

A720 Sheriffhall Roundabout

Public Transport & Active Travel Review Report

Transport Scotland

Document Number: 60572241-ACM-HGN-SW_GN_000_Z-RP-CH-0003
Project number: 60470009
December 2020

Prepared for:

Transport Scotland
Buchanan House
58 Port Dundas Road
Glasgow G4 0HF

Prepared by:

AECOM Limited
Aurora, 120 Bothwell Street
Glasgow, G2 7JS, United Kingdom
T +44 (0) 141 248 0300
aecom.com

© 2020 AECOM Limited. All Rights Reserved.

This document has been prepared by AECOM Limited ("AECOM") for sole use of our client (the "Client") in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM.

Table of Contents

1	Introduction.....	5
2	Scope of the study	5
3	Public Transport Review.....	5
3.1	Bus Prioritisation.....	5
3.2	Tram feasibility	6
4	Active Travel Review	6
5	Consultations.....	7
5.1	Public Transport & Active Travel Review Workshop	7
5.2	Workshop Feedback.....	7
5.3	Stakeholder Consultation - Bus Companies.....	8
6	Conclusion	9
	Appendix A - TN46 Public Transport Review	10
	Appendix B - TN50 Active Travel Review	11
	Appendix C - PT & AT Workshop Slides.....	12

1 Introduction

Following completion of the A720 Sheriffhall Roundabout scheme (hereafter referred to as the Proposed Scheme) Design Manual for Roads and Bridges (DMRB) Stage 3 Scheme Assessment, draft (Road and Compulsory Purchase) Orders and an Environmental Statement (ES) were published in December 2019. Public Exhibitions were subsequently held in December and the relevant statutory process is currently ongoing.

Following the representations (including objections) received, and the Edinburgh and South-East Scotland City Region Deal (ESES CRD) meeting attended by Transport Scotland in February 2020, it was agreed that:

- The Proposed Scheme would be reviewed to see whether further improvements to active travel and public transport facilities would be feasible, whilst not creating additional impacts for local landowners, residents and businesses.
- A technical stakeholder workshop would be held to discuss the findings of the review, with technical officers from all local authority City Region Deal (CRD) partners in attendance.

2 Scope of the study

The study has reviewed the Proposed Scheme from the perspective of public transport and active travel journeys – both the current trip patterns and taking cognisance of any future plans or aspirations from the CRD partners.

Of critical importance is that the review treats the published draft road orders, compulsory purchase order and Environmental Statement (the draft consents) as limitations on the scope of any proposals. Transport Scotland is satisfied that the draft consents as published are a proportionate way of achieving the scheme objectives and does not wish to consider increasing the scheme impacts in terms of land acquisition or environmental impact any further than is necessary.

Accordingly the review seeks to maximise the benefits of the scheme for public transport and active travel, focussing on additional opportunities that can be realised within the draft consents framework.

3 Public Transport Review

3.1 Bus Prioritisation

As part of the Public Transport review, a number of potential measures have been considered for the implementation of bus priority into the Proposed Scheme. Full details of the options considered for implementation and the relevant assessment work undertaken as part of this review are included in Appendix A – Technical Note (TN) 46 'Public Transport Review'.

Based on current local and national guidance, a number of potential measures have been considered for the implementation of bus priority. Of the wide range of measures considered as part of the review, a total of six options were identified as appropriate for further consideration:

1. Provision of an additional lane and entry
2. Reallocation of carriageway space to buses
3. Extension of roundabout entry flares
4. Long extension of Lane 1
5. Full signalisation of the roundabout with passive priority
6. Full signalisation of the roundabout with active priority

These options have been considered as possible enhancements to the facilities included in the Proposed Scheme as set out in the draft Orders and Environmental Statement; pros and cons of their introduction have been assessed.

Examination of existing traffic flows indicates that the main bus movements through Sheriffhall Roundabout are between the A7 (North) and the A6106 (South). The proposed scheme is expected to deliver significant benefits to local traffic, including bus services and the Shawfair Park & Ride facility, due to the improved traffic conditions on local roads resulting from the separation of strategic and local traffic at Sheriffhall. Examination of operating conditions on the A7/A6106 southbound route indicates that journey time savings would range from 3.5 minutes to 5 minutes during the PM period, with smaller changes in journey times in the northbound direction.

The various physical interventions were considered in the context of this baseline condition. Options 1, 2, 3 and 5 were discounted due to negligible benefits to buses over the baseline, impacts on general traffic and deliverability issues. Options 4 and 6 were considered to be potentially beneficial to bus journey times and reliability, but benefits were considered to be marginal when compared to the benefits already offered by the Proposed Scheme. These bus priority measures, especially if considered in isolation, also introduce operational challenges or conflicts for general traffic.

The Proposed Scheme will also be futureproofed with the provision of ducting throughout the junction. This would facilitate the implementation of Option 6 later if deemed necessary and beneficial in future, and as part of a longer term and wider strategy.

3.2 Tram feasibility

The Public Transport review included an initial feasibility assessment for the potential extension of the Edinburgh Tram line to Dalkeith through Sheriffhall Roundabout. Full details of this assessment are included in Appendix A – Technical Note (TN) 46 ‘Public Transport Review’.

City Region Deal Partner the City of Edinburgh Council (CEC) have advised that their future public transport plans might include the extension of the tram line to Dalkeith, potentially along the A7 and through Sheriffhall Roundabout, and enquired whether the current design for the grade separation of Sheriffhall Roundabout would be able to accommodate this extension.

There are no specific plans for the tramline extension at present, but an initial feasibility assessment has been undertaken to ensure the Proposed Scheme would not represent a barrier to the tram extension plans, especially in relation to the available headroom at structures. The A720 structures included in the Proposed Scheme have been designed to provide a minimum 6.45m clearance over the roundabout, as defined for a High Load Route in DMRB TD 27 (now CD 127) ‘Cross-sections and Headrooms’, therefore providing sufficient headroom for any future tramline extensions through the roundabout.

4 Active Travel Review

The Proposed Scheme includes grade-separated non-motorised user (NMU) links under the Sheriffhall Roundabout with five subways connecting to off-carriageway shared pedestrian/cycle routes on the A7 North, A7 South, A6106 Millerhill Road and A6106 Old Dalkeith Road. A 3m wide cross section with 1m wide verges generally applies to all proposed facilities, with the only exceptions being a 2m wide cycle link west of the A6106 South and a short 2m wide NMU extension east of the A7 North.

The active travel facilities included in the Proposed Scheme have been reassessed to determine whether further improvements would be feasible, whilst not creating additional impacts for local landowners, residents and businesses. Full details of the potential enhancements considered for implementation and the relevant assessment work undertaken as part of this review are included in Appendix B – Technical Note (TN) 50 ‘Active Travel Review’.

The following potential further enhancements were identified and assessed:

- Widening of shared footway/cycleway routes
- Provision of additional NMU routes/subway
- Extended NMU provision
- Signing and Lighting

The proposed 3m wide facilities, which are suitable for expected flows of up to 300 users per hour, cater for a potential significant increase in demand and further widening is not deemed necessary. The Proposed Scheme provides significantly improved NMU facilities that connect to existing facilities on all side roads. The introduction of additional NMU routes/subways or the provision of extended/widened facilities is therefore not deemed necessary, and would not be feasible due to deliverability issues (drainage issues, land constraints and republication of Orders). The Proposed Scheme includes the provision of signage and lighting throughout the dedicated NMU route network, including subways, and further provision is therefore not deemed necessary.

5 Consultations

5.1 Public Transport & Active Travel Review Workshop

As agreed at the ESESCRD meeting in February 2020, a workshop was arranged to present the outcome of the Public Transport and Active Travel review to the ESESCRD partners. The workshop was held virtually by AECOM and Transport Scotland on 6th August 2020 using Microsoft Teams. Technical officers for the following Local Authorities were invited to attend:

- Midlothian Council (MLC)
- City of Edinburgh Council (CEC)
- East Lothian Council (ELC)
- West Lothian Council (WLC)
- Scottish Borders Council (SBC)
- Fife Council (FC)
- SEStran

Of those invited, only representatives from MLC, CEC and SEStran were able to attend.

The workshop was structured in two parts, one for each review undertaken, and started with introductory slides that gave some background information on the Proposed Scheme and the purpose of the review.

Part 1 focused on the Public Transport review. The existing public transport facilities were described and the impact of the proposed scheme on existing facilities was detailed. The development and assessment work undertaken for the bus priority options was summarised, along with the outcome of the review. The tram feasibility review and its outcome were also included in Part 1.

Part 2 focused on the Active Travel review and was structured in the same way as Part 1: after a description of the existing and proposed NMU facilities, the review work and its outcome were summarised.

The workshop closed with an overall summary of the Public Transport and Active Travel review outcome and a description of the next steps.

The work undertaken for the review was welcomed and generated positive comments and discussions during the workshop. Those who attended the workshop provided very constructive feedback.

A copy of the slides presented at the workshop is included in Appendix C.

5.2 Workshop Feedback

The Public Transport & Active Travel review Workshop slides were circulated to all invitees, with an invitation to provide feedback by 21st August 2020.

Formal feedback was received from MLC on 19th August 2020, and from CEC on 21st August 2020. No formal feedback was received from any other invitees.

MLC reiterated the positive feedback on the work undertaken, noting in particular that the Proposed Scheme is fit for purpose for public transport and the importance of the scheme to promote economic development in the area. The only concern MLC expressed in their formal feedback was in relation to the financial risk associated with the potential installation of traffic signals at a later date, should they be required for road safety. MLC also noted that the Local Authority generally has no power to implement new or amended bus routes through Sheriffhall after construction is complete.

CEC feedback included a number of detailed queries and comments on traffic modelling, as well as on the provision for public transport in the short, medium and long term. CEC particularly insisted on the implementation of dedicated bus priority measures from the outset, in the form of long bus lanes and traffic signals as a minimum. CEC also noted the scheme should consider and support opportunities for Bus Rapid Transport (BRT) to route through the junction and be fully futureproofed for the implementation of tram infrastructure. CEC welcomed the outcome of the initial tram feasibility review and the futureproofed structures on the A720 for the inclusion of an additional lane if required in future. CEC also recognised the effort to provide extended and well-configured active travel facilities as part of the proposed scheme and would be keen for the opportunity to comment as the detailed design develops.

Formal responses to MLC and CEC were issued by Transport Scotland via digital letter on 5th October 2020.

5.3 Stakeholder Consultation - Bus Companies

Consultations with the bus companies operating in the area of the Proposed Scheme were also undertaken after the workshop.

A summary of the review work undertaken and an extract of the workshop presentation slides was sent to Lothian Buses, Borders Buses and Lothian Community Transport Services, with an invitation to provide feedback on the bus priority options considered and on the outcome of the review.

Lothian Buses provided feedback on 25th August 2020, questioning the need for bus lanes on the approaches to the roundabout. Lothian Buses expressed the opinion that public transport would be better served by interventions elsewhere on the local road network, and highlighted the worse delays to buses currently occur on A772 and Lasswade Road due to traffic avoiding Sheriffhall roundabout. Lothian Buses also noted that any signal priority at Sheriffhall should not require the installation of new equipment on buses, as a traffic signal controller should be able to interact with buses using systems already in place (e.g. CEC's UTS system).

Borders Buses sent a holding response on 21st August 2020, but no formal feedback has been received to date. No response was received from Lothian Community Transport Services.

6 Conclusion

The review has set out options which have been considered to further improve and enhance the active travel facilities and public transport provision which are already incorporated in the Proposed Scheme. The critical aspect of the review was to ensure that any options considered did not create additional impacts for local landowners, residents and businesses and fundamentally require a change to the published draft consents consisting of the draft road orders, compulsory purchase order and Environmental Statement.

The active travel review considered a range of options which could potentially improve the level of NMU provision at the junction, including increasing the length and width of footway/cycleway links as well as incorporating a further subway. The review has concluded that any improvements to further enhance NMU facilities to the Proposed Scheme would not be feasible as it would require significant redesign which would have an impact on adjacent land/properties, thereby resulting in the need for the republication of the draft consents.

The review of improvements to public transport provisions considered six bus priority options, from which four options were discounted as a result of demonstrating negligible benefits to buses, exhibiting detrimental impacts on general traffic and having deliverability issues. The remaining Options, 4 and 6, were considered to provide benefits to bus journey times and reliability, however these benefits were considered to be marginal when compared to the benefits that the Proposed Scheme already offers. Furthermore, these bus priority measures also introduce operational challenges or conflicts for general traffic passing through the junction. It is therefore concluded that these options offer marginal benefits to bus journey times compared to what will be realised by the scheme as currently promoted.

It is however recognised that in order to futureproof the Proposed Scheme, ducting provision has been included which would allow for the implementation of Option 6 (full signalisation) at a later date should this be deemed necessary and beneficial as part of a longer term and wider strategy. Furthermore, it is noted that the aspirations for an extension to the tramline have been considered and the form of the main A720 bridge structures have been designed such that they do not preclude this transport mode being promoted as part of a future strategy.

