



THE INSTITUTION OF
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Towards Sustainability Good Practice Case Sheets

Developing a Quality Bus Service in London

Author Details:

Scott Lester BEng (Hons) CEng MICE, Bus Priority Unit, Transport
for London Tel: 020 7941 4334 Fax: 020 7941 7176 e-mail
scottlester@streetmanagement.org.uk

1. Introduction and Summary of Achievement

Transport policy in London is now focused on the sustainable movement of people and goods as opposed to developing the road network for ever increasing private car use. Buses have a crucial role to play in developing sustainable transport, which is often undermined by the impact of traffic congestion. In London a number of projects are being developed to dramatically improve bus journey times, timetable reliability and the whole journey experience for passengers. These include:

- the London Bus Priority Network (LBPN);
- the Route 43 Improvement Project;
- the London Bus Initiative (LBI).

Coupled with investment in new buses and continued development of the London bus service network, bus usage has increased by 13% over the last 5 years, whilst car traffic volumes have remained constant. Existing and future programmes should see even higher growth in bus use.

2. Towards Sustainability – Impact on the Triple Bottom Line

Table 1: Government Headline Indicators for Sustainable Development on which this project has an impact

Economic Growth	X
Social Investment	X
Employment	X
Health	X
Education and Training	
Housing Quality	
Climate Change	X
Air Pollution	X
Transport	X
Water Quality	
Wildlife	
Land Use	
Water	
Use of Resources	X

Environmental: Enhancement of bus services has a key part to play in meeting environmental policy objectives by providing a real and attractive alternative to car use. Significant reductions in the use of private cars can reduce emissions to air and improve quality of life in previously congested localities.

Social: Street engineering and new buses deliver greater accessibility to public transport and a safer, more pleasant environment for users.

Economic: It is hoped that these improvements will boost local economic development by making existing facilities safer, attractive and accessible.

3. Project Details

The London Bus Priority Network (LBPN)

The LBPN began in 1993 and involved all 33 London local authorities working together to make bus travel more efficient and convenient for passengers. The full 865km of the LBPN will be completed by 2003/4 at a total cost of £110M. Typical economic rates of return on individual routes have been a very impressive 12-15 months.

The Route 43 Improvement Project

The Route 43 Improvement Project built on many of the elements of the LBPN and aimed to demonstrate the potential for a 21st Century bus service in London. The route linking London Bridge in the City with Friern Barnet in the North London suburbs, pioneered the concept of a total route control strategy. Traffic signals are used to control general traffic queues and provide priority for buses. Where possible enhanced bus lanes have been introduced (see photograph) and, where this is not physically possible, “virtual” bus lanes have been created by upstream queue control to prevent congestion.



Highways works providing accessible bus stops and improved waiting environments for passengers. Note bus lane also provides safe route for cyclists.

Other features of the route include:

- adjustments in kerb height and horizontal alignment at bus stops to aid accessibility;
- bus priority at traffic signalled junctions;
- partial carriageway resurfacing (where required);
- waiting and loading restrictions new low floor fully accessible buses;
- Countdown (real time passenger information at bus stops);
- high quality driver and customer care training.

The final cost of the Route 43 project, excluding new buses, will be approximately £8m, of which £5m will be for implementation and £3m for Countdown and bus stop infrastructure. Both Transport for London and the Local Authorities are providing funding. It is anticipated there will be an average journey time reduction from 80 mins to 50 mins.

The London Bus Initiative

Following the success of these projects, the Government announced the London Bus Initiative (LBI), a £60m project to provide 27 BusPlus™ routes across London with a similar level of improvements. The 27 routes were identified as being of strategic importance, serving areas where there is the potential to provide an integrated transport service and where they offer a genuine travel alternative to

the car. The LBI will be completed by March 2002. The Initiative will build on London's network of bus lanes which has expanded rapidly in the last decade (see figure 1).

Figure 1 – Bus Lanes in London (Introductions and Removals)

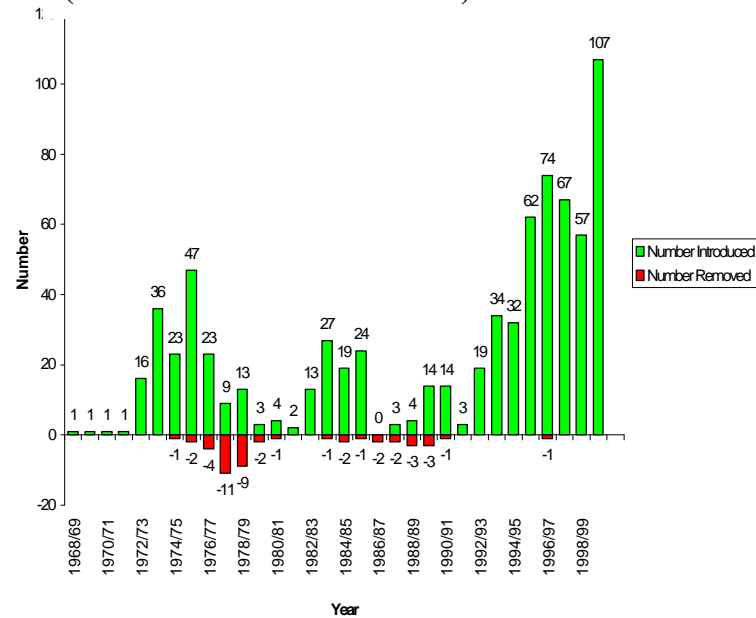


Table 2: Achieving Sustainability

Existing Practice	Bus priority per route length	Capital Cost	Result
LBP (865KM inc 27 BusPlus routes)	700 bus lanes, 5% of route protected	£110M	Increase of 3K passengers per day
Improved Practice			
LBI (2574km inc 600 routes)	40% of routes protected by bus priority	£900M	Increase of 20K passenger per day

References

- Keep Buses Moving – DETR Local Transport Note 1/97
- Transport in the Urban Environment – Institution of Highways and Transportation 1997
- LBI Framework Document May 2000
- LBI Bus Stop Designs for Low Floor Bus Accessibility June 2000
- Bus Priority Unit Annual Review 1999 London Transport Buses
- BPU SVD Leaflet February 1999 London Transport Buses