

Understanding Bus Lanes: Improving Signing and Operation
AET Leiden 2007
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Have you ever been fined for driving in a bus lane or received a parking ticket? Maybe you were running late and thought you'd get away with it, or maybe you just made an honest mistake? Even traffic engineers can sometimes be confused by traffic signs, so how do the general public cope with them?

Communicating information to road users is a real 'art form' and the UK has very high standards for signing. However, there is always scope for improvement. This paper draws on work investigating how bus lane signing in London can be simplified. Symbols are already used to show who is allowed to use bus lanes, but operational hours can often be confusing, particularly if there are time variations, such as at the weekend.

This paper investigates bus lane signing techniques adopted by other countries, as well as identifying the technology currently available for use in traffic signs. Coloured coded signs, rotating prisms, LED displays and lights embedded in the carriageway are among the options identified.

A range of possible solutions are developed and assessed on practicality and likelihood of success. Many of the options depend on the standardisation of operational hours. Although five variations of operational hours encompass 70% of bus lanes in London, the remaining 30% of lanes include over 60 other variations. Many of these variations reflect the characteristics of different communities within London, and it is clear that it is impractical to standardise all of these.

A short-list of options is taken forward and evaluated in terms of lifecycle costs, reliability, durability, road safety and impact on the streetscape. The requirement for a power supply to signing is also considered and the use of solar power investigated. A user perception exercise clarifies whether different options improve a driver's understanding of when the lane is in operation.

The analysis reported in the paper is useful for evolving practice in Europe in providing a basis for which options for improving the understanding, design, operation and effectiveness of bus lane signing can be evaluated.