#### **DERBYSHIRE COUNTY COUNCIL**

#### MEETING OF CABINET MEMBER - HIGHWAYS AND TRANSPORT

# 15 May 2012

Report of the Strategic Director – Environmental Services

# TECHNICAL GUIDANCE NOTE ON VEHICLE ACTIVATED SIGNS

- (1) **Purpose of the Report** To seek the Cabinet Member's approval to technical guidance to provide clarity on the use of Vehicle Activated Signs (VAS) within Derbyshire.
- (2) **Information and Analysis** The reduction of casualties from road collisions continues to be a priority at national and local level. Despite a trend of gradual improvement, these remain a significant problem and, although there was a reduction of 17% from 2010, 330 people were killed or seriously injured on Derbyshire's roads in 2011. In order to ensure that casualty numbers continue to reduce, the County Council works directly and through the Derby and Derbyshire Road Safety Partnership on a range of interventions involving engineering measures, education, training and publicity.

VASs, which display a warning message triggered by the characteristics of an approaching vehicle (such as its speed), are a valuable road safety engineering tool. They have been developed to address the problems of exceeding speed limits, to encourage drivers to approach hazards, such as bends or junctions, at a safe speed, and to provide hazard warnings where conventional signing has not been effective. Analysis of existing sites within Derbyshire shows that, where VASs have been installed as a response to known collision problems, they have resulted in immediate and ongoing improvements in the casualty record. Their use at targeted sites is therefore well founded.

Derbyshire still has relatively few VASs with approximately 50 in place and, at the current level of use, there is no reason to believe that the effectiveness of the signage will reduce significantly over time. However, there is a concern that an increase in usage will reduce the overall effectiveness of VASs as road users become more familiar with them.

VASs are popular with local communities and many requests are received from parish/town councils for their installation as a solution to known or

perceived road safety problems. Their relatively low cost has led to an increase over time in parishes requesting permission to install, and to fund, their own signs where County Council funding cannot be justified. Whilst this desire for VASs is understandable, and will be reflected as far as possible in County Council programmes, the use of VASs in these circumstances has the potential to lead both to the proliferation of signage and to reduced effectiveness. It is therefore considered that a protocol is needed which can be used both to determine the priorities for County Council investment in VAS and to inform other bodies about where signs will be deployed and where installation is likely to be refused.

Attached, as Appendix 1 to this report, is a proposed Technical Guidance Note which sets out the circumstances under which VASs are likely to be approved and installed, and the type of sign suitable for different circumstances. Importantly, it also sets out requirements for ongoing monitoring and, where appropriate, removal. If approved, this guidance will assist interested parties to understand the applicability of VASs to their local road safety concerns. It will also assist officers in responding to these concerns and in considering the suitability of VASs as a local solution.

(3) **Financial Considerations** VASs, where funded by the County Council, are provided through Highways and Transport Capital Programmes, as approved through Environmental Services Department Service Plans.

In preparing this report the relevance of the following factors has been considered: legal, prevention of crime and disorder, equality and diversity, human resources, environmental, health, property and transport considerations.

- (4) Key Decision No.
- (5) **Call-In** Is it required that call-in be waived in respect of the decisions proposed in the report? No.
- (6) **Background Papers** Analysis of the effectiveness of VASs in Derbyshire is available from the Environmental Services Department. Officer contact details Jim Seymour, extension 38557.
- (7) **OFFICER'S RECOMMENDATION** That the Cabinet Member approves the Technical Guidance Note on Vehicle Activated Signs which forms Appendix 1 of this report.

# Ian Stephenson Strategic Director – Environmental Services

#### Draft

## **Derbyshire County Council**

### **Technical Guidance Note on Vehicle Activated Signs**

#### 1. Introduction

The intention of this guidance is to supplement the County Council's Local Transport Plan Investment Protocol (October 2011). This, through Policy IP83, dictates that infrastructure, which creates a net increase for the authority to maintain, should be used sparingly, and in policy IP42 it identifies Vehicle Activated Signs (VAS) specifically, as falling into this category, but with detailed policy to be developed. This guidance puts in place the more detailed procedures to be followed in considering the installation of permanent, temporary or mobile VAS. It will be reviewed as and when required by any revision of the Investment Protocol.

#### 2. Technical Guidance

### 1) Permanent and Temporary VAS - Inclusion in County Council Programmes

- a) VAS should be considered at sites that have a collision history associated with inappropriate speed, or a hazard, that has not been satisfactorily remedied by standard signing. Other signing means must have been tried and have failed; the site must have been subject to a recent speed survey to determine justification for a VAS installation.
- b) VAS displaying a speed limit should be located at sites which have a history of a minimum of 6 injury collisions within 1km over the previous 3 years, and where speed has been a factor in all or some.
- c) VAS displaying a speed limit should be located at sites where the results of traffic surveys show the 85<sup>th</sup> percentile<sup>1</sup> speed is at least 10% over limit +2mph measured over 7 days.
- d) Hazard warning VAS should be located at sites which have a history of a minimum of 6 injury collisions within 1km over the previous 3 years, and where the hazard has been the cause.
- e) Requests for VAS that meet these criteria should be prioritised on the basis of a calculated estimate of casualty reduction benefits.
- f) The flexibility of temporary VAS means they are the preferred option but the decision on which type of VAS to be used should be made on a case by case basis. To retain effectiveness, temporary VAS should remain on site for no longer than 3 months, and should not be redeployed at the same site within 6 months.
- g) Any proposal for VAS to be funded through County Council programmes but which does not meet the above criteria must be justified through an Exception Report in Service Plan preparation processes for permanent installations or via a Cabinet Member report for temporary installations.

<sup>(1) 85&</sup>lt;sup>th</sup> percentile is the speed at which up to 85 per cent of the traffic is travelling.

#### 2) Installation and Monitoring Criteria

- a) VAS warning of a hazard should be set to operate at the 50<sup>th</sup> percentile<sup>2</sup> speed measured before installation. However, discretion may be used to change this depending on the road conditions.
- b) VAS displaying a speed limit should normally be set to operate at the speed limit + 2mph. However, discretion may be used to change this depending on the road conditions.
- c) The section of road in advance of the VAS must be straight over a reasonable distance to maximise visibility to the sign.
- d) There should be little or no vegetation or street furniture that will block the view of the sign or affect the working of the radar equipment.
- e) There must be sufficient footway or roadside verge to install the sign. There must be reasonable access to a power supply.
- f) The sign should, wherever possible, not be intrusive to nearby residential properties and early consultation should be sought to establish residents' views. If the sign is proposed within the Peak District National Park, early consultation with the National Park Authority should be sought.
- g) VAS displaying a speed limit should be located between 100 and 200 metres beyond the start of the posted speed limit sign, except in urban areas with street lighting where a 30mph speed limit operates and where repeater signs are not allowed.
- h) VAS warning of a hazard should be located between 50 and 100 metres in advance of that hazard.
- i) Permanent VAS should be routinely inspected every six months and provided with regular maintenance, such as cleaning the sign face, removing any obstructing foliage and ensuring that the vehicle detection system is functioning correctly.
- j) All VAS installations should be monitored for effectiveness by regular analysis of speed data and collision records. Any that are considered ineffective should be removed.

# 3) Permanent and Temporary VAS - Funding by Borough, District or Parish/Town Councils

Where a local council has requested a VAS which meets criteria for inclusion in the County Council's programmes but is a low priority for installation at the County Council's expense, then the local council may fund the installation. It must undertake to be responsible for all costs, including long-term maintenance for the life of the installation, and removal if required. All selection, installation and monitoring criteria above will apply, with the exception of criteria 1) e) and g).

#### 4) Mobile VAS

Mobile VAS may be deployed in locations which would not meet the criteria for permanent or temporary sites. Decisions on where they may be deployed, and the length of deployment, should be taken through established selection and consultation procedures of the sign's owner, either the County Council or Derby and Derbyshire Road Safety Partnership. The owner may seek contributions to costs from the local council requesting the installation. In no circumstances should mobile VAS be deployed for longer than the three month limit applying to temporary installations.

 $<sup>85^{</sup>th}$  percentile is the speed at which up to 85 per cent of the traffic is travelling.