

Report to Chief Officer of Highways & Transportation

Report to Highways Board

Date: 12th March 2019

Subject: Leeds Public Transport Investment Programme (LPTIP); A647 Bus Priority Corridor – Package 5a – Gloucester Terrace.

Are specific electoral wards affected?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, name(s) of ward(s): Armley; Little London & Woodhouse		
Are there implications for equality and diversity and cohesion and integration?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Is the decision eligible for call-in?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Does the report contain confidential or exempt information?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
If relevant, access to information procedure rule number:		
Appendix number:		

Summary of main issues

1. Leeds is a growing and successful city with the Best City Ambition for a Strong Economy and a Compassionate City. The proposals in this report support the priorities for 21st-Century Infrastructure and Health & Wellbeing in:
 - i. Improving transport connections, safety, reliability and affordability;
 - ii. Improving air quality, reducing noise and emissions;
 - iii. Supporting healthy, physically active lifestyles.

These support the outcomes we want for everyone in Leeds to:

- iv. Move around a well-planned city easily;
- v. Enjoy happy, healthy, active lives.

2. The Leeds Public Transport Investment Programme (LPTIP) consisting of £270m from the DfT, LCC, Combined Authority, bus operators and developers will deliver significant investment in public transport up to 2021. The LPTIP programme will deliver:
 - i. Bus Priority Corridors;
 - ii. City Centre Gateways;
 - iii. New sites and expansion of existing bus and rail park & ride sites;
 - iv. Rail Stations Accessibility and New Stations;
 - v. Complementary investment in bus services and low emission vehicles.

3. As part of the Leeds City Centre Package, funded via the West Yorkshire Plus Transport Fund, plans are currently under development to reconfigure Armley Gyratory in order to increase its capacity. This work is expected to be completed by 2022 and will complement the A647 Bus Priority Corridor project.
4. In June 2017 the Executive Board approved £15.3m of expenditure to progress LPTIP, including progressing the A647 Bus Priority Corridor project to Outline Business Case. The Outline Business Case for the A647 Bus Priority Corridor was submitted to WYCA in November 2018, and full approval was received in February 2019.
5. In July 2018, Leeds City Council Executive Board approved the expenditure of £5.19m to be funded from the LPTIP Capital Programme for the detail design and construction of a number of early intervention schemes identified on the five LPTIP Bus Priority Corridor projects, including Package 5a of the A647. Package 5a focuses on the delays to buses around the junction of Armley Road, Canal Street and Gloucester Terrace. The LPTIP Bus Infrastructure Package Board was informed of the current scheme design in October 2018.
6. In February 2019, Leeds City Council Executive Board gave approval for detail design and construction of the A647 Bradford to Leeds Bus Priority Corridor to be carried out, including Package 5a. However, approval of preliminary design at Highways Board is required in order for detail design of Package 5a to begin.
7. The anticipated final cost of Package 5a of the A647 Bradford to Leeds Bus Priority Corridor is £129,232, all of which will be incurred in the 2019/20 financial year.

Recommendations

8. The Chief Officer Highways and Transportation is recommended to:
 - (i) Note the Executive Board approval on 25th July 2018 to progress Package 5a to detail design and construction;
 - (ii) Note that the LPTIP Bus Infrastructure Package Board was informed of the current design of Package 5a in October 2018.
 - (iii) Note that WYCA approved the Outline Business Case for the A647 Bus Priority Corridor project in February 2019.
 - (iv) Note that in February 2019, Executive Board gave approval for detail design and construction of the A647 Bradford to Leeds Bus Priority Corridor to be carried out, including Package 5a.
 - (v) Approve the preliminary design of Package 5a – A647 Gloucester Terrace; and
 - (vi) Approve the commencement of detail design of Package 5a – A647 Gloucester Terrace.

1. Purpose of this report

- 1.1 To seek approval of the preliminary design of package 5a of the A647 Bus Priority Corridor project.
- 1.2 To seek approval to commence detail design of package 5a of the A647 Bus Priority Corridor project.

2 Background information

2.1 Leeds transport infrastructure represents a major challenge for the City. Years of under investment and its impact on the city's economy and quality of life means a comprehensive package of interventions need to be progressed over the next decade. Accordingly, in order to achieve our stated ambitions, the Council is leading on major schemes within the £1bn West Yorkshire Transport Fund and working in partnership with the Combined Authority on the £173.5m LPTIP.

2.2 The scheme described within this report is an important part of early moving the city towards our Connecting Leeds Vision which looks to create:

- A world-class connected city, that allows seamless end to end public transport journeys internationally, nationally, regionally and locally;
- An ambitious city, that attracts and plans for inclusive growth;
- A smart city that embraces innovative technology to efficiently use, manage and maintain the transport network;
- A people-focused city, with well-connected neighbourhoods and a city centre that's easily accessible for everyone;
- A healthy city, that allows more people to walk, cycle and be more active, with reduced traffic and emissions to create cleaner air.

2.3 In December 2016 Executive Board agreed the submission of an Outline Strategic Case for the Leeds Public Transport Investment Programme (LPTIP) to DfT for £173.5m for public transport. With anticipated local and private sector contributions the total investment package is worth c.£270m. At present the total public funding confirmed comprises the contributions from DfT (£173.5m), LCC (£8.8m) and WYCA (£0.97m) totalling £183.3m. Set against the relative low levels of transport investment in Leeds and indeed the region when compared with other regions and especially London, this funding will begin to make a real difference in narrowing the gap and preparing for future investment and the leverage of further funds.

2.4 The aims and ambitions of the LPTIP have been informed by the ongoing Transport Conversation and the schemes have been selected to deliver the following aspirations:

- Move forward the goal of doubling bus patronage from 2016 levels within 10 years;
- Support economic growth by unlocking transport constraints in key growth areas and across the city;
- Align with the emerging Leeds Transport Strategy, West Yorkshire Transport and Bus Strategies, as well as the national/pan northern growth strategies including HS2 and Northern Powerhouse Rail;

- Improve health outcomes especially air quality by reducing transport emissions and making a significant contribution towards compliance with DEFRA's legal requirement of the city;
- Complement the existing schemes being delivered through the WYTF such as Leeds City Centre Package and the Corridor Improvement Programme;
- Reflect the key messages from the Transport Conversation in terms of improving public transport operation and quality;
- To leverage match funding from the private sector, both public transport providers and developments / businesses who will benefit from the public investment; and
- Cognisance of and adaptability for the delivery of the longer term strategy.

2.5 In June 2017 the Executive Board approved £15.3m of expenditure to progress LPTIP, including progressing the A647 Bus Priority Corridor project to Outline Business Case. The Outline Business Case was submitted to West Yorkshire Combined Authority in November 2018, and full approval was received in February 2019.

2.6 In July 2018, Leeds City Council Executive Board approved the expenditure of £5.19m to be funded from the LPTIP Capital Programme for the detail design and construction of a number of early intervention schemes identified on the five LPTIP Bus Priority Corridors, including Package 5a of the A647. Package 5a focuses on the delays to buses around the junction of Armley Road, Canal Street and Gloucester Terrace. The LPTIP Bus Infrastructure Package Board was informed of the current scheme design in October 2018.

2.7 In February 2019, Leeds City Council executive Board gave approval for detail design and construction of the A647 Bus Priority Corridor to be carried out, including Package 5a. However, approval of preliminary design at Highways Board is required in order for construction of Package 5a to begin.

3 Main issues

3.1 An essential component of the LPTIP target to double bus patronage is to improve the reliability and times of bus journeys. Improvements therefore need to be made on the key bus corridors coming into the city and within the city centre itself. To determine the optimum improvements in street infrastructure all of the relevant baseline data along the key corridors and city centre was analysed such as traffic speeds and flows of public and private transport, bus patronage by stages, general bus routing information, accident details, junction hotspots, land ownership, site allocations plans, non-motorised-user (NMU) facilities and usage parking etc. The A647 emerged from this process as one of 5 corridors on which new bus priority measures would be implemented.

3.2 The A647 Bus Priority Corridor improvement works include 5 distinct packages, stretching from the Bradford border to the junction between Gloucester Terrace, Armley Road and Canal Street. This report focuses on Package 5a, which focuses on the junction of Gloucester Terrace, Armley Road and Canal Street. Specifically, the package targets the operation of the bus gate outbound on Canal Street, and the

toucan crossing west of Gloucester Terrace. The issues affecting this area at present are as follows:

OUTBOUND

- The loops for the detection of approaching buses on the bus lane are in the wrong location, too close to the stopline, resulting in the majority of buses coming almost to a stop at the bus gate. Site observations also indicate a higher than expected failure rate of bus detection forcing buses to wait for the default green at the bus gate in the signals cycle.
- The outbound bus stop is well used and is located between the bus gate and toucan crossing (implemented as part of the City Connect scheme). The toucan provides a vital crossing point in the cycle network and surveys show it is well used by cyclists and pedestrians. Outbound buses are therefore often stopped at the toucan.
- The toucan only has pushbuttons and microwave vehicle detection in place, meaning that pedestrian clearance (intergreen) times are often longer than needed, delaying traffic in both directions. Given high traffic demand in peak periods, it is usual for pedestrians/cycles to wait for the maximum timer (40 seconds), even though traffic throughput is inefficient whilst pedestrians are waiting. The toucan signal controller is not linked to the bus gate, nor is it set up to provide any form of bus priority.
- The combination of detection issues at the bus gate, bus stop and toucan crossing mean that buses often come to a stop three times in a short distance, even in free flow traffic conditions.
- In more congested conditions typical through the afternoon, queues form along the corridor, which appears to be associated with congestion forming both around the pedestrian crossing between Eyres Mill Side and Armley Park, and at the Ledgard Way Junction. As a result, the localised issues at this site are exacerbated by queuing traffic.

INBOUND

- The toucan crossing is located at the eastern end of a 600m long single lane section of the A647. The frequent calling of the toucan crossing sends shockwaves of slow moving traffic back along this section of road in busy times causing delays to buses which cannot avoid the congestion. Queuing traffic is often slow to move through the crossing as a result of a combination of issues on the link including numerous site accesses, the Pickering Street junction, and a bus stop. Driver behaviour also appears to be impacted as a result of the merge after the Ledgard Way junction, with drivers not expecting freer flowing conditions before reaching the dual carriageway.
- The toucan only has pushbuttons and microwave vehicle detection in place, meaning that pedestrian clearance (intergreen) times are often longer than needed, delaying traffic in both directions. Given high traffic demand in peak periods, it is usual for pedestrians/cycles to wait for the maximum timer (40 seconds), even though traffic throughput is inefficient whilst pedestrians are waiting. The toucan signal controller is not linked to the bus gate, or set up to provide any form of bus priority.

3.3 Package 5a seeks to address the issues raised in point 3.2 via the following measures:

- New bus and general traffic detection loops located in the bus lane, bus stop and approaches to the toucan crossing

- Linking of the toucan and bus gate signals via a MOVA controller
- Provision of kerbside and on crossing detection at the toucan crossing

- 3.4 Results of traffic modelling have shown that Package 5a would enable the junction to operate with similar queues, delays and degrees of saturation as in the do nothing scenario. It is also anticipated that implementation of linked MOVA at the toucan crossing and bus gate will allow buses to be given effective priority through both sets of signals, thus improving bus journey times and reliability. The impact of implementation of MOVA on bus journey times and reliability has not been formally estimated, due to the difficulty in accounting for such changes in signalling within fixed time traffic models. Implementation of MOVA will also help to decrease pedestrian wait times. The modelling results are discussed further in Appendix C.
- 3.5 Physical works including relocation of the existing toucan crossing and introduction of new toucan crossings were also considered. However, it has not been recommended that these works be progressed, as the measures detailed in paragraph 3.3 are expected to deliver greater benefits than major physical works.
- 3.6 The proposed works fit within the Best Council Plan strategic aims to promote sustainable and inclusive economic growth by improving the economic wellbeing of local people and businesses and the 2018/19 Best Council Plan priorities on 'Low carbon' and 'Transport and infrastructure'.
- 3.7 The initial period of public engagement for the A647 Bus Priority Corridor occurred in spring 2018, with a second period of consultation taking place in November and December 2018. Responses relating to Package 5a and the surrounding area were predominantly positive, and are discussed in more detail in sections 4.1.5 and 4.1.6.
- 3.8 There are no land acquisition requirements as part of Package 5a. The package is predominantly technology based, although some minor construction works will be required for the installation of detection loops.
- 3.9 The estimated cost of the scheme is £129,232.
- 3.10 There will be no Traffic Regulation Orders required to enable these proposals to be implemented.
- 3.11 Construction of the scheme is programmed to start in June 2019, and is expected to be completed in around 2 months.

4 Corporate considerations

4.1 Consultation and engagement

- 4.1.1 The Transport Conversation and the £173.5 million LPTIP proposals were reported to Executive Board on the 14th December 2016, with LPTIP proposals having been developed in response to the feedback from the Transport Conversation engagement process in Summer/ Autumn 2016.
- 4.1.2 A three month Transport conversation in the Autumn of 2016, generated 8,169 questionnaire responses, (along with feedback from 100 workshops, meetings and

presentations) demonstrating a keen interest in engaging with the city on issues of transport, both now and in the longer term.

- 4.1.3 The report showed that across the consultation there was a strong desire to travel more sustainably. Many respondents referred to wanting to improve public transport, walking and cycling routes and respondents felt that investment in the Leeds Transport System was vital to improve the economy and the environment. The key themes from the feedback included issues around bus reliability, cost, poor service and lack of accessibility of public transport. There was strong support for making the city a more people focussed place, including improved provision for pedestrians and cyclists, whilst reducing the impact of congestion and environmental impacts.
- 4.1.4 Since that time the Transport Conversation has continued through the development of:
- A 'Connecting Leeds' Communications and Marketing Plan aimed at raising public awareness of Leeds' transport ambitions and the wide role connectivity plays in assisting inclusive economic growth for the city and Leeds City Region, improving health, greater social mobility through education, training and employment, and supporting independent lifestyles;
 - A bi-monthly Cross Party meeting which has had early sighting and involvement of the schemes as they progress;
 - Reporting and presentation to all 10 Community Committees (Transport sub committees and Forums) in late autumn 2017. Discussing the results of the Transport Conversation relating to their area and progression of both the LPTIP and other transport improvements proposed or on-going for that area.
- 4.1.5 The first phase of consultation for the A647 Bus Priority Corridor project was carried out in Spring 2018. This included leaflet and survey promotion, public engagement exhibitions and attending local neighbourhood forums. A total of 909 responses to the online consultation were received via the Commonplace website developed for LPTIP. A further 11 submissions were received via email. Some packages of works received more positive than negative responses, whilst others received more negative responses. Package 5, which stretches from Ledgard Way to Abbott Court, received predominantly positive responses, although there were no comments specifically referencing the proposals forming Package 5a. It should be noted that the proposals for this area presented at this round of consultation included repositioning of the westbound bus stop and toucan crossing, in addition to improved detection at the bus gate and linking of bus gate and toucan crossing signals.
- 4.1.6 A second round of public consultation began in November 2018, and closed on 14th December 2018. Materials provided as part of this public consultation included details relating to Package 5a as described in this document. Responses to the proposals on this section were predominantly positive.
- 4.1.7 Local ward members have not been consulted specifically on this package of works, as no physical changes are proposed. Local ward members have had a full briefing on the designs for the A647 Bus Priority Corridor as a whole, as part of the second round of public consultation. The only comment received regarding Package 5a stressed the need to reduce the wait time for cyclists at the toucan crossing, which the proposed scheme is expected to achieve.

- 4.1.8 Local bus operators (First Bus) were consulted and are in support of the proposals for package 5a.
- 4.1.9 A Road Safety Audit has not been undertaken for Package 5a as no physical changes to the road layout are proposed.

4.2 Equality and diversity / cohesion and integration

- 4.2.1 An Equality, Diversity, Cohesion and Integration (EDCI) Screening has been undertaken for Package 5a, and it was determined that no EDCI assessment was required.

4.3 Council policies and best council plan

- 4.3.1 The anticipated benefits of using the £183.3m to create improvements to the Leeds transport network has the potential to contribute to the vision for Leeds 2030 to be the best city in the UK, and the following Best Council Priorities:
- Inclusive Growth (Supporting growth and investment helping everyone benefit from the economy to their full potential)
 - 21st Century Infrastructure (Improving transport connections, safety, reliability and affordability)
 - Child-friendly city (Supporting all children and young people to reach their potential)
- 4.3.2 The strategy also contributes to the objectives of the Local Development Framework, Leeds Core Strategy, Local Transport Plan 3, WYCA Transport Strategy, and Strategic Economic Plan.

4.4 Resources and value for money

- 4.4.1 The funding approvals requested in this report are to be allocated from the Leeds Public Transport Investment Programme which currently stands at £183.3m from contributions from the DfT (£173.5m), LCC (£8.8m) and WYCA (£0.97m). Further funding approvals will be required from the Combined Authority for spend from the DfT and WYCA funding.
- 4.4.2 One of the conditions in the letter from the DfT is that investment decisions on individual components of the LPTIP will be made locally in accordance with the WYCA Assurance Framework previously agreed with the government. A parallel authorisation is currently being progressed through this assurance process with WYCA to release the expenditure requested in this report.
- 4.4.3 The Benefit to Cost Ratio (BCR) for the complete A647 Bus Priority Corridor project has been estimated as 3.39 for the preferred option, as set out in the Outline Business Case submitted to WYCA in November 2018. BCRs have not been calculated at the package level.
- 4.4.4 Package 5a will be funded from the LPTIP. The anticipated final cost of the scheme is £129,232, all of which will be incurred in the 2019/20 financial year.

4.4.5 In February 2019, Leeds City Council Executive Board gave approval for detail design and construction of the A647 Bradford to Leeds Bus Priority Corridor to be carried out, including Package 5a.

4.5 Legal implications, access to information, and call-in

4.5.1 This report is not eligible for call-in as it is a Significant Operational Decision which sits under the Key Decision which was approved at Executive Board in February 2019.

4.5.2 This report does not require a decision to be made on the spending of LCC funds.

4.5.3 There are no specific legal implications arising from this report.

4.6 Risk management

4.6.1 The LPTIP serves to make progress towards the Leeds Long Term Transport Vision and Keeping the city moving. If the programme is not implemented, Leeds will not be able to develop in the way articulated above. Given the timescales available to assemble the high level programme, there will need to be some flexibility to adjust the programme to meet cost, programme and deliverability changes.

4.6.2 The schemes will be assured through the WYCA framework set up for the West Yorkshire Transport Fund, already approved by the Department for Transport. Progression through this assurance process in a timely manner is necessary in order to avoid delays to the overall programme delivery.

4.6.3 A Programme Board has been established to manage delivery of the Programme with Package Boards responsible for each package. Risks are actively managed through these Boards.

5 Conclusions

5.1 Leeds is a successful city and its economy continues to grow. Improving the existing transport network is an important enabler helping Leeds to be a prosperous, liveable and healthy city. Accordingly, the £173.5m funding allocated from DfT added to local funding creates an opportunity to deliver £270m of improvements to public transport in Leeds in the short to medium term. These will include a transformation of the bus network, plans for new rail stations at key employment growth locations, build some world class city centre gateways and pave the way for ambitious longer term plans emerging through the Leeds Transport Strategy.

5.2 The proposals described in this report represent an important part of the LPTIP and will make a significant contribution to the quality of life of people living, working and visiting the city and contribute to its on-going growth and economic success.

6 Recommendations

6.1 The Chief Officer Highways and Transportation is recommended to:

- (i) Note the Executive Board approval on 25th July 2018 to progress Package 5a to detail design and construction;

- (ii) Note that the LPTIP Bus Infrastructure Package Board was informed of the current design of Package 5a in October 2018.
- (iii) Note that WYCA approved the Outline Business Case for the A647 Bus Priority Corridor project in February 2019.
- (iv) Note that in February 2019, Executive Board gave approval for detail design and construction of the A647 Bradford to Leeds Bus Priority Corridor to be carried out, including Package 5a.
- (v) Approve the preliminary design of Package 5a – A647 Gloucester Terrace; and
- (vi) Approve the commencement of detail design of Package 5a – A647 Gloucester Terrace.

7 Background documents¹

7.1 None.

8 Appendices

- 8.1 Appendix A - Technical drawing
- 8.2 Appendix B - Gloucester Terrace Phase 2 consultation board
- 8.3 Appendix C – Local Junction Modelling

¹ The background documents listed in this section are available to download from the Council's website, unless they contain confidential or exempt information. The list of background documents does not include published works.