### **MANCHESTER CITY COUNCIL**

### REPORT FOR RESOLUTION

**COMMITTEE:** Economy, Employment and Skills Overview & Scrutiny

Committee

**DATE:** 4 February 2009

**SUBJECT:** Quality Bus Corridors

**REPORT OF:** Greater Manchester Public Transport Executive

### **PURPOSE OF REPORT:**

To provide Members with an overview Quality Bus Corridors and their impact on facilitating transport across the city.

## **CONTACT:**

Keith Howcroft, Deputy Head of Transport & Assistant Clerk to the GMPTA

Tel: 0161 234 3312

Email: k.howcroft@manchester.gov.uk

### **WARDS AFFECTED:**

ΑII

# **IMPLICATIONS FOR:**

Anti-Poverty Equal Opportunities Environment Employment

No No Yes Yes

### 1.0 Introduction

- 1.1 A Quality Bus Corridor (QBC) is an important bus route that is improved to increase bus use and improve conditions for pedestrians and cyclists. Since 1999/2000, £88m has been invested in QBC routes in Greater Manchester.
- 1.2 The QBC programme was developed in partnership with the 10 Districts of Greater Manchester and the key bus operators. The Greater Manchester Passenger Transport Authority provided programme governance and Greater Manchester Passenger Transport Executive (GMPTE) has provided programme and project management services.
- 1.3 Manchester City has been involved throughout, from network development through to project design and implementation. Manchester officers have worked closely with GMPTE and other stakeholders, including bus operators, to ensure that individual QBC projects address the specific needs of Manchester residents, as well as the strategic objectives of improving travel by bus.
- 1.4 An evaluation of the whole network has been undertaken to determine what the QBC programme has achieved and hence gauge the relative success of the network investment.
- 1.5 This report summarises the outcomes of this evaluation with specific reference to the infrastructure and investment obtained within Manchester City. Specific reference has been made to the impacts and benefits of improved parking and loading provision within District centre areas.
- 1.6 The report also considers the implications of the TIF no-vote in terms of its implications on the future of bus performance improvements within Manchester.

### 2.0 The QBC Network

2.1 The QBC network extends over 277km, or 172 miles, covering all 10 Districts. The following table shows the lengths of route in each District:

	Totals (Km)	Totals (miles)	% of Network
Bolton	11.32	7.03	4.1%
Bury	17.20	10.69	6.2%
Manchester	63.96	39.74	23.1%
Oldham	20.17	12.53	7.3%
Rochdale	36.15	22.46	13.1%
Salford	8.76	5.44	3.2%
Stockport	55.26	34.34	19.9%
Tameside	23.73	14.75	8.6%
Trafford	18.62	11.57	6.7%
Wigan	21.83	13.56	7.9%
Totals	277.00	172.12	

- 2.2 Manchester contains the highest proportion of QBC routes within the County, with nearly a quarter of the network within the City, covering 40 miles of Manchester's strategic road network.
- 2.3 The following table and chart summarises the magnitude of costs invested in the QBC network by District:

District	Investment	% of Budget
Bolton	£3.4m	3.9%
Bury	£6.3m	7.2%
Manchester	£19.7m	22.4%
Oldham	£7.5m	8.5%
Rochdale	£9.3m	10.6%
Salford	£1.3m	1.5%
Stockport	£13.2m	15.0%
Tameside	£6.7m	7.6%
Trafford	£2.2m	2.5%
Wigan	£4.5m	5.1%
GMPTA	£13.9m	15.8%
Total	£88.0m	

2.4 Manchester has therefore benefited from nearly £20m of infrastructure investment, representing 22.4% of the total programme budget.

#### 3.0 Infrastructure Delivered

- 3.1 The QBC programme has delivered a significant number of improvements to the highway network. An inventory of all QBC schemes has shown that the programme has delivered
  - Over 20 miles of bus lanes:
  - 29 new traffic signal junctions;
  - 245 junction improvements;
  - 162 junctions included within the GM Urban Traffic Control system;
  - 1596 parking and loading spaces;
  - 213 traffic management schemes;
  - 14 miles of cycle lanes
  - 125 new signalised pedestrian crossings;
  - Over 120 new pedestrian phases at traffic signal junctions; and
  - 57 un-controlled crossings such as refuge islands.
- The amount of infrastructure delivered has therefore been significant, with over 200 separate schemes incorporating some or all of the above measures. 42 of those schemes have been delivered in Manchester City alone, both fully and partly funded through the programme, including major District centre and urban realm improvement projects, examples of which include:
  - Chorlton District centre improvement scheme (see Appendix);
  - Didsbury District centre improvement scheme
  - Parrswood interchange upgrade and junction enhancements;
  - Cheetham Hill District centre improvement scheme;
  - Hyde Road, Gorton junction improvement and public realm enhancements:
  - Levenshulme District centre improvement scheme;
  - Fallowfield bus, pedestrian and cycle facility improvements:
  - Rusholme District centre improvement scheme; and
  - Many other schemes throughout the City.
- 3.3 Investment in improvement schemes in Manchester has ranged from low-cost passenger facility upgrades to in excess of £1.5m for delivery of major projects such as improvements to Didsbury and Chorlton District centres. Projects such as these have also delivered significant improvements for vulnerable users, with pedestrians and cyclists benefiting from new crossing facilities and cycle lanes. Other traffic has also benefited from improvements to traffic signal operation and improved signal coordination, which has reduced congestion for all users.
- 3.4 In addition, nearly 1900 bus stops have been upgraded throughout the County to improve accessibility and enhance the comfort and convenience of bus passengers. There are 446 stops on Manchester QBC routes, nearly 90% of which have been upgraded. Stops that have not been upgraded will be addressed as part of ongoing QBC schemes; as part of developer funded schemes or; are on a reserve list for future review.

- 3.5 Upgrading of bus stops was seen as an integral part of the whole journey experience and the core objective was to upgrade all bus stops on the network to improve their layouts, locations, accessibility and convenience of use. Upgrades included the provision of raised platforms for ease of access along with improved facilities and better passenger information.
- 3.6 New or upgraded bus shelters were provided at all stops where it was feasible or viable to do so. Some shelters were specially designed for sites where there was a particularly high demand.
- 3.7 In Didsbury two existing shelters were replaced with a longer custom-made shelter, which provides weather protection and seating for a large number of passengers. Similar shelters were also introduced at the very busy stops in Withington, adjacent to the Library.



3.8 In Fallowfield, the Owens Park bus stops opposite student halls

of residence were successfully improved by an award-winning innovatory QBC project designed by Manchester City Council. A 50m long shelter was provided to accommodate the hundreds of students that regularly use this stop. Improvements also significantly aided pedestrian and cycle movements as well as delivering priority for buses.

### 4.0 Provision for Parking & Loading on QBCs

- 4.1 The QBC approach to improving and accommodating parking and loading requirements was very much based on local needs, current levels of activity and impacts on bus performance.
- 4.2 Buses suffer more from inconsiderate parking than other traffic because they tend to be in the left hand lane of 2 lane roads, and with their limited manoeuvrability they require more space to pull out and pass a parked vehicle.
- 4.3 In busy areas on QBC routes, dedicated spaces were created to set aside kerb space to accommodate local needs. In the majority of cases, provision for parking and loading was made on a like-for-like basis, with revised parking and loading controls where necessary and clearly marked areas for loading, disabled users and parking.



- 4.4 Restrictions were introduced to ensure consistency in times of operation, providing clear guidance to drivers over where they can park or load, and for how long.
- 4.6 Parking bays indented into pavements are a very useful method of providing for local needs as well as improving overall traffic flow. However, indented parking can only be introduced where space permits.



Bus boarders within indented bays greatly ease passenger access and bays provided on approaches to signals (as per example in Chorlton below) remove parked vehicles from the traffic stream and improve the capacity of signals for all users.

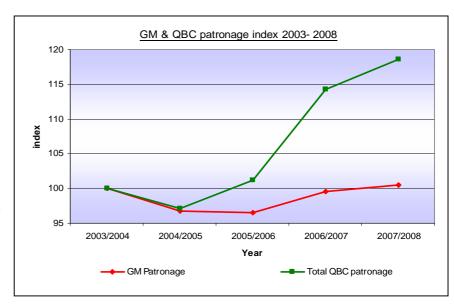


- 4.7 Through the QBC programme a significant number of on-street parking places have been provided by marking them with white lines. This has been found to assist in regulating and controlling parking in busy areas. Where no parking guidance is provided, i.e. unmarked lengths of street, users tend to park indiscriminately, blocking side roads and preventing access to bus stops.
- 4.8 Marked bays and indented parking have been provided in many areas of Manchester, including Chorlton, Didsbury, Cheetham, Rusholme, Levenshulme and Fallowfield. These improvements have assisted in removing kerbside obstructions, allowing buses to access stops as well as improving traffic flow for all road users.

### 5.0 Network Benefits

- 5.1 The objectives of the QBC programme were to:
  - Reduce bus journey times to make them more competitive with the car;
  - Reduce the variability of bus journey times and improve reliability of services:
  - Increase the comfort and convenience of bus travel for all users;
  - Ensure that bus services provide a real alternative to car use; and
  - Improve pedestrian and cycling facilities along the corridors.
- 5.2 In addition, improving bus reliability, punctuality and patronage levels are key LTP performance indicators for the County.

- 5.3 One of the most important indicators is impact on patronage. This has been reviewed using data provided by the two core operators of frequent services on the QBC network, First Group & Stagecoach.
- 5.4 In total, patronage on QBC routes has increased by 7.98m journeys between 03/04 and 07/08, representing an 18.6% increase overall. Journeys on QBC routes have accounted for over 1/5th of total GM bus patronage since 2006.



5.5 With specific reference to routes

that pass through Manchester, patronage has increased by an average of 14%:

Route	Service Number	% Increase in Patronage
Manchester to Hazel Grove	Service 192	29%
Manchester to Hyde	Service 201	13%
Manchester to Parrswood	Service 50	-13%
Oxford Rd/Wilsmlow Rd	Various	22%
Manchester to Bury	Service 135	33%
Manchester to Oldham	Service 82/83	1%
Average of All Manchester Routes		14%

- 5.5 Only one service route, the 50 service between Manchester and Parrswood, has seen a decrease in patronage. Operator's note that patronage on this route was impacted by routing changes within the City core during 2006/07.
- 5.6 As regards route performance, bus punctuality measured on the high-frequency QBC network has improved on all but one route. Generally, service punctuality has notably improved across the network and is significantly better on QBC routes than on the non-QBC network, with QBC services being 50% more punctual overall.
- 5.7 Competitiveness has been measured by assessing whether the "gap" between car and bus journey times has reduced or increased. Available data shows that there has been a decrease in this gap, indicating improved competitiveness.

- 5.8 A review of accident data has indicated an encouraging reduction in levels of injury accident occurrence in the location of major QBC schemes, averaging 19% saving for all accidents, and a 19% saving in pedestrian and cycle accidents.
- 5.9 Monitoring data from a number of key projects has shown that individual QBC schemes have delivered journey time and reliability benefits, as well as increasing pedestrian and cycle flows and enhancing public realm in key areas.
- 5.10 In the locations of QBC schemes monitoring data has illustrated significant journey time and reliability savings for buses. However, there have been increases in bus journey times on un-treated lengths of route, leading to an overall journey time increase of 5%.
- 5.11 Detailed analyses of the corridors have demonstrated that many of the individual journey time benefits gained from bus priority schemes have been eroded through growth in congestion on un-treated sections.
- 5.12 There is still clearly more to be done to deliver whole-route treatments and address problems on lengths of route that have not been subject to QBC improvements. However, where projects have been delivered, they have been shown to provide significant benefits and to have met the objectives of the QBC programme.

# 5.0 Implications of TIF Vote

- 5.1 A multi-million pound bus strategy and infrastructure improvement programme was developed as part of the TIF bid, with wide-ranging proposals to re-plan the operation of the bus network in conjunction with quality partnerships, extensive complimentary bus priority measures, information systems and improved ticketing.
- 5.2 As the TIF bid was unsuccessful, very limited funding sources are currently available to improve bus performance within Greater Manchester and no dedicated programme such as QBC exists.
- 5.3 Evaluation has shown that, on sections of the network that have not been improved, buses still suffer from low journey speeds and high journey time variability, which consequently leads to poor punctuality.
- 5.4 There is therefore a clear need to continue to invest in the bus network in order to maintain and build-on the positive results obtained through the QBC programme.
- 5.5 Consideration of priorities for both Manchester and the wider GM area needs to be given to determine the relative importance of the bus network. However,

- given that buses accommodate 85% of passenger movements within the County the priority of the bus network must be considered to be high.
- 5.6 Improvements delivered through the QBC programme have been extensive and have encouraged significant passenger growth on the core network, as well as delivering numerous facilities for vulnerable users, improving road safety, enhancing urban realm and, in many cases, reducing congestion.
- 5.7 Continuing the improvement to bus performance is essential if Manchester is to meet its National and LTP performance targets. Currently, performance indicators for punctuality are poor for scheduled services and are at risk of reducing on the high-frequency core network.
- 5.8 If no further funding is made available moving forward, then bus journey times will increase, reliability worsen and passenger levels will begin to fall. In addition, operator costs will increase and services may potentially be withdrawn or reduced to reflect worsening operating conditions. This then reduces the accessibility of employment areas, creates greater reliance on the private car and hence leads to greater levels of road congestion.
- 5.9.1 In summary, Manchester has benefited from £20m of infrastructure investment through the QBC programme. Numerous major QBC schemes and minor improvements have improved travel by bus as well as reducing congestion and providing new facilities for vulnerable users. The programme has therefore delivered a great deal and it is recommended that consideration be given to ways in which investment can be maintained within Manchester and the wider GM area to ensure that the benefits gained are not eroded over time.

# Appendix: Manchester QBC Case Study

#### **Chorlton District Centre**

#### **The Problem**

Chorlton is a major district centre with a high-street shopping environment.

Problems are caused by conflicts between pedestrians, cyclists, parking & loading activity, through-traffic and high-frequency bus services. The main problems identified by local people were:

- Lack of pedestrian crossing facilities at a major cross-roads junction in the district centre;
- Buses held up and running late;
- Difficulties in finding short-term parking;
- Not enough pedestrian facilities;
- Not enough safe cycling routes;
- Getting on and off buses; and
- · Difficulties in loading and unloading.

#### The Solution

A £1.5m improvement scheme partly funded by Manchester City Council, providing:

- Bus lanes on district centre approaches
- New pedestrian crossing facilities at traffic signals;
- Upgrading pelican crossings to puffins;
- Cycle lanes and forward stop lines at all junctions;
- Parking and loading bays built into the existing pavements;
- Improved signal junction layouts to maximise efficiency;
- The prohibition of a right turn except for buses; and
- New paving and raised kerbs at bus stops.





### **Benefits Gained**

- Journey time savings of nearly 5 minutes for buses running north/south through Chorlton in the morning peak;
- An overall increase of 23% in passenger boarding.
- 74% more boarders per bus in the AM peak;
- 28% more boarders per bus off-peak;
- Reductions in through traffic; and
- An increase of 7% in pedestrian flows across junctions.