

NORTH YORKSHIRE COUNTY COUNCIL
TRANSPORT, ECONOMY AND ENVIRONMENT
OVERVIEW AND SCRUTINY COMMITTEE

16 APRIL 2014

INTERIM REPORT ON THE 'INITIAL PHASE' OF
TEMPORARY VEHICLE ACTIVATED SIGN (VAS) PROTOCOL

Report of the Corporate Director – Business and Environmental Services

1.0 PURPOSE

- 1.1 To inform members on the progress of the 12 month 'initial phase' of the Temporary Vehicle Activated Sign Protocol, the feedback from participating communities and to report the initial findings.

2.0 BACKGROUND

- 2.1 A Task Group of the Transport, Economy and Environment Overview and Scrutiny Committee met in June 2012 to consider the potential introduction of a Temporary Vehicle Activated Sign (VAS) Protocol. The Transport, Economy and Environment Overview and Scrutiny Committee recommended the introduction of a Temporary VAS Protocol and it was approved in principle by the Executive in September 2012. Business and Environmental Services Executive Members approved the Protocol and establishment of a 12 month 'Initial Phase' in November 2012.
- 2.2 The Temporary VAS Protocol was developed for those communities with local speeding concerns but which following assessment through the Speed Management Protocol, fall below the threshold required for further action by the 95 Alive Road Safety Partnership.
- 2.3 Where a site is assessed as Category 3 or 4 through the Speed Management Protocol the option exists for local communities to be considered for a temporary VAS. There is a requirement for local communities to fund the rotation and installation costs associated with the deployment of the temporary VAS.
- 2.4 The initiative did not start in April 2013 as originally anticipated, largely because a number of parishes, understandably, took some time to decide whether they wanted to be involved. There was then a further process to offer any remaining VAS to those parishes/communities further down the approved list. The first deployment of the signs began on 17 June 2013 for those communities at the top of the list.

2.5 There are 31 communities participating in the 'initial phase'. The number of participating communities in each District is as follows:

- 5 in Richmondshire
- 5 in Hambleton
- 2 in Scarborough
- 4 in Ryedale
- 4 in Craven
- 6 in Harrogate
- 5 in Selby

2.6 Not all of the shortlisted communities in the Scarborough Borough were interested in participating in the 'initial phase' so the spare capacity was offered to rural communities in the Harrogate Borough as the demand here was greater than anywhere else.

2.7 Before the list of 31 participants was finalised, 34 other communities turned down the opportunity to participate, mainly because they did not have the necessary funds available to participate. However, some of these 34 communities comprised a number of urban sites in the Harrogate Borough that were not within an areas covered by either a Parish or Town Council. When approached neither the local community in question nor Harrogate Borough Council chose to participate in the 'initial phase'. There are no communities participating that are not within a Parish or Town Council area.

3.0 PROGRESS TO DATE

3.1 Despite some early teething problems regarding the installation and siting of the signs the temporary VAS have been deployed in accordance with the agreed programme.

3.2 The vehicle activated signs log speeds of approaching vehicles. However, it became apparent that 'during' speeds collected by the vehicle activated sign were not comparable with the 'before' speeds collected by pneumatic tubes which are laid across the width of the carriageway. This was because the temporary VAS radar reach for detecting speeds extends to 130m in advance of the sign, whereas the tubes record speeds at a fixed point. This has since been remedied with the installation of pneumatic tubes at the same time as the sign is deployed and at the same location where the 'before' surveys were carried out. It is therefore possible to measure the effectiveness of the sign by comparing 'before' speeds with 'during' speeds. This process is currently on-going and a detailed comparison of all sites will be included in the overall evaluation of the 'initial phase'.

3.3 The temporary VAS deployment is currently approximately two-thirds of the way through the 'initial phase'. The last community to take its first deployment was North Stainley in November 2013. Therefore as the 'initial phase' is running for 54 weeks, a realistic date for completion of the initiative will be November 2014.

4.0 COMMUNITY FEEDBACK

4.1 Feedback from participating communities has been generally very positive and the demand for the signs in the future from those in the current phase is high. Additionally, numerous adjoining parishes continue to express their interest too. There are currently twelve communities who were not in the original selection process that have expressed an interest should the scheme be extended; which in terms of making communities feel safe is encouraging and a clear indication of the positive impact of these signs.

4.2 The general consensus is that the signs do work and visibly reduce approaching speeds. When approach speeds trigger the speed limit reminder and the 'SLOW DOWN' message residents have commented on the high number of motorists who react by braking.

4.3 There has been some negative feedback. A number of residents have been in contact to complain about the appearance and size of the VAS unit particularly the size of the solar panel. Furthermore, some parishes within conservation areas did turn down the opportunity to participate because of the appearance of the assembly. There have also been a small number of complaints about the visual intrusion of the activations. Wherever possible, action was taken to accommodate these concerns and there are currently no outstanding complaints.



Appearance of sign assembly

- 4.4 Should the Temporary VAS Protocol be rolled out further the feasibility of smaller sized solar panels will be considered.

5.0 INITIAL FINDINGS

- 5.1 After analysing the data available typical vehicle speeds are approximately 10% lower when the vehicle activated signs are in-situ. This percentage differs from site to site but generally there is a tangible speed reduction when comparing 'before' speeds with 'during' speeds.
- 5.2 Shown below is the format of the results that are issued to the participating communities. This data for one location (Gilling West) highlights the amount of data captured during the exercise.

Date	08/07/2013	12/01/2014	10/09/2013	07/01/2014	13/05/2014
Gilling West (Site 2) Northbound					
	Tubes Before	Tubes During	VAS 1	VAS 2	VAS 3
85th% (Mon - Fri)	31.8	29.1			
85th% (Sat)	32.3	29.3			
85th% (Sun)	32.4	29.1			
Mean Speed (Mon - Fri)	27.5	26.1			
Mean Speed (Sat)	27.9	26.3			
Mean Speed (Sun)	28	25.9			
Volume (Mon - Fri)	1487	1242	1866	1394	
Volume (Sat)	1430	1141	1696	1325	
Volume (Sun)	1149	787	1125	1024	
Mon - Fri %>30mph	25%	9%	28%	21%	
Mon - Fri %>35mph	5%	1%	6%	4%	
Mon - Fri %>40mph	N/A	N/A	N/A	N/A	N/A
Mon - Fri %>46mph	N/A	N/A	N/A	N/A	N/A
Sat %>30mph	31%	10%	27%	19%	
Sat %>35mph	6%	1%	6%	3%	
Sat %>40mph	N/A	N/A	N/A	N/A	N/A
Sat %>46mph	N/A	N/A	N/A	N/A	N/A
Sun %>30mph	30%	9%	26%	21%	
Sun %>35mph	7%	2%	6%	3%	
Sun %>40mph	N/A	N/A	N/A	N/A	N/A
Sun %>46mph	N/A	N/A	N/A	N/A	N/A

Category	Tubes Before	Tubes During
85th% (Mon - Fri)	31.8	29.1
85th% (Sat)	32.3	29.3
85th% (Sun)	32.4	29.1
Mean Speed (Mon - Fri)	27.5	26.1
Mean Speed (Sat)	27.9	26.3
Mean Speed (Sun)	28	25.9

- 5.3 The table above shows a detailed comparison between 'before' and 'during' speeds recorded by pneumatic tubes (yellow headed columns). It also shows the speed data captured by the VAS during each deployment (red, amber or green headed columns). In this example for Gilling West there is a clear difference between speeds taken 'before' the sign was erected and 'during' deployment. The vehicular speeds in Gilling West were lower when the signs were deployed.

- 5.4 Unfortunately the signs cannot calculate the 85th percentile speed (85% of motorists travel at or below this speed) and mean (average) speed from the data captured. However, it is possible to calculate the percentage of vehicles travelling above various thresholds and the average number of vehicles per day passing the sign from one direction which can be used to assess the effectiveness.
- 5.5 Providing the data in this format has been well received as the parish or town council can easily analyse the figures and make their own judgement on the value of their participation.

6.0 FINANCIAL IMPLICATIONS

- 6.1 Participating communities were charged for the installation of a retention socket in the ground and for three rotations of the VAS in the 'initial phase'. The installation cost was a one-off charge and all costs were payable up-front.
- 6.2 The installation charge was £300 per socket installed in verge or £400 per socket installed in the footway. The rotation costs were £330 per sign per year (based on three deployments).
- 6.3 The maximum charge ('initial phase' only) for any participating community was £730 per sign. All costs were subject to VAT.
- 6.4 The original estimate for installing the sockets was based on a much simpler system rather than providing a 'NAL' retention socket. However, the 'NAL' retention socket allows posts to be removed and replaced quickly, even after knockdown so to avoid any complications with a cheaper system this option was preferred. The 'NAL' socket also has a cover plate so when the socket is not in use the hole in the ground is safely covered over. This approach was agreed after participating communities were informed of the costs involved so the additional cost of installing the 'NAL' sockets was included in the scheme cost and therefore borne by the County Council.
- 6.5 The total capital cost of the 'initial phase' is set out below:

Purchase of 16No 30/40mph vehicle activated signs, SIM cards and configuration costs	£44,804
Undertaking speed surveys	£12,000
Purchase of 16No posts for signs	£2,000
Additional cost for socket installation and sign rotation	£3,760
Total Capital Cost of 'Initial Phase'	£62,564

- 6.6 Revenue costs associated with administering the scheme (including site meetings, dealing with correspondence and issuing speed data) have also been recorded as it was important to get a clear picture of the likely revenue cost implications to inform the evaluation of the 'initial phase' and these costs will be included in the formal review of the pilot and the associated report to

Executive. However, participating communities have not been charged for costs allocated to revenue.

7.0 **LEGAL IMPLICATIONS**

7.1 There are no legal implications associated with the content of this report.

8.0 **EQUALITIES IMPLICATIONS**

8.1 Consideration has been given to the relevance of equality and diversity issues to the recommendation. It is the view of officers that the recommendation has no impact on any of the protected characteristics identified in the Equalities Act 2010.

9.0 **NEXT STEPS**

9.1 The 'initial phase' of the Temporary VAS Protocol will continue until November 2014, following which a formal review is to be carried out culminating with a report on the completed pilot to Executive in early 2015.

10.0 **RECOMMENDATION**

10.1 That Members note of the progress being made on the 'Initial Phase' of the Temporary VAS Protocol.

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Author of Report: Allan McVeigh

Background Documents: None