

Greater Manchester Bus Priority

The Greater Manchester bus priority programme consists of two schemes: the Cross-City Bus Package and Leigh Guided Busway. The Cross-City Package originated from a desire to enable cross-city services and was designed to reduce passenger journey times and improve reliability through the provision of infrastructure in and on the approach to the city centre. A key objective was improved access to healthcare, employment and leisure facilities on the Oxford Road corridor. The busway originated from a need to provide high-quality public transport in this part of Greater Manchester, with existing bus services being unreliable and infrequent.

The improvements include the creation or enhancement of over 25 miles of bus route, covering three corridors:

- West corridor between Leigh, Atherton and Tyldesley, on the A580 through Salford to the Regional Centre;
- North corridor from Middleton to the Regional Centre via the A664; and
- South corridor from the Regional Centre to Manchester Royal Infirmary via Oxford Road.



The west corridor includes 7km of guided busway and a multi-user path from Leigh to Ellenbrook and a further 10km of on-highway improvements. Significant highway, pedestrian and cycling improvements have also been carried out in Leigh, Atherton and Tyldesley town centres to allow efficient connections to the guideway. Major improvements were made to Leigh Bus Station, and new Park & Ride sites were introduced in Leigh, Tyldesley and on the East Lancashire Road. Within the Regional Centre, sustainable transport has been prioritised through bus gates and sharing tram routes.

The north corridor to Middleton incorporates traditional bus priority improvements as well as improvements for pedestrians and cyclists. On the south corridor, a 15-hour restriction (0600 to 2100) to general traffic was applied to a mile length of Oxford Road, retaining bus, taxi and cycle access. In addition to bus priority measures, local funding was used to deliver segregated cycle paths. Capacity improvements and traffic calming were implemented on parallel routes to mitigate the effect of the restriction to general traffic.

The total investment in the scheme was £122.5m, split between the busway (£68m) and the Cross-City Package (£54.5m). The scheme was predominantly public sector funded, with the Greater Manchester Local Transport Fund providing the majority of the funding and the Department for Transport contributing £32.5m.

First was procured by Transport for Greater Manchester (TfGM) to operate the busway service, branded as Vantage. The service is operated using 25 high specification double deck hybrid buses, with next stop audio and visual announcements, CCTV, free Wi-Fi, climate control and high-quality seating. First's standard network fares apply. Although the bus priority programme has no associated partnership in place with operators, TfGM as asset owner can control the services and vehicle type assigned to the busway route.

The scheme has successfully delivered its original objectives. Journey times and journey time reliability have improved with, for example, journey times between Leigh and Manchester City Centre in the morning peak reducing from 60-90 minutes to 50 minutes consistently. The removal of the interchange penalty in the city centre has also had notable benefits. In excess of 3m passengers used the busway service in year 3, compared with a predicted business case figure of 2.9m, and modal shift has been comparable to that for light rail, with a shift of 20-25% from car.

In terms of secondary outcomes, residential appeal has increased in locations where bus priority has been improved, as corridors have become more attractive from a connectivity perspective. Furthermore, the multi-user path along the route of the busway is well-used by pedestrians, cyclists and horse riders, with around 220,000 users per year. Bus operators have also been able to extend some routes cross-city on a commercial basis, with a number of these links in operation prior to the completion of the scheme.¹

¹ Sourced from a telephone interview with Transport for Greater Manchester (TfGM) on 14 October 2019, supplemented with information taken from an unpublished TfGM presentation. Image provided by TfGM.

Fastlink

Fastlink is a bus rapid transit system along the Clyde corridor in Glasgow. It was developed to provide good public transport accessibility to the new Queen Elizabeth University (QEU) Hospital, support regeneration and improve the public transport offering on one of the few corridors in the city without rail provision.

The Scottish Government committed £40m to support scheme development, allied to the decision to build the QEU Hospital. Strathclyde Partnership for Transport (SPT) worked with Glasgow City Council (GCC) on developing the business case, the focus of which was the route between the city centre and the QEU Hospital, via Govan and the media village, supporting access to the hospital and the regeneration of the Clyde corridor.

SPT established a steering group with representation from Transport Scotland, GCC, Renfrewshire Council, the Confederation of Passenger Transport and the NHS. The key aims of the scheme were to reduce journey times by 20% and improve journey time reliability by 20%, with the entire route reviewed in order to identify locations for full segregation.



The scheme was delivered by GCC contractors and opened in 2014 in advance of the opening of the hospital. Two pieces of new road infrastructure were implemented – segregated busways at Broomielaw and in the Pacific Drive area where the STV and BBC campus is located. Where possible, full segregation was provided, with attention also focussing on the quality of passenger facilities, information provision, real-time information provision at every bus stance, high access kerbs at every stop and 500m spacing of stops where possible.

The main difficulty encountered was the execution of the city centre elements, which required changes to Union Street, Oswald Street and Jamaica Street, with bus gates installed, a bus contraflow lane removed and the number of stops reduced. The tracking data highlights improvements both in journey times and the reliability of journey times and, additionally, the junction of Union Street, Jamaica Street and Argyle Street was one of the city's worst accident blackspots and initial indications suggest that this has been greatly improved.

Engagement was undertaken with McGills, First, Stagecoach and West Coast Motors, and a Statutory Quality Partnership was secured, which necessitated the use of a minimum of Euro 6 vehicles on the segregated sections of route and a minimum of Euro 5 vehicles on the shared sections. Minimum frequencies were also set, with operators obliged to operate seven days a week on the segregated sections of route and at least hourly on weekdays between 5am and 11pm.

Expenditure on the scheme was around £32m, with both Stagecoach and McGills additionally investing in fleet improvements. Stagecoach also received funding for seven vehicles through a GCC Network Enhancement Grant on the condition that they run a service for four years along the entirety of the route without revenue support. The NHS made a £1.5m contribution to the scheme and also contributed through the delivery of a transport interchange at the hospital, approach roads, and bus lanes and signalling within the site.

A formal evaluation of Fastlink is in progress, but in terms of the initial objectives, the scheme has achieved improved service provision, improved quality of service, journey time savings and improvements to journey time reliability. There has also been significant regeneration along the corridor, with three hotels opening and the provision of new flats, with the marketing information for the flats promoting the Fastlink corridor.

Secondary outcomes include reduced fares along the corridor and, although there has been some mode shift from subway to bus due to improvements to the service through Govan and the scheme's tie in with the Govan Interchange, Fastlink has been a springboard to consider other corridors within Glasgow to promote quality bus corridors.²

² Sourced from a telephone interview with SPT on 9 October 2019. Image provided by SPT.

Eclipse Bus Rapid Transit

The Eclipse initiative is a bus rapid transit system that links key towns and destinations in South East Hampshire. It was brought about as a response to addressing significant congestion issues on the A32 by providing a viable alternative to car travel and speeding up journey times into Fareham from Gosport. Additional objectives included improving access to employment sites, health services, tertiary education and the North Fareham Strategic Development Area, and to assist in meeting Air Quality Management Areas plans.

Around half of the total Eclipse journey is fully segregated, following a disused rail line, with the rest currently operating on the highway. There is priority for buses at intersections on the non-busway section of the route, although there is limited priority elsewhere. There are regular bus stops along the route with accesses onto the busway from surrounding housing estates. Phase 1 of the project opened in 2012, costing £25m.



Prior to the implementation of the Eclipse scheme, consideration had been given to a tram system in the area. This was disregarded in favour of implementing bus interventions.

Hampshire County Council delivered the infrastructure for the scheme, including Real-Time Passenger Information and live news and weather information at the majority of bus stops on the route from Fareham to the end of the bus way.

First contributed 66-plate Enviro200 MMC vehicles towards the scheme. As part of the voluntary partnership between First and Hampshire County Council, it was agreed that the vehicles would be renewed every 3 to 4 years. A second round of vehicles are currently in operation on the Eclipse corridor, with vehicles due for renewal again in 2020. The vehicles are all Euro 6 standard with high-quality interiors, including Eclipse branding, leather seats, charging ports, Wi-Fi and visual and audio displays. As part of the agreement, First is also responsible for the daily opening and closing of the busway gates.

The service is operated by a dedicated team of drivers, who were picked based on customer service skills and were given additional customer service training before operating the Eclipse buses. This has been well-received by passengers, because the familiarity allows drivers and passengers to build up a relationship.

The Eclipse initiative has generated a 2% modal shift away from cars and onto the bus. It is used by a wide cross-section of society, stopping at schools, colleges, businesses and Fareham railway station, which provides onward connections to London. Eclipse has achieved a predictable journey time, which allows passengers to plan appropriately. Overall emissions have gone down despite increased service frequencies, as a result of fuel efficient buses.

Proposals are currently progressing for a second phase of the project. This is being brought forward through the Department for Transport's Transforming Cities Fund, which shortlisted Portsmouth City Council and Hampshire County Council for a share of the fund for public transport improvements across South Hampshire. Works for this phase are about to commence and include extending the busway by one kilometre further south towards Gosport.

Going forward, Hampshire County Council is considering an expansion of the initiative. Following the second phase to extend the busway, there are aspirations to further extend the busway to the end of the disused railway. Discussions are also ongoing regarding how the bus rapid transit system could be extended to the north across Fareham, Portchester and Portsmouth.³

³ Sourced from a telephone interview with First on 9 September 2019, supplemented with information taken from KPMG's report 'An Economic Evaluation of Local Bus Infrastructure Schemes' <https://greenerjourneys.com/publication/an-economic-evaluation-of-local-bus-infrastructure-schemes/>. Image provided by First.

Gateshead Bus Priority

The introduction of bus lanes forms part of Gateshead Council's overall transport policy objective of improving sustainable travel opportunities, thereby supporting the wider strategic aims of supporting economic growth, environmental improvement and social inclusion.

The main travel corridors into the city centre were considered on a multi-modal basis. The corridors differ in character but were experiencing similar problems: congestion, high traffic flows, constrained envelopes within which to work and residential areas tight against the road, with relatively high pedestrian flows.



Bus lanes were installed at various locations across Gateshead, mainly within the town centre and on key travel corridors into the centre. The bus lanes are not generally continuous along each corridor, but split into a number of sections of varying lengths, because it can be difficult to install bus lanes in locations where space is constrained. The majority of the relatively straightforward locations have now been tackled and bus lanes are generally in operation for 24 hours a day.

Bus lanes were the principal consideration at the time of development, with Urban Traffic Management and Control (UTMC) treatments being introduced more recently. UTMC allows for improved management of the route, whereby adjustments to the timing of traffic signals are used to improve journey times and reduce their variability. There is now a degree of UTMC coverage on most of the main corridors into the city centre.

It is roughly estimated that around £5m has been spent on the implementation of sustainable transport measures in the area in total, including pedestrian and cycle works as well as bus priority. Implementation of bus lanes has been part of Council policy since at least 2001, and costs have risen significantly over the years, in part due to inflation and in part because the problems have become more expensive to address since the most straightforward locations were tackled first. The implementation of a lengthy bus lane on the Felling Bypass cost in the region of £1m in 2009.

There is no formal partnership agreement in place with operators covering the bus priority interventions, but Go North East, the main operator in the area, has tended to upgrade its fleet on routes where interventions have been implemented.

A post-implementation review has been undertaken at a number of locations, with the findings highlighting the substantially positive impact that bus lanes can have on journey times. Indeed, research carried out across Tyne and Wear in 2014 amongst bus passengers indicated that a substantial majority of bus passengers (typically 80-90%) consider that bus lanes have benefited journey times.

Discussions with Go North East have also highlighted support for the view that bus lanes can be effective, citing the Felling Bypass as a particular example. As a general rule, shorter bus lanes were considered to be less effective, and sometimes benefits can be reduced due to abuse by general traffic.

In most cases, the introduction of bus lanes has not made any identifiable difference to general traffic levels, with the exception of the A692 at Lobley Hill Road, where the introduction of the bus lane necessitated the loss of a lane for general traffic, resulting in a 14% decrease in weekday traffic.

Analysis also suggests that there has been no overall detrimental impact on road safety, with a fall in casualties overall following introduction of the bus lanes. In the three years following their introduction, there was an average reduction in the number of collisions of 13% compared to the previous three years – this was a fall of 13 collisions from 99 to 86.⁴

⁴ Sourced from a telephone interview with Gateshead Council on 27 September 2019, supplemented with information taken from an unpublished council report. Image provided by Gateshead Council.