Factsheet

G3 – Omitting Centrelines

Risk & Mitigation in Exceptional Circumstances

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Omitting Centrelines

Omitting centrelines on single carriageway streets and roads can help to create safer and more appealing places.

Centreline removal introduces an element of uncertainty that causes drivers to instinctively reduce their speed.

Benefits include:

- safer streets
- potential to re-allocate space to benefit all users
- reduction of visual clutter
- positive effect on the character of the street.
- reduction of construction and maintenance costs

Omitting centrelines should always be considered when white lines are being refreshed or carriageways are being resurfaced. Generally omit centreline on streets that have only one general traffic lane in either direction, unless these have a particular hazard (see page 3):

- 20mph streets (except on strategic streets), except multi-lane streets, on approaches to signalled junctions.
- Rural/no frontage streets 5.5m wide or narrower

Benefits for cyclist are discussed by:

Shackel, S. C. and Parkin, J. (2014) Influence of road markings, lane widths and driver behaviour on proximity and speed of vehicles over-taking cyclists. Accident Analysis & Prevention, 73. pp. 100-108. ISSN 0001-4575,





Centreline removal & Cycle lane widening
Before & After TfL, 2014, Centreline Removal Trial,

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Supporting Information

Centreline removal trial London, UK

Investigating the impact of centreline removal on traffic speeds across three sites in London

Key functions











Opportunity

The Mayor's Better Streets initiative challenged TfL to justify any road marking.

Benefits

The investigation showed that at all three sites there was a statistically significant reduction in traffic speed; drivers were more cautious due to the loss of perceived safety a centreline provides. Collision data will be tracked at these sites for the next three years to ascertain the long-term effects of centreline removal.

Implementation

A study was conducted at three sites across London to judge the effect of removing centrelines on traffic speeds and accidents.

Applying in London

While it is not suitable to remove markings at all locations, it is desirable to remove clutter where possible.





Manual for Streets 2 recognises that centrelines are not an absolute requirement, noting that by omitting centreline markings on carriageways, a reduction in traffic speed has been successfully achieved on busy routes in urban areas as well as village settings.

TRL Report 641: 'Psychological' traffic calming states "Lack of a centre line can make drivers." concerned about meeting other vehicles headon, thus increasing the perceived risk, which can reduce speeds.





Source: TRL Report 641 (2005)

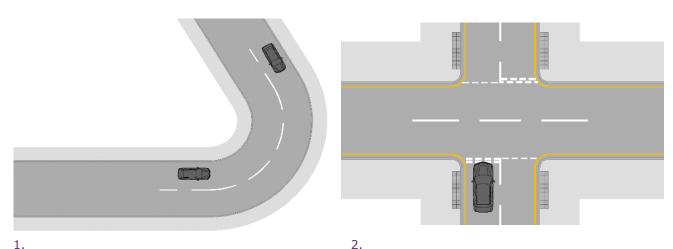
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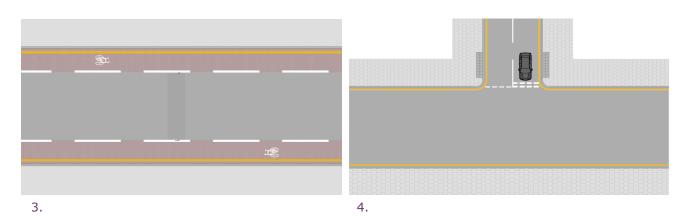
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Risk Mitigation

There may be safety concerns with removing the centreline marking along the full length of a route. The following consideration should be given to types of risk mitigation:

- 1. Where it is likely vehicles may cross over onto opposite lane at significant bends provide centreline markings in the road.
- Where it may be particularly unclear to a driver at a side road junction that the main road is twoway, (for example if the previous road crossed will have been oneway) provide centreline road markings on main road at priority junctions.
- 3. Consider adding cycle lanes to emphasise to drivers the space available to pass one another as well as a moving cyclist
- 4. Where two roads with omitted centrelines meet at a "Give Way" junction, provide two dashed centrelines on the minor road.





All diagrams: The City of Edinburgh Council Sketches

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Image References

Omitting Centrelines

All images: Transport for London: Centreline Removal Trial, 2014 [ONLINE]. Available at: https://www.tfl.gov.uk/cdn/static/cms/documents/centre-line-removal-trial.pdf [Accessed 1 February 2017]

Supporting Information

Case study: Transport for London: London Street Design Guidance, 2016 [ONLINE]. Available at: http://content.tfl.gov.uk/streetscape-guidance.pdf [Accessed 1 February 2017]

Psychological' traffic calming: TRL Report 641 'Psychological' traffic calming, 2005 [ONLINE]. Available at: http://www.20splentyforus.org.uk/UsefulReports/TRLREports/Psychological%20traffic%20calming_TRL_2005.pdf [Accessed 10 March2017]

Risk Mitigation

All diagrams: CEC Sketches

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