

Policy for Speed Indicating Devices & Vehicle Activated Signs

1 Introduction

1.1 This policy outlines the current data led approach to managing speed on the Local Highway Authority (LHA) roads within Milton Keynes Council (MKC). Whilst referring to a number of measures available to raise awareness to change attitudes and behaviour towards speed, it focuses upon Speed Indicating Devices and Vehicle Activated Devices. The reason for this is to try and indicate the distinct difference between these two measures and develop a greater understanding of how these measures are intended to operate.

2 Definitions

2.1 Speed Indicating Devices, or SIDs, are **temporary** sign installations that alert road users to the speed at which they are travelling along a given stretch of the highway.

2.2 Vehicle Activated Signs, or VAS, are **permanent** installations placed at carefully selected sites on the highway where there has been a recent record (3 year period) of at least one Killed or Seriously Injured (KSI) road traffic casualty, or 4 Personal Injury Collisions (PIC's) and that these casualties are likely to have occurred as a direct result of the traffic travelling too fast for the local conditions.

3 Background

3.1 Both the demand for and use of interactive signing is increasing on the highway network as local communities continue to be concerned about the perceived, and actual, level of vehicles that drive too fast through their neighbourhoods.

3.2 The use of emerging technology has recently been seen as a favourable and relatively low cost option of alerting drivers to driving too fast for the conditions through areas on the highway network that have a history of speed related collisions or a potential for collision conflict at a hazardous location, eg severe bend or crossroads junction on higher speed roads.

3.3 As with any other remedial engineering solution, the installation of interactive signs, should be set up in accordance with criteria and guidelines to ensure their use is as effective as possible in terms of reducing casualties on the highway whilst changing both the attitude and behaviour of road users travelling on the network.

3.4 To date, there have been a number of Highway Authorities installing interactive signs on their networks to differing criteria, both in terms of historic casualty data and the day to day operation of these signs.

3.5 The MKC policy for SIDs and VAS is published on the website www.vasuk.info to enable other Local Highway Authorities to interact with MKC in developing consistent and effective policy in the future. MKC will therefore liaise with neighbouring local highway authorities to inform and steer future consistencies in policy where possible.

3.6 As with any road layout, road users are picking up subtle messages about the road environment and, on the whole adjust their driving according to the prevailing conditions. As part of the road environment, engineering measures, including signs, are put in place to assist the road user in adjusting their behaviour on the network to alter their speed and concentration according to their immediate surroundings.

3.7 It is likely that if the installation of interactive equipment continues to occur without a consistent approach, the potential benefits of these signs will be severely reduced. For example, if road users drive from one highway authority to another and receive different and confusing signals from signs because they are installed on different casualty criteria and/or are set to activate at different speed thresholds.

3.8 In addition to interactive signs, there are a number of measures that can tackle the perceived and actual number of vehicles that drive through communities too fast. These include:-

- High Visibility Speed Message Boards,
- Mobile Safety Cameras, and
- Fixed Safety Cameras.

3.9 Set out below are the criteria for the use of these measures on the Local Highway Authority (LHA) within Milton Keynes, together with the minimum number of casualties and other criteria for considering their installation.

4 High Visibility Speed Message Posters (HVSMPs) (0 casualties, but meet the criteria listed below)

4.1 HVSMPs are temporary posters that give drivers an indication that local concern of residents exists to traffic driving too fast for the conditions on the local road, or throughout the community that they are currently driving through. These posters can be installed or requested by Local Councils, where resources allow, according to the general criteria below:-

- the criteria for a vehicle activated sign are not met,
- a known speeding problem is recorded, or
- public concern over vehicle speeds exists.

4.2 The posters should be seen as temporary and only installed for a maximum period of 3 weeks every quarter, in a given location to gain maximum impact upon road users. The very fact of their temporary nature assists in raising awareness to them and ensuring road users notice their presence is re-enforced at periods throughout the year, rather than them being permanent

installations and the risk that drivers will develop an attitude of 'sign blindness' towards them.

4.3 In agreement with the LHA, Local Councils can install HVSMPS, subject to signing a strict code of installation terms and conditions. These include, training, health and safety guidelines, and the evidence of public liability insurance. The terms and conditions for this operation are included in Appendix 1 to this document.

5 Speed Indicating Devices (SIDs)

(0 KSI casualties, but meet the criteria listed below)

5.1 Speed Indicating Devices, or SIDs, are temporary sign installations that alert road users to the speed at which they are travelling along a given stretch of the highway. They are educational devices to advise drivers of the speed at which they are travelling through a given area and assist in developing a more balanced attitude and behaviour towards speed choices for given environments.

5.2 The SID will display the drivers' speed, together with a frowning face, or a smiling face, dependant upon whether they are travelling above or below the given speed limit.

5.3 *It must be stressed that these devices are temporary (and are distinctly different from Vehicle Activated Signs), and will not be in operation at any one site for a period of more than 5 days in any one month*¹, and will be installed in locations agreed with the LHA. Where resources allow, SID sites will be determined and operated dependant upon one or more of the following factors existing:-

- HVSMPS are programmed in to the area,
- the criteria for a vehicle activated sign are not met,
- a history of Personal Injury Collisions (PIC's) at the site,
- a known speeding problem is recorded, or
- public concern over vehicle speeds exists.

5.4 There will be an upper threshold limit for SIDs to display a reading. This is in order to minimise the chance that a minority of individuals may see the device as a 'target' to see how fast they can travel through a given area. The threshold will be set in accordance with the prevailing speed limit in force.

5.5 .SID Sites will have been subject to Risk Assessment, and the personnel installing the SID must be trained to operate under current Health and Safety criteria, and be approved by the LHA.

¹ Local Councils operating their own SIDs programme can install a SID at a site for a maximum of 5 days in any one month. MKC will install SIDs for up to 24 hours per site during 2005/6 increasing to a maximum of 5 days hours during 2006/7 when additional funding is approved.

- 5.6 All SID's sites will continue to be subject to periodic review between the LHA (including MKC members) and the Local Council to ensure optimum use of the resource and notified to the local constabulary.
- 5.7 In agreement with the LHA, Local Councils can install SID's, subject to signing a strict code of installation terms and conditions. These include, training, health and safety guidelines, and the evidence of public liability insurance. The terms and conditions for this operation are included in Appendix 2 to this document.
- 5.8 MKC are actively exploring the opportunity to make the SID data available to Local Councils in the most cost effective and accessible way (either via MK Observatory, or other electronic means). The SID's data collected by Local Councils operating their own SID's programme will also need to be transferred to and from MKC in the most cost effective way to ensure it is managed effectively.

6 Vehicle Activated Signs (VAS)

(1 Killed or Seriously Injured (KSI) casualty or 4 or more Personal Injury Collisions (PIC's).

6.1 VAS are permanent installations placed at carefully selected sites on the highway where there has been a recent record (3 year period) of at least 1 KSI road traffic casualty or 4 or more PIC's and these casualties are likely to have occurred as a direct result of the traffic travelling too fast for the local conditions. The factors determining their installation will be that there is :-

- a known speeding problem is recorded,
- site length up to 1.5km
- a history of road traffic casualties at the site, but
- the level of casualties does not meet the level for a mobile camera
- survey of the site concludes no other suitable engineering measure

6.2 VAS re-enforce existing traffic signs and are only activated to alert drivers who are travelling above a pre determined speed set in the device. They will usually be speed limit roundels (order signs), or warning signs to target those motorists who are considered to be driving too fast for the local prevailing conditions.

6.3 VAS will be considered at sites with an historical casualty problem, therefore an analysis of the casualty data will be undertaken and other traffic management and road safety options will be considered.

6.4 The location to be considered for a VAS will be reviewed prior to installation as part of a process to ensure that the existing signing and lining is adequate and will include an audit of overgrown vegetation, etc. At this stage, any substandard markings or signing will need to be refreshed or upgraded.

6.5 As stated above, the trigger speed for activating the signs will need to be pre determined according to the nature of the site, but where speed roundel VAS are installed, the threshold speed would normally be in accordance with Association of Chief Police Officers (ACPO) guidelines for enforcement. This is important to allow the same degree of variance allowed by the police, and to only act as a re-enforcement to those road users who are seen to be driving in a manner likely to cause a speed related collision at the site.

6.6 Whilst VAS will only be considered at locations that have a current 3 year casualty history, they will normally be installed as a measure where the current criteria for a safety camera installation is not met. There is however nothing to prevent VAS or SID's being used in conjunction with fixed or mobile camera sites in order to re-emphasise the road safety message

6.7 Sites will be monitored to evaluate their effectiveness in improving both the speed and casualty reduction achieved after their installation.

6.8 MKC will explore the opportunity to make the monitoring data available to Local Councils in the most cost effective and accessible way (either via MK Observatory, or other electronic means).

6.9 Potential VAS sites may be eligible for funding via planning gain identified in areas subject to development. The installation and funding of VAS may therefore become part of the planning conditions of a particular site.

7 Mobile Safety Cameras (MSC)

(A minimum of 2 KSI collisions)

7.1 DfT guidance states that for a core MSC site to be considered eligible, the following criteria must be met:-

- at least 2 KSI collisions per km in a 3 year period,
- site length between 0.4 – 5km,
- 85%ile speed at or above ACPO threshold,
- 20% of drivers/riders exceeding the speed limit,
- easily accessible location for mobile enforcement,
- survey of site concludes no other suitable engineering measure.
(See Appendix 3).

8 Fixed Safety Cameras (FSC)

(A minimum of 4KSI collisions)

8.1 Department for Transport (DfT) guidance states that for a core FSC site to be considered eligible, the following criteria must be met:-

- at least 4 KSI collisions per km in a 3 year period,
- site length between 0.4 – 1.5km,
- 85%ile speed at or above ACPO threshold,
- 20% of drivers/riders exceeding the speed limit,
- loading and unloading of the camera can take place safely,

- survey of site concludes no other suitable engineering measure. (See Appendix 3).

9 Supply and Erection of Equipment

9.1 It is the intention of MKC to supply, erect and maintain the speed management equipment that includes HVSMP, SIDS and VAS according to the terms set out in this policy.

9.2 The remaining equipment of MSC and FSC cannot be funded from external sources and sites are determined by TVSRP in accordance with DfT guidelines in force.

9.3 MKC is currently investigating alternative funding sources to ensure the SIDs programme continues at its basic level from financial year 2006/7 onwards, and to this end will be submitting a growth revenue budget bid for the programme. If this bid is successful, MKC will continue to operate the SIDs programme on behalf of Local Councils, ensuring that SIDs continue to be erected on a fair and equitable basis throughout the Milton Keynes area.

9.4 However, if circumstances prevail that MKC is unable to resource at a more regular frequency required by Local Councils, the following conditions shall apply:-

9.4.1 HVSMPs

Local Councils will be able to fund the provision of HVSMPs, if necessary.

Local Councils will be able to arrange the erection of HVSMPs upon signing an agreement with MKC (See Appendix 1)

9.4.2 SIDs

If a site meets the criteria for SID but MKC are unable to site on a more regular frequency required by Local Councils, then Local Councils (or a group of Local Councils) can fund the provision of a dedicated SID for their Local Council (or Joint Local Council) area.

Furthermore the Local Council (or group of Local Councils) may wish to seek agreement to fund and erect the SID at agreed locations, upon signing an agreement with MKC (see Appendix 2).

Local Council's may either purchase SID's direct from the supplier but would required to meet the costs of maintenance and the associated costs of data retrieval equipment and the licensing thereof. The manufacturers and models of SID's must be approved by MKC's Road Safety Team to ensure software and mounting compatibility.

Alternatively Local Councils may purchase SID's through MKC (the local council's would be invoiced by MKC) in this case MKC would undertake to maintain these machines.

Another option currently being pursued, particularly for smaller Local Councils, who may wish to see more SIDs visits than the basic level of SIDs programme has enable to date in their area, is to fund an 'enhanced' SIDs programme: An additional charge will then be made for additional visits, which would essentially operate as a managed hire service for the SIDs programme. However, those Local Councils who are currently happy with the level of SIDs visits to their area should see no change to the programme, neither will they be expected to pay for the existing level of the basic programme.

Such an option may be the preferred way forward for those Local Councils who do not meet the required level of minimum cover for public liability insurance to work on the Highway. It is envisaged that this option would be available from 2006/07 onwards.

9.4.3 VAS

If a site meets the criteria for a VAS that MKC are unable to fund, Local Councils would be able to fund their provision. This would involve being invoiced for the direct cost of the equipment.

The liability for ongoing maintenance, monitoring and decision upon the 'lifetime' of the site would be the responsibility of MKC.

Appendix 1

Safer Roads High Visibility Speed Message Posters Loan Scheme

The loan scheme is based upon the following conditions:-

1. Posters are loaned out in sets to be erected in agreed locations between Milton Keynes Council (MKC) & _____(Name of Local Council).
2. The schedule of locations and recommended frequency for boards is attached to this agreement and needs to be closely adhered to.
3. Evidence of public liability insurance (minimum of £5 million) will be required for the Council erecting and dismantling the posters.
4. Training will be given to those staff erecting and dismantling the posters in terms of health and safety requirements, eg working on the highway, high visibility clothing, etc.
5. Careful consideration must be given to who will erect & dismantle the posters, to take into account their health & safety and a risk assessment completed.
6. Extreme care should be taken when erecting the posters, especially when they are close to the carriageway. Ideally, at least two people should be involved in carrying out the work, in daylight and when traffic volumes are low.
7. Posters erected over the footways (ie where people need to walk under the signs) must be erected above 6'9" (2.1m) to give adequate headroom (this also guards against potential vandalism/theft).
8. Edges of the posters must be no closer than 45 cm to the edge of the road to avoid being hit by passing vehicles.
9. Posters are only to be erected on site for a period of three weeks maximum per quarter annum using the ties/straps provided.
10. Poster sites will be agreed in advance between MKC and the Local Council.
11. Posters should be attached to existing street furniture (ie lamp columns – other sign posts) as agreed by MKC, at locations agreed in advance with MKC.
12. Posters should be checked at regular intervals to ensure they have not been vandalised, which may constitute a danger to road users, in such circumstances the debris should be removed.
13. Posters must be clearly visible to approaching drivers.
14. Speed related leaflets will be provided in order to be hand posted to all households in the immediate area of the proposed location of the posters.
15. Posters are to be collected and (if necessary) returned to Civic Offices reception by prior arrangement.

I have read and agree to the above terms and would like our organisation to take part in the pilot scheme for the placement of the High Visibility Message Posters.

Signed _____ Date _____

Print Name _____

Local Council _____

Appendix 2

Safer Roads Speed Indicator Device (SID) Agreement

The use of SID is based upon the following conditions:-

1. The SIDs locations are agreed in advance between Milton Keynes Council (MKC) & _____(Name of Local Council).
2. The schedule of locations and recommended frequency for boards is attached to this agreement and needs to be closely adhered to.
3. SIDs are not to be erected at any one site for a period of more than 5 days in any one month.
4. Evidence of public liability insurance (minimum of £5 million) will be required for the Council erecting, operating and dismantling the SIDs.
5. Training will be given to those staff erecting, operating and dismantling the SIDs in terms of health and safety requirements, eg working on the highway, high visibility clothing, etc.
6. Careful consideration must be given to who will erect, operate & dismantle the SIDs, to take into account their health & safety and a risk assessment completed.
7. Extreme care should be taken when erecting the SIDs, especially when they are close to the carriageway. Ideally, at least two people should be involved in carrying out the work, in daylight and when traffic volumes are low and using appropriate fixings.
8. SIDs erected over the footways (ie where people need to walk under the signs) must be erected above 6'9" (2.1m) to give adequate headroom (this also guards against potential vandalism/theft).
9. Edges of the SIDs must be no closer than 45 cm to the edge of the road to avoid being hit by passing vehicles.
10. SIDs sites will be agreed in advance with MKC, MKC Members and the Local Council.
11. SIDs should be attached to existing street furniture as agreed by MKC, at locations agreed in advance between MKC, MKC Members and Local Councils.
12. SIDs must be clearly visible to approaching drivers.
13. SIDs will be checked at regular intervals by MKC to ensure compliance with the agreement.
14. SIDs data collect by Local Councils will need to be transferred to and from MKC electronically.
15. A breach of the agreement will constitute suspension of the Local Council being able to site SID on the highway.

I have read and agree to the above terms and would like our organisation to take part in the pilot scheme for the placement of Speed Indicator Devices.

Signed _____ Date _____

Print Name _____

Local Council _____

Appendix 3: Rule 7: Rules for proposed core sites, Handbook of Rules and Guidance for the National Safety Camera Programme for England and Wales for 2005/06, available at http://www.dft.gov.uk/stellent/groups/dft_rdsafety/documents/page/dft_rdsafety_032652.pdf

Rule 7: Rules for proposed core sites			
Each proposed core site for 2005/06 must meet all of the rules below.			
Rule	Fixed camera sites	Mobile speed camera sites	Red-light speed and combined (speed and red light) camera sites*
1 Site length requirements	Between 0.4 and 1.5 km ¹⁰	Between 0.4 and 5 km	0.05 km (50 metres)
2 Number of fatal and serious collisions (KSI)	At least 4 KSI collisions per km in the baseline period ¹¹ . For information, the partnership should provide the total number of PIC (collisions)	At least 2 KSI collisions per km in the baseline period ¹¹ . For information, the partnership should provide the total number of PIC (collisions)	At least 2 KSI collisions within the junction in the baseline period ¹¹ . For information the partnership should provide the total number of PIC (collisions)
3 85th percentile speed at proposed sites	Speed survey shows free-flow 85th percentile speed ¹² is at or above ACPO threshold ¹³		Not applicable
4 Percentage over the speed limit	At least 20% of drivers are exceeding the speed limit, ¹³ excluding congestion periods.		Not applicable
5 Site conditions that are suitable for the type of enforcement proposed	Loading and unloading of camera can take place safely	Location for mobile enforcement is easily accessible and there is space for enforcement to take place in a visible, legal and safe manner	Loading and unloading the camera can take place safely
6 No other engineering solutions can be implemented	There has been a site survey carried out by a road safety engineer confirming that no other cost effective engineering solution can be implemented to improve road safety along this stretch of road.		

* For a combined (speed and red-light) site the number of KSI collisions per km must meet the requirements of a fixed camera site, measured over the length of a fixed site (rather than the length of the red-light site). In addition the speed criteria for a fixed camera must be met.