



Traffic Advisory Leaflet 01/13 January 2013



Reducing Sign Clutter

Introduction

Traffic signs, signals, and road markings are the key method for communicating with the road user and need to be simple and concise so as to be easily understood.

Proper use of signs is vital to their effectiveness in terms of guiding or regulating. Over-provision of signs can have a detrimental impact on the environment and can dilute more important messages if they result in information overload for drivers.

Signing the Way¹, the outcome of the Department's major review of traffic signs policy, sets out the new policy framework for the traffic sign system in Great Britain. Minimising the impact of traffic signs on the environment is a key priority.

This leaflet, one of the early deliverables in Signing the Way, gives practical advice on reducing sign clutter. It emphasises that designers should use their engineering judgement and local knowledge to complement guidance to ensure signing solutions are effective. For new schemes, the aim should be to design clutter out from the start.

It is based on research carried out as part of the traffic signs policy review on Reducing Traffic Sign Clutter².



Background

Traffic signs are placed by the traffic authority, through the powers provided by the Road Traffic Regulation Act 1984³, to provide warnings, information and details of restrictions to road users. The term 'signs' refers to all upright signs, road markings, and traffic signals.

There is no legal requirement to provide any signs and 'less is more' is a good place to start in designing a scheme. However, where a restriction imposed by a Traffic Regulation Order (TRO) is in place, or there is a need to warn and inform road users, then signs or markings will be needed. Signs should only be provided where a clear need has been identified, and should be minimal and sympathetic to their environment. These principles apply in both urban and rural settings.

Traffic sign clutter often occurs over time, where additional signing is provided without consideration of any existing signing. It can also occur where information to road users is unnecessary or excessively signed.

Good sign design can prevent clutter happening in the first place, and integration of signing requirements into the design stage of a scheme can help ensure the number of signs is kept to the minimum needed without compromising on the messages they need to deliver. Careful design of the signs themselves can also help to avoid clutter by reducing their size and by combining signs onto fewer separate structures.

Auditing traffic signs

Local authorities should consider auditing their traffic signs, traffic signals and road markings on a regular basis. This will enable authorities to manage their assets better and to determine whether their existing signs are necessary. The Department also recommends that an audit of existing signing is undertaken before new signs are introduced and where new traffic schemes are being planned. This will help identify those signs that are obsolete or unnecessary which can then be removed from the road network, as well as signs that need replacing.

There are several techniques for auditing traffic signs, whether by scheme or by area, and these will be highlighted in further advice.

Removing unlawful traffic signs

Traffic signs in use on the highway must either be prescribed by the Traffic Signs Regulations and General Directions (TSRGD)⁴ as amended, or be specially authorised by the Secretary of State, or the Scottish or Welsh Governments. Signs that are neither prescribed nor authorised are unlawful obstructions on the highway and should be removed.

Regulatory signs

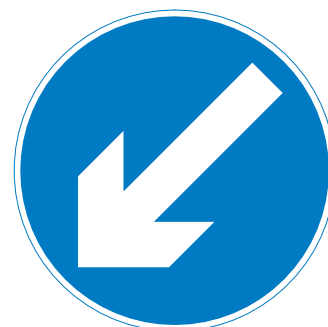
Most regulatory signs are the means of putting into practical effect an Act, Order, Regulation, bylaw or notice. These signs show the extent of restrictions and help road users to understand and comply with them.

To identify if any regulatory signs can be removed, authorities should review their TROs. Where the TRO is no longer needed or is out-of-date, then it should be revoked and the signs removed. Advice on the signing of restrictions is provided in the Traffic Signs Manual (TSM)⁵ and designers should refer to this for more details.

An example of overuse of regulatory signs is the use of signs to diagram 610 (fig. 1) placed upon bollards at pedestrian refuges and other islands. In many cases these are unnecessary and serve no purpose, particularly at traffic signals where the signal head itself gives plenty of warning of the presence of an island. There is no requirement under TSRGD to provide these signs at refuges and islands, and by restricting their use only to those sites where visibility of an island is genuinely an issue, authorities will save money both on the cost of the sign itself, and on sign lighting.

'Keep left' signs might be needed at sites where the road layout could lead drivers to travel on the wrong side of a refuge or island. In this situation, a 'keep left' sign would highlight the correct path for drivers, and enable the associated offence to be enforced if necessary.

Fig. 1:
Diagram 610



Warning signs

Warning signs can play an important part in improving road safety. However, they should only be used where there is a specific safety issue or hazard, not to sign routine features of the road, such as bends and junctions. Overuse of warning signs can dilute their effectiveness.

For example, it should not be necessary to place roundabout or traffic signal warning signs in addition to map-type advanced direction signs or where the traffic signals or roundabout are clearly visible - fig. 2 shows an example of this. Similarly, junction warning signs should not be necessary in street-lit urban areas, where there are frequent side-road junctions.

Local authorities should work with local communities where specific issues and concerns are raised, to make sure the right solution is found. Warning signs should only be installed where there is an identified hazard or road safety problem, and not to solely meet a perceived need.



Fig. 2: Unnecessary roundabout warning sign

Local directional signs

Much local signing is unnecessary. Regular visitors and people living locally know where facilities such as schools, churches and surgeries are. Authorities should review their local direction signs and remove any that are redundant. It is often possible to consolidate existing signing, rather than adding new signs.

Tourist destination signs

Tourist signs should only be provided for major destinations and not for facilities used primarily by local residents. Tourist signs should only be provided where existing directional signs are not sufficient. For most tourist attractions, and all tourist facilities, it is likely that signing would only be appropriate within the last two to three miles, or from where the route diverges from that to the nearest town or village.

Temporary signs

Authorities should consider if temporary signs are necessary in the first place. These signs are often of only limited use to someone using a stretch of road for the first time. Local drivers are likely to have seen the scheme being implemented and will therefore be aware of the changes to the road layout already.

All temporary (white-on-red) signs should be removed as soon as they are no longer needed. Signs such as 'new road layout ahead' (fig. 3) must, by law, be removed no later than 3 months after the completion of the works.

Black-on-yellow temporary signs (fig. 4) for new housing developments must by law be removed within 6 months of completion of the development.

Temporary traffic signs may be erected for a limited period to guide traffic to special events, such as major sporting events, shows or other public gatherings that are expected to attract large volumes of traffic. Traffic Advisory Leaflet 4/11: Temporary Traffic Signs for Special Events⁶ gives advice on the circumstances in which these signs may be used, their design, construction and mounting.

Fig. 3:
Diagram 7014



Fig. 4: Diagram 2701

20mph speed limits and zones

The area-wide traffic sign authorisations issued in October 2017 to every local authority in England included approval to use 20mph roundel road markings on their own as a repeater sign within 20mph limits, without the need for associated upright signs. This does not extend to speed limit terminal signs, which must still be placed in accordance with TSRGD. Roundel markings or upright repeater signs may also be used within 20mph zones in place of physical traffic calming features where the speed of the road is naturally close to the speed limit. Local authorities in England may wish to consider reviewing their existing schemes, in order to reduce the number of signs and traffic calming features where appropriate.

In rural areas, DfT will consider allowing trials of 40mph zones with reduced signing requirements. This could benefit sensitive areas such as national parks. DfT will consider issuing site specific authorisations in response to requests from local authorities.

Obsolete signs

Signs that have become obsolete, either through updates to TSRGD or changes in local circumstances (for example, new or removed parking restrictions) should be removed. For example, the 'at any time' plate used with double yellow lines was withdrawn in the 2002 revision of TSRGD, therefore any existing ones should be removed. Local direction signs with blue borders must be removed or replaced by the end of 2014.

Road markings

Removal of unnecessary road markings can also reduce clutter and maintenance costs. For example, worded markings such as 'keep clear' and 'slow' should be assessed to see if they are still needed.

Yellow lines and parking bays should be removed where the TRO has expired or been revoked.

Use of restricted parking zones and 'permit holders only past this point' area-wide parking controls (fig. 5) can be an effective way of removing the need for road markings to indicate waiting restrictions and parking bays. These signs were prescribed by the 2011 amendments to TSRGD, and therefore no longer need authorisation. Local authorities in England can now also remove yellow lines from pedestrian zones where appropriate repeater signs are placed.



Fig. 5: Diagram 663.3

Environmental impact

Signs should be assessed to see if their environmental impact can be reduced. This should focus on elements such as number, size, mounting, placement, and lighting. Extensive advice on these is given in TSM.

Local authorities should work closely with their communities when planning new signing schemes. It is strongly recommended that authorities include details of sign designs and locations when consulting on proposals such as parking restrictions, so residents can understand and comment on the placing and appropriateness of the signs.

Size

TSM gives advice on the minimum size of sign necessary for different situations. Generally, bigger signs are needed on higher-speed roads to allow drivers time to read them. Where speeds are lower, smaller signs will generally suffice.

Directional signs should be designed in accordance with TSM Chapter 7 to minimise blank areas and ensure they are an appropriate size for their environment.

Where possible, symbols should be used instead of legends on tourist signs to reduce sign size. When a legend and symbol are used together, subsequent signs should generally use the symbol only where this would not lead to confusion with other tourist attractions.

Placement

Regulatory signs must be placed as near as practicable to the start of a restriction. A key commitment arising from the Department's review of traffic signs policy is to reduce the need for signing. The area-wide authorisations mentioned above include approval to relax the requirement for

many regulatory signs to be placed on both sides of a road at the beginning of a restriction. English local authorities should now review their current arrangements, and reduce the signing at sites with good visibility and where they consider it safe to do so. **This change does not apply to speed limit signing.**

The amendment of direction 8 by the Traffic Signs (Amendment) (No.2) Regulations and General Directions 2011⁸ revised the requirement to place repeater signs in some circumstances. Local authorities should use their judgement to determine how many repeater signs are required, where necessary, and where these are placed. New thresholds were also specified below which certain repeater signs may not be necessary.

Mounting of signs

Signs should be mounted so that they are visible, but not intrusive. Mounting heights are recommended in TSM Chapter 1. Whilst lower mounting heights are generally less intrusive and put signs more directly into the drivers' line of vision, the need for clearance, both vertically and laterally, must be considered. For example, a minimum clearance of 2100mm over footways, and 2300mm over cycle paths, is recommended to avoid pedestrians and cyclists colliding with signs. A minimum set-back of 450mm from the edge of the carriageway is recommended, to avoid signs being hit and damaged.

The possibility of mounting signs on walls, railings and other street furniture should be investigated to reduce the need for separate posts. Permission or a legal agreement will be needed to mount signs on private property.

Signs can be mounted on the same post to reduce clutter - advice is given in Chapter 1 of TSM. Care should be taken that mounting several signs on one post does not lead to a very tall assembly, which is unsightly and difficult to read, such as that shown in fig. 6. A maximum overall height of 4m is recommended.

The correct length of post should be used, such that the top of the post does not extend above the sign, unless it supports a lighting unit. This is a relatively easy way to improve the appearance of signs. Colours and designs of posts should be co-ordinated with lamp columns and other street furniture where possible.

Poorly sited signs and unnecessary posts can restrict the space available on footways and can cause problems for visually impaired and disabled

pedestrians. Local authorities should consider the impact of sign placement on pedestrians and vulnerable road users, and in relation to other street furniture. The recommended minimum unobstructed footway width is 2m.



Fig. 6:
Too many signs mounted untidily on one post

Lighting

Direct sign lighting ensures that many safety critical signs can be seen within a system of street lighting. TSRGD sets the lighting requirements for signs in Schedule 17.

Unnecessary sign lighting is expensive and increases carbon emissions and light pollution. Many signs are no longer legally required to have lighting, as result of changes in TSRGD 2002. Local authorities should review their current sign system to ensure that they light only those signs which require it for night-time visibility or to comply with TSRGD.

The physical appearance of lighting units should also be considered. Newer types such as LED lights, are less visually intrusive and more efficient over the lifetime of the sign.

Yellow backing boards

Yellow rectangular backing boards are often used to highlight signs that drivers may have problems seeing, or to address road safety concerns. However, they can be very intrusive and should only be used as a last resort. If there are problems with the visibility of a sign to drivers, the first step is to consider if the sign is in the right place and is the right size. A less intrusive way of increasing visibility might be to use a sign that is one size larger, rather than adding a backing board. Yellow backing boards should not be used with flashing amber lights.

Unnecessary use of backing boards can also negate the feature of a sign that makes it stand out. For example, in fig. 7, the square backing board has removed the distinctive silhouette of the octagonal STOP sign.

If too many signs have yellow backing boards, the highlighting effect is lost.



Fig. 7: Undesirable use of a backing board

Traffic Signals

Traffic signals by their nature are more visible than static signs.

For permanent traffic signals, TSRGD requires a minimum of two signal heads on each approach, one of which must be a primary signal head (i.e.

one located just beyond the stop line). In most cases, a primary signal on the left-hand side of the road, and an extra signal on the right-hand side (a secondary signal) will be sufficient to ensure visibility, particularly at stand-alone crossings (pelicans, puffins and toucans). Drivers should be able to see one signal head on the approach, and one while waiting at the stop line.

The use of extra signal heads at stand-alone crossings has become almost a matter of course in some places. They are often unnecessary, create extra clutter and should be avoided except where necessary to address a particular safety problem. The same applies to 'tall poles'; those where an extra signal head is mounted on the same pole above the standard signal head.

There will always be circumstances where extra signal heads are required, but their use should be carefully considered at the design stage. The aim should be to provide the minimum number of signal heads necessary.

While reducing the number of signs and posts is generally desirable, in the case of traffic signals the risk of driver confusion and distraction caused by too many signs on the signal posts should be borne in mind. For this reason, the types of additional signs that can be mounted on signal posts have been prescribed in direction 44A of the Traffic Signs (Amendment) (No.2) Regulations and General Directions 2011.

Summary

Following the advice in this leaflet can help local authorities reduce the amount of sign clutter on their roads. This can give substantial benefits, some of which are listed below:

- Improves the streetscape by identifying and removing unnecessary, damaged and worn out signing;
- Helps rationalise signs to help ensure they are provided only where required;
- Helps minimise the environmental impact of signing through careful design, including siting, size and colour;
- Reduces the costs associated with providing traffic signs and lighting units; and
- Reduces the need for maintenance, for example for sign cleaning, lamp changing and foliage cutting.

Recommended further reading

- Local Transport Note 1/08 Traffic Management and Streetscape. TSO (DfT 2008) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/3810/ltn-1-08.pdf
- Local Transport Note 2/09 Pedestrian Guardrailing, TSO (DfT 2009) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/3806/ltn-2-09.pdf
- Local Transport Note 1/11 Shared Space, TSO (DfT 2011) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/3873/ltn-1-11.pdf
- Manual for Streets. Thomas Telford (DfT, CLG, Welsh Assembly Government 2007) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/3891/pdfmanforstreets.pdf
- Manual for Streets 2 Wider Application of the Principles. CIHT (2010) <http://www.ciht.org.uk/en/publications/index.cfm/manual-for-streets-2-wider-application-of-the-principles-2010>
- Traffic Advisory Leaflet 5/11 Quality Audit (DfT 2011) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/4394/5-11.pdf
- Traffic Advisory Leaflet 1/12 The Traffic Signs (Amendment) (No.2) Regulations and General Directions 2011 (DfT 2012) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7964/tal-1-12.pdf

References

1. Traffic Signs Policy Paper: Signing the Way (DfT 2011) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/4346/signing-the-way.pdf
2. Transport Research Laboratory Client Project Report 727 Reducing Traffic Sign Clutter <http://assets.dft.gov.uk/publications/signing-the-way/traffic-sign-clutter.pdf>
3. Road Traffic Regulation Act 1984 <http://www.legislation.gov.uk/ukpga/1984/27/contents>

4. The Traffic Signs Regulations and General Directions 2002. <http://www.legislation.gov.uk/uksi/2002/3113/made>
5. The Traffic Signs Manual <http://www.dft.gov.uk/publications/traffic-signs-manual/>
6. Traffic Advisory Leaflet 4/11 Temporary Traffic Signs for Special Events (DfT 2011) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/4393/4-11.pdf
7. Area-wide authorisations and special directions guidance note (DfT 2012) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/3218/area-wide-authorisations-special-directions.pdf
8. Traffic Signs (Amendment) (No. 2) Regulations and General Directions 2011 <http://www.legislation.gov.uk/uksi/2011/3041/contents/made>

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Case study examples

City of York

A project initiated by the York Civic Trust aimed to remove street furniture in the central area of the city, particularly around historic buildings. Whilst this had a degree of success it was a one off project and there still remained much to do and funding was very limited.

Encouraged by decluttering work elsewhere in the country, City of York Council decided to carry out a small scale pilot project in one of the conservation areas in the city. This involved logging all the signs, what they were fixed to, illumination, state of repair, etc. Each was then assessed with a view to removal unless there was a very clear need for the sign to remain.

The scheme benefits – based on achieving a reduction in the ongoing maintenance and power costs and the benefits to blind and partially sighted people due to the removal of footway obstructions – showed that the scheme cost of less than £1,000, would be recovered in 3 to 4 years.

The City Council has also reviewed and removed some access only restrictions that had been in place for over 40 years, but which had been superseded in many cases by other forms of control and regulation such as residents parking schemes.

The success of the pilot project has led to an ongoing annual allocation of funding to continue tackling the issue of street clutter, which has been expanded to include bollards and guardrailing.



Alistair Briggs, City of York Council

Nottingham City Council

As part of a scheme to develop a strategy to manage traffic heading for car parks and attractions within the city centre and to destinations outside it, Nottingham City Council carried out a comprehensive review of all its direction signing. The need for every traffic sign was challenged to determine which must be retained and which could be removed.

Where signs were needed, council officers worked closely with designers to design out clutter by grouping city destinations and using symbols to direct drivers whilst using generic terms for destinations beyond the city centre, for example 'all routes north', 'all directions'. The size of the signs was reduced by simplifying the information on them and unnecessary posts were removed by erecting signs on existing street furniture such as lamp columns and barrier rails.

As a result the street environment in the city centre is less cluttered with an associated reduction in maintenance costs. A change in culture within the design teams has also developed where the need for street furniture is challenged.

The example below shows a junction in the city where the information for drivers has been simplified and reduced, making it easier to understand and reducing clutter.



Caroline Stylianou, Nottingham City Council

West Meon, Hampshire

In designing streets and roads we must consider and respect the local landscape and sense of place. All too often we see creeping urbanisation and visual intrusion in our villages and rural lanes in the form of unsympathetic highway features such as kerbs, traffic signs, road markings, street furniture and wide carriageways. The opportunity to use more natural features needs to be considered and experience shows that a more sensitive approach can and does bring significant benefits.

West Meon is one of a number of villages on the A32 along the Meon Valley in Hampshire. High traffic speed and aggressive driving, especially by motorcyclists, dominated the concerns of the Parish Council in a village severed by the main road.

Whilst clutter was not a particular problem in West Meon, careful analysis of traffic behaviour and movement patterns brought about a range of small-scale measures to change the character of the road through the village. The interventions included the creation of simple yet uncluttered gateways at the entrances to the village and the removal of chevron warning signs and centre lines.

As a result recorded speeds through the village showed an immediate reduction of 3 to 4 mph.

The images below show how this relatively low-cost scheme in West Meon has enhanced the streetscape and surrounding features.



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