

Report of the Acting Director City and Environmental Services, Neil Ferris.

PART 3: VEHICLE ACTIVATED SIGNS REVIEW

Summary

1. This report seeks approval of an updated Vehicle Activated Sign (VAS) policy which includes:
 - a. The criteria that a site would have to meet before a VAS can be considered;
 - b. Monitoring of existing and new sites and;
 - c. The future maintenance of VAS.

Background

2. VAS were developed to address the problem of inappropriate speed where conventional signing had not been effective. They are relatively inexpensive and can often be used on roads where physical traffic calming would not be appropriate.
3. There are two types of VAS approved for use on UK roads, both are triggered by a vehicle exceeding a set speed and have an option to also show the text 'SLOW DOWN' and / or have flashing amber lights. They are:
 - a. Hazard warning signs.
 - b. Speed limit roundels / camera symbols (where appropriate).
4. Since 2005, 66 VAS have been installed in the Council area as shown in **Annex A**, the majority (57 signs) are over five years old and consequently are out of warranty. Several of these signs are known to be faulty, and it is expected that all the existing signs will fail in the

next few years. In a time of growing budgetary constraints, there could be significant implications for the maintenance of these signs. As the majority of signs (61 out of the 66) are speed limit roundels, this will be the main focus of the report.

5. There are also two signs owned by Network Rail at the Wigginton Road level crossing, these are not included in this review.
6. A new speed limit VAS is currently £2100 plus VAT, but this is expected to be reduced if a better deal can be secured (previously these were £1600 plus VAT under a now expired framework agreement). These signs currently come with a 6 year warranty which covers everything except vandalism, impact damage and theft. There are also other costs associated with VAS such as electrical connection, post installation, speed surveys and staff fees.
7. The current VAS policy was approved on 20th October 2009 by the Executive Member for City Strategy in response to concerns over the proliferation of signs. This included recommendations for the criteria that new LTP and Ward Committee sites should meet, and the monitoring and review of sites following implementation.
8. It should be noted that in addition to meeting any agreed policy criteria, there are other practicalities to take into account when considering a site for the installation of a VAS. There needs to be good clear visibility of the sign for approaching drivers to see it, and also for the radar to detect oncoming vehicles. An available electricity supply is also required. Solar and wind powered units are an alternative option but these need to have a clear south facing aspect for optimal efficiency. In addition, each proposal would be subject to a consultation process which would include residents, Councillors, Parish Councils, North Yorkshire Police and other affected parties. The outcome of any consultations would have to be reported to the Director or Executive Member for a decision to be made.

Existing VAS

9. The first major update since 2009 to the VAS inventory has now been undertaken. This has included a visual inspection of all the signs, a

review of injury accident data and an assessment of before, after and recent speed data for all 66 sites.

10. Twelve signs are currently faulty or otherwise missing, of which nine were originally LTP funded. Repairs or replacements at these sites alone could cost in the region of £20,000.
11. A large amount of speed survey data has been collated and the number of sites with reliable before and after data averaged a 1.8mph reduction in mean speeds and a 2.7mph reduction in 85th percentile speeds. Recent speed data has been collected for each of the sites but because most of the VAS are quite old, it seems likely that there would have been other changes that may affect vehicle speed such as a general increase in traffic volume, changes to parking patterns or road layouts.
12. Although at the majority of sites VAS were installed for speed rather than accident reduction purposes, injury accident records have also been checked for each site. Twenty sites were found to have had recorded injury accidents in the three years before implementation, and about half of these are now indicating a reduction in accidents.

Current VAS Policy and Proposals

13. Key recommendations contained within the 2009 report included the criteria a site had to meet before it could be considered for the installation of a VAS and monitoring of the sites to provide information for any review.
14. The criteria adopted in the 2009 report was as follows:
 - a) That Local Transport Plan (LTP) funding will only be used where the 85thile speed equals or exceeds the signed limit by 10%+2mph (i.e. 35mph in a 30mph limit, and 46mph in a 40mph limit). This would be consistent with the speed enforcement thresholds employed by the police (ACPO guidelines).
 - b) Where this funding criteria is not quite met, a Ward Committee or Parish Council may still wish to fund the installation of a VAS. In this situation, a threshold of 85thile speeds being 10% above the speed

limit should be adopted (i.e.33mph in a 30mph limit and 44mph in a 40mph limit).

15. It is not proposed to make any changes to this criteria with respect to speed limit VAS, and therefore any new requests (which for LTP funding are generally expected to come through the speed review process) would have the existing criteria applied. The criteria for hazard warning VAS was not specifically covered. This is discussed later in the report.
16. The existing policy also recommends:
 - c) That monitoring of traffic speeds at VAS sites is carried out at approximately 3 months after implementation to gauge initial performance, and then again at around 3 years (or earlier if considered appropriate), along with a review of accident records, to assess the long term effectiveness of the sign.
 - d) That the outcomes of this monitoring process and officer recommendations be reported to the Executive Member in respect of LTP funded VAS, and Ward Members in respect of Ward Committee funded VAS, for decisions to be made on the retention or possible re-deployment of the VAS.
17. Owing to budget and staff resource constraints it has not been possible to review the VAS signs to the level originally anticipated. There has been no budget specifically allocated for the monitoring and aftercare of VAS, and re-deployment would have invalidated the manufacturers warranty. Post implementation speeds were however, checked as a matter of good practice. It is also difficult to define how much speeds may be affected by other factors three years after implementation, such as changes in parking patterns or road layout. It is therefore difficult to isolate the effectiveness of the VAS without taking speeds with it operational and switched off.

Maintenance of Existing and Future stock

18. Given the current age of the VAS stock, and the likelihood of an increasing number failing, it is evident that a system needs to be adopted to tackle this issue. It is therefore proposed to review

individual sites as and when they become faulty (outside their warranty period) using up to date speed readings and applying the same criteria as for new sites. Any LTP funded sites that meet this criteria should have their signs repaired or replaced. If the original sign was funded by the Parish Council or Ward Committee, they would be asked if they would like to pay for repairs or replacement. If they do not wish to, removal is the proposed approach. Any signs that do not meet the criteria should be removed and the site disbanded after informing the appropriate Parish Council, Ward Committee and Ward Councillors.

19. The budget of £50,000 will be used to complete this year's review and refurbish or replace faulty or missing LTP funded signs provided that the sites meet the proposed criteria. An allocation for this purpose may also need to be considered for future year's capital programmes, taking into account any other priorities at the time. If there are significant financial implications, a further review may be needed.

Consultation

20. Consultation has taken place with key Council Officers, North Yorkshire Police, Group Spokespersons and Independent Ward Councillors. Four key questions were asked:
 1. Should we continue to install VAS at new sites?
 2. Should we keep the existing speed criteria for a new site to be considered for a VAS installation?
 3. When a VAS develops faults outside the warranty period, should we review it against the above criteria to decide if it should be repaired, replaced or removed (referring it back to the Ward Committee/ Parish Council, where appropriate)?
 4. Should a commitment to meet the costs of repairs and replacement of LTP funded signs be made on an annual basis until a further review?

CYC Officers

21. Alistair Briggs, Traffic Management Manager - answered yes to all four questions.

22. Russell Stone, Head of Highway Operations – wished to ensure that Ward Committees, Parish Council’s and any other funding bodies were aware of any possible maintenance implications and where possible these be covered upfront.

Officer comments

This report is intended to be followed by a procurement exercise which will factor in the warranties offered by manufacturers as part of its considerations. It will also be made clear to non-LTP fund providers that other costs can arise such as repairs due to vandalism, vehicle impact, theft, damage to posts or electrical problems which would not be included in the warranty.

23. Trish Hirst, Road Safety Officer – wished to see more robust criteria, in line with national guidance, for LTP funded signs. Specifically that VAS should only be considered where there is an accident problem associated with inappropriate speed, where other solutions are either not practical or have failed, that VAS should not be used as a substitute for fixed signing, and should be used sparingly.

Officer comments

It is agreed that where the use of hazard warning VAS are concerned, there should be a history of recorded injury accidents (the last three years is generally considered to be an appropriate timeframe). In these instances, inappropriate vehicle speed may be within the posted speed limit (eg. At a bend or junction) so the speed criteria is not considered appropriate for this type of sign. However, there are so few LTP funded speed limit VAS that it is considered once the speed criteria is applied, the individual officer should be able to determine the suitability of VAS taking into account any other factors.

North Yorkshire Police

24. Steve Burrell, North Yorkshire Police Traffic Management Officer – commented that:
- a) Most of the VAS are being ineffectively used to treat excess speed rather than inappropriate speed as recommended in the guidance. With the exception of sites with hazard warning VAS which raise awareness of oncoming hazards, this has led to a very short

timeframe in which the signs are effective. Therefore, the implementation of speed limit VAS are not considered to represent value for money.

- b) The signs have not been used sparingly as recommended in the guidance and frequent exposure to drivers has compounded the issue of long term effectiveness.
- c) North Yorkshire Police have an expectation that the national guidance (mainly Transport Advisory Leaflet 1/03) is adhered to on every occasion and therefore no enforcement action will be considered necessary or entered into where the signs are placed. Where the sign is found to be ineffective, further measures should be put in place by CYC.

Officer comments

- a) *Monitoring of VAS has shown positive effects on vehicle speed, which it is accepted does diminish over time, however, there is still considered to be enough evidence to support the use of the signs. One possible solution would be the use of portable signs for rotation around several locations. However, as these are more expensive than fixed VAS (£2625 from our current supplier) with only a 12 month warranty, and take down and installation costs, these are not considered to offer better value for money.*
- b) *It is agreed that there are a lot of VAS in the York area. The report in 2009 was written to tackle this proliferation, but since then only eleven signs have been installed. In addition, recent surveys suggest that as the signs develop faults and the sites assessed, there will be a reduction in the overall number.*
- c) *As the majority of speed limit VAS are installed on roads where vehicle speeds are at or above the speed limit plus 10% but below the speed limit plus 10% = 2mph (the ACPO limit used to determine appropriateness for enforcement) it is considered unlikely that the situation would arise where there is any disagreement over enforcement action. In addition, where vehicle speeds are highest, the signs have generally been the most effective. Where they are not, their use and positioning would be reviewed.*

Group Spokespersons & Independent Councillors

Cllrs Gillies, D'Agorne, Reid, Williams, Hayes and Warters have been consulted but no responses have been received.

Options

25. Option 1 – To make no changes and retain the VAS policy as agreed in October 2009.
26. Option 2 – To update the VAS policy thus:
 - Retention of the existing criteria for speed limit VAS.
 - A new criteria for hazard warning VAS based on at least one recorded injury accident in the last three years. Speed data would be considered but would not be part of the criteria.
 - Speed data to be collected three months after installation for monitoring purposes.
 - A system of review when a sign develops faults by applying the criteria with the sign switched off or absent, with a subsequent decision by Officers as to repair, replacement or removal.
 - The consideration of a yearly allocation for the refurbishment and renewal of LTP funded signs. Ward committee or Parish Councils would be expected to fund any maintenance (if they so wish) if they originally purchased the signs.
27. Option 3 – To update the VAS policy, as otherwise considered appropriate by the Executive Member.

Analysis

28. Option 1 to make no changes is not recommended as whilst it does provide a criteria for new VAS, the system of periodic monitoring and review was not really adopted, and there is no mechanism in place to consider when signs should be repaired or replaced or where funding should come from.
29. Option 2 is recommended to tackle the issues of failing signs in a time of growing budgetary constraint. It will also ensure that new VAS are used appropriately, VAS are refreshed at sites where they are considered to still be warranted, deal with the issue of proliferation, and safeguard funding for the future maintenance of the VAS.
30. Option 3 to otherwise update the policy may be appropriate if it is in addition to the items in option 2, but as no other issues have arisen up to the point of writing, it is not currently considered to be justified.

Council Plan

31. The Council Plan has three key priorities:
- **A Prosperous City For All.**
 - **A Focus On Frontline Services.**
 - **A Council That Listens To Residents**
32. Speeding traffic and concerns about road safety are a common complaint from residents. Measures that are provided from LTP funding or by communities themselves through Ward Committees or Parish Councils provides a way to address these issues.

Implications

- **Financial** - There is an allocation of £50,000 in the Transport Capital Programme for this year's VAS review which should also cover the refurbishment or replacement of any faulty or missing VAS. An allocation for these purposes should also be considered for future year's programmes at the appropriate time, taking into account any other priorities. This money would otherwise have to be found from revenue maintenance budgets, or signs would continue to be faulty and hence ineffective.
- **Human Resources** - The future resource requirements will only be on an adhoc basis (when signs require review or are requested by ward committees), this is not thought to represent a significant amount of officer time, although it will need to be considered alongside other workload priorities.
- **Crime and Disorder** - Speeding is a criminal offence and the Council has a responsibility to deliver an effective Speed Management Strategy of which VAS form an element. It is the responsibility of North Yorkshire Police to enforce the appropriate speed limit as per the DfT guidelines and Road Traffic Law.
- There are no **equalities, legal, information technology, property** or **other** implications.

Risk Management

33. In compliance with the Council's risk management strategy, the following risks associated with the recommendations in the report have been identified and described below.
34. Organisation / Reputation – Where a site with a faulty VAS is assessed and recommended to be removed, or where a sign is requested and it does not meet the criteria, it is highly likely to meet some public opposition. The overall impact on the Authority is however thought to be minor if backed up by an agreed robust policy applied consistently. This gives a risk rating of 11 so frequent monitoring is required.

Recommendation

35. That the Executive Member is asked to approve Option 2 to update the Council's VAS policy, as follows:
 - i. To retain the existing criteria for speed limit VAS, which is:
 - a) That Local Transport Plan (LTP) funding will only be used where the 85thile speed equals or exceeds the signed limit by 10%+2mph (i.e. 35mph in a 30mph limit, and 46mph in a 40mph limit). This would be consistent with the speed enforcement thresholds employed by the police (ACPO guidelines).
 - b) Where this funding criteria is not quite met, a Ward Committee or Parish Council may still wish to fund the installation of a VAS. In this situation, a threshold of 85thile speeds being 10% above the speed limit should be adopted (i.e. 33mph in a 30mph limit and 44mph in a 40mph limit).

Reason: To ensure a consistent approach and targeted use of LTP resources. In the case of Ward Committee and Parish Council funding this allows the use of VAS where there are real concerns about the speed of traffic but where the stricter criteria for LTP funding is not met.

- ii. To establish criteria for the provision of hazard warning VAS based on at least one recorded injury accident in the previous three years,

with reports of inappropriate speed (which may be within the posted speed limit) .

Reason: To make sure hazard warning VAS are used appropriately.

iii. The existing system of monitoring should be replaced by collection and analysis of speed data before installation and three months after.

Reason: To focus future monitoring and review, where it is most needed.

iv. VAS to be reviewed as and when they develop faults applying the criteria in i. and ii. above. If the site meets the criteria, it is recommended that the VAS is repaired or replaced. If they do not, the sign and post should be removed and the site disbanded.

Reason: To address the issue of maintenance, longer term monitoring, and review the site objectively when the sign is not present.

v. To consider the need for future allocations for the review and aftercare of LTP funded signs. Ward committee or Parish Councils are expected to fund any maintenance (if they so wish) if they originally purchased the signs.

Reason: To address the current maintenance funding shortfall and ensure the VAS stock is maintained at sites where the signs are warranted.

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Report
Approved

Date 27/10/2015

Specialist Implications Officer(s)

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Wards Affected: List wards or tick box to indicate all

All

For further information please contact the author of the report

Background Papers

- i) Report to the Executive Member for City Strategy Decision Session on 20 October 2009 - VAS Policy
<http://democracy.york.gov.uk/ieListDocuments.aspx?CId=672&MId=4764&Ver=4>

Annexes

Annex A – VAS Location Plan