HIW/17/29

Teignbridge Highways and Traffic Orders Committee 30 March 2017

A380 South Devon Highway: Review of Traffic Enforcement Options

Report of the Chief Officer for Highways, Infrastructure Development and Waste

Please note that the following recommendations are subject to consideration and determination by the Committee before taking effect.

Recommendation: It is recommenced that:

- (a) HATOC notes the information provided on the costs and effectiveness of Average Speed Camera deployment.
- (b) The information presented in this report is used in the Speed Compliance Action Review Forum (SCARF) process when validated collision data is available.

1. Background/Introduction

This report presents information on the effectiveness and financial implications of Average Speed Cameras (ASC) in relation to the South Devon Highway and has been produced in response to discussions at this Committee in July 2016 and November 2017.

At the November meeting the Committee resolved to review data regarding vehicle speeds and collisions as part of the recognised process for identifying viable speed enforcement options.

Cornwall Council and the Safety Camera Partnership have kindly provided information to support this report.

2. Effectiveness of Average Speed Cameras

In September 2016 the RAC Foundation published 'The Effectiveness of Average Speed Cameras in Great Britain'. This report is intended to support the debate on the use of ASC through a review of the data available across all Highway Authorities that deploy ASC on their network.

The evidence base includes all 51 ASC installations that were in place up to the end of 2015, covering a total of 410km of highway. The research for the report introduced an independent methodology for reviewing site boundaries and the collisions that have taken place within them since 1990 to produce a robust dataset.

The report presents data based on the impact on both fatal and serious collisions and personal injury collisions.

On average, the permanent ASC sites analysed saw reductions in injury collisions, especially those of a higher severity.

Fatal and Serious Collisions	36.4% (95% confidence interval: 25-46%)

Personal Injury Collisions 16% (95% confidence interval: 9-22%)

Validated collision data for the South Devon Highway is not yet available and is expected to be published in May 2017.

Cornwall Council were approached and provided information on their experiences of ASC.

ASC systems are in place in four sites in Cornwall:

- Trewannack, Nr Helston
- St Mellion, Nr Saltash
- St Blazey, Nr St Austell
- Henver Road, Newquay

These ASC systems were installed in Spring 2015 and as such have not been in place long enough to collect and analyse data in as robust a manner as the RAC Foundation's report. They are also influenced by the following factors:

- Two of the four ASC sites (Henver Road and St Blazey) already had fixed cameras and therefore speeds are likely to have already been influenced by their presence.
- The two remaining sites (Trewennack and St Mellion) were chosen in order to provide a 'unique provision' i.e. to address long-term aspirations to be bypassed and as such expectations for a change in speed along these stretches of road are lessened.

Speed readings were taken using Bluetooth prior to ASC being installed at Trewennack and St Mellion. This method was used because it gave the closest match to how ASC's work i.e. distance over time measurement. This gave the following readings:

Table 2a: Speed readings pre and post installationSiteBluetooth averageASC data Apr/May/JuneChange						
Site	speed Feb 2015	2016. Average speed	Change			
Trewennack (eastbound):	30.1mph	25.5mph	-4.6mph			
Trewennack (westbound):	28.4mph	25.5mph	-2.9mph			
St Mellion (southbound):	30.7mph	26.5mph	-4.7mph			
St Mellion (northbound):	27.7mph	24.9mph	-2.9mph			

Data was also collected for the sites at St Blazey and Henver Road prior to installation. This was done by radar class and so is a less accurate comparison as the pre-installation readings are from a fixed point, while the post-installation readings are taken over a length of road. The sites are not directly comparable.

Table 2b: Speed readings pre and post installation							
Site	Radar Class average speed 2014		ASC data Apr/May/June	Change			
	Site 1	Site 2	2016. Average speed				
Henver Road Eastbound	24.2mph	26.9mph	23.1mph	-1.1 / -3.8mph			
Henver Road Westbound	27.1mph	26.7mph	21.6mph	-0.4 / -5.1mph			
St Blazey Eastbound	25.9mph	30.9mph	25.4mph	-0.5 / -5.5mph			
St Blazey Westbound	25.2mph	33.1mph	25.0mph	-0.2 / -8.1mph			

There is no information from Cornwall on the impact of speed reduction on accident frequency or severity. Validated accident data is the information used in the analysis of speed reduction options and in the calculation of scheme costs benefits for scheme prioritisation purposes.

3. Financial Considerations

3.1 Installation costs

A supplier has been tasked with producing an estimate of cost to install a new system. Following a site visit, a plan indicating likely camera positions has been produced, this can been seen in Appendix I. The estimated cost for the system is £164,000; in addition there would be costs for new signs (approximately £15k).

3.2 Operational finances

The operational costs can be divided into system maintenance and enforcement. DCC would be responsible for the installation, maintenance and future removal of any new equipment.

With regards to maintenance, experiences of the Safety Camera Partnership would suggest that the electronic equipment has a typical life of 7 to 10 years before requiring replacement. The annual maintenance and calibration costs quoted to Cornwall Council for their average speed systems are between $\pounds 11 - 15k$ per site.

The costs of enforcement are met by the Safety Camera Partnership and are not seen by DCC. This includes both the income from any penalties and the costs of administering the process.

Once a driver is caught travelling in excess of the speed limit, depending on how far in excess, the Police will issue the following:

- an offer to attend a Speed Awareness Course if eligible. It is at the discretion of the driver as to whether they choose to take up this offer. Where the driver chooses to attend a course, he or she will pay an £85 charge for the course, of which £35 is reclaimable to cover Safety Camera Partnership operational and administrative expenses.
- a Fixed Penalty Notice (FPN). Where a FPN is paid by the driver, no costs are recoverable by the Safety Camera Partnership and the costs go to the Treasury.
- Court summons rather than a FPN the most significant offenders may receive a Court summons (or the driver may elect to choose court attendance having rejected the offer of a Speed Awareness Course or the conditional offer of a fixed penalty). For standard offences dealt with by the courts, the Safety Camera Partnership may receive costs of up to £85. This figure is at the discretion of the Magistrate.

There is currently no County Council funding allocated for installation or maintenance of average speed cameras.

4. Environmental Impact Considerations

The environmental issues associated with excessive speed are increased road noise and a reduction in air quality. Improving compliance with the speed limit will help to reduce the noise experienced by residents and the community and maintain air quality.

A programme of acoustic surveys has recently been carried out along the length of the project to help determine compensation claims that have been received from residents. Initial analysis of this data indicates that some residential areas are experiencing noise levels similar to those predicted; whilst others are significantly lower than expected. The lower noise levels will in part be due to the higher specification noise reducing surface course that was incorporated into the works. Further work is required before these figures can be published.

5. Equality Considerations

There are no negative equality impacts recognised.

6. Legal Considerations

The enforcement of the traffic speeds is the responsibility of Devon and Cornwall Police.

7. Conclusions

The experiences of other authorities suggest that average speed cameras are very effective at reducing personal injury collisions. Data kindly provided by Cornwall Council supports the notion that ASC deployment can reduce average speeds.

Initial analysis of data provided from noise surveys indicates that noise levels experienced by residents is as predicted or in some cases significantly lower.

When validated collision data is available for the South Devon Highway the SCARF process will be followed to consider the business case for the installation of Average Speed Cameras or for other viable changes to speed enforcement on the South Devon Link Road.

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Local Government Act 1972: List of Background Papers

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Background Paper	Date	File Ref.
A380 South Devon Highway: Review of Traffic Speeds A380 South Devon Highway: Review of Traffic Enforcement Options	July 2016 Nov 2016	

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Appendix I To HIW/17/29

