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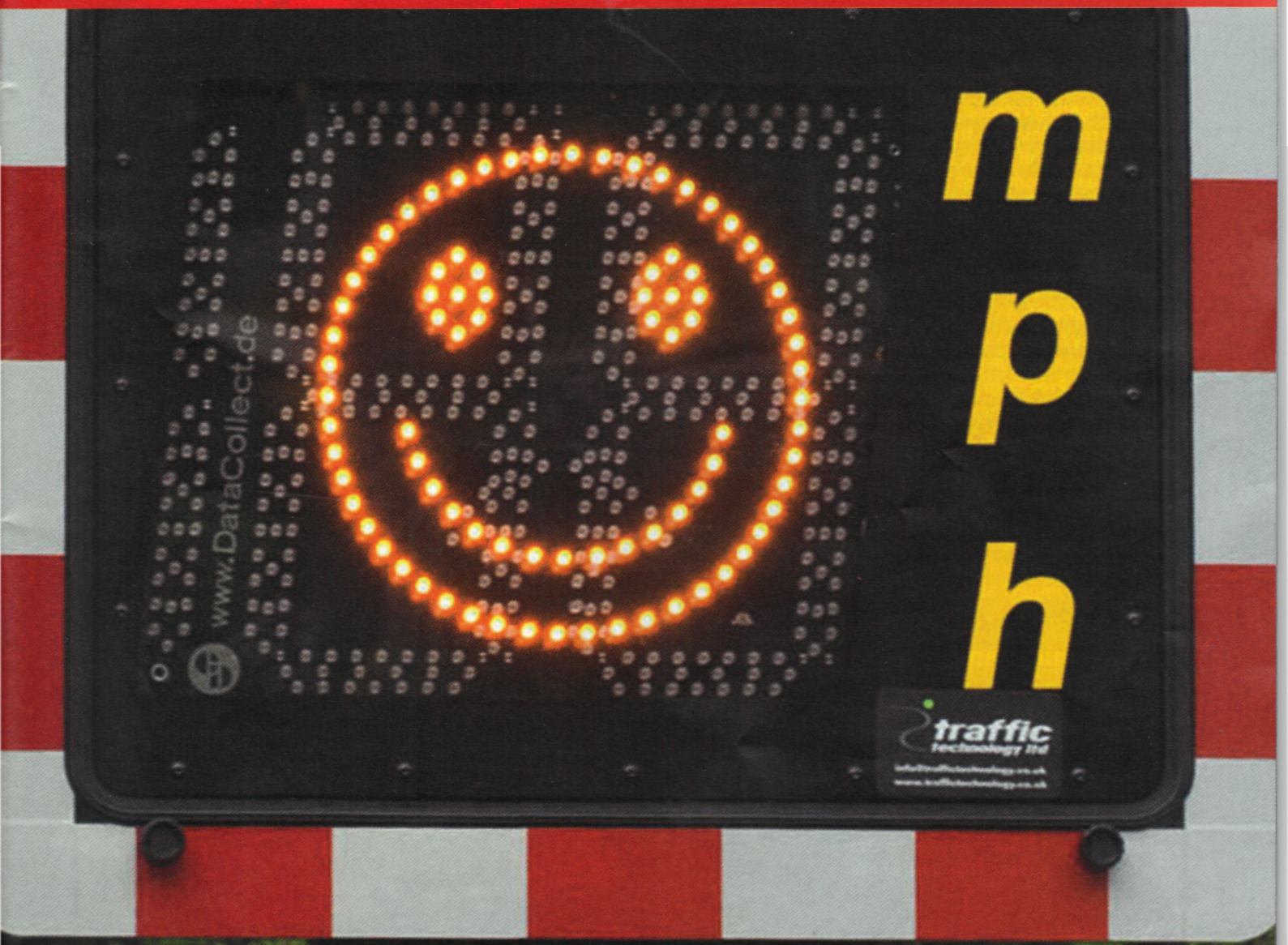


SLOWING DOWN?

How road safety schemes are beating the cuts

Driving change: Specialist transport services manager wanted in Warrington - see page 29

Smiles in front

Sheffield City Council takes road safety seriously, and as part of its latest campaign, is introducing portable 'smiley' speed-indicator devices. **Adrian Tatum** has the story

Given the technology and a wealth of road safety engineers in the highways sector, there are a number of road safety measures at the disposal of local authorities dependent on the aim of the particular project. This has helped the UK already meet its European road safety targets and improve conditions on the network.

Like any other council, Sheffield City Council takes road safety very seriously, and reducing KSIs has been identified as one of its main priorities. It is also an authority prepared to try something new to make a difference.

Research conducted with officers and members at each of its seven community assembly areas revealed that the most popular choice to put into place was portable 'smiley' speed-indicator devices (SIDs) as part of the council's road safety engineering initiative to introduce more innovative traffic-calming measures and reduce speed-related traffic collisions. Working in partnership with road safety specialist David A Graham Associates, and Traffic Technology, 14 SIDs have now been installed throughout the city at specific problem sites – and the results have been positive.

Further devices are now being purchased so that other sites across the city with a speed related-collision record can benefit from using the devices. They have been particularly popular adjacent to schools, where children have been actively participating in events spreading awareness of the road safety benefits of speed reduction.

The council is working to move away from road humps, and use less traditional traffic-calming measures to address the legitimate concerns of the local community towards excessive or inappropriate speeding on the city's road network. And SIDs are proving popular with members of the public.

All smiles: Sheffield youngsters from Wisewood Primary School embrace the 'smiley' campaign

Cllr Ian Auckland, cabinet member for business, transport and skills at Sheffield, says: 'When it comes to road safety, we are always looking to new ideas rather than relying on traditional measures such as road humps. Apart from the costs involved, some motorists may simply find alternative routes to avoid physical road safety measures, due to driver frustration and passenger discomfort, thus transferring the problem elsewhere in the city.

'SIDs are a great way of tackling inappropriate driver speeds. The city's community assemblies have been given funds which can be used for the procurement of SIDs in their areas so that large parts of the city can benefit from this innovative programme.'

Consultant, David Graham, who has project-managed the SID programme in Sheffield, tells *Surveyor* this project is a real example of what can be achieved with innovative thinking and limited resources.

He says: 'In a sense, there is nothing particularly innovative about SIDs, but the way in which we are deploying them in rotation, city-wide, targeting "hotspots" and collecting the data, which has led to some positive early results.

'Given the cut-backs the council is facing at the moment, balanced with the fact that we wanted to increase driver awareness of their speed and so, aim to reduce accidents, SIDs have proven to be a positive choice, and the results speak for themselves,' says Mr Graham.

Having studied the broad conclusions of the 2008 TRL report entitled *Effectiveness of speed indicator devices on reducing vehicle speeds in London*, the Sheffield road safety team decided to rotate SIDs at an average of six sites a year.

While the report recommends rotation every three to four weeks, it was decided to rotate SIDs at eight weekly intervals, due to the reduced costs involved.

Speed data collection took place only for the first four weeks when the SID was most effective, and the data collected after eight weeks at the rotation interval so that management costs could be reduced.

Where concerns in relation to speeding are supported by speed-related collision statistics, Mr Graham has developed schedules to include all these sites into a programme of rotation whereby portable SIDs are being deployed for eight weeks at each site before being relocated to the next.

Nigel Robson, road safety team manager at Sheffield City Council, says: 'Although the programme is in its infancy here, a 2mph speed reduction was achieved at one site in the first week of operation.

'It was decided to move the SIDs from site to site, as evidence from the 2008 TRL study suggests that they are more effective if deployed in this way.

'If they remain in one location, drivers may become over-familiar with the sign, causing them to be less effective.'

The data logging capability of each SID allows officers to capture traffic volume and speed data from each

site, and compare this with 'before' data recorded at each site.

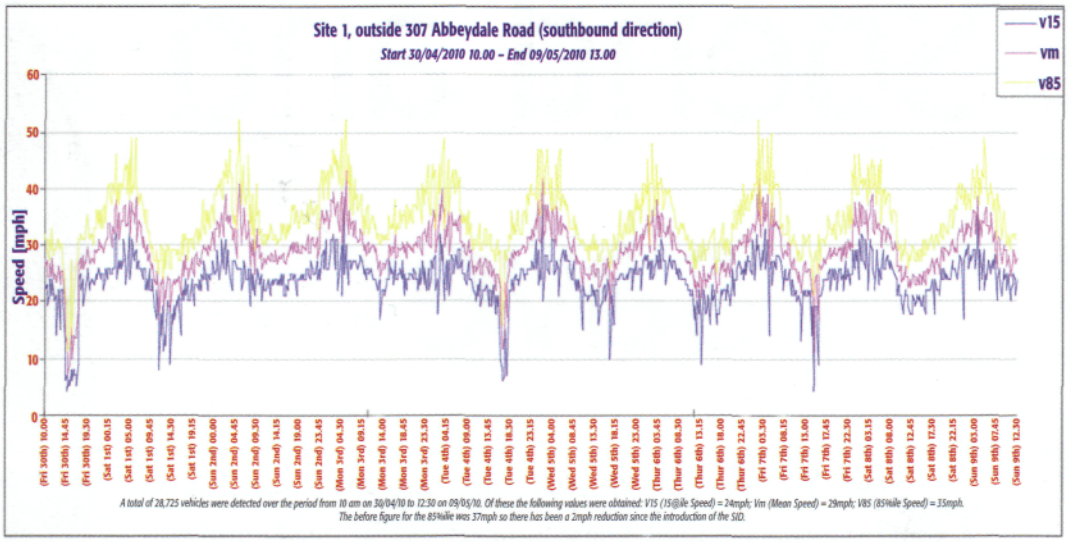
The graph (*above*) shows the first weekly result that was captured using the data logging capability at Abbeydale Road.

Comparing it with the before data recorded from this site, it can be seen that the 85%ile speed has reduced by 2mph.

While only a modest reduction, the net effect of each 1mph reduction in speed can only have a positive effect on collision frequency and severity. Further fine-tuning of the programme will seek to deploy SIDs at individual sites during the months when collisions have been most prevalent.

An SID can be relatively quickly and easily deployed by local authorities to detect and inform drivers of their speed.

Compact and portable, the device can be installed and operational in a relatively-short period of time. Power options available include battery, solar and mains power, depending on the desired application.



Not only do SIDs give drivers a friendly warning of their speed, they can actually be configured to detect the difference between the vehicle's speed and the speed limit. In 'smiley SID' mode, a 'happy' or 'sad' face is displayed, depending on whether the speed of the vehicle is below or above the speed limit, providing personal feedback direct to drivers, and putting social pressure on them to reduce their speed.

'They do have their disadvantages. At the moment, they are not as effective as fixed safety cameras at sustaining speed reductions, can be difficult to locate in certain circumstances due to street furniture and buildings, and like speed cameras, they require ongoing management costs.

'But we have demonstrated very early on that people do react positively to them in the way we want, and speed is reduced. It should be something other authorities are considering in these times of local transport plan budget cuts,' adds Mr Graham.