

Decision Report – Key decision

– 18th October 2017

Somerset Road Safety Strategy Update

Cabinet Member(s): Cllr John Woodman – Cabinet Member for Highways and Transport

Division and Local Member(s): All

Lead Officer: Mike O'Dowd Jones - Strategic Commissioning Manager Highways and Transport

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	Seen by:	Name	Date
	County Solicitor	Honor Clarke	21/09/2017
	Monitoring Officer	Julian Gale	21/09/2017
	Corporate Finance	Kevin Nacey	21/09/2017
	Human Resources	Chris Squire	21/09/2017
	Property / Procurement / ICT	Richard Williams	N/A
	Senior Manager	Alyn Jones Michele Cusack	20/09/2017
	Local Member(s)	All	21/09/2017
	Cabinet Member	Cllr John Woodman	21/09/2017
	Opposition Spokesperson	Cllr Mike Rigby	21/09/2017
	Relevant Scrutiny Chairman	Cllr Tony Lock	21/09/2017
Forward Plan Reference:	FP/16/05/02		
Summary:	<p>The roads in Somerset are the safest they have been for decades. This is in part attributable to the efforts by SCC to engage with residents and invest in engineering, education, training and promotion around the safest ways to use the roads. However there are still people being killed and seriously injured on our roads. In order to maintain the trend of reducing collisions and the severity of them SCC has looked at best practice around the world and developed a new strategy for delivery.</p> <p>The strategy introduces a Safe System approach which seeks to ensure that all parts of the system, the users, the roads, and the vehicles, are considered in developing measures to reduce collisions and their severity.</p> <p>This is a sustainable safety approach that recognises human fallibility, provides more protection for vulnerable road users and promotes a sense of responsibility relative to the level of</p>		

	<p>potential for harm. In doing so this also supports the Council's health and wellbeing aspirations by encouraging and enabling active travel and healthy active lifestyles.</p> <p>The partnership approach presents the benefit of sharing resources and enabling the use of the best intelligence available to target those resources to delivering intervention.</p> <p>The use of new technologies will be key to the delivery; social media plays an important role in communicating with a wide range of audiences.</p>
<p>Recommendations:</p>	<p>That the Cabinet</p> <p>1. Endorses the consultation draft Road Safety Strategy and authorises the commencement of public consultation on the draft Road Safety Strategy</p>
<p>Reasons for Recommendations:</p>	<p>The current Road Safety Strategy should be brought in line with best practice to underline Somerset County Council's commitment to ensuring the number and severity of road casualties is minimised on the county's roads.</p> <p>The public consultation will raise awareness of road safety activities and enable individuals, partners and interest groups to engage with the Council to refine the strategy and action plan.</p>
<p>Links to Priorities and Impact on Service Plans:</p>	<p>County plan links –</p> <p>More Local Co-operation by working in partnership with a wide range of organisations, local interest groups and businesses.</p> <p>Better health by reducing road casualties and encouraging active travel (improving the perception of the safety of Somerset's roads).</p> <p>Better roads by adopting an approach that recognises that people make mistakes and designing infrastructure to minimise the impact of those mistakes.</p> <p>Better roads by adopting an approach that empowers individuals with the responsibility to protect other road users.</p> <p>Better roads by ensuring that roads are engineered to be as safe as possible.</p> <p>Social Value Policy</p> <p>The revised Road Safety Strategy supports the Social Value Policy by taking a more joined up approach through partnership working with key agencies and interest groups.</p>
<p>Consultations and co-production undertaken:</p>	<p>Somerset County Council road safety strategy steering group formed with area specific sub-groups to develop the detail of the strategy action plan.</p> <p>Strategy process undertaken with a range of stakeholders;</p>

	<ul style="list-style-type: none"> • Engagement with road safety partners in Somerset (Avon and Somerset Police, Devon and Somerset Fire and Rescue Service, Severn Trauma Network) through meetings and discussion; • Engagement with internal stakeholders through meetings and discussion; • Targeted consultation with road user special interest groups undertaken (appendix B); and • Wider public consultation on strategy planned for January 2018. 						
Financial Implications:	<p>The financial implications of the consultation are low; consultation will be carried out using electronic resources and promotion via social and other free media.</p> <p>Following consultation, should the action plan be adopted in its current form then there will need to be a service review of funding in order to undertake the specific tasks of speed and network review.</p>						
Legal Implications:	No legal implications have been identified.						
HR Implications:	No HR implications have been identified.						
Risk Implications:	<p>The reduction in road related incidents, e.g. injury from collisions, particularly fatal and serious ones, will not continue to decrease throughout Somerset if the Council does not formally adopt a new Road Safety Strategy.</p> <p>When implemented there are implications that will need careful planning out in action and transition plans to enable the changes to a safer systems approach.</p> <p>The partnership approach presents a risk in that partners who are currently supportive may withdraw their support due to external factors.</p> <table border="1"> <tr> <td>Likelihood</td> <td>2</td> <td>Impact</td> <td>3</td> <td>Risk Score</td> <td>6</td> </tr> </table>	Likelihood	2	Impact	3	Risk Score	6
Likelihood	2	Impact	3	Risk Score	6		
Other Implications (including due regard implications):	<p><u>Equalities Implications</u></p> <p>The consultation process will draw out the likely impacts and implications for the general public, but none are envisaged at this stage.</p> <p><u>Community Safety Implications</u></p> <p>It is anticipated that the revised strategy will have a positive impact on community safety. Engagement with the community will increase awareness of road safety and ways to reduce traffic collisions. It will also improve the perception of the safety of Somerset's roads which will reduce barriers to active travel.</p>						

	<p><u>Sustainability Implications</u></p> <p>The reduction in barriers to active travel (as per previous paragraph) will have a positive impact on both environmental and economic sustainability.</p> <p><u>Health and Safety Implications</u></p> <p>The strategy is designed to have positive impacts on the safety of road users by all modes of transport. In particular is it designed to reduce the likelihood and severity of incidents.</p> <p><u>Privacy Implications</u></p> <p>No privacy implications have been identified.</p> <p><u>Health and Wellbeing Implications</u></p> <p>The strategy has been designed to have positive health and wellbeing implications. In the first instance it will reduce the likelihood and severity of incidents. Secondly the improved perception of the safety of travel by foot or bike will encourage use of these modes and enable healthy active lifestyles.</p>
<p>Scrutiny comments / recommendation (if any):</p>	<p>An update on the Road Safety Strategy was taken to scrutiny on 5th Sept 2017 and the following comments were recorded – The Committee commented that it is clear that this is a strategy which cannot be delivered in isolation. It noted the report and asked to be kept updated as the Strategy develops</p>

1. Background

- 1.1. Section 39 Road Traffic Act 1988, sets out that local highway authorities, must prepare and carry out a programme of measures designed to promote road safety including investigating collisions arising from the use of vehicles on roads and highways and taking measures to prevent them in the future. Road construction, improvement, maintenance and repair contribute to the achievement of this requirement. In addition, the Council aims to have a greater impact on preventing collisions by promoting safer use of the highways through education, road safety campaigns, improving the highway environment and reducing anti-social behaviour on the roads. These measures include the dissemination of information and advice relating to the use of the roads and the provision of practical training to road users.
- 1.2. Through these measures, and partnership working, there have been significant and successful efforts to reduce casualties in Somerset over the last twenty years. However some of the reduction is attributable to safer vehicles, improved medical care, improved driver standards through changes to the driving test, and national road safety initiatives.

- 1.3.** Casualty statistics, which are currently available up to the end of 2016, demonstrate a downwards trend in the numbers of people Killed and Serious Injured (KSI) persons on Somerset roads and also a trajectory towards meeting the 2020 targets. However, nationally and locally the impact of current initiatives on KSI figures is starting to plateau and the pace of reduction is slowing down. The County Council is however keen to make efforts to keep its casualty reduction record continuing downwards through a comprehensive review of its current road safety strategy and associated action plan. The action plan will develop further from this strategy, being live to the latest information. For example speed management issues will be considered further following a detailed national study into 20 mile per hour schemes, which is currently being prepared and is expected at the end of the year.
- 1.4.** Since the development of the Somerset Road Safety Strategy in 2013 there have been some key policy changes and opportunities, both nationally and locally, which have made the development of a new road safety strategy a priority for the County Council.

 - In April 2013, under the Health and Social Care Act 2012, statutory duties for public health were conferred on local authorities; they were made responsible for improving the health of their local population and for public health services. The Public Health Outcomes Framework has several indicators relevant to road safety (appendix B);
 - Pressures on local government have resulted in budget, operational and staffing reductions directly affecting the road safety service and resulted in changes to the pre-existing delivery model;
 - Data sources on serious injury sustained through road use are improving and afford the opportunity to review and develop further targeted preventative activity;
 - Data and evidence on road safety interventions is improving, including the benefits and costs of speed reduction; and
 - The 'Safe System' approach to road safety has been advocated for internationally and nationally. Key advisory bodies are challenging local authorities and partners to review their practice and move towards a five pillar approach to managing road safety to create a truly safe system (Department of Transport; 2015, United Nations, 2010).
- 1.5.** At a stakeholder strategy review meeting in March it was agreed that it was an appropriate time for Somerset to develop a new road safety strategy that adopts a wider-agency approach while continuing to promote evidence based approaches to road safety, health and wellbeing.
- 1.6.** The Road Safety, Highways and Transport Commissioning and Public Health Teams are working together with other parts of the County Council, and appropriate external bodies, to explore how this vision could be applied and achieved in Somerset through the development of a cross-directorate road safety strategy.
- 1.7.** The strategy embraces work with partners such as Avon and Somerset Constabulary, Devon & Somerset Fire and Rescue Service, Advanced Motoring Groups and South-west Ambulance Service Trust, seeking to have maximum impact on the numbers of people killed and seriously injured on Somerset's roads.

- 1.8. A Safe System approach to road safety requires a change in attitude and recognition that, even with comprehensive road safety interventions, people will always make mistakes on the road and that the human body has a known, physical limit to tolerate crash forces before harm occurs. A Safe System approach does not disregard that all road users have a responsibility to act with care and within traffic laws, with enforcement being integral to this; however it highlights that a shared responsibility exists with those who design, build, manage and use roads/vehicles to ensure that they enable safe road use. Alongside this it is essential that good quality post-crash care is available should a collision occur.
- 1.9. In a safe system approach, safety is embedded into design as early as possible to reduce the need for future expensive retro-fitting. There are challenges in a rural county like Somerset with significant lengths of rural roads, many of which have historic and constrained layouts. The use of a safe system approach will need to consider identifying high risk locations, prioritising treatments and balancing the needs of proactive assessments of highway improvements whilst maintaining the rural character of the County.
- 1.10. The strategy includes an action plan that sets out how the County Council will work with partners to embed the Safe Systems approach and actively deliver improved road safety across the county.
- 1.11. The public consultation will be planned to be carried out in January. Consultation of the strategy will be open to the general public and will consider the Safer Systems approach of the Strategy. Questions will focus on the agreement/disagreement of the strategy objectives, the possible outputs and potential personal experience that may occur if the objectives are implemented. The consultation will give examples to explain the changes in activity that may be the result of adopting the strategy, for example the objective “identify road users not compliant with traffic law” may result in an increase in speed enforcement or vehicle safety checks. An accessible summary document will be produced. Response to the consultation will be via the SCC consultation website (with an option to print off and send in). The consultation will be for a 6 week period and results will be used to refine the final strategy.
- 1.12. It is anticipated that the final version of the strategy will be brought back to Cabinet for adoption in spring 2018.

2. Options considered and reasons for rejecting them

- 2.1. The option to continue to use the existing Road Safety Strategy was considered however given the changes set out in paragraph 1.4 of this report and the trends towards plateauing casualty figures, this was rejected.

3. Background Papers

- 3.1. Appendix A contains the draft updated road safety strategy that it is proposed to issue (formatted in the corporate style) as a draft for consultation.
- 3.2. Appendix B contains the analysis of an interest group survey that was used to understand the initial perception of the direction of the strategy.

Equality Impact Assessment Form and Action Table 2015

(Expand the boxes as appropriate, please see guidance (www.somerset.gov.uk/impactassessment) to assist with completion)

"I shall try to explain what "due regard" means and how the courts interpret it. The courts have made it clear that having due regard is **more than having a cursory glance** at a document before arriving at a preconceived conclusion. Due regard requires public authorities, in formulating a policy, to give equality considerations the weight which is **proportionate in the circumstances**, given the potential impact of the policy on equality. It is not a question of box-ticking; it requires the equality impact to be **considered rigorously and with an open mind.**"

Baroness Thornton, March 2010

What are you completing the Impact Assessment on (which policy, service, MTFP reference, cluster etc)?

The consultation draft Somerset Road Safety Strategy 2017

Version

Initial draft EIA
(further
consultation
required)

Date

18/09/17

Section 1 – Description of what is being impact assessed

A new Road Safety Strategy for Somerset to replace the current Road Safety Strategy launched in March 2013.

Section 39 of the Road Traffic Act 1988, sets out that: local highway authorities must prepare and carry out a programme of measures designed to promote road safety. In addition in April 2013, under the Health and Social Care Act 2012, statutory duties for public health were conferred on local authorities making them responsible for improving the health of the local population including a responsibility for road safety.

The Road Safety Strategy outlines the planned measures for improvement and how Somerset County Council and its partners will deliver these.

Section 2A – People or communities that are targeted or could be affected (taking particular note of the Protected Characteristic listed in action table)

The Strategy is aimed to improve road safety for all. However, research shows that certain groups may be more at risk and therefore some interventions may be targeted to these groups. Those groups include:

- Vulnerable road users such as pedestrians (including mobility users), pedal cyclists and equestrians;
- Older adults;
- Young drivers (16-24 year olds);
- Motorcyclists; and
- Car users and owners.

Section 2B – People who are delivering the policy or service

The Strategy aims to deliver its measures through a number of initiatives from partnership working with other authorities such as the Police, DSFRS and NHS, embedding into other policies, highways design, intervention and maintenance through to awareness campaigns. It is not thought that it will have a negative effect on those delivering the policy.

Section 3 – Evidence and data used for the assessment (Attach documents where appropriate)

The Road Safety Team provides a continued and up-to-date evidence base which they use to provide targeted services to users. Their data and analysis has been used in the

Strategy and in this assessment. This includes:

- The Casualty Reviews
- SCC Road Safety KPI's

In addition, evidence from the following has influence the assessment:

- Health and Wellbeing Strategy (2012-2020)
- JSNA (live)
- Public Health Outcomes Framework (PHOF: Numbers Killed or Seriously Injured)

A Road Safety User Group consultation was undertaken in March 2017 with external interest groups. The results of the consultation have informed this assessment, however the number of responses were low.

It is intended that a full consultation of the Strategy is undertaken January 2018, which will include questions regarding equalities impact to further inform this assessment.

Section 4 – Conclusions drawn about the equalities impact (positive or negative) of the proposed change or new service/policy (Please use **prompt sheet** in the guidance for help with what to consider):

It is expected that the policy will have a positive equalities impact by providing improved road safety for all through a targeted approach that addresses current inequalities identified in vulnerable user groups.

Further conclusions will be drawn after the full consultation in January 2018.

If you have identified any negative impacts you will need to consider how these can be mitigated to either reduce or remove them. In the table below let us know what mitigation you will take. (Please add rows where needed)

Identified issue drawn from your conclusions	Actions needed – can you mitigate the impacts? If you can how will you mitigate the impacts?	Who is responsible for the actions? When will the action be completed?	How will it be monitored? What is the expected outcome from the action?
Age			
Disability			
Gender Reassignment			
Marriage and Civil Partnership			
Pregnancy and Maternity			
Race (including ethnicity or national origin, colour, nationality and Gypsies and Travellers)			
Religion and Belief			
Sex			
Sexual Orientation			
Other (including caring responsibilities, rurality, low income, Military Status etc)			

Section 6 - How will the assessment, consultation and outcomes be published and communicated? E.g. reflected in final strategy, published. What steps are in place to review the Impact Assessment

Consultation is planned for October 2017 and will be fed back into the Strategy and will be used to update this EIA. The final Strategy will be published on the Council's website and its publication promoted through local press and social media. The EIA will be published as part of the Strategy and will be reviewed in line with the Strategy.

Completed by:	Lucy Bath
Date	18/09/2017
Signed off by:	Sunita Mills
Date	19/09/17
Compliance sign off Date	05/10/17
To be reviewed by: (officer name)	Nick Cowling
Review date:	January 2018

DRAFT

Appendix A – Draft Updated Road Safety Strategy

Safe Roads in Somerset: Road Safety Strategy 2017-2026

Foreword

Travel is an essential part of life, however the transport system is a complex system in which both positive and negative effects on health can arise; one of these being serious injury or death as a result of an incident or collision.

“Road transport includes the moving of people and goods via a range of means including private cars, public transport, freight vehicles, walking and cycling. Roads are not only used for transport but also as places for living, working and leisure, creating a complex system in which both beneficial and deleterious effects on health can arise.”¹

Somerset County Council will adopt a Safe System approach to road safety, aiming to ensure that no human is killed or seriously injured as a result of a road crash.

Comment by Cllr Woodman and photo to be added.

1. Introduction

1.1: Road traffic injury

Road collisions can have a devastating effect on the lives of those involved, their family and friends and the wider community. Extended road closures can have serious consequences for road users and the local economy while fear of road collisions can make people reluctant to travel by active modes such as cycling and walking. This can affect freedom of movement, especially for young people and the elderly.

Somerset County Council has set out its policy and priorities for transport and communities within our 'Future Transport Plan and within our 'County Plan'. This Road Safety Strategy, 'Safe Roads in Somerset' will support the overall vision of Somerset County Council to increase prosperity and ensure that we continue to care for and protect the people of Somerset and its visitors.

1.2: Somerset Roads

Somerset is comprised of five district authorities with a diverse landscape of rural and urban road environments. Less than 1% of Somerset roads are motorway, 11% are A roads and 89% are minor B, C and unclassified roads.

Somerset has built an additional 74 miles of road infrastructure in the last ten years, an overall increase of 1.8%, while traffic volume has risen by 6% in the same period, (the volume is also 28% higher than 20 years ago). While traffic volume has been increasing, the numbers of collisions and people seriously injured or killed has been gradually decreasing. This is due to a diverse range of interventions including; investment in road improvement and road engineering, safer vehicles, road user education, enforcement of road laws and improved trauma response and medical care.

However, from 2012-2016 122,512 people were serious injured or killed on England's roads, 1041 of them in Somerset. This is unacceptable. There are indications locally and nationally that progress has stalled, suggesting new approaches may be needed.

Box 1: Costs of road traffic injury

The Department of Transport place an average value of £65,998 on each road collision injury that is successfully prevented and estimate that each fatal collision alone costs £2 million². These estimated values include costs arising from; lost output, medical and paramedic treatment, police, insurance administration and damage to property estimates. In Somerset this equated to a figure greater than £69 million in 2016.

2. What is a Safe System?

2.1: Safe System approach

Almost all road deaths and injuries are preventable. However, for a continued decline in road traffic collisions and serious injury there needs to be a shift in the way that

road safety is delivered in local areas. Somerset County Council aims to adopt a Safe System approach to road safety. The principle aim of this approach is that no human should be killed or seriously injured as a result of a road crash, and the traffic system should be designed to this end. In a Safe System there is a shared responsibility for preventing injury, not just between road users and enforcers but also those that design, build and manage roads or vehicles. It is also essential that good quality post-crash care is available should a serious collision occur.

A Safe System approach to road safety requires recognition that even with comprehensive road safety interventions, people will always make mistakes on the road and that the human body has a known, physical limit to tolerate crash forces before harm occurs. Road infrastructure must be designed and engineered to minimise both the risk of mistakes by road users (by enabling them to behave with due care and respect), and serious injury should a collision occur.

BOX 2: Additional resources on the Safe System and Vision Zero approach to road safety

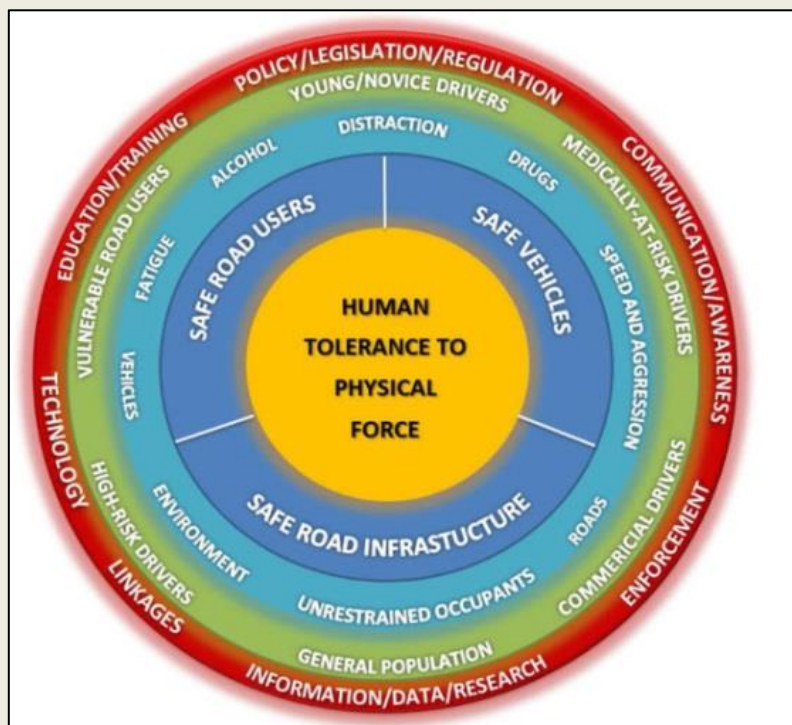
www.gov.uk/government/publications/road-safety-statement-working-together-to-build-a-safer-road-system

www.visionzeroinitiative.com/

<http://www.brake.org.uk/facts-resources/15-facts/1484-safe-systems-facts-page>

BOX 3: Four guiding principles of a Safe-System

- People will always make mistakes;
- The human body has a known, physical limit to tolerate crash forces before harm occurs;
- Individuals have a responsibility to act with care and within traffic laws; however a shared responsibility exists with those who design, build, manage and use roads/vehicles and provide post-crash care; and
- All parts of the system (Figure 1) must be strengthened



in combination to multiply their effects ensuring that road users are protected if one part fails.

Figure 1: adapted from the 2009 WHO report on the Global Status on Road Safety³

The differences between a safe system and traditional approach to road safety are summarised in **Table 1**.

Table 1 Differences Between the Traditional and Safe Systems Approach to Road Safety

	Traditional	Safe System
What is the problem?	All injury collision but focus on fatal and serious	Significant focus on fatalities and serious injuries
What causes the problem?	Human factors	People make mistakes, people are fragile
Who is responsible?	Individual road users	Road users and system designers
What is the approach?	Incremental approach to reduce the problem	Systematic approach to build a safe road system
What is the appropriate goal?	Optimum number of fatalities and serious injuries	Zero fatalities and serious injuries.

2.2: Requirements of a Safe System

A Safe System approach does not disregard that all road users have a responsibility to act with care, but in a safe system the responsibility is proportional to the risk of causing serious injury. Drivers of motorised vehicles bear the greatest responsibility for safety, while cyclists and pedestrians less so because they rarely cause serious injury.

In a Safe System priority should be given to the vulnerability of human beings, not to vehicle mobility at any cost. This can pose challenges in a rural county like Somerset where there are significant lengths of rural roads, some of which have historic and constrained layouts, in addition to lengthy commutes both within and across the county.

The use of a Safe System approach in Somerset will require identifying high risk locations, prioritising road treatments and balancing proactive assessments of highway improvements with the rural character of the County.

3 How will Safe Roads in Somerset be achieved?

3.1: Vision

The vision for a Safe Roads in Somerset is that no road user should be killed or seriously injured on the roads of Somerset. The specific actions required to achieve

this are detailed within the action plan and align with the following key components of a safe system;

- Safe road users
- Safe roads and roadsides;
- Safe speed;and,
- Safe vehicles.

3.2: Safe Road Users

Individual knowledge, experience and attitudes affect road user behaviour and compliance with road safety law. Putting road users at the centre of a safe system requires acknowledging road user's strengths and weaknesses and avoiding a victim blaming culture for those experiencing serious road injuries. Although intentional non-compliance with the laws of the road does occur, lapses in attention and errors of judgement are an unavoidable reality of road use when there are millions of road users daily.

In terms of addressing the modifiable factors that impact on road user behaviours (e.g. drug and alcohol use, excess speed, mobile phone use and driving while tired) evidence shows that using Behaviour Change Techniques (BCT) in road safety education and training are most likely to impact on road user behaviour. There are a range of different BCTs available that can be tailored to the target⁴ audience.

Behavioural interventions alone will not eliminate road injury and these approaches need to be used alongside a wide range of road safety solutions, including engineering and enforcement to ensure that those at highest risk of making errors on the road network are identified and targeted appropriately. Technological advances will also aid road users in safer behaviours, alongside of educational promotions.

BOX 4: National and local data and evidence identify that the priority groups for road safety education and training in Somerset are;

Car drivers (in particular young drivers and passengers aged 16-24 years);

- Older road users (over 60 years);
- Work-related drivers;
- People living in more deprived areas of Somerset;
- Motorcyclists; and
- Vulnerable road users (e.g. pedestrians, cyclists and equestrians) – *this includes children and young people as a specific target sub-group*

3.3: Safe roads and roadsides

The design of roads and roadsides often contribute to the outcome of collisions, as well as the causation. It is recognised that not all collisions can be prevented however when they do occur the road environment should be engineered to reduce the risk of serious injury. There are a wide variety of approaches to achieving this outcome including **passive safety** (where interventions such as crash barriers on

central reservations and the avoidance of signs or fixed objects in likely crash paths are used to protect road users) and more extensive highways engineering. Techniques such as filtering out or directing motorised traffic (**filtered permeability**) can also be used to reduce speed and direct traffic away from residential or pedestrian areas.

Adapting roads and roadsides after they have been built can be expensive and challenging. An effective and safe road system for Somerset requires a pro-active approach, ensuring that safety is considered in the planning and building of all new developments, prioritising the needs of the most vulnerable road users.

One of the key dangers on our roads is that different types of road user share the same space. As far as possible, a safe systems approach seeks to segregate different road users, developing and enhancing safer routes for vulnerable users, and ensuring junction design accommodates all classes of user enabling them to traverse the junction in safety.

As well as continuing to assess and engineer routes with higher rates of collisions causing injury, a proactive approach is required to identify and adapt roads where the road design is likely to cause severe injury, should a collision occur in the future.

3.4: Safe Speed

To build a safe road system, speed limits should be set appropriately, guided by the knowledge of the [human body's tolerance](#) to external forces.

Studies show that reductions in average speed result in substantial casualty reductions. **Just a 5% reduction in speed can result in a 30% reduction in the number of fatal crashes**⁵. Conversely it is estimated that a 5% increase in speed can result in a 10% increase in collisions and a 20% increase in fatalities – depending on the type of road.

Vulnerable road users are at particular risk from higher traffic speeds. **The risk of a pedestrian being killed if hit by a car increases from 10% at 30 mph to 70% at 50 mph**⁶.

Speed can have wide impacts on communities. Real or perceived danger can deter people from walking and cycling but there are also environmental consequences. A doubling of speed from 30 mph to 60 mph will typically increase noise levels by about 10 dB (perceived as being about twice as loud)⁷.

Speed is an area of shared responsibility between those that design, use and enforce roads. Alongside ensuring that road users understand the significant benefits of speed reduction is a need to ensure that roads guide and enable road users to adopt the posted speed limit, this is termed as **self-explaining** and requires consistency across a wide area to be effective⁸. There are also design solutions available to decrease speed, such as reducing access to cut-through roads in urban and rural areas.

Effective enforcement of speed limits is a crucial element of achieving a safe speed environment. Technological advances with average speed cameras, insurance

company remote monitoring ('black boxes') and in the future potentially autonomous vehicles, can all assist with this objective. Somerset County Council, our partners and other major employers and fleet operators can also lead by example in setting expectations around speed limit compliance by their employees.

3.5: Safe Vehicles

Vehicle design, maintenance and technology all play important roles in ensuring the safety of road users; however this often relies on appropriate use of systems such as seatbelts, child car seats, in-vehicle insurance telemetry as well as regular maintenance of private and fleet vehicles.

Although innovation for safer vehicles is primarily nationally or internationally led, local authorities have a role and interest in ensuring that vehicles using the road network are road worthy and that the road network can adapt with technological developments.

3.6: Partnership working

In order to effectively address these key components of a safe system, effective partnership working to agreed objectives across the statutory and voluntary sector is critical. Somerset County Council is a leading member of the South West Accident Reduction Working Group (SWARWG) and a member of Road Safety Great Britain. At a local level Somerset County Council works closely with partners in Avon and Somerset Police, Devon & Somerset Fire & Rescue Service, Severn Major Trauma Network, Highways England and the South West Ambulance Service NHS Foundation Trust (SWAST). The County Council's road safety team has a significant role in enablement, particularly to better understand the patterns of collisions that occur on the roads of Somerset and to help co-ordinate road safety activity across the partners.

3.7: Manage by objectives

Although road safety has always taken an evidence based approach to road engineering and road user education, the availability and quality of road safety data is continuously improving. Partnership working and a shared responsibility for road safety across the system offers an ever increasing insight into the causes and consequences of road injury in Somerset.

Effective management of a safe road system requires a focus on results and the achievement of safety objectives or outcomes⁹ Analysis of results and trends, alongside research, helps to inform the system on how best to prioritise and allocate resources for interventions. Please see **Appendix A** for Somerset County Council's current road safety key performance indicators.

BOX 5: Somerset Road Safety Team

The Road Safety Team in Somerset contains an Accident Investigation and Prevention (AIP) team and an Education, Training and Publicity (ETP) team. In the 2016/17 financial year;

- Somerset Road Safety engaged with and delivered talks and training to 11,801 people through 18 different types of delivery

- 2129 pupils were trained in 'Bikeability' cycle safety training
- 1065 tweets on road safety were posted
- 433,985 impressions were made on Twitter
- 139,345 people were reached on Facebook
- 15,284 engagements took place

For more information on the work of the Somerset Road Safety Team please visit www.somersetroadsafety.org

4: Road Safety policy

4.1: National policy

In 2011 the Department for Transport (DfT) produced the Strategic Framework for Road Safety¹⁰ to look at three main areas relating to road safety:

- Freeing local councils to make their own decisions on how best to make their roads safer;
- Improving public education and training; and
- Penalising the minority of offenders who drive dangerously.

As such Somerset County Council is able to identify the aims and objectives of local strategy and how best to implement road safety interventions. As no specific targets were identified within the strategic framework local targets were developed and are detailed within **Appendix A**.

Traffic authorities have the flexibility to set local speed limits that are appropriate for the individual road, reflecting local needs and taking account of local considerations. In 2013 DfT requested through a Setting Local Speed Limits circular that traffic authorities keep their speed limits under review with changing circumstances. Considering the introduction of more 20 miles per hour limits and zones, over time, in urban areas and built-up village streets that are primarily residential, to ensure greater safety for pedestrians and cyclists¹¹.

BOX 6: Somerset County Council's Responsibility

Under section 39 of the Road Traffic Act 1988 highway authorities are required to prepare and carry out a programme of measures designed to promote road safety. This includes; investigating collisions arising from the use of vehicles on roads and highways within their administrative area, taking measures to prevent reoccurrence and the construction, improvement, maintenance and repair of such roads and paths in addition to road safety education to enable safe road users¹².

The local authority also has duties to ensure the efficient movement of traffic under the 2004 Traffic Management Act (traffic meaning all modes of transport). Section 16 (1) of the Act refers to the duty placed on a highway authority to manage the road network with a view to achieving efficient movement of traffic on the network, while having regard to other policy objectives

4.2: Local policy

At a local level road safety is a key consideration within a range of Somerset County Council policy including our 'Future Transport Plan (2011-2026) which highlights that "Transport is part of everything we do. It allows us to go to work or school, visit the people we care about and access the things we need. However, if not managed carefully the impacts transport has can also be bad for us, our economy and the environment". This, and other local policy, acknowledges that staying safe when travelling in our County is a key priority for residents, commuters and visitors alike. For a summary of some key road safety policy please see **Appendix B**.

5. Transport, road safety and health

5.1: Active travel

A quarter of Somerset's population is inactive¹³. Incorporating physical activity into everyday routines is seen as a key method for building up fitness and confidence in physical activity and reducing risk of ill-health and premature death. However many people, especially women, children and the elderly, perceive cycling (and sometimes walking) to be unsafe.

"It is not appropriate to improve road safety by the discouragement of active travel modes as the health benefits of active travel significantly outweigh the risks by as much as 20:1" (DfT/DH, 2010)

Transport and planning policy can help or hinder good health. Fear of traffic and a perceived lack of safety have a major impact on people's decisions on how to travel. This often results in the use of motorised vehicles for short journeys, commuting to work or taking children to school. Safe roads mean more people will be able to walk and cycle. This will improve health and also reduce the use of motorised vehicles and the associated air pollution and congestion this brings. Conditions will however need to be perceived as safe, as well as actually being safe in practice for travel behaviour to change.

5.2: Health inequalities

Health inequalities are a key issue in road safety. People living in more deprived areas typically have less access to a car but are exposed to high levels of motorised traffic. Children from the most deprived backgrounds are five times more likely to be injured on the road compared with children from the most affluent backgrounds¹⁴. Through prioritising active forms of travel and the needs of vulnerable road users this strategy has the potential to improve the overall health of Somerset residents while reducing inequalities in health outcomes.

There is an array of national and local policies in support of these ambitions, a selection of which are detailed in **Appendix C**.

6. The burden of road traffic injury

6.1: Overall trend

Through road safety measures, and partnership working with

Figure 2: National trend in reported road fatalities in the UK against motor traffic (DfT, 2014)

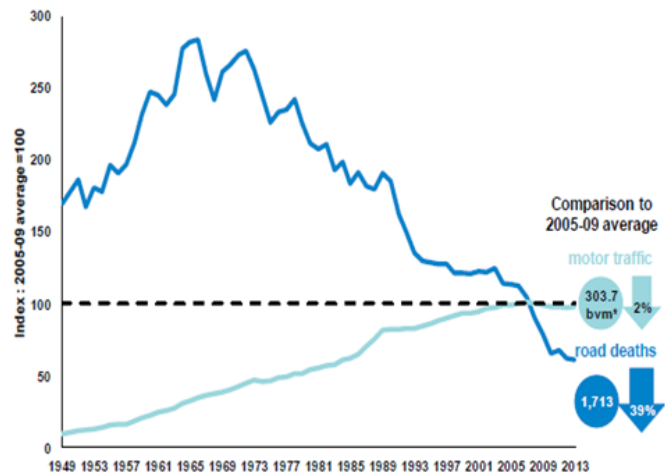
enforcement agencies, there have been significant and successful efforts to reduce casualties in Somerset over the last twenty years. However some of the reduction is attributable to safer vehicles, improved medical care, improved driver standards through changes to the driving test, and national road safety initiatives.

Both nationally and locally it is clear that this impact is starting to plateau (Figure 2).

In Somerset this plateau needs to be considered against background traffic growth, in 2015 this was estimated at 2.5%¹⁵. It is therefore possible that the data shown for Somerset slightly underestimates the true reduction in serious and fatal casualties and collisions.

Trends over time

Reported road fatalities and motor traffic, GB: 1949 to 2013¹



¹ Traffic estimates from 1995 onwards were produced on a new more accurate basis and are not directly comparable with previous years.

*bvm = billion vehicle miles

BOX 7: Road safety data sources

STATS 19

STATS19 are the primary source of data for road traffic collisions and injuries and published by the Department for Transport. These STATS 19 forms are completed by a Police Officer for reported collisions resulting in injury. This form includes the types of vehicles involved, the consequent casualties, relevant causation factors (as identified by the police officer) and areas of behaviour which may have led to the collision. An injured casualty is recorded as fatal, seriously or slightly injured by the Police on the basis of information available within a short time of the collision.

- A Fatal Injury is one where a death occurs less than 30 days after a collision;
- A Serious Injury is one for which a person is detained in hospital as an in-patient, or any of the following injuries whether or not they are detained in hospital: fractures, concussion, internal injuries, crushing, burns (excluding friction burns), severe cuts, severe general shock requiring medical treatment and injuries causing death 30 or more days after the collision; and
- A Slight injury is an injury that doesn't necessarily require medical treatment, such as bruising, sprains and slight shock.

Hospital Admissions Data

Hospital Episode Statistics (HES) detail all admissions, outpatient appointments and A&E attendances at NHS hospitals in England. Admissions are coded according to

the primary cause of injury. Because of this it is possible to extract data on admissions relating to transport injury for local consideration and analysis.

Trauma and Audit Research Network (TARN)

TARN collect, collate and analyse data on all serious trauma injuries in England, including those sustained through a road traffic collision. The Severn Trauma Network are Somerset County Council's local partner and are able to provide detailed information on the most severely injured casualties in Somerset.

6.3: Road injury data sources and definitions

Somerset County Council uses a variety of data to understand road safety trends and determine policies and solutions (See BOX 7). Understanding local road collision and injury data ensures that limited funding is allocated appropriately and those inequalities in road safety outcomes are identified and prioritised for action.

In addition to STATS 19 data, Somerset County Council Road Safety Team accesses a range of data sets to help produce a more complete picture of safety issues. Amongst these sets are Traffic Flow and Speed Data, Speed Information Device records, NHS Hospital Data, Enforcement information from the Police Mobile Camera Enforcement Team and demographic information.

6.4: People killed or seriously injured in Somerset (local analysis of STATS 19 data from 2012-2016)

6.4.1: General

- Between 2012-2016 1041 people were killed or seriously injured in Somerset;
- Approximately three quarters of people involved in an injury collision originate from within the county;
- More collisions occur in the Summer and Autumn. This period is also when traffic flows are highest;
- People living in deprived areas in Somerset are more likely to be killed or seriously injured in a road traffic collision. During this period 28% of casualties on Somerset roads were from the two least deprived quintiles while 36% were from the two most deprived quintiles;
- During this period 49% of collisions resulting in serious injury or death occurred on urban roads (where the speed limit is 40mph or lower) and 51% occurred on rural roads where the speed limit was greater than 40mph;
- Within urban areas the majority of road users killed or seriously injured were car users (drivers or passengers) (50%) followed by Motorcyclists (27%), Pedestrians (15%) and Cyclists (7%) (Figure 4); and
- Within rural areas a larger majority of road users killed or seriously injured were car users (drivers or passengers) (67%) followed by Motorcyclists (20%) and an equal proportion of Pedestrians (5%) and Cyclists (5%) (Figure 4).

Figure 3: Number of people Killed or Seriously Injured (KSI) in Somerset by age group and road user group (STAT 19 data 2012-2016, DfT 2017)

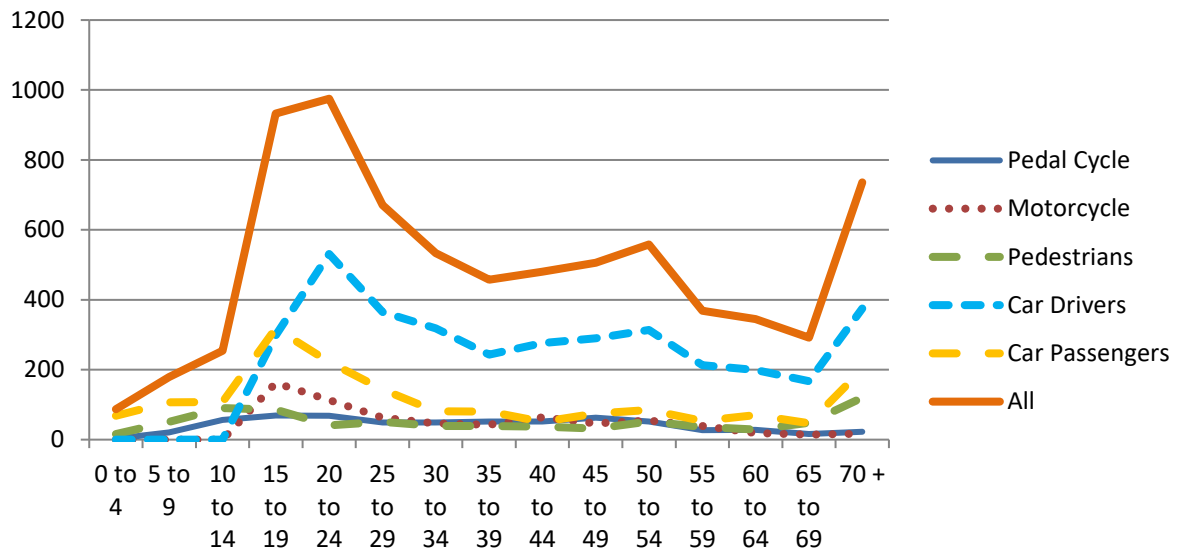
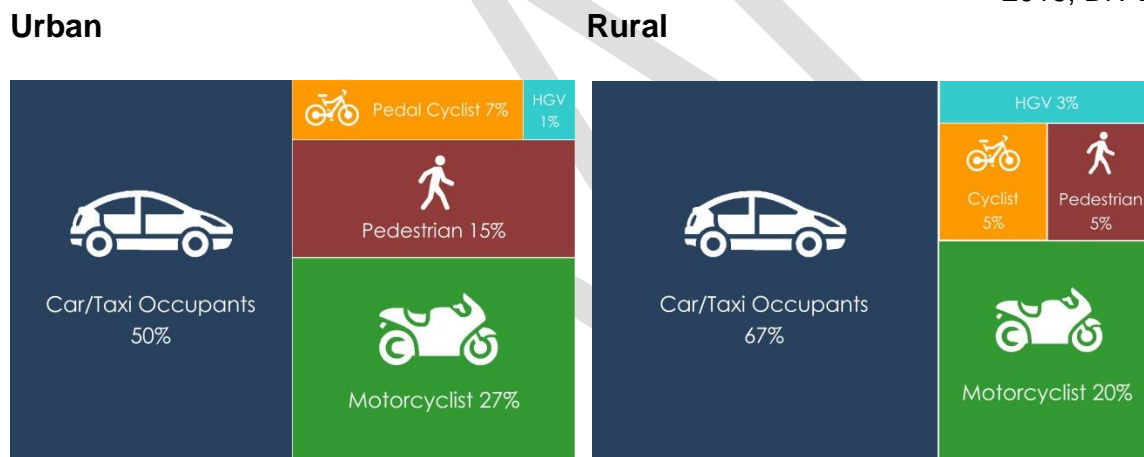


Figure 4: Proportions of road users KSI on rural and urban roads (STAT 19 data 2012-2016, DfT 2017)



6.4.2: Children and young people (aged 0-15 years)

- The majority of children and young people seriously injured or killed on Somerset's roads are car passengers (53%), followed by pedestrians (30%) and cyclists (16%)

6.4.3: Young drivers

- Figure 3 demonstrates that there is a significant peak of road traffic injury in car users aged between 17 and 24 years. A majority of those injured in this age group are male.

6.4.4: Older adults (aged 60+ years)

- As road users age they become at increased risk of significant road injury particularly due to increased physical vulnerability.
- A disproportionate amount of casualties seriously injured on Somerset roads are over 65 (Figure 3).

Figure 5: Proportion of people killed or seriously injured in 40-59 year old age-group (STAT 19 data 2012-2016, DfT 2017)

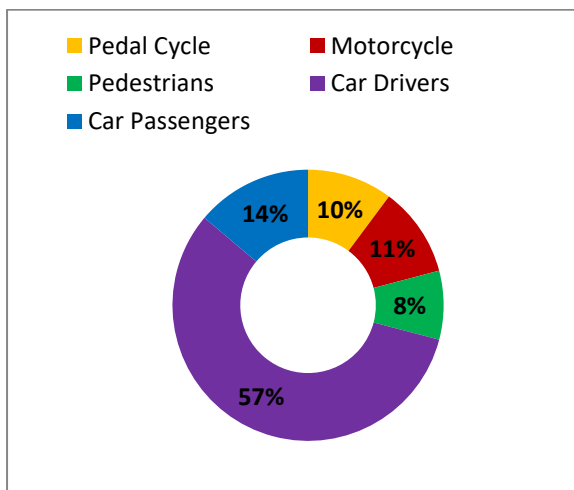
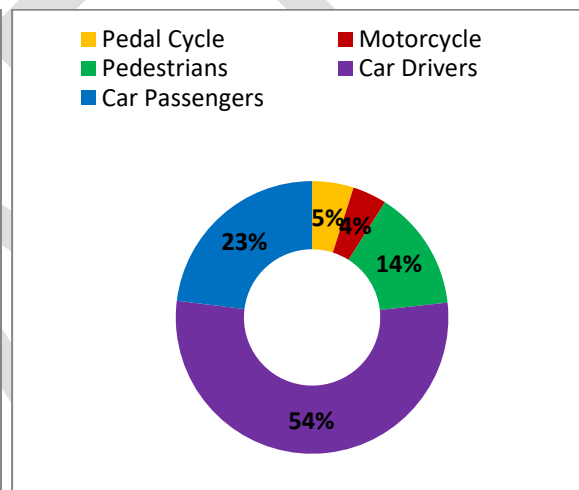


Figure 6: Proportion of people killed or seriously injured in 60+ year old age-group (STAT 19 data 2012-2016, DfT 2017)



4.4.5: Motorcyclists

- Figure 7 demonstrates that motorcyclists are particularly vulnerable to severe injury should a collision occur. Within the motorcycle user group over 30% of reported collisions involving a motorcyclist resulted in serious or fatal injury.

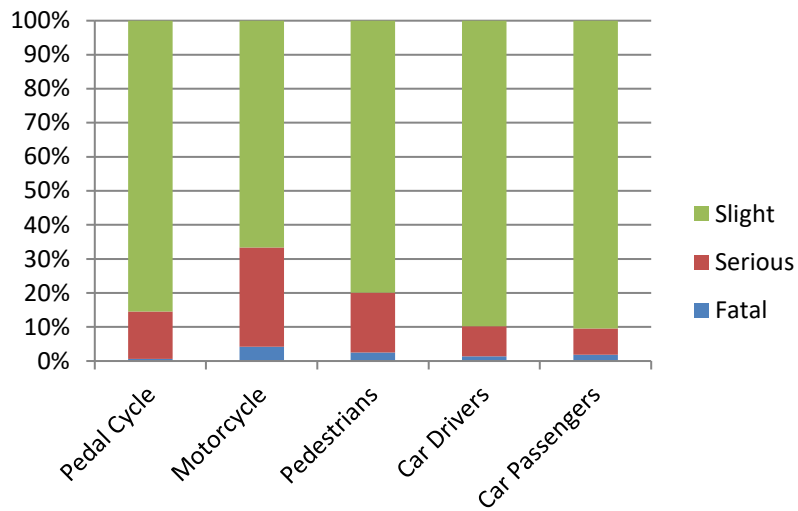


Figure 7: Proportions of slight, serious and fatal injury by road user group (STATS 19 data 2012-2016, DfT 2017)

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- ¹ Faculty of Public Health (2015) 'Transport and health' (available from <http://www.fph.org.uk/uploads/briefing%20statement%20transport%20V2.pdf>) [accessed 1/05/2017]
- ² Department for Transport (2016) 'Accident and casualty costs (RAS60)' (available from <https://www.gov.uk/government/statistical-data-sets/ras60-average-value-of-preventing-road-accidents>) [accessed 01/02/2017]
- ³ WHO (2015) 'Global status on road safety' (available from http://www.who.int/violence_injury_prevention/road_safety_status/2015/en/) [accessed on 03/06/2017]
- ⁴ RAC (2017) Using Behaviour Change Techniques: Guidance for the road safety community (available from http://www.racfoundation.org/assets/rac_foundation/content/downloadables/Using_behaviour_change_techniques_Guidance_for_the_road_safety_community.pdf)
- ⁵ WHO (2004) 'Speed: the facts' (available from http://www.who.int/violence_injury_prevention/publications/road_traffic/world_report/speed_en.pdf) [accessed on 01/01/2017]
- ⁶ RAC (2012) 'Speed limits: a review of the evidence' (available from http://www.racfoundation.org/assets/rac_foundation/content/downloadables/speed_limits-box_bayliss-aug2012.pdf) [accessed 30/04/2017]
- ⁷ RAC (2012) 'Speed limits: a review of the evidence' (available from http://www.racfoundation.org/assets/rac_foundation/content/downloadables/speed_limits-box_bayliss-aug2012.pdf) [accessed 30/04/2017]
- ⁸ International Transport Forum (2016) 'Zero roads deaths and serious injuries: Leading a paradigm shift to a safe system'. OECD Publishing: Paris
- ⁹ International Transport Forum (2016) 'Zero roads deaths and serious injuries: Leading a paradigm shift to a safe system'. OECD Publishing: Paris
- ¹⁰ Department for Transport (2011) 'Strategic framework for road safety' (available from <https://www.gov.uk/government/publications/strategic-framework-for-road-safety>) [accessed 03/04/2017]
- ¹¹ Department for Transport (2013) 'Setting local speed limits' (available from <https://www.gov.uk/government/publications/setting-local-speed-limits>) [accessed on 01/05/2017]
- ¹² www.gov.uk/government/statistical-data-sets/tra89-traffic-by-local-authority
- ¹³ Public Health England (2012) Public Health Outcomes Framework (available from <http://www.phoutcomes.info/>) [accessed 2/02/2017]
- ¹⁴ ROSPA (2014) 'Road safety and public health' (available from <https://www.rospa.com/rospaweb/docs/advice-services/road-safety/practitioners/rospa-road-safety-and-public-health.pdf>) [accessed on 01/06/2017]
- ¹⁵ Somerset County Council (2015) 'Somerset Traffic Data' Somerset Transport Data Team: Somerset County Council

6.8: Objectives

To realise this vision Somerset County Council and partners aim to implement the following objectives;

Objectives		
Safe road users	<ul style="list-style-type: none"> • Promote a sense of responsibility by road users, especially for the protection of more vulnerable road users; • Encourage compliance with traffic law and educate road users of the risks of excess speed, fatigue and being under the influence of drugs and/or alcohol while using the road; • Identify road users not compliant with traffic law; • Promote corporate responsibility for fleet vehicle behaviour and work driver training; • Ensure that evidence led road safety education, training and information is available and accessible to identified priority groups; and • Provide and promote road safety education and awareness raising material in a range of appropriate formats e.g. face to face training, virtual reality training and through social media. 	<p>,Partnership working and managing by objectives</p> <ul style="list-style-type: none"> • Use data and evidence to target, coordinate develop and evaluate road safety education and training programmes and continue to ensure that practice is reactive to emerging evidence; • Use data and evidence from across the system to inform preventative road engineering interventions; • Use data from across the system to identify high-risk locations for road safety review and enforcement • Design and implement targeted mitigation measures
Safe roads and roadsides	<ul style="list-style-type: none"> • Ensure that the needs of the most vulnerable road users (pedestrians, cyclists, horse-riders, children and the elderly) are prioritised in new and existing highways infrastructure, implementing passive safety and evidence based solutions; • Continue to review and adapt routes where there is an increased risk of serious injury to road users, implementing speed limits and engineering solutions to mitigate against this risk; and • Investigate serious and fatal collisions to assess the contribution of the road infrastructure on the outcome of a collision and identify any suitable engineering solution. 	
Safe speed	<ul style="list-style-type: none"> • Ensure that speed limits are consistent and reflective of the road environment and use, taking into account the vulnerability and physical limitations of road users; 	

	<ul style="list-style-type: none">• Ensure a consistent 'self-explaining' road design;• Protect vulnerable road users by separating them from fast moving traffic;• Continue to increase the use of 20mph limits and zones in areas where vulnerable road users will be mixing with motorised vehicles e.g. town centres, children's playgrounds and outside schools during pick-up times;• Work with communities and police to identify, assess and enforce areas where speed of motorised vehicles is a concern; and• Increase road users' understanding of the benefits of speed reduction, promoting an ethos of responsibility for other road users, especially for those using modes of transport that make them more vulnerable to injury in a collision.	
Safe vehicles	<ul style="list-style-type: none">• Enforce, lobby and encourage compliance with regulatory and maintenance standards by vehicle owners, and our own organisations, to ensure that vehicles using our road network are safe and roadworthy;• Promote 'safe vehicles' within road safety campaigns and training;• Plan and prepare for technological advances, such as connected and autonomous vehicles, on the Somerset road network; and• Educate road users, especially children, pedestrians and cyclists about the road safety issues related to being around large and long vehicles.	

7. High-Level Action Plan

(1) Partnership working and managing by objectives			
Aim	Objectives	High-Level Actions	Partners
<p>Effective and efficient use of resources to prioritise road safety education, engineering and enforcement activity</p> <p>Shared responsibility and vision for road safety across all key agencies</p> <p>A skilled network in place to horizon scan and effectively respond to emerging evidence and technological developments relevant to road safety</p>	<p>(a) Increased partnership working across the road safety system</p> <p>(b) Use data and evidence from across the system to inform preventative road safety interventions</p> <p>(c) Lead from the front over promotion of corporate responsibility for road safety</p> <p>(d) Use data and evidence from across the system to understand injury causation, outcomes and modifiable factors in road injury prevention</p>	<ul style="list-style-type: none"> • Development of a multi-agency forum and associated action plan for road safety strategy development and operational planning in Somerset • Identify and action opportunities for increased data sharing between agencies e.g. data on injury, speed, collisions and community reports held within 'Qlik Sense' and the Severn Trauma Audit & Research Network • Use these data sources to analyse causation and impact of the most serious collisions, identifying opportunities for action as appropriate • Development of a shared communications plan for road safety messages and training in Somerset • Share and learn from regional best practice through road safety team participation in regional and national road safety forums e.g. SWAWRG/RSGB meetings, and ADEPT (County Surveyor's Society) 	<p>Avon & Somerset Police, Devon and Somerset Fire & Rescue, Highways England, Severn Trauma Audit Network, Air Ambulance</p>

(2) Safe road users

Aim	Objective	High -Level Actions	Partners
<p>Vehicles are driven in a manner consistent with road law and sharing the road with more vulnerable users</p>	<p>(a) Promote a sense of responsibility especially for more vulnerable road users</p> <p>(b) Encourage compliance with traffic law and educate road users of the risks of excess speed, fatigue and being under the influence of drugs and/or alcohol while using the road</p> <p>(c) Identify road users not compliant with traffic law</p> <p>(d) Promote corporate responsibility for fleet management policies and work driver training</p> <p>(e) Ensure that targeted and evidence</p>	<ul style="list-style-type: none">• Delivery of a range of road safety education and training to priority road users groups (see www.somersetroadsafety.org for current delivery) in locations and formats appropriate to the target audience e.g. schools and for groups experiencing high collision occurrence• Delivery of social media, communications and other awareness raising activity to road users around key road safety topics e.g. drink and drug-driving, mobile phone use, eye-sight and fitness to drive (http://www.somersetroadsafety.org/events)• Work with the police to identify repeat offenders and prioritise road users with risk-taking behaviours for education and training• Communication of available training and resources for priority groups through appropriate professional networks, e.g. School Safe-guarding boards, Primary care, Advanced Motoring and Motorcycling groups• Partnership working to develop and deliver co-ordinated communications and road safety campaigns in Somerset	<p>Avon & Somerset Police, Devon and Somerset Fire & Rescue, Highways England, NHS Somerset, Local businesses, local Councils and the Media</p>

<p>led road safety education, training and information is available and accessible</p> <p>(f) Provide and promote road safety education and awareness raising in partnership with key stakeholders in a range of appropriate formats</p> <p>(e) Ensure that targeted and evidence led road safety education, training and information is available and accessible</p>	<ul style="list-style-type: none">• Partnership working to identify opportunities for joint-working on training and education• Implement MOSAIC (geographical segmentation tool) analysis to better understand and tailor road safety education and communications for specific road users groups• Promote and advocate for the use of the 'Driving for Better Business' risk assessment and risk management toolkit within Somerset businesses and on-line• Review current road safety training against recent recommendations on Behavioural Change Techniques for Road Safety Education (including evaluating desired training outcomes using evaluation toolkits)	
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(3) Safe Speed			
Aim	Objective	High-level action	Partners
<p>Road speeds appropriate to the design and use of roads in Somerset</p> <p>Adherence to posted road speed and conditions by road users</p>	<p>(a) Ensure that speed limits are consistent and reflective of the road environment and use, taking into account the physical limitations of road users</p> <p>(b) Ensure consistent 'self-explaining' road design</p> <p>(c) Protect vulnerable road users by separating them from fast moving traffic</p>	<ul style="list-style-type: none"> • Conduct an urban and rural road speed limit review to prioritise routes requiring a change in speed limit and/or engineering solutions to support users to drive at the posted speed, ensuring consistency across the network • Ensure that roads are designed or adapted to help guide and enable road users to adopt the posted speed through appropriate traffic management. • Work with communities and Police to identify, assess and enforce areas where speed of motorised vehicles is a concern • Increase road users understanding of the benefit of speed reduction, and promote an ethos of responsibility especially for more vulnerable road users through the use of behavioural change techniques in road safety education, training and 	<p>Avon & Somerset Police, community and special interest groups, Road users Community speed watch, Parish Council and communities</p>

(d) Continue to increase the use of 20mph limits and zones in areas where vulnerable road users will be mixing with motorised vehicles e.g. town centres, children's playgrounds and outside schools during pick-up times

(e) Work with communities and police to identify, assess and enforce areas where speed of motorised vehicles is a concern

(f) Increase road users understanding of the benefits of speed reduction for all road users

communications

- Continue to conduct Urban Safety Management Reviews to identify areas where vulnerable road user collisions would likely be reduced by lower traffic speeds

(4) Safe roads and roadsides

Aim	Objectives	High-level actions	Partners
<p>A road environment that minimises the risk of serious collision</p> <p>A road environment that minimises the risk of severe or fatal injury should a collision occur</p>	<p>(a) Ensure that those most vulnerable to injury are prioritised in new and existing developments and highways infrastructure, implementing passive safety and evidence based solutions as appropriate</p> <p>(b) Review and treat routes where there is an increased risk of serious injury to road users. Implementing area wide treatment including speed limits, traffic calming and filtered permeability as required to mitigate against this risk.</p> <p>(c) Investigate serious and fatal collisions to assess the contribution</p>	<ul style="list-style-type: none">• Review current provisions for vulnerable road users to ensure that those most vulnerable to serious injury are protected, including the implementation of area wide treatments, passive safety interventions and speed and traffic engineering;• Work with partners through the Somerset multi-agency road safety forum to increase information available on serious and fatal collisions, using this information to assess the impact of the road environment on the outcome of a collision;• Review current practice around pre-maintenance assessments of existing road network and recorded injury collisions in including considerations of passively safety and other traffic engineering measures ;and• In partnership with Highways England contribute to the production of a regional incident and casualty reduction plan to cut injury collisions on the trunk road network running through Somerset.	<p>Highways England, Avon & Somerset Constabulary, Coroner's Office, District Councils, Developers</p>

of the road infrastructure on the outcome.

(5) Safe vehicles

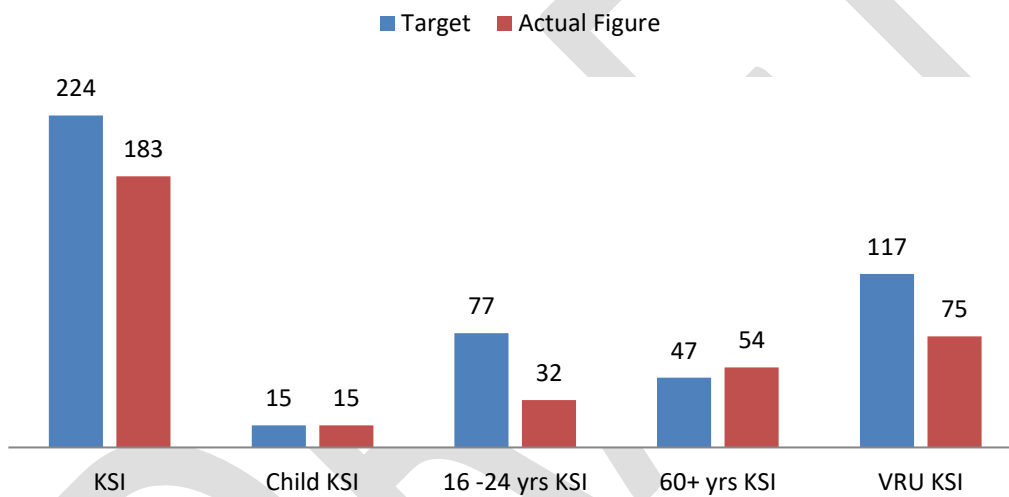
Aim	Objectives	High-level actions	Partners
<p>Vehicles using Somerset's road network are appropriately maintained</p> <p>The road network in Somerset is able to adapt to technological developments</p>	<p>(a) Enforce, lobby and encourage compliance with regulatory standards, and the adoption of best practice by vehicle owners, and our own organisations, to ensure that vehicles using our road network are as safe as possible</p> <p>(b) Promote safe vehicle use within road safety campaigns and training</p> <p>(c) Plan and prepare for technological advances, such as connected and autonomous vehicles, on the Somerset road network</p>	<ul style="list-style-type: none"> • Work in partnership with Highways England and other partners to deliver and widen roadside safety checks of Heavy Goods Vehicles, and tyre safety checking on vehicles on Somerset roads • Incorporate vehicle safety messages in road safety campaigns and training (e.g. tyre safety and pre-driving checks) • Continue the implementing of the 'Trucks and Child Safety' (TACS) programme to help promote safe user behaviour around large vehicles on our roads • Advocate for the adoption of the Construction Logistics and Cyclist Safety (CLOCS) programme for HGV operators • Use the Somerset multi-agency road safety forum to; horizon-scan and analyse the impact of new developments (e.g. connected and autonomous vehicles) and agree actions required of partners to manage any impact on road safety in Somerset • Work with local groups regarding safe agricultural vehicle use 	<p>Highways England, National Government, Trading Standards Parents HGV operators National Government, Motor manufacturers</p>

Appendix A: KPI Summary and 2016 Trend

In 2012, Somerset Road Safety set new targets to 2020 in five key categories:

- Total number of Killed and Seriously Injured (KSI) casualties;
- Vulnerable road users KSI casualties (Pedestrian, Motorcycle or Pedal Cycle casualties);
- 60+ years KSI casualties;
- 16-24 years KSI casualties; and
- Child 0 – 15 years KSI casualties.

2016 Targets: Casualties



Appendix B: Summary of key road safety policy

Strategic Framework for Road Safety (Department for Transport, 2011)

This framework has the long term vision that Britain remains a world leader on road safety. The Government's approach to Road Safety within the Strategic Framework translates into a number of key themes:

- making it easier for road users to do the right thing
- better education and training for children and learner and inexperienced drivers;
- remedial education for those who make mistakes and for low level offences where this is more effective than financial penalties and penalty points;
- tougher enforcement for the small minority of motorists who deliberately choose to drive dangerously;
- extending this approach to cover all dangerous and careless offences, not just focusing upon speeding;
- taking action based upon cost benefit analysis, including assessing the impact on business;
- more local and community decision making from decentralisation and providing local information to citizens to enable them to challenge priorities; and
- supporting and building capability by working with the road

Reducing unintentional injuries on the roads among children and young people under 25 years (Public Health England/RoSPA, 2014)

This policy urges local authorities to;

- identify all the relevant local partners both inside and outside of the local authority
- look at the components of the current strategies and activities that either directly or indirectly impact on road safety, along with any local evaluation, monitoring, or audit data and investment
- review local casualty data to identify areas of highest need and where there are links with other needs (for example, the need to increase physical activity)
- set performance indicators
- monitor and evaluate the impact of the activities, including wider consequences,
- such as changes in the number of people walking and cycling

Future Transport Plan (Somerset County Council, 2011-2026)

Somerset's Future Transport Plan sets out transport policy for the next 15 years. It describes the challenges and the policies and investments that will help tackle these challenges. It covers the period between 2011 and 2026 and replaces Somerset's

Second Local Transport Plan, which finished in March 2011. **The priorities for this plan are;**

- Community and partnership involvement
- Smarter choices
- School travel
- Road safety
- Stay active
- Access to health
- Climate change
- Noise
- Landscapes and biodiversity
- Air quality

Within the Future Transport Plan, one tool for achieving its aims are work and school 'Travel Plans'. Travel Plans are a powerful way of reducing the impact of excess traffic on Somerset's road network. They also help deliver the four national shared priorities for transport:

- tackling congestion
- delivering accessibility
- safer roads
- better air quality

Travel plans play an important role in delivering a number of quality of life issues such as quality of public spaces, better streetscapes, and healthy communities.

Bridgwater, Taunton and Wellington local travel plan (Somerset County Council, 2011-2026)

This travel plan supports local economy through;

- Shorter and more reliable journey times
- Less congestion
- More public transport, walking and cycling trips to work
- Easier access to the strategic road network

This travel plan supports the protection of the local environment through;

- Pollution and noise levels minimised
- Fewer greenhouse gas emissions

This travel plan aims to strengthening communities through;

- Greater use of public transport
- More walking and cycling
- Widely available and accessible information about travel alternatives
- More use of sustainable travel facilities and changes in travel behaviour

- Less disruption of communities from roads and traffic
- Better transport opportunities for residents of deprived wards, the elderly, the disabled and those with young children
- Better physical fitness

This travel plan aims to making travelling safer through;

- Reductions in the numbers of fatal, serious and slight injuries on our roads

Appendix C: Summary of key health, transport and road safety policy

Public Health Outcomes Framework (PHOF) (Public Health England, 2012)

The 'PHOF' sets out a vision for desirable public health outcomes, presenting indicators that enable a better understanding and monitoring of how well public health is being improved and protected at a local level. Somerset is benchmarked against several indicators relevant to road safety;

- Number of Killed and seriously injured (KSI) casualties on England's roads
- The percentage of children with excess weight
- Number of hospital admissions caused by unintentional and deliberate injuries in young people 0-14
- The percentage of adults with excess weight AND the percentage of physically active and inactive adults

(<http://www.phoutcomes.info/>)

Somerset Health and Wellbeing Strategy (Somerset County Council, 2013-2018)

Somerset's Health and Wellbeing Board is made up of partners from the health and social care system. They look at people's health and social care needs together, as well as taking into account the bigger picture – e.g. transport, housing, jobs and leisure - so that services truly help people stay healthy and independent. Priorities of the strategy are;

1: People, families and communities take responsibility for their own health and wellbeing: Council to enable this through provision of an enabling environment and by supporting community development. Prevention is a priority.

2: Families and communities are thriving and resilient: Somerset people are able to live independently (supporting those with low resilience and fewer social networks).

3: Somerset people are able to live independently: Services and partners are joined up

'Working together to promote active travel' (Public Health England, 2016)

'Active travel' is a physically active mode of transport, such as walking and cycling. Benefits of increasing active travel are improved physical and mental health and

wellbeing, lowered air and noise pollution and the promotion of sustainable travel through lower carbon emissions.

'Working together to promote active travel' advocates that local authorities view pedestrians, cyclists, and users of other transport that involve physical activity, as the 'priority road user' when developing or maintaining streets and roads. This can mean changing the existing road space to support walking and cycling, restricting motor vehicle access introducing traffic-calming schemes, and creating safe routes to schools and other areas where children are present.

Active Travel Strategy (Somerset County Council, 2012)

The aim of this local strategy is to enable active travel, e.g. walking and cycling, by making these options easier to access and more attractive to use. The strategy has the potential to:

- Improve health and wellbeing;
- Maximise access to local services without increasing congestion;
- Reduce transport carbon emissions and improve air quality;
- Make Somerset a more attractive and safer place to live;
- Enhance mobility and independence for vulnerable groups (such as older people and those social excluded); and
- Reduce congestion and facilitate economic growth

This strategy highlights the strong economic case for making the environment perceivably better and safer for walking and cycling; for every pound invested there is often a greater than ten pound return on investment (DOH, 2012). However, providing the environment and conditions necessary for people of all ages and abilities to choose to travel actively requires a holistic approach. Conditions need to be perceived as safe, as well as actually being safe in practice for travel behaviour to change.

Air Quality: Outdoor air quality and health (NICE, 2017)

The main sources of air pollution are the combustion of fuels for health, electricity and transport. Road transport accounts for 31% of nitrogen oxides (NO_x), 18% of Particulate Matter 10 (PM₁₀) and 19.5% of Particulate Matter 2.5 (PM_{2.5}) in UK emissions. Pollutants are produced by exhaust fumes, tyre wear and braking.

The long-term effects of air pollution are significant; human-produced air pollution was estimated to have contributed to 29,000 deaths in 2008 (PHE, 2017) and health impacts of air pollution are estimated to cost the UK between £8.5 and £18.6 billion pounds a year (NICE, 2017).

This NICE guidance recommends that local areas mitigate against the effects of traffic air pollution by;

- Encouraging low-carbon travel, such as walking and cycling;
- Encouraging the uptake of low-emission vehicles and increasing the provision of electric charging points in retail, office, and residential areas;

- Taking action to smooth traffic flow (e.g. avoidance of stop-start traffic flows); and
- Driver training to reduce emissions.

Air quality in Somerset is generally good; however traffic pollution can become relatively high in urban locations, primarily due to diesel exhaust emissions. The benefits of walking and cycling outweigh the harm of exposure to this polluted air, although people with some health conditions e.g. asthma, can have the condition exacerbated by exposure to exhaust fumes.

Exposure to poor quality air is typically highest in motor vehicle users in congested conditions, for example, professional drivers.

Addressing poor air quality is a priority of the Somerset Health Protection Forum. This forum aims to provide assurance on behalf of the population of Somerset that there are safe and effective plans and systems in place to protect population health.

DRAFT

Appendix B - Road Safety 'interest group' survey: Response analysis

There were four respondents to the survey. Three of these were external interest groups, namely:

- Taunton Area Cycling Campaign
- Taunton Transition Town
- Institute of Advanced Motorists Roadsmart

There was also a response that appeared to be from within SCC, but the specific team was not stated.

Given the limited number of responses from diverse organisations few conclusions can be drawn. The summary sections against each answer below attempt to synthesise the responses, and suggest matters for consideration for the final strategy.

Question 1: A Safe System approach recommends tackling road safety through five key pillars. What does your organisation think are the main challenges and opportunities that need to be considered to enable this in Somerset?

Safer Vehicles:

- A particular concern regarding large vehicles with lack of view from the cab, and the danger this poses to cyclists.
- Not much Somerset itself can do with vehicle design but Somerset CC can encourage say cycle maintenance classes at schools
- Safety concerns should include not only incidents but emissions that result in thousands of premature deaths. All changes that result in less exposure to emissions should be part of safety initiatives and be prioritised.

Summary: The respondents focused mainly on vehicle design issues, with a recognition that design is not something Somerset can influence. But there may be opportunity through purchasing and commissioning to influence vehicle selection, in relation to both visibility from HGVs and PSVs, and emissions. Vehicle maintenance is only touched on regarding cycle maintenance classes. Is there a need to do more regarding maintenance of motor vehicles, noting recent enforcement campaigns in London revealing many unroadworthy HGVs, notably in the construction-related trade?

Safer roads and roadsides

- Much current road design has an emphasis on creating capacity for motorised traffic, appears to work against walking and cycling. SCC should adopt a design hierarchy putting walking and cycling at the top. Best practice should be used (Design Manual for Streets 2 and London cycle design guide). We have concerns that the safety audit process can result in rather illogical and convoluted layouts from a cycling and walking perspective, resulting in people not using the 'facilities' and trying to avoid diversions and delays.. The Cycling Level of Services tool should be used, with road safety auditors and highway designers giving full consideration to level of service as well as safety The current SCC criteria for dealing with surface issues doesn't seem to recognise the risk to cyclists of having to take sudden swerves or positioning to avoid bad surfaces. Barriers along footways and on cyclepaths are often counterproductive, encouraging risk taking, as do long and convoluted crossings such as around the A358 park and ride site. There also needs to be a better trade-off between the amount of signing (including illumination) and the need to reduce street clutter. It is not clear to what extent SCC use a route and area based approach to safety management (see comments on safe speed)

- Pot holes and overgrown verges add to hazards and reduce information for road users
- Consideration in design for all road users, cyclists pedestrians, those with partial sight etc.
- Improve the network of pedestrian and cycling paths so that "cycling and walking become the natural choice for shorter journeys"(gvt. Cycling and walking strategy)

Summary: Three of the respondents strongly emphasise the need to design for all road users, with the case either stated explicitly or implicitly that SCC appears to design primarily for motor vehicles, to the detriment of people using other modes. Support for improving network of cycle and pedestrian paths.

Is there a need for SCC to critically assess its current design processes, including safety audit, to ensure that the needs of all road users are properly incorporated in schemes? With active travel prioritised?

Safer road users

- Much can be done to enhance the mutual understanding of drivers and cyclists. The recent West Midlands police safe overtaking campaign is an excellent example. There is a tendency for some drivers to overtake cyclists, then abruptly stop because they haven't read road conditions ahead (e.g. Cheddon Road). Taunton Area Cycling Campaign would welcome a positive dialogue with Avon and Somerset Police.
- Education to improve road users' skills and attitudes
- Education but not just learner drivers, drivers of all ages need refreshers
- Give cyclists priority over motor vehicles and install signage to this effect

Summary: Calls for greater education of road users, and increasing understanding e.g. overtaking cyclists.

Safe speed

- There needs to be better enforcement of existing speed limits with the use of average speed cameras. Community speed watch schemes should be given more support. There appears to be evidence that area wide 20mph reduce severe injuries. A particular problem for cyclists is vehicles racing to get through sections of road which are restricted in width, e.g. Cheddon Road with parking narrowing the road.
- It is the few who drive with excessive speed who endanger the others. mobile speed cameras could target roads where speeding is a problem
- Reduce urban speed limit to 20mph

Summary: Support for 20mph from two respondents, and for better enforcement of speed limits.

Post-incident response

- This is an area where Somerset CC and police can work together to identify accident hot spots and decide if there are education issues or road layout issues.

Summary: Just one response above. No respondents referred to post-incident response in relation to survivability of the injured in serious collisions, which is an important factor especially in a rural context. Nor was there any response in relation to the quality of post-collision investigation and reporting, and the need for robust data

from both police and NHS sources to inform decisions on improvements that may be needed to highways.

Q2. We know that certain road users are more likely to be killed or seriously injured on the road, either due to risk taking behaviour, inexperience or due to increased vulnerability from crash forces. We would be interested to hear of any local education or interventions you are undertaking with any of these key groups.

Vulnerable road users (cyclists, pedestrians and equestrians)

- Mainly through talking to local cyclists, discussing road safety issues, but nothing formally yet.
- We work with Taunton Area cycling Campaign in their initiatives to advocate safer cycling

Older adults

- Driving assessments offered by IAM Roadsmart
- We support and promote all action that encourages walking and cycling and makes this choice of travel a healthier more pleasant and safer option.

Young drivers (16-24 years old) – none cited

Children and young people (0-15 years old) – none cited

Motorcyclists

- Advanced rider courses offered to improve safety through skill

Car users and owners

- Advanced Driver courses offered to improve safety through skill
- Employers of people who drive at work (including 'self-employed' drivers)
- As an employer, we test drivers of Council vehicles every two years with our own in-house driving test

Summary: IAM Roadsmart offers training courses for motorists. TACC appears to be intelligence gathering informally. Nothing reported aimed at employers of drivers, which could be an important area given the significant proportions of travel that are either to and from work or involve driving for work.

Q3. If there is anything that you would like to add, please use the box below.

- Changing road user attitude and behaviour is a long game but ultimately the one most likely to succeed.
- Reckless cycling on pavements is a danger to pedestrians, and pavement parking is a nuisance for pedestrians, particularly those partially sighted. Education and a sense of community responsibility can reduce this.
- We support and promote all action that encourages walking and cycling and makes this choice of travel a healthier more pleasant and safer option.

Summary: All three respondents to this question emphasise encouragement and education as the answers to problems identified, but these appear to be assertions rather than based on any evidence of effectiveness.

Overall Conclusions:

1. None of the respondents oppose the Vision Zero approach, but nor do they explicitly support it either.
2. The encouragement and education of good behaviours is a strong theme throughout.
3. Speed is recognised as a critical factor.
4. There is support for inclusive design of roads and roadsides, ensuring the needs of vulnerable users, including disabled users, are properly designed for, not secondary to motor vehicle movement.