

traffic safety

SPECS SAFETY CAMERAS – SOUTH YORKSHIRE



OVERVIEW

The A616 Stocksbridge Bypass Trans-Pennine Route is a key feeder road to the M1. Opened in 1988, this rural road had a significant accident history that the Highways Agency (HA) decided to address with a number of road safety measures. These included an 11km SPECS monitored Speed Control Zone along the length of the Stocksbridge Bypass.

CUSTOMER

The Highways Agency and South Yorkshire Safety Camera Partnership.

The partnership consists of South Yorkshire Police, Sheffield City Council, Doncaster, Rotherham and Barnsley Metropolitan Borough Councils, the Highways Agency and Her Majesty's Courts Service.

www.safetycamera.org

PROBLEM

Following 25 fatal accidents between the opening of the A616 in 1988 and December 2002, the HA carried out a detailed study of the route. This revealed that speed was a major contributory factor to the severity of many accidents.

Half of all traffic at weekends was shown to exceed the 60mph speed limit, despite a high Police presence on the road.

SCS SOLUTION

Eight SPECS pairs have been in operation on the A616 since December 2003. Each SPECS pair consists of two digital video cameras, linked by fibre optic cable to a remote enforcement cabinet. The video cameras continuously capture images of vehicles as they pass through the cameras' views. The number plates are read using Automatic Number Plate Recognition (ANPR) and the average speed of the vehicle is calculated between the two cameras. If this exceeds the Police threshold, a violation file is created.

RESULTS (comparing figures from the three years prior to installation with the three years post installation)

- Six fatalities occurred prior to installation. One alcohol-related fatality has occurred since installation.
- % of drivers exceeding the speed limit dropped from 45 per cent to 15 per cent Eastbound.
- % of drivers exceeding the speed limit dropped from 20 per cent to 4 per cent Westbound.



TECHNOLOGY OVERVIEW

The SPECS camera pairs are clearly erected on unique bright yellow single armed columns. In conjunction with rumble strips and speed limit markings on the road, the camera columns create very noticeable gateways to the 'speed control zone', with repeat columns acting as a powerful reminder to drivers that they are inside a speed monitored area.

Over the 11km stretch, the cameras provide a route strategy approach, modifying driver behaviour over the entire distance.



SOLUTION BENEFITS

The SPECS solution was installed to reduce the excessive speeds seen on the A616. The obvious deterrent effect of the highly overt camera columns has encouraged car drivers to travel at or below the 60 mph speed limit over the entire 11km stretch.

SPECS has created a 'speed control zone' allowing speeds to be controlled along the full length of the bypass, not just in the immediate vicinities of the cameras. This approach has resulted in more motorists complying with the speed limit, thus reducing the potential for serious accidents along this stretch of road.

3 yr Prior to SPECS	2 yr Post SPECS
6 Fatalities	1 Fatality*
45% exceeding speed limit (East)	15% exceeding speed limit (East)
20% exceeding speed limit (West)	4% exceeding speed limit (West)
* Drink drive motorcycle fatality in 2003	

"The SPECS system has proved very effective in bringing down the average speed of vehicles along the entire bypass"

(Gerry Scarfe, Project Manager - South Yorkshire Safety Camera Partnership)

SCS OVERVIEW

Speed Check Services provides a range of Intelligent Transport Systems (ITS) to the UK's road network. Three operating divisions target key market sectors:

- traffic operations:** implementing solutions to manage traffic flow on the road network
- traffic information:** using technology to keep the public informed about road conditions
- traffic safety:** protecting road users and enforcing traffic law

Drawing on considerable experience and a diverse technology toolkit, Speed Check Services can consult, design, install and maintain a broad range of ITS solutions.