



ALLABOUTBUSES.WORDPRESS.COM

DUBLIN, IRELAND

High-Level Bus Service: the Quality Bus Network**Background/context**

Dublin City is a conurbation with nearly 1.2 million inhabitants and great economic growth in recent years around the old city. Despite previous investments into the metro and two tram lines, mobility problems remain.

Several years ago, Dublin launched an impressive network of Quality Bus Corridors (QBC) along main arteries throughout the urban area. The goal is to provide 400 km of QBC (200 km are already carried out) with an annual investment of €30–40 million until 2011. Improved regularity and speed has yielded impressive gains in frequency: on average on all QBCs, about 16% of the trips come from cars. Another objective is to soon implement a dynamic information system for passengers (real time data).

Case description

The Malahide QBC (7 km, 60% of which are dedicated lanes) has been in operation since 1997, and currently carries high levels of bus patronage. The infrastructure is being further enhanced to improve its ability to deliver a congestion-free operating environment to the bus service so that it can not only retain existing patronage but build upon it.

All bus stops along the route have been or are being upgraded to QBC standards with level-boarding platforms, shelters, and seating. Approximately 60 buses with an average age of 6.5 years, run on this corridor (with headways by two and three minutes in peak hours). Most of the buses are double decker between 10 and 12 metres in length. Eighty-two percent of the buses on the Malahide QBC fleet are low floor.

Dublin Bus is currently developing an automatic vehicle location (AVL) system. This system will facilitate the incorporation of real-time data from other compatible systems to permit information from multiple public transport companies to be displayed at electronic bus stop display units.

Cost and financing

The investment cost of the global project (including P+R, interchange stations, etc.) will be around €4.5 million per km on average with funding from the central government (Department of Transport) for infrastructure.

The operating fleet is provided by semi-state bus company (Dublin Bus). All buses are common buses (not a new shape) and mainly double decker.



Results

Regularity and speed: much less variation of the speed

- Inbound morning peak : 16.5 km/h
- Inbound off Peak: 18.67 km/h

Dublin Bus Survey November 2002 indicated passenger satisfaction as follows:

- Reliability – 80%
- Quality of service – 83%
- Value for money – 82%

Before and after modal share on the route. Car mode share dropped from 33.51% to 21.93% and bus share grew from 56.64% to 60.55%.

Average travel time (comparison with the car traffic):

- by bus: 19.47 min
- by car: 25.35 min

These are average journey times during the morning peak. Monitoring is carried out annually.

Problems

The challenges were and always will be:

- Lack of available road space and competing functions;
- Public consultation / opposition to QBCs
- Construction mainly on city streets
- Lack of experienced contractors and consultants
- Requirement for additional new and enhanced buses
- Uncertainty surrounding deregulation of bus companies
- Excessive delay in implementation of integrated ticketing and real-time passenger information.

Transferability and success factors

The main key issues for QBC success were:

- Low-cost solution in parallel with the implementation of metro and light-rail extensions
- Funding to be aligned with other resources such as the road construction programmes where bus lanes are incorporated in the designs
- Continued annual investment of €30-40 million until 2011
- Integration with other major public transport modes
- Selling the concept of QBCs through the website and other means of publicity in conjunction with the local authorities, the bus companies and the Dublin transportation office
- Political support and public acceptance
- To form an operational staff that can be in charge of all sub-systems (infrastructure, vehicles and operating matters)

The comprehensive approach of the system is very important and implies that vehicles, stations, traffic lanes, line identification and operating methods are dealt with in a coherent and sustainable manner.

Lessons learnt

Bus with a high level of service (BHLS) is a type of public road transport for capacitive bus routes that structure the network. They have to be carefully identified. These BHLS routes meet specific requirements in terms of efficiency and performance. For achieving good and sustainable results, a comprehensive approach to the system is highly needed and implies that vehicles, stations, running lanes, line identification and operating methods are all dealt with in a coherent manner.

References and contacts

Company: Dublin City Council (QBNPO)

Address: Erne Street Lower, IRL-Dublin 2

Tel: +353 (0)1 686-0100

Contact 1: Ciaran Deburca

Email: ciaran.deburca@dublincity.ie

Contact 2: Anne McElligott

Email: anne.mcelligott@dublincity.ie

Web: <http://www.dublincity.ie/Pages/Homepage.aspx>