Getting the bus to work: why quality bus corridors work in Dublin

This item was submitted to Loughborough University’s Institutional Repository by the/an author.

Citation: ENOCH, M.P., 2003. Getting the bus to work: why quality bus corridors work in Dublin. Traffic engineering and control, 44 (7), pp. 252-254

Additional Information:

• This is a journal article. It was published in the journal, Traffic and control engineering [© Hemming Group Ltd] and is also available from: http://www.tecmagazine.com/

Metadata Record: https://dspace.lboro.ac.uk/2134/3414

Publisher: © Hemming Group Ltd

Please cite the published version.
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Getting the bus to work: why quality bus corridors work in Dublin

Dublin has achieved a remarkable increase in bus patronage through the introduction of quality bus corridors. Marcus Enoch reports on Dublin’s success which is founded on properly implemented bus lanes. He concludes that the key to persuading car users to switch to the bus is that the bus journey time must be consistently and significantly less than that taken by car.

Persuading people to use public transport instead of their cars has long been seen as a key component of any sustainable transport policy approach. The Government’s Ten Year Plan is no exception, requiring public transport use to increase significantly over the period until 2010.

To do this, the plan relies on the rail sector to deliver a 50% increase in passengers, while the bus industry’s target is a more modest 10%. However, since the adoption of the plan, the railway system has degenerated into turmoil. Meanwhile light rail schemes will only ever be viable for a very few corridors in a very few cities. Thus, in the short term, the humble bus represents the only realistic hope of the Government’s targets being met.

This is a tall order. Although bus patronage levels have remained stable over the past decade or so after a steady decline since the 1950s, much of this could be explained by the booming economy. Bluntly, buses are perceived as being the ‘mode of last resort’ by the vast majority of people, and especially by those with access to a car.

On the other hand, buses currently perform two-thirds of all passenger journeys in the UK. And there are examples of towns and cities where bus use has increased, bucking the national downward trend.

One reason for this, has been the emergence of the concept of Quality Bus Partnerships. QBPs were developed to address the problem caused by the 1985 Transport Act, which separated bus operations from the infrastructure. In essence, the bus operator pledges to upgrade its bus service – generally by buying new state-of-the-art vehicles, improving frequencies and training drivers in customer care techniques. In return, the local authority offers to upgrade infrastructure along the route, possibly through the provision of new bus shelters, real-time passenger information and bus priority measures.

While significant advances have been made in terms of patronage increases in a few cases, most notably by Trent Buses in the East Midlands and Brighton and Hove Bus and Coach Company, in general patronage gains have been fairly moderate. However, even in the Trent and Brighton cases, progress has been threatened because increasing levels of congestion are dramatically reducing the reliability of the bus service offered. In other words, the bus priority measures typically offered at the moment by local authorities are not up to the task.

One solution to this problem is to implement a network of guided busways, specifically designed to bypass the worst pinch points, and this is the option favoured by public transport authorities and providers in West Yorkshire.

Another less publicised approach is in place across the Irish Sea in Dublin.

TECHNICAL ECONOMICS JOURNAL

Dublin Bus claim that commuters no longer run for a bus during the peak period because they can usually see the next one.

THE DUBLIN QBCS

During the 1990s, with economic growth of around 10% a year, Dublin was facing worsening levels of traffic congestion. This led in 1994 to the publication of the Dublin Transportation Initiative – the first integrated study of transport in the city – which in turn resulted in a virtual halt to urban road building (although the C-ring, the M50 motorway around the city was given
the go ahead), three LRT lines (now two) and a number of so-called Quality Bus Corridors – 10–11 radial routes, and one orbital.

The goal of the Quality Bus Corridor (QBC) is to provide a clearly defined, high performance bus transportation system segregated from other traffic. In practical terms, the aim is to deliver bus journey speeds on the corridor of at least 20km/h, with a minimum increase in bus journey speeds of 25% on all corridors. Buses must be segregated from other traffic along the complete length of the corridor, except where the road width is too narrow to provide a bus lane. In addition, it is aimed to provide high quality waiting areas with real-time passenger information throughout, while buses will have an average age of only five years, be accessible to mobility impaired people, be distinct in appearance from other buses and be air conditioned. Finally, average waiting times for passengers were set at three minutes during the peak and four minutes in the off-peak, with an average excess wait of two minutes allowed.

As of late 2002, 98 km of bus lanes forming nine QBCs are in place, and three remain to be developed – Orbital, South Clondalkin and Ballymun. The results are impressive. In total, bus use in the morning peak (07:00-09:15 Monday to Friday) inbound services has increased by 38%, from 138,500 to 191,500 since 1997, while on the Stillorgan QBC, patronage rose by 232%!

Further, cordon counts on the ‘canal’ ring of traffic entering the city show that the modal share of the bus increased from 36.8% in 1997 to 40.5% in 2001. These counts also showed that some 60%–65% of new bus users had switched from the car.

Altogether, the QBCs cost €57m for 98 km to implement, or €575,000 per km. While installing the lanes was relatively cheap, the cost of providing traffic signal improvements, additional cycle lanes and a whole raft of ‘village improvements’ – necessary for gaining local approval of the process – were more costly. The QBCs were mainly funded through European Regional Development Funding and Traffic Management Grants from the DTO.

The lessons from the QBC policy are simple. If car users are to be persuaded to switch to using the bus, then there must be a tangible benefit. In short, the journey time taken by bus must consistently be significantly less than that taken by car. As a consequence, congestion is seen as the ally of the bus – at least on the segregated sections of the QBCs.

For this to apply, the bus lanes must be air conditioned, have unfavourable demographics or are simply too short to generate a sufficient journey time differential with the car.
Putting the bus first

Based on Dublin Office (2002).

Transportation only a single bus lane in a two-way puts bus lanes. And, if space permits making certain turning movements, traffic management measures preventing cars or making certain turning movements, the link. Otherwise, neither the transport problems nor the transport institutional set up are sufficiently different to prevent a UK council following the Scandinavian route franchising model than that adopted in Great Britain outside London.

**LESIONS FOR THE UK**

In transferring such experience to the UK, it is clear that the major advantage of the bus company in Dublin is that it is part of the same organisation as the transport planners and therefore ‘singing from the same hymn sheet’. This is not the case in Britain where local authorities are sometimes distrustful of bus operators that are seeking to maximise profits, although the development of QBFs should have gone some way to addressing this issue.

Related to this, is that the core objective of the Dublin QBCs is to reduce peak period congestion, and hence the size of the vehicle fleet, the cost of providing that and the level of public subsidy has risen as a result. This may be a significant barrier in the UK context, although bus companies are already being forced to supply more buses in peak periods due to units being trapped in congestion.

Otherwise, neither the transport systems nor the transport institutional set up are sufficiently different to prevent a UK council following the Dublin example. While the results of the Dublin QBC experience are truly impressive, what is extraordinary is that these have been gained almost exclusively due to the bus lanes. However, unless one actually searches for the QBCs it is very difficult to tell that they are there. This is because the buses and stops used are branded in the standard corporate livery, there are virtually no adverts – even on shelters or on the bus themselves – and the lanes themselves are black asphalt rather than pigmented green as in Edinburgh for example. Further, the information for the services is not easy to understand, and the use of the exact fare system is off putting – although a key component in reducing bus boarding times and hence overall journey times.

Such a revelation is actually rather positive for the future of the bus industry as a whole, as it would appear that no urban area in the British Isles has yet tried matching a Trent Buses-style marketing strategy with a Dublin Bus-style bus lane solution. Given the almost 40% increase in bus use just from properly implementing bus lanes, one could only imagine what results that approach would achieve.

**Acknowledgements**

Thanks are due to Derry O’Leary of Dublin Bus, and Marion Wilson of the Dublin Transportation Office for all their help.

**Footnotes**


2. Roughly 40% of traffic on O’Connell Street, the main street in the city was through traffic before the traffic management measures.

**About the author**

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