ABERDEEN CITY COUNCIL

COMMITTEE	Net Zero, Environment and Transport Committee
DATE	27 March 2024
EXEMPT	No
CONFIDENTIAL	No
REPORT TITLE	South College Street Junction Improvements (Phase 1) Project Completion, Monitoring & Evaluation.
REPORT NUMBER	RES/24/099
DIRECTOR	Steve Whyte
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TERMS OF REFERENCE	9.8

1. PURPOSE OF REPORT

1.1 The purpose of this report is to update the Committee on the South College Street Junction Improvements (Phase 1) project, to provide information from early monitoring and evaluation activities and highlight lessons learned from the simultaneous undertaking of the King George VI bridge refurbishment works alongside the project works.

2. RECOMMENDATION(S)

That the Committee: -

- 2.1 notes the content of the report on full opening of the project and the outcomes of monitoring and evaluation;
- 2.2 notes the Transport Scotland Bus Partnership Fund programme will be unable to fund project expenditure from 2024/25 onwards and that the Council has included budget provision in the recently approved General Fund Capital Programme to fund the remaining project close activities.
- 2.3 notes the circumstances considered when programming major roadworks and the steps taken to limit their impact on road users.

3. CURRENT SITUATION

Background

- 3.1 Following the adoption of the Aberdeen City Centre Masterplan (CCMP), the impact of the proposed changes on the city's road network were assessed. This identified transport network changes required to support the Masterplan's ambitions. Changes as part of the South College Street Junction Improvements Project were highlighted as essential to support further public realm and bus priority improvements.
- 3.2 The completed project supports the City Centre Masterplan's infrastructure strategy for bus priority measures aimed at removing the impact of congestion on bus journey times through the city centre. It will also enable public realm enhancements along Guild Street and Union Street, providing alternative options to allow the rerouting of traffic. The project has been jointly funded by the Council and a grant from the Transport Scotland Bus Partnership Fund.
- 3.3 The improved capacity and operation along the corridor also complement its position within the new roads hierarchy. In tandem the project has enhanced infrastructure for walking and cycling. Making these improvements has been the next step towards providing a transport network to meet Aberdeen's needs and city centre aspirations.
- 3.4 The Project consisted of the following main elements:
 - An additional traffic lane along South College Street between Bank Street and Wellington Place;
 - An additional lane on Palmerston Place;
 - A new traffic signal-controlled junction at the intersection of Palmerston Place/ North Esplanade West;
 - The alteration of the existing traffic signal-controlled junctions at the South College Street/Wellington Place junction and the South College Street/Millburn Street/Palmerston Place junction adding additional approach lanes and improving operational coordination;
 - New and altered walking and cycling infrastructure along South College Street and Palmerston Place;
 - Reconfigured parking and loading areas on South College Street between Millburn Street and Riverside Drive.

Project Objectives

- 3.5 South College Street Junction Improvements (Phase 1) is an enabling project for CCMP's infrastructure strategy for bus priority measures and public realm enhancements along Guild Street and Union Street removing car traffic from the area and improving the pedestrian environment. The project objectives were:
 - Develop a project with sufficient additional road capacity to accommodate rerouting associated with the CCMP;
 - Improve the corridor's capacity & operation to complement and support its role as a Secondary Radial Route within the new Roads Hierarchy;

- Minimise detrimental impacts on Public Transport and Active Travel modes; and
- Implement the project in a timely manner to enable the implementation of Union Street & Guild Street measures in line with the CCMP programme.
- 3.6 With all improvements now complete and open the project is successfully delivering across all objectives allowing other City Centre Masterplan projects to proceed with reduced impact on the road network.

Construction and Reopening

3.7 In 2022 local company W M Donald Ltd were appointed as the main contractor for the project. In July 2023 the project works were substantially completed with project roads reopened. The final section of the project providing a second left turn lane from Palmerston Place on to North Esplanade West came in to use during February 2024, following the completion of complex utility works.

Project Review

- 3.8 Monitoring and evaluation of the project has been undertaken to appraise how the expected benefits of the project have been realised and inform where these could be optimised further. It also appraises the current operation of the scheme taking cognisance of concerns highlighted by the public and stakeholders. The themes for the review are listed below:
 - Movement
 - Safety
 - Operations
 - User feedback

Movement

South College Street traffic flows and speeds

3.9 An assessment of post opening traffic flow and speeds on South College Street between the Wellington Place junction and the Millburn Street / Palmerston Place junction shows daily averages as follows: -

	Weekday Averages (for a 24-hour period)		
Direction	Traffic flow	Mean speed	85 th percentile speed
Northbound	6200	28.2 mph	31.8 mph
Southbound	5300	25.6 mph	31.5 mph

3.10 The traffic flow volumes and measured speed values are within the anticipated range for a single carriageway link on the road network, subject to a 30mph speed limit. In particular, the measured speeds indicate that the project improvements have not resulted in misuse of the South College Street corridor by excessive exceedance of the speed limit.

Network Traffic Flows & Junction capacities

- 3.11 An analysis of traffic data collected as part of the monitoring & evaluation exercise, comparing observed traffic flows on the completed improvements with pre-implementation model predictions has been undertaken. This initial assessment indicates that observed flows are lower than the comparison model year, particularly on the new Palmerston Place link road. These differences could be attributed to lower than anticipated occupancy in the surrounding offices due to slower pace of development of new accommodation and hybrid working, the downturn in the city centre retail economy and a change in overall traffic demand since the Covid-19 pandemic. Traffic patterns are also still at an early stage of adjustment following the implementation of city centre bus priority measures.
- 3.12 Traffic flows are still recovering and as more workers return to offices on aregular basis and vacant sites are developed, traffic flows are expected to rise to or nearer pre-pandemic levels. It is very likely that traffic volumes through this area of the network will continue to increase for the following reasons:
 - Continued recovery from the Covid-19 pandemic
 - Increased attraction to the city centre as the City Centre and Beach Masterplans are delivered
 - Increased traffic demand on key transport corridors as active and sustainable transport measures are implemented on other parts of the network
- 3.13 The improved network will cater for a higher volume of traffic than is currently observed traveling through and accessing the area. There is therefore resilience within the completed improvements to cater for an increase in traffic volumes associated with recovery and development.

Public Transport aspects

3.14 Although the South College Street Junction Improvements project is considered essential for bus priority improvements in the city centre, the construction and completed works do not directly affect any bus routes. No negative feedback has been received from bus operators. The operation of the associated bus priority measures is not considered within this report and will be reported at a later date.

Safety

General

3.15 A Stage 3 Road Safety Audit has been undertaken on the completed works. The audit report recommends only minor changes or additions to the delivered works, including references to kerbing, signing, road markings and traffic signals. Appropriate remedial actions are being taken.

Traffic Regulation Orders

- 3.16 There are four significant Traffic Regulation Orders covering vehicle movements within the extents of the project, namely: -
 - No right turn from South College Street to Millburn Street
 - No right turn from South College Street to Palmerston Place
 - No right turn from Palmerston Place to North Esplanade West
 - One way traffic northbound on Palmerston Road from Palmerston Place to Old Ford Road
- 3.17 Observations have shown a small number of road users contravening project Traffic Regulation Orders, with the most common being the no right turns from South College Street at the Millburn Street / Palmerston Place junction. These contraventions impact primarily on the capacity of the junction and are not a significant safety concern as drivers will normally give way to any oncoming traffic before making these manoeuvres.
- 3.18 Contraventions of the right turn from Palmerston Place to North Esplanade West are a significant safety issue as the manoeuvre brings vehicles into conflict with south-east & westbound traffic on North Esplanade West. The observed behaviour, of this small number of drivers, suggests they are aware of the illegality and risk of contravening the restriction.
- 3.19 The one-way order on Palmerston Road is being contravened persistently by a small number of drivers, apparently as a convenient way to travel south and west from the area.
- 3.20 All signs and road markings have been reviewed and are adequate. The occurrence of the illegal manoeuvres has been notified to Police Scotland and there are no proposals to alter the Traffic Regulation Orders or the road network arrangements in the project area.

User Conflict

3.21 In an on-site user survey for the project two thirds of respondents did not observe any conflicts between pedestrians, cyclists or vehicles; one sixth observed conflicts between cyclists; and one sixth observed conflicts between pedestrians and vehicles. Observations have highlighted a small number of occasions when drivers parked vans and taxis on the project's cycle track, obstructing it for a short time.

Parking and loading

3.22 The previous parking and loading activities in the area adjacent to the arches on South College Street south of Palmerston Place were uncontrolled and considered to be unsafe for all road users. Vehicles and materials storage previously occupied the footway space and severely limited visibility and loading/unloading activities encroached onto the South College Street carriageway space. The new arrangements provide significantly improved pedestrian accessibility and safety for all users.

Operations

- 3.23 The project has provided improvements by alterations to the existing road network which have not resulted in a significant increase in demand for winter maintenance, but it has installed one additional signal-controlled junction at North Esplanade West/ Palmerston Place. There will be an increased need for maintenance of the surface water drainage systems, with the provision of new sustainable drainage measures beside the Dee Village flats and adjacent to Millburn street, plus added drains below both the Palmerston Place & South College Street rail bridges.
- 3.24 The alterations and additions to the street lighting and traffic signals within the extents of the project and the provision of new CCTV infrastructure will incur an increase in annual maintenance costs. Similarly, the provision of improved landscaping for the project will incur an increase in maintenance costs compared to the previous streetscape in the area.

User feedback detailed aspects

3.25 To inform the evaluation of the project, feedback was invited from users & stakeholders. The engagement was conducted through Citizen Space surveys and by other communication methods including letter drops, meetings and site visits. A number of matters were highlighted and the most significant are detailed below. Further details on the feedback can be viewed in full in the feedback report in Appendix A.

Construction issues

- 3.26 Feedback was received about several issues which caused concern during the construction of the improvement works including lack of communication and information about the alterations to the area, detrimental impacts in the vicinity of the work and insufficient directional signs and markings. They are common criticisms of this type of infrastructure alteration works, which are inevitable considering the temporary disruption required to user activities. Considering the nature and extent of the project work the level of criticism is not considered to be excessive and the contents of the feedback understandable in the circumstances.
- 3.27 All feedback regarding the site activities is being considered as part of a lessons learned process for the project and any necessary comments or information passed to the main contractor employed to execute the works. They will also be used to inform future design development and construction works contracts.

Construction period and overlap with King George VI bridge works

3.28 The 52-week duration of the construction contract for the works was primarily defined by the amount of time required to divert underground utilities to enable carriageway widening activities. Significant time was also required for bridge monitoring work to satisfy Network Rail that there would be no detrimental impact on the rail bridges at Palmerston Place and South College Street. A

substantial delay to the works was also caused by damage to a Scottish Water combined sewer at Palmerston Place, by a sub-contractor working on behalf of Openreach diverting telecommunication cables. Overall the project roads were reopened within the planned time range, with substantial completion achieved with only a short contract delay of 6 weeks.

- 3.29 The commencement of project works in 2022 had been planned for a number of years. Construction work for the improvements project caused some unavoidable localised disruption to the road network, mainly affecting Crown Street, North Esplanade West and the South College Street corridor. The main works contractor issued regular updates on traffic management changes and signed alternative routes for drivers. In the main the associated disruption and congestion was at a tolerable level.
- 3.30 In late winter 2022/23 further major works proceeded nearby on the network, with refurbishment works on King George VI bridge commencing. These overlapping of programmes had a combined effect on traffic which was more widespread with more circuitous traffic rerouting and disruption affecting larger areas on the south side of the city. This was undesirable adding inconvenience to the travelling public already experiencing disruption from the South College Street works.
- 3.31 This undesirable situation arose as the works on King George VI bridge were postponed due to Operation Unicorn. Considerable thought was put into the new start date as there was a need to balance issues related to Operation Unicorn, winter working, price inflation, external funding, contractor availability and impact on the traffic network. A decision was reached that the best compromise was to start works in March 2023.
- 3.32 The works were undertaken in 2 main phases closing the northbound then southbound carriageways, with the Bridge of Dee used for diverted traffic. The restrictions started in March 2023 and finished in June 2023. The phases switched in May 2023.
- 3.33 These were unique circumstances. During normal times the Council's standard roadworks planning systems, through works coordination, successfully avoids imposing excessive delay on the city network.

General use aspects

- 3.34 The majority of interview survey respondents stated that the street is well lit, well maintained, & easily accessible; the project enhances the area, feels safe, is fit for purpose, encourages people to walk or cycle more and meets the needs of the community. A small number of respondents criticised the expenditure required for the upgrade works. These negative comments are at odds with the results of the user survey which indicate a positive attitude towards the improvement works.
- 3.35 The more negative feedback included criticism of right turn restrictions for traffic. No right turn orders were implemented from South College Street to Millburn Street and Palmerston Place to improve traffic safety and the junction

operating capacity. Alternative routes are available via Wellington Place / Crown Street and South College Street / North Esplanade West. There is no requirement for traffic to turn right from Palmerston Place to North Esplanade West at the new signal-controlled junction. Southbound traffic heading for the Riverside Drive roundabout beside the Queen Elizabeth Bridge can do so along South College Street. A dedicated right turn lane onto South College Street has also been added to Millburn Street to accommodate traffic approaching from the west.

Walking aspects

- 3.36 The tactile paving provided on the paths constructed for the project was referred to in feedback as causing difficulty and discomfort for users of manual wheelchairs and confusion for those with visual impairments. The main concern was user unfamiliarity with the type of paving used for the segregated tracks, due to the limited provision of these features in the Aberdeen area to date.
- 3.37 There were some comments and criticism of the area on South College Street around the arches south of Palmerston Place, citing slippery footways and water ponding. The surface water aspects mentioned do not differ significantly from what was experienced before reconstruction but may be more apparent now that the space is no longer covered by parked vehicles.
- 3.38 Feedback comments proposed changing the timing of traffic lights, giving longer time to enable pedestrians to cross. However, movement detection sensors installed at the junction should automatically adjust the signal timings to extend the pedestrian phase if anyone is still crossing the road.

Continuous path aspects

- 3.39 The improvements for pedestrians and cyclists along the west side of South College Street include new lengths of segregated and shared use paths from Riverside Drive to Wellington Place. At the access points to the residential properties on South College Street between Bank Street and Riverside Drive, a continuous path has been built for cyclists and pedestrians. Guidance for road users on how to cross the continuous path was made available by letter drop to all the relevant properties and via the project website.
- 3.40 Feedback received expressed some concern about the use of the new layouts by non-motorised users and vehicles, with some degree of uncertainty about the speed of vehicles making turns and whether priority was obvious enough. This is to be expected initially with the changes made to the previous access priorities but is anticipated to improve with the passage of time as users become more familiar with the new layouts.

Cycling aspects

3.41 Feedback from cyclists referred to the absence of advanced cycle stop lines at the Millburn Street junction. Provision of the new segregated and shared use cycle tracks adjacent to the roads and toucan crossings at the junction reduces the need for advanced cycle stop lines on the road. This also supports the

junction capacity improvements considered to be essential at this location. Advanced stop lines will not be reintroduced at this junction because they could encourage cyclists to make right turn manoeuvres in traffic on the roads, instead of the safer new cycling infrastructure.

3.42 Feedback received also included comments on a lack of cycle route connectivity to the north and south of the project works and criticism of the city centre bus gates. These are aspects which were out-with the scope of the South College Street Junction Improvements (Phase 1) project, therefore no response on these matters is included in this report.

Parking & loading at the railway arches

- 3.43 Feedback from local businesses included dissatisfaction with the parking / loading spaces beside the arches on South College Street, between Palmerston Place and the South College Street rail bridge. The lengths of road allocated for parking and loading are loading 45m, parking 85m and disabled 6.5m. Video analysis on the use of these loading and parking areas over a two-week period showed that the maximum number of vehicles parked at any time during each 24 hour period was nine vehicles.
- 3.44 The video analysis suggests that there is sufficient parking available for the demand based on the one-hour duration allowed by the parking regulations. However, the feedback comments about the parking indicate that there may be a much greater demand for parking to be allowed for a longer duration. Extending the permissible parking duration could be considered in any further review of the controlled parking regulations in the area.
- 3.45 There was limited use of the loading areas during the video recording period. The demand for loading provision may have reduced since the controlled parking regulations were proposed, due to changes of the businesses which occupy the railway arches premises. The demand for loading space provision is likely to fluctuate as other businesses take up occupancy of the arches or existing businesses end occupancy. Network Rail lease the arches and the authority cannot predict how the demand for parking and loading provision in the area is likely to fluctuate.

Further Action

3.46 The South College Street Junction Improvements (Phase 1) works were substantially completed in July 2023 and the construction contract included a defects correction period which will continue to July 2024, with a further extension to July 2025 for all the landscaping works. Any required remedial action should be carried out within these timescales and any further alterations deemed to be beneficial or necessary for the project are likely to be implemented during these periods.

South College Street Improvements (Phase 2)

3.47 ACC is now undertaking a STAG (Scottish Transport Appraisal Guidance) based appraisal of options for transport improvements, in particular active travel (walking, wheeling and cycling) at the Queen Elizabeth Bridge / North Esplanade West roundabout, as part of Phase 2 of the project. This options appraisal study is being funded by Nestrans. Relevant feedback and lessons learnt from the Phase 1 project will be considered and incorporated in to the second phase as it develops. A separate report will be provided to committee on the Phase 2 proposals.

4. FINANCIAL IMPLICATIONS

- 4.1 When the business case to proceed with implementation of the project was approved by the City Growth and Resources Committee on Thursday, 26 September 2019, the budget cost estimate for the project was £10.7 million.
- 4.2 The project has been jointly funded by Aberdeen City Council and the Scottish Government. In 2021 the project was awarded £10m of funding through the Transport Scotland Bus Partnership Fund.
- 4.3 The estimated project outturn cost is currently £8.5m bringing the project in significantly under budget. This has mainly been achieved through value engineering and design refinement during project development and a limited requirement to utilise risk allocations to address market conditions and site issues. This underspend attributes to the Bus Partnership Fund share of the project.
- 4.4 In early 2024, Transport Scotland announced a pause on the Bus Partnership Fund programme. This has removed any opportunity to use the programme to fund remaining project activities from the start of Financial Year 2024/25 onwards. However, project liabilities will extend to FY 2025/26. Therefore the recently approved General Fund Capital Programme has included budget provision to fund the remaining activities through NHCP806A South College Street (Phase 1).

5. LEGAL IMPLICATIONS

5.1 There are no direct legal implications arising from the recommendations of this report.

6. ENVIRONMENTAL IMPLICATIONS

6.1 There are no direct environmental implications arising from the recommendations of this report.

7. RISK

7.1 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	-	No significant risks identified	-	Yes
Compliance	-	No significant risks identified	-	Yes
Operational	-	No significant risks identified	-	Yes
Financial	Final project outturn cost exceeds available funding	Funding allocated through budget process.	L	Yes
Reputational	Negative view from stakeholders due to lack of post opening changes	Explanation and continued engagement with stakeholders on future project development.	L	Yes
Environment / Climate	-	No significant risks identified	-	Yes

8. OUTCOMES

COUNCIL DELIVERY PLAN 2023-2024		
	Impact of Report	
Aberdeen City Council Policy Statement	Opening of the project supports the delivery of the following aspects of the policy statement:-	
Working in Partnership for Aberdeen	Greener Transport, Safer Streets, Real Choices - Working with the Scottish Government and NESTRANS to improve the city's bus network, including considering options for an Aberdeen Rapid Transit network, with the support of the Scottish Bus Fund and consider options for council-run services in the city.	
<u>Local Outcome Improvement Plan</u>		
Prosperous Place Stretch Outcomes	LOIP Stretch Outcome 14 Increase sustainable travel: – 38% of people walking and 5% of people	

	cycling as main mode of travel by 2026; through enabling the Key Improvement Measures in the City Centre.
Regional and City	The project within this report forms a key enabler for
Strategies	phase 2 of the CCMP and directly contributes to
The Local Transport	·
Strategy and City Centre	Programme of Road Improvement Schemes,
Masterplan form parts of the	building on the opening of the Third Don crossing,
Council Delivery Plan	the Airport Link Road and ongoing work for the
Strategy Framework.	Berryden Corridor Improvement project.
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9. IMPACT ASSESSMENTS

Assessment	Outcome
Integrated Impact Assessment	New Integrated Impact Assessment has been completed
Data Protection Impact Assessment	Not required.
Other	Not required.

10. BACKGROUND PAPERS

RES/19/271 - City Growth and Resources Committee - South College Street Junction Improvements Business Case Update – 26th September 2019

RES/20/090 - Urgent Business Committee - South College Street Junction Improvements (Phase 1) - Compulsory Purchase Order - 6th May 2020

11. APPENDICES

Appendix A – South College Street Junction Improvements (Phase 1) Feedback Report

12. REPORT AUTHOR CONTACT DETAILS

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