsibly towards cyclists. We will continue to facilitate and encourage safe cycling in Scotland through education and training for cyclists and raising awareness for other road users.

We would also encourage consideration of cyclists when road design and maintenance schemes are being conceived. This can range from creating new or upgrading existing cycle paths to providing space for cyclists on shared roads.

In the interests of safety, we support cyclists taking sensible precautions by wearing appropriate protection, including cycling helmets and high visibility clothing, so that they are visible to motorists and other road users.

Commitments

In Government, and in partnership with other stakeholders, we will:

- Develop a Cycling Action Plan for Scotland to achieve the overarching outcome of 'more people cycling more often'. One action will be to increase the numbers of children receiving cycle training and therefore promoting road safety.
- Ensure that all road users receive appropriate education and training messages about cycling in the road environment, including journeys to and from school and in residential areas.
- Continue to monitor and develop SCTS resources for dissemination to Road Safety Units and others responsible for co-ordinating the SCTS programmes.
- Encourage the wearing of correctly fitted helmets by cyclists, especially children.
- Ensure cyclists are considered in new road and maintenance schemes.

What we all can do:

- Increase the number of journeys we make by bicycle and encourage others to do the same.
- Adopt safe practices in accordance with RSS publicity and advice contained within the Highway Code.
- Pay greater attention to the needs of cyclists when we are driving.

Chapter Seven

Driving for life

This chapter focuses on a 'start to end' road user education system – a lifelong learning approach to driving. Our aim is to introduce a cultural change so that driving ability is viewed as a skill to be maintained and enhanced rather than just achieved at a single point in time.

7.1 Pre-Drivers

"Early intervention with road safety messages to target future road users is essential … attempting to change young road users' opinions once they have reached driving age is extremely challenging." *(Police)*

The Issues

Research suggests that children who have **road safety education** from an early age, including cycling training, make safer drivers in later life.[21] The research concluded that a developmental track for risky road user behaviour can be traced from very young children to individuals of driving age. Effective early intervention promises a move away from "a focus on 'picking up the pieces' once things have happened, towards prevention".[22] The vital contribution of early years education lies in developing and broadening the range of children's learning experiences to equip them for the future. Road safety education is a life skill and, as such, is a vital part of that early learning experience.

A survey commissioned by RSS gained insight into attitudes to road safety amongst young people aged between 14-17 who intended to learn to drive before the age of 20.[23] This established that young people generally regarded speeding in rural environments to be the most acceptable type of driving misbehaviour. Driving after the consumption of excessive levels of alcohol was largely frowned upon, but there was tacit acceptance of driving after moderate consumption, and certainly while under the legal limit. Importantly, there was practically no outright rejection of driving under the influence of drugs. The aim of the research was to inform the development of an effective Communications Strategy which would target pre-drivers with information that might change their future driving behaviour.

What we do now

The RSS 'Crash Magnets' resource and website for senior pupils aims to encourage responsible attitudes to driving before they get behind the wheel. The resource covers issues such as drink driving, speeding, seatbelt use and mobile phone use.

Safe Drive Stay Alive is an initiative run by the emergency services in partnership with private and public sector partners for young pre-drivers. It shows a reconstruction of an actual crash and the aftermath on video, interspersed by representatives of the local emergency services recounting the incident, how they felt, and illustrating the full human horror. The event finishes with messages from members of the public who have been involved in a crash or whose loved ones have been killed or seriously injured in a crash.

The Scottish Qualifications Authority (SQA) has been working in partnership with the DSA on the development of a **Safe Road User Award**. This award is aimed at young people from 14-16 (before they begin driving) and aims to build positive attitudes to road use and to help young people to take responsibility for using the roads safely. This award is not just about driving, but about road use in general, by pedestrians, horse riders, passengers in cars, etc.

The award consists of two units, one of which is about developing positive attitudes as a road user, while the other covers the knowledge and understanding needed for safe road use. Pupils must complete both units to receive the award. Those who complete the award will receive partial credit towards their **Driving Theory Test**.

What we need to do next

We need to ensure that young people are fully equipped and prepared for a life of safe and enjoyable driving. As previously mentioned, research suggests that children who have road safety education from an early age, including cycling training, make safer drivers in later life.

Commitments

In Government, and in partnership with other stakeholders, we will:

- Seek to influence young people's attitudes to road safety and future driving behaviour before they get behind the wheel.
- Support the implementation and encourage take up of the safe road user award.
- Develop a guide to organising pre-driver events for senior secondary school pupils.

What we all can do:

- As parents, relatives and carers who travel with young people, set a good example for them in our own driving behaviours and habits.

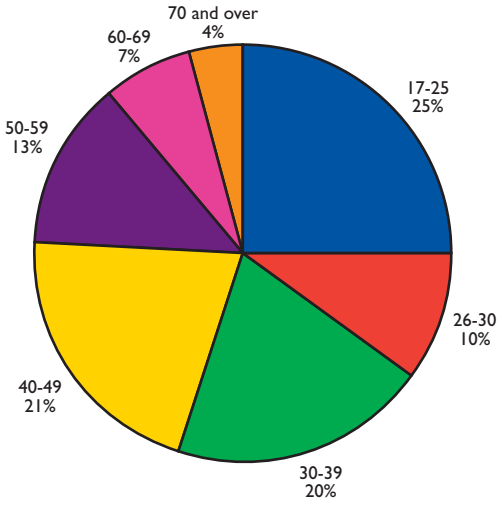
7.2 Drivers aged 17-25

"Young drivers should be a priority. It is clear that all across Scotland the agencies charged with reducing the casualty levels on our roads have to deal with a disproportionate level of collision involving drivers under 25 years of age. They are over represented in the accident statistics and while the many and diverse education campaigns undoubtedly help, more needs to be done." *(Local Authority)*

The Issues

In 2007, drivers in the 17-25 age group accounted for 25% of all drivers involved in road accidents in Scotland. Figure twelve illustrates that this age group has the highest proportion of involvement in road accidents as drivers and riders. **Male drivers** in this age group are twice as likely as females to be involved in an accident.

Figure twelve: Age of (known) driver/rider involved in all road accidents, 2007



Around 24,000 younger drivers pass their driving test in Scotland every year. However, as many as one in five will be involved in a crash in their first six months of independent driving. This is mainly due to lack of experience rather than intentional risk taking. Crashes involving drivers aged 17-25 often include young passengers – around 45% of whom are aged 15 and 59% are aged 16.

Research, published in 2005,[24] was used to inform and evaluate an advertising campaign aimed at making younger drivers more aware of their vulnerability.

The study found that younger males:

- Generally associated driving with power, speed and *'showing off'* to their friends. They aspired to owning fast, powerful cars and were more likely to display annoyance at groups of other road users.
- Displayed strong confidence in their driving ability and a belief that they were already good drivers. Dangers were perceived to come from other road users, despite admitting they occasionally took risks themselves.

It found that younger females:

- Associated driving with freedom and perceived passing their test as a natural progression in the process of entering adulthood.
- Put stronger emphasis on the personal impact of bad driving. They cited physical injuries such as disfigurement, broken bones, whiplash and a necessity to visit hospital, e.g. physiotherapy treatment, as the potential aftermath of having been a victim, or the cause, of an accident.

Further reviewed research and data on accidents on rural roads, also published in 2005,[25] highlighted that young drivers were in particular at risk and found that young male drivers were most likely to drive at excessive speeds. The review also found that young drivers were disproportionately associated with positive breath tests following single vehicle accidents on rural roads.

Research carried out by the Transport Research Institute at Napier University[26] concluded that the higher incidence of crash involvement by younger drivers is part explained by the fact that the frontal lobe region of the brain does not fully develop until a person is around 25 years old. The functions of the frontal lobe include recognising future consequences of current actions; selective attention; anticipation, feelings and emotions. When watching videos designed to test their reaction to risk, younger drivers often lacked the fear or the gut instinct to enable them to anticipate danger and take the avoiding action.

Qualitative research commissioned by the Scottish Government in 2008[27] sought the views of people aged 16-25 with regard to their perceived rights and responsibilities as road users, their concerns regarding road safety, what motivation would be required to make them safer and how aware they were of the level of risk to which they are exposed when using the road. Focus groups were drawn from both urban and rural locations. The research concluded that younger drivers rarely considered themselves to be at risk and mostly considered themselves to be good drivers. Passengers reported high levels of trust in their friends as drivers. They were also unsure about the legal limit for drink driving and were more likely to travel with a drink driver if they also had been drinking. Furthermore, it found that young people were open to gaining more driving experience after passing their DSA test through participation in Pass Plus or similar, but were not in agreement with restrictions on young drivers, viewing these as discriminatory.

What we do now

Research published by the IAM Motoring Trust[28] states that **'young drivers are made not born'** and recommends a ten-point package of actions for making younger drivers safer. These are:

- recognising the effect of driving in poor weather on rural roads;
- better preparation for solo driving post-test;
- integration of road safety education within the curriculum;
- guidance for parents;
- persuading the insurance industry to recognise pre-test driving to be low risk;
- early identification of male drivers exhibiting poor driving behaviour;
- better targeted enforcement;
- a more comprehensive pre-test training regime;
- greater investment in 'on road' safety features; and
- incentivisation of the uptake of in-car technologies such as Electronic Stability Control.

The **Driver Training and Testing Regime** is administered by the DSA. A consultation exercise in 2008 asked for views on overhauling the regime and included a proposal to include additional steps prior to fully qualifying as a driver. The Scottish Government fully supported these proposals but urged the DSA to also consider post-test training to encourage a 'drive for life' culture.

RSS has produced a leaflet entitled **'So your Teenager is learning to Drive'**. This leaflet is aimed at parents and carers, giving advice on how to help their children become safe and confident drivers, capable of handling any situation on the roads.

RSS's **Driver Behaviour Strategy** aims to reduce crashes involving younger drivers. To capture the attention of this particular audience it is important that RSS is innovative in its use of publicity relating to speeding, drink and drug driving and seatbelt use. An award-winning initiative of this type developed by RSS is the XBox initiative.

XBox Initiative

The disproportionate number of young people killed and injured on Scotland's roads has resulted in many road safety campaigns having young people (particularly young males) as a key target audience. It is important to engage with this group on their own ground and this has meant that RSS has had to look at new and innovative ways to target them. According to media experts, this group is unlikely to see advertising on traditional channels, preferring satellite television or gaming consoles as evening entertainment. The opportunity to tap into the live gaming market was pursued and, in a world first, Microsoft agreed to trial geographical marketing within the XBox environment. RSS has now run two campaigns, one on drink driving and one to support the rural road distraction cinema advert. Until this initiative, all live gamers would have seen only adverts for global companies. Using ISP addresses, RSS was able to target only those with a Scottish-registered address and, while users from across the world continued to see adverts from global companies, Scottish gamers saw road safety adverts.

Road Safety Units throughout Scotland are taking action to raise awareness among young people of their vulnerability on the roads and to encourage responsible driving attitudes. The following case study, for example, highlights a qualification which can be studied whilst learning to drive. The course addresses driving skills, attitudes and behaviours for all drivers, but in the case study, Fife Road Safety Unit is piloting the initiative specifically for young people who are learning to drive.

BTEC in Driving Science – Fife

Fife Road Safety Unit has built on its driving education programmes year on year from early intervention with S1 pupils through to S6 'Life after Learning' programme in all Fife Secondary Schools. Added to this there is also an award winning Fife Pass Plus Initiative, which has been running for a number of years. This initiative is aimed at new drivers but also has an evening involving parents who have a large part to play in their son's or daughter's safety as a driver.

However, it was felt that there was a gap in the provision of education and it has been decided to fill this with an a2om BTEC in Driving Science, which is the world's first academic/vocational qualification for drivers.

This qualification has been many years in the making and is informed by a considerable amount of research. It gives the new driver a complete education in driving, along with a qualification that can be entered on a CV and which would be looked on favourably by employers. The course gives drivers the opportunity to improve the standard of their driving, whatever their skill levels. Drivers develop not only physical skills of driving but also risk management techniques for life. They also learn how changing lifestyles, personality, beliefs and attitudes can influence their driving.

Fife Road Safety Unit worked alongside a2om personnel and trained 26 local driving instructors to enable them to promote and run the course with their pupils. It will promote the BTEC course through schools and colleges. It also hopes to encourage new drivers to take the course that by doing so whilst learning to drive, rather than post test, the results may be better and lead to more positive drivers. Fife intends to sponsor a number of young people through the course and then evaluate the results.

Post Test Training is available from various providers of additional and advanced driving. Organisations such as RoSPA and IAM offer courses for many vehicle classes and for specific driving skills acquisition. Courses range from the traditional motorcycling and car driving to more specialist areas such as reversing and skid control.

A number of companies now exist to help young people find a safer way to enjoy the freedom and fun of driving. These businesses specialise in getting young people into safer, new and nearly-new cars. They also offer driving lessons if required and insurance at competitive rates.

Young Marmalade is one such company. It provides an insurance and car ownership package for young drivers enabling them to get: cheaper car insurance; a larger no claims bonus; and a new or nearly new car with modern safety features such as airbags, ABS brakes, a high EuroNCAP safety rating and stability control.

Penalties for breaking the law are more stringent for newly qualified drivers. In order to encourage them to drive sensibly, they can have their licence revoked if they accumulate six penalty points in the first two years after passing their driving test. They are then required to re-sit all parts of the driving test.

What we need to do next

The issue of young drivers was the subject of much debate in our road safety consultation. There are very different views on how we should tackle the disproportionate fatality rate of drivers and passengers of drivers in the 17-25 age group. We want to encourage further training, possibly through insurance incentives, and we want to explore further new and innovative ways to reach this group of road users.

Some countries have **graduated licences** for newly qualified and young drivers. This involves various restrictions which include not being able to drive after a certain time at night, and restrictions on speed and engine size. There is strong support for the introduction of graduated licences from some areas within the Scottish road safety community, albeit that this is a reserved matter.

The Scottish Government believes that 'young drivers' is an issue that should be subject to further debate.

Commitments

In Government, and in partnership with other stakeholders, we will:

- Continue to look for innovative ways to target younger drivers with appropriate messages about safe driving, to increase their awareness and understanding of their vulnerability, and the dangers they face due to inexperience.
- Provide information and support for parents and carers on how to set a good driving example.
- Encourage younger drivers to undergo post-test training by engaging with the private sector, including the insurance industry, to explore incentivisation.
- Encourage initiatives which lead to qualifications, safer driving attitudes and behaviours.
- Conduct a public debate on young driver issues including graduated licences and additional training.

What we all can do:

- Set a good example for new drivers by displaying good driving habits.
- All drivers should consider taking post driver training which has been proven to deliver improvements in key areas of speed choice and anticipation of hazards.

7.3 People who Drive for Work

The Issues

Up to one-third of all road crashes involve someone who is driving for work purposes and more employees are killed in 'at work road accidents' than in all other occupational accidents.[29] It is not only commercial vehicle drivers who are at risk as many people are required to drive their own cars whilst working.

UK Government research[30] looked at the relationship between an organisation's safety culture, the attitudes of its drivers to safe driving behaviour and accident risk. The study concluded that there was a relationship between accident rate and driver attitudes. In particular, low company accident rates corresponded with the highest percentage of drivers with positive attitudes, whilst higher company accident rates corresponded with the highest percentage of drivers with negative attitudes.

Legal Requirements for Employers

There is a legal requirement for employers to manage the duty of care for employees driving for work. This includes drivers who drive their own vehicles. The Health and Safety at Work Act 1974 states:

"It shall be the duty of every employer to ensure, so far as is reasonably practicable, the health and safety and welfare of all employees."

Both management and employees can be prosecuted for road traffic crashes involving work-related journeys, even when the driver is using their own vehicle.

Under Health and Safety Executive regulations, there is a requirement for any organisation employing five or more people to have a written policy statement on health and safety, which should cover work-related road safety. In the case of work-related road incidents, organisations will need to provide evidence that they have taken reasonably practicable steps to manage their duty of care.

The Corporate Manslaughter and Corporate Homicide Act 2007 came into force in April 2008. This created a new offence where death is caused by a gross breach of duty of care by senior management.

What we do now

RoSPA encourages employers to have **Managing Occupational Road Risk** (MORR) policies in place. Advice and guidance on MORR and access to other publications relating to people who drive for work can be found at:
www.rospa.co.uk/roadsafety/resources/employers

The **Scottish Occupational Road Safety Alliance** (ScORSA) was established by RoSPA in Scotland. Its key aims are to:

- Facilitate networking between key stakeholders;
- Encourage joint working to raise awareness in organisations of the need for action on work-related road safety;
- Promote the exchange of information on new initiatives and best practice; and
- Contribute to the delivery of this Road Safety Framework for Scotland.

MORR in the Scottish Government

The Scottish Government recognises that driving whilst carrying out Scottish Government business is one of the higher risk activities performed by its staff. To protect staff who drive for work and other road users, the Scottish Government has produced a MORR procedure. Guidance has been developed to assist line managers in meeting their health and safety obligations with regards to ensuring staff are authorised to drive and also for staff who drive for work. It details the support mechanisms available to develop and maintain driving standards. This should result in transferable skills and experience which can be utilised outwith work.

The procedure applies whether the vehicles involved are under the control of the Scottish Government, the employee or hired from a third party. It details what must be done to minimise their risk of injury, loss of life and/or damage to property whilst driving for work.

This includes an annual document check of driving licences, insurance, MOT and road tax. In addition there is an e-learning module for all staff who drive for work purposes which they must pass to become an authorised driver.

The document details the responsibilities of senior managers, line managers, relevant departments such as the Motor Services Unit and employees themselves.

There is also a generic MORR assessment developed by the Occupational Health and Safety Board to help managers determine that all hazards have been identified and risks evaluated. A copy of this document is attached at Annex D.

MORR as implemented by Black of Dunoon

In 1984, Black of Dunoon introduced a series of measures designed to impress the importance of a positive approach to road safety on all staff who are required to drive in the course of their work.

The businesses are involved in the production and distribution of bakery products together with an autonomous transport company which operates within the road haulage sector.

The bakery distribution arm operates within strict time frames, delivering to customers throughout South West Scotland. Delivery times are consistently to specification and achieved with an enviable safety record.

All prospective drivers are tested by one of the directors prior to employment and regular assessments are carried out on both day and night driving. Each driver is also instructed in the proper use of new vehicles and is made aware of individual characteristics in different weather conditions.

Delivery schedules are made up by a director who re-assesses all new drivers after one week's employment.

An important part of the driver responsibility is carrying out stipulated, documented safety checks on a daily basis. In the case of bakery distribution, due to the early starts, these checks are carried out at the end of the shift. All other drivers carry out the checks before driving and vehicles are not permitted on the road until even minor faults are rectified. A six-weekly check is carried out by non-company personnel.

Whilst mobile phones are fitted to vehicles, use of these on the move is not permitted and this is written into terms of employment.

The detrimental effect of stress is recognised and this is also appreciated by driving staff.

Commercial vehicles carry the 'DRIVESafe in Argyll and Bute' logo and current strapline.

The success of these actions can be measured by the low insurance claims and the consequential reduction in premiums.

There are a variety of **advanced training courses** that employers can provide for employees who drive for work. Every Approved Driving Instructor (ADI) is required to be registered by the Instructor Services & Registration Team (ISRT) based in DSA headquarters in Nottingham. DSA also regulate the training companies who offer the Compulsory Basic Training (CBT) scheme for novice motorcyclists. DSA does not currently regulate any other aspect of LGV, PCV or motorcycle training but does operate a voluntary registration scheme for LGV/PCV instructors and has plans to implement a voluntary registration scheme for motorcycle trainers. More information can be found at:
www.dsa.gov.uk/OrganisationDetails.asp?id=1556&cat=223

The European Union has introduced a new qualification for professional bus, coach and lorry drivers – the **Driver Certificate of Professional Competence** (CPC). The new qualification, which is being developed by the DSA in the UK, will also affect bus, coach and lorry drivers from other countries in the European Union. Existing drivers will not have to pass the initial qualification but will be subject to the periodic training requirement. The new qualification was introduced in 2008 for bus and coach drivers and in 2009 for lorry drivers. Further information is available at: www.transportoffice.gov.uk/crt/vehicledrivers/drivercpctrainingforbusandlorrydrivers/drivercpcforbuscoachandlorrydrivers

Scottish Government Staff Training

The Scottish Government has procured advanced driver training for all staff that drive in excess of 25,000 miles per year. Training packages are also recommended for consideration if a member of staff who drives for work has been involved in a traffic accident, has penalty points on their licence or who have been reported for reckless driving.

The **Safe and Fuel Efficient Driving** (SAFED) scheme is a valuable driver development course, which aims to improve the safe and fuel efficient driving skills of HGV drivers. The benefits are reduced accident involvement, lower costs, lower emissions and less unproductive downtime for vehicle repair. More information on this can be accessed at: www.safed.org.uk

The UK Government is carrying out a review of the **UK domestic drivers' hours' rules** which apply to most goods and passenger carrying vehicles that are exempt from the EU drivers' hours' rules. The aim of the review is to collate and examine evidence as to the effectiveness of the current regime in meeting relevant objectives, such as road safety and decent working conditions for drivers; fair competition within the road haulage and passenger transport industries; and minimising burdens placed on operators. This evidence will then be used to consider whether there is a case for change and, if so, to examine possible options and make recommendations.

What we need to do next

We want to highlight the risks of driving for work and to encourage all employers to adopt management of road risk policies. We want to promote training for both professional drivers and people who drive for work, whether that is on an everyday basis to get to customers, or occasionally to attend meetings, etc.

We want to help ensure that HGV drivers work appropriate hours and have access to facilities where they can rest. The provision of **rest areas** is a commercial matter, however, there are currently very few in Scotland and quality is variable. Facilities available for car drivers do not always provide suitable areas for HGVs and there can be security issues. We would encourage commercial ventures to provide rest areas with facilities to combat driver fatigue on long journeys and we are keen to explore how other countries have addressed this issue.

Commitments

In Government, and in partnership with other stakeholders, we will:

- Encourage and support the Royal Society for the Prevention of Accidents (RoSPA) (Scotland) with the formation of the Scottish Occupational Road Safety Alliance (ScORSA) in order to raise employers' awareness of the need to have a policy on Managing Occupational Road Risk (MORR).
- Continue our activities to ensure that Safe and Fuel Efficient Driving (SAFED) training is embedded within the freight industry.
- Introduce SAFED training for van drivers in Scotland.
- Provide road safety and driver awareness sessions for Scottish Government staff.
- Ensure that all contractors working with Scottish Government have a MORR policy in place.
- Encourage an increase in the provision of rest areas across Scotland.

What we all can do:

- Find out if your organisation has a MORR policy and always drive in accordance with its principles.
- Sign up for any advanced driving training offered by employers.

7.4 Older Drivers

The Issues

In 2007, 87 drivers aged 70 and over were killed or seriously injured in Scotland (14 died) and three motorcyclists aged 70 and over were seriously injured (none died).

Research published by the UK Government[31] found that driving performance reduced with increasing age, but that up to age 80, the reduction was very small.

In general, older drivers will have held a driving licence for many years and the majority will not have undertaken further training since passing their test in spite of significant changes in driving conditions and their own driving ability.

In this instance, the issue is more one of anticipation rather than statistics. Scotland has an ageing population who are more active and living longer than previous generations. The proportion of older people holding a driving licence, particularly women, has been increasing and is expected to continue to do so. Many want to continue driving as long as possible in order to maintain independence.

What we do now

At age 70 and every three years thereafter, drivers are required to **renew their driving licence**. Whilst there is no requirement for drivers to produce evidence of fitness to drive, they are required to notify any medical conditions that may affect their driving.

Through RSS, the Scottish Government targets messages at older drivers via the medium of Theatre in Education. **'Urban Roadeo'** is one such play developed for drivers and pedestrians aged 55 and over. The play tours annually and is accompanied by a booklet which provides advice on issues such as knowledge of the Highway Code, distraction, impairment, medication and further training.

Driving Safer for Longer – Devon County Council

Devon County Council, in partnership with Torbay Council and Devon and Cornwall Constabulary, have developed several initiatives aimed at older drivers under the banner of 'Driving Safer for Longer'. These include leaflets on a variety of relevant issues including keeping fit to drive and the use of medicines and drugs. There is also a road fit test which can be taken when facing a health issue to assess fitness to drive. Details can be accessed at: www.devon.gov.uk/index/transport/roads/road_safety/drivingsaferforlonger.htm

What we need to do next

We believe that driving is a skill which can benefit from updating and enhancement through additional and advanced training throughout life. We want to encourage older people who drive to be aware of their responsibilities in relation to driving and the ageing process and to take advantage of additional training. We want to investigate how to publicise, facilitate and even incentivise this.

Commitments

In Government, and in partnership with other stakeholders, we will:

- Promote initiatives to raise awareness amongst older drivers of their vulnerability and ways in which they can address this.
- Encourage full use of public transport.
- Investigate ways to promote and facilitate initiatives relating to further training for older drivers including consideration of incentivisation to do this.

What we all can do:

- View driving as a lifelong learning process.
- Make full use of concessionary bus travel.

7.5 Drivers from Abroad

The Issues

The Association of British Insurers (ABI) reports that, in the UK, **foreign goods vehicles** are almost three times more likely to be involved in an accident than UK goods vehicles. In an ABI report, published in 2007,[32] it stated that drivers from elsewhere in Europe were involved in over 18,000 recorded accidents in the UK.

In 2001, the Scottish Executive published a report[33] on **tourist road accidents** in rural Scotland, which concluded that tourist activity does not significantly boost road accident numbers in the rural tourist areas of Scotland. However, the document further reported that the accidents caused by foreign drivers involved driving on the wrong side, turning, and crossing the centre line, with the majority arising from the drivers' lack of experience of driving on the left.

While most road signs are pictographic by nature and, therefore, should be self-explanatory, we are aware that there may be both language and cultural differences which increase the risk of road accidents involving foreign drivers. Additionally, a number of overseas visitors may be unaware of differences in road traffic law in this country from that of their own.

What we do now

RSS has produced a leaflet for **overseas visitors** which provides advice on driving in the UK. Designed for tourists and translated into French, Italian, German and Spanish, it also includes an adhesive 'keep left' sticker for in-vehicle use. The leaflet can be accessed at www.road-safety.org.uk/downloads/downloads_publicity.asp.

Following advice on the issues surrounding migrant workers and the most appropriate languages, RSS has also produced a series of booklets giving advice and information in four languages: Polish, French, Lithuanian and Russian. These are published on the RSS website at www.road-safety.org.uk/downloads/downloads_publicity.asp.

Strathclyde Safety Camera Partnership has produced eye-catching postcards depicting Scottish rural road scenes and landmarks, with important advice for drivers from abroad, including speed limits for cars and caravans on the reverse side along with other useful information on traffic law in Scotland.

Prevention of Side-Swipe Incidents by Left-Hand Drive Heavy/Longer Goods Vehicles (HGVs)

There are up to 500,000 foreign drivers travelling on UK roads, many of which are in left-hand drive HGVs. One of the risks with these vehicles is that left-hand drive lorry drivers can't easily see a car overtaking them on the right. In 2006, more than 400 side-swipe incidents occurred in the UK.

In order to tackle this problem the Vehicle and Operator Services Agency (VOSA) trialled the use of **Fresnel lenses**. These are placed on the passenger side window giving the driver a clearer view of overtaking vehicles which are in the driver's blind spot. Three months before the trial began, the Regional Intelligence Unit collected data on the number of side-swipe incidents in South East England,[34] involving left-hand drive HGVs. They then repeated the exercise for the three months after 40,000 lenses were distributed by Customs and Immigration Officials at the Eurotunnel and numerous French Ports. It was established that the number of side-swipes dropped by about 59% during the pilot period and VOSA estimate that use of Fresnel lenses has the potential to avoid around 300 such incidents annually. In addition to achieving a reduction in crash and casualty numbers, this represents savings between £2 million and £5 million in delays per annum. Following this success, VOSA has now distributed 90,000 lenses at British and French ports.

What we need to do next

We want to work with relevant organisations including car hire companies, Visit Scotland and the United Kingdom Border Agency (UKBA) to ensure that foreign tourists and migrant workers receive and understand information to help them drive safely on Scottish roads.

Commitments

In Government, and in partnership with other stakeholders, we will:

- Continue to meet the demand for the migrant workers booklet, exploring the need for production in other languages. We will also consult with the United Kingdom Border Agency (UKBA), to ascertain the most effective way to disseminate the information as widely as possible.
- Continue to produce the tourist information leaflet and 'keep left' sticker. We will consult with Visit Scotland to ensure it is promoted widely in advance of the tourist season each year.
- Continue to monitor accidents involving foreign drivers and discuss and implement appropriate actions, with partners where relevant.
- Promote the use of Fresnel lenses by left-hand drive HGVs to avoid blind spots and side-swipe incidents.

What we all can do:

- Be aware that drivers of left-hand drive HGVs will have restricted vision of other vehicles overtaking and be particularly vigilant when overtaking left-hand drive HGVs.
- Resident foreign drivers should make themselves fully aware of UK traffic laws.

Chapter Eight

Reducing risk on the roads

As previously mentioned, there is more risk of death and serious injury on the roads than in any other area of domestic life. Certain behaviours, actions and conditions increase the risk. The most common of these are discussed in this chapter.

8.1 Rural Roads

"Drivers, especially younger and inexperienced ones, drive with less care on rural roads than they do on urban roads. They think these roads are safer because they are quieter. Unfortunately, they do not realise that rural roads present many unforeseen hazards, such as blind bends, hidden dips, animals and mud on the road." *(Safety Organisation)*

The Issues

While a number of the matters relating to rural roads are covered in other sections of this document (e.g. Sections 8.4 and 9.2), the high number of fatalities and serious injuries which occur on rural roads demand a specific section of the Framework devoted to examining safety issues on rural roads. In spite of many such roads having relatively low traffic volumes, seven out of ten fatal crashes occur in rural locations. Additionally, over half of all serious injuries occur on rural roads. There are also a disproportionately high numbers of deaths and serious injuries involving under 25 year old drivers occurring on rural roads.

Rural roads have many **hazards**:

- Some drivers do not realise that the speed limit is often not the most appropriate speed for the road conditions.
- Wet surfaces, mud and leaves can contribute to skidding.
- Blind summits, tight bends and dips on the road.
- Dazzle and distraction caused by oncoming vehicle headlamps.
- Slower road users – agricultural vehicles, pedestrians, cyclists, etc.
- Concealed side junctions, exits from fields, etc.
- Livestock or other animals on the road.
- Sun dazzle, particularly on east-west roads.

Research in 2007 by the IAM[35] found that, on Scottish rural roads, about 75% of all fatal and serious accidents are accounted for by four main crash types: head-on collisions (12%), running off the road (24%), junctions (24%) and pedestrian/cyclist (15%).

Scottish Government research[36] found the following:

- Only around half the drivers surveyed (51%) knew that the National Speed Limit sign meant a maximum of 60 mph for car driving.
- Survey respondents saw driving on rural roads as low risk, due to fewer vehicles and pedestrians, and lower police presence. Risky driving was not perceived as likely to have negative consequences.
- Fatalities on Scottish non built-up roads comprise 67% car occupants, 16% motorcyclists and 17% others.

What we do now

RSS has been developing a **publicity campaign strategy** as part of the 'Don't risk it' brand to improve safety on rural roads which will address different driver and rider behaviours. The initial phase raised awareness that open roads are not as safe as some think, and this was followed up in 2008 with the launch of a cinema advert which highlighted the effects that a simple distraction could have when driving on rural roads.

The Scottish Government research document Rural Road Safety: Drivers and Driving, referred to previously, recommended future publicity should focus on **young drivers and male drivers** and should not include statistics which the focus groups viewed with mistrust. It should, however, include helpful information regarding specific messages and issues relevant to rural roads, such as: "driving too fast for the road conditions is the biggest cause of death on Scotland's roads".

Targeted Police Enforcement Campaigns are run in addition to routine enforcement activities on rural roads. The police carry out such enforcement campaigns to raise public awareness of specific issues on rural roads.

There are a variety of engineering initiatives relevant to road safety on rural roads, these are discussed in Chapter Nine.

What we need to do next

We want to reduce the high incidence of fatalities and serious injuries on rural roads. We want to ensure that drivers are aware of the risks and drive with due care and attention to the road and weather conditions. We believe that this should be part of the driver training and testing regime. We also want to discuss and encourage engineering solutions, where appropriate, on rural roads. This is explored more fully in Chapter Nine.

Commitments

In Government, and in partnership with other stakeholders, we will:

- Continue to publicise the risks associated with driving and riding on rural roads and warn all road users of potential dangers.
- Consider what further actions to take from current research on rural roads.
- Encourage any proposal by the Driving Standards Agency (DSA) to include specific pre-test training on rural roads.
- Support targeted police enforcement campaigns on rural roads.

What we all can do:

- Take extra care when driving or riding on rural roads – especially in poor weather conditions.
- Be aware that, in certain circumstances, it will be safer to drive at a much lower speed than the speed limit.

8.2 Impairment

The Issues

Driving a vehicle is a complex task requiring a high level of concentration and alertness. It is imperative, therefore, that drivers and riders do not use their vehicles when their performance is likely to be impaired through alcohol, drugs or fatigue.

Unsurprisingly, the issue of **drink driving** attracted a high degree of response from the public consultation.

"Set level (of the drink drive limit) low enough to discourage anyone thinking that even having one drink is appropriate." *(Safety Organisation)*

Figures have fluctuated but, since 1995, the estimated number of fatal accidents in Scotland involving drivers with illegal alcohol levels has declined by around 25%. The overall number of drink drive injury accidents has reduced by around 16%. During the same period the estimated number of deaths in Scotland from drink drive accidents fell by around 40%. Nevertheless, an estimated 1 in 9 road deaths continues to be the result of drink driving.[37]

Drink Drive Limit

The current prescribed limit in the UK is set out in section 11 of the Road Traffic Act 1988 and is 35 microgrammes of alcohol in 100 millilitres of breath, 80 milligrammes of alcohol in 100 millilitres of blood or 107 milligrammes of alcohol in 100 millilitres of urine.

A person who, when driving or attempting to drive a motor vehicle on a road or other public place, is unfit to drive through drink or drugs, is guilty of an offence.

The Scottish Government published a report in March 2008[38] that provides an insight into behaviour and attitudes relating to drink driving. Some of the key findings included:

- Men, people aged 30 to 59, and people in higher social grades were more likely to have driven after drinking.
- Drivers often said they thought they were under the legal limit and their driving ability was unaffected.
- There was confusion as to how the number of drinks or units related to legal limits.

Two of the key recommendations from the research were:

- There should be action to increase the perceived level of risk, in order to change the attitude that people who are caught are 'unlucky' (e.g. by publicising the number of drivers breathalysed, rather than those caught and introducing random testing).
- Lowering the legal drink drive limit to a less ambiguous level, as it is clear that people are confused about the relationship between units, drinks and the legal limit.

Drivers can still be over the limit the following morning if they have been drinking heavily or late at night. While the study found that few people admitted to driving the morning after drinking, there was confusion about how quickly alcohol left the system.

Regarding **drug driving**, DfT research published in 2001[39] found that 18% of people killed in road accidents in Great Britain had traces of illegal drugs in their bodies. On this basis it is estimated that around 49 adults killed in road accidents in Scotland in 2007 had illegal drugs in their system.

Research on drug driving among 17-39 year olds, published by the Scottish Government in 2006,[40] found that cannabis was the most common drug to have been used by drug drivers and there was a perception that drug drivers will not be caught by the police. DfT is currently working with the police on new ways to enforce the existing law and the possibility of introducing new laws. We strongly support them in these endeavours.

Drug Driving

Unlike drink driving there is no prescribed limit for drugs. When police suspect a motorist of drug driving they need to demonstrate impairment which is why they carry out the roadside "FIT" test (Field Impairment Test). There are a number of different aspects to the FIT test – a measurement of pupil size, being able to estimate a timespan of 30 seconds with eyes closed, walking along an imaginary line, touching nose with forefinger with eyes closed, etc. If the driver fails the FIT test then that provides sufficient evidence to allow the police to arrest and take the driver back to the police station where further tests to corroborate the roadside tests are carried out. A doctor must certify that the person is, in their opinion, impaired to the extent that they are unfit to drive. The driver is then required to provide further sample (usually blood) which is then sent for testing for the presence of drugs that would cause impairment to drive. The level of the drugs in the sample is not measured against a limit as such limits have not been established in legislation.

DfT advises that public attitude surveys indicate there is growing concern about people who are unfit to drive after taking **prescription, or over the counter, drugs**. A DfT report on prescription drugs and unwanted drowsiness[41] identified over the counter drugs used to treat various ailments including nausea, coughs and colds which had the potential to cause drowsiness and could therefore be particularly hazardous to drivers and other road users.

Fatigue in general is also a safety concern. Research published in 2001 found that fatigue and sleepiness were deemed to have been a major cause[42] in around 10% of all road accidents and up to 20% of accidents which occurred on motorways or trunk roads.

What we do now

There is a widespread and growing consensus in Scotland and elsewhere in the UK that the **blood alcohol limit** should be reduced from 80mg per 100ml of blood to 50mg, as part of ongoing efforts to combat the problem of drink driving. The current UK drink drive limit was introduced in 1967 and is one of the highest in Europe. Powers to vary the limit are currently reserved to UK Ministers under the terms of the Scotland Act 1998.

Since late 2007, ACPOS, the British Medical Association (BMA), and the Royal Society for the Prevention of Accidents (RoSPA), have called consistently for a reduction in the blood alcohol limit. The Automobile Association (AA) announced earlier in 2008 that 70% of 14,000 members polled favoured a reduction.

On 13 February 2009 the Cabinet Secretary for Justice wrote to the Secretary of State for Transport reiterating the Scottish Government's support for a lower drink drive limit. If the UK Government is unwilling to commit to bringing forward a reduction in the limit, the Scottish Government has requested that the powers to set the limit be transferred to the Scottish Ministers. Scottish Ministers are of the opinion that lowering the limit will bring us into line with most of the rest of Europe, reduce any doubt regarding the amount of alcohol it is safe to drink and then drive and, most importantly, save lives.

The Scottish Government also supports calls for the police to be able to stop and breath test drivers anytime, anywhere and has written asking the UK Government to introduce these powers. Similar powers are in place in all EU countries except the UK and Denmark.

The Department of the Environment in Northern Ireland is currently consulting on the blood alcohol limit, penalties and police powers. A report on the consultation is expected later in 2009.

Data enabled roadside breath testing equipment is being used by some of the police forces in England for drink driving. These are essentially the same as "breathalysers" that store all the results of the tests that are being carried out. The greatest benefit of the data enabled roadside screening devices is that they record all measurements taken by the device, including the negative results. This information can then be downloaded onto a central database and the results analysed to provide a comparison of positive/negative tests. A year on year comparison of these figures would give an indication if the incidence of drink driving was increasing, decreasing or remaining the same. This in turn could be used to inform enforcement and campaign activity.

Australia – Booze Bus for Roadside Testing

An informative example for police forces to consider is the **booze bus**. In Australia, a booze bus is a mobile truck designed for rapidly assessing the blood alcohol concentration of motor vehicle drivers in large numbers. Operated by various police services in Australia, it allows main arterial roads, such as freeways, to be blocked, with all or most drivers sampled for compliance with drink driving laws. They are commonly used outside popular nightspots to help identify drivers who might illegally drive home drunk. The vehicle itself is not used to test all drivers. Multiple test points are set up on the highway and drivers are breath tested in their own vehicles. Drivers failing this test will be taken to the bus for their cases to be processed.

In Victoria, as of 2007, the concept has been extended by making all booze buses also 'drug buses', capable of testing drivers for a number of illicit drugs such as cannabis.

Drink Drive Campaigns are run by RSS and ACPOS who are committed to a joint approach in tackling the drink drive problem. Although it is routine business for road policing officers to be ever vigilant against drink driving, ACPOS also organises two targeted campaigns, one in early summer and the other over the festive season. During these periods, RSS supports the enforcement activity using paid-for media and generating further coverage through PR activity. Such activity is intended to increase awareness of being caught. Research has informed this approach, advising that while people know that killing themselves or others is the worst thing that can happen, they do not believe that it will happen to them and, therefore, it is not a credible risk. People are more likely to change behaviour if the risk is real and credible and makes them feel personally vulnerable or threatened. Recent research published by RSS[43] confirms that the risk and consequences of being caught are still the most appropriate deterrents.

Morning after Drink Driving is becoming more common as people now socialise more in their own homes than they have done in the past and some drinks measures have increased in size. It is a concern of many within Scotland that the intake of alcohol is increasing. Many people do not intend to drink drive but the fact that drinking and driving are both part of their lifestyles means that the two do coincide. 'Unmeasured' drinking can mean that people are unaware of the amount of alcohol they have consumed and this obviously has an effect on their ability to drive and may still be an issue the next day. In order to raise awareness, RSS has adopted a new approach in recent years, focusing on the 'morning after' message. The rationale is twofold: if people believe they can still be over the limit the next day, they will reconsider driving; in addition they may also reflect on their consumption the night before if they have to drive the following morning.

Two technological innovations are also worth highlighting. The first is **alcohol ignition interlocks**. They prevent a vehicle engine from starting until a clean sample of breath is provided. Powers exist for the courts to refer convicted drink drivers disqualified for at least two years to a rehabilitation programme involving the use of an alcohol ignition interlock. Secondly, the UK Government is working towards the development of a specification for a **roadside drug screening device**. Such a device would require to be approved by the Secretary of State (Home Office Type Approval or HOTA) before it could be brought into operational use by the police and used in a court for prosecution. Screening devices will only detect the presence of drugs and will not remove the need for the police to form a judgment about impairment.

The **'Getinlane' website** developed by RSS for new drivers includes information and advice about fatigue. This includes the dangers, what to do if you are feeling sleepy whilst driving and an online game which tests reaction time and can be played over and over again to show how reaction time changes depending upon how we are feeling.

What we need to do next

We want the UK Government to lower the drink drive limit to 50mg of alcohol per 100ml of blood and to introduce anytime, anywhere breath testing. We believe the evidence to support this is clear and the support for this is very strong.

We want to promote the view that driving is a skill which requires full concentration – the consequences of anything less can be deadly. The impairment of performance is potentially dangerous and must be acknowledged as unacceptable risk taking. We want to raise awareness and support and educate, but we also want to put enforcement measures in place which deter drivers from offending.

Commitments

In Government, and in partnership with other stakeholders, we will:

- Continue to press the UK Government for a reduction in the drink drive limit and for powers for the police to carry out breath testing anytime, anywhere.
- Give greater prominence to the 'Don't risk it' message throughout the year through the targeting of more road policing officers to carry out increased enforcement and raise the perceived risk of being caught.
- Promote the use of data enabled roadside breath screening devices by Scottish police forces.
- Raise awareness of the dangers of fatigue among drivers.
- Raise public awareness of the possible effects on driving after taking some prescription or over the counter drugs and illegal drugs.
- Continue to work in partnership with ACPOS and other partners, including the private sector, to provide publicity in support of enforcement initiatives by Scottish police forces.
- Introduce, in liaison with the Scottish Government Marketing Unit, drink drive publicity campaigns outside of the traditional summer and festive seasons.
- Press the UK Government to quickly ensure Home Office type approval of roadside drug testing devices.

What we all can do:

- Don't guess how much we have had to drink – if in doubt don't drink or don't drive.
- Be aware that you may still be over the limit after a good night's sleep.
- Don't get in a car where you suspect the driver is over the limit.
- Don't take drugs and drive – including some prescription drugs which may cause drowsiness.
- Don't drive if you are tired.

8.3 Seatbelts

The Issues

In Great Britain in 2006, just over one-third of car occupants killed in road accidents were not wearing seatbelts. This would suggest around 60 fatalities in Scotland that year were not wearing seatbelts.[44]

The legislation currently in force on seatbelts has been introduced over a number of years since 1983, when it became compulsory for front seat occupants to wear them. The law, as it stands today, requires drivers and passengers to use seatbelts when travelling in vehicles, with very few exemptions.

While it is important to stop accidents happening, it is also critical to mitigate their impact on vehicle occupants. Seatbelts are vital to this and, according to the European Transport Safety Council; seatbelt usage reduces the risk of fatal injury by about 50%, describing them as "the single most effective feature in the car to fulfil this role".[45]

According to DfT, wearing rates for car occupants in Great Britain in August 2007[46] were:

- Drivers 94%
- Front seat passengers 93%
- Rear seat adults 70%
- Rear seat children 93%

However, wearing rates for van occupants are much lower:

- Drivers 69%
- Front seat passengers 58%

The last compliance study in Scotland was carried out in 2002.[47] At that time, the results were not dissimilar to those above, with 95% of car drivers, 91% of front seat passengers, but only 78% of rear seat passengers appropriately restrained. As with the GB study, however, just under two-thirds of van occupants used seatbelts.

Children are particularly at risk in cars when they are not properly restrained. Over 35% of **child casualties** took place in cars. Many of these casualties could have been avoided or injuries made less severe if the children had been properly restrained.

Since September 2006, it is illegal to carry a child who is below the height of 4ft 5ins (135cm) or under the age of 12, in a car without an appropriate car seat. For failing to comply with this law, there is a fixed penalty of £30 or a maximum fine of £500 if the case goes to court. Further guidance is available at: www.dft.gov.uk/pgr/roadsafety/child/newrulesforuseofchildcarseat4635

What we do now

Police forces around Scotland have **targeted seatbelt campaigns** where motorists will be stopped and checked to ensure that both they and their passengers are wearing seatbelts.

The **'Good-Egg' In-Car Safety Campaign** aims to ensure that all child passengers are carried safely in cars. RSS is a key partner, along with the police, local authority Road Safety Units, RoSPA and the Arnold Clark Group. The Campaign features the 'Good Egg Guide', which provides advice to parents about appropriate child restraints, car seat clinics, media advertising and the www.protectchild.co.uk website.

Seatbelt wearing for all **passengers aged 14 years and above in buses/coaches where seatbelts are fitted** has been a legal requirement since September 2006. It has been a legal requirement for all passengers in minibuses since 1993. In the case of minibuses, as with cars, the law states it is an offence to drive with unrestrained child passengers. Liability for ensuring seatbelts are worn is placed on the driver, not the child. EU Directive 2003/20/EC requires Member States to implement the requirement that all children aged 3 and over use safety systems (where fitted) on buses and coaches.

In Scotland, the terms of contracts for the provision of school transport are matters for individual local authorities and their contractors. The Scottish Government encourages, through guidance, local authorities to specify within their contracts with bus operators that only vehicles fitted with seatbelts, where available, should be used.

Vehicles can be fitted with **audible warning devices** to remind occupants to fasten their seatbelts. The Scottish Government welcomes greater use of these devices and any other means to remind and encourage wearing of seatbelts.

What we need to do next

We want to find out the extent of non-compliance in Scotland, the reasons why people do not wear seatbelts and explore innovative ways of encouraging all car and van occupants to use them at all times.

We need to carry out research to find out if non-compliance is greater in particular areas of the country or particular sections of the community, and seek ways to address this if found to be an issue.

DfT is currently proposing to raise the fine for non-compliance to £60. Whilst the Scottish Government welcomes this, along with partners such as ACPOS, we would support the view that non-compliance should be an offence which attracts licence penalty points in addition to the current fine.

Commitments

In Government, and in partnership with other stakeholders, we will:

- Conduct research into seatbelt compliance in Scotland and act on the research findings.
- Raise awareness of the importance of seatbelts, including via TV and radio advertisement, with a view to creating future generations who will automatically use seatbelts whenever they travel in a vehicle.
- Seek ways of bringing attention to seatbelt wearing, for example, through the use of seatbelt accessories that are highly visible.
- Continue to educate and encourage drivers to ensure that children are properly restrained in cars and vans.
- Support the introduction of a requirement for children aged between 3 and 14 to wear seatbelts on buses and coaches, where fitted.
- Press the case with the UK Government to make non-seatbelt wearing an endorsable offence (i.e. one which attracts licence penalty points in addition to the current fine).

What we all can do:

- Always wear a seatbelt when travelling as a passenger or driver in a motor vehicle.
- Where they are provided, always wear a seatbelt as a passenger on a bus.
- Ensure that children are correctly strapped in and use the appropriate restraint for their weight, age and size.

8.4 Speed

The Issues

"Speed may not be identified as a factor for all crash causations but it will affect the severity of all casualties and crashes." *(Charity Organisation)*

Speed limits are set to indicate to drivers the maximum speed permitted on a particular road. Unfortunately, a number of motorists drive above the **speed limit** or at an **inappropriate speed** for the conditions. In Scotland in 2006-07 a total of 163,826 speeding offences were recorded by the police.

There is overwhelming evidence that the frequency of accidents rises disproportionately with speed. A study in 2000[48] found that for every 1 mph reduction in average speed there is a 5% reduction in accident frequency. On urban roads a 21% increase in collisions could result from a 10% increase in mean speeds. The probability of serious injury to a belted front seat car occupant is three times greater at an impact speed of 30 mph than at 20 mph. Research in 1979[49] showed that for pedestrians, around 95% who are struck at speeds below 20 mph will survive, while at speeds between 20 mph and 40 mph nine out of ten people will die.

Research published in 2003[50] provided a **profile of drivers most involved in speeding** as well as highlighting the higher crash involvement of speeders. It also found that speeding is not perceived to be a 'real crime' and that knowledge of speed limits is poor, other than for motorways and urban streets. A table showing national speed limits for different types of roads and vehicles is at Annex E.

What we do now

Guidance to local authorities on **setting local speed limits** was issued in 2006. www.scotland.gov.uk/Publications/2006/08/14134225/0 The guidance stressed the importance of consistency and transparency in setting speed limits, in order to encourage greater compliance by drivers. Local authorities were asked to review the speed limits on all A and B Class roads in their areas by 2011. The Society of Chief Officers of Transportation in Scotland (SCOTS) Road Safety and Traffic Management Group has developed further guidance in addition to ETLLD Circular 1/2006 to assist authorities to review the speed limits.[51]

For people who continually break the law and knowingly put themselves and others at risk, it is entirely appropriate to be faced with the threat or reality of attracting penalties through the points system. We want to encourage a culture where a speeding conviction has the same type of public disapproval as drink driving. There may also be circumstances where **remediation** could be a particularly effective deterrent as a means of changing behaviour. This is already a feature of the justice system in England and Wales and we want to explore it further.

Speed Awareness courses – an Alternative to Prosecution

As an alternative to prosecution some local authorities and police forces in England offer Speed Awareness courses to some offenders.

A recent study from the University of Reading,[52] 'Speed Awareness: The effect of education versus punishment on driver attitudes' concluded that those who had gone through the Thames Valley course had been, in the most part, positively influenced.

There was clear evidence that attendance was significantly associated with more positive attitudes to existing speed control. Those who attended mainly:

- Gave approval for significantly higher camera numbers than all groups of drivers who had been punished with a fixed penalty.
- Considered a speed limit breach of 35 mph in a 30 mph limit significantly more unacceptable than those groups receiving punishment.
- Were more in favour of stricter speed control in the future.

All of these differences were sustained across a period of six months. The report also considered that these newly formed beliefs would help improve public acceptability of future speed enforcement.

We support the **Scottish Safety Camera Programme** which is an initiative that is designed to influence driver behaviour, particularly by the targeted enforcement of speed limits.

The Programme is operated by eight Safety Camera Partnerships that cover all of mainland Scotland – see Chapter Three and Annex A. Cameras established under the Programme are only located at sites where there is a history of fatal and serious road accidents and where there is an identified problem with speeding. In addition all Partner members must agree that there are no other viable options available for addressing the road safety problem. Details of the Scottish Safety Camera Programme can be accessed at www.scottishsafetycameras.com

The existing safety camera network is a mixture of fixed, mobile and red light cameras.

- Fixed cameras use radar to measure the speed of vehicles. Once a vehicle has been detected exceeding the limit, the camera confirms the offence by taking two photographs 0.5 seconds apart. The road markings at fixed camera sites are at a fixed distance (two metres) and therefore can be used to confirm the speed of the vehicle that has been photographed.
- Mobile cameras use a laser to measure the speed of vehicles. The laser device is linked to a video camera that records details of the offence.
- Red light cameras are controlled through underground cables. The cables only become energised after the lights turn to red. Any vehicle travelling through the red traffic light activates the camera which takes a photograph. The camera then takes another photograph one second later to confirm that the driver has continued through the junction or crossing.

All safety camera sites have advance signing to alert drivers to their presence. The camera housings have high visibility red and yellow markings and the mobile enforcement vehicles have been fitted with a standard high visibility livery, similar to that used by police, to alert drivers to their presence. The aim is to get people to slow down – not catch them.

Hand-held devices are exclusively used by the police. They are among a range of speed detection devices the police have at their disposal to detect the speed of vehicles.

A relatively new method of detection is by means of average speed cameras. The average speed camera systems work by calculating the time taken for a vehicle to travel between two fixed cameras which are a known distance apart. When a vehicle passes the first camera Automatic Number Plate Recognition (ANPR) technology reads the number plate of the vehicle. The second camera also reads the number plate as the vehicle passes and calculates the average speed from the time taken to travel from the first camera.

A77 Average Speed Camera Trial

Transport Scotland and Strathclyde Safety Camera Partnership combined resources to implement Scotland's first average speed camera enforcement system. The system, known as SPECS, was installed in July 2005 and stretches over a 32 mile zone from Bogend Toll south of Kilmarnock to Ardwell Bay south of Girvan. Since the system was installed there has been a huge drop in the numbers of vehicles travelling at excessive speeds.

The three-year data published on the Safety Group's website, www.a77safetygroup.co.uk, shows a significant reduction not only in casualties but also in accident numbers. This means that, in the three years since the implementation of the system, around 24 people have avoided death or serious injury. Overall, this has led to a reduction in the most serious accidents, including fatal, of 37%.

SPECS has been a successful element of a co-ordinated route strategy on the A77, but it is important that these figures are now properly assessed to inform how best to design future schemes. We also look forward to Home Office Type Approval being given to the next generation of Average Speed Cameras in order to assess their future use on the Scottish road network.

SPECS has also been used to protect workers and road users at a number of road work sites in Scotland. The primary aim of a speed management strategy at roads works is improved safety through reduction of risk for both road users and road workers alike. Road workers in Britain have one of the highest workplace mortality rates.

The Safety Camera network in Scotland is now fairly mature. However, the accident and speeding profile of the road network is dynamic and therefore to achieve the maximum road safety benefit, the Safety Camera Programme has to develop to meet the challenges that these new conditions present.

Very often road traffic accidents occur over a length of road or route rather than at a single location. The causes of accidents on these routes are often diverse, though problems with excessive or inappropriate speed are recurring major contributory factors. The deployment of safety cameras alone will not fully address the accident problems on these routes. The optimum road safety benefit can, however, be achieved by all the partner agencies working together to develop and deliver a co-ordinated approach to each particular situation.

The accident levels and traffic speeds at established camera sites are collected on an ongoing basis to help assess the effectiveness of cameras in influencing driver behaviour and to monitor the level of road accidents. This data is currently collected and held locally. However, from mid 2009, a new national web-based database will be introduced that will allow this information to be held centrally and allow all Partnerships to view each others' data. Additionally, a new national system for administering detected speeding and red light offences is being introduced. Together these systems will allow the Partnerships to better target their enforcement and communications strategies to ensure that the maximum road safety benefit is achieved.

Vehicle Activated Signs (VAS) are in use and can be useful tools in reminding drivers of the speed limit and in encouraging compliance. VAS are activated by vehicles exceeding a pre-set threshold. They display the speed limit and sometimes the message 'Slow Down'. In trials, they have been found to be very effective in reducing speeds.[53]

Intelligent Speed Adaptation (ISA) is a system in which vehicles are fitted with a digital map which contains details of the various speed limits. A global positioning system compares the vehicle's position with the speed limit applicable on the road. An on-board computer then takes the appropriate action depending on the category of system that is being used. The three ISA categories are:

- **Advisory ISA** where the driver is informed of the speed limit and then needs to make a decision on how to adjust his/her behaviour.
- **Voluntary ISA** where the driver is informed of the speed limit and an on-board computer restricts the vehicle's speed to ensure that the limit cannot be exceeded. The driver can choose to override the system.
- **Mandatory ISA** where the driver is informed of the speed limit and an on-board computer restricts the vehicle's speed to ensure that the limit cannot be exceeded. The driver cannot override the system.

Research published by the UK Government in September 2008[54] found that voluntary (i.e. overridable) ISA reduced the amount of speeding in almost every category of user. The study concluded that this technology can deliver substantial reductions in excessive speed and consequently considerable safety benefits. To assess the potential effectiveness of this system and to encourage others to adopt the system, we are considering the feasibility of a pilot of ISA in Scotland.

In addition to the above initiatives, RSS and the Scottish Safety Camera Programme work closely with the police in **anti-speeding campaigns** and support the various focus days which have become a feature of the ACPOS annual programme of events. Speeding is an issue which the police are addressing all year round but the focus days are used to highlight the problems caused by speeding and raise awareness of the devastating effects it can have on victims, their families and offenders.

The Scottish Government is working with the **Energy Saving Trust** to promote simple measures people can take to drive more efficiently, which also help to improve safety. The measures include driving at lower speeds, planning journeys, checking tyre pressures and anticipating road conditions. Further information on practical steps to reduce emissions and improve efficiency is available from the Energy Saving Trust website www.ecodrivescotland.com

In addition to increased safety, lower vehicle speeds can have financial and other benefits. In general, **fuel efficiency** tends to fall at higher speeds, so reducing speeds may reduce carbon emissions. Fuel consumption factors from the National Atmospheric Emissions Inventory speed emission curves suggest that there will be a 4% to 8% fuel consumption saving (and therefore the same saving in CO_2 emissions) per kilometre from driving at 60 mph instead of 70 mph in a modern car. Conversely, exceeding the speed limit by driving at 80 mph rather than 70 mph uses 10% to 15% more fuel.

The Scottish Government will shortly publish a **Delivery Plan on Climate Change** that will require significant changes in driving practice (i.e. reduced speed, eco-driving and fewer journeys) as well as encouraging a shift to sustainable and active travel. The Scottish Government have also committed, through the Energy Pledges announced in February 2009, to promote the development, uptake and use of electric and other low carbon vehicles. These measures will not only help us meet our emissions reduction targets but will have a positive impact on road safety in Scotland. More information on eco driving and fuel-saving tips can be found in Chapter Four of the document 'Transport and Climate Change' which can be accessed at:
www.cfit.gov.uk/docs/2007/climatechange/pdf/2007/climatechange.pdf

What we need to do next

We need to make drivers more aware of the dangers of speed and the safer, greener and economical advantages of driving at lower speeds. We need to foster a culture of abiding by the law and seeing speeding as a 'real crime' through both education and awareness, pointing to the increased likelihood that speeders will be caught, or worse, cause injury to themselves, their passengers or other road users. We want to use technology, where proven effective, to help drivers stay within the speed limit and we want to support drivers to be aware of both speed limits and appropriate speeds.

Commitments

In Government, and in partnership with other stakeholders, we will:

- Promote the voluntary use of Intelligent Speed Adaptation (ISA).
- Consider a pilot in Scotland to test out the effectiveness of voluntary ISA in road safety.
- Continue to publicise and educate people about the risks associated with speeding.
- Encourage local authorities to implement any changes indicated by their review of speed limits.
- Continue to raise awareness of speed limits, including those that apply to different types of vehicle on the different categories of roads.
- Continue to support the Safety Camera Programme.
- Support the development and implementation of the new viewing and administration system for the Safety Camera Partnerships.
- Consider if the introduction of a Speed Awareness Scheme focused on speeding would be an appropriate contribution to road safety in Scotland.
- Increase awareness of the benefits of lower speed driving in relation to fuel efficiency, health impacts and road safety.
- Publish a Delivery Plan on Climate Change that will require significant changes in driving practice.

What we all can do:

- Ensure we are aware of the speed limits that apply on different types of road and to different types of vehicles.
- Stay within the law by staying within the speed limit.
- Drive at speeds lower than the limit when appropriate to the conditions.

8.5 Distraction

The Issues

Although **mobile phones** are an obvious distraction, any activity which takes the driver's concentration away from the road is potentially dangerous. These can include **eating, drinking, loud music and smoking** whilst driving.

Evidence suggests that a driver cannot help but be distracted by a mobile phone call or a text message as sending or receiving these requires the driver to process the information contained within that call or message.

Research from 2003[55] showed that, while over 90% of respondents said it should be illegal to use a hand-held mobile phone whilst driving, more than 25% of drivers admit to doing so. This research also showed that using a mobile phone whilst driving means you are four times more likely to be involved in an accident.

Research carried out in 2002[56] indicated that reaction times for drivers using a hand-held phone were 30% worse than for driving under the influence of alcohol at the legal limit. The reaction times were nearly 50% worse than when driving under normal conditions.

An extensive research programme commissioned by the RAC in 2007[57] indicated that 22% of motorists questioned said they were distracted by a hand-held mobile phone. Seventy-four percent of those who took part in the study regarded using a hand-held mobile phone as a very serious distraction.

Scottish Government research carried out in 2008[58] explored the views of young people aged 16-25 towards road safety. It highlighted the fact that, despite evidence to the contrary, many young people believed **that speaking to a passenger** is just as distracting as speaking on the phone. There was, however, general agreement that texting was unacceptable. Most of the young people said that, if a friend was trying to text whilst driving, they would take the phone away from them.

What we do now

One Distraction Cinema Advert

RSS created a cinema advert in 2008 that followed young male car occupants travelling on a rural road: the driver is distracted and, by the time his eyes return to the road, it is too late to avoid becoming involved in an accident. Although the issues of young male car occupants and inappropriate speed are highlighted, distraction was the key element, chosen to make the advert more credible in the eyes of the target audience. Distraction was also the focus of online and Bluetooth activity that supported the advert.

Distracting drivers, both of cars and buses, and distractions to pedestrians are issues that are discussed in depth within RSS's **'Crash Magnets'** educational resource www.crashmagnets.com. There are 'vox pop' clips of young people talking about their experiences of, and attitudes to, distracting influences. Extension material is provided within the Crash Magnet toolbox for classroom activity which develops the theme that the brain cannot concentrate on two things that require the same senses. A new RSS **S1 to S3 educational resource 'Your Call'**, launched in late Spring 2009, also has distraction as one of its principal themes throughout.

Legislation was introduced in 2006 making it illegal to use a hand-held mobile phone or similar device whilst driving. There is a fixed penalty of £60 and three penalty points. If the case goes to court, the maximum fine is £1,000 (or £2,500 if driving a bus, coach or heavy goods vehicle), discretionary disqualification and three points.

It is also an offence to "cause or permit" a driver to use a hand-held mobile phone whilst driving. Therefore, employers can be held liable as well as the individual driver if they require employees to use a hand-held phone whilst driving.

New **careless driving laws**, which came into force on 18 August 2008, allow courts to imprison drivers who cause death or serious injury by not paying due care and attention to the road or other road users. The **avoidable distractions**, as they are termed, include: using a mobile phone (calling or texting); drinking and eating; smoking; changing a CD/radio station; applying make-up and anything else which takes the driver's attention away from the road and which a court judges to be an avoidable distraction.

What we need to do next

We want drivers to be aware of the risks and consequences associated with in-vehicle distraction and recognise the skill and concentration needed for driving as they would any other potentially dangerous activity.

Commitments

In Government, and in partnership with other stakeholders, we will:

- Continue to raise awareness through targeted campaigns of the dangers of driver distraction.
- Encourage everyone to acknowledge driving as a skill which requires concentration and judgement.

What we all can do:

- Never use a hand-held mobile phone whilst driving.
- Pay full attention to the road and do not allow ourselves to be distracted.


Queues likely

Chapter Nine

Designing for human error on the roads

The responsibility for road design and maintenance in Scotland is divided between Transport Scotland, which is responsible for Scotland's trunk road network, and local authorities which are responsible for the local roads within their own areas.

In addition to road engineering, this Chapter covers vehicle engineering and technology and outlines the part they both can play in road safety.

9.1 Trunk Roads

Because Scotland's trunk road network is of strategic importance it comes under the authority of Scottish Ministers. The trunk road network is vital because it connects our cities and rural communities as well as providing strategic links to the ports and the islands. Transport Scotland manages the trunk road and rail networks and their interfaces. Its responsibilities also include high level policy determination of the future investment strategy, as set out in the Strategic Transport Policy Review. This takes safety into consideration at all levels.

The Issues

Although the trunk road network represents just over 6% of the total Scottish road network, it carries 37% of all traffic and 62% of heavy goods vehicles. Around 16% of injury accidents occur on the trunk road network each year.

A **road's design** has a major influence on its safety performance. The features of the roads themselves affect the likelihood and severity of accidents. Humans are fallible and, in recognising that road users will make mistakes, we must acknowledge the need to design out or protect the features that result in death and serious injury.

Analysing accident histories shows us that the four main accident types that result in death and trauma are: hitting an off-road fixed object; head-on collisions; accidents at junctions and accidents involving vulnerable road users. The potential to improve the safety performance of a stretch of road is influenced by its accident rate and the feasibility of improving its road features.

What we do now

Safer road design, improved speed management, continued maintenance and a better provision for vulnerable road users are amongst the steps being taken to reduce injuries and fatalities on Scotland's trunk roads. The **Strategic Road Safety Plan**[59] sets out how Transport Scotland delivers safety. It includes an Action Plan setting out how its specialist Strategic Road Safety Unit will deliver the Agency's targeted safety objectives. It highlights the need to remove risk and prioritises initiatives aimed at preventing accidents and mitigating the effects when accidents do occur.

Significant progress has been made in road safety and Transport Scotland will continue to exploit those methods that have delivered improvements in recent years. However, greater innovation is now needed in the approach we adopt. Transport Scotland's intention is to complement the existing activity with more proactive methods in order to further improve the safety performance of the Scottish trunk road network. The Action Plan details the ways in which the Strategic Road Safety Unit aims to successfully deliver the improvements needed to meet casualty reduction targets beyond 2010. The key themes of the Action Plan are:

- Analysis and Knowledge
- Risk Reduction
- Vulnerable Road Users
- Research and Development
- Speed Management
- Working with Partners
- Continuous Improvement

In 2007/08, the Strategic Road Safety Unit invested £6 million through a dedicated road safety budget. However, this is a small proportion of the total amount being invested through Transport Scotland where substantial engineering programmes are also delivering significant safety engineering improvements.

Transport Scotland is continually improving the analysis of trunk road accidents and is undertaking research to inform how best to target investment at mitigating the four main accident types. **Road Protection Score Surveys**, under the EuroRAP[60] Star Rating protocol, have already been undertaken for one-third of Scotland's trunk road network and a programme is being developed to survey the remainder of the network.

We want to find out how to reduce the disproportionate impact on drivers and passengers when their vehicles leave the road and collide with **off-road fixed objects**, such as trees and walls, following relatively minor mistakes.

Some of the things Transport Scotland already does include: replacing larger signposts with signs which crumple on impact; providing and modernising road restraint systems; and managing the risk of vehicle collisions with trees.

The nature of much of the single carriageway network is such that overtaking opportunities are few and far between. The resulting frustration can lead to drivers accepting risky overtaking manoeuvres that all too often end with the serious consequences of **head-on collisions**. Transport Scotland has an extensive programme of upgrades to provide safe overtaking opportunities across the rural network. This is being done by providing **2+1 single carriageways** which have dedicated overtaking opportunities.

Accidents occurring at grade **junctions** can be very severe. When a vehicle travelling at high speed hits a vehicle turning at low speed the result can be devastating. There are a number of ways to address the problem from closing junctions to converting the junction to a roundabout.

Many junction improvement schemes on the trunk road network are targeted specifically at road safety. A good example is the addition of **seven new interchanges on the A90 between Perth and Forfar** where surface level junctions with poor accident histories have been replaced with grade separated (flyover) junctions to allow safer movements to, from and across the A90. Each proposed scheme is assessed systematically and consideration is given to such issues as safety, environment, economy, integration, social inclusion and accessibility. All these factors are considered in prioritising schemes. The schemes invariably provide significant accident savings.

In addition, **road restraint systems** are installed throughout the network to protect drivers and riders from a range of potential hazards such as large signs, water courses, steep embankments, and bridge abutments. The most common type of vehicle restraint system is the **safety barrier**.

The design and detailing of barriers is under constant review from many interested groups, e.g. motorcyclists, pedestrians and disabled road users. Improvements include crumple barrier and safety cushions at the start terminals. These barriers absorb much of the energy from impacts and reduce injury severity.

Maintaining the road network in Scotland is also a vital part of ensuring the safety of the network. Each element of the maintenance regime plays an important part in providing a safe driving environment. Cyclical reviews of the road surface, infrastructure features, and foliage cutbacks, as well as an annual winter service programme, are used to ensure that potential hazards are identified.

Having a sound knowledge base is essential to setting future road safety actions. Transport Scotland is forming **Route Safety Groups** for each of the trunk road routes. Participation from relevant road safety partners such as local authorities, police forces, emergency services, safety camera partnerships and others will be critical to the success of the initiative. The groups will develop a sound knowledge base made up of five key components: route information and contacts; accident analysis; stakeholder and community issues; scheme programmes (safety, minor and major improvements, etc); and technical projects and initiatives.

Traffic Scotland forms part of the Network Operator Role within Transport Scotland, alongside the Strategic Road Safety Unit and the Development Management team. The Network Operations team's activity helps to deliver a road network than can be used for safe and reliable journeys.

Network Operations manages the Traffic Scotland service which uses a wide range of **Intelligent Transport Systems** to deliver its three core functions of monitoring, controlling and informing across Scotland's trunk road network, 24 hours a day, 365 days a year. Traffic Scotland monitors and communicates information on around 15,000 unplanned incidents on the network annually, including breakdowns, accidents and severe weather events, thereby helping to minimise the impact of these incidents on the users of the network.

Through utilising the automatic queue detection and lane control signalling systems in place on the most heavily trafficked sections of the motorway network, the risk of secondary incidents is minimised. **Variable Message Signs** (VMS) in overhead gantries and roadside signs convey to approaching motorists up-to-date information on current incidents.

Traffic Scotland also supports various year-round **road safety campaigns** through displaying appropriate message legends on the network of VMS signs, for example, 'Don't Drink and Drive'. In future, it is proposed to take a more targeted approach to background message legends on the VMS to try and address specific road safety concerns on particular routes on the network.

The **Trunk Road Incident Support Service** (TRISS) aims to help reduce congestion and improve safety on the network by providing a bespoke service to improve response times to incidents such as emergencies, debris removal and assistance with broken-down vehicles. These operations are undertaken in partnership with the police. A TRISS service is currently operational in the Glasgow and Edinburgh areas. Transport Scotland is currently examining the possibility for roll out beyond these areas. A new service, covering major arteries in Fife commenced on 6 April 2009.

What we need to do next

Looking to the future, Transport Scotland's Strategic Transport Projects Review supports the Scottish Government's purpose of promoting sustainable economic growth by planning the next 20 years of transport investment for Scotland's rail and trunk road networks.

Strategic Transport Projects Review

The outcome of the STPR was announced in the Scottish Parliament on Wednesday 10 December 2008. The review identified 29 major packages of work across Scotland which were developed in line with a three-tiered investment hierarchy:

Investment aimed at **maintaining and safely operating existing assets**;

Investment promoting a range of measures, including innovative solutions, to **make better use of existing capacity**, ensuring the existing road and rail networks are fully optimised; and

Investment involving **targeted infrastructure improvements**.

In the context of maintaining and safely operating existing assets Transport Scotland has developed, and is delivering, a Strategic Road Safety Plan to implement measures on the trunk road network in order to reduce the rate and severity of road accidents on Scotland's trunk roads (STPR Project 1). In addition, a package of measures has been identified to improve safety on key routes in North and West Scotland (STPR Project 4).

The following schemes demonstrate the variety of projects and scale of investment currently going into road infrastructure to create a Safer Scotland.

M74 Completion

The M74 Completion will continue the M74 motorway from Fullarton Road Junction, near Carmyle, to the M8 motorway west of the Kingston Bridge. It is anticipated to open in 2011, completing the missing link between the two motorways. The new eight kilometers (five miles) stretch of road will have a positive impact on road safety by transferring traffic from local roads onto the M74. This is expected to reduce the number of accidents by between 525 and 700 in the first 20 years after opening. Safety will be further enhanced by facilitating the development of strategies to allocate previously congested road space to cyclists and pedestrians and by promoting the introduction of traffic management and traffic calming schemes.

A96 Fochabers and Mosstodloch

A scheme to bypass the two towns of Fochabers and Mosstodloch which are currently bisected by the A96 is due to start in July 2009 at an estimated cost of approximately £30 million. Fochabers in particular will benefit especially from this scheme as it lies within a conservation area and is home to a number of listed buildings. The completion of this scheme will not only improve journey times along the busy trunk road corridor between Aberdeen and Inverness, but also give the residents of both communities significant relief from noise, pollution and community severance. Potential conflict between strategic trunk road traffic (particularly heavy goods vehicles) and town traffic and its associated pedestrian movements will be eliminated. The facility will add to the recently completed accident reduction measures installed on the route and provide safer overtaking opportunities for traffic in tandem with the original six climbing lanes that have been converted to give dedicated overtaking opportunities.

Commitments

Transport Scotland, in partnership with other stakeholders where required, will:

- Undertake Road Protection Score Surveys, for the remaining two-thirds of Scotland's trunk road network and determine how this information can complement the existing processes within the road safety engineering programme.
- Continue to consider and implement a range of proactive risk removal strategies to reduce the severity and frequency of impacts with hazards.
- Continue to invest in providing 2+1 overtaking opportunities.
- Consider the most appropriate barriers to protect vulnerable users such as motorcyclists.
- Continue to invest in junction improvement schemes.
- Rank the worst performing junctions on the trunk road network, by accident frequency and severity over the last ten years, and prepare a programme to improve selected locations.
- Develop Route Safety Groups for each of the trunk road routes with participation from relevant road safety partners such as local authorities, police forces, emergency services, safety camera partnerships, etc.
- Examine the possibility for further rollout of TRISS.

- Implement the Strategic Transport Projects Review including:
  - Transport Scotland's Strategic Road Safety Plan;
  - Road Safety Improvements in North and West of Scotland;
  - Route Management;
  - A82 targeted road improvements;
  - Road safety improvements in North and West Scotland;
  - A9 upgrade from Dunblane to Inverness;
  - A96 from Inverness to Nairn Upgrade;
  - Targeted Road Congestion/ Environmental Relief Schemes; and
  - Dundee Northern Relief Road.

9.2 Local Roads

"There is considerable research evidence suggesting that improving the road environment through safer road design has the greatest potential to reduce casualties. The use of passively safe roadside furniture, increased roadside protection along with improved signing and markings could significantly contribute to reduce accidents on rural roads." *(Local Authority)*

The Issues

Local roads cover a diverse range of road types from busy towns and cities to rural and strategic routes linking adjoining local authority areas. Local roads must cater for all types of traffic including buses, cars and HGVs as well as more vulnerable road users such as pedestrians, cyclists and motorcyclists.

Many of the issues relating to local roads have already been covered in previous Chapters. Additionally, many of the issues relating to trunk roads also apply to local roads. Safer road design, continued maintenance and better provision for vulnerable road users are at the forefront of local authority efforts to reduce casualties. So the issues are both numerous and diverse.

What we do now

Local authorities have a duty under the **Road Traffic Regulation Act 1984** and the **Road Traffic Act 1988** to promote road safety in conjunction with the Chief Constable for their area. They must investigate road accidents and take steps to reduce and prevent accidents. The actions taken by the local authorities to comply with the Acts are generally set out in local Road Safety Plans.

When designing and constructing new roads, local authorities must consider what measures to take to reduce the possibilities of road accidents.

As ACPOS leads on enforcement and RSS leads on education, so the **Society of Chief Officers of Transportation in Scotland** (SCOTS) lead on engineering input to local road safety.

A working group of SCOTS[61] commissions independent consultants to undertake a rolling systematic survey – the **Scottish Road Maintenance Conditions Survey** – to provide consistent information on the condition of the roads in Scotland. The results of the survey are used to classify the road network on the basis of a green, amber and red status report. This informs roads authorities about which roads are considered to be in an acceptable condition (green), those that require further investigation to establish if treatment is required (amber) and those that are considered to have deteriorated to a point where they should be considered for repair (red). Local authorities then determine what remedial action to undertake.

When designing roads infrastructure, roads authorities use the general principles contained within the **Design Manual for Roads and Bridges**: www.standardsforhighways.co.uk/dmrb/ The Designing Streets Manual mentioned in Section 6.2 will also shape road design of local roads over the coming years.

The Scottish Government has promoted legislation to improve the planning, co-ordination and quality of **road works in Scotland**. This is contained in the **Transport (Scotland) Act 2005** and subsequent Regulations and Codes of Practice. The safety of road works sites forms part of the approach to improving standards and we will continue to maintain an overview, along with the road works community, of the effectiveness of the current arrangements. The **Scottish Road Works Commissioner** was appointed in July 2007. More information can be found at: www.roadworksscotland.gov.uk

Road traffic accidents in Scotland, resulting in injury, have reached their lowest level for 50 years. This has in part been achieved by addressing road safety issues at specific locations on the road network often referred to as **'accident blackspots'**. As a consequence of this success road accidents are now geographically dispersed with some roads experiencing a higher rate of accidents than others. The accidents generally do not have a single cause but are the consequence of a number of factors such as inappropriate speed, driver behaviour and road conditions, all acting together to contribute to a relatively high accident frequency along the route. A **route safety strategy** to try to tackle all of these issues has been set up on the A811.

A811 Route Safety Strategy

The A811, which runs in an east-west direction between Stirling and Drymen, has a high accident frequency that cannot easily be attributed to a common cause. In parts the road is wide and relatively straight, which encourages fast driving. In other locations the road narrows, there are tight bends and undulations that need to be negotiated in an appropriate manner. Several minor roads intersect the A811 and there are numerous farm and field accesses onto the road.

There is no one solution to the accident frequency along the A811. However, a comprehensive route safety strategy has been developed between Stirling Council, Central Scotland Police and Central Scotland Safety Camera Partnership, which is designed to address the range of factors that are contributing to the accidents. Under the Strategy, each of the partners have agreed to carry out the following:

- Central Scotland Police will carry out increased patrols on the road to detect and deal with a range of road traffic offences.
- The Central Scotland Safety Camera Partnership will establish a number of camera sites along the route for more targeted enforcements of the speed limits.
- Stirling Council will continue to improve the standard and consistency of road signs and markings along the route. They will also carry out road carriageway improvements at identified locations.

The accident frequency along the route will be closely monitored for a minimum of three years after implementation. If the partnership approach is shown to be successful then consideration will be given to promoting it throughout Scotland.

What we need to do next

We want to continue to work closely with local authorities through organisations such as SCOTS and the Improvement Service for Local Government to develop and share best practice in delivering safe roads for the travelling public.

Commitments

In Government, and in partnership with local authorities and the Improvement Service, we will:

- Continue to seek improvements to the planning, co-ordination and implementation of safety measures at roadworks through Codes of Practice and further legislation if necessary.
- Produce a best practice guide with SCOTS for carrying out safety audits by reviewing current local authority procedures.
- Encourage and promulgate research and guidance in the engineering field through SCOTS.
- Monitor and evaluate the progress of the A811 route safety strategy and, if successful in the reduction of casualties, encourage rollout across Scotland.

9.3 Safer Vehicles

The Issues

Many people are unaware of how important their **choice of car** is to future safety. Often, the decision on which car to buy is based entirely on cost and model. What is not fully considered is that older vehicles often lack many of the safety features which are fitted as standard on some newer models. These new technologies, e.g. anti-lock brakes and electronic stability control, etc. can mitigate the effects of driver error and help reduce casualty severity.

Car safety has a part to play in casualty reduction:

- Research in 2000[62] suggested that an occupant's relative risk of serious or fatal injury might be reduced by as much as 12% for each EuroNCAP occupant protection star awarded.
- Observational studies[63] have suggested intrusive seat belt reminders might increase their use to over 99% from only 82% wearing without the reminders.
- A UK study[64] showed that cars fitted with electronic stability control are 25% less likely to be involved in a fatal accident.

What we do now

There are several guides and websites that describe various safety features which are available in cars including the RoSPA and DfT Guide 'Vehicle Technology: a Manager's Guide.'[65] This describes the role and types of safety features available through vehicle technology.

European New Car Assessment Programme (EuroNCAP)

EuroNCAP car safety performance assessment programme publishes safety reports on new cars, and awards 'star ratings' based on the performance of the vehicles in a variety of crash tests, including front, side and pole impacts, and impacts with pedestrians.

EuroNCAP's aim is to provide motoring consumers – both drivers and the automotive industry – with a realistic and independent assessment of the safety performance of some of the most popular cars sold in Europe.

Prospective car buyers can compare safety performance of cars and view films of their crash tests at: www.euroncap.com.

Seatbelt Reminder Systems
These systems detect if a seatbelt is fastened in an occupied seat and, if not, provides an alert to the occupant. The alert may take the form of a simple warning light on the dashboard, or be an audible alarm activated when the vehicle has reached a particular speed or travelled a pre-determined distance. Although more common for the driver's seat, many vehicles also include passenger seat warnings.

Electronic Stability Control (ESC)
This is a safety feature which senses when a vehicle is veering from its intended direction. Should this happen ESC automatically applies braking to selected wheels individually to take the car back to its planned course, thus reducing the likelihood of accidents involving skidding and/or overturning.

The EC impact assessment suggests that ESC can reduce accidents by more than 20% in normal conditions and more than 30% in wet or icy conditions. It has been available on some cars for around ten years and costs have been reducing due to improved technology and increased volumes. A UK study on passenger cars equipped with ESC supports the Commission findings. DfT research showed it to be effective in reducing 25% of fatalities when compared to non-ESC equipped cars. The European Commission's proposal mandates future fitment of ESC to all vehicle types.

Advanced Emergency Braking System

This employs sensors to monitor the proximity of the vehicle in front and detect situations where the relative speed and distance between two vehicles indicates that a collision is imminent. In such a situation, automatic systems can activate the vehicle's brakes to slow the vehicle and so either reduce the impact severity or avoid the accident altogether.

Close-Proximity Lenses on HGVs

From 31 March 2009 most HGVs registered after 1 January 2000 will be required to be fitted with close-proximity lenses to help improve the road safety of vulnerable road users. HGVs registered after January 2007 are required to be fitted with these lenses from date of first registration. This leaves a fleet of some 200,000 vehicles which will need close-proximity lenses to be retrofitted.

What we need to do next

We want everyone who is thinking of buying a car to be aware of the various in-car safety measures available and the effect they have in preventing accidents and in reducing the severity of injuries. We want people to make an informed choice when purchasing a car that includes considering the safety of both car occupants and other road users.

We want to set the example in government by buying and hiring cars which have high EuroNCAP ratings, low emissions and low engine sizes for use on official business. We encourage all partners to do the same.

Commitments

In Government, and in partnership with other stakeholders, we will:

- Signpost information for car buyers to help them to make informed safer and greener choices.
- Ensure that all new cars purchased or hired by the Scottish Government have a high EuroNCAP rating, low engine size, low emissions and are fuel efficient.
- Support EC recommendations to include safety features in new cars as standard.
- Encourage and support the fitting of close-proximity lenses on HGVs.

What we all can do

- Check out the EuroNCAP ratings for cars we are considering buying and make an informed choice regarding safety features.


ROAD
CLOSED
AHEAD

Chapter Ten

Commitments

This section is in tabular form and details the commitments to deliver the Framework broken down into short term (one to two years), medium term (two to five years) and longer term (five to ten years).

Working Together

Commitments	Short Term	Medium Term	Long Term
Investigate the establishment of a strategic Scottish group which is representative of the major road safety disciplines and key delivery partners.	✔		
Introduce a Scottish Road Safety Week after consultation with partners.		✔	
Produce an annual public update on the delivery of the Framework.	✔		
Help to promote existing information sharing fora and databases and consider whether there is a need for a specific initiative for Scotland.		✔	
Consider, with partners, local pilots of initiatives for evaluation and promulgation of results across Scotland.		✔	
Explore the inclusion/effectiveness of wider statistical evidence other than that of Stats 19.		✔	
Ensure Scottish views are included in the DfT Stats 19 review.	✔		
Work with local authorities and police forces in order to identify their needs in relation to expanding Road Casualties Scotland to include casualty analysis by home post code.	✔		
Encourage and support the use of intelligence-led road safety targeting.		✔	

Children and Young People

Commitments	Short Term	Medium Term	Long Term
Aim to achieve our ambitious child casualty reduction targets by 2020, by scrutinising the circumstances of each child fatality and reporting to Scottish Ministers with recommendations for action.			✔
Fund Road Safety Scotland to develop innovative road safety educational resources (including a new resource for pupils in lower secondary school and a new Early Years resource to replace the Children's Traffic Club in Scotland).		✔	
Undertake an audit of our road safety education resources to ensure they address the specific issues which Scotland's child road casualty record presents and that they keep pace with educational developments and methods.	✔		
Commission new research to investigate the links between road safety and disadvantaged children and those in ethnic minority groups and implement agreed action.		✔	✔
Continue to support the use of school travel plans, fully involving the local community, through grant to the Sustrans School Run Team and cycle training resources from RSS and Cycling Scotland.	✔		
Investigate, report and implement ways to help ensure schoolchildren's safety when getting on and off school buses.	✔		
Call on UK Government to consider any strengthening of legislation in relation to school transport.	✔		

Pedestrians

Commitments	Short Term	Medium Term	Long Term
Publish guidance for Scottish roads authorities on designing streets, focusing on the needs of pedestrians.	✔		
Encourage local authorities to consider 20 mph zones in all residential areas.		✔	
Investigate whether alcohol is playing a greater part in pedestrian casualties and, if it is, consider what we can do to reverse the trend.		✔	✔

Motorcyclists

Commitments	Short Term	Medium Term	Long Term
Encourage training and support for motorcyclists, e.g. through Bikesafe and other advanced rider training schemes.		✔	
Develop a website which provides a link to all sites providing information on a range of issues, including safety, of interest to motorcyclists.	✔		
Through RSS, support targeted publicity campaigns aimed at motorcyclists.		✔	
Consider the needs and vulnerabilities of motorcyclists when designing new roads and implementing safety features on existing roads.			✔

Pedal Cyclists

Commitments	Short Term	Medium Term	Long Term
Develop a Cycling Action Plan for Scotland to achieve the overarching outcome of 'more people cycling more often'. One action will be to increase the numbers of children receiving cycle training and therefore promoting road safety.	✔		
Ensure that all road users receive appropriate education and training messages about safer cycling in the road environment, including journeys to and from school and in residential areas.	✔		
Continue to monitor and develop SCTS resources for dissemination to Road Safety Units and others responsible for co-ordinating the SCTS programmes.	✔	✔	✔
Encourage the wearing of correctly fitted helmets by cyclists.		✔	
Ensure cyclists are considered in new road and maintenance schemes.			✔

Pre-Drivers

Commitments	Short Term	Medium Term	Long Term
Seek to influence young people's attitudes to road safety and future driving behaviour before they get behind the wheel.		✔	
Support the implementation and encourage take up of the safe road user award.	✔	✔	
Develop a guide to organising pre-driver events for senior secondary school pupils.		✔	

Drivers aged 17-25

Commitments	Short Term	Medium Term	Long Term
Continue to look for innovative ways to target younger drivers with appropriate messages about safe driving, to increase their awareness and understanding of their vulnerability, and the dangers they face due to inexperience.	✔	✔	✔
Provide information and support for parents and carers on how to set a good driving example.		✔	
Encourage younger drivers to undergo post-test training by engaging with the private sector, including the insurance industry, to explore incentivisation.		✔	
Encourage initiatives which lead to qualifications, safer driving attitudes and behaviours.		✔	
Conduct a public debate on young driver issues including graduated licences and additional training.	✔		

People who Drive for Work

Commitments	Short Term	Medium Term	Long Term
Encourage and support the Royal Society for the Prevention of Accidents (RoSPA) (Scotland) with the formation of the Scottish Occupational Road Safety Alliance (ScORSA) in order to raise employers' awareness of the need to have a policy on the Managing of Occupational Road Risk (MORR).	✔		
Continue our activities to ensure that Safe and Fuel Efficient Driving (SAFED) training is embedded within the freight industry.	✔		
Introduce the development of SAFED training for van drivers in Scotland.	✔		
Provide road safety and speed awareness sessions for Scottish Government staff.		✔	
Ensure that all contractors working with Scottish Government have a MORR policy in place.		✔	
Encourage an increase in the provision of rest areas across Scotland.			✔

Older Drivers

Commitments	Short Term	Medium Term	Long Term
Promote initiatives to raise awareness amongst older drivers of their vulnerability and ways in which they can address this.		✔	
Encourage full use of public transport.	✔		
Investigate ways to promote and facilitate initiatives relating to further training for older drivers including consideration of incentivisation to do this.			✔

Drivers from Abroad

Commitments	Short Term	Medium Term	Long Term
Continue to meet the demand for the migrant workers booklet, exploring the need for production in other languages. We will also consult with the United Kingdom Border Agency (UKBA), to ascertain the most effective way to disseminate the information as widely as possible.	✔		
Continue to produce the tourist information leaflet and 'keep left' sticker. We will consult with Visit Scotland to ensure it is promoted widely in advance of the tourist season each year.	✔		
Continue to monitor accidents involving foreign drivers and discuss and implement appropriate actions, with partners where relevant.		✔	
Promote the use of Fresnel lenses by left-hand drive HGVs to avoid blind spots and side-swipe incidents.		✔	

Rural Roads

Commitments	Short Term	Medium Term	Long Term
Continue to publicise the risks associated with driving and riding on rural roads and warn drivers of potential dangers.	✔	✔	✔
Consider what further actions to take from current research on rural roads.		✔	
Encourage any proposal by the Driving Standards Agency (DSA) to include specific pre-test training on rural roads.		✔	
Continue to support targeted enforcement campaigns on rural roads.	✔	✔	✔

Impairment

Commitments	Short Term	Medium Term	Long Term
Continue to press the UK Government for a reduction in the drink drive limit and for powers for the police to carry out breath testing anytime, anywhere.	✔		
Give greater prominence to the 'Don't risk it' message throughout the year through the targeting of more road policing officers to carry out increased enforcement and raise the perceived risk of being caught.		✔	
Promote the use of data enabled roadside evidential breath screening devices by Scottish police forces.	✔		
Raise awareness of the dangers of fatigue among drivers.		✔	
Raise public awareness of the possible effects on driving after taking some prescription or over the counter drugs.		✔	
Continue to work in partnership with ACPOS and other partners, including the private sector, to provide publicity in support of enforcement initiatives by Scottish police forces.	✔	✔	✔
Introduce, in liaison with the Scottish Government Marketing Unit, drink drive publicity campaigns outside of the traditional summer and festive seasons.		✔	
Press the UK Government to quickly ensure Home Office type approval of roadside drug testing devices.	✔		

Seatbelts

Commitments	Short Term	Medium Term	Long Term
Conduct research into seat belt compliance in Scotland and act on the research findings.		✔	
Raise awareness of the importance of seat belts, including via TV and radio advertisement, with a view to creating future generations who will automatically use seat belts whenever they travel in a vehicle.	✔		
Seek ways of bringing attention to seatbelt wearing, for example, through the use of seat belt accessories that are highly visible.		✔	
Continue to educate and encourage drivers to ensure that children are properly restrained in cars and vans.	✔		
Support the introduction of a requirement for children aged between three and 14 to wear seat belts on buses and coaches where fitted.	✔		
Press the case with the UK Government to make non-seatbelt wearing an endorsable offence (i.e. one which attracts licence penalty points in addition to the current fine).		✔	

Speed

Commitments	Short Term	Medium Term	Long Term
Promote the voluntary use of Intelligent Speed Adaptation (ISA).		✔	
Consider a pilot in Scotland to test out the effectiveness of voluntary ISA in road safety.		✔	
Continue to publicise and educate people about the risks associated with speeding.	✔	✔	✔
Encourage local authorities to implement any changes indicated by their review of speed limits.		✔	
Continue to raise awareness of speed limits, including those that apply to different types of vehicle on the different categories of roads.	✔		
Continue to support the Safety Camera Programme.	✔		
Support the development and implementation of the new viewing and administration system for the Safety Camera Partnerships.	✔		
Consider if the introduction of a Speed Awareness Scheme focused on speeding would be an appropriate contribution to road safety in Scotland.		✔	
Increase awareness of the benefits of lower speed driving in relation to fuel efficiency, health impacts and road safety.		✔	
Publish a Delivery Plan on Climate Change that will require significant changes in driving practice.	✔		

Distraction

Commitments	Short Term	Medium Term	Long Term
Continue to raise awareness through targeted campaigns of the dangers of driver distraction.	✔	✔	✔
Encourage everyone to acknowledge driving as a skill which requires concentration and judgement.			✔

Trunk Roads

Commitments	Short Term	Medium Term	Long Term
Undertake Road Protection Score Surveys, for the remaining two-thirds of Scotland's trunk road network and determine how this information can complement the existing processes within the road safety engineering programme.	✔	✔	
Continue to consider and implement a range of proactive risk removal strategies to reduce the severity and frequency of impacts with hazards.	✔	✔	✔
Continue to invest in providing 2+1 overtaking opportunities.	✔	✔	✔
Consider the most appropriate barriers to protect vulnerable users such as motorcyclists.	✔	✔	✔
Continue to invest in junction improvement schemes.	✔	✔	✔
Rank the worst performing junctions on the trunk road network, by accident frequency and severity over the last ten years, and prepare a programme to improve selected locations.	✔		
Develop Route Safety Groups for each of the trunk road routes with participation from relevant road safety partners such as local authorities, police forces, emergency services, safety camera partnerships, etc.	✔	✔	
Examine the possibility for further rollout of TRISS.	✔	✔	
Implement Strategic Transport Projects Review including: – Transport Scotland's Strategic Road Safety Plan; – Road Safety Improvements in North and West of Scotland; – Route Management; – A82 targeted road improvements; – Road safety improvements in North and West Scotland; – A9 upgrade from Dunblane to Inverness; – A96 from Inverness to Nairn Upgrade; – Targeted Road Congestion/ Environmental Relief Schemes; and – Dundee Northern Relief Road.	✔	✔	✔

Local Roads

Commitments	Short Term	Medium Term	Long Term
Continue to seek improvements to the planning, co-ordination and implementation of safety measures at roadworks through Codes of Practice and further legislation if necessary.	✔	✔	✔
Produce a best practice guide with SCOTS for carrying out safety audits by reviewing current local authority procedures.		✔	
Encourage and promulgate research and guidance in the engineering field through SCOTS.	✔	✔	✔
Monitor and evaluate the progress of the A811 route safety strategy and, if successful in the reduction of casualties, encourage rollout across Scotland.		✔	

Safer Vehicles

Commitments	Short Term	Medium Term	Long Term
Signpost information for car buyers to help them to make informed safer and greener choices.	✔		
Ensure that all new cars purchased or hired by the Scottish Government have a high EuroNCAP rating, low engine size, low emissions and are fuel efficient.		✔	
Support EC recommendations to include safety features in new cars as standard.	✔	✔	✔
Encourage and support the fitting of close-proximity lenses to HGVs.	✔		

Annex A

Organisation of road safety policy and delivery

UK Government

Many road safety functions are the responsibility of the UK Government, including policy and legislation relating to driver and vehicle licensing (Driver and Vehicle Licensing Agency, DVLA), driver training and testing (Driving Standards Agency, DSA), vehicle standards (Vehicle and Operator Services Agency, VOSA), national speed limits, traffic signs, the drink-drive limit and road traffic offences and penalties (Department for Transport, DfT). These are commonly referred to as 'reserved' functions. A more detailed list of reserved functions can be found at Appendix 1 to this Annex.

Department for Transport published the GB Road Safety Strategy, 'Tomorrow's Roads: Safer for Everyone' in 2000 in association with the Scottish Government and Welsh Assembly. The Strategy contained targets for road casualty reductions in the period to 2010 alongside actions designed to achieve them. The latest review was published in February 2007 and a new Strategy will follow post 2010.

Driving Standards Agency (DSA) sets the standards for the learning process and the driving test. DSA also sets the standards for approved driving instructors. The Agency issued a Learning to Drive Consultation Paper in 2008 which aims to encourage a customer-led training, testing and driving for life programme.

European Union (EU)

The EU has powers to introduce future Directives on specific road safety issues such as vehicle standards or roads infrastructure. Member states are then invited to adopt them, with the aim of achieving consistency and minimum road safety standards on Europe's roads. The UK Government is responsible for the adoption of EU Directives.

Scottish Government

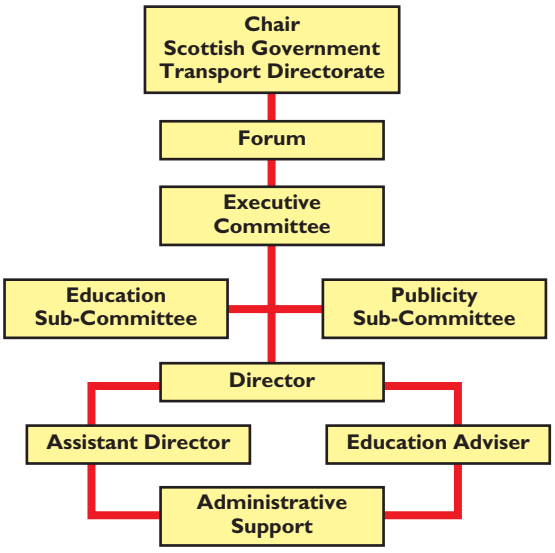
The Scottish Government has **policy responsibility** for devolved aspects of road safety where the primary legislation responsibility rests with the UK Government. This includes road safety education and publicity and working in partnership with local authorities, the police and other key interests to improve road safety. These subsidiary functions include powers for Scottish traffic authorities in regard to speed limits on trunk roads and consent to certain speed limit orders by local authorities. Other traffic management matters, including policy and legislation on speed-reducing engineering measures and the designation of home zones, are fully devolved.

The Scottish Government shares with the UK Government responsibility for the promotion of road safety in Scotland. The Scottish Government also engages with the UK Government and its Agencies on UK Government-led road safety policy, driver training and testing, enforcement issues and consultations that extend to Scotland.

Road Safety Scotland (RSS), formerly known as the Scottish Road Safety Campaign, was set up to address road safety education, training and publicity matters in Scotland. Funded by, and sitting within, the Scottish Government, RSS brings together some of the key road safety interests to ensure a co-ordinated approach to road safety throughout the country.

The RSS Forum oversees the organisation's activities, managed by an Executive Committee, while its main business is carried out by its two Sub-committees dealing with education and publicity. The Structure of RSS is shown in the diagram at figure thirteen. Membership is drawn from the whole road safety community, including Local Authority and Police Road Safety Officers. Other organisations represented include health, education, motoring organisations, voluntary organisations, the Fire and Rescue Service, Transport Scotland and the Safety Camera Programme.

Figure thirteen: Road Safety Scotland Committee Structure



RSS has a number of aims and objectives:

Aims include:

- to raise and maintain public awareness of road safety issues;
- to work with Scottish Government Analytical Services to research, analyse and monitor the reasons for road accidents in Scotland;
- to develop strategies to address key road safety problems;
- to promote development of key Scottish road safety educational materials and targeted road safety publicity campaigns; and
- to contribute towards achievement of Government road safety casualty reduction targets.

Objectives include:

- to provide a Scottish Forum for interchange of information; and
- to develop, promote, collate and disseminate information on good practice in road safety, education, training and publicity throughout Scotland.

RSS is responsible for a suite of education materials which sit within the framework of the Scottish education system's *Curriculum for Excellence*. These provide an end-to-end education and training programme in road safety which is consistent across Scotland and is highly regarded across the UK and beyond.

RSS also administer the Scottish road safety publicity campaign under the banner of **'Don't risk it'**. All Scottish Government road safety TV, radio, press and other advertising carries this slogan which is based on research[66] which found that people can be complacent about messages of death and injury on the road, they are much more likely to be deterred by messages which outline the risks and consequences of being caught speeding, drink driving, etc.

The RSS website, which includes the latest annual report and business plan, can be accessed at: www.roadsafetyscotland.org.uk/

Transport Scotland was established in January 2006 as an executive agency of the Scottish Government. One of the aims of the Agency is to ensure that Scotland's trunk road network is managed efficiently, effectively, and economically. It delivers a programme of enhancements to the trunk road network and supports Scotland's National Transport Strategy by setting investment priorities for the network. Key objectives within both of these aims directly affect road safety by maintaining and renewing the trunk road infrastructure and ensuring that service levels are maintained to required standards.

In 2007 Transport Scotland published its Strategic Road Safety Plan. This can be accessed at: www.transportscotland.gov.uk/reports/publications-and-guidance/road/j9041-02.htm

The document was produced to set out how Transport Scotland delivers road safety on trunk roads. It highlights the need to remove risk and prioritise initiatives aimed at preventing accidents and mitigating the effects when accidents do occur. It shows how Transport Scotland is harnessing intelligent solutions, demonstrating innovation and working with partners, while sharing best practice with roads authorities across Scotland and throughout Europe.

Scottish Safety Camera Programme

The Scottish Safety Camera Programme aims to reduce accidents at locations where there is a history of fatal and serious accidents and also an identified problem with speeding or failing to obey a red light traffic signal. It is delivered through eight regional Safety Camera Partnerships that cover all of mainland Scotland. The Partnerships are:

- Central Scotland
- Dumfries and Galloway
- Fife
- Lothian and Borders
- North East
- Northern
- Strathclyde
- Tayside

The main members of the Partnerships are the police, local authorities and Transport Scotland. The Partnerships also receive support from other organisations that have an interest in reducing accidents on the road network, such as the Fire and Rescue Service, the Scottish Ambulance Service and the National Health Service.

The Safety Camera Programme is funded by direct grant from the Scottish Government.

Local Authorities

Local authorities are responsible for road safety on the local road network. The 1988 Road Traffic Act puts a 'statutory duty' on the local authorities to deliver an appropriate road safety education service and for the provision of a safe local road network. This includes road construction, accident investigation and analysis, traffic calming, setting speed limits and facilities for pedestrians and cyclists.

Powers and Duties of Local Authorities

- Local authorities are responsible for all aspects of road safety and traffic management on local roads in their areas.
- Under the Road Traffic Act 1988, each local authority must prepare and carry out a programme of measures designed to promote road safety and may make contributions towards the cost of measures for promoting road safety taken by other authorities or bodies.
- Under that Act, local authorities have a duty to carry out studies into accidents and take such measures appropriate to prevent such accidents.
- Local Roads authorities (and Transport Scotland) have a statutory duty (Section 1 of the Roads Scotland Act 1984) to manage and maintain all roads within their area. These duties are intrinsic to the overall road safety effort.
- Local authorities also have a duty under Section 122 of the Road Traffic Regulation Act 1984 to secure the expeditious, convenient, and safe movement of vehicular and other traffic (including pedestrians) on local roads in their area. This general duty is met by the local authority making traffic regulation orders which can be introduced for a variety of reasons.
- The Scottish Government considers that local authorities are in the best position to decide when a particular traffic management scheme could be usefully introduced on roads in their area.

Society of Chief Officers of Transportation in Scotland (SCOTS) is affiliated to The County Surveyors Society and has representation across local authorities.

The aim of SCOTS is to be in a position to give policy advice on a national basis and to act as a forum for professional advice and interchange of information on all policy matters affecting transportation in the widest sense; including roads, traffic management, road safety, lighting, public transport and issues related to land use, development and the physical environment.

Community Safety Partnerships (CSPs) are part of each of Scotland's 32 local authorities, set up in order to embrace broader Community Planning. Since the mid-1990s these partnerships have encouraged practitioners to use evidence to identify local community safety priorities. In the more successful areas, analysis of data has led to effective problem solving for specific and strategic road safety issues. This data-based approach is evident in many examples of Scottish best practice where road safety issues are resolved through local partnerships. CSPs have the ability to raise local road safety issues and to fund initiatives, working in partnership across the public sector.

A number of CSPs have undertaken strategic assessments or audits where road safety has been included and, in several, highlighted as a priority.

Road Safety Units (RSUs) are responsible for local delivery and promotion of road safety education, training and publicity. RSUs are located throughout Scotland. In some areas the RSU is administered by the local authority while, in other areas, the RSU sits within the police force. In four areas the RSU is jointly operated by the local authority and the police. A map showing the location of each RSU in Scotland can be found on the Road Safety Scotland website. A full location list is at Appendix 2 to this Annex.

Institute of Road Safety Officers (IRSO) is a central organisation for all persons actively engaged in the promotion of road safety, casualty reduction and sustainable travel. IRSO's main aim is to facilitate and support road safety and sustainable travel professionals to deliver effective programmes to reduce casualties and congestion. IRSO also aims to promote the efficiency and specialist knowledge of all its members whether on behalf of local authorities, police authorities, statutory bodies, other organisations, commercial concerns or individually.

Emergency Services – Police, Fire and Rescue Service, Ambulance Service

Scottish Police forces are responsible for enforcing road traffic law. The Association of Chief Police Officers in Scotland will be launching its new Road Policing Strategy in 2009. It will include measures to reduce casualties and improve road safety through higher visibility, denying criminals the use of the road and reducing anti-social behaviour on the roads.

Scottish Fire and Rescue Service remit includes a statutory function related to attending road accidents. Alongside this, the Service contributes to prevention campaigns through public education initiatives. The Chief Fire Officers Association (Scotland) will also be launching its Road Safety Strategy in 2009. Its vision is to work in partnership to reduce the numbers of people killed or seriously injured on Scotland's roads.

Scottish Ambulance Service (SAS) attends road accidents when required. Its crews provide vital life saving treatment, treating patients at the scene of accidents and, when necessary, taking them to hospital.

In partnership with emergency services across Scotland, the SAS takes an active role in a wide range of road safety initiatives. These range from projects to raise road safety awareness and challenge the attitudes of young people, to projects which aim to reduce the numbers of road deaths and serious injuries sustained by motorcyclists.

The Service is a member of the Scottish Occupational Road Safety Alliance and the Royal Society for the Prevention of Accidents.

Charitable Road Safety Organisations

There are a number of voluntary organisations which focus on road safety, some of which are highlighted below. A fuller list with web addresses is at Appendix 3 to this Annex.

Royal Society for the Prevention of Accidents (RoSPA) is a registered charity established over 90 years ago, and aims to campaign for change, influence opinion, contribute to debate, educate and inform. RoSPA's Scottish office works closely with the Scottish Government on activities to improve road safety, including training for road safety practitioners.

Road Safety Foundation (formerly the AA Foundation for Road Safety Research) was founded in 1986 by the UK Automobile Association (then a member-owned motoring club). The charity was established as a permanent legacy of the 1986 European Road Safety Year as Britain launched its first national casualty reduction target. The objectives of the Foundation are to carry out or procure research into all factors affecting the safe use of public roads. Its key programme is the European Road Assessment Programme (EuroRAP) founded as a non-profit association by the Foundation.

Scottish Campaign against Irresponsible Driving (SCID) was formed in 1985. Its objectives are to help and advise the families of victims of road crashes; to seek to restructure the law as it applies to criminal traffic offences which have caused death or injury; to deter irresponsible drivers by the imposition of more relevant sanctions; and to encourage drivers, through education, to adopt safer standards.

Brake is a registered charity with two aims: to prevent death and injury on the roads through education of all road users and campaigning for improvements to road safety; and to provide support services for people who are bereaved or affected by serious injury in a road crash.

RoadPeace is a UK charity providing support for victims of road crashes and campaigning for justice, road safety and road danger reduction.

Motoring Organisations

The motoring organisations, including the Automobile Association, and the Royal Automobile Club represent the interests of motorists to government and provide information to motorists on all aspects of driving. Through Road Safety Scotland, the Scottish Government works with the motoring organisations on the development of road safety education and publicity initiatives. The Institute of Advanced Motorists is represented on RSS's Publicity Sub-committee.

Private Sector

There are a number of private sector companies which support road safety in Scotland in a variety of ways. These range from sponsorship of road safety campaigns to incentivisation of additional driver training through reduced insurance premiums.

Appendix 1 to Annex A

Reserved Road Safety Legislation

Road Traffic Act 1988

- The Highway Code.
- Driving offences, including drink and drug driving and 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.

Road Traffic Offenders Act 1988

- Penalties for road traffic offences, including driver retraining schemes as court disposal.
- Drink drive offenders courses.
- Type approval of devices for detecting speeding and traffic signal offences (speed and red light cameras).
- Statutory driver improvement schemes (diversion from prosecution).

Road Traffic Regulation Act 1984

- National speed limits – the Scottish Parliament cannot pass primary legislation in respect of speed limits but is responsible for carrying out a number of functions within existing legislation.
- Power to make regulations relating to the technical aspects of pedestrian crossings.
- Traffic Signs – the Scottish Parliament does not have power to pass primary legislation relating to traffic signs, but can exercise certain functions within existing legislation.

Appendix 2 to Annex A

Location of Road Safety Units in Scotland

Argyll and Bute
Argyll and Bute Council, Development Services, Kilmory Castle, Lochgilphead. PA31 8RT
Tel: 01546 604114

Central Scotland
Central Scotland Police, Collision Prevention Unit, Police Headquarters, Randolphfield, Stirling FK8 2HD Tel: 01786 456533

Dumfries and Galloway
Dumfries and Galloway Constabulary, Operational Services, Cornwall Mount, Dumfries, DG1 1PZ, Tel: 01387 242235

East Ayrshire
East Ayrshire Council, Holmquarry House, Holmquarry Road, Kilmarnock KA1 4EP
Tel: 01563 555 593

East Dunbartonshire
Community Safety Unit, East Dunbartonshire Council Broomhill Industrial Estate, Kilsyth Road, Kirkintilloch, G66 1TF, Tel: 0141 574 5766

East Renfrewshire
East Renfrewshire Council, Roads Planning and Transportation Service, 2 Spiersbridge Way, Spiersbridge Business Park, Thornliebank, G46 8NG Tel: 0141 577 3449

Fife
Fife Police Headquarters, Road Safety Unit, Detroit Road, Glenrothes, KY6 2RJ
Tel: 01592 418 510

Glasgow
Glasgow City Council, Road Safety Development, Traffic Operations, Land and Environmental Services, Richmond Exchange, 20 Cadogan Street, Glasgow G2 7AD
Tel: 0141 287 9043

Grampian
Grampian Police, Road Safety Unit, Nelson Street, Aberdeen AB24 5EQ
Tel: 01224 306730

Highland
Highland Council, TEC Services, Ardross House, 3 Ardross Terrace, Inverness IV3 5NQ
Tel: 01463 702690

Inverclyde
Inverclyde Council, Safer Communities, 40 West Stewart Street, Greenock. PA15 1YA
Tel: 01475 715987

Lothian and Borders
Road Safety Coordinator, Safer Communities Department, Lothian and Borders Police, Police Headquarters, Fettes Avenue, Edinburgh EH4 1RB Tel: 0131 311 3118

Northern Constabulary
Road Safety Officer, Police Headquarters, Perth Road, Inverness IV2 3SY
Tel: 01463 720407

North Ayrshire
North Ayrshire Council, Perceton House, Irvine, KA11 2AL Tel: 01294 225264

North Lanarkshire
Senior Road Safety Education Officer, North Lanarkshire Council, Dalziel Building, 7 Scott Street, Motherwell ML1 1SX Tel: 01698 274214

Orkney Islands
Orkney Islands Council, Community Safety, School Place, Kirkwall KW15 1NY
Tel: 01856 873535

Renfrewshire
Renfrewshire Council, Planning and Transport Roads Division, Renfrewshire House, Cotton Street, Paisley PA1 1LL Tel: 0141 842 5702

Scottish Borders
St Boswell's Police Station, Road Safety Unit, Greenside Park, St Boswells, TD6 0AH
Tel: 01835 823036

Shetland Isles
Shetland Islands Council, Safety and Risk, 4 Market Street, Lerwick, Shetland, ZE1 0JN
Tel: 01595 744560

South Ayrshire
South Ayrshire Council, Development and Environment, South Ayrshire Council, 4th Floor, Burns House, Burns Statue Square, Ayr, KA7 1UT Tel: 01292 616371

South Lanarkshire
South Lanarkshire Council, Road Safety Office, Montrose House, 154 Montrose Crescent, Hamilton, ML3 6LB Tel: 01698 453617

Tayside
Tayside Police, Road Policing Unit, Baluniefield Police Station, Balunie Drive, Dundee DD4 8UT Tel: 01382 596431

West Dunbartonshire
West Dunbartonshire Council, Housing, Environmental and Economic Development, Council Offices, Garshake Road, Dumbarton, G82 3PU Tel: 01389 737630

Western Isles
Comhairle nan Eilean Siar, Technical Services Department, Sandwick Road, Stornoway, Isle of Lewis, HS1 2BW Tel: 01851 709486.

Appendix 3 to Annex A

Voluntary Road Safety Organisations (non-exhaustive list)

The Royal Society for the Prevention of Accidents – www.rospa.org.uk

The Scottish Accident Prevention Council – www.sapc.org.uk

BRAKE – www.brake.org.uk

Child Accident Prevention Trust – www.capt.org.uk

RoadPeace – www.roadpeace.org/

Campaign Against Drink Driving – www.cadd.org.uk

Bicycle Helmet Initiative Trust – www.bhit.org/

British Horse Society – www.bhs.org.uk

Annex B

Road safety expert panel

Chair:

Stewart Stevenson, Minister for Transport, Infrastructure and Climate Change

Members:

Jane Greer, Chair, Institute of Road Safety Officers Scottish Group

Neil Greig, Director, Policy and Research Division, Institute of Advanced Motorists

Dr Steve Lawson, Technical Director, Road Safety Foundation and EuroRAP AISBL

Michael McDonnell, Director, Road Safety Scotland

Dr Bob McLellan, Head of Transportation Services, Fife Council

Professor Steve Stradling, Professor of Transport Psychology, Napier University

John Vine, Chief Constable, Tayside Police

Contributions were also made by:

Professor Richard Allsop OBE, DSc, FREng, University College London

Roger Johansson, Swedish Road Administration

Chief Inspector Donald McMillan, Central Scotland Police

Kathleen Marshall, Scotland's Commissioner for Children and Young People

Douglas Muir, Society of Chief Officers of Transportation in Scotland

Carl Olivarius, Argyll and Bute Council (on secondment to the Scottish Government Road Safety Team)

Annex C

Road Safety Scotland educational resources and websites, June 2009

Children's Traffic Club in Scotland (CTCS)

The Club was developed to help parents teach their young children how to stay safe when they are out walking, playing or travelling. Membership of the Club is free to all three year olds resident in Scotland. On registration, children will receive six CTCS books at three monthly intervals. Each book contains pictures, stories and activities to help children have fun whilst learning to stay safe.

Streetsense

This is a suite of resources for primary schools in Scotland. Whilst the original resource was produced in line with the 5-14 National Guidelines, the new Streetsense2 resource embraces the *Curriculum for Excellence* providing teachers with overarching links to other subject areas across the curriculum. The Streetsense2 resource is in every classroom in Scotland. This is enhanced by Streetsense2.com which provides a fully interactive classroom resource. Gaelic worksheets are also available.

Streetwise Guys

Streetwise Guys is a website aimed at 8-14 year olds in primary and lower secondary. In particular, it targets children in the transition period from primary to secondary, when they are most at risk. The website uses interactive games to educate young people about road safety in a fun way. It can be used in the classroom, whilst teaching road safety.

S1/S2 PSD Road Safety Education

The PSD Road Safety Education pack contains materials developed for S1 and S2 pupils, who are amongst the most vulnerable road users. It provides teachers' notes, suggested lesson plans and pupil activities for Levels D and E. It also contains support materials and a script for the S1 road safety play 'The Nine Lives of Roddy Hogg'. This resource is being replaced in summer 2009 with 'Your Call' which was launched on 29 April 2009.

a2bsafely

a2bsafely is an interactive, multi-media road safety education resource for young people with mild to moderate additional learning needs. It is an online resource, for which support materials are available in hard copy. It is film-based, and uses activities to explore five real life journeys, with progression through four levels of difficulty. Four journeys are on foot and one is by bus. The road safety messages contained in the activities are clear and relevant. It is a peer education resource, narrated and presented by young people.

Junior Road Safety Officer Scheme

The aim of a Junior Road Safety Officer (JRSO) scheme is to empower children to highlight road safety issues within their school. The JRSO scheme has a dedicated website, with games and competitions, as well as a 'Staff Room' area with information for teachers and a 'Members Area' specifically for the JRSOs.

Theatre in Education

'The Journey' is forum theatre, aimed at P6 pupils, which features audience participation throughout the play. Key road safety messages in the play are: walking and cycling safely to school; transition from primary to secondary school; and peer pressure when crossing the road.

'The Nine Lives of Roddy Hogg' targets first-year secondary pupils who, in the transition stage from primary, are at an increased risk of involvement in a road accident.

'Friends Disunited' is a new play for senior secondary pupils, dealing with the fun and responsibilities involved in becoming a driver and getting your first car. It follows the lives of four friends at secondary school, one of whom is given a car for his birthday.

'Urban Roadeo' is a play specifically for older drivers aged 55+, whose road safety skills and knowledge may be in need of updating. It is complemented by a booklet which provides information about road safety issues.

Crash Magnets

Crash Magnets is a road safety tool box for secondary school students in their mid-to-late teens. The resource comprises a DVD with five programmes covering subjects including driver distraction, speed, 'cruise culture' and drink and drug driving. Young people from across Scotland are Vox Pop subjects in each programme, expressing opinions and talking about their experiences. This aims to encourage students to feel confident about expressing themselves in class about their own opinions and experiences.

Out of School Activity Pack

The pack is full of ideas for fun things to do in After School and Breakfast Clubs. It has been designed specifically for the out of school care service and contains a range of adaptable play activities for all age groups.

Roadways

Roadways was produced in association with youth organisations and Road Safety Officers. It gives members both mental and physical exercises and should contain all the information and ideas needed to cover badge work in road safety. It comes in four main sections with activities and fact sheets for the 8-14 age range.

Travel Pack

The Travel Pack is an audio activity pack for families with young children travelling by car. It contains a double CD with the aim of entertaining and informing young children. One CD features 'The Magic Book', an enchanting and intriguing story containing music and songs. The second features games and songs based on various road safety themes which are relevant to young children.

Scottish Cycle Training Scheme

This Scheme is offered to all P6/7 pupils throughout Scotland by their local Road Safety Unit. The scheme is designed to give pupils the skills and knowledge they need to ride safely and sensibly on the road and thus help reduce the significant numbers of child cyclists involved in road accidents. The students learn a variety of manoeuvres on and/or off-road, complemented by cycling theory in the classroom.

Adult Literacy

'On The Road' is a resource specifically targeted at young drivers aged between 17-25, who are the most likely group of road users to have a car crash and account for a quarter of drivers killed or seriously injured. Each section in the pack looks at particular topics related to safe driving.

Websites

www.roadsafetyscotland.org.uk – the main website for Road Safety Scotland.

www.crashmagnets.com – a support website for the 'Crash Magnets' resource for senior secondary pupils.

www.jrso.com – a website to complement the Junior Road Safety Officer scheme in primary schools.

www.getinlane.com –developed for young drivers, this website provides information on a range of road safety issues.

www.streetwiseguys.co.uk – aimed at children aged 8-14 years, the website educates children about road safety. In particular, it targets children in the transition from primary to secondary school.

www.a2bsafely.com – an online road safety educational resource for young people with mild to moderate support needs.

www.streetsense2.com – a support website for the 'Streetsense' educational resource for primary schools.

www.protectchild.co.uk – a support website for the Good Egg Campaign, which focuses on the correct fitting and use of child car seats and restraints.

OHSB document on managing occupational road risk assessment

Activity	Potential Hazards	Existing Control Measures	Additional Action Required/Comment
Unlawful driving of vehicle	Road Traffic (RT) offence	Holds appropriate driving licence Holds MOT; if appropriate Adequate (business) insurance; if appropriate Employee to report if disqualified from driving	Instigate documentation check procedure by line manager Undertake any identified training
Driving defective vehicle	Accident, RT offence	Pre-use checks by driver and responsible person Ensure adequate maintenance regime MOT held; if appropriate Fault reporting	
Personal security getting to and from vehicle	Aggression and violence	Refer to SG lone-working procedure Park in well-lit areas Walk to car with colleague Load high-risk items in daylight in close proximity to office Avoid known trouble spots	Refer to lone working risk assessment Consider further controls, e.g. mobile phone, buddying, etc
Use of mobile phone whilst driving	Distraction causing accident; RT offence	No hand-held mobiles to be used whilst driving Adherence to SG policy and guidance Move to a safe place, stop car and switch off engine and remove ignition key prior to making call Drive with mobile phone turned off or on silent mode Refrain from taking calls when driving	

Activity	Potential Hazards	Existing Control Measures	Additional Action Required/Comment
Eating, drinking and using stereo or SatNav systems, etc.	Distraction; reduced ability to respond to situations; reduced control of vehicle.	Refer to SG guidance in safe use of SatNav Avoid eating or drinking, etc. at the wheel Adjust stereo settings when stationary	
Fatigue	RT accident	Take breaks at appropriate intervals (20 minutes every 1-2 hours) When total journey is over 12 hours then schedule an overnight stop Do not drive for more than 7.5 hours Don't drive if feel excessively tired Awareness of medication side effects Drive with window down/keep car interior cool Allow sufficient time for journey and breaks	
Prolonged seating in vehicle	Poor posture; Musculo-skeletal injury	Take breaks at appropriate intervals (20 minutes every 1-2 hours) Take postural breaks – stop and walk about Stretching exercise in the vehicle when stationary Consider need for supportive devices Report any postural ill-health effects to line manager Report specific musculoskeletal diseases if results in period of sick leave	Lumbar rolls or backfriend if deemed necessary
Road rage	Personal injury; shock	Adopt non-aggressive driving to avoid confrontation Do not use lights or horn as a reprimand Pull over and call police to report incident	

Activity	Potential Hazards	Existing Control Measures	Additional Action Required/Comment
Breakdown	Inclement weather, struck by other road vehicles	Regular servicing/maintenance Ensure roadside assistance contract in place Vehicle manual states maintenance details Be prepared – plan journey and emergency arrangements Refer to breakdown guidance located in SG vehicle	
Driving in inclement weather	Fatigue, accident	Avoid/delay journeys in extreme weather Pre-plan journey route Consider alternative arrangements Check data on weather and road conditions prior to journey Modify driving style to suit road/visibility conditions – allow extra braking distances, drive more slowly, etc. Allow extra travel time Winter weather kits	
Poor driving technique	Accident; RT offence	Adopt appropriate attitude/demeanour when driving Drive within the law Driving licence checks Ensure familiarity of driver with vehicle: Private vehicles – driver to be familiar with handbook SG vehicles – ensure familiarisation briefing/induction Adherence to Highway Code Adherence to signs and other traffic directions and instructions Accident/near miss reporting	

Activity	Potential Hazards	Existing Control Measures	Additional Action Required/Comment
Speeding	Accident; RT offence	Avoid speeding – adhere to speed limits Adjust road speed to traffic and weather conditions Allow sufficient time to undertake journey If necessary arrive late – stop car and phone to advise of lateness Driving licence checks Accident/near miss reporting	
Driving under influence of alcohol, illegal drugs or substances of abuse	Reduced ability to respond to situations Reduced judgement (distances, etc.)	Adherence to SG Substance Misuse Policy	
Driving under influence of medicinal drugs	Reduced ability to respond to situations Reduced judgement (distances, etc.); drowsiness	Notify line manager if prescribed medication that may impair driving ability Caution in use of such substances at any time that may affect driving at work Follow manufacturers guidance and be aware of side effects Decline to drive if unfit	
Loading/unloading items into car	Strains/sprains Musculo-skeletal injury; trapping	Refer to SG Manual Handling procedure Risk assess separately where this is significant risk and/or element of work	
Refuelling	Fire/Explosion Allergic reaction/dermatitis	Use of public petrol stations – refer to refuelling procedures as displayed Personal Protective Equipment – for refuelling with LPG Wash spilt fuel off skin or clothes as soon as practicable	

Activity	Potential Hazards	Existing Control Measures	Additional Action Required/Comment
Passengers	Distraction leading to accident	Driver to exercise appropriate levels of awareness when driving Only authorised personnel to be carried on official journeys General driver competency and awareness	
Smoking	Distraction leading to accident	All SG vehicles are designated no-smoking Avoid smoking in private cars and never when another colleague is also present	
Loose items/load	Items forming missiles in event of sudden stop	Avoid hard braking/cornering Secure all loose items and loads Load in footwell if carrying items in front of car Avoid loading on rear parcel shelf Avoid heavy items on rear seat Place items in boot and ensure folding rear seats are secured	
Theft/break-in	Loss/damage to vehicle or items being conveyed Injury to driver/passengers Stress, shock	Lock vehicles Parking in secure, well-lit location Keep valuables out of sight – lock in boot Use of immobiliser and alarm (if fitted) Report incident to police and line manager	

Assessor's details			
Name:	Job title:	Signature and date:	
Manager's acceptance			
Manager's name:	Job title:	Signature and date:	

Annex E

National speed limits for different roads and classes of vehicles

Type of vehicle	Built-up areas* mph	Single carriageways mph	Dual carriageways mph	Motorways mph
Cars and motorcycles (including car-derived vans up to 2 tonnes maximum laden weight)	30	60	70	70
Cars towing caravans or trailers (including car-derived vans and motorcycles)	30	50	60	60
Buses, coaches and minibuses (not exceeding 12 metres in overall length)	30	50	60	70
Goods vehicles (not exceeding 7.5 tonnes maximum laden weight)	30	50	60	70
Goods vehicles (exceeding 7.5 tonnes maximum laden weight)	30	40	50	60

* A 30 mph speed limit generally applies on all roads with street lighting unless signs indicate a different limit.

Stopping Distances at Different Speeds

Speed	Thinking distance	Stopping distance	Overall stopping distance
20 mph	6 metres	6 metres	12 metres (3 car lengths)
30 mph	9 metres	14 metres	23 metres (6 car lengths)
40 mph	12 metres	24 metres	36 metres (9 car lengths)
50 mph	15 metres	38 metres	53 metres (13 car lengths)
60 mph	18 metres	55 metres	73 metres (18 car lengths)
70 mph	21 metres	75 metres	96 metres (24 car lengths)

Annex F

Acronyms

AA
The Automobile Association

ABI
The Association of British Insurers

ACPOS
Association of Chief Police Officers in Scotland

ADI
Approved Driving Instructor

AIP
Accident Investigation and Prevention

ANPR
Automatic Number Plate Recognition

BHIT
Bicycle Helmet Initiative Trust

BHS
British Horse Society

BMA
British Medical Association

CADD
Campaign Against Drink Driving

CAPT
Child Accident Prevention Trust

CBT
Compulsory Basic Training

CFOAS
Chief Fire Officers Association (Scotland)

COSLA
Convention of Scottish Local Authorities

CPC
Driver Certificate of Professional Competence.

CRP
Casualty Reduction Partnership

CSPs
Community Safety Partnerships

CSS
The County Surveyors Society

CTCS
Children's Traffic Club in Scotland

CWSS
Cycling, Walking and Safer Streets programme

DfT
Department for Transport

DSA
Driving Standards Agency

EC
European Commission

ETLLD
Enterprise, Transport and Lifelong Learning Department

ESC
Electronic Stability Control

EU
European Union

EuroNCAP
European New Car Assessment Programme

EuroRAP
European Road Assessment Programme

HOTA
Home Office Type Approval

HSE
Health and Safety Executive

IAM
Institute of Advanced Motorists

ISA
Intelligent Speed Adaptation

ISRT
Instructor Services and Registration Team

ISP
Internet Service Providers

JRSO
Junior Road Safety Officer

JTS
Joint Technical Secretariat

KSI
Killed or Seriously Injured

LGV
Larger Goods Vehicles

MORR
Managing Occupational Road Risk

NESCAMP
North East Safety Camera Partnership

NHS
National Health Service

NTS
National Transport Strategy

OHSB
Occupational Health and Safety Board

PCV
Passenger Carrying Vehicle

PDA
Personal Digital Assistant

PSD
Personal and Social Development

PUDOs
Pick Up and Drop Off points

RAC
Royal Automobile Association

RAS
Road Accidents Scotland

RoSPA
The Royal Society for the Prevention of Accidents

RSS
Road Safety Scotland

RSUs
Road Safety Units

RT
Road Traffic

SAFED
The Safe and Fuel Efficient Driving scheme

SAPC
The Scottish Accident Prevention Council

SAS
The Scottish Ambulance Service

Satnav
Satellite Navigation System

SCID
Scottish Campaign against Irresponsible Driving

ScORSA
Scottish Occupational Road Safety Alliance

SCOTS
The Society of Chief Officers of Transportation in Scotland

SCRAS
Standing Committee on Road Accident Statistics

SCTS
Scottish Cycle Training Scheme

SG
Scottish Government

SOAs
Single Outcome Agreements

SPECS
average Speed Camera Enforcement System

SQA
Scottish Qualifications Authority

STPR
Strategic Transport Projects Review

TRISS
Trunk Road Incident Support Service

TRL
Transport Research Laboratory

UKBA
United Kingdom Border Agency

VAS
Vehicle Activated Signs

VMS
Variable Message Signs

VOSA
Vehicle and Operator Services Agency

Annex G

Bibliography

1 How Many Deaths are we Prepared to Accept', Professor Richard Allsop, UCL, 2005 (www.eprints.ucl.ac.uk/1423/)

2 Road Casualties Scotland 2007, Scottish Government, 2009

3 Scottish Road Safety Strategy; Analysis of Consultation Responses, George Street Research, 2008: www.Scotland.gov.uk

4 Qualitative Research with Young People; Road Safety, ODS Consulting, 2008

5 Vision Zero: www.sei-se/visionzero/vzSummaryReport3.pdf

6 Road Casualties Scotland 2007, Scottish Government, 2009

7 www.dft.gov.uk/pgr/statistics/committeesusergroups/scras/

8 www.northamptonshire.gov.uk/transport/road_safety/partnership.htm

9 www.roadsafetyhub.co.uk

10 www.concept3c.org

11 www.statisticsauthority.gov.uk/uksa/uk-statistical-system/statistics/index.html

12 Review of the S1/S2 Road Safety Education Resource, Colin Buchanan and Partners Ltd, RSN Associates, Scottish Government 2008

13 The Older Child Pedestrian Casualty, Carole Millar Research, Scottish Government, 1998

14 Improving Road Safety Education for Children with Additional Support Needs, Tony Graham, Katy MacMillan, Anne Murray and Steven Reid, ODS, Scottish Executive Social Research 2005

15 Road Accidents and Children Living in Disadvantaged Areas; A Literature Review, Napier University, 2000

16 Road Casualties Great Britain, 2007, Department for Transport

17 Motorcycle Accidents and Casualties in Scotland 1992-2002, TRL Ltd, 2004

18 Risk and Motorcyclists in Scotland, TRL Ltd in collaboration with Tri Napier University, 2006

19 www.scotland.gov.uk/Publications/2007/07/Motorcycling

20 Extent and Severity of Cycle Accident Casualties, Carole Millar Research, Scottish Executive Social Research, 2005

21 Early Years and Early Intervention; A joint Scottish Government and CoSLA policy statement, March 2008

22 Cradle attitudes – grave consequences' 2002, The University of Reading, Frank McKenna and Andrew Waylen

23 Qualitative Research with Young People; Road Safety 2008, ODS Consulting

24 Evaluation of the SRSC Young Driver Campaign, mruk Ltd, 2005

25 Rural Road Safety; A Literature Review, Kevin Hamilton and Janet Kennedy, TRL Ltd, 2005

26 N. Kinnear, S. Kelly, J. Thomson & S. Stradling (2007) Do we really drive as we feel? Ch 7 in Behavioural Research in Road Safety, Seventeenth Seminar, Department for Transport, London

27 Qualitative Research with Young People; Road Safety, ODS Consulting, 2008

28 Young drivers – where and when they are unsafe, IAM Motoring Trust, 2008

29 Safety Culture and Work-Related Road Accidents, Department for Transport, 2004

30 Reducing at-work road traffic incidents, report of the work related road safety task group to govt and the health and safety commission, 2001

31 The Ageing Driver, Department for Transport, Research Compendium 2004/2005

32 European Drivers; Crossing Borders Safety, ABI, 2007

33 Tourist Road Accidents in Rural Scotland, Scottish Executive, 2001

34 www.highways.gov.uk/knowledge/17479.aspx

35 Rural Roads – the biggest killer, IAM Motoring Trust, 2007

36 Rural Road Safety: Drivers and Driving, Scottish Government, 2008

37 Road Casualties Scotland 2007, Scottish Government, 2009

38 Drinking and Driving 2007: Prevalence, Decision Making and Attitudes, Scottish Government 2008, TNS System Three

39 The Incidence of Drugs and Alcohol in Road Accident Fatalities, Department for Transport, TRL Report 495, 2001

40 Illicit Drugs and Driving, Scottish Government 2006, MORI Scotland, Centre for Drugs Misuse Research, University of Strathclyde, Transport Research Institute, Napier University

41 Over-the-Counter medicines and the potential for unwanted sleepiness – Department for Transport Research Report 24 – 2004

42 Driver Sleepiness, Department for Transport, 2001

43 Drinking and Driving 2007; Prevalence, Decision Making and Attitudes; Scottish Government 2008

44 Think! Website, Department for Transport, 2007

45 Raising Compliance with Road Safety Law, European Transport Safety Council, 2007

46 Think! Website, Department for Transport, 2007

47 Seat Belt Wearing in Scotland: A Second Study of Compliance, Halcrow Group Ltd, 2003

48 The Effects of Drvers Speeds on the Frequency of Road Accidents, Taylor, Lynam and Baruya, TRL 2000

49 Ashton and Mackay, Some characteristics of the population who suffer trauma as pedestrians when hit by cars and some resulting implications, 4th IRCOBI International Conference, Gothenburg 1979

50 The Speeding Driver; Who, How and Why, NFO System Three Social Research, TRL, Transport Research Institute, Napier University, 2003

51 Scots guidance on setting local speed limits can be accessed at www.scotsnet.org.uk

52 McKenna, School of Psychology and Clinical Language Sciences, The University of Reading, Early Gate, Whiteknights, PO Box 238, Reading

53 Vehicle-activated signs – a large scale evaluation, TRL Report 548, 2003

54 Intelligent Speed Adaptation, Oliver Carsten, Mark Fowkes, Frank Lai, Kathryn Chorlton, Samantha Jamson, Fergus Tate, Bob Simpkin, Department for Transport, 2008

55 Think! Tracking Research 2003

56 Direct Line Mobile Phone Report 2002

57 RAC Report on Motoring 2007, Driving Safety

58 Qualitative Research with Young People; Road Safety 2008, ODS Consulting, Scottish Government, 2008

59 Transport Scotland Strategic Road Safety Plan

60 www.EuroRAP.org

61 www.scotsnet.org.uk

62 How do EuroNCAP results correlate with real-life injury risks? A paired comparison study of car-to-car crashes. Lie A, Tingvall C, Traffic Injury Prevention 2002

63 Kullgren A, Krafft M, Lie A, Tingvall C, 2006: The use of seatbelts in cars with smart seatbelt reminders – Results of an observational study in traffic injury prevention 7/2006, pp 125-129

64 Effectiveness of Electronic Stability Control Systems in Great Britain by Frampton and Thomas (2007) a VSRC report published on behalf of DfT

65 Vehicle Technology; a Manager's Guide can be accessed at www.rospa.com/roadsafety/resources/employers.htm

66 Scottish Executive Evaluation of the 2003/2004 Festive Drink Drive Campaign, mruk Ltd, 2004

The Scottish Government

This document is also available on the Scottish Government website:
www.scotland.gov.uk

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A full copy of the Framework can be accessed via the publications page of:
www.scotland.gov.uk

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