



meeting **HIGHWAYS SELECT COMMITTEE**

date **6 NOVEMBER 2006** agenda item number

Report of the Group Manager (Highway Management)

VILLAGE GATEWAYS AND INTERACTIVE SIGNS

Purpose of the report

- 1 To inform Members of the effectiveness and costs of village gateways compared with interactive signs

Village Gateways

- 2 Gateways consisting of speed limit roundels, village or town nameplates and other complementary speed reducing measures have been introduced throughout the County since the mid 1990s. Their introduction followed research by the Department for Transport into the effectiveness of various speed reducing measures in villages (known as the VISIP study). It is critical to note that pressure to introduce gateways has also been based on local communities' desire to uniquely identify the boundary of their town or village and as such the signing can incorporate twin towns or other local features.
- 3 The VISIP study showed that gateways with associated speed reducing features like narrowings, red surfacing or roundels on the road can reduce speeds at the gateway by up to 6mph but this speed reduction dwindles to 2-3mph further into the village or town. There is no national evidence available regarding the effect of proliferation of gateways but they continue to be recommended as part of new or existing village/town speed limit entries. The same guidance states that speed interactive signs should only be considered in association with gateways as a 'final measure' after other speed reducing features (such as traffic islands, chicanes or pedestrian crossings) have been considered.

Speed Interactive Signs

- 4 There are two types of speed interactive signs used in Notts. One is a conventional speed limit roundel (usually a 30) with an associated 'Slow Down' message and the other is a 'Your Speed' sign which also flashes a 'Slow Down' message with a 'Thank you' when the driver regulates speed to within the speed limit. Current policy states that

speed interactive signs should only be provided if the following criteria are met:-

- Permanent 400 vehicles one way in the peak hour with 85th percentile speeds of 36mph or more
- Short Stay 250 vehicles one way in peak hour with 85th percentile speeds of 35mph or more.

Assessment of all the Member requests for these signs is expected to be complete by the end of November 06 and a decision will then need to be taken by the Cabinet Member for Environment on a future programme for these signs.

- 5 All the National research on speed interactive signs has been on the use of conventional roundels. A study by TRL in 2002 showed that initial speed reductions achieved when the signs first go in were maintained up to 3 years afterwards. The average speed reduction achieved in the study was 4 mph. Significant accident reductions were also achieved at the sites. Drivers surveyed for their views showed overwhelming approval of the signs. There has been no National research on the effect of proliferation of speed interactive signs.
- 6 No National guidance exists on 'Your speed' signs and research of other Authorities' practice shows very limited use of these signs and even then only on the grounds of accident reduction. Notts therefore appears to be a pioneer in the use of these signs and as a consequence, the study into the effectiveness of the signs in Burton Joyce is the only National evidence available. This showed speed reductions of up to 5.3 mph at the signs, with reductions of up to 3.7 mph in between signs. Anecdotal evidence suggests that the high volume of traffic through the village leads to frequent 'platooning' where potentially faster vehicles get stuck behind slower 'conforming' vehicles.

Costs of Village Gateways and Interactive Signs

- 7 There is a wide variety of designs for gateways dependant on the 'uniqueness' applied by the local community. Nevertheless, efforts have been made to standardise designs and the costs are as follows:-
 - Standard gateway (per entry to town/village) £3000
 - Standard Gateway with special loop posts £4200
 - Standard Gateway with illuminated signs £4000
 - Speed Interactive Sign (Conventional roundel) £4000
 - 'Your Speed' sign £5000
 - Additional cost for Solar panels/Wind power £500
 - Basic speed limit signs (per entry to town/village) £500

Additional costs associated with interactive signs include annual servicing (£150/sign) and energy (where mains powered).

In summary, basic speed limit signs and an interactive sign at each entry to the village/town would cost £4500 compared with £3000 for a standard gateway.

Speed Management Policy

- 8 Speed interactive signs and village gateways are only two components of a speed management policy which should include other engineering, education and enforcement initiatives. The fact that Notts is a pioneer in the use of 'your speed' signs should be acknowledged and used to justify further research by TRL into the effectiveness of all types of interactive sign and in particular the issues of proliferation and comparison with village gateways as speed reducing features.
- 9 A coherent speed management policy can also have an effect on accident reduction. A study by DfT of traffic calming in 56 villages and the effects on accident reduction gave the following results:-

Speed reduction (85 th percentile)	Change in accidents (all severities)
0-2 mph	-10%
3-4 mph	-14%
5-6 mph	-32%
7 mph or over	-47%

Where accidents are occurring in villages it seems that introduction of significant traffic calming can have a dramatic effect on speeds and accident reduction.

Conclusion

10. The recent approval of further stages of the Speed Limit Review means that a programme of introducing new speed limits in those villages without a speed limit will now continue. Given the County's existing criteria for interactive signs and Government advice that such signs should only be used for Village speed limits as a 'final measure', it is proposed to continue with introducing village gateways at these locations. However, at those sites where there is an existing speed limit (or a speed limit is being extended) then consideration could be given to introducing a basic speed limit sign and associated interactive sign rather than a gateway. This would be dependant on the site meeting the current criteria for interactive signs and whether the local community wants to maintain or introduce a village/town specific gateway. Private funding of interactive signs would only be permitted at these locations if the site met the current criteria.

Recommendations

- 10 It is recommended that

the Highways Select Committee consider the information presented in this report and provide recommendations for consideration by the Cabinet Member for Environment in determining future policy.

Chris Charnley
Acting Group Manager (Highway Management)

Background papers:-

Traffic Advisory Leaflet 13/93 Gateways DfT 1993
Traffic Advisory Leaflet 01/94 VISP (Village Speed Control Group) - a summary DfT 1994
Traffic Advisory Leaflet 11/00 Village Traffic Calming – reducing accidents DfT 2000
Vehicle Activated Signs – a large scale evaluation Transport Research Laboratory Report 548 2002
Traffic Advisory Leaflet 01/03 Vehicle Activated Signs DfT 2003
Traffic Advisory Leaflet 01/04 Village Speed Limits DfT 2004