ABERDEEN CITY COUNCIL

COMMITTEE	Net Zero, Environment and Transport
DATE	27 March 2024
EXEMPT	No
CONFIDENTIAL	No
REPORT TITLE	South College Street Phase 2 - Options Appraisal
REPORT NUMBER	COM/24/084
DIRECTOR	Gale Beattie
CHIEF OFFICER	David Dunne
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TERMS OF REFERENCE	7, 8

1. PURPOSE OF REPORT

1.1 This report advises Members of the outcomes of the Scottish Transport Appraisal Guidance (STAG) based appraisal of options for improvements to travel conditions at the Queen Elizabeth Bridge/North Esplanade West roundabout and the review of active travel provision on Riverside Drive, where this road passes underneath the Wellington Suspension Bridge. An outline of the findings from the technical report is provided, along with recommendations on the next steps for the preferred option that has been identified through the appraisal process.

2. RECOMMENDATIONS

That the Committee :-

2.1 Note the findings and outcomes of the South College Street Junction Improvements Project (Phase 2) - Option Appraisal Report (Appendix 1);

2.2 Agree that Option 3 Signalised Junction (All movements permitted), described in paragraph 3.11 of this report, is the preferred option and should proceed to further development work, along with the wider active travel improvements on North Esplanade West identified in section 9 of Appendix 1.

2.3 Instruct the Chief Officer – Strategic Place Planning to seek external funding to allow the continued development of the option agreed in 2.2, including the development of an Outline Business Case, and report the Outline Business Case to the Finance and Resources Committee once completed.

2.4 Note the findings of the option testing for the Riverside Drive active travel improvements (as described in paragraph 3.12 of this report) and instruct the Chief Officer – Strategic Place Planning to seek external funding to allow for the continued development of wider active travel connectivity improvements adjacent to and across the River Dee at this location and report any findings to a future meeting of this Committee.

3. CURRENT SITUATION

Background

3.1 The South College Street corridor is subject to an on-going series of improvements to road capacity and active travel infrastructure to facilitate the delivery of the City Centre Masterplan (CCMP). Following the adoption of the CCMP in 2015, the impact of the proposed changes on the city's road network was assessed through a traffic modelling study. This identified a number of transport network changes required to support the Masterplan's ambitions, including upgrading of the traffic capacity at the Queen Elizabeth Bridge / North Esplanade West junction. Outcomes from the study were reported to the Council's Communities, Housing and Infrastructure Committee on 08 November 2017, where Members agreed an interim scheme (Phase 1) that did not include changes to the Queen Elizabeth Bridge / North Esplanade West roundabout itself. The Phase 1 scheme was substantially complete and operational in July 2023 and a report titled on the 'South College Street Junction Improvements (Phase 1) Project Completion, Monitoring & Evaluation' is also on the Agenda for this Committee meeting. The works were funded through Transport Scotland's Bus Priority Fund and Aberdeen City Councils Capital budget. Relevant feedback and lessons learnt from the Phase 1 project will be considered and incorporated into Phase 2 as the project develops.

3.2 At the same Communities, Housing and Infrastructure Committee meeting in November 2017, Members approved the principle of a traffic signal junction at the current Queen Elizabeth Bridge / North Esplanade West roundabout, and instructed the then Head of Planning and Sustainable Development to take forward a review of the junction arrangement on completion of the Aberdeen Western Peripheral Route (AWPR) and subsequent development of a new roads hierarchy.

Site Location

3.3 The junction is a four-arm roundabout in Aberdeen city centre connecting the key routes of Queen Elizabeth Bridge (A956), North Esplanade West (A956), Riverside Drive, and South College Street – See Figure 1:

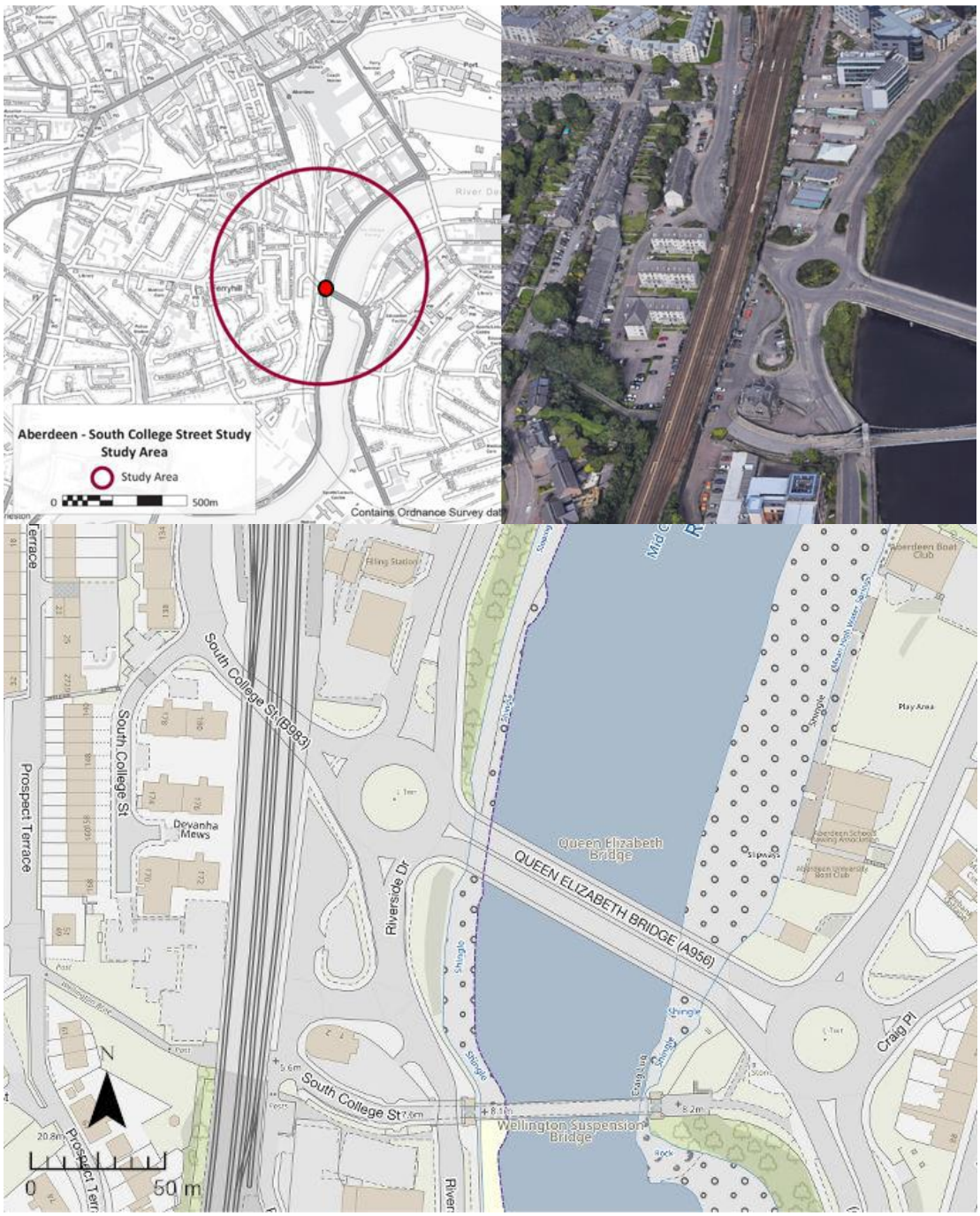

Figure 1 - Study Area
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3.4 Following the completion of the AWPR and the adoption of a new Roads Hierarchy in 2019, Nestrans funding was secured by Officers and utilised to commission SYSTRA consultants to undertake a proportionate STAG (Scottish Transport Appraisal Guidance) based appraisal of options for transport improvements (particularly active travel and public transport improvements) at the Queen Elizabeth Bridge / North Esplanade West roundabout. This report provides the Committee with a summary of outcomes of this options appraisal (Appendix 1).

Objective Setting

3.5 The objectives of the City Centre and Beach Masterplan have been considered within the objectives of this study in order for the junction itself to form part of the overarching transport strategy around the city centre. Utilising the identified Problems, Issues, Constraints and Opportunities, and drawing upon the relevant objectives of the City Centre and Beach Masterplan, the following Study Objectives were developed and refined during the appraisal process:

- Improve Pedestrian, Wheeling and Cycling connectivity
- Ensure safe and equitable access for all
- Maintain public transport connections
- Maintain freight connections through the junction
- Optimise the traffic network performance to facilitate the introduction of the City Centre Masterplan
- Network Resilience

Option Generation and Development

3.6 The initial stage of the option development process identified nine options to be considered for initial sifting. Details of the assessment and subsequent sifting of these options is contained within Appendix 1. The four junction design options remaining from the option generation and initial sifting process were carried forward for further development, traffic modelling and appraisal. These were:

Table 1 – Junction Design Options for Modelling & Appraisal

Option	Option Concept	Option Detail Summary
Option 1	Enhanced Roundabout (Additional Pedestrian Crossing on Queen Elizabeth Bridge)	Retention of existing roundabout with remote staggered Pedestrian crossing on Queen Elizabeth Bridge approximately 20m from the junction.
Option 2	Spiral Roundabout (Additional Toucan Crossing on Queen Elizabeth Bridge)	Re-alignment of the roundabout eastwards to allow for the implementation of a remote staggered pedestrian crossing on Queen Elizabeth Bridge.
Option 3	Signalised Junction (All Turning Movements Permitted)	All turning movements permitted. Walk-with staggered Toucan crossing on Queen Elizabeth bridge and staggered pedestrian crossing on South College Street. Retention of existing remote crossings on Riverside Drive and North Esplanade West.
Option 4	Signalised Junction (Restricted Turning Movements)	Banned Right Turn movements on North Esplanade West and Riverside Drive. Walk-with staggered Toucan crossing on Queen Elizabeth Bridge and staggered pedestrian crossing on South College Street. Retention of existing remote crossings on Riverside Drive and North Esplanade West.

Concept design drawings for each option are provided within Appendix 2, along with the key features of each option.

Option Appraisal

3.7 An appraisal of the four options was undertaken to understand the ability of each to deliver against the study objectives. The options were assessed in the Aberdeen City Centre Paramics traffic model to provide quantitative evidence to support their performance against the study objectives.

3.8 In addition to the appraisal against the study objectives, an initial qualitative appraisal has been undertaken against STAG criteria (i.e. Environment, Climate Change, Health, Safety & Wellbeing, Economy, Equality & Accessibility); Established Policy Directives and; Feasibility, Affordability, & Public Acceptability.

3.9 In line with STAG, the Public Acceptability element of the appraisal has been informed through a public and stakeholder engagement exercise. Public and stakeholder engagement was carried out via an online survey on Citizen Space between 19th January and 16th February 2024. Key stakeholders were notified of the consultation via email, and the survey was also publicised via the Council's social media accounts. The survey received 222 responses. Responders were primarily vehicle drivers or passengers (>70%) which generally reflects the proportion of users of the junction. The majority of vehicle drivers are concerned about additional delays to their journeys and the perception is that providing improved active travel or controlled traffic flow at the junction will be to the detriment of vehicle journeys. The responses have therefore primarily been negative toward any changes at this location with the strongest overall support for making no changes to the junction, or the minimal changes presented in Option 1. However, for those who expressed a view for a change at the junction, Option 3 marginally has the greatest level of support. A more detailed overview of the consultation exercise is provided in Appendix 1, however key comments relating to each option included:

- Option 1 - deemed to be insufficient for active travel and little different to the current operation. For that reason, drivers tended to favour this option.
- Option 2 - spiral roundabout markings are unfamiliar to users and there is a perceived safety issue because of this.
- Option 3 - whilst most drivers feel this design may cause delay to their journey, the design does meet the expectation of improved active travel provision.
- Option 4 - the proposal to restrict traffic movements at the junction were heavily criticised, citing the impact to those routing to and from the Torry area.

Overall, the responders focussed on their experiences at this location and the perception of how any changes may impact them. Most drivers demonstrated concerns about a signalised option resulting in increased journey times. For those that walk or cycle, there is a perceived safety issue at present, with a disconnect for safe movement across certain arms of the junction.

3.10 Appendix 1 provides a detailed description of the appraisal process and how each option has been assessed and scored against the appraisal criteria and also provides a summary of the key benefits and risks for each option.

3.11 The appraisal scoring demonstrates that Options 3 and 4 best meet the objectives of the study, providing the optimum balance of improvements to traffic routing whilst allowing significant improvements to active travel accessibility through all legs of the junction. The main difference is that Option 3 allows for all traffic movement through the junction, while Option 4 removes the right turn movements from Riverside Drive to Queen Elizabeth bridge and North Esplanade West to South College Street. Banning these right turns does provide a small improvement to the traffic throughput for the remaining movements, but would reduce overall accessibility for some local movements, particularly to the Torry area. Therefore, due to the limited benefits of banning the right turn movements and taking into account the significant active travel benefits of the scheme and improvements to the management of traffic through the junction, it is recommended that Option 3 is progressed as the preferred option for further development. Monitoring of the operation of the scheme, when delivered, would be carried out to identify whether future modifications to the junction would be required.

3.12 The study also identified potential wider linkages for active travel, and the particular issue of the road narrowing on Riverside Drive going under the Wellington Suspension Bridge. A realignment of the footway and additional signing has been implemented as part of the South College Street – Phase 1 improvements, however consideration has been given through this study on how further improvements for active travel access could be made at this location. In particular, options for widening the footway and narrowing the road carriageway at this location were considered. Road narrowing would require the introduction of traffic signals (with a shuttle working operation) and include an added benefit of pedestrian and cycling crossing points at the signals.

3.13 Analysis of the impact of these proposal, including feedback received through the consultation survey, (discussed in Appendix 1) highlights concerns around queuing traffic from the signals tailing back through the Queen Elizabeth/South College Street junction. This could be mitigated by appropriate signal timing favouring the westbound flow; however, this would lead to a significant level of queuing in the eastbound direction. There would also be a separate issue around the reduction in height for traffic going under the Wellington suspension bridge which would occur if the footway on the south side was widened.

3.14 Along with the concerns about the traffic implications of this proposal, discussions with stakeholders also highlighted an issue around the wider active travel routing in this area. This identified that the focus should be on how the overall active travel linkage adjacent to the river and through to Wellington Road can be improved. It is therefore recommended that external funding is sought by the Chief Officer Strategic Place Planning to allow further development work to be carried out to identify a wider active travel solution, that considers both the specific issue on Riverside Drive but also the wider active travel linkage in the area including how routing to Wellington Road and the potential use of the

Wellington Suspension Bridge can be incorporated into an overall active travel solution for the area.

Outline Business Case Development

3.15 Should Members agree the recommendations then the next step would be for the Chief Officer – Strategic Place Planning to obtain funding to fund development of an Outline Business Case for the preferred option (Option 3). The Outline Business Case will gather the outputs of the STAG process and detail the case for investment by outlining the benefits, costs and key risks associated with the preferred option. The Outline Business Case would be reported to Council's Finance and Resources Committee once completed.

4. FINANCIAL IMPLICATIONS

4.1 To date this project has been funded through a budget allocation from Nestrans, the Regional Transport Partnership.

4.2 There is currently no budget for the project to proceed with further development work, or for implementation, therefore progress will be dependent on the sourcing of continued external funding from Nestrans or any other appropriate funding sources. As per 2.3 it is also recommended that the Chief Officer – Strategic Place Planning is instructed to seek external funding to allow the continued development of the preferred option and the wider active travel linkages.

4.3 Should the preferred option proceed towards delivery, as well as capital costs for implementation, there will be future costs associated with maintaining any new or upgraded infrastructure. Any future development work will identify implications for the revenue budget as options are developed further and refined. To minimise the requirement for revenue response maintenance in the future it is crucial to strive for the highest standards of quality in infrastructure, which shall be a key consideration of the next stages of project delivery.

5. LEGAL IMPLICATIONS

5.1 There are no direct legal implications arising from the recommendations of this report. Should funding be secured to move forward then there may be a need for land acquisition, Traffic Regulation Orders, planning and other approvals and the detail of this will be developed as part of the design process. Further procurement exercises to deliver this project and its wider benefits shall also be required.

6. ENVIRONMENTAL IMPLICATIONS

6.1 Environmental considerations are part of the STAG criteria which has influenced the recommendations of this report in terms of the preferred option to be taken forward. There are no direct environmental implications arising from the recommendations of this report. Any subsequent design stages shall

include an Environmental Impact Assessment to inform any environmental implications of the project.

7. RISK

The assessment of risk contained within the table below is considered to be consistent with the Council's Risk Appetite Statement.

Category	Risks	Primary Controls/Control Actions to achieve Target Risk Level	*Target Risk Level (L, M or H) *taking into account controls/control actions	*Does Target Risk Level Match Appetite Set?
Strategic Risk	Delivery of improved active travel and public transport measures supports a number of the Council's strategic priorities, particularly in terms of a sustainable economy, a sustainable transport system, the continued health and prosperity of our citizens, reductions in carbon emissions and a high-quality environment. Failure to deliver active travel / public transport improvements where there is evidence of their effectiveness could undermine the Council's ability to realise these aspirations.	Continue to work with Nestrans and other project partners to deliver the strategic objectives of this project and its wider benefits, therefore mitigating against the risk of the Council failing to deliver on its strategic sustainability priorities	L	**Yes**

Compliance	Should the project move forward towards implementation there may be a need for land acquisition, Traffic Regulation Orders, planning and other approvals and the detail of this will be developed as part of the design process. Further procurement exercises to deliver this project and its wider benefits shall also be required.	Compliance with statutory processes, procurement regulations, grant conditions (if required) and Scheme of Governance with regular progress and spend reporting to external funders and the Transportation Programme Board.	L	**Yes**
Operational	There will be costs associated with maintaining the infrastructure associated with the proposals, should these reach the implementation stage.	Future development work shall identify implications for the Revenue budget as the scheme is developed further and refined. To minimise the requirement for revenue response maintenance in the future it is crucial to strive for the highest standards of quality in infrastructure, which shall be a key consideration of the next stages of project delivery.	L	**Yes**
Financial	Removal or reduction in potential external funding streams for further development work and implementation.	Continual engagement with external funding bodies and appropriate monitoring of any funding applications.	M	**Yes**

Reputational	Failure to deliver active travel / public transport improvements to help meet the Council's (and partners) strategic transport objectives undermines the Council's commitments to improving the transport network, achieving the PLACE outcomes set out in the LOIP (Local Outcome Improvement Plan), and supporting Scotland's Climate Change Plan commitment to reduce car kilometres by 20% by 2030.	Continue to work with Nestrans and other project partners to deliver the strategic objectives of this project and its wider benefits, therefore mitigating against the risk of the Council failing to deliver on its strategic sustainability priorities.	L	**Yes**
Environment / Climate	The Council's Net Zero vision and strategic infrastructure plan – energy transition: transport emissions are a significant contributor to climate emissions so increasing sustainable travel will be necessary to achieving this sector's required reduction. If active travel measures are not delivered, the Council would not provide	Continue to work with Nestrans and other project partners to deliver the strategic objectives of this project and its wider benefits, therefore mitigating against the risk of the Council failing to deliver on its strategic sustainability priorities.	L	**Yes**

	conditions which could encourage more sustainable travel movements which are likely to bring environmental improvements to the city and region.			

8. OUTCOMES

COUNCIL DELIVERY PLAN 2023-2024	
	Impact of Report
Aberdeen City Council Policy Statement **Working in Partnership for Aberdeen**	The proposals within this report support the delivery of the following aspects of the policy statement: - • Reviewing our cycle and active transport network, and work with Aberdeen Cycle Forum to deliver our shared vision of making Aberdeen a cyclist friendly city and provide covered secure cycle storage in suitable locations across Aberdeen. • Improving cycle and active transport infrastructure, including by seeking to integrate safe, physically segregated cycle lanes in new road building projects and taking steps to ensure any proposal for resurfacing or other long-term investments consider options to improve cycle and active transport infrastructure.
Local Outcome Improvement Plan	
Prosperous Economy Stretch Outcomes *1. No one will suffer due to poverty by 2026.* *2. 400 unemployed Aberdeen City residents supported into Fair Work by 2026.* *3. 500 Aberdeen City residents upskilled/ reskilled to enable them to move into, within and between*	The proposals within this report support the delivery of LOIP Stretch Outcomes 1 to 3 as a good transport network and infrastructure provision means anyone regardless of their social status/economic means can choose a sustainable mode of travel for commuting. A reliable transport network supports economic growth and movement both locally and otherwise and affords the public the opportunity to choose a sustainable mode of travel to and from their workplaces.

economic opportunities as they arise by 2026.	
Prosperous People Stretch Outcomes *11. Healthy life expectancy is five years longer by 2026*	The proposals within this report support the delivery of LOIP Stretch Outcome 11. Active travel is known to improve a number of health conditions, potentially increasing life expectancy. Increased use of active travel produces less local emissions helping to combat the environmental risk to public health caused by poor air quality.
Prosperous Place Stretch Outcomes *13. Addressing climate change by reducing Aberdeen's carbon emissions by at least 61% by 2026 and adapting to the impacts of our changing climate.* *14. Increase sustainable travel: 38% of people walking and 5% of people cycling as main mode of travel by 2026.*	The proposals within this report support the delivery of LOIP Stretch Outcomes 13 and 14. Private vehicles are a significant contributor to carbon emissions so increasing sustainable travel opportunities will be necessary to help encourage greater levels of walking and cycling and achieving this sector's required emissions reduction.
Regional and City Strategies	The proposals within this report support: • The Local, Regional and National Transport Strategies, all of which aim to deliver fewer miles travelled by private car and a cleaner transport system which results in fewer emissions; • The City Centre and Beach Masterplan • The Net Zero Vision for Aberdeen, the Net Zero Aberdeen Routemap, the Air Quality Action Plan, and the Low Emission Zone (LEZ) by looking to improve opportunities for travel by low/zero emission forms of transport.

9. IMPACT ASSESSMENTS

Assessment	Outcome
Integrated Impact Assessment	New Integrated Impact Assessment has been completed
Data Protection Impact Assessment	Not required
Other	N/A

10. BACKGROUND PAPERS

10.1 South College Street - Corridor Improvement - CHI/17/020 (08/11/17) https://committees.aberdeencity.gov.uk/documents/s75668/CHI.17.020%20South%20College%20Street%20-%20Corridor%20Improvement.pdf

10.2 South College Street Junction Improvements (Phase 1) - Project Completion, Monitoring & Evaluation - RES/24/099 (27/03/24)

11. APPENDICES

11.1 Appendix 1 - South College Street Junction Improvements Project (Phase 2) - Option Appraisal Report

11.2 Appendix 2 - Option Concept Designs

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