

Engineering Services



Road Safety Plan



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Foreword

“Every person injured in a crash is one too many”

Road crashes and concern about them affects the whole community. Most people know a friend or relative that has been involved in a crash. Too often these result in injuries or deaths. They can have a distressing effect for friends and family involved.

Many road crashes are preventable. This new Road Safety Plan – *“Improving Road Safety on the Isle of Wight”* is a fundamental review of Road Safety Strategy adopting best practice from around the UK. It sets out a comprehensive and structured programme of wide ranging measures which will be adopted in order to achieve a substantial reduction in the number of people killed and injured in road crashes. It also seeks to tackle the root causes of public concerns over road safety issues through a partnership approach.

Road safety involves all sections of the community and your views are welcome on these important issues.

A. Review of Road Safety Strategy

A.1 Introduction

The Isle of Wight Council has a number of corporate objectives that need to be considered in the delivery of our Road Safety service:

- To care for vulnerable and disadvantaged people
- To protect the health, safety and environment of the Island and it's people
- To develop the Islands transport network for the benefit of local people

In delivering this service the values of the authority are to:

- Listen to people
- Work in partnership
- Give excellent service
- Be open and fair
- Care for our unique environment

This Road Safety Plan takes account of all of these principles and aims to deliver a high quality service.

The *1988 Road Traffic Act, Section 39*, requires local highway authorities to "prepare and carry out a programme of measures designed to promote road safety". The Isle of Wight Council has carried out programmes of road safety measures for many years.

The Local Authority Associations (LAA) produced a revised edition of *Road Safety - Code of Good Practice* in 1996. This made several recommendations about the road safety service that highway authorities should provide. Whilst a number of these recommendations have been superseded (for example by best value performance indicators), this still forms the basis for good practice for a highway authority. The Isle of Wight Council complies with many of these already and the measures proposed in this plan aim to cover the majority of the remaining recommendations.

The Isle of Wight is co-operating with other councils in the south-east region to compare its performance (benchmarking) in delivering its road safety service with other councils.

The Local Transport Plan (2001-2006) states that the Isle of Wight Council will continue to review its Road Safety Strategy as part of its Best Value Review. In addition to national casualty reduction targets (see *Road Safety Strategy - 2000 to 2010* page 3), Audit Commission Performance Indicators (ACPI's) have been defined for various aspects of road safety. The Isle of Wight Council aims to achieve performance levels in the top 25%ile of councils.

This Road Safety Plan represents a target-led strategic review of the progress of the road safety strategy for the Isle of Wight. Best practice from around the UK has been considered. A review of the local casualty problems has been undertaken to ensure that the proposals will tackle the Isle of Wight's road safety problems effectively. A substantial number of potential improvements to the road safety service have been identified.

A.2 Road Safety in an Environmentally Sustainable Transport System

A safe, efficient and environmentally sustainable transport system plays an essential role in a modern economy and enhances people's quality of life. The way in which people travel and the continued growth in road traffic needs to be considered when planning all aspects of the transport system. Whilst cars have brought great benefits, their increasing use causes congestion, which reduces their convenience, undermines the local economy and adds to local air pollution. This can damage health and contributes to greenhouse gases that cause global warming. Measures to provide a safer, more accessible transport system and restrict the growth in traffic are outlined in the Local Transport Plan.

Reducing road casualties will help to make roads safer and achieve the Government's overall target to cut accidents from all causes as set out in "*Saving Lives: Our Healthier Nation White Paper*".

Reducing speed and removing or reducing traffic in sensitive areas can make roads safer, reduce road casualties and improve the local environment.

Reducing the fear of crashes by making roads safer can help to promote social inclusion. Urban regeneration schemes can incorporate both road safety and personal safety measures. Improving safety on routes to schools can help to promote walking and cycling. This leads to greater fitness and health as well as reduced congestion.

Planning and land use policies can help to promote road safety measures, which encourage walking and cycling and improve the local environment. These can include measures to reduce speeds (such as 20 mph Zones and traffic calming), and measures to improve safety for pedestrians and cyclists (such as improved routes and crossing facilities).

A.3 Road Safety Strategy – before 2000.

The first casualty reduction targets were introduced in 1987. The principal target was to achieve a reduction in road crash casualties of 33% by the start of the year 2000 based on the average casualty figures for 1981 to 1985. This was to be achieved by improvements in road safety engineering (13%), vehicle safety engineering (14%) and education, training, publicity and enforcement (6%).

In the early 1990's, local authorities were encouraged to produce Road Safety Plans to co-ordinate efforts to improve road safety and reduce the number of people injured in road crashes. In 1993/4 the Isle of Wight Council produced its first Road Safety Plan.

By the start of 2000 the following results had been achieved in Great Britain:

- fatal casualties reduced by 39%
- serious casualties reduced by 48%
- slight casualties increased by 15%
- overall casualties reduced by 0.5%

The increase in slight injuries has nullified the overall casualty reduction, due mainly to a 63% rise in car user's injuries.

- Similarly on the Isle of Wight:
- fatal casualties reduced by 39%
- serious casualties reduced by 49%
- slight casualties increased by 7%
- overall casualties reduced by 19%

On the Isle of Wight overall casualties fell by 19%.

A.4 Road Safety Strategy – 2000 to 2010

Against this background the government launched its road safety strategy "*Tomorrows Roads - Safer for everyone*" in 2000.

This was a wide-ranging strategy covering:

- **New targets for casualty reductions to be achieved by 2010 (compared to the 1994-8 averages):**
 - 40% reduction in killed and seriously injured
 - 50% reduction in the number of children killed or seriously injured
 - 10% reduction in slight casualty rate (injuries per 100 million vehicle kilometres)

- Improving safety for children
- Improving safety for drivers
- Improving the safety of the transport network
- Achieving safer vehicle speeds
- Improving vehicle safety
- Improving safety for motorcyclists
- Improving safety for pedestrians, cyclists and horseriders
- Improving enforcement
- Promoting safer road use

A.5 Isle of Wight Road Safety Strategy

Progress against targets

The number of certain classes of casualties (particularly KSI) is comparatively small and hence random fluctuations from year to year can make significant differences to the appearance of the trends. In order to get a better indication of the long term trends, a rolling 5 year average has been plotted for each casualty type.

There were 92 KSI casualties in 2004, which is 28% below the 1994-8 average. This compares with 22% below for Great Britain. The trend appears to be fluctuating around the target line.

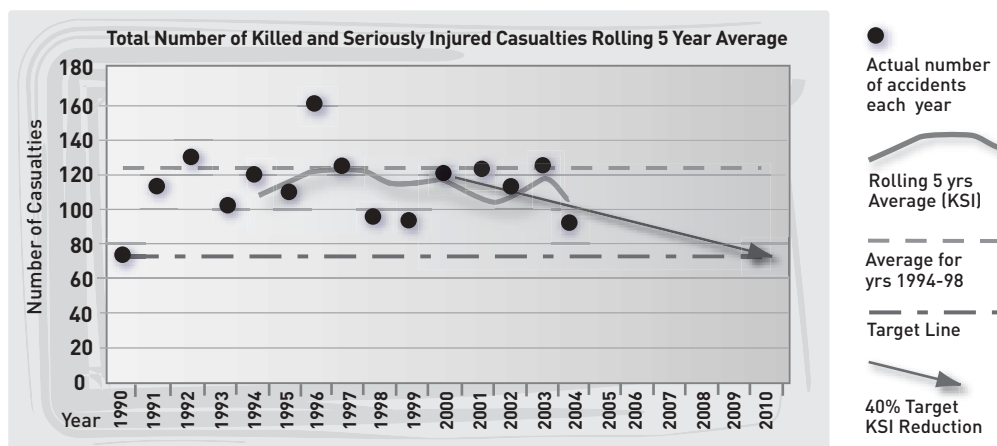


Figure 1 – KSI casualty trend

There were 8 child KSI casualties in 2004, 47% lower than the 1994-8 average. The numbers of child KSI casualties are very small and a change of just 1 child KSI casualty makes a 7% change against the 1994-8 baseline. Hence, random fluctuations can easily overshadow any progress made. Nationally the number of child KSI casualties in 2004 is 40% lower than the 1994-98 average.

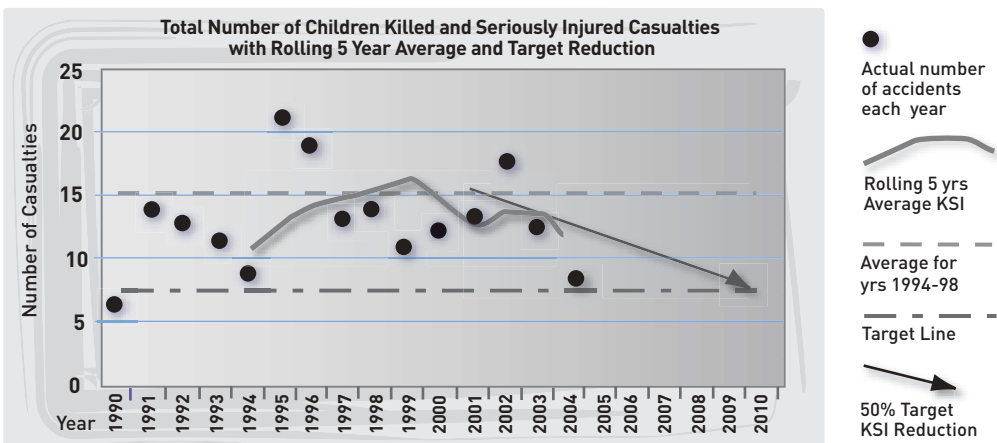


Figure 2 – Child KSI casualty trend

There were 526 slight casualties in 2004. The national target uses a slight casualty rate to reflect the changes in traffic volume and distance travelled in relation to the number of the casualties.

The slight casualty rate is already substantially below the target for 2010. Nationally the slight casualty rate is 16% below the 1994-98 average.

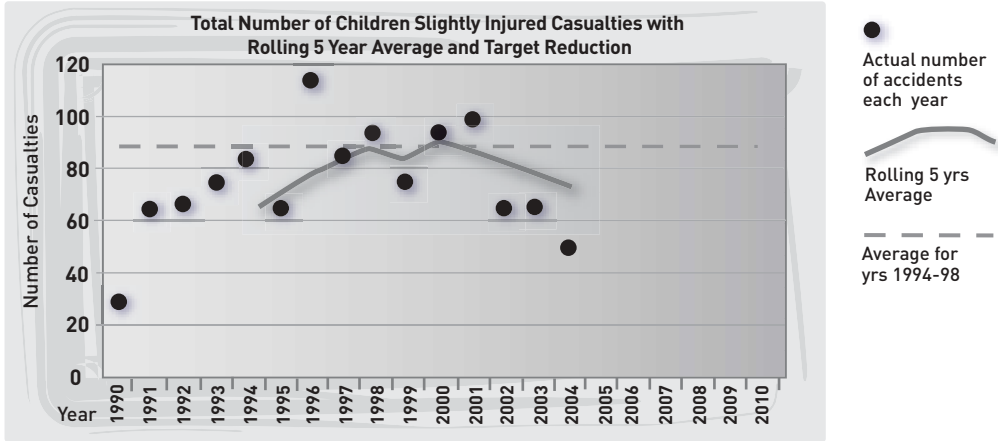


Figure 3 – Slight casualty rate trend

Comparison with national casualty data

On the Isle of Wight in 2004, there were 618 casualties in 458 road crashes. 3 people were killed, 89 people were seriously injured and 526 people were slightly injured. The two tables below compare the number and proportion of accidents involving different categories of road users and KSI casualties and proportions with national data for 2004:

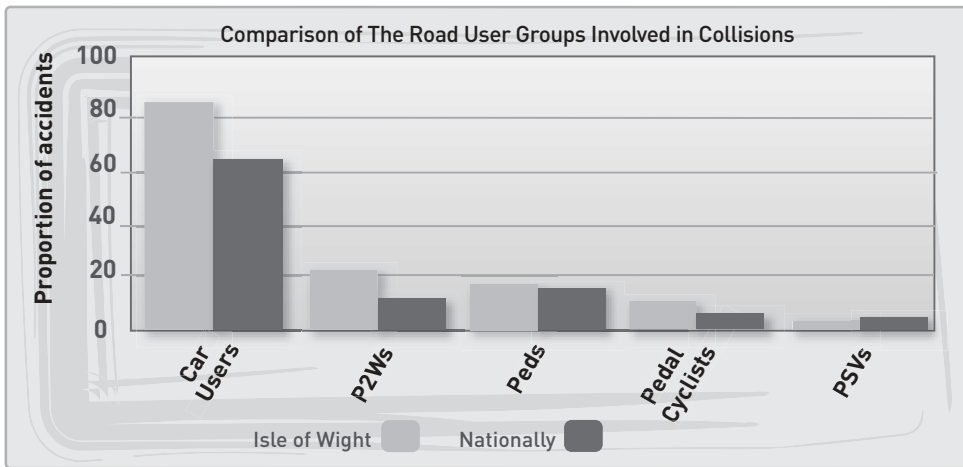


Figure 4 – Comparison of road users involved in collisions

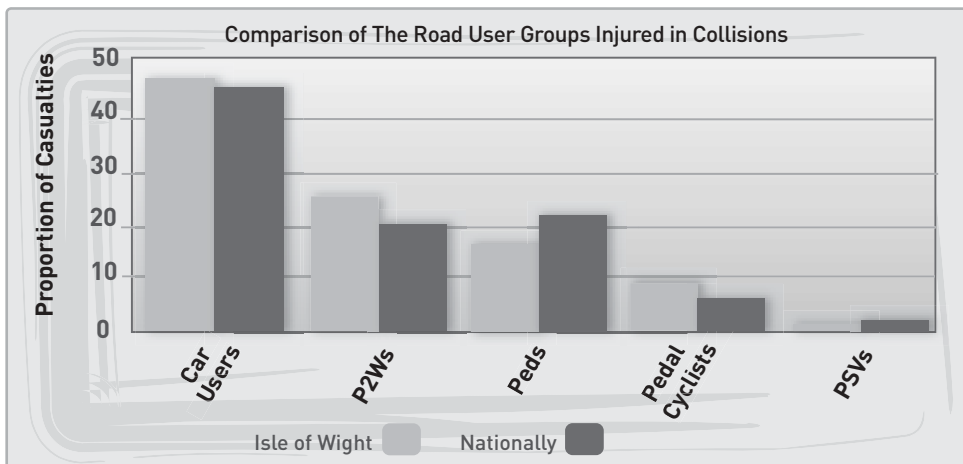


Figure 5 – Comparison of road users injured in collisions

The proportions of accidents which involve powered two wheeled vehicles and pedal cyclists are approximately twice that national rate, while the proportion of accidents involving cars is approximately a third higher than the equivalent national rate. However, the proportion of the casualties who were occupants of a car is only marginally more than the national rate. The severity of the injuries for these two categories is also higher than the national figures.

Comparison with Hampshire and Dorset

A comparison with national data does not take into account the Isle of Wight's unique local environment. Neighbouring counties such as Hampshire and Dorset have areas with similar types of environment and tourism and may provide more appropriate comparisons. The large urban areas of Southampton and Portsmouth have been excluded from the comparison data to make comparison more appropriate.

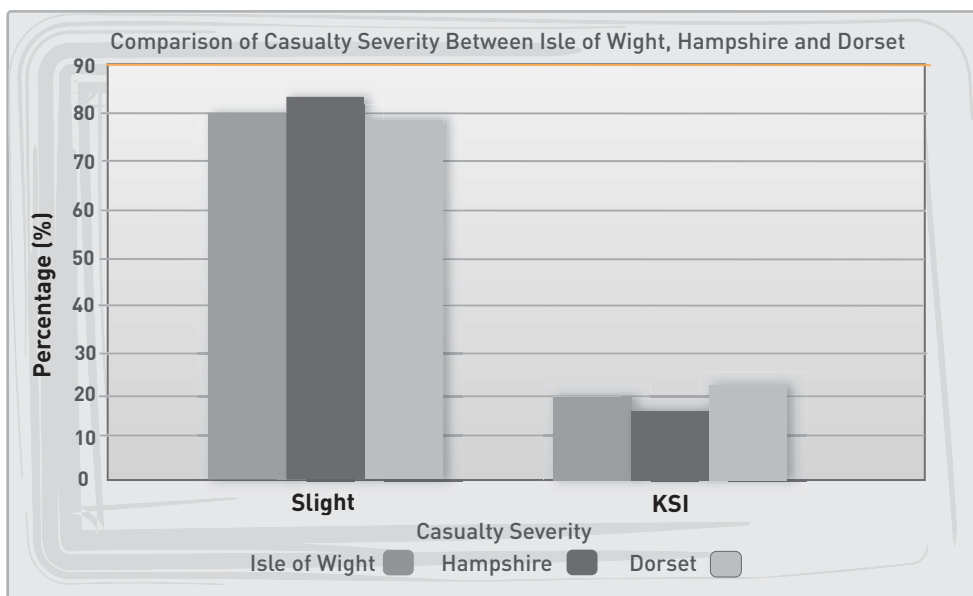


Figure 6 – Casualty severity comparison

The proportion of KSI casualties for the Isle of Wight is higher than for Hampshire but less than for Dorset.

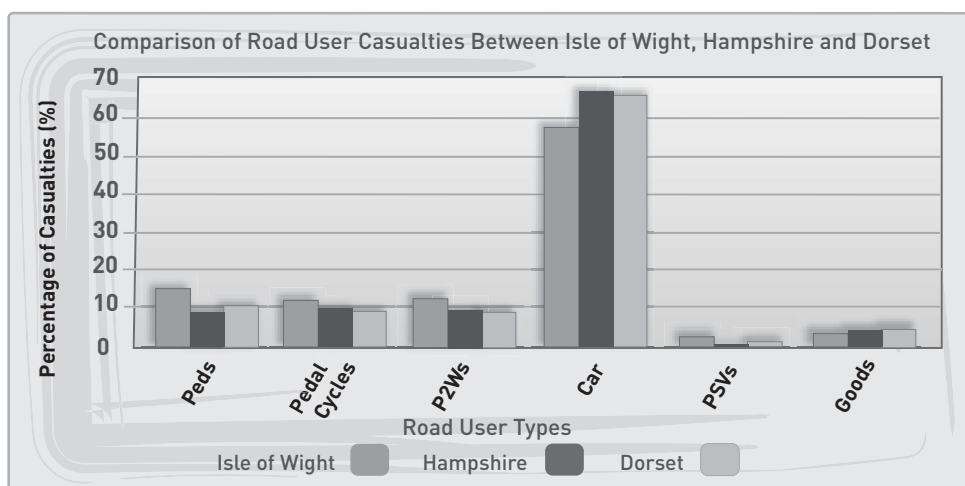


Figure 7 – Casualty comparisons by road user group

The proportion of casualties which involve vulnerable road users such as pedestrians, pedal cyclists and riders of powered two- wheeled vehicles are higher than for the two neighbouring authorities of Hampshire and Dorset. However, the proportion of accidents involving cars is lower than the neighbouring authorities.

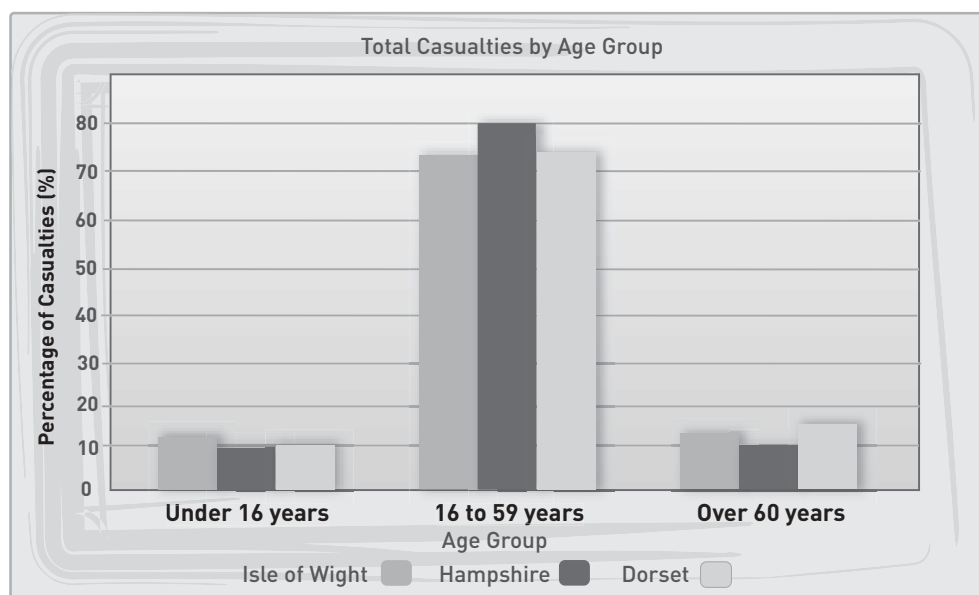


Figure 8 – Casualty comparisons by age group

The island has a greater proportion of casualties under the age of 16 than either of its neighbours.

Main road safety issues

The Local Transport Plan 2001-2006 and subsequent APRs identify the programmes of Local Safety Schemes introduced. Good progress is being made with reductions in:

- All child casualties
- All pedestrian casualties
- All pedal cycle casualties

The main casualty problems to be tackled are:

- P2W KSI and slight casualties which are substantially above the 1994-8 average number and significantly worse than for the whole of England
- Car User KSI and slight casualties which are significantly worse than for the whole of England

The Isle of Wight Council has adopted the principles of the Government's road safety strategy and challenging casualty reduction targets. This Plan sets out the measures that will be undertaken in order to achieve the reductions in casualties.

B. How Road Safety Can Be Improved

The government's road safety strategy places great emphasis on reducing injuries and the fear of accidents particularly for children. Action needs to be taken in a wide variety of areas if efforts are to be focused towards the achievement of particular targets. This requires the participation of many different groups and organisations working together in partnership.

B.1 Understanding the Causes of Crashes

Concern about road safety issues such as speed, poor or dangerous driving and the difficulty that pedestrians have in crossing a road etc. are examples of daily problems facing large numbers of people. Fear of being injured in a crash can affect the way people use the road network. People may avoid roads or junctions that they consider to be dangerous. Similarly, concern over safety can cause other traffic problems such as around schools. Parents may restrict the movement of their children in an area or take them on a journey (such as to school) by car if they perceive there to be road safety problems. This can add to peak hour congestion.

It is convenient to assign cause or blame for a crash to a single factor. However, usually have a number of contributory factors involved in them. Research has shown that treating one or more of these factors can make a substantial reduction in number and severity of injuries.

There are three main categories of factors involved in crashes:

Human factors

Human factors include making errors of judgement, lack of experience and driving skills (often younger drivers), aggressive driving and risky manoeuvres (such as overtaking where inappropriate), thrill seeking, driving whilst under the influence of alcohol / drugs or whilst tired and not using of seat belts and child safety restraints.

Road environment factors.

Common road environment factors include poor signing or road markings, road layout which users find confusing, road design which does not discourage speeding, inadequate facilities for right turning vehicles at junctions, inadequate road surface skidding resistance to help drivers stop in an emergency. Other road environment factors include the lack of provision of adequate facilities for pedestrians and cyclists.

Vehicle factors

Vehicle factors can include poor or faulty steering, suspension, brakes, tyres or lights.

B.2 The Cost of Road Crashes

In the UK, research into the cost of accidents has placed financial values on the cost of road accidents. Typical costs (June 2003 prices) are:

- Fatal injury - £ 1,312,260
- Serious injury - £ 147,460
- Slight injury - £ 11,370

These values consist of the costs of lost output, hospital and emergency service costs, repair costs etc. plus an element for a 'willingness to pay'. The latter is based on the premise that in terms of public investment people would be willing to invest money in measures that would reduce the risk of them being killed or injured in a road crash.

These values can be used when assessing the economic benefits of alternative investments in highway infrastructure. Engineering schemes that reduce crashes often produce very high economic rates of return, often far higher than with other forms of highway improvement. This provides strong justification for increasing funding for road safety engineering schemes.

B.3 Ways of Improving Road Safety

The main measures available to improve road safety at a local level are outlined below. Subsequent sections will look at these in more detail for each road user group.

Analysing Road Crash Data, Treating Hazardous Locations and Monitoring Trends in Casualties

Details of all injury accidents reported to the police are recorded on a database. This information is analysed to identify locations such as cluster sites, routes and areas with a higher than average accident occurrence. Once these sites have been identified they will be subject to a preliminary investigation to determine which locations are likely to lead to cost effective remedial treatments. They will then be ranked in priority order for detailed accident investigation and preliminary design of remedial measures. The results of the casualty reduction measures will be monitored. Trends in particular types of accidents and casualties will be monitored to make sure that appropriate action is taken.

Engineering a Safer Road Network

Engineering improvement measures such as traffic calming, junction improvements, anti-skid (safety) surface, signs and road markings can make substantial reductions in both the number and severity of injuries. These measures will be targeted at cluster sites locations, routes and areas with a crash problem. Better facilities for vulnerable road users can be provided. All significant changes to the highway network will be subject to Road Safety Audits to ensure that schemes are designed to be as safe as practicable and measures to reduce possible injuries are incorporated.

Speed Management, Enforcement and Deterrence

Deterring people from poor driver behaviour, driving under the influence of alcohol or drugs, speeding, and other traffic offences can help to improve peoples feeling of safety when using the road. It can also help to make a significant reduction in the number of people injured in road accidents. Effective enforcement combined with good publicity can help to deter the type of behaviour, which puts road users at greater risk.

The Hampshire and Isle of Wight Safety Camera Partnership was launched in April 2002 and is helping to reduce casualties throughout Hampshire and the Isle of Wight. In the first year of Safety Cameras operating on the Isle of Wight, collisions in which people were killed and seriously injured fell by 43% at fixed camera sites and 11% at mobile camera sites. Personal injury accidents fell by 8% at fixed camera sites and 39% at mobile camera sites.

The implementation of new speed limit policies including village 30mph limits will be investigated. Similar initiatives in other local authorities have proved successful when supported by Education, Publicity and Engineering measures. In Oxfordshire, the County Council have introduced a comprehensive county-wide village 30mph speed limit initiative (at locations previously with a 60mph limit). This was introduced in stages on an area by area basis. It has achieved a 4-5mph reduction in speeds and a 40% reduction in casualties at treated locations. Further information on the setting of local speed limits is available in Appendix 2.

Education

Education starts in the home with children learning from parents and at pre-school with activities designed to increase children's understanding of road safety problems that they may face. It continues through school and college with structured education packages. As children get older, education helps to develop responsible attitudes to key road safety issues.

Publicity and Awareness Campaigns

Publicity and awareness campaigns aim to influence attitudes and behaviour. They can help people to understand and accept road safety measures. Examples of these include the dangers of:

- not wearing seat belts or not using the correct child seats and restraints
- driving under the influence alcohol or drugs
- driving at excessive or inappropriate speed

Road Crossing Patrol Service

The Road Crossing Patrol Service, through its officers, provides a vital safe crossing point on a child's journey to and from schools across the Isle of Wight. They perform an important and well respected role in the community and their presence at key locations enhances the Council's 'Safer Routes to Schools' strategy.

Training and Testing

Training for pedestrians, cyclists, and drivers can help to improve their skills and behaviour. This can help to reduce the number of road accident casualties and improve people's perception of safety. Driver training including hazard perception and advanced driving skills can help younger or inexperienced drivers cope better with potentially hazardous situations and can help to reduce their involvement in accidents.

Safer Vehicles

Improvements to vehicle standards are made at a national level. However, information on the safety performance of different vehicles (such as the EuroNCAP results) can be made more widely available through other publicity campaigns and the road safety website.

Partnerships and Communication

Much more will be achieved if road safety issues are dealt with in partnership with the many bodies and groups that have an interest and influence on these matters. Encouraging bodies to contribute ideas, expertise and resources in a co-ordinated and focused way will help to maximise the safety benefits for all road users. It is important to communicate road safety information widely and look for feedback from road users and partners on road safety issues.

C. Improving Child Safety

C.1 The Problems

The number of child casualties (particularly KSI) is comparatively small and hence random fluctuations from year to year can make significant differences to the appearance of the trends. In order to get a better indication of the long term trends, a rolling 5 year average has been plotted for each casualty type.

Trends

There were 8 child KSI casualties in 2004, which is 47% below the 1994-8 average number. This compares with 40% below for Great Britain.

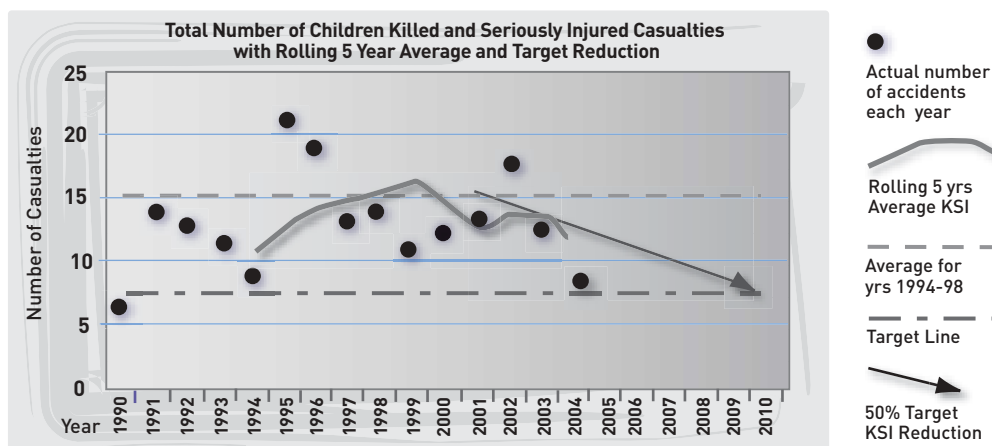


Figure 9 – Child KSI casualties

There were 51 child slight casualties in 2004, which is 41% below the 1994-8 average number. This is approximated as the same as the reduction for Great Britain. The recent trend for child slight casualties is downward.

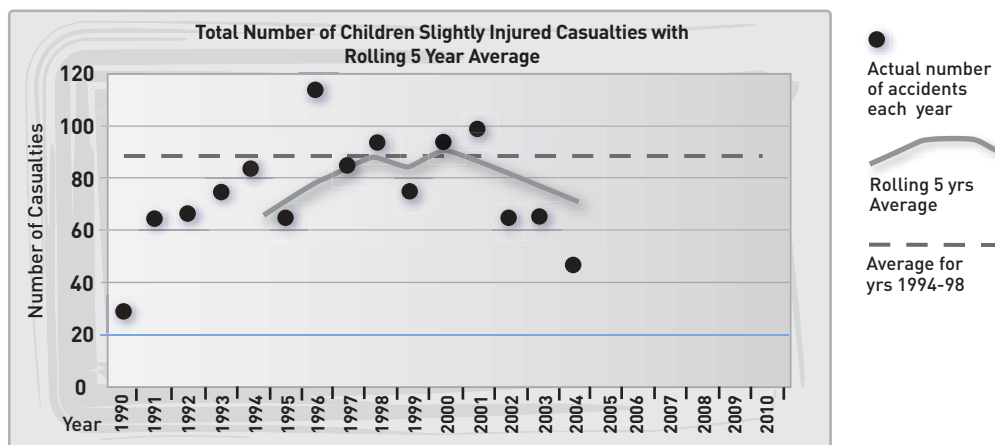


Figure 10 – Child slight casualties

The measures set out in the Road Safety Plan will seek further significant improvements.

KEY ACTIONS

The Isle of Wight Council is committed to improving child safety by:

1. Structured road safety education programmes
2. Promotion of road safety and providing support to children, parents, carers, teachers and school governors
3. Providing and developing appropriate road safety resources for parents, carers and teachers
4. Providing and supporting cycle and pedestrian training activities
5. Running appropriate publicity and awareness campaigns
6. Expanding the safer routes to schools programme to offer all schools the service
7. Undertaking programmes of speed reduction measures in residential areas (See Improving the Safety of the Road Network)
8. Provide a topic page on child road safety within the new road safety section of the Isle of Wight website

Mode of Travel

The number of child casualties by mode of travel for 2004 was:

- Motor vehicle – 32%
- Pedal Cycles – 24%
- Pedestrian – 44%

Child car occupant casualties (33% of child KSI and 40% of child slight). Approximately 53% of these occur on A and B roads and the remaining 47% occurred on unclassified roads.

Child pedestrian casualties (45% of child KSI and 39% of child slight). The majority of these occur on minor roads with a 30mph speed limit. Undertaking area-wide studies is likely to yield the most effective reductions in this type of casualty.

Child pedal cycle casualties (16% of child KSI and 24% of child slight). The majority of these occur on minor roads with a 30mph speed limit. Undertaking area-wide studies is likely to yield the most effective reductions in this type of casualty.

C.2 Road Safety Education

Pre-school (0-4 years) – at home and at nursery, pre-school or playgroup

- Provide information on in car safety features, including practical in-car child safety seat checks
- Provide education guidelines for parents and carers
- Provide pre-school education activities and worksheets
- Provide access to pre-school resource packs
- Encourage parents to drive responsibly, especially around schools.

Schools (5-18 years)

- Provide advice to parents on protecting younger children from danger through children's traffic clubs and programmes of structured education
- Teach road user skills and encourage attendance of appropriate training courses such as cycling proficiency
- Provide practical on road pedestrian training for 5 to 8 years old children
- Encourage and support schools to plan and promote structured road safety education at key Stages 1, 2 and 3
- Encourage training of teachers in road safety education and provide them with the necessary resources
- Encourage schools to prepare school travel plans and to participate actively in safer routes to schools initiatives
- Encourage school governors and head teachers to consider road safety education as an integral part of the school curriculum
- Encourage school governors and head teachers to actively promote road safety to parents and identify ways of improving road safety around and on routes to schools
- Provide information on safer cycling and journeys to school for 11 year old pupils.
- Develop road safety material for PHSE curriculum opportunities
- Use of youth theatre, road risk management and peer pressure to influence attitudes of older students on issues such as driving under the influence of alcohol/drugs and speeding
- Provide structured road safety education programmes promoting the use of the Department for Transport's lesson plans for secondary schools
- Pre-driver training education and training for 16-18 years old pupils

Child Pedestrian and Cycling Training

- Encourage the wearing of cycle helmets
- Continue the structured cycle training carried out at all of the islands 69 schools. It is council policy to make the wearing of cycle helmets compulsory for cycle training with on road cycle training starting at 11 years old
- Provide child pedestrian training packages

C.3 Child Publicity and Awareness Campaigns

The year round national campaigns such as **THINK!** will be supported by a number of initiatives such as:

- Encouraging children to be seen and safe by providing and encouraging the wearing of reflective material. Encouraging adults to look out for children when driving.
- Promotion of cycle helmet wearing at schools and pre-schools as well as local events
- Raising awareness amongst parents through schools of the problems associated with parking around schools entrances
- Provide information on the values and limitations of protective gear, and the importance of correctly fitting a cycle helmet
- Encouraging the use of appropriate child car seats and restraints
- A mobile Education, Training and Promotion unit will be commissioned which will attend schools as well as local events

C.4 Safer Routes to School (see Appendix 1)

The safer routes to school programme will be expanded to offer this option to all schools. These projects will be based on partnerships with the schools and local community and will be complemented by programmes of engineering measures to reduce the danger from vehicles and improve walking and cycling facilities. Schools will be expected to adopt a school travel plan in order to take part in safer routes to school projects.

C.5 Road Crossing Patrols

Engineering services currently manages 46 Road Crossing Patrol sites who all receive full training and uniform in accordance with the Road Traffic Regulation Act 1984 and The School Crossing Patrol Sign (England and Wales) regulations 2002. Any potential sites will be assessed by the Road Crossing Patrol Service using criteria set out in 'School Crossing Patrol Service: guidelines' produced by the Local Authority Road Safety Officers' Association and the Royal Society for the Prevention of Accidents.

C.6 Isle of Wight Road Safety Website

The addition of a child road safety topic page within the Isle of Wight Road Safety website could aid the promotion of road safety among children. As well as providing general information for children, the topic page could also be used to provide information and resources for parents and teachers. Links to other useful sites could be provided within the page.

C.7 Engineering

Area wide accident studies and traffic calming schemes, including 20mph zones, will be targeted at appropriate minor road areas (predominantly residential areas) with casualty problems. Such measures should help to reduce Child KSI casualties by around 50% in areas to be treated. On major routes, casualty problems will be targeted by a programme of cluster site and route study treatments.

D. Improving Pedestrian and Cyclist Safety

D.1 The Problems

The number of pedestrian and cycle casualties (particularly KSI) is comparatively small and hence random fluctuations from year to year can make significant differences to the appearance of the trends. In order to get a better indication of the long term trends, a rolling 5 year average has been plotted for each casualty type.

Pedestrian Casualties

There were 17 pedestrian KSI casualties in 2004, which is 35% below the 1994-8 average number. This compares with 32% below for Great Britain. The trend since 2000 is downward.

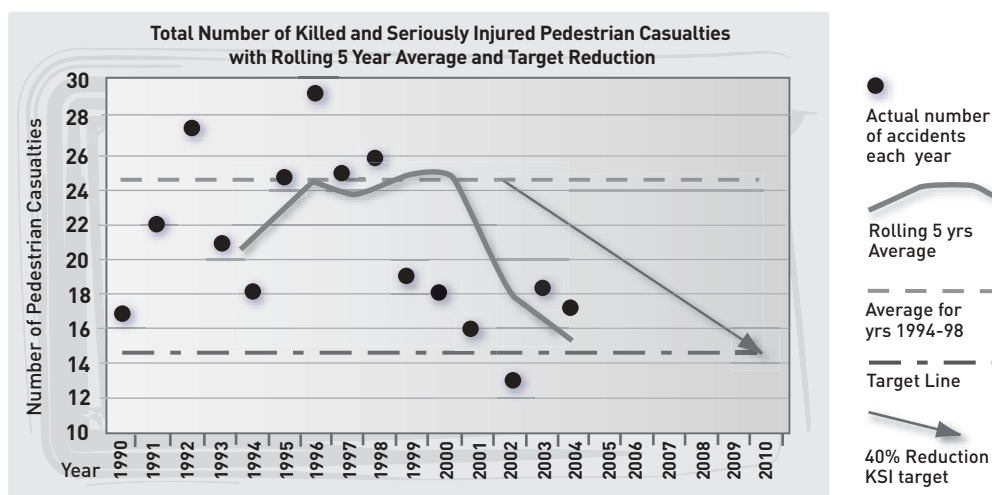


Figure 11 – Pedestrian KSI casualties

There were 50 pedestrian slight casualties in 2004, which is 44% below the 1994-8 average. This compares with 18% below for Great Britain. The trend since 2001 is downward.

KEY ACTIONS

The Isle of Wight Council is committed to improving safety for pedestrian and cyclists by:

1. Expanding the safer routes to schools programme and providing structured road safety education programmes and training packages for children (See Improving Child Safety)
2. Running appropriate publicity and awareness campaigns for high risk pedestrian and cyclist groups
3. Providing safer walking and cycling facilities and routes
4. Reducing the dangers to walking and cycling caused by traffic volume and speed
5. Ensuring that the needs of pedestrians and cyclists (including mobility impaired) are given a high priority in all modifications to the road network

Pedal Cycle Casualties

There were 10 pedal cycle KSI casualties in 2004, which is 41% below the 1994-8 average. This is better than the 35% below 1994-98 average for Great Britain. However, the trend is particularly affected by small numbers and fluctuation but appears to be flattening out.

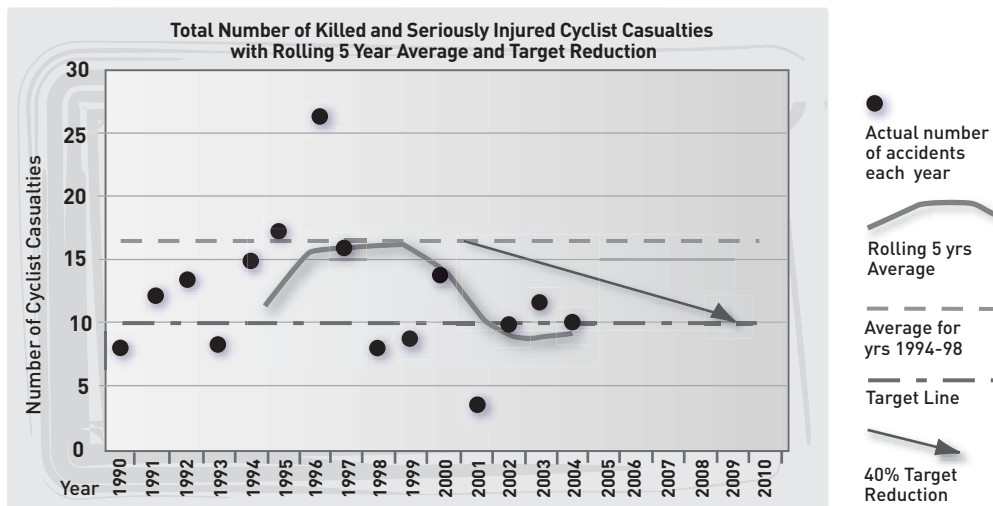


Figure 12 – Pedal cycle KSI casualties

There were 25 pedal cyclists slightly injured in 2004, which is 36% below the 1994-8 average. This is better than 29% below the average for Great Britain. This continues the downward trend.

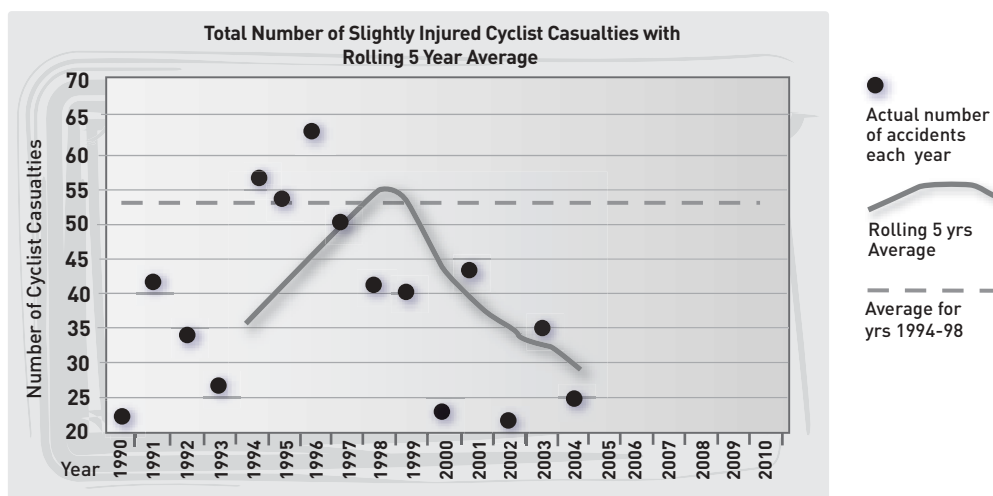


Figure 13 – Pedal cycle slight casualties

D.2 Publicity and Awareness Campaigns

In addition to the campaigns for children outlined in the “Improving Child Safety” section a number of initiatives such as:

- Promoting the benefits of wearing cycle helmets to all cyclists
- Encouraging cyclists and pedestrians (where appropriate) to be seen and safe by wearing clothing that is highly visible
- Providing advice for adult pedestrians on dangers of crossing roads
- Targeting high risk groups such as children, older road users and mobility impaired people

- Driver awareness campaigns specifying the rights and needs of cyclists, such as giving cyclists space and looking before opening car doors
- Offer cycle training widely to everyone
- Promote compliance with the statutory requirement to use bike lights

D.3 Providing Safer Walking and Cycling Routes

A review of walking and cycling facilities and routes will be undertaken as part of the Council's Walking Strategy and Cycling Strategy. These strategies aim to encourage more people to walk and cycle by providing safer and more convenient facilities.

D.4 Reducing the Danger to Walking and Cycling

As well as providing safer walking and cycling routes, reducing the perceived dangers to walking and cycling will help to improve safety for these road users and encourage more walking and cycling.

The volume of traffic and its speed are two of the major barriers to safe walking and cycling. Measures to reduce the volume of traffic by reallocating road space and demand management techniques will be employed to achieve this on particular routes. Similarly measures to reduce speed (Speed Management Strategy – Appendix 2) will be employed to reduce this problem.

E. Improving Powered Two Wheel Vehicle Safety

E.1 The Problems

The number of P2W casualties (particularly KSI) is comparatively small and hence random fluctuations from year to year can make significant differences to the appearance of the trends. In order to get a better indication of the long term trends, a rolling 5 year average has been plotted for each casualty type.

Trends

The number of riders and passengers injured rose to 105 in 2004 and the trend is upward. In 2004, P2W riders accounted for 26% of all KSI casualties and 14% of slight casualties despite being less than 2% of the traffic flow.

There were 22 P2W KSI casualties in 2004, which is 8% below the 1994-8 average number. This compares with 16% above for Great Britain. The numbers fluctuate from year to year.

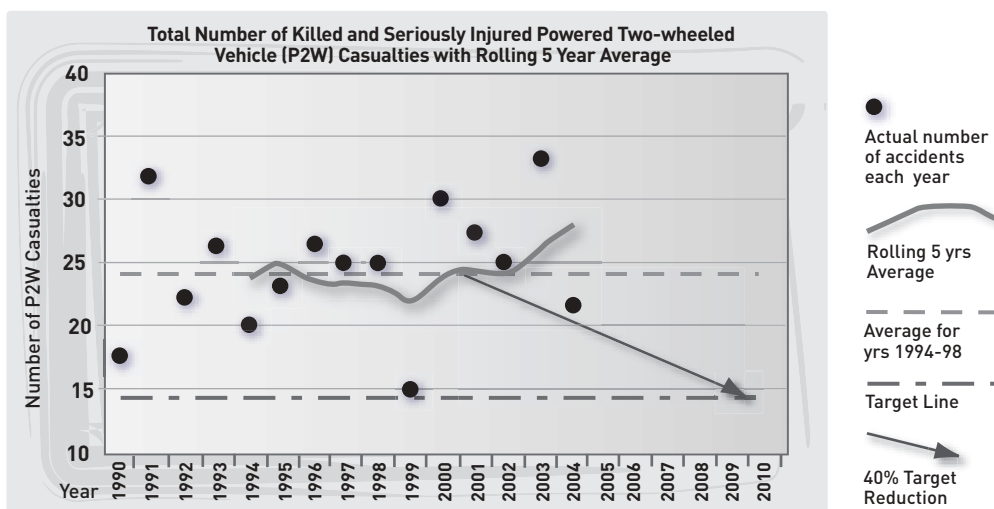


Figure 14 – P2W KSI casualties

There were 83 P2W slight casualties in 2004, which is 45% above the 1994-8 average number. This compares with 18% above for Great Britain.

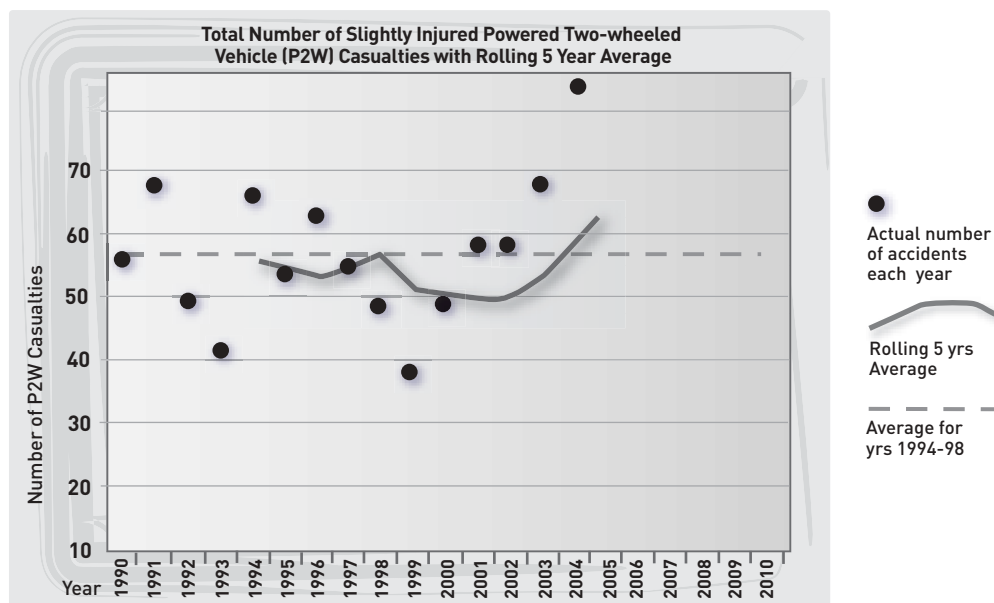


Figure 15 – P2W slight casualties

KEY ACTIONS

The Isle of Wight Council is committed to improving safety for powered two-wheeled vehicle users by:

- 1. Promoting advanced riding courses via locally based organisations**
- 2. Encouraging riders to seek refresher and familiarisation training via direct access organisations**
- 3. Carrying out publicity and awareness campaigns**
- 4. Working with representatives of motorcycle user groups to look at issues of concern**
- 5. Improving road conditions that could be a hazard**
- 6. Undertaking a detailed investigation/audit of crashes involving powered two-wheeled vehicles**

Powered two-wheeled vehicles can be a more environmentally friendly form of travel than cars. However they can also be more dangerous with motorcyclists representing a large proportion of casualties in relation to their numbers and use. Younger riders tend to be injured on smaller and less powerful machines and older (25+) riders tend to be injured whilst riding larger more powerful machines. A more recent trend is for people who used to ride powered two wheelers to return to riding, often buying new more powerful machines.

Although the majority of powered two-wheeled vehicle injuries occur on the main road network a substantial proportion (around 25%) occur on built up minor roads.

E.2 Motorcycle Accident Audit

The number of younger riders and riders of smaller motorcycle has increased significantly in recent years. A detailed study of accidents involving powered two-wheeled vehicles on the Isle of Wight will be undertaken. The aim of the study will be to identify particular risk factors and locations for motorcyclists and to formulate detailed work programmes for future years.

E.3 Improving Training and Testing

All new riders are required to undertake Compulsory Basic Training before they can ride a motorcycle. The Compulsory Basic Training

(CBT) package will be improved in line with national guidelines for the development of the training course. Other proposed national changes mean that newly qualified drivers will no longer be able to ride a moped without passing a form of Compulsory Basic Training. Similarly, drivers holding a full car license will also need to pass a theory test reflecting the different problems for motorcycles.

On Two Wheels is a pre-rider course run by Hampshire and Isle of Wight Youth Clubs which is designed to prepare young people for riding and owning a moped or motorcycle. The Isle of Wight Council will support and publicise this initiative.

Accident data shows that greater numbers of older riders are being injured, often after returning to riding and buying a bigger more powerful machine. Training and refresher courses are available via registered CBT organisations and local advanced rider groups and will be publicised widely.

Edge 44 is a rider assessment scheme that Hampshire run under the Bikesafe initiative in partnership with the Road Safety Unit of Hampshire County Council and the Police supported by the Motorcycle Industry Association. The Isle of Wight Council will promote both Edge 44 and other Bikesafe initiatives to experienced riders.

E.4 Publicity and Awareness Campaigns

Campaigns highlighting the dangers for powered two-wheeled vehicles and the benefits of training to all new and returning riders will be undertaken. Drivers of other vehicles will also be made more aware of the vulnerability of riders.

E.5 Working with Motorcycle User Groups to Improve Safety

Motorcycle user groups will be involved in partnership efforts to improve road safety and will be encouraged to identify safety problems to be addressed.

E.6 Improving Road Conditions

The location of manholes, drains and other potential slip hazards in the road surface can cause problems for riders. Similarly, surface defects (including diesel spillage), potholes and poor reinstatements can dislodge riders or cause a loss of control.

Improving maintenance procedures and response times and ensuring that slip hazards are minimised or treated with non slip surfaces in the design of new schemes will help to improve safety and reduce accidents.

F. Improving Driver and Passenger Safety

F.1 The Problems for Drivers and Passengers

Trends

There were 40 car occupant KSI casualties in 2004, which is 12% below the 1994-8 average number. This compares with 28% below for Great Britain.

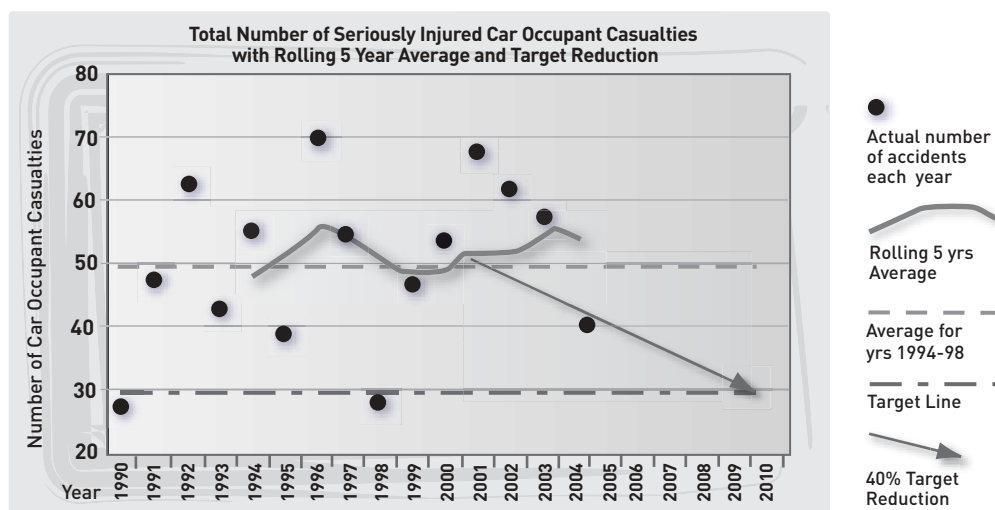


Figure 16 – Car Occupant KSI Casualties

There were 341 car occupant slight casualties in 2004, which is 10% below the 1994-8 average. This compares with 5% below for Great Britain. The trend since 2000 is downwards.

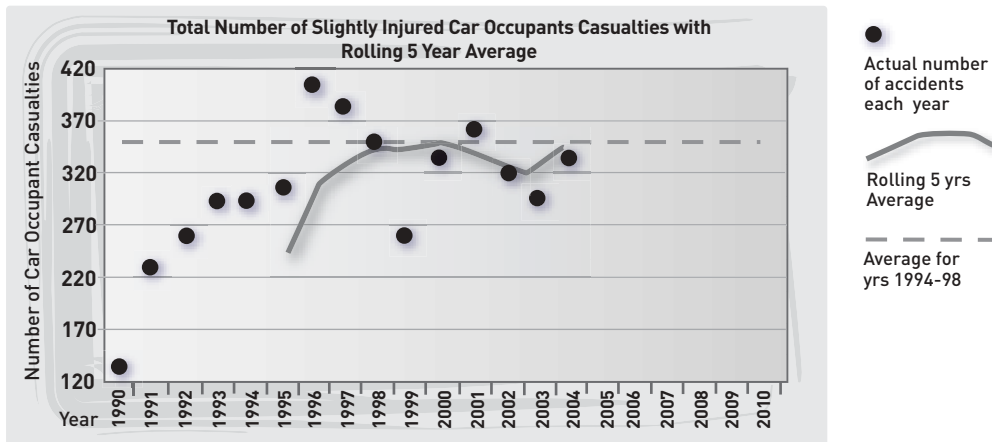


Figure 17 – Car occupant Slight casualties

In car safety

Free checks by the Isle of Wight Council and motoring chainstore Halfords found that more than 80% of child seats in cars were either of the wrong type or incorrectly fitted. The campaign led to the correct fitting of nearly 80 child seats and advice to purchase a more suitable seat for the remaining 57 cars. This service is now available to nurseries and the Childcare Action Trust.

Similarly, a campaign at schools on the Isle of Wight relating to children wearing seatbelts led to a significant increase in the numbers of children wearing seatbelts.

KEY ACTIONS

The Isle of Wight Council is committed to improving driver and passenger safety by:

1. Making driver training, improvement and rectification courses widely available
2. Undertaking publicity and awareness campaigns aimed at key issues and targetting high-risk groups
3. Promoting the use of appropriate in car safety equipment for child seats and restraints

F.2 Driver Training and Improvement

Pre-driver training

Pre-driver training programmes will be provided for young drivers to increase their awareness of the risks that they face and encourage good attitudes. Courses in driver awareness will be offered to 16–18 year olds. In its road safety strategy, the government has recognised that improving driver's hazard perception will play an important part in reducing casualties. Hazard perception testing is now incorporated into the driving test. This is expected to make a significant reduction in the crash rates for younger drivers.

Driver Improvement and Rectification

Driver re-training, improvement and rectification schemes can be given as alternatives to fines and penalty points for minor offences where this would be more beneficial. Initially these will be targeted at drivers who are involved in crashes or commit minor driving offences where it is clear that one or more of the following was a significant factor:

- lack of experience
- poor awareness of hazards
- poor attitude to driving or other road users

In conjunction with the Councils Licensing Officer, a driver rectification scheme is now being considered for taxi drivers with excessive penalty points on their license.

Older (60+) Drivers

Injuries to older drivers represent around 7% of all injuries on the Isle of Wight compared to 4% in the whole of Great Britain. Older drivers are increasing in numbers and can be more vulnerable if involved in a road crash. Older people often take longer to recover or may sustain more serious injuries than other age groups. Despite their considerable driving experience, it may be difficult for older people to come to terms with a decline in eyesight, hearing, mobility or reaction time.

A programme of seminars and practical driving assessments for older drivers will be provided. Eyesight checks will also be offered. These will be promoted through local community groups.

Minibus driving

A training scheme for minibus drivers is provided. All school and local authority minibus drivers are required to undertake this before driving a minibus. Private companies are also encouraged to undertake this training.

F.3 Publicity and Awareness Campaigns

Publicity and awareness campaigns can help people to understand road safety problems and influence attitudes and behaviour. In the longer term they help to determine the social acceptability of behaviour and have a major influence on road safety. Campaigns to highlight the dangers of the following issues will be undertaken:

- not wearing seat belts or not using the correct child seats and restraints
- driving under the influence alcohol or drugs
- driving at excessive or inappropriate speed

Other local issues will be identified and be included in the campaign programme.

Experience has shown that these campaigns are most effective when linked to enforcement activities.

F.4 Vehicle Safety

When a crash occurs, the safety characteristics of the vehicles involved can have a significant effect on the severity of injuries that the people involved in the crash will receive. All vehicles have to meet minimum safety standards but some provide much better protection for vehicle occupants and pedestrians that are hit. Protection for other road users can be gained, for example, by making car fronts safer for pedestrians that may be struck. Vehicle designers are constantly seeking to improve the performance of their vehicles. Safety is an important aspect of that improvement and the perception of safety of a car can help to make it a more popular choice.

Many electronic and mechanical devices are now available to help drivers overcome common problems. Some examples are:

- anti-lock brakes or electronic braking systems
- front air bags and side air bags/curtains
- high mounted brake lights

EuroNCAP (European New Car Assessment Programme) provides a realistic and independent assessment of the safety performance of some of the most popular cars in Europe. This programme is backed by five European Governments together with motoring and consumer organisations from every EU country.

Cars are given a star rating for their ability to protect occupants, with 5 stars currently being the highest level of protection.

Findings of recent research in Sweden which involved road crashes with cars of different star ratings suggest that there is a 30% reduction in the likelihood of death and serious injury for cars with a 4 star rating compared with those with a 2 star rating or older cars.

More details of the tests and the results are available on the EuroNCAP website www.euroncap.com

It is important that this type of information is made widely available to people when considering buying new cars. Better and more widely available information on the safety performance of different cars will influence buyer's decisions and the way in which manufacturers develop their new models.

G. Improving the Deterrence and Enforcement of Traffic Offences

G.1 Traffic Law Enforcement

Traffic law provides a framework for using roads safely. It has an essential part to play in improving driver behaviour and reducing the number of people injured in road crashes. The police therefore have a central role in improving road safety. It is important that people perceive that there is a substantial chance of being prosecuted if they speed, drive dangerously or drive without due care and consideration for other road users. The perceived level of enforcement and penalties provides a significant deterrent to the preventable poor behaviour often involved in crashes.

Technological developments such as automatic cameras to detect speed and red light infringements, roadside breath testers and roadside drug screening devices can make enforcement more efficient and effective. The targeting of enforcement activity to the offences and locations, which contribute most to crashes, can improve effectiveness significantly.

Attention will also be directed to local problems identified but particular attention will be given to common problems such as:

- not wearing seat belts or not using the correct child seats and restraints
- driving under the influence of alcohol or drugs
- driving at excessive or inappropriate speed

G.2 Strategic Casualty Reduction Partnership

Engineering Services is part of a strategic casualty reduction partnership with Hampshire Police and the other emergency services and other local authorities in the region to take a strategic role in road casualty reduction. The group is currently looking at motor cycle casualties.

Proposed changes to the financing and operation of Safety Camera Partnerships are to be introduced from April 2007. This initiative provides additional resources for road safety initiatives and Government is encouraging a partnership approach to their deployment.

KEY ACTIONS

The Isle of Wight Council is committed to improving road safety for all road users by:

1. Assisting Hampshire Constabulary in providing better and more effective data led traffic law enforcement
2. Promoting a better understanding of the road safety consequences of poor or inappropriate road user behaviour
3. Offering education and retraining as an alternative to fines and penalty points in appropriate cases where this would be beneficial
4. Developing partnership working opportunities through the Strategic Casualty Reduction Partnership

G.3 Hampshire and Isle of Wight Safety Camera Partnership

The Hampshire and Isle of Wight Safety Camera Partnership was launched in April 2002 and is helping to reduce casualties throughout Hampshire and the Isle of Wight. In the first year of Safety Cameras operating on the Isle of Wight, collisions in which people were killed and seriously injured fell by 43% at fixed camera sites and 11% at mobile camera sites. Personal injury accidents fell by 8% at fixed camera sites and 39% at mobile camera sites.

G.4 Promoting a Better Understanding of Consequences of Poor or Inappropriate Road User Behaviour

To be most effective, enforcement activity should be linked to education, publicity and awareness campaigns. Liaison meetings with the police and others partners will aim to co-ordinate efforts to tackle identified road user problems holistically rather than each organisation operating in isolation.

G.5 Offering Education and Retraining Package to Offenders

Driver Improvement schemes can offer a more constructive alternative to prosecution for some drivers who commit relatively minor offences or cause minor crashes. If it is clear that education or further training would help the driver to avoid a recurrence of the incident, then a place on an improvement scheme can be offered (at the discretion of the police) as an alternative to prosecution. It should be emphasised that this is not an easy option. The driver will have to pay for the course and should the driver fail to participate properly in it, then the prosecution could still be pursued. Isle of Wight Council will work with Hampshire Constabulary and other partners to develop and provide a driver improvement scheme.

H. Improving the Safety of the Road Network

H.1 The Problems

Trends

There were 92 KSI casualties in 2004, which is 28% below the 1994-8 average. This compares with 22% below for Great Britain. The trend appears to be fluctuating around the 1994-8 average.

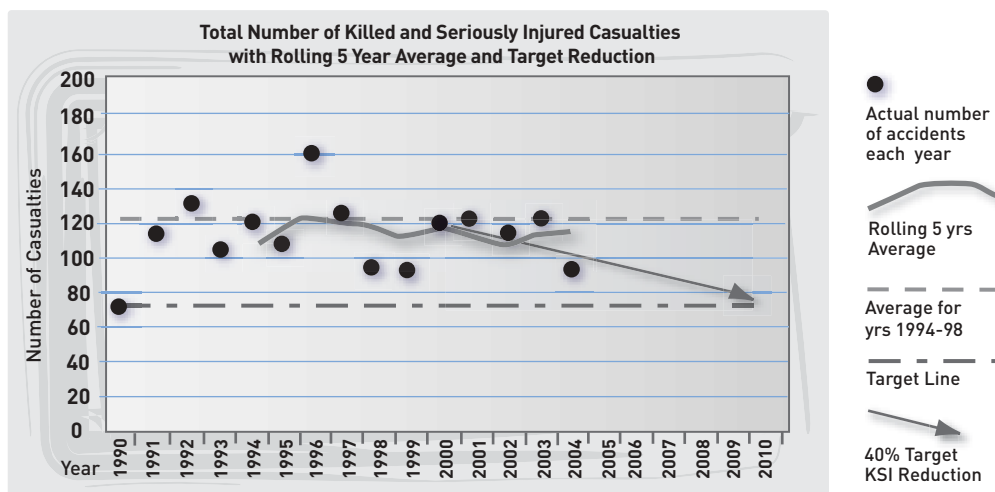


Figure 18 – KSI casualty trend

There were 526 slight casualties in 2004. The national target uses a slight casualty rate to reflect the changes in traffic volume and distance travelled in relation to the number of the casualties.

Approximately 70% of all the collisions that have been recorded on the island between 2001 and 2004 occurred on roads where the speed limit is 40mph or less. It is these types of roads that are usually found within built up areas of the island.

KEY ACTIONS

The Isle of Wight Council is committed to improving the safety of the road network by:

1. Investigating road accidents and treating problem locations, routes and areas with engineering measures to reduce the number and severity of injuries
2. Monitoring trends in road casualties and ensuring that appropriate action is taken
3. Improving safety at school and college entrances and on routes to schools and colleges
4. Improving safety in residential areas by reducing speeds through traffic calming measures including 20 mph Zones
5. Improving facilities for pedestrians and cyclists
6. Speed management measures will be provided at entrances to towns, villages and locations with specific speed related injury accident problems
7. Implementing a system of Road Safety Audits for all significant changes to the highway network to ensure that they operate as safely as practicable
8. Reviewing road improvement and maintenance policies to ensure that road safety is given a high priority

Location of collisions

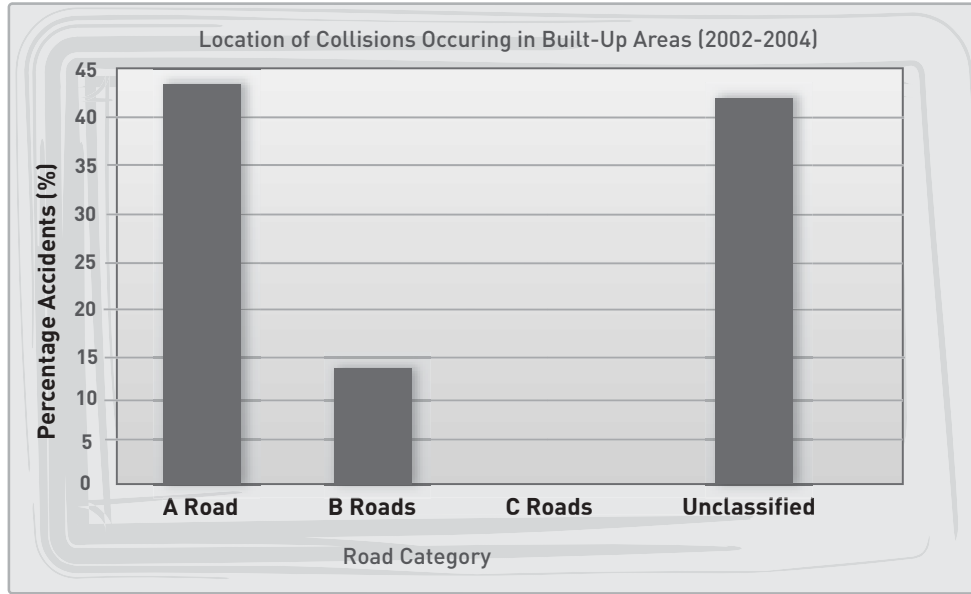


Figure 19- Percentage of collisions by type of road in built-up areas

Over 40% of the collisions in built-up areas occur on A roads, and similarly over 40% occur on unclassified roads. The A roads are the busier roads which link the individual settlements on the island, while the unclassified roads are usually local roads within or linking housing areas.

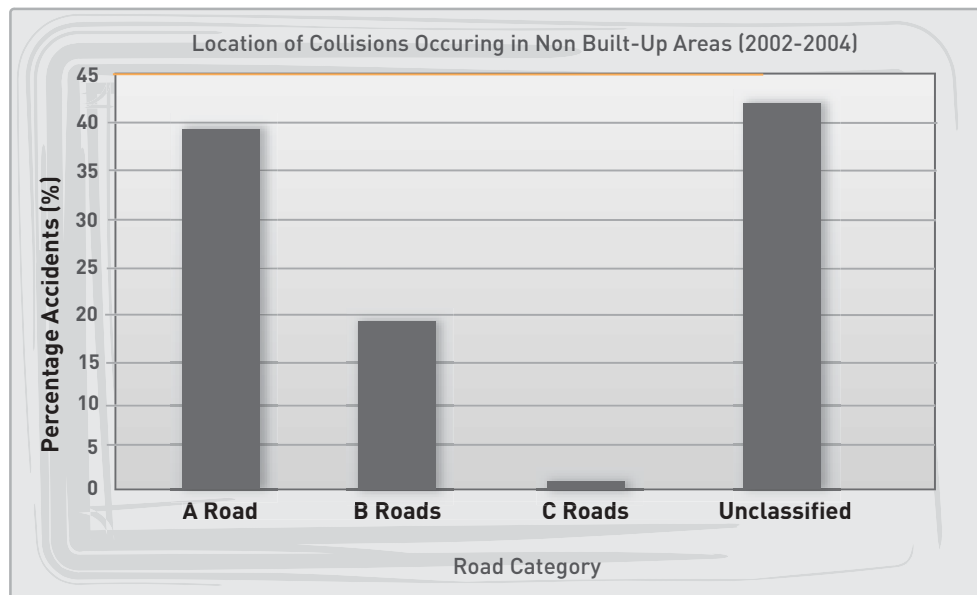


Figure 20 - Percentage of collisions by type of road in non built-up areas

Of the accidents which occur in non built-up areas over 40% of them occur on unclassified roads while over 35% occur on the busier A roads and nearly 20% occur on B roads.

H.2 Investigating Road Crashes

Engineering measures can improve road safety by the identification and treatment of hazardous locations where high (or higher than expected) numbers of accidents occur. It is important that all locations that could be susceptible to treatment are identified. This will ensure that treatable problems are not missed. The accident patterns at these locations can then be analysed and (where possible) engineering measures can be implemented. The primary objective of this approach is to make a significant reduction in the number of people injured in road accidents.

Locations for accident investigation studies will be identified in 4 main categories:

Cluster sites

These are specific locations, such as a junction, where a cluster of accidents occur.

All locations with 4 or more injury accidents in 3 years will be identified annually. These locations will be subject to a preliminary accident investigation. The locations that reveal a potential for treatment will then be subject to a detailed accident investigation to determine the most appropriate treatments. The sites will be monitored.

Route lengths

These are routes (or sections of routes) that have a higher than average number of accidents on them. The main traffic routes are likely to account for a high proportion of road accidents. Some roads of a lower category will also have accident problems.

All A and B roads will be subject to a detailed accident investigation every 5 years in a rolling programme. Roads (or sections of roads) of a lower category having a higher than average number of accidents (for that road class) will also be reviewed annually. Those that have a treatable accident pattern will be considered for Local Safety Scheme funding. An annual programme of route investigations will be carried out.

Area-wide problems

These are whole areas where there are accident problems that are spread over the area rather than clustering at a small number of specific locations. These tend to be mixed-use retail or residential areas where there are conflicts between vehicles and vulnerable road users. Problems can be exacerbated by through traffic using roads not designed for that purpose or substantial numbers of pedestrian movements in conflict with vehicles.

All areas with more than 50 injury accidents (in the most recent 3-year period) in a square kilometre will be subject to a preliminary accident investigation. The locations that reveal a potential for treatment will then be subject to a detailed accident investigation to determine the most appropriate treatments.

Mass action sites

These are sites that exhibit common accident problems where a tried and tested engineering measure will make a significant reduction in the accidents. Examples of these include skidding accidents at junctions or bends and red light infringements at traffic signals. The provision of anti-skid surface and red light cameras respectively would reduce the problems.

An annual review of the accident database will be undertaken to identify sites exhibiting common accident problems (with a potential treatment). The locations that reveal a potential for treatment will then be subject to a detailed accident investigation to determine the most appropriate treatments.

Identifying and investigating accidents using these four approaches will reveal most of the treatable accident locations. There may be some overlap between the approaches but few (if any) treatable sites will be missed.

H.3 Monitoring trends in Road Accident Casualties and Review of Action

An annual review of road accident casualty facts will be undertaken and published. The trends identified will be used for monitoring progress against targets. A review of any further actions needed to achieve the target reductions will be identified.

This information will also be used to help target other road safety activities such as education, publicity and enforcement campaigns.

Accident information can be related to other information on traffic volumes, speeds and demographic information relating to population distribution through Geographic Information Systems (GIS).

H.4 Improving safety around school and college entrances and on routes to schools

The areas outside schools and colleges and the routes to and from them are often a concern to children, parents and teachers. There is often intense activity in the period of time when staff and pupils are entering or leaving the school. Outside these times there may be little activity unless the road is on a main traffic route.

Improving safety (or the perception of safety) around schools and colleges and on routes to and from them can lead to more children cycling and walking to school. This in turn leads to less traffic problems outside the school.

The safer routes to school programme will be extended to offer all schools the opportunity to benefit from a safer routes to school scheme. A more detailed description of this work is contained in Appendix 1.

H.5 Improving Safety in Residential Areas

The areas where people live should be as safe as possible. These are areas where children will play and learn their first road skills. Around 25% of all road accidents each year (involving 40% of all child injuries) take place on minor built-up roads. Research has shown that reducing traffic speeds and volumes on these types of road can reduce the number of people injured by more than 60%, with few if any fatal or serious injuries.

Traffic restrictions such as road closures, access restrictions and bus-only gates can be considered in residential areas to prevent through traffic using inappropriate roads. Where these are not suitable, traffic calming measures, 20mph Zones and Home Zones can be implemented in order to reduce traffic speeds and discourage any through traffic. This approach can lead to significant improvements in both road safety and the local environment.

An annual programme of 20mph Zones and traffic calming measures will be undertaken in residential areas. Priority will be given to locations with injury accident problems.

Developers of all new residential roads and estates will be required to provide measures to constrain vehicle speeds to around 20 mph and ensure that pedestrians and cyclists have good access.

H.6 Improving Safety in Villages

Fear of traffic can affect people's quality of life in villages and it is self-evident that villages should have comparable speed limits to similar roads in urban areas.

An annual programme of 30mph speed limits to be implemented in villages will be undertaken. This programme will be prioritised according to the Councils priority ranking system.

Village speed limits will also be assessed as part of relevant local safety schemes and route studies. Further information on the assessment of speed limits is available in Appendix 2 (Speed Management Strategy)

H.7 Improving Safety on Rural Roads

Safety on rural roads will be addressed as part of the rolling route studies programme. As part of this programme, a review of rural speed limits will be undertaken in accordance with the Government guidance (update of Circular 1/93) “Setting local speed limits”

Where appropriate, the implementation of Quiet Lanes will be investigated as part of the route studies programme.

Further information on assessing rural speed limits and Quiet Lanes can be found in Appendix 2 (Speed Management Strategy).

H.8 Improving Facilities for Pedestrians and Cyclists

Poor or inconsistent facilities for walking and cycling can be a significant barrier to encouraging safer walking and cycling and can contribute to both concerns about possible accidents and injuries to these vulnerable road users.

An annual programme of pedestrian and cycle route and crossing facilities will be undertaken. This will be carried out in conjunction with reviews of walking and cycling routes.

H.9 Implementing Road Safety Audits

Accident investigation and treatment programmes seek to improve the safety of existing roads. When new roads (residential, commercial or main traffic routes) are built or existing roads are improved or modified to accommodate development then it is important to ensure that these roads operate as safely as practicable. Road Safety Audit is a formal process for checking the safety of such changes to the road network to achieve this. It aims to minimise the number of accidents that occur on new and improved roads and take advantage of opportunities to include accident reducing measures. Experienced road safety engineers undertake documented safety checks at the stages of the design and construction of such schemes.

All significant changes to the highway will be subject to the road safety audit procedure detailed in Appendix 3. This will generally involve road schemes being subject to a safety audit at three stages of their development:

- 1. Completion of preliminary design**
- 2. Completion of detailed design**
- 3. Completion of construction**
- 4. Monitoring**

For smaller schemes it may be possible to combine the first two stages.

H.10 Speed Management Measures

In addition to actively contributing to the Safety Camera Partnership with Hampshire Constabulary (Appendix 2) the Isle of Wight council will provide an annual programme of speed management measures. These will include:

- Town and village gateways and traffic calming schemes
- Safety cameras to discourage speeding and red light offences
- Interactive fibre optic “SLOW” signs which are blank until activated by a vehicle travelling at or above a particular threshold speed
- Mobile ‘Speed Indicator Display Signs’ (SIDS)

H.11 Reviewing Road Improvement and Maintenance Policies to Ensure that Road Safety is Given a High Priority

Maintenance issues can often have an impact on road safety. Issues such as road surfacing and drainage defects can lead to increased risk of skidding accidents. The effectiveness of signing can be reduced by inadequate cleaning or landscape maintenance regimes.

A comprehensive review of the road improvement and maintenance policies of the Council will be undertaken. The aim of this is to identify opportunities to give road safety considerations a higher priority. Some areas that may yield benefits are:

- The skidding resistance provided by the different road surface repair techniques used (potential problems with early life skidding on some of the new thin surfacing materials such as Stone Mastic Asphalt will be considered as part of this). A programme of providing safety surfacing will be undertaken
- Inspection frequencies and response times for surface defects likely to cause problems for vulnerable road users
- Inspection frequencies and response times for signs/markings defects
- Standards of inspection of temporary traffic management arrangements at all roadworks
- Programmes of preventative maintenance work such as safety surfacing

I. Partnership and Communication

I.1 Establishing a Road Safety Forum

The involvement of a wide variety of bodies and groups with an interest in road safety can improve the effectiveness of spreading the road safety message. Wide spread interest is vital if improvements in the behaviour of drivers, riders and pedestrians, enhancement in vehicle safety, better roads and road engineering and better enforcement are to be achieved. Improving road safety should be a joint venture through partnerships and this requires the positive co-operation of road users and a large number of both public and private sector organisations.

A road safety forum was set up following the publication of the last Road Safety Plan. The involvement of a wide variety of bodies and groups with an interest in road safety can improve the effectiveness of spreading the road safety message. Whilst the forum has generated widespread interest and a number of partners have become involved, a shift in focus is required to improve its effectiveness as an accident reduction tool. An alteration in focus to concentrate on data-led road safety issues will be considered and evaluated.

I.2 Improving Accessibility to Road Safety information

It is important to make road safety information more accessible for all interested parties in order to encourage interest and foster an informed approach to road safety issues. A road safety website will be established to assist with communication. Links to other sources of information and partner groups/bodies will be established. The website will have a facility to request more specific information and comment on road safety matters.

KEY ACTIONS

The Isle of Wight Council is committed to improving road safety through a partnership approach and to improving communication by:

1. Re-focusing the Road Safety Forum to take a more strategic and data led approach to road safety.
2. Improving accessibility to road safety information and making it easier for people to comment on road safety issues and problems

1.3 Potential Partners

An indication of potential partner organisations and groups representing road users' interests is shown below:

- Hampshire and Isle of Wight Safety Camera Partnership
- Hampshire Constabulary
- Ambulance Service
- Fire Service
- Health Authority
- Education Authority

In addition the following groups will be consulted on safety policy and schemes where appropriate:

- Town and Parish Councils
- Community Forums
- Schools and Colleges
- Walking groups
- Mobility Impairment groups
- Cycling groups
- Driver Instruction and Training groups
- Public Transport Operators
- Other Transport Operators
- British Horse Society
- Taxi Drivers Association
- Specialist interest road user groups

A strategic approach to tackling road safety problems is being undertaken with neighbouring local highway authorities throughout the southern region. The Isle of Wight plays an active part in this attending meetings and implementing joint initiatives to tackle problems in a widespread comprehensive manner

Appendix 1: Safer Routes to School Programme

Introduction

Over the last 10 years the number of parents driving their children to school has increased substantially with consequent increases in traffic congestion around schools at start and finish times.

Safer Routes to School projects are intended to improve road safety and reduce child casualties on the journeys to and from school. By encouraging more walking and cycling to school the schemes are also intended to improve children's health and to reduce local traffic congestion and pollution.

Successful Safer Routes to School projects require initiatives within the schools themselves as well as road safety engineering and education measures. The projects should involve the school, local residents, the health authority and the police in addition to the local authority's transportation department. The active involvement of the school children and teachers is essential. It is a condition that schools adopt a School Travel Plan in order to have a Safer Routes to School project.

Safer Routes to School Projects can be identified in three ways:

- By using road crash data to identify those schools where children travelling to or from school have been involved in road crashes
- By inviting schools to take part in a project provided that the school is preparing to produce a School Travel Plan to enhance the project
- By identifying schools with particular local congestion problems

Experience elsewhere in the country suggests that crashes near schools are relatively infrequent and hence crash data alone will generally only identify a small number of schools with a poor safety record.

Possible Options to Improve Safety Around and on The Routes to School

Measures to improve road safety:

- Parking restrictions or School Keep Clear markings can lead to more orderly parking in the area adjacent to the school's pedestrian and vehicle access points. However programmed enforcement activity may be required to prevent illegal waiting whilst parents drop off and pick up children
- Traffic calming measures can reduce vehicle speed and provide narrower sections of road which children can cross more easily
- Variable speed limits can be applied outside the school with lower speed limits (generally 20mph) operating in the periods when children are entering and leaving the school
- Provision of safe crossing facilities on main walking and cycling routes to school can improve safety
- Provision of education, awareness and pedestrian/cycle training programmes for schools
- Provision of support packages including project work, competitions, events and promotional material
- Safer routes to schools initiatives can be set up to involve parents, teachers and school children. It is necessary to analyse their various concerns about the school journey. This may be done through questionnaires to all groups of people. Measures taken in response may include road safety education in schools, raising the awareness among parents and the provision of low cost engineering measures to specific road or footway problems

Measures to promote travel by walking/cycling

- Provision of new or improved walking and cycling routes can encourage these modes of travel
- Provision of safe and secure cycle parking facilities and lockers to encourage cycling
- School travel plans can help to put in place policies that encourage walking and cycling to school, improve safety and ease local traffic problems
- Walking buses can encourage groups of children to walk to/from school together, accompanied by adults

Proposed Strategy

- Check child injuries (location and time of day) to identify those occurring on school journeys
- Identify schools with particular local traffic congestion problems
- Write to all schools inviting them to take part in Safer Routes to School projects. Participating schools will be required to produce School Travel Plans to demonstrate their commitment to the objectives of the Safer Routes to Schools programme.
- Prepare a programme (in priority order) of schools for Safer Routes to Schools projects
- Implement a given number of projects per year (dependent on funds and resources - 5 schools per annum) for the next 5 years in accordance with the programme above
- Undertake pupil and teacher travel surveys and classroom sessions on developing initiatives to encourage walking and cycling
- Set up a monitoring system to look at child casualties on the school journey and the modal split of journeys to and from school and publish information annually
- Review and reassess the programme annually
- Child Pedestrian Training in primary schools is now managed holistically starting at reception through to year 4 (4 – 9 year olds), using structured lesson plans at the chalk-face and practical kerbside training.

Appendix 2: Speed Management Strategy

Introduction

Vehicles travelling at excessive or inappropriate speed raise great public concerns about road safety. They also have adverse implications for sustainable travel initiatives, community severance, air quality and noise.

Research into accidents has shown that speeding or driving at inappropriate speed contributes to a significant percentage of collisions (up to around 33%) particularly more serious collisions. For each 1 mph reduction in average speed, accident frequency is reduced by an average of 5%. Recent research shows that it varies between around 3% and 6% depending on the type of road.

The Isle of Wight Council recognises and supports the government's initiative "to develop a speed policy that takes account of the contribution of reduced speeds to environmental and social objectives as well as to road safety". This was outlined in the DETR publication New Directions in Speed Management – A Review of Policy.

The Isle of Wight Council will work with partners to introduce a wide range of measures and initiatives to reduce the dangers posed by speeding vehicles. These will include:

- **A new speed limit policy in accordance with new national guidance**
- **Engineering measures to compliment speed limits**
- **Education, training and publicity initiatives and campaigns to raise awareness of the problems posed by speeding vehicles and encourage people to drive at more appropriate speeds**
- **Enforcement initiatives to increase compliance with speed limits**

The principles and actions in this Speed Management Strategy are integrated into the Isle of Wight Council's Road Safety Plan.

Speed Limits

Policy

The setting and enforcement of speed limits is a key area of speed management. Speed limits that drivers can more easily understand and accept are likely to be more effective and require less enforcement activity. The Isle of Wight Council will introduce a new method of assessing appropriate speed limits in accordance with new Government guidance "Update of Circular Roads 1/93, Setting Local Speed Limits" and the Traffic Advisory Leaflet 1/04 "Village Speed Limits"

The key objectives of the new guidance are

- **To provide up to date and consistent advice**
- **To better reflect the needs of all road users**
- **To improve the balance between road safety, accessibility and environmental objectives especially in rural communities**
- **To help road users to recognise and understand the risks involved on different types of road, the speed limit which applies and the reason for it**
- **To help bring about better respect for, and compliance with, more appropriate speed limits**
- **To help reduce the number of road traffic collisions, injuries and deaths in which excessive or inappropriate speed is a contributory factor**

Speed limits on their own will not necessarily achieve the desired reductions in vehicle speeds. They will need to be supported by a wide range of engineering, education, training, publicity and enforcement initiatives.

Villages

Government policy is to work towards 30mph speed limits in villages being the norm, where appropriate. However, 30 mph is not appropriate for all villages. The nature of the road alignment, its local environment, the speed of vehicles and the accident record will play a large part in the evaluation process.

A new speed assessment framework has been devised for single carriageway rural roads which will be used to determine the most appropriate speed limit.

Fear of traffic can affect people's quality of life in villages and it is self evident that villages should have comparable speed limits to similar roads in urban areas.

Assessing Village Speed Limits

The definition of a village, for the purposes of setting village speed limits should be based on simple criteria relating to frontage development and distance as shown below:

- **20 or more houses**
- **A minimum distance of 600m**

The minimum of 20 houses should be measured irrespective of whether they are on one or both sides of the road. The minimum distance of 600m is given due to the practical difficulties in providing a speed limit over a shorter section of road.

As a visual message to drivers that they are in a village, a measure of density is needed to give some minimum frequency of the houses over the extent of the speed limit. On the basis of the minimum number of houses and length of speed limit, an average density of at least 3 houses per 100m over the extent of the 30mph speed limit is recommended. This should generally apply over each 100m section of the limit but particularly for the first 100m at each end of the 30mph speed limit, to reinforce the visual message for drivers.

The influence of frontage development should be taken into account through the following factors:

- **If the road section has at least 20 houses with a density greater than 3 houses every 100m over a minimum length of 600m then it can be classified as a village and should be subject to a 30mph speed limit.**
- **If the section of road has a minimum 20 houses over a section of at least 600m in length, and at least half the housing density required for village status then a speed limit of 40mph should be considered.**

If the distance between adjacent villages is less than 600m, it is recommended that the 30mph limit should apply throughout in order to avoid frequent changes in speed limit. The minimum length of a speed limit should be 600m to avoid too many changes of speed limit along a route. In exceptional circumstances this may be reduced to 400m.

If a section of road does not meet the village definition criteria, but it is still felt that a lower speed limit should apply then the speed limit assessment framework outlined in Section 2.4 should be applied.

Implementing Village Speed Limits

An annual programme of 30mph speed limits to be implemented in villages will be undertaken. The programme will be prioritised according to accident rates.

Village speed limits will also be assessed as part of appropriate local safety schemes.

Towns

The default speed limit in lit urban areas is 30mph, representing an appropriate balance between mobility and safety of road users, especially the more vulnerable groups. Local speed limits of 20mph or 40mph may also be set where they are considered appropriate.

20mph zones and speed limits

20 mph zones are areas wide speed limits supported by engineering measures such as traffic calming to physically reduce mean vehicle speeds to around 20mph. No repeater signs are required with this type of speed limit

20mph limits are generally applied used to a single road or a comparatively short length of road for example outside a school. They should only be used where the speeds are already low (mean speeds of 24mph or below) or where additional speed reduction measures are to be carried out. Repeater signs are required for this type of limit.

40 mph speed limits

Roads suited to the higher urban limit of 40mph are urban dual carriageways and main traffic routes, e.g. ring and radial routes and bypasses which have become partially built-up. Roads suitable for this limit are generally in the suburbs. They should have:

- **Good width and layout;**
- **Parking and waiting restrictions in operation;**
- **Buildings set back from the road.**

These roads should not be used substantially by pedestrians and cyclists, but should, where appropriate, have adequate footways and crossing places as necessary for pedestrians, cyclists and equestrians.

Implementing Town Speed Limits

The following measures will be implemented as part of the Speed Management Strategy in towns.

- **An annual programme of 20mph Zones to be implemented in residential areas will be undertaken.**
The programme will be prioritised according to accident rates, particularly child accident rates, and will also include Home Zones.
- **Developers of new residential roads and estates will be encouraged to provide measures to restrict vehicle speeds to around 20mph on access roads**
This will ensure that new residential areas do not become future problem sites for vehicle speeds

Rural roads

The vast majority of the rural road network, including C and unclassified roads is subject to the national speed limit of 60mph on single carriageway roads. The majority of drivers do not exceed the speed limit on many single carriageway roads because it is often difficult to do so. Nonetheless, a high proportion of KSI casualties occur on rural roads and vehicle speed has been identified as a major factor in this.

There is a need to improve speed management in rural areas, and in particular tackle the problems caused by inappropriate speed. Nationally, the use of vehicle activated signs (VAS) has proved effective on the approaches to isolated hazards, junctions and bends. There are a number of site or route specific intervention measures that can be used to improve rural road safety.

Speed limits on their own without supporting physical measures, driver information and publicity or other measures will not necessarily change driver behaviour and will therefore result in substantial numbers of drivers continuing to drive at inappropriate speeds, leading to significant enforcement cost. Every effort should be made to achieve an appropriate balance between speeds, speed limits, road design and other measures. This balance may be delivered by introducing one or more speed management measures in conjunction with new speed limits or introducing speed limits as part of an overall route safety strategy.

Assessing Rural Speed Limits

TRL have developed an Assessment framework for weighing up the advantages and disadvantages of the speed limit options for each single carriageway rural road. The framework differentiates between two tiers of road according to function:

- **Upper Tier: Roads with primarily a through function, where mobility is important (typically A and B roads)**
- **Lower Tier: Roads with a local or access function where quality of life benefits are important (typically the C and unclassified roads).**

There may be roads below A and B classification which serve a mixed through traffic and access function. Where that function is currently being achieved without a high accident rate these roads should be judged against the criteria for upper tier roads. Where, however there a substantial potential risk to vulnerable road users exists on all or part of these roads they should be assessed against the criteria for lower tier roads.

An electronic spreadsheet is available for in depth analysis of the safety and mobility costs associated with each speed limit option. In most cases however, the Assessment Framework will indicate the most likely appropriate limit without the need for detailed analysis.

Nationally, over time, the speed limits which local authorities are expected to move towards are:

Upper Tier A and B Roads

- **70mph – Dual Carriageways**
- **60mph – High quality roads with accident rates below a threshold of 35 injury accidents per 100 million vehicle kilometres**
- **50mph – Where accident rates are above a threshold of 35 injury accidents per 100 million vehicle kilometres and / or the mean speed is already below 50mph**
- **40mph – Where there is substantial development or there are considerable numbers of vulnerable road users**
- **30mph – In villages**

Lower tier C and Unclassified roads

- **60mph – Roads with a mixed function (i.e. partial traffic flow function)**
- **50mph – Roads with a local or access function with accidents below a threshold of 60 injury accidents per 100 million vehicle kilometres**
- **40mph – Roads with a local or access function with accident rates above 60 injury accidents per 100million vehicle kilometres and / or where it forms part of a recognised route for vulnerable road users**
- **30mph – In villages**

Within routes separate assessments should be made for each section of road of 600m or more for which a separate speed limit might be considered appropriate. When this is completed, the final choice of appropriate speed limit for individual sections might need to be adjusted to provide consistency over the route as a whole.

Application of the Speed Limit Assessment Framework does not automatically mean that a speed limit will be reduced. In some cases the framework may identify the need for a higher speed limit to be implemented.

Implementing Rural Speed Limits

It is not possible, or desirable to implement a blanket change in rural speed limits on the Isle of Wight. Rural speed limits will be assessed on a case by case basis as part of structured review of speed limits.

Quiet Lanes

The aim of quiet lanes is to maintain the character of minor rural roads by seeking to contain rising traffic growth that is widespread in rural areas. There are three key elements to a Quiet Lanes Scheme:

- **Community involvement to encourage a change in user behaviour**
- **Area-wide direction signing to discourage through traffic**
- **Entry signing to indicate that those entering an area may expect to encounter a range of users and activities**

Where minor roads or networks of minor roads which have low flows of traffic travelling at low speeds and are suitable for shared use by walkers, cyclists, equestrians and motorists then they are suitable for consideration as quiet lanes.

Measure to Help Reduce Speeds

Engineering

Engineering Village and Town 30mph and 40 mph Speed Limits

When providing a village speed limit, supporting speed reducing measures will be required as reducing the speed limit alone is unlikely to have much effect on vehicle speeds unless they are already close to 30mph.

The following measures could be considered:

- **Vehicle Activated Signs** – *These are signs which remain blank until vehicles exceed a specified speed threshold. The sign then activates to warn drivers of a speed limit*
- **Carriageway Roundels** – *These must be accompanied by upright repeater signs. They are not allowed as repeaters in a 30mph speed limit where there is a system of street lighting in place*
- **Chicanes** – *These have the effect narrowing the carriageway and encouraging drivers to reduce speed*
- **Dragons Teeth Markings** – *These are usually placed prior to speed limit terminal signs. Dragons teeth markings can have a limited effect on vehicle speeds but have an impact on the visual amenity of the road and the surrounding environment*
- **Gateways** – *Can be used alone, or combined with another traffic calming feature to mark the entry point to a village and can act as a speed reducing feature if properly designed*
- **Road markings and coloured surfacing** – *These are used to visually narrow the carriageway*
- **Pedestrian crossing facilities** – *Can create a speed reducing effect or can be provided with a traffic calming feature*
- **Traffic Islands** – *These have the effect of reducing the width of the carriageway and although not as effective as chicanes, do change the visual nature of the road, particularly when used with hatch markings*
- **Rumble devices** – *These can alert drivers to a hazard by causing a noise on its approach*

Engineering 20mph zones and Speed Limits

Traffic calming measures are often required to make a 20mph Zone 'self-enforcing'. There are a number of measures available to reduce vehicle speeds, including:

- Road Humps;
- Road Narrowings;
- Gateway Features;
- Road Markings;
- Rumble devices;
- Mini-roundabouts.

A combination of measures of these measures is normally required. Measures such as road markings, gateway features and mini-roundabouts do not generally reduce speeds to 20mph without these physical features.

Education, Training and Publicity

Making drivers and riders more aware of the problems caused by speeding vehicles, influencing their attitudes and changing their behaviour are key areas of speed management to address.

A number of proposed actions to increase public awareness of the consequences of driving too fast and measures to influence attitudes and behaviour have been identified:

- Running appropriate local publicity and awareness campaigns and supporting national campaigns such as "KILL YOUR SPEED" and "THINK"
- Providing pre-driver training courses and road safety education in schools and colleges that provide a significant content relating to the problems caused by speeding vehicles and more appropriate behaviour
- Identifying potential high risk speeders and offering driver /rider education and retraining as an alternative to fines and penalty points in appropriate cases, where this would be beneficial
- Promoting a better understanding of the dangers of driving at an inappropriate speed on driver and rider training, improvement and rectification courses
- Evaluating the establishment of a Road Safety Forum involving local interest groups and community representatives to discuss and co-ordinate ways of reducing vehicle speeds to more appropriate levels, improve road safety and reduce accidents

The Isle of Wight Council will develop its programmes of education, training and publicity measures and campaigns to improve awareness of the problems caused by speeding vehicles and encourage people to drive/ride at more appropriate speeds.

Enforcement and deterrence

Hampshire Constabulary is responsible for enforcing speed limits on the Isle of Wight. The use of automatic safety camera technology as a means of detecting and deterring speeding vehicles (at locations where there are speed related injury accidents) as well as red light infringements at traffic signals plays an increasing role in enforcement. On 1 April 2002, a partnership between the Isle of Wight Council, Hampshire County Council and Hampshire Constabulary was set up.

This partnership is responsible for the management of safety cameras throughout the whole of Hampshire Constabulary area. Under this arrangement safety cameras are deployed primarily on the basis of injury accident criteria laid down by the Government. A proportion of the fines ("netting-off") paid for speeding is used to fund the purchase of the necessary safety cameras and associated

equipment as well as the operational, maintenance and management costs of the system.

During 2004 financial year, the Safety Camera partnership achieved significant speed and casualty reduction benefits across Hampshire and the Isle of Wight:

- **The number of accidents resulting in death or serious injury fell by an average of 59% on safety camera routes compared to baseline levels**
- **The number of accidents resulting in personal injury fell by an average of 35% on safety camera routes compared with baseline levels.**
- **On the basis of historical trend data, it is estimated that 80 fatal or serious accidents have been prevented in the 2004 financial year along safety camera routes.**
- **Six monthly speed monitoring shows 85%ile speeds along safety camera routes have reduced by an average 5.1mph on 30mph routes, 3.5mph on 40mph routes and 5mph on 50mph routes.**
- **Public perception remains mostly positive with surveys demonstrating that the majority of the public accept that the purpose of the initiative is to save lives rather than generate revenue.**

The government's current criteria for the use of safety cameras for detecting speeding vehicles under the "netting off" arrangement through the partnerships are stringent:

- **Fixed camera sites can only be used at locations where there have been 4 people killed or seriously injured per kilometre of road in three years**
- **Mobile camera sites can only be used at locations where there have been 2 people killed or seriously injured per kilometre of road in three years**
- **Speed must be a contributory factor to the collisions and vehicle speeds should be at or above ACPO guidelines**
- **At least 20% of drivers should be exceeding the speed limit**
- **There should be no other obvious measures to improve road safety**

On the Isle of Wight a number of both fixed sites and mobile sites have been identified in accordance with the criteria. Hampshire Constabulary will continue to enforce speed limits more generally on the Isle of Wight primarily using their traditional methods of detection. The safety camera partnership will have a limited capability to deploy cameras periodically at other sites where vehicle speeds are causing concern.

Appendix 3: Road Safety Audit Policy and Procedure

Introduction

Purpose

Road Safety Audit is a systematic and objective method for checking the safety aspects of a wide range of road schemes to:

- ensure that road schemes operate as safely as practicable
- minimise the occurrence and severity of road accidents
- consider the safety of all road users
- improve the awareness of safe design practices by design, construction and maintenance staff

Road Safety Audits identify potential road safety hazards within the design of road schemes and make practical recommendations to eliminate or minimise them.

The Road Safety Audit process is not:

- a technical check
- a check of compliance with design standards
- an assessment of the safety benefits of a scheme

If any of these are necessary then they should be undertaken separately.

A Road Safety Audit should be carried out from each of the following road users' point of view by examining how they are likely to use the scheme:

- Pedestrian (adult, child, elderly, mobility and sight impaired)
- Cyclists (pedal and powered)
- Drivers (car and commercial vehicles)
- Equestrians

Background

Road Safety Audit was developed during the 1970's and 1980's, by UK road safety engineers, predominantly working in local authorities. This was in response to accident problems associated with the opening of new road schemes and road improvements. In 1990 formal guidelines and requirements were introduced in the UK, which lead to the widespread undertaking of Road Safety Audits.

The need for Road Safety Audits

Road Safety Audit has an important part to play in achieving the road safety objectives of the Road Safety Plan. Roads are constructed or changed for a variety of reasons, for example to relieve congestion or to allow access to new development. Mistakes can be made and design or budget constraints may lead to road safety problems. Opportunities to include accident-reducing elements may have been missed or road safety may not always receive a sufficiently high priority.

Road Safety Audit can help to ensure that road safety is given a high priority. The process can be applied to new roads, road improvements, traffic management schemes, development proposals and maintenance schemes.

The benefits of Road Safety Audits

A study of 40 minor works schemes in Surrey indicated that those schemes that were safety audited on average resulted in 1 less person injured in road accidents per scheme per year. In Denmark, the first year rate of return for safety audits has been estimated at around 150%. In Ireland it was found that 30% of the safety problems identified resulted in injury accidents within 5 years of the implementation of the scheme.

Policy

Scope

In 2003, a new Highways Agency standard (HD19/03 – Road Safety Audits) was published. This was a thorough review of safety audit practice in the UK and internationally. Although this is only binding for Trunk Roads and Motorways, it is recommended as good practice for local authorities to use on their road network. This represents the current best practice guide upon which Road Safety Audit Policy and Procedures should be based. However, it is recognized that local authorities are often dealing with smaller scale schemes, have more limited resources and have differing management structures. Hence whilst using HD 19/03 as a base for the Isle of Wight Council's policy and procedures, not all of the procedures in HD19/03 can be adopted. This Road Safety Audit Policy and Procedure document outlines the practices which will be adopted and applied on the Isle of Wight.

Road Safety Audit will apply to all engineering schemes implemented on roads for which the Isle of Wight Council is the Highway Authority. Road Safety Audits should be carried out on all the road schemes indicated below, except where the total cost of road works on the scheme is less than £10,000. For schemes of lesser value, the decision whether or not to carry out an audit is the responsibility of the Traffic manager.

Road Safety Audits will also apply to schemes planned and designed by outside organisations on behalf of the Isle of Wight Council or on roads that will be the maintenance responsibility of the Isle of Wight Council. Such outside organisations should be able to demonstrate that they have adopted all relevant parts of this policy and procedure. Specialist sub-contractors may be used, or if this is not appropriate, staff undertaking the audit should be completely independent of the scheme design and meet the experience requirements outlined in Table 1 and have substantial experience of undertaking road safety audits.

The safety audit process will be applied to the following types of road scheme:

- **New road schemes (including residential developments)**
- **Major improvements**
- **Minor improvements**
- **Traffic management schemes**
- **Development schemes**
- **Major maintenance schemes**

Road Safety Audit will also apply to arrangements between developers and the Isle of Wight Council as a result of schemes arising from planning applications. It is the responsibility of the Project Sponsor to determine the requirement for a Road Safety Audit in accordance with this Procedure.

Road Safety Audit stages

Road schemes will be subject to a Road Safety Audit at a number of the stages throughout their planning, design and construction process.

Stage F: Feasibility Study (only applicable to new roads, major schemes / developments or where there is a choice between options)

This stage of audit will examine the choice of route, the purpose and function of the road in the hierarchy, the standards applicable and the number and types of junctions. In housing zones it will consider speed management issues. It will also be used to examine major planning developments

Stage 1: Completion of Preliminary design

This stage of audit will assess horizontal and vertical alignments, sight lines, and layouts and suitability of junctions

Stage 2: Completion of Detailed design

This stage of audit will assess detailed junction layout, road markings, signs, lighting, landscaping and other design details

Stage 3: Scheme completion

This stage of audit will examine the completed scheme by driving, walking or cycling along the new route (as appropriate). The scheme should also be examined during the hours of darkness to ensure that night-time safety standards have been achieved

Stage 4: Scheme Monitoring - 1 year and 3 years after completion

This stage of audit will examine the accident records of the scheme and other reported road safety problems. Comparisons will be made with control data and expected accident rates and types for similar locations. Separate reports will be produced for 1 year and 3 years after completion of the scheme.

Stage F may only be required where there is a choice between different scheme options. Stages 1 and 2 can be combined for smaller schemes where there are no distinct preliminary design / detailed design phases. Stage 3 Road Safety Audits can be carried out in two parts for major schemes. These are stage 3a) - (substantial completion) and 3b) - (immediate post-opening in both daytime and darkness conditions). For minor schemes Stage 3 Road Safety Audits should be carried out at either pre-opening or immediate post-opening.

For the purpose of this procedure a major scheme is one where the total cost of road works on the scheme is greater than £10,000. In addition, such a scheme can be defined at the discretion of the Traffic Manager.

Representatives from the Design Team, Maintenance Team and the Police will be invited to all Stage 3 Road Safety Audits. The Design Team, Maintenance Team and Police representatives are present as advisors and do not formally constitute part of the Road Safety Audit Team.

All recommendations of the audit report should be carried out unless they are subject to an Exception Report (See Section 3.1). A copy of the signed Exception Report should be sent to the Audit Team Leader.

The Road Safety Audit Team

The Road Safety Audit can be carried out either by staff from the Isle of Wight Council or by external bodies. The Audit Team proposed must be approved by the Project Sponsor (Isle of Wight Council) prior to the commencement of the Road Safety Audit. In approving the Audit Team due consideration will be given to the criteria below.

It is essential that Road Safety Audits are carried out by a team of at least two people who are independent of the scheme design. This improves the quality of the audit and reduces the risk of safety problems being missed. The team should have suitable road safety engineering expertise and training to undertake the Road Safety Audits.

Additional specialist staff, such as Road Safety Education, Training and Publicity Officers and Traffic Signal Engineers, can be brought into specific projects to act as advisors as required. They will not formally constitute part of the audit team.

Table 1 outlines the requirements for the Road Safety Audit Team. CVs of the Audit Team members should be approved by the Project Sponsor for the Isle of Wight Council.

TABLE 1 - ROAD SAFETY AUDIT TEAM REQUIREMENTS

- Audit Team leaders should have a minimum of:
 - 4 years Road Safety Engineering / Accident Investigation experience
 - have carried out 5 road safety audits in the last 12 months
 - have attended a UK accredited 10 day Accident Investigation / Road Safety Engineering training course
 - have obtained 2 days CPD in Road Safety Audit, Road Safety Engineering or Accident Investigation in the last 12 months
- Audit Team members should have a minimum of:
 - 2 years Road Safety Engineering / Accident Investigation experience (recent)
 - have carried out 5 road safety audits in the last 24 months
 - have attended a UK accredited 10 day Accident Investigation / Road Safety Engineering training course
 - have obtained 2 days CPD in Road Safety Audit, Road Safety Engineering or Accident Investigation in the last 12 months
- Audit Team Observers
 - 1 years Road Safety Engineering / Accident Investigation experience (recent)
 - have attended a UK accredited 10 day Accident Investigation / Road Safety Engineering training course

Note

- A working knowledge of design standards and the design and effectiveness of accident remedial measures is desirable
- Highway engineers or other engineers without the required Accident Investigation or Road Safety Engineering are not acceptable as auditors
- All Road Safety Audit teams should be approved by the Project Sponsor (Isle of Wight Council) prior to undertaking Road Safety Audits. In the case of external auditors, the CVs of the audit team should be approved before the audit team are deemed acceptable
- In the case of an external organisation carrying out Road Safety Audits, copies of the appropriate level of their public liability and professional indemnity insurance for this type of work should be provided with CVs

Procedure

Definitions and roles within Road Safety Audit

Design Team:

The group undertaking the various phases of scheme design and/or supervision of construction. This team may be internal or external to Isle of Wight Council.

Project Manager:

The person responsible for ensuring the progression of the scheme in accordance with procedures; The Project Manager is responsible for proposing the Audit team and obtaining the approval of the Project Sponsor (Isle of Wight Council) before commissioning the Audit Team.

Road Safety Audit Team:

A team of two or three people, independent of the Design Team, comprising staff with the required experience and training, which considers the scheme from a road safety point of view.

Exception Report:

A report prepared by the Project Manager in response to the Road Safety Audit Report. The Exception Report should give reasons why recommendations from the Road Safety Audit Report have not been adopted, and where appropriate outline alternative solutions. The report should not be actioned until signed by the Project Sponsor. A copy of the signed report shall be sent to the Audit Team Leader.

Project Sponsor:

The person designated by Isle of Wight Council as responsible for approving audit teams, agreeing / signing exception reports and overseeing the Road Safety Audit Procedure

Information and time required to carry out Road Safety Audits

The Project Manager should provide all of the information required by the Road Safety Audit Team. Subject to the overall scheme implementation programme, at least ten working days is required from receipt of drawings and other design information to complete a Road Safety Audit. At least 20 working days prior notification of the need for an audit for a major scheme should be given wherever possible.

The information supplied for Road Safety Audit should include at least:

- **design brief;**
- **design checklist;**
- **departures from Standard;**
- **scheme plans;**
- **other scheme details;**
- **accident details where relevant;**
- **traffic flows and/or speeds where relevant;**
- **previous Road Safety Audit reports;**
- **previous Exception Reports;**
- **notification of the proposed date for the start of construction.**

An example of a standard form covering these items to be completed by the Design Team is shown in Annex A.

The Isle of Wight Council will retain a copy of all information submitted to the Road Safety Audit Team together with the Road Safety Audit report and any Exception reports.

It is the responsibility of the Project Manager to ensure that adequate time for the Road Safety Audit process and for potential post-Audit re-design is considered within the overall project programme.

Carrying out Road Safety Audits

Once the Audit Team has been approved they should be sent the audit information (See 3.2). The Audit Team Leader should check it for completeness and any missing or additional information required should be identified and requested from the Project Manager.

Stage F, 1, 2 and 3 Audits

These audits will consist briefly of

- **An examination of the scheme details**
- **A visit to the site by the whole audit team (plus any advisors if appropriate)**
- **Recording of notes and photographs (where appropriate) of possible road safety problems**
- **Use of checklists (see HD19/03) to ensure that no potential safety problems have been overlooked**
- **A discussion by the Audit Team of the potential safety problems and recommendations**
- **A final Audit Report to be sent to the Project Sponsor (Isle of Wight Council) and Project Manager**

Stage 4 Audits - The road safety performance of schemes that have been audited will be monitored by the LTP Programme Management Board. This will take place 1 year after and 3 years after the completion of the schemes. The purpose of this is to examine any subsequent safety problems and report on how engineering designs can be improved to reduce accidents and improve road safety.

Key issues

The main purpose of Road Safety Audit is to identify potential road safety hazards within the design of schemes and make practical recommendations to eliminate or minimise them. Hence the team undertaking the Road Safety Audit needs experience and training in Road Safety Engineering, Accident Investigation and undertaking Road Safety Audits.

In order not to hinder the design and construction process designers should be encouraged to seek audits at as early a stage as possible. This will result in less need for time-consuming fundamental changes at crucial periods such as tendering. Similarly designers should be encouraged to seek interim road safety audit views between formal stages if considered appropriate. The results of these interim audits should be recorded on the design file and in the audit records. Such interim audits do not replace the need for formal audits at the normal stages.

A number of checklists are available to assist in the audit process. They are not a substitute for road safety experience and training. They should be used only after the auditors have completed their examination of the scheme as a means of checking that nothing has been overlooked. Checklists can also be valuable as an aid to train road safety auditors.

Road Safety Audit should be carried out from the point of view of how people will actually use the roads in a variety of conditions and not just be a check for technical or design standards compliance. This process will involve role-play as different road users.

The Road Safety Audit Report

The Road Safety Audit report should be prepared in the style of the sample reports contained in HD 19/03.

An introductory statement setting out the terms of reference, and listing the Road Safety Audit Team members, should be included. The statement should describe when and where the Road Safety Audit was carried out. It should refer to plans and documents checked by the Road Safety Audit Team, which should be listed in an appendix to the report.

The report should include a series of road safety problems and related recommendations for improvement. The report should be signed by the Audit Team Leader.

The report should be written in a concise and specific format. Each problem is documented in terms of a potential road safety problem. This is most effective where the Road Safety Auditor attempts to describe a potential accident scenario that will affect a user of the scheme. These scenarios should, as far as possible, be capable of being backed up from accident records on previous schemes.

Recommendations, in terms of outline engineering measures, are then provided to help the Design Team to choose an appropriate action. The recommendations should, as far as possible, be capable of being backed up by evidence that the type of measure suggested is an effective safety feature.

It is not the responsibility of the Road Safety Audit Team to re-design the scheme. Their objective should be to get the Design Team to accept each road safety problem and point out possible solutions. It is the responsibility of the Project Sponsor to decide what action is appropriate and prepare an exception report if necessary.

Once the Road Safety Audit Team has completed the Road Safety Audit, copies of the final report should be sent to the Project Manager and the Project Sponsor. A paper copy of the final report plus all the requested documentation and plans should be retained by the Isle of Wight Council and the Road Safety Audit Team.

The Exception Report

The Project Manager should consider the Road Safety Audit Report and if any of the recommendations are not adopted then an Exception Report must be prepared. The Project Sponsor will either accept that the Road Safety Audit recommendations should be implemented in full, or agree and sign an Exception Report (prepared by the Project Manager).

The Project Sponsor should instruct the Project Manager to make those changes to the design that are required as a result of the Road Safety Audit Report. Where an alternative recommendation is proposed by the Design Team, discussions can be held with the Road Safety Audit Team before finalising the action and Exception Report.

The Project Manager should forward a copy of the Exception Report to the Road Safety Audit Team. In the case of unresolved issues the final decision as to whether a Road Safety Audit recommendation is implemented will be the responsibility of the Project Sponsor.

Issues Arising From This Policy and Procedure

Resource Implications

The adoption of this procedure has important implications in terms of staff resources for the Isle of Wight Council. If Road Safety Audits are to be carried out by staff from within the Isle of Wight Council, a team of two people will have to be formed and trained. They will not be able to audit any designs that they have worked on (in order to remain independent). This may require additional staff. If Road Safety Audits are to be carried out externally then additional staff time within the Isle of Wight Council will be needed to manage the process. There will be a need for additional ongoing staff time and commitment to maintain and operate the system.

Training

Staff undertaking audits should have the required training and experience set out in Table 1 (Section 2, page 4).

The Isle of Wight Council could also consider establishing a list of approved external safety auditors meeting the minimum standards of experience and training in Road Safety Engineering, Accident Investigation and Road Safety Audit.

Information for designers etc subject to the safety audit process will need to be incorporated in the Quality Management System (QMS), and in Capital Procedures and disseminated to designers to ensure that the process runs smoothly.

Checklists

Checklists are available in the Highways Agency Design Manual for Roads and Bridges – HD19/03 and the IHT Guidelines for The Safety Audit of Highways. These checklists should not be used for a “menu based tick box” approach to auditing but rather as an aid to auditors to check that potential road safety problems are not overlooked. Designers should be made aware of the Road Safety Audit process and may be interested in the checklists to get a feel for the issues that auditors are likely to be interested in. This, together with feedback reports from the monitoring of audited schemes, will help designers to produce safer schemes.

Annex A

Information Required to Carry Out a Road Safety Audit

SCHEME NAME: _____

BRIEF No.: _____

AUDIT STAGE: _____

AUDIT REQUEST DATE: _____

DATE AUDIT REQUIRED BY: _____

I request a Road Safety Audit for _____ (Scheme Name)
 _____ (Brief No.)

This work should be carried out in accordance with Isle of Wight's Road Safety Audit Policy and Procedures.

The report will describe any road safety problems that are identified from material supplied by us to your Road Safety Audit Team.

The report will also list recommendations made by the Road Safety Audit Team to reduce the possibility of future accident occurrence and or severity.

Please note the information that we are submitting for the purposes of the Road Safety Audit attached is outlined below.

Item	Attached (yes / no)
Design brief	
Design checklist	
Departures from Standard	
Scheme plans (list separately)	
Other scheme details (list separately) e.g. signs schedules	
Accident printout for existing roads affected by the scheme	
Traffic surveys	
Previous Road Safety Audit reports	
Previous Exception Reports	
Start/completion date for construction	
Any other information (list separately)	

Signed _____

Name _____

Project Manager _____

Annex B

Road Safety Audit Comments List

SCHEME NAME: _____

BRIEF No.: _____

AUDIT STAGE: _____

AUDIT REQUEST DATE: _____

DATE AUDIT REQUIRED BY: _____

Auditors Name _____ Page ____ of ____

Plan No.	Road Safety Audit Comments	Discussed within Audit tram	Comment included in report	Reason not included

Appendix 4: Partnerships and Communication

Introduction

Improving road safety should be a joint venture through partnerships and this requires the positive co-operation of road users and a large number of both public and private sector organisations. These include the Government (through the Government Office for the South East – GOSE), Isle of Wight Council, Hampshire Constabulary, schools, insurance companies, hospitals and health organisations, motor manufacturers and retailers and a variety of organisations and bodies that have specific responsibilities or interests in road safety.

At its broadest level all road users have an element of responsibility for their own behaviour and those they are looking after.

The involvement and exchange of views and information of as many bodies and groups improves the effectiveness of spreading the road safety message. Wide spread interest is vital if improvements in the behaviour of drivers, riders and pedestrians, enhancement in vehicle safety, better roads and road engineering and better enforcement are to be achieved.

Main Organisations involved and their roles

The main organisations involved and their roles are:

- **Government** prepares planning, highway and traffic legislation. It is also responsible for vehicle design and construction regulations, vehicle inspection, vehicle testing and driving standards. The government determines priorities and funding for road safety engineering, policing, education, publicity and training/testing.
- **The Engineering Services Department of the Council** is responsible for the planning and engineering of the transport system. They have many specific programmes of work aimed directly at improving road safety. They are also responsible for:
 - investigation and treatment of road accidents
 - monitoring and assessment of traffic safety
 - education, publicity, awareness, and training with regard to road safety issues
 - Co-ordination of road safety initiatives
 - provision of traffic management safety measures such as:
 - safer routes to schools
 - speed management including 20 mph zones, traffic calming, safety cameras etc.
 - pedestrian/cycle crossings and routes
 - junction control
 - anti-skid surfacing
 - road signs and markings
 - maintenance of the road network
 - provision of facilities for pedestrians, cyclist and public transport
 - design and construction of roads and road improvements
- **Hampshire Constabulary** is responsible for enforcement of much of the highway and traffic law that impacts on road safety. A lot of effort goes into deterring drivers from speeding and drink/driving. They also get directly involved in publicity and educational work. They are consulted closely on engineering matters.
- **Fire and Ambulance Services** have to deal with the casualties of road accidents and may be able to offer an insight into how to prevent accidents or reduce the injuries that arise from them. They also have a developing role in education and training issues.

- **The Local Education Authority (LEA)** has a role to play in incorporating road safety issues into the school curriculum. A Key Stage 2 “Step by Step” resource is being developed to encourage children to look at health, safety and environmental aspects of walking to school. Road safety officers support the LEA and regularly make schools aware of road safety issues and the teaching aids that are available.
- **Health Authority** - The Isle of Wight Health Authority has recognised the importance of encouraging safe walking, cycling and reduced car use as key issues in improving the Island’s Plan for Health and Well-Being. The Council works in partnership with the local Health Authority to develop and take appropriate actions to ensure that transport (including safety matters) and health matters are dealt with inclusively.
- **Other Groups That May Be Involved In Road Safety**
 - **Town and Parish Councils** have local knowledge of traffic and road safety problems. It is important that they are encouraged to take a positive role in improving road safety by being actively involved in the identification and prioritisation of safety problems and solutions. They can act as a sounding board for the local community and can assist in communicating road safety messages to the community and assisting in road safety campaigns.
 - **Schools and Colleges** will be encouraged to produce travel plans that reflect the safety of their students and staff. The views of schools and colleges will be sought and they will be encouraged to have a positive role in promoting road safety in their communities. Schools are actively involved in safer routes to schools projects. Road safety topics can be used in other areas of work to develop the personal and social skills of pupils. They can communicate information to parents on road safety issues.
 - **Driving Instructors and Specialist Driving Associations** are important links to young drivers and can train them in hazard perception and responsible driving behaviour.
 - **Community Forums** often show concern for traffic safety and can indicate where improvements are required. Involving them in the design and promotion of schemes and policies encourages ownership and support for safety work.
 - **Disabled groups** can offer specialist advice on where their members have particular road safety problems and how they can be solved.
 - **Walking and Cycling** groups can help to identify particular problems for pedestrians and cyclists and may be able to offer assistance in practical training courses.
 - **Transport Operators** are responsible for significant parts of many people journeys. It is possible that better links to their services may help to reduce safety problems.
 - **British Horse Society** can help to provide training for riding on the highway and may be able to identify measures to improve the road safety of horse riders.
 - **The media** has the ability to publicise information and provide a base for discussion. Resources come from national and local news, in-store promotions, distributions, school activity, complementary advertising, mailings and radio phone-ins can be used to raise awareness of safety issues. The use of web sites on the internet and email communication is a new way of reaching target audiences to ensure that road safety messages are readily accessible and influence road user behaviour.

Appendix 5: Summary of Key Actions

Action	Target Problem
<ol style="list-style-type: none"> 1. Structured road safety education programmes 2. Encouraging the promotion of road safety and providing support to children, parents, carers, teachers and school governors 3. Providing and developing appropriate road safety resources for parents, carers and teachers 4. Providing and supporting cycle and pedestrian training activities 5. Running appropriate publicity and awareness campaigns 6. Expanding the safer routes to schools programme to offer all schools the service 7. Undertaking programmes of speed reduction measures in residential areas 	Child Safety
<ol style="list-style-type: none"> 8. Running appropriate publicity and awareness campaigns for high risk pedestrian and cyclist groups 9. Providing safer walking and cycling facilities and routes 10. Reducing the dangers to walking and cycling caused by traffic volume and speed 11. Ensuring that the needs of pedestrians and cyclists (including mobility impaired) are given a high priority in all modifications to the road network 	Pedestrian and Cycle Safety
<ol style="list-style-type: none"> 12. Promoting advanced riding courses via locally based organisations 13. Encouraging riders to seek refresher and familiarisation training via direct access organisations 14. Carrying out publicity and awareness campaigns 15. Working with representatives of motorcycle user groups to look at issues of concern 16. Improving road conditions that could be a hazard 17. Undertaking a detailed investigation/audit of crashes involving powered two-wheeled vehicles 	Powered Two-Wheeled Vehicle Safety
<ol style="list-style-type: none"> 18. Making driver training, improvement and rectification courses widely available 19. Undertaking publicity and awareness campaigns aimed at key issues and targetting of high risk groups 20. Promoting the use of appropriate in car safety equipment for child seats and restraints 	Driver and Passenger Safety
<ol style="list-style-type: none"> 21. Assisting Hampshire Constabulary in providing better and more effective traffic law enforcement 22. Promoting a better understanding of the road safety consequences of poor or inappropriate road user behaviour 23. Offering education and retraining as an alternative to fines and penalty points in appropriate cases where this would be beneficial 	Enforcement and Deterrence (Safety Of All Road Users)

Action	Target Problem
<ul style="list-style-type: none"> 24. Investigating road accidents and treating problem locations, routes and areas with engineering measures to reduce the number and severity of injuries 25. Monitoring trends in road casualties and ensuring that appropriate action is taken 26. Improving safety at school and college entrances and on routes to schools and colleges 27. Improving safety in residential areas by reducing speeds through traffic calming measures including 20 mph Zones 28. Improving facilities for pedestrians and cyclists 29. Speed management measures will be provided at entrances to towns, villages and locations with specific speed related injury accident problems 30. Implementing a system of Road Safety Audits for all significant changes to the highway network to ensure that they operate as safely as practicable 31. Reviewing road improvement and maintenance policies to ensure that road safety is given a high priority 	<p>Safety of the Road Network (Safety of All Road Users)</p>
<ul style="list-style-type: none"> 32. Re-focusing the Road Safety Forum to take a more strategic and data led approach to road safety 33. Improving accessibility to road safety information and making it easier for people to comment on road safety issues and problems 	<p>Partnership and Communication (Safety of All Road Users)</p>

