

Shropshire Council



Road Safety Policy

March 2013

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Introduction

The Department for Transport is currently looking to reduce the extent to which central government needs to become involved in local decision making and to provide a devolution of power to local authorities, particularly in relation to responding to concerns about speed management, reducing signing on the road network, delivering effective enforcement, and providing users with better information. There is an aim to encourage the development of local solutions built on local knowledge and reduce the costs of implementation of certain traffic management measures.

Shropshire Council's previous portfolio of speed management policies set out prescriptive lists of proposed speed limit sites, however a number of challenges have arisen and the schemes implemented so far have been variable in their success.

As a result Shropshire Council's speed management policies have been reviewed and developed into one single Road Safety Policy for Shropshire. This policy document supersedes the following Shropshire Council Policies:

- Village Speed Limit Policy (2009)
- Vehicle-activated Signs Policy (2009)
- Rural Speed Limit Policy (2010)
- Urban Speed Limit Policy [draft]
- Road Safety Policy within LTP [draft]

Shropshire Council's Road Safety Policy provides the strategy framework within which measures and initiatives can be developed to contribute towards the improvement of highway safety in Shropshire. The policy has been developed to set out how road safety schemes and initiatives are delivered in Shropshire to address the needs of both current and future users of Shropshire's road network.

Through the services it provides, Shropshire Council can influence road safety in a number of ways:

- Highway design and speed management;
- Highway maintenance (i.e. skidding resistance, potholes etc.), and
- Driver behaviour through targeted education, training and publicity for high risk groups and behaviours.

The national rate of accidents has dropped significantly over the last 15-20 years which could be attributed to improvements in car technology and safety features. In Shropshire, the rate of reduction has been notably greater than the national average. This policy therefore needs to provide a mechanism for this positive progress to be continued.

The adoption of a single road safety policy in Shropshire can contribute towards the following benefits:

- Fewer collisions and casualties;
- Improved the quality of life and perceptions of safety in local communities;
- Less social exclusion for vulnerable road users;
- Modal shift to more sustainable modes of transport;
- Improved driver behaviour, and
- Educated children and a positive attitude to the effects of speed and road safety.

In summary, this road safety policy will result in:

- An annual programme of schemes rather than predefined lists of schemes for forthcoming years;
- More flexibility for appropriate measures on a site by site basis;
- A consistent approach county-wide;
- A requirement to demonstrate community support, and
- The opportunity to use local funding.

Policy context

The following table shows how Shropshire Council's Road Safety Policy will contribute towards achieving the wider objectives of the current Local Transport Plan (2011-2026) and Shropshire's Community Strategy (2010-2020).

Community Strategy priority and LTP goal	LTP objectives	Links to Road Safety
Enterprise and growth, with strong market towns and rebalanced rural settlements	Improve connectivity and access, particularly by sustainable transport modes	Road traffic accidents can generate significant costs both in terms of damage and police but also in relation to any casualties which can incur medical costs, loss of output (i.e. loss of earnings etc.) and human costs (i.e. pain and grief). The total value of prevention of reported road accidents in Great Britain in 2010 was estimated to be £15 billion ^[1] . For Shropshire the estimated value of prevention of reported road accident casualties is £50,662,100 and reported road accidents is £11,297,550 ^[2] .
	Improve journey time reliability and reduce unforeseen delays	Road traffic accidents can also cause significant congestion and disruption to the road network.
	Support growth and ensure new housing and employment areas encourage more sustainable travel behaviour	Effective speed management measures can have a significant influence on peoples' propensity to choose sustainable modes of travel, particularly walking and cycling.
Responding to climate change and enhancing our natural and built environment	Reduce transport related carbon emissions	Risk of accident can be a significant deterrent to walking and cycling and the propensity for people to use sustainable modes of travel in favour of the car. High levels of car use can be detrimental to air quality.
		Congestion that may arise as a result of a road traffic accident can have a localised impact on air quality.
	Maintain the condition of the highway network	Poor highway maintenance can be a factor in the cause and severity of road traffic accidents. Improved highway design for the reduction of accidents can lead to reduced cost of accidents to the highway.

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Responding to climate change and enhancing our	Reduce transport related carbon emissions	Risk of accident can be a significant deterrent to walking and cycling and the propensity for people to use sustainable modes of travel in favour of the car. High levels of car use can be detrimental to air quality.
		Congestion that may arise as a result of a road traffic accident can have a localised impact on air quality.
	Maintain the condition of the highway network	Poor highway maintenance can be a factor in the cause and severity of road traffic accidents. Improved highway design for the reduction of accidents can lead to reduced cost of accidents to the highway.

¹Department for Transport. Reported Road Casualties in Great Britain: 2010 Annual Report. A valuation of road accidents and casualties in Great Britain in 2010.

²Calculation based upon 2011 accident and casualty data for Shropshire and average values of prevent per reported road accident casualty and per reported road accident (2009) contained in reference above.

Road safety policy objectives

The objectives of this Road Safety Policy are:

- 1. To reduce the **number of casualties** at sites where significant numbers of road traffic accidents have been recorded.
- 2. To implement **effective speed management measures**, where necessary, that are **suited to the function** of the road.
- 3. To **maintain** the highway so that its condition does not significantly impact upon safety.
- 4. To encourage all road users to have a positive and responsible attitude to road safety and **improve perceptions of safe and secure communities.** A full education approach will be included as part of the road safety strategy.
- 5. To overcome **community concerns regarding traffic speeds,** according to the function, nature and use of the road (to deal with perception of danger if considered appropriate).
- 6. To work in **partnership** with organisations, such as West Mercia Police, to develop a cohesive approach to delivering effective road safety initiatives.

Targets and monitoring

Central Government has reduced the reporting requirements as it is no longer setting road safety targets. It is anticipated that we will continue to monitor and report as within the national indicator guidelines.

In 2011, the Department for Transport introduced a Strategic Framework for Road Safety which sets out the approach to continuing to reduce killed and seriously injured casualties on Britain's roads. The framework has a focus on increasing the range of educational options for the drivers and improving enforcement.

At the local level, the framework proposes the following key indicators:

- Number of killed or seriously injured casualties;
- Rate of killed or seriously injured casualties per million people, and
- Rate of killed or seriously injured casualties per billion vehicle miles.

Targets

Consideration will be given to what the appropriate targets will be in line with national government emerging guidance and current trends in Shropshire. The most recent accident data is provided in appendix C, National Indicator 47. This gives an overview, however local targets will need to consider the most vulnerable groups, such as children, as well as the overall figure.

A casualty reduction target of 50% reduction in KSI casualties by 2020 is proposed, based on the 2005-2009 average.

Understanding and measuring the problem

The following sections demonstrate how demand for action and work to be generated will be considered (see accompanying **flow chart** in Appendix A). The framework has two drivers to act on speed and road safety: data analysis and community led concerns. Following assessment, any recommendations will be fed into the annual transport capital programme.

Data analysis

Shropshire Council will undertake the following analyses of accident and traffic data to determine any locations that may require intervention:

- Casualty data will be analysed at a fixed point annually using the previous three years of data.
- A detailed review of accident cluster sites will be carried out on a one-two year cycle.
 Thresholds for intervention will need to be defined. On a site specific basis West
 Mercia Police will liaise with the relevant traffic engineer if they become aware of potential highway issues at a collision site (damage only and/or personal injury collisions). A site meeting will be carried out and appropriate options discussed and followed up at regular liaison meetings.
- Analysis of other relevant data (i.e. traffic flows, speed data etc.) will be carried out where appropriate.
- Post scheme monitoring will be carried out where necessary if West Mercia Police, the community or a Shropshire Council officer are concerned.

Community led concerns

Perception of danger, in addition to accident rates, can be a legitimate trigger for action and as such potential road safety work may also be generated by concerns reported by local communities. Under this policy, town and parish council will take a primary role in filtering the road safety concerns, including speed management, generated by the local community as it is recognised that town and parish councils can provide key input in terms of understanding local circumstances.

The level of community support will need to be established before any investigation into possible interventions or action is undertaken by Shropshire Council. Community led concerns will therefore be dealt with in the following way:

- Town and parish councils will accept requests first and then submit those that they support, and consider there to be a level of shared community concern, to Shropshire Council.
- Concerns may come from the general public, Shropshire Council local members or community groups and directed to town and parish councils at any point in a year.

- Town and parish councils will make submissions to Shropshire Council's local traffic
 engineering teams three times a year (end of February, May and September) to allow
 time for discussions to be undertaken with Shropshire Council local members and the
 police and to gather any necessary data. There will be clearly a defined cut-off point
 for when concerns can be considered for inclusion in a particular annual programme.
- Town and parish councils will be asked to submit a prioritised list (maximum of five per submission) traffic management concerns to the local traffic engineering teams.
- There will be a requirement for Shropshire Council traffic engineers to give consideration to perceived danger and agree that a perception is 'fair'.
- Community led concerns must have the support of:
 - ◆ the Shropshire Council local member;
 - the town or parish council;
 - West Mercia Police, and
 - ◆ the local Shropshire Council traffic engineer

to be taken forward by Shropshire Council and recommended for inclusion in forthcoming programmes of work. There will be on-going liaison with all parties throughout the development of any proposals.

• Town and parish councils can continue to raise issues directly with West Mercia Police and the Safer Roads Partnership where enforcement is required.

Each concern put forward by town and parish councils will be considered by Shropshire Council traffic engineering teams, and documented, even if the result is no action.

Further guidance for town and parish councils is contained in Appendix E.

Road safety interventions

Shropshire Council's traffic professionals will use their expertise to clarify the extent of a particular concern and the most appropriate way forward in addressing it. After an initial site visit, review of relevant background data and risk assessment, a **toolkit** and **road function framework** will be applied to ascertain the appropriate level of intervention.

A toolkit will be developed that provides a portfolio of options that can be considered in addressing road safety concerns on the highway. It is intended that this is used in conjunction with a road function framework to ensure that the options considered are appropriate.

Road function framework

The development of a road function framework is a holistic approach to understanding the nature of the Shropshire's highway network in terms of needs, priorities and use.

The function of different categories of road will be set out in a design guide/manual with an aim to change the culture in relation to road safety and function in a given environment. This will not be prescriptive or a commitment to action. The framework will provide an indicative approach to the appropriate level and type of intervention on different types of roads and help to create a consistent approach across the County.

The Road Function Framework will be developed as a separate piece of work.

Toolkit for traffic professionals

The following sections provide an overview of the tools that could be available in addressing road safety concerns in Shropshire.

Engineering

The following lists outlines the options available to traffic engineers in tackling sites where there are road safety concerns. The list is not exhaustive. Specific guidance for engineers on individual elements of the toolkit will be developed where considered necessary.

- Speed limits (see following sub-section)
- Carriageway surface (links to other policies i.e. skidding resistance)
- Maintenance of highway to original design standard
- Lining measures for visual impact
- Warning signs
- Vehicle Activated Signs (VAS)
- Physical traffic calming / gateway treatments / vertical deflections
- Designing roads for lower speeds i.e. new developments

- Traffic management i.e. reduce vehicle flows
- Other innovative / site specific measures or highway features (e.g. tree planting etc.)
- Do nothing where result is positive i.e. where judgment suggests that poor visibility slows drivers and results in more cautious behaviour

Speed limits

The Department for Transport's Circular 01/2013 "Setting Local Speed Limits", has been used as a basis for reviewing Shropshire Council's position in relation to speed limit policy and strategy. It states that speed limits should:

- be evidence-led and self-explaining;
- seek to reinforce people's assessment of what is a safe speed to travel, and
- encourage self-compliance. Speed limits should be seen by drivers as the maximum rather than a target speed.

The development of this toolkit will cover the following speed limit areas:

- Urban (including 20mph)
- Rural (including villages);
- Advisory options;
- Reviewing speed limits and offering the option to increase a speed limit where appropriate, and
- Speed limits outside schools.

Where speed data is reviewed, the mean average speed recorded at a particular site will be used by Shropshire Council as the basis for determining local speed limits. Where there is not a consistent relationship between the mean speed and the 85th percentile speed, additional measures may need to be considered to result in a more typical speed distribution (see Appendix B).

Enforcement

Shropshire Council will continue to work with West Mercia Police and the Safer Roads Partnership to ensure that and road safety interventions on the highway are realistic and reasonable through:

- Police patrol / enforcement, and
- Safety cameras.

Requests for enforcement can be made directly to Safer Roads Partnership by town and parish councils.

Education

There will be an annual programme of road safety education initiatives based on national campaigns and accident statistics and profiles:

- Driver training.
- School road safety initiatives.
- Shropshire Council will continue to work alongside the Safer Roads Partnership to deliver specific education initiatives where appropriate.
- Where appropriate, Town and Parish Councils can be involved in, or coordinate, the delivery of local road safety initiatives.

Funding and programme

There will be one combined road safety budget for Shropshire. A capital programme will be determined annually based upon recommended schemes and prioritisation. For indicative purposes, budgets previously allocated are contained in Appendix D.

It is envisaged that there will be a consistent approach in outputs across the County.

The Community Infrastructure Levy (CIL) is a levy that local authorities can charge on new developments in their area. The money can be used to support development by funding infrastructure that the local authority or local community wants. Communities will need to agree their local priorities in line with the CIL Code of Practice and any proposed measures in relation to road safety would need to meet approval by the processes set out in this policy.

Prioritisation

Schemes recommended for inclusion in annual programmes of work will need to be prioritised due to competing needs and budget constraints. A prioritisation process will be developed that will be based upon the following criteria:

- Accident data analysis and other relevant data (i.e. traffic flows, speed data etc.);
- Level of local support;
- Police view the level of police support for a scheme may vary but will be critical if a scheme is to be enforceable;
- Perceived risks that may impact on travel choices;
- Suitability of road conditions for understood function (e.g. Residential or rural, etc);
- Wider community benefit i.e. other than the initial request made, and
- Other funding availability (i.e. Community Infrastructure Levy (CIL), other community contributions etc.).

Shropshire Council

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Working with partners

Shropshire Council positively engages with enforcement agencies and emergency services to propose, implement, promote and monitor accident reduction and road safety within Shropshire. Through transparent sharing of knowledge and experience, it is envisaged that Shropshire Council can continue to provide the best achievable outcome for road users and communities within the County.

West Mercia Police

The policy will endeavour to formalise the positive consultation that is already carried out between West Mercia Police and Shropshire Council. As a minimum requirement it is suggested that liaison meetings are carried out on a monthly or quarterly basis and that a cluster site review is undertaken annually.

The weight given to police support at an early stage is critical if the scheme is to have the potential to be enforced in the future, where appropriate.

Safer Roads Partnership

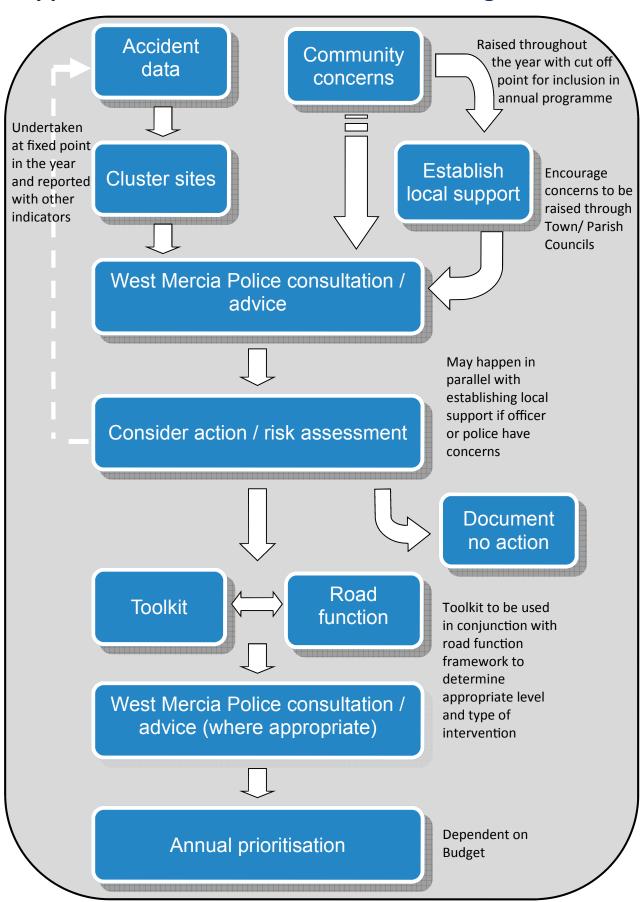
The Safer Roads Partnership in West Mercia is part of West Mercia Police and works in partnership with nine partner agencies to reduce casualties and make the roads safer for all users in West Mercia. As well as running safety campaigns, the Safer Roads Partnership enforces speed limits in Shropshire.

Speed enforcement sites may be sites where there is a known history of road accidents and casualties or sites that are part of the 'Community Concern' programme. 'Community Concern' sites are where a speeding issue and a high level of concern from a local community can be demonstrated.

Shropshire Council will continue to take an active involvement in the Safer Roads Partnership. Shropshire Council officers currently have regular and direct liaison, normally on a bi-monthly basis.

Communities can continue to make direct requests to the Safer Roads Partnership in relation to road safety concerns.

Appendix A: Demand for action and work generation



Appendix B: Interpretation of speed data

For the majority of roads there is a consistent relationship between mean speed and 85th percentile speed. Where this is not the case, it could indicate that drivers have difficulty in deciding the appropriate speed for the road, suggesting that a better match between road design and speed limit is required. It may be necessary to consider additional measures to reduce the larger than normal difference between mean and 85th percentile speeds or to bring the speed distribution more in line with typical distributions³.

For practical purposes, the distribution of vehicle speed is treated as Normal Curve. For a Normal Curve, the 85th percentile is about one standard deviation above the mean. The standard deviation of speeds is usually equal to about one sixth of the mean speed⁴.

Figure 1 illustrates the typical relationship between the mean speed and 85th percentile speed in a 40mph speed limit, where the mean speed is 40mph and the standard deviation is taken as 6.66mph (one sixth of the mean). In this example, the 85th percentile is approximately 47mph, with 15% of vehicles travelling at speeds up to 60mph.

If the standard deviation is assessed at 10mph, the gap between the mean and the 85th percentile is widened and the tail of the normal curve is lengthened, as shown in Figure 2. This suggests that for this 40mph speed limit, the 85th percentile is increased to approximately 50mph with 15% of vehicles travelling at speeds up to 70mph. In line with the Department for Transport guidance outlined above, this would be an example of where additional measures may be considered necessary to reduce vehicle speeds.

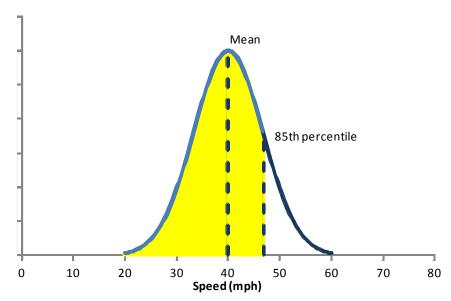


Figure 1: Typical relationship between mean and 85th percentile vehicles speeds in a 40mph limit

³Department for Transport. (2012). Setting Local Speed Limits [DRAFT]. Available: http://www.dft.gov.uk/consultations/dft-2012-32/. Last accessed 10th September 2012.

⁴Highways Agency et al. (1981). Design Manual for Roads and Bridges 5:1:4 – TA 22/81. Available: http://www.dft.gov.uk/ha/standards/dmrb/vol5/section1/ta2281.pdf . Last accessed 10th September 2012.

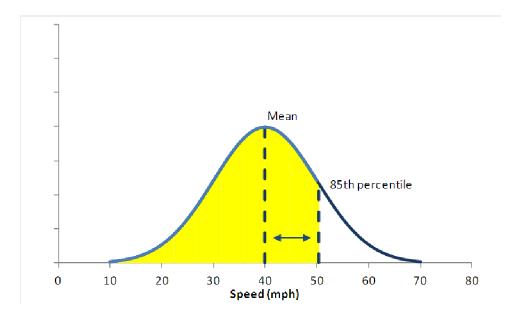


Figure 2: Non-typical relationship between mean and 85th percentile vehicles speeds in a 40mph limit

Appendix C: Accident trends in Shropshire—2011/12 end of year performance

NI 047: Reduction in Killed and Serious Casualties

The actual number of people killed or seriously injured in a road traffic accident in Shropshire each calendar year is shown in Figure 3.

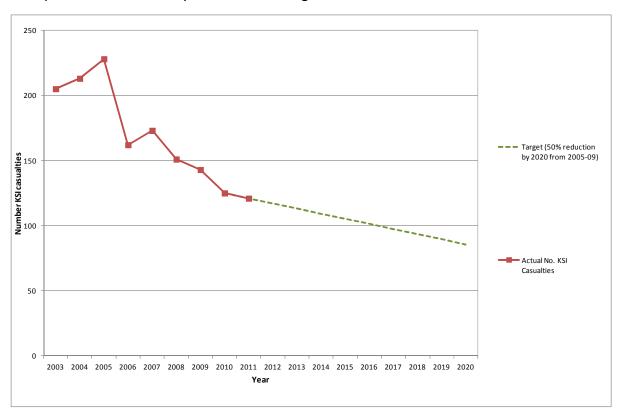


Figure 3: Killed and seriously injured road accident casualties in Shropshire

Long Term Trend

This shows there has been a historical sharp downward trend with significant reductions in casualties over the last decade. The rate of reduction slowed down between 2010 and 2011, although it is too soon to say whether this is significant in terms of the longer term trend or just an annual fluctuation.

However, as Figure 3 shows the current rate of reduction is in line with what is required to achieve our long term target – a 50% reduction in KSI casualties based on the 2005-2009 average. This target is in line with national projections.

Performance indicator

Due to the tendency for there to be annual fluctuations the performance indicator is measured as a three year rolling annual average (the average of the previous 3 years data). Figure 4 shows the downward trend of the quarterly annual rolling average. It can be seen that the rolling average for quarter 4 2011/12 shows and increase in the number of

casualties for the first time in recent years.

This is a result of quarter 4 (Jan- March 2012) seeing a comparatively high number of casualties (33 casualties) (the highest in that quarter for 5 years) combined with the loss from the average of the same quarter in 2009 which was a particularly good quarter (23 casualties).

Casualty data is sensitive to a large number of factors including weather patterns, and at this point the upward trend is not too concerning, unless it is repeated in further quarters this year.

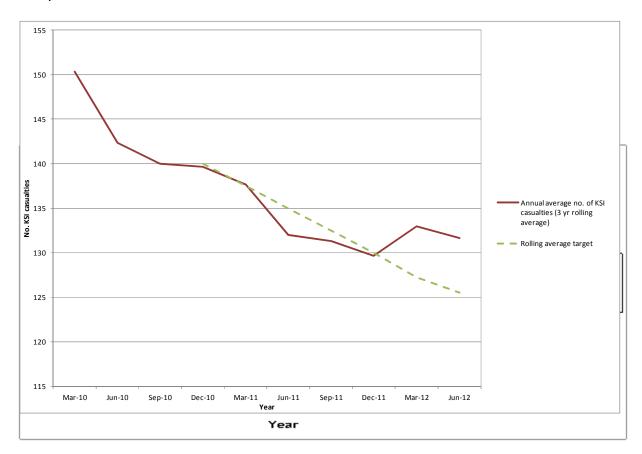


Figure 4: Annual average number of KSI casualties (three year rolling average)

Long term KSI casualty trends are influenced by a number of factors. Some are outside of Council control, such as vehicle technology and in car safety features.

Factors which are influenced more by council actions include:

- **Driver behaviour** influenced by targeted local education, publicity and training work which is targeted at high risk groups (e.g. motorcyclists, young drivers, cyclists) and high risk behaviours (e.g. drink driving)
- **Road condition** factors such as surface quality which effect skid resistance, drainage, potholes can impact on safety and are influenced by maintenance practices and

budgets

• **Highway design and speed limits** - Targeting high risk accidents sites with road redesign, new facilities such as pedestrian crossing facilities or lower speed limits is proven to be effective at reducing accidents at these sites.

Over the last 15-20 years the national rate of accidents had dropped sharply which can be argued to be significantly influenced by improved car technology and safety features. However the rate of reduction in Shropshire has been significantly greater than the national average, indicating that local actions have also influenced the casualty reduction (see Figure 5).

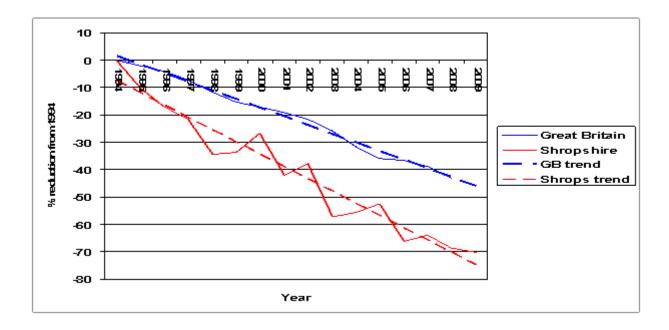


Figure 5: Comparison of accident rates in Shropshire and Great Britain

Appendix D: Indicative road safety budgets

Total allocated to speed reduction measures for Rural, Urban, Village Speed limits and Vehicle Activated Signs combined.

2011/12 2012/13 2013/14 £340,000 £255,000 £250,000

Appendix E: Guidance for town and parish councils on community led concerns

Introduction

A new Road Safety Policy framework was approved by Shropshire Council's Cabinet on 20th February 2013. The framework enables Shropshire Council traffic engineers to consider what speed management measures will best address a defined problem taking account of road function, accident data analysis and **community led concerns**. In summary, the new policy will result in:

- An annual programme of schemes rather than predefined lists of schemes for forthcoming years;
- More flexibility for appropriate measures on a site by site basis;
- A consistent approach county-wide;
- A requirement to demonstrate community support, and
- The opportunity to use local funding.

In addition to accident data analysis, road safety schemes can also be generated by a new method for dealing with road safety concerns raised by the local community. The community led concerns element of the Road Safety Policy strengthens the role of town and parish councils and this document provides further guidance on how local road safety concerns will be dealt with.

How will road safety concerns be raised?

Members of the general public will be encouraged to approach town and parish councils directly with any road safety concerns. Town and parish councils will accept requests first and then submit those that they **support**, and consider there to be a level of **shared community concern**, to Shropshire Council.

When will community led concerns be reported to Shropshire Council?

Submissions will be made three times a year (end of February, May and September) to allow officers to undertake discussions with Shropshire Council local members and the police, and to gather any necessary data. It is envisaged that the first collection will be at the end of **May 2013**, however for the first submission lists will be accepted into June 2013.

Town and parish councils can continue to raise issues directly with West Mercia Police and the Safer Roads Partnership where enforcement is required.

How will community led concerns be submitted to Shropshire Council?

Town and parish councils will need to submit a prioritised list of **up to five** road safety concerns to the local traffic engineering teams. This means that there can be up to fifteen concerns highlighted in any calendar year. The list will need to include details on the specific nature of the concern, the location and its priority (with number 1 being the greatest priority).

Example

Priority	Location	Details of concern
1	At junction of Farm Lane and Main St.	Vehicle speeds
2	Main St. between East St. and West St.	Safety of pedestrians crossing the road

- An individual concern will only need to be reported once in any calendar year. All lists will be cleared at the end of a calendar year.
- If a new issue arises that the town or parish council considers being of greater priority than previous concerns reported, or if priorities change then this needs to be communicated to the local traffic engineer.

Where will the submissions need to be sent to?

The prioritised lists of road safety concerns will need to be sent to the relevant local traffic engineering team. Please do not hesitate to call any one of the engineers if you need to clarify which area you fall within or if you would like any help or advice in reporting your council area's road safety concerns.

Area	Name	Telephone	E-mail
South	Alice Dilly	01746 713225	alice.dilly@shropshire.gov.uk
Central	Kevin Aitken	01743 254958	kevin.aitken@shropshire.gov.uk
North	David Gradwell	01939 237414	david.gradwell@shropshire.gov.uk

What will happen next?

Each concern put forward by town and parish councils will be considered by Shropshire Council traffic engineering teams, and documented, even if the result is no action. In some cases, the local traffic engineer may wish to carry out some survey work. Where this is the case, there will be clear communication with the town and parish council regarding survey locations.

The local traffic engineer will report back to town and parish councils any schemes that are suitable to be recommended for funding. Schemes will only be recommended for inclusion in forthcoming programmes of work where there is clear support from **all** of the following:

- Shropshire Council local member;
- Town or parish council;
- West Mercia Police, and
- Local traffic engineer (Shropshire Council).

It will be the responsibility of the local traffic engineer to communicate with the Shropshire Council local member and West Mercia Police.

Small scale schemes may be implemented on a monthly basis however larger schemes will be subject to an annual prioritisation process. Shropshire Council local members and town and parish councils will be informed of any programmed works.