Transport and Environment Committee

10.00am, Thursday, 19 August 2021

George Street and First New Town – Final Concept Design and Operational Plan Update

Executive/routine	**Executive**
Wards	**11 – City Centre**
Council Commitments	16, 17, 19

1. Recommendations

1.1 It is recommended that Transport and Environment Committee:

1.1.1 approves a set of final fundamental design elements, outlined in paragraph 4.7 and Appendix 1;

1.1.2 agrees the key principles of an Operational Plan proposed for George Street and First New Town, as outlined in paragraph 4.8 and detailed in Appendix 2;

1.1.3 notes that a procurement exercise has commenced to secure multi-disciplinary consultancy support to progress the next stages of the project;

1.1.4 notes that the next design stage is critical where, by end of 2021, it is expected that sufficient detail will emerge from the design process to enable the commencement of the necessary statutory consents; under which the power to construct the scheme would be obtained; and

1.1.5 notes that funding up to £20 million has been secured from Sustrans Places for Everyone programme, with 100% of design costs and 70% of construction costs covered by the grant award

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Report

George Street and First New Town – Final Concept Design and Operational Plan Update

2. Executive Summary

2.1 George Street and the First New Town (GNT) is a public realm project that forms a key component of the Edinburgh City Centre Transformation (ECCT) strategy and delivery plan. It seeks to deliver an exceptional street environment that is welcoming and accessible for all users. The final concept plan for GNT follows several years of development, consultation and engagement to refine design objectives with residents, businesses and stakeholders, including the local community council and heritage, business, walking, cycling and accessibility groups.

2.2 The core elements of the proposed final concept design are presented in this report for approval, alongside a set of principles for the future operation of the First New Town streets. The proposals reflect alignment to strategic priorities including the recently approved City Mobility Plan (CMP) and form an integral relationship with other key city centre active travel projects including Meadows to George Street (MGS) and the City Centre West to East Link (CCWEL).

2.3 Initial project cost estimates are also presented alongside the next steps and timelines to develop and deliver the GNT project.

3. Background

3.1 In 2014 and 2015, the Council trialled new layout and operating arrangements on George Street. Independent surveys were conducted throughout the trial period and evidenced strong public support for changes to the street. From this study, initial design principles were developed for George Street with the input of local stakeholders. These were approved at Transport and Environment Committee in June 2016 and formed the starting point of current design development work. At that time, an indicative cost estimate for delivery of the new layout and operating arrangement was £28m.

3.2 Edinburgh's 'First New Town' is of significant, and unique value within the UNESCO World Heritage Site. George Street, which forms its core, is arguably the city's

premier shopping street, and carries a strong appeal as a civic space and unique shopping, hospitality and visitor experience.

3.3 GNT is a major public realm project that aims to reconfigure the use of space in George Street and reconsider how its junctions work with intersecting streets and squares, to create an exceptionally high-quality place making environment. In keeping with the ECCT vision, the ambitious plans for GNT will make it attractive for people of all ages to visit, shop, rest, and make active and sustainable travel choices.

3.4 Ensuring people have had the opportunity to influence and shape the future of the city centre is essential to achieving a robust and long-lasting design for the GNT area. In addition to observing relevant strategic consultation exercises in the city, distinct consultation and engagement approaches for the GNT project have ensured appropriate, continuous and wide input at key stages:

3.4.1 Design Principles Setting stage (2016 - 2017);

3.4.2 Design Objectives and Initial Concept Evaluation stage (2018 - 2019);

3.4.3 Concept Design and Operational Plan Development stage (2019 - 2020); and

3.4.4 Final Concept Design stage (October 2020 - March 2021).

3.5 As reported to Transport and Environment Committee in October 2017, the expansion to a larger GNT study area including Castle, Frederick, and Hanover Streets and the junctions with Charlotte and St Andrew Squares, recognised the operational inter-relationship between the First New Town streets, and the need to address critical design interdependencies with other projects in the surrounding city centre. Committee agreed to the development of a 'blueprint' for the GNT area, which was capable of both sustaining future operational changes and would be delivered in phases as resources became available.

3.6 A number of operational changes will be required to support the delivery of the GNT project and to ensure that design outputs are maximised. Building on all relevant work undertaken previously, an exemplar, innovative and creative operational plan is critical in supporting the final design proposal. The operational plan is a crucial component of the project, as it proposes (in detail) the future arrangements for loading, servicing and vehicle access in the area. Furthermore, the fundamental principles of an Operational Plan to be explored (delivering pedestrian priority, possibly through set periods of the day where the streets operate without non-essential vehicle access) were reported to Transport and Environment Committee on 16 May 2019.

3.7 As reported to the Leadership Advisory Panel on 31 March 2020, procurement of technical design consultancy services to conclude the delivery of the GNT concept design had commenced. WYG Ltd consultants were appointed and an ambitious and comprehensive project delivery plan was developed which set a challenging target of concluding the Stage 2 Concept Design by spring 2021. The consultants were also charged with the development and subsequent execution of a project

communication and engagement plan which addressed the challenges of undertaking engagement while Covid-19 restrictions remained in place.

3.8 At a strategic level, GNT forms a key part of the approved ECCT Strategy; which unifies city centre projects into a singular holistic delivery plan. The ECCT Strategy identifies key quiet zones in the city centre where people will have priority, with vehicles given access as 'guests'. George Street is identified as one of these areas, where significant public realm improvements and pedestrian priority will be delivered. GNT is one of the earlier programmed projects within the ECCT delivery plan, and once implemented, the scheme will make a significant contribution towards realising the vision of transforming the city centre as a revitalised, more vibrant and people focused place.

3.9 Furthermore, and more recently, Transport and Environment Committee on 19 February 2021 approved the CMP. The CMP frames a bold, ambitious and rapid change agenda (underpinned by a target to be net carbon zero by 2030) and sets out a basis for significant tram, bus network and active travel interventions to improve mobility and address key challenges. The strategy will mean car and heavy bus dominated traffic within the city centre will be replaced by walking and cycling infrastructure, and by smaller cleaner passenger vehicles for those who, with mobility constraints, would find this approach too challenging. The CMP strategy aims to ensure that Edinburgh will remain as a leading global city by improving places for people to live, work, visit and enjoy.

3.10 Specific CMP proposals target a significant redesign of the bus network by 2025, based on the 'to not through' principle, and by 2030 the city centre is to be largely car free. The final concept design for the GNT project aligns with many of the CMP aims, especially the aim to create a people focused city centre.

3.11 Business Bulletin reports were presented to the Transport and Environment Committee on 22 April 2021 and 17 June 2021 providing a general update on progress with the project to date including the final outcome of the most recent engagement exercise which was concluded end March 2021.

4. Main report

Core elements of GNT final Concept Design

4.1 The core elements of GNT's final concept design act together to reallocate and reprioritise space within the public realm to improve accessibility and active travel, make the spaces and streets more welcoming, whilst celebrating the unique heritage and architectural environment of the area. The project will also support the Council's commitment to become a net-zero carbon city by 2030.

4.2 Extensive consultation and engagement have been undertaken in preparing a final concept design which elicited broad public support for the delivery of high-quality public realm improvements; supporting a safe walking and cycling environment, with a focus on delivering inclusive access for all.

4.3 Consultation and engagement processes have been reinforced by a broad range of studies and assessments including a heritage statement and impact assessment, relevant technical studies such as radar surveys, parking survey, street life assessment study, business operations survey, traffic modelling, integrated impact assessment, and work to integrate the project with adjacent schemes and with the ECCT delivery plan.

4.4 The analysis of consultation findings and responses to final design proposals, combined with the above technical assessments, concludes the concept design stage of the project. The following core elements and design principles are now proposed, which combine to underpin the finalised GNT concept design:

4.4.1 Wider pavements on both sides of George Street along the entire street length, will increase circulation space and accessibility for all pedestrians. This is primarily achieved by the reduction in the road width, obtained from the removal of parking bays. Wider pavements and narrower road space means pedestrian crossing in all directions will be more convenient, and will be more direct, safer and easier at all junctions. A designated limit for café seating areas ensures that the pavement width remains consistent and ample.

4.4.2 Parks and gardens formed an integral part of the James Craig plan of 1768, carefully included within a symmetrical and hierarchical arrangement: Princes Street Gardens, Queen Street Gardens, St Andrew Square, Charlotte Square and private residential rear gardens. George Street has a simple symmetry and geometry, giving rise to an end to end sense of street continuity with the street proportions and architecture carefully framing views and vistas of trees and gardens within the designated gardens of St Andrew and Charlotte Squares. The volume of greenery proposed by the final concept design will be substantive while sympathetic to Craig's original design principles as outlined above. Sensitively balanced landscaped seating areas both on the north and south side of George Street will provide designated areas where people can relax or rest in comfort and safety, within a unique street environment. These additions make the street more welcoming for people of any age, with the potential to include some informal play elements within these spaces. The volume of greenery, landscaped areas and low vehicle environment and encouragement of active travel will enable the GNT project to make a major contribution to the Council's climate emergency commitments. The final concept design includes appropriate levels, types and placement of "greening" in the form of hedges, large multi stem shrubs and other low-level shrub planting contained within raised granite planters. The current greening is exclusively contained within sixteen landscape seating areas, distinct from the footway and carriageway/cycle space within the street. Total greenery includes 80 Amelanchier tall shrubs, 220m^2 of large shrub planters, 184m^2 of ground level planters and 520 linier metres of hedging. Edinburgh World Heritage (EWH) accept this form of greening to be

appropriate as it does not interfere with views and vistas and, most importantly, can clearly be identified as part of a contemporary intervention which does not interfere with the understanding of the original James Craig masterplan. EWH agree that the new "greening" elements have been carefully introduced and will echo the symmetry and materials of the historic streetscape. The substantial scale of greenery and its associated benefits proposed for George Street will make a significant contribution to the Council's commitment to be a zero-carbon city by 2030 and enhance the overall biodiversity of a street which is limited at present.

4.4.3 The Council has made a commitment, via the CMP, to review the existing bus network especially within the city centre. With the extension of the existing tram network, climate change commitments, population growth and capacity constraints, a revised bus network is crucial to ensure the service responds to the needs of the city. George Street has three dedicated local bus services and two "peak time only" services which serve two stops on two blocks, on the street. The final concept design assumes bus services will continue to operate within the GNT area however will not travel along George Street itself as part of the city-wide bus network review. However, the revised bus network will always ensure a high provision of local bus services are able to serve the GNT area. Bus services will be able to directly cross George Street via north and south routes on interconnected streets, including Hanover and Frederick Streets. Furthermore, St Andrew Square will continue to be an important transport interchange for users to work in and visit GNT, with access to the expanded tram network (accessed from nearby stops on Princes Street and St Andrew Square), local bus services and Edinburgh Bus Station. The proposal to remove local bus routes along George Street will allow the creation of a final design proposal that removes all but essential traffic from the street. The promotion of a very low traffic area will enable cycling to be located within the centre of George Street, creating a unique cycling experience in a world class place, enable much enhanced symmetry and provide opportunities for additional placemaking including landscaped, play and seating areas.

4.4.4 The removal of buses, and all other non-essential traffic from George Street presents a unique opportunity to create a cycling street within the central carriageway of the newly designed street. The creation of a cycling street within George Street will provide a high quality approach to cycling in the First New Town area, interfacing with both the CCWEL and MGS active travel projects to create a network of strategic cycling routes to the west of the city from Charlotte Square, to the east through St Andrew Square and south via George IV Bridge. To accommodate the new cycleway, the junctions of George Street will be redesigned, which will also improve the visual setting around the central statues, help slow down any remaining vehicle movements within the First New Town streets and reduce potential for cycle/pedestrian/vehicle conflict. The detail of how the final cycleway

will be designed in full will be developed during the next stage of the design process.

4.4.5 The removal of parking bays from George Street, to free up space for non-motorised uses is a principle that is already established for the city centre. The new St James Quarter, which recently opened, will provide a significant increase in off-street parking within the city centre creating an opportunity to reduce on-street parking in the surrounding area. The ECCT strategy highlights the removal of on-street parking in the Edinburgh's historic core as necessary to reallocate space for high quality public realm. During previous public consultation, the removal of central parking in the GNT concept design elicited general support from a wide range of consultees, while recent engagement with key stakeholders has, in the main, reinforced this principle. Some concerns remain with regards to wider parking in the area especially relating to providing access for people with lower levels of mobility, who are not blue badge holders, discouraging spread of parking activity into the New Town and emergency access for example building repairs. In due course, a project monitoring and evaluation plan will be established to appraise the impacts/benefits of the new design and operational plans for GNT. Included within the monitoring plan will be a review of parking within the neighbouring vicinity of the GNT area to identify any indirect impacts related to the new design.

4.4.6 An integrated Sustainable Urban Drainage System (SUDs) has been incorporated within the final concept design proposals. The introduction of a SUDs system, which will be formed within the designated landscaped areas, will allow surface water to drain naturally, replenishing ground water and having zero impact on the capacity of existing drains and sewers. The varied landscape planting for the area will also slow the rate of surface water as plants filter, reuse and reduce flood risks. A final SUDs system for George Street will be developed during the next stage of the design process. The project has also been invited to participate in the Edinburgh and Lothian's Strategic drainage partnership "Blue Green Infrastructure Pilot" programme which will, in partnership with Scottish Water, review and recommend a final Blue/Green technical solution for the project. The project will also aim to demonstrate what climate impact it will have on the Council's aim to become a net zero carbon city by 2030 by undertaking a carbon emission assessment utilising the Council's Carbon Scenario Tool.

4.4.7 Following the completion of a design options exercise over the location of the James Clerk Maxwell (JCM) statue, and in continuous dialogue with the Royal Society of Edinburgh (owner of the statue), the final concept design proposes that the JCM statue is repositioned at the gateway into George Street; adjacent to the western entrance to St Andrew Square gardens. The proposed location for JCM will create a more sympathetic and prominent position with a commanding view of George Street where the statute can be celebrated and enjoyed. Final relocation plans for the statue

will be undertaken in close dialogue with the Royal Society and Sandy Stoddart (Sculptor). A revised lease will be secured with the Royal Society once the final position is agreed for the JCM statue and all necessary statutory consents required to move the statue will also be prepared during the next stage of design.

4.4.8 The final concept design incorporates largely "clutter free" spaces located outside key iconic George Street buildings on each block, including areas outside the Assembly Rooms and St Andrew's and St George's West Church. The location of these spaces provides clear and uninhibited views of prominent buildings further enhancing their unique and iconic status within the world heritage site. The spaces located outside key buildings will also create a flexible and multi-functional environment that, while still prioritising pedestrians, wheelers and cyclists, could support appropriately scaled events which are sympathetic to the unique setting and built form of George Street. The concept design for George Street does not intend to determine what form and scale of events should take place as this will be influenced by the outcome of the Council's Public Space Management Plan (PSMP) once finalised. The design will however create a structured and appropriate setting to facilitate potential future events on George Street.

Principles for a First New Town 'operational plan'

4.5 Several operational changes will be required to support the transformation of the First New Town into an area that people can enjoy for its exceptional quality of place. The proposed operational changes (Appendix 1) will form the basis of the development of the detailed statutory notice process during the next stage of the project which is required to enable the construction of the public realm improvements scheme. The fundamental principles of an operational plan, which are aligned to the ECCT Strategy, will include:

4.5.1 Delivering pedestrian and cycling priority, where George Street operates without non-essential vehicle access through set periods of the day but permitting blue badge access at all times where appropriate;

4.5.2 Preserving the use of cycling infrastructure all year-round;

4.5.3 Maintaining local bus passenger services within the First New Town area including direct crossing points with George Street (but not along George Street), with final proposals determined by the outcome of a wider city bus network review;

4.5.4 Prioritising blue-badge parking within the GNT area including George Street and essential resident parking within the wider scheme area (but not on George Street), to support access for this group of key users;

4.5.5 Removing all but essential vehicle traffic movements from George Street with access for service vehicles only permitted during servicing and loading windows, except for certain essential services. The exact criteria which will be applied for access for essential services out with servicing and loading

windows will be finalised during Stage 3 and subject to final approval by the Executive Director of Place.

4.5.6 Taxi and Private Hire services will not be permitted to access George Street when enforcement restrictions are in place however additional taxi rank spaces are proposed in the wider First New Town interconnecting streets and St Andrew Square. A final decision as to whether taxi access will be permitted during service and loading windows has still to be determined with a final decision on this, and final service/loading window times, made during the next stage of the project – Stage 3. Full consultation will take place with Taxi and Private Hire representatives prior to presenting any final proposals.

4.5.7 A final enforcement strategy to support the proposed operational plan will be developed as part of the immediate next detailed design and technical stages of the project and will confirm final details of the operational plan including service and loading window periods. At this stage the intention is to develop a strategy which incorporates technology-based methods whereby essential vehicles, including blue badge holders, are still permitted to enter George Street unrestricted, and where service vehicles are only permitted during service windows. Pre-agreed “exemptions” will apply to users who required access during service windows for example weddings, funerals and emergency utility/building works.

Alignment of GNT to City Centre Transformation, City Mobility Plan and surrounding projects

4.6 The development of the GNT construction delivery plan will align with the ECCT and CMP delivery programmes in relation to other city centre projects, with overall delivery and programme milestones co-ordinated by the City Centre Project Delivery Board. The Board’s membership consists of project managers and other key Council officers representing planning, public transport, active travel, parking and strategic transportation.

4.7 The development and testing of final technical designs for GNT will continue to align with the active travel MGS and CCWEL cycling projects, with teams for each project having continuous technical and programme reviews of the GNT proposals to ensure a seamless transition, especially at key junctions at Hanover Street and Charlotte Square.

5. Next Steps

5.1 The next stage of the GNT project is to progress and subsequently complete the development of the Spatial Coordination Design - Stage 3 (formerly Detailed Design) which aligns with the Royal Institute of British Architects (RIBA) Plan of Work which sets out key processes required to deliver projects. The commencement of Stage 3 is a significant milestone as this will include the promotion of all necessary statutory processes; most critical of which are Traffic

Regulation and Redetermination Orders which provide the necessary powers to enable the construction commencement of the final project, earmarked for 2023. It is expected that promotion of these statutory orders will commence by the end of 2021.

5.2 A procurement exercise has commenced to secure consultancy support to deliver Stage 3 of the project. The appointment of the multi-disciplinary consultant team will be sourced from the Council's multi-disciplinary consultancy framework. Subject to satisfactory performance, the Stage 3 commission will be extended to secure services from the successful consultancy team to deliver the subsequent stages of the project including Stage 4 and potentially contract management and supervision. Once appointed, the Consultant will be required to produce Consultation and Engagement and Communication Plans as early deliverables. These will set out the key activities for engagement during stage 3, and once available, will be reported Committee at the earliest opportunity. Consultancy fees are covered by 100% grant allocation secured from Sustrans' Places for Everyone programme.

5.3 Continuous engagement, especially with key stakeholders and local businesses/residents will continue as final detailed plans for the GNT project are progressed. Final tasks required to deliver the operational plan, especially for George Street, will also continue and detailed engagement with local businesses and residents will be critical to the success of implementing an operational plan for the area. Final design proposals for GNT, including the proposed operational plan, aim to ensure the vibrancy of the GNT area continues and creates a unique and welcoming environment that sustains existing businesses and encourages future inward investment.

5.4 During the Stage 3, progress will not only be made on design and technical aspects of the project but also the preparation a final operational plan. Information gathered to date from engaging with local businesses and residents, most recently during March 2021 business and resident workshops, will be key to finalising the plan for the area. Several themes were identified during the March workshop sessions which will be developed further during the Stage 3 engagement process including:

5.4.1 Final proposals for service and loading windows;

5.4.2 Access for essential vehicles during service and loading restrictions, for example, in response to emergency repairs, wedding and funeral services;

5.4.3 Access for Taxis and Private Hire cars out with service and loading windows; and

5.4.4 Access for major planned works including major refurbishments.

6. Financial impact

6.1 The GNT project will make a strong early contribution to the way the First New Town functions and represents a significant and positive capital investment in the city during a period of uncertainty, rapid population expansion and change.

6.2 The Covid-19 pandemic has had a profound impact on the city centre including the GNT area where businesses have been hard hit with footfall significantly reduced. While it remains difficult to predict the medium to longer term impacts of the pandemic, there is an opportunity to re-energise the GNT area with the creation of a desirable place to live, work and visit while supporting the area's economic recovery.

6.3 The project will create a significant number of construction jobs from 2023 onwards and in turn create opportunities for local suppliers and businesses. As with all major Council construction contracts, community benefit clauses will be included in any contracts aiming to secure benefits such as local apprenticeships and training opportunities.

6.4 George Street footways and carriageways are currently in a generally poor condition and somewhat distract from the special quality of the surrounding built environment. Therefore, the implementation of the capital funded scheme, will not only address the current unattractive condition of the streetscape but will also reduce the short and medium term burden on Council budgets associated with maintaining road infrastructure assets in the design area.

6.5 As reported to Transport and Environment Committee on 12 September 2019, the GNT Design Project will receive a multi-year funding of up to £20m through Sustrans Scotland Places for Everyone programme, with 100% of the design and preconstruction costs being funded by the programme.

6.6 It is anticipated that multi-disciplinary consultancy fees for Stage 3 of the project will total circa £0.770m (excluding VAT) and will be 100% funded from the Sustrans Scotland Places for Everyone programme. The exact cost of consultancy fees associated with the delivery of the next stage will be confirmed after negotiations have been concluded, with the final tender value being reported to Committee in due course.

6.7 However, after this immediate next stage of the project, further consultancy support will be necessary for the completion of the remaining RIBA Design Stages 4-7 (Technical Design - Completion). The project team, in liaison with Commercial and Procurement Services, will consider opportunities to include the delivery of RIBA Stages 4-7 as an option within the Stage 3 consultancy contract. RIBA Stages 4-7 will also be 100% funded from the Places for Everyone programme.

6.8 The required consultancy support will be secured through the Council's Professional Services Framework which was adopted by the Council in October 2020. Services will be selected from Lot 11 Multi-Discipline Design Team Services and use of this framework agreement ensures that consultancy rates remain competitive.

6.9 Council staff costs associated with the project management team dedicated to the GNT project will be 100% funded from the Sustrans Scotland Places for Everyone programme (as agreed in principle with Sustrans Scotland and to be confirmed through the terms of the final Legal Agreement currently being developed).

6.10 At this stage in the design process, the Council's capital budget requirement for GNT is likely to be up to £12m and is identified within the ECCT Delivery Plan and dedicated Outline Business Case for GNT. A condition of Sustrans Places for Everyone grant offer is that Council match funding will be designated against delivery of the GNT project.

7. Stakeholder/Community Impact

7.1 The input of stakeholders, including local residents, key stakeholder groups, businesses, interest groups, people with protected characteristics and the general public, has been critical in arriving at a final Concept Design for GNT. The continuous and extensive engagement carried out on the project to date is in recognition of the First New Town's unique status not just as a UNESCO world heritage site but its exceptional and unique position within Edinburgh in terms of its premier shopping, leisure and business status which the GNT public realm improvement project aims to enhance and sustain.

7.2 Extensive formal public consultation outcomes were previously reported to the Transport and Environment Committee in May 2019 which established many of the broad design principles which the Concept Design now incorporates. In arriving at a final concept design further detailed "in depth" engagement was undertaken with key stakeholders, both during formal group stakeholder sessions organised in November/December 2020 and where necessary on a one to one basis. A total of 23 stakeholder groups were engaged during 22 stakeholder sessions. Following a final engagement exercise in March 2021 the majority of key stakeholders have positively endorsed the final concept design, albeit some groups, especially those representing business interests, indicating that further detailed information is required especially in relation to operational plans for George Street before formally endorsing final proposals for the area. Such information, for example relating to a final enforcement strategy or access for taxis, will be discussed with key stakeholder groups during the Stage 3 design process.

7.3 Detailed below are the formal statements received from key stakeholders in respect of the final concept design proposals:

Living Streets

7.3.1 Edinburgh – perhaps uniquely for a European city of its size and history – lacks any significant space in the city centre where pedestrians really come first. George Street has been dominated by traffic and parking for too long and is the obvious place to put this right in the heart of the New Town. These proposals offer the prospect of George Street becoming a place where it is finally a pleasure to walk in and linger.

Edinburgh Access Panel

7.3.2 EAP is aware that George Street currently presents many obstacles for people with disabilities. We are delighted to be involved in a scheme which will remove so many barriers that prevent a significant proportion of the population, both residents and visitors from being able to participate fully in the many facilities that are available in this attractive central city location.

Sustrans Scotland

7.3.3 George Street is one of the most vibrant and distinctive shopping streets in Scotland, thanks to the insightful planning of James Craig. We are pleased to be supporting the increased space for walking, wheeling and cycling that this project will create, upgrading one of the city's key travel routes. The new spaces for sitting and relaxing provide both visitors and residents with comfortable spaces where they can rest and enjoy the World Heritage Site.

Spokes

7.3.4 George Street forms a crucial section of the Council's flagship west-east 'CCWEL' cycle route project, as well as being a major destination in its own right. The new George Street plans, taking lessons from European "cycle streets", provide a wide central "cycling zone" shared with blue badge and (at restricted times) delivery vehicles treated as 'guests.' This replaces the previously planned segregated bi-directional cycle route. This will be an innovative scheme for Scotland, which could be widely followed, and as such the Council must get it right. Given the funding from Sustrans, safe and pleasant conditions for cycling and walking are critical. Spokes welcomes the scheme subject to strict enforcement of the limited number and timings of permitted vehicles, as well as design details. We particularly welcome the assurance of enforcement, by automated means such as number plate recognition or in other ways, which is essential to success.

Edinburgh World Heritage

7.3.5 EWH is highly supportive of the design for the public realm improvements in George Street as currently proposed. Over time, the proposal has evolved into a simple and elegant design, removing traffic and street clutter, with the potential to enhance the character and authenticity of this significant centrepiece of the first New Town in relation to its existing state. New elements have been carefully introduced and will echo the symmetry and materials of the historic streetscape. Based on the current visuals, we believe these changes will improve the way the street is experienced and valued by putting pedestrians first and allowing them to enjoy the rich heritage which surrounds them. We would like to thank City of Edinburgh Council for taking our views on board at critical stages during the design process.

The Cockburn Association

7.3.6 The Cockburn has been involved in this project since the outset and has seen the designs evolve and mature. The Experimental TRO conducted several years ago showed an appetite for change to George Street and its shift from a trafficked street to a destination for civic living. Key was increased pedestrian space, facilitating the east-west cycle route and generally producing a more amenable place while respecting and enhancing the qualities and characteristics of the World Heritage Site. We endorse all of these objectives and feel that the designs have generally reflected these well.

7.3.7 On the subject of trees, we acknowledge the significant public interest in introducing trees into the street. George Street was not designed as a boulevard but as a set-piece along a strong axis from Charlotte Square to St Andrew's Square, with the intervisibility of each crucial to its urban form. The current proposals have evolved to respect this key feature, which we welcome. If trees were to be introduced, it is important that this key element of the street is not undermined

George Street Association

7.3.8 There is no doubt that the current pre-occupation of George Street Association members is how to recover when the prolonged coronavirus restrictions are lifted. However, we have a mutual interest with the City Council and others involved in this ambitious project to deliver the high-quality changes needed for the future success of this iconic street. This overdue transformation to the appearance and operation of George Street will impact on our members and affected businesses in the area will need support throughout the inevitable disruption involved. We appreciate the opportunity for ongoing engagement with the City Council on the final concept design and thereafter.

Essential Edinburgh

7.3.9 Essential Edinburgh welcome the proposed concept designs for George Street which are the result of extensive consultation. It is vital the design works for all its users whether they be retail and hospitality businesses, residents, office workers and people undertaking active travel. The design takes this into account including issues related to servicing and accessibility and we look forward to continuing to work with the Council and other stakeholders to support delivery of a plan that works for all.

New Town and Broughton Community Council

7.3.10 As reported in the Business Bulletin update to Committee in April 2021 no written response to the Concept Design and Operational Plan has been received, however, the Consultancy team did meet with the Community Council in March 2021 to present the draft Concept Design and Operational Plan where the general concept of the project was welcomed. During the

Stage 3 design process the Consultancy team shall continue to fully engage with the Community Council on final design and operational proposals.

7.4 Further public engagement has been undertaken in arriving at a final concept design with a new website launched providing both high quality visuals of the proposed design and contextual background on specific aspects of the project including Heritage, Transport, Environment and Placemaking. Since its launch the project website has had over 7,500 views with the YouTube animation video receiving nearly 8,000 views. As part of this engagement exercise the wider public were invited to complete an online survey which asked a range of questions. Over 566 surveys were completed by close of the engagement period, end March. An overwhelming majority of respondents (66%) indicated that they are more likely to visit George Street if the plans proceed. Other outcomes from the survey indicated that the majority of visitors would not travel by car (14%) but instead walk (65%), cycle (45%) or use public transport. A key theme that emerged from the on-line engagement survey was a request for additional greening and trees. Section 4.4.2 of this report provides further details on the current proposals for greenery within George Street which have been subject to comprehensive discussions with a range of key stakeholders including Edinburgh World Heritage. Full details on the outcome of the March 2021 engagement strategy was provided to the Transport and Environment Committee in April 2021.

7.5 Several “virtual” on-line events have been organised in recognition of the challenges of Covid-19 lockdown restrictions. These events included a virtual tour of the final concept design with several stakeholder groups where questions and queries could be raised with the consultancy team and a virtual public engagement session was organised in March. Open to the wider public the public engagement event provided an opportunity for questions and queries to be raised with the project team. Finally, eleven “in depth” engagement sessions took place in March with local residents and businesses following a mail drop to 2,500 addresses, with over 85 participants attending. The events provided an opportunity for detailed discussions specifically relating to how any final operational plan for George Street will operate.

7.6 Communication and marketing of the final concept design has been comprehensive with various channels used to publicise the project including local and national press outlets, social media, dedicated project website and technical trade outlets. Nearly 500,000 “hits” were recorded on a BBC news article relating to the project while 457,000 impressions were reached via twitter. Feedback via press and social media channels has generally been positive.

7.7 An Integrated Impact Assessment (IIA) process is underway (and will be maintained throughout the design process) and a copy is available online. This identifies a majority of positive impacts for people with protected characteristics, and notes where some potential negative impacts require further detailed development.

8. Background reading/external references

8.1 George Street and First New Town Project Update – Business Bulletin to 11 October 2019 Transport and Environment Committee.

8.2 George Street and First New Town Project Update - Business Bulletin to 12 September 2019 Transport and Environment Committee.

8.3 Edinburgh City Centre Transformation (ECCT) – Business Bulletin to 12 November 2020 Transport and Environment Committee

8.4 George Street and First New Town Public Realm Project – Business Bulletin to 28 January 2021 Transport and Environment Committee

8.5 George Street and First New Town Project Update– Report to 31 March 2020 Leadership Advisory Panel

8.6 George Street and First New Town – Consultation and Design Development Update Report to 16 May 2019 Transport and Environment Committee

8.7 George Street and First New Town Design Project Update Report to 5 October 2017 Transport and Environment Committee.

8.8 George Street Experimental Traffic Regulation Order, Concluding Report and Design Principles report to 7 June 2016 Transport and Environment Committee.

8.9 George Street and First New Town (GNT) Public Realm Project – Business Bulletin to 22 April 2021 Transport and Environmental Committee

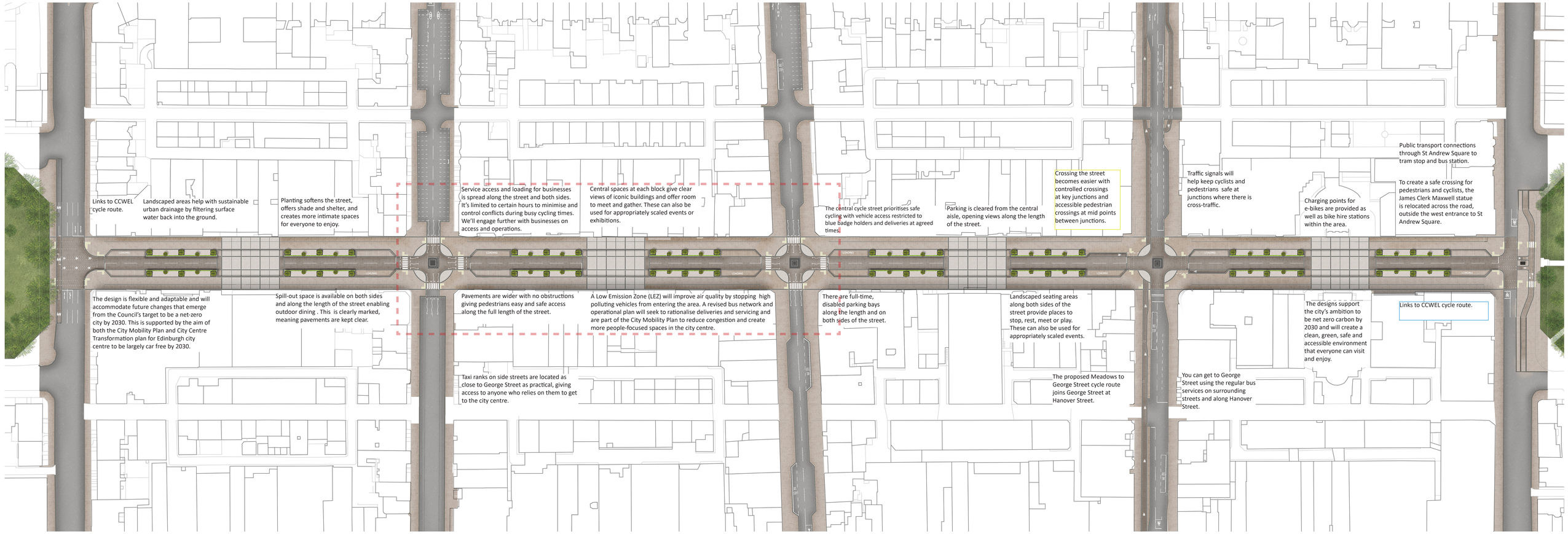
8.10 George Street and First New Town (GNT) Public Realm Project – Business Bulletin to 17 June 2021 Transport and Environmental Committee

9. Appendices

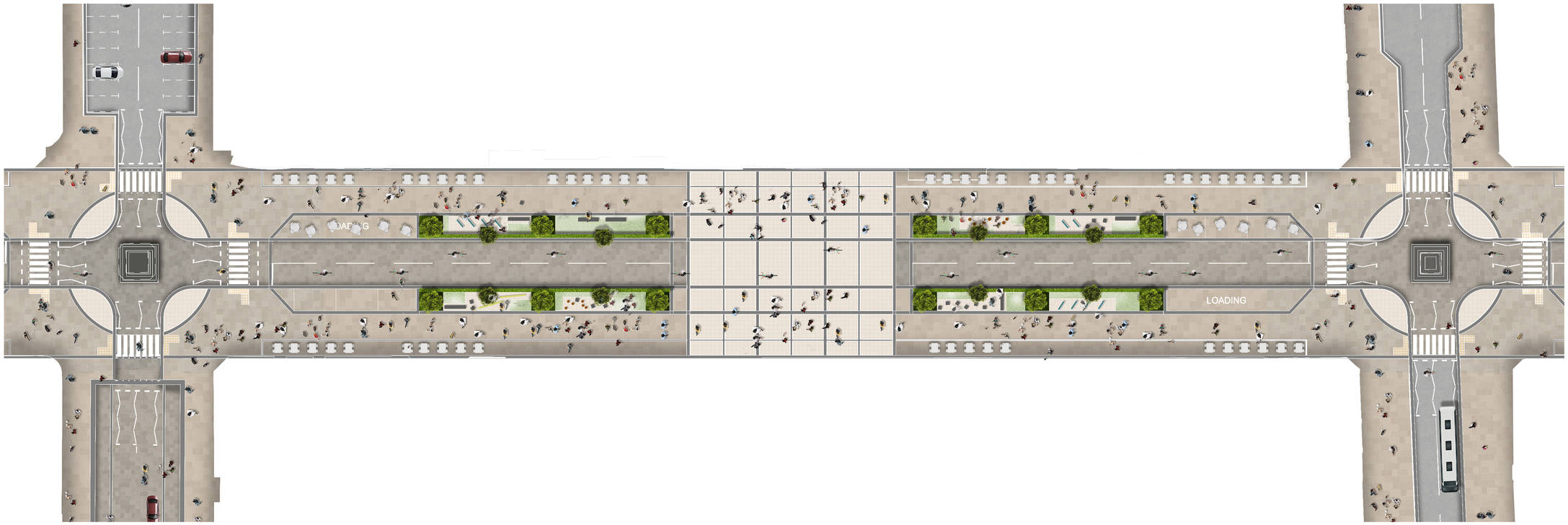
9.1 Appendix 1 – Final Concept Design Plans

9.2 Appendix 2 – Updated GNT Operational Plan

FULL STUDY AREA, RENDERED PLAN, 1:750



STUDY AREA DETAIL, RENDERED PLAN, 1:250



REV. DESCRIPTION APP. DATE

LDĀDESIGN

PROJECT TITLE
George Street and First New Town Public Realm Design

DRAWING TITLE
Concept Plan

ISSUED BY	Glasgow	T: 0141 222 9780	
DATE	Nov. '20	DRAWN	MMc
SCALE@A0	As shown	CHECKED	RW
STATUS	Sketch	APPROVED	KT

DWG. NO

No dimensions are to be scaled from this drawing.
All dimensions are to be checked on site.
Area measurements for indicative purposes only.

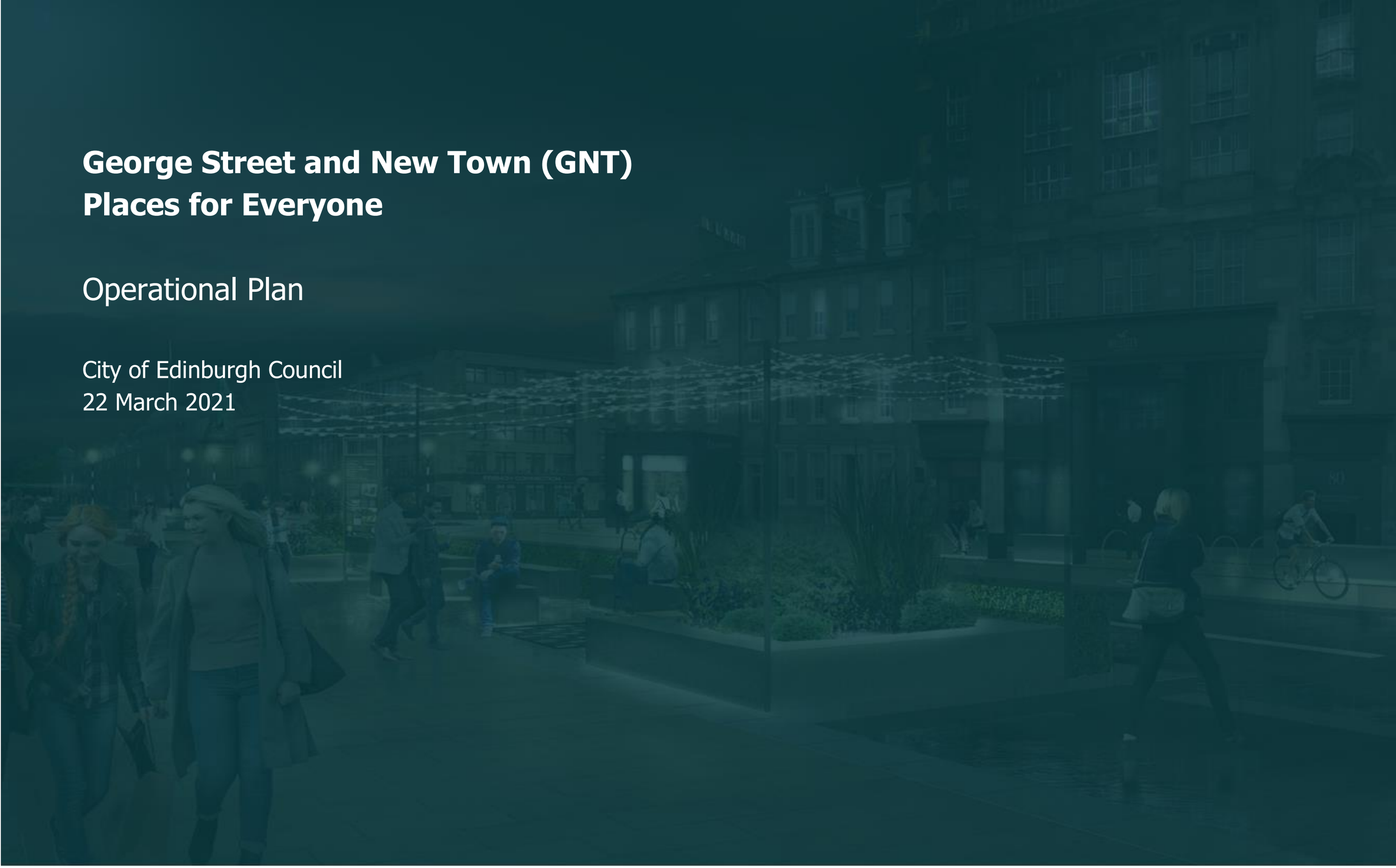
Sources Ordnance Survey


drummond
Balustrade

George Street and New Town (GNT)
Places for Everyone

Operational Plan

City of Edinburgh Council
22 March 2021



Document control

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Date:	6th April 2021	
Prepared by	Checked by	Approved By
Jordan Dunn	Jordan Dunn	Mark Rinkus
Description of Revision	Client comments and minor alterations / clarifications	
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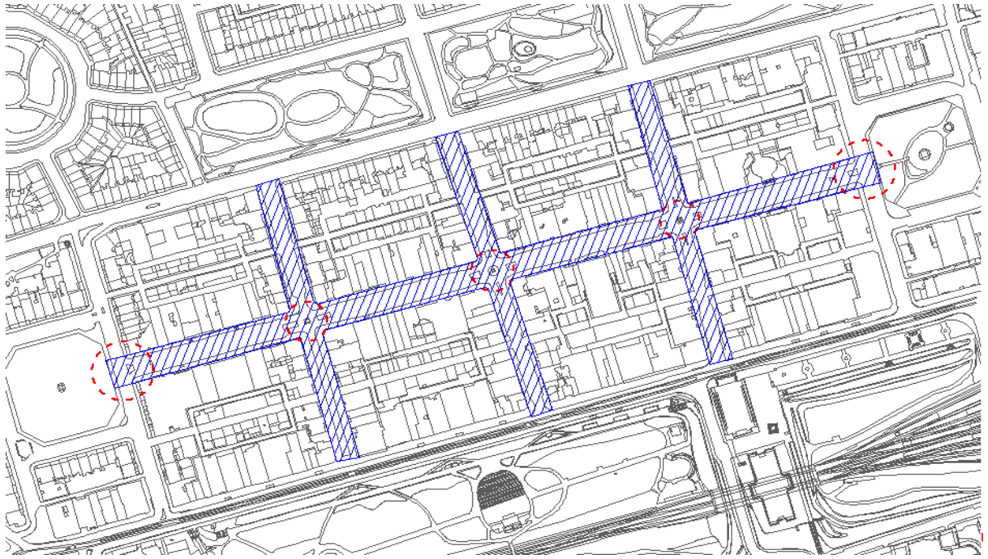
	Sustrans – Laurie Robertson, Chris Coldwell, Andrew Peat, Katherine Henebry	Alasdair Anderson, Katherine Henebry
Description of Revision	Sustrans comments – some clarifications requested; minor alterations proposed	

Contents

1. Introduction

The purpose of this Stage 2 Operational Plan (OP) is to support the concept design proposals for improvements to the quality and operation of Edinburgh's First New Town as part of the George Street and First New Town Design Study (GNT). This report provides a summary of the proposed design elements and design considerations along with areas where further design development is required. This report should be read in conjunction with the George Street and First New Town Operational Statement which provides a detailed summary of the existing service and loading and access arrangements. The extent of the study area is shown in the following figure.



George Street and First New Town Study Area

The GNT design aims to create a vibrant area with a world class street environment that is safe for all users. It will enhance its use for pedestrians and prioritises active travel through provision of a robust design which is adaptable to future requirements.

Policy Background Review

Edinburgh City Centre Transformation Strategy (ECCT)

The Edinburgh City Centre Transformation Strategy (ECCT), which has been developed by the City of Edinburgh Council is estimated to deliver £420m of benefits over a 10-year period through investment in improved public spaces, inclusive access and prioritisation of travel on foot, by bicycle and on public transport.

The strategy was originally considered by the Transport and Environment Committee in May 2019 and was updated following a consultation held between May and July 2019. This saw almost 80% of more than 3,000 respondents agreeing with aims to reduce the number of motor vehicles in streets, create more pedestrian and cycling space and a enhanced public realm.

A 10-year Programme Delivery Plan has been developed, with two key projects already underway, Meadows to George Street (MGS) and George Street and First New Town (GNT).

Progress towards the successful delivery of the ECCT strategy will be closely monitored throughout the 10-year programme, with regular updates to committee based on both quantitative and qualitative indicators. As well as tracking public perception, real-world indicators such as bus patronage, the share of modes of transport used by commuters and footfall in catalyst areas will be continually monitored, informing the ongoing delivery of the plan.

ECCT will be delivered in close alignment with a range of projects envisioning a sustainable, accessible and better-connected future for Edinburgh, including the Low Emission Zone, City Mobility Plan and City Plan 2030, which will shape development across the city.

Across the whole of the city centre, ECCT will seek to deliver:

- A walkable city centre core right at the heart of the World Heritage Site, enabled by a pedestrian priority zone and a network of connected, high quality, car-free streets;
- High-quality streets and public spaces where improvements allow for people to be inspired by the city's unique heritage while they interact, relax or play;
- A city centre that is inclusive and accessible for people of all ages and abilities, including provision of blue badge parking;
- A connected network across the city centre of new segregated and safe cycle routes to link communities and destinations;
- A strategy to review and coordinate buses, coaches and taxis, making it easier to switch between public transport, shared mobility and active travel.

City Mobility Plan (CMP)

The City Mobility Plan, which supersedes Edinburgh's Local Transport Strategy 2014- 2019, provides a strategic framework for the safe and effective movement of people and goods around Edinburgh up to 2030. The CMP sets a bold, new, strategic framework for the sustainable, safe, efficient and inclusive movement of people, goods and services into and around Edinburgh whilst seeking to address the associated environmental and health impacts.

The Plan sets out a strategy for significant tram, bus network and active travel interventions which will link with the Edinburgh City Centre Transformation (ECCT) Strategy, update of the National Transport Strategy (NTS), the Strategic Transport Projects Review 2, the Edinburgh and South East Scotland City Region Deal Growth Framework and City Plan 2030. New policy proposals are identified to improve mobility and transport in Edinburgh and address the key challenges which the City faces. Proposals have been developed through a robust review and engagement process with the final CMP and associated Implementation Plan approved by the Transport and Environment Committee in February 2021.

The outcomes of the Plan are that Edinburgh will be a city with a carbon neutral, inclusive public transport system, with good accessibility and affordability, with better air quality and less congestion, with better spaces for people to move around in and enjoy and a leading global city for people to live, work and access services in and for residents and visitors to enjoy.

Low Emission Zone

Edinburgh is part of the Scottish national Low Emission Zones (LEZ) programme to reduce road transport's contribution to poor air quality by introducing LEZs in the four largest cities in Scotland. A LEZ will help Edinburgh comply with legal air quality standards and reduce the impact of harmful emissions. It will help to accelerate the move to lower emission vehicles and encourage earlier renewals of vehicle fleets. The LEZ scheme is anticipated to be in place during 2022 with drivers of non-compliant vehicles given grace periods to upgrade their vehicles or face penalties. Where appropriate local exemptions will be explored, informed by national regulations.

2. Design Overview

Introduction

The study and Concept Design continues to benefit from the input from residents, businesses and project stakeholders who have played a central role in developing the design over the most recent years. The Concept Design has been developed from the design principles adopted by City of Edinburgh Council in 2016 following the Experimental Traffic Regulatory Order (ETRO) trial closure to provide more space for pedestrians and cyclists on George Street. In developing a Concept Design for George Street and the First New Town (GNT), it is also critically important that the views of a wide range of citizens, businesses and special interest groups are gathered.

Design Objectives

During winter 2017/2018 the GNT study objectives were developed through engagement events, with a range of stakeholders, residents, businesses and the general public. The purpose of the objectives is to help guide the development of a Concept Design for the area. The events also helped to identify the many considerations that need to be taken into account when developing the design, and although some are more general considerations, they are linked to the objectives set out below.

- **World class place** - create a world class place that respects and enhances the existing Edinburgh City Centre World Heritage Site.
- **Pedestrian experience** - enlarge and enhance public and pedestrian space, creating a safe, vibrant space for all.
- **Sustainable transport** - prioritise active travel and access for people with a disability or impairment, with public parking on George Street seen as lowest priority.
- **Flexible space** - develop an adaptable street design, in particular enabling use for appropriate events.
- **Vibrant for the economy** - enhance the First New Town as a place where businesses can thrive.

Design Principles

As published in the May 2019 Transport and Environmental Committee Report, the goal of the project is to deliver a robust design proposal that is operationally sound, deliverable in the short term and that will respond to wider operational changes in future. Following this report, the key components of the design concept were agreed, these were shaped through engaging and consulting extensively with local community groups, businesses, specialist interest groups and the wider public and include:

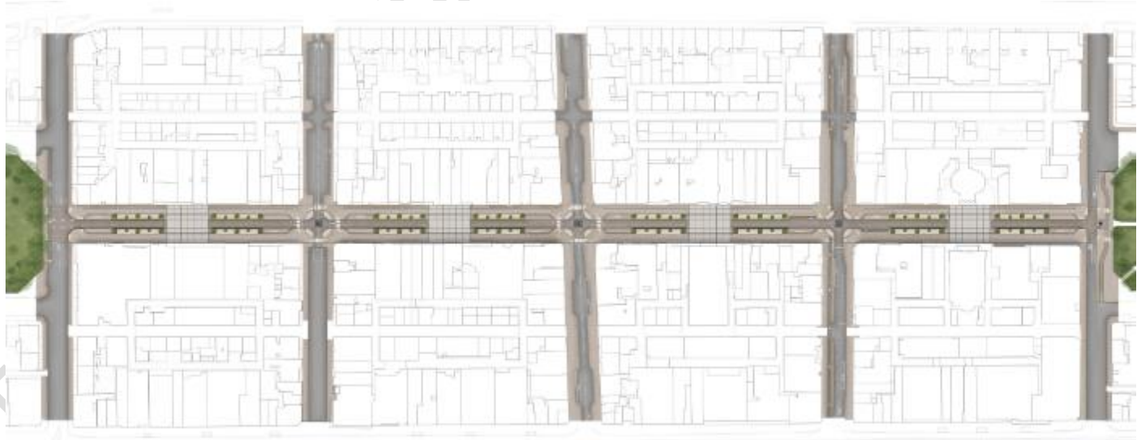
Core Principles

- Delivering a design solution which gives priority to pedestrian movement, considering set periods of the day where the streets operate without non-essential vehicle access but permitting bus services or blue badge access where appropriate.
- Preserving the use of cycling infrastructure year-round.
- Maintaining the current local bus passenger services within the area; with limited bus stop and route realignment, in keeping with City of Edinburgh Council's wider bus stop rationalisation plan.
- Prioritising blue-badge parking in within the GNT area, and essential resident parking within the scheme area, to support close access for those who most need it and reallocating some bays from George Street within the First New Town where this may be possible.
- Reducing vehicle traffic movements at the junction of George and Hanover Street to support essential access requirements through the First New Town.

Further Design Considerations

- An appropriate method of segregation (physically and visually) between cyclists, pedestrians and vehicles is required.
- Those with impaired mobility and equalities groups should be a core consideration of the scheme. This ensures that users of the street who are blind or visually impaired are able to discern distinct areas, whilst people using walking aids, wheelchairs or pushing buggies are able to easily cross the street where desired.

First New Town Layout and Proposed Concept Design



3. Walking Wheeling & Accessibility

Overview

Current pedestrian provision within George Street and the First New Town significantly varies depending on the exact location but is generally considered to be uninviting. In general, footways are often 'cluttered' with refuse waste, advertisement boards or 'business spill' from local business. Footways are generally in a poor state of repair and uneven. Pedestrian desire lines and freedom of movement is significantly reduced due to the number of vehicles and a streetscape which prioritises vehicle parking. Pedestrians are required to utilise multi-stage pedestrian crossings present at all junctions with pedestrian guard rails 'funnelling' pedestrians at these locations. The area also has varied footway levels, inconsistent use of surface materials, which, combined with high kerbs and limited formal crossing points, reduces the accessibility and coherence for disabled users. There is no formal signage or wayfinding in place to assist visitors in negotiating the streetscape.

Proposed Provision

The design focuses on creating a better place for walking and wheeling while contributing to the value of George Street and the First New Town as a city centre destination. To achieve this, all non-essential parking will be removed and space redefined to include wider pavements and landscaped seating areas within each street block.

The pedestrian areas will be delineated by a low upstand kerb providing designated clutter free areas that are accessible for walking and wheeling by using an appropriate range of high-quality finishes.

The largely car-free design will support walking and wheeling through and across the First New Town and will include:

- Improved pedestrian crossing facilities at each junction along George Street. This will include reduced crossing distances, single stage crossings and adjusted traffic signal phases to increase pedestrian crossing time.
- New formal pedestrian crossing facility on the northern section of Hanover Street at Thistle Street.
- Informal pedestrian crossings at multiple points throughout each block.
- Significantly wider, clutter free pavements on George Street with landscaped seating areas.

Allocation of Space

The proposed design creates more space on the street for walking, wheeling and cycling, and makes it easier and safer to move around. The concept design seeks to prioritise pedestrian movement through a number of key design changes which include introducing significantly wider, unobstructed pavements and the removal of obstructions for pedestrians at each crossing point and junction. The continuity of high-quality aesthetic and tactile surface materials will support accessibility and promote inclusivity. The carriageway space has been reduced to a physical operational minimum largely dictated by the requirements to maintain access for essential servicing and loading activity. The introduction of open central spaces within the street and common pallete of materials and finishes all serve to remind the remaining vehicles accessing George Street that the traditional 'road' has been removed and that they are now the 'visitors' within this streetscape. This designed change in user hierarchy benefits all other user groups in navigating the streetscape space.

Summary of Proposed Infrastructure

George Street

To prioritise people of all abilities across all user groups we propose to significantly widen footway provision. The design innovatively redefines footway space on George Street using a series of lateral 'zones' formed at a 60mm 'higher' surface level than the central carriageway space. The proposed provision for walking and wheeling are summarised as follows:

Clearly delineated commercial seating areas within a 2.5m zone including the following design elements:

- Clearly delineated seating areas forming part of the overall footway directly adjacent to the commercial and retail frontages to both the north and south of the street allowing for controlled commercial spill-out e.g. on-street dining (where Council Policy or tenancy agreements support such actions).
- Whilst formed on the same level as the adjacent main footway zone, the zone would be surfaced demarcated and provide a visual and textural reminder to identify its boundary. Where commercial seating areas are not present the 2.5m wide strip will also allow those moving at a slower pace or people window shopping to separate from those within the main areas of the footway.

The 'Main Footway Zone' includes the following design elements:

- This zone is a minimum of 4.5m wide within the centre of the footways. This zone is also consistent in both size and use on the north and south side of George Street and is comparable to the existing footway width with the added benefit that this zone is free from clutter and obstructions, such as commercial seating or those alighting at storefronts.
- To support the legibility of the streetscape to those with protected characteristics, the design has developed to prevent in the inclusion of physical obstacles within this zone such as vegetation planters, bus stops or loading bays.
- The central zone of each block is proposed to provide flexible clutter free spaces level with the footway 40m long and 4.5m wide that will accommodate a variety of needs at various times of day, week and year.

Landscaped seating areas including the following design elements:

- The proposed Landscaped seating areas are 4.5m wide and 40m long. Located again on both the north and south sides of the street with 4 areas per block of George Street.
- Landscaped seating areas are proposed to provide comfortable and flexible spaces which contain public seating areas supporting increased dwell times and supporting the mobility of all age groups.

First New Town Streets

To support these changes, some revisions to the layout of connecting side streets is recommended. This includes widening footways and, where possible, reducing the width of the carriageway across each of the First New Town Streets to 7m. The following key measure are proposed:

- 4m wide minimum footway on each of the side streets.
- Increase footways up to 6m in the vicinity of the junctions with George St in order to remove pinch points and ease pedestrian movement.
- Raised tables and reduced corner radius at the junctions with Thistle/Hill and Youngs Streets to the north of George Street incorporating level pedestrian crossings.

Facilitating Desire Lines and Crossings

The design seeks to better manage and encourage crossings of side streets by:

- reducing the width of the central carriageway space and maximising footway space, supporting more direct crossing behaviours at the junctions (diagonal crossing);

- removing all unnecessary infrastructure (refuge islands); and
- promoting indirect crossing of the street as required.

The combined interventions that aim to reduce the volume of vehicles within George Street through restricted access and wider First New Town Streets through the implementation of the City Mobility Plan (CMP), the introduction of service windows and a simple pallet of materials combined with unobstructed sightlines will minimise the potential for conflicts currently observed between user groups.

Crossings at junctions will reinforce pedestrian priority over motorised vehicles, as a result of a reduction of traffic volumes, by improving wait time at signals and increasing crossing times. Crossing points will also enhance east-west and north-south connectivity, addressing the identified psychological barrier to travelling along George Street. This is anticipated to support increased pedestrian activity towards the western end of the street.

Similar to the current layout, zebra crossings are proposed for the George Street/Castle and George Street/Frederick Street junctions. Zebra crossings have the added safety benefit of requiring motorists to stop to allow pedestrians to proceed.

Signalised crossings will be retained at the junction of George Street/Hanover Street, serving as the key interchange point for north-south traffic through the First New Town area. At this junction it is proposed cyclists will also be provided with their own dedicated phase, removing the potential conflicts with pedestrians and motorised vehicles.

Rebalancing the street to promote a largely car free space promotes the improved movement of pedestrians and cyclists. Whilst surface delineation and kerbed upstands are proposed, these will be provided in keeping with City of Edinburgh Council Street Design Guidelines and will be significantly lower than the current kerbed arrangement (suggested 60mm) whilst still detectable by the mobility impaired.

Pedestrian desire line tracing at junctions (George Street and First New Town). Here + Now 2017

Inclusive Design

In line with City of Edinburgh Council's (CEC) recent Street Design Guidance and Chartered Institution of Highways & Transportation's (CIHT) Street Design for All, inclusive measures and ensuring accessibility for users is a key element of the proposal. Inclusivity and consideration of equality groups is embedded within the design both in terms of the physical layout and through the consultation centric approach used to develop the design.

Ease of Use

Crossings at junctions are known to be challenging to navigate within the existing layout of the First New Town. A lack of available space to alight on footways or pedestrian islands, street clutter and pedestrian guard rails produces an environment with greater risks and discriminates against vulnerable users.

Footways and crossing locations have been designed to be ergonomic, intuitive and provide quality and robustness. All median islands have been removed and crossings realigned to be both shorter and better align with desire lines, whilst the lower kerb height supports impromptu crossing.

A consistent approach to providing facilities such as dropped kerbs with visually contrasting materials has also been used. Footways in the area are also be proposed to be at a consistent level travelling east-west, improving accessibility for wheelchair users and removing the risk of slips and trips. The designs include a range of tactile paving, enabling visually impaired pedestrians to recognise changes in the road layout.

Existing high kerbs, George Street

Proposed 60mm kerb upstands

Pedestrian Welfare Provision

There is currently only one permanent bench on George Street, outside St Andrew's and St George's Church. The provision of seating would be greatly improved by the design proposal. Landscaped seating areas are proposed along the length of the George Street with 4 per block located to both the north and south of the street and will provide circa 150 spaces for public seating available to users of the street to rest and dwell supporting the design of the street as a destination.

Indicative proposed seating within Landscaped Areas

Road Safety

A Stage 1 Road Safety Audit (RSA) was undertaken in support of the concept design development during February 2021. The audit results are reported separately but overall did not identify any road safety design concerns although did note a number of areas for further consideration through design development.

Operational Considerations

The design will enhance the pedestrian environment in the area and reinforce the key views and vistas on-street. Landscaped seating areas are introduced to create open recreational spaces within the streetscape. These are intended to assist wayfinding and characterise each block within George Street, helping to make the environment more legible for people of all abilities. Upgraded crossing facilities at junctions will give additional priority to pedestrians and increase crossing safety. The design will also widen footways and minimise street clutter on all adjoining streets, which currently causes constraints on the footway and detracts from the surrounding architecture and local attractions.

The additional width provided within footways and zoned approach to providing clearly delineated seating areas reduces the potential for conflicts between commercial seating area, slow moving pedestrians (alighting at storefronts and other local businesses) and faster moving pedestrians travelling elsewhere within the study area.

Careful consideration will be given to the requirements for inclusive street furniture during the Sustrans Funded Places for Everyone Stage 3 developed design phase. Particular attention will also be given to the main footway areas to ensure that these remain free of clutter.

Counter Terrorism

The design incorporates the ability for Anti-terrorism measures within each street block. The measures will be designed to align with the material palette and the strict requirements of a World Heritage Organisation (WHO) protected site.

Anti-terrorism measures are not required to be in place full time and as such are not envisaged to be a permanent feature of the street design. However, to support pedestrian safety at the junctions, permanent bollards around the overrun areas will be considered in further detail through design development.

Details of the anti-terrorism measures will be developed during the next stage of the design process.

Summary of Operational Impact (Pedestrians and Accessibility)

Operational Change	Evaluation	Rationale
Reduced pedestrian congestion at junctions through wider footways and more opportunity to cross	Strong Benefit	Widened footways, ease pedestrian congestion whilst the design promotes placemaking
Reduced waiting times at junctions through phased signalling	Strong Benefit	Supports pedestrian movement hierarchy encouraging travel by foot
Improved crossing desire lines at informal locations	Strong Benefit	Supports pedestrian movement hierarchy encouraging travel by foot
Improved overall pedestrian safety through improved visibility and reduced surface heights	Strong Benefit	Reduced street clutter, no parked vehicles and removal of high kerbs heights supports pedestrian movement hierarchy encouraging travel by foot
More attractive and pleasant environment through creation of space and place	Strong Benefit	Design promotes placemaking
Reduction in access to and through George Street by general traffic	Benefit	General benefit although noted that some essential users dependent upon vehicle access

4. Active Travel & Cycling Accessibility

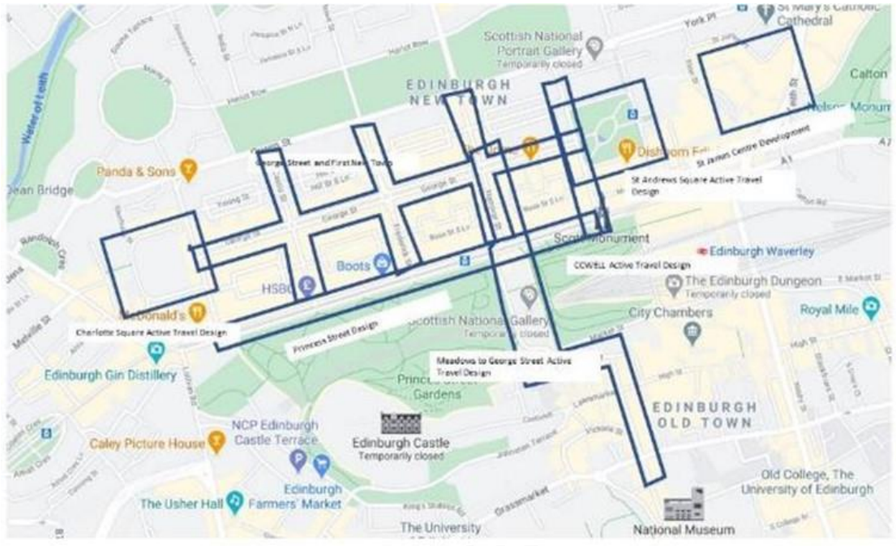
Overview

Cyclists are currently expected to travel along the carriageway and through each junction. Current traffic volumes, along with challenges arising from vehicles accessing and egressing parking are generally considered to be discouraging to less confident cyclists.

George Street as part of the National Cycle Route and a critical section of the City Centre West to East Link (CCWEL) Quiet Route will serve cycle connections both along and to George Street as a destination. The cycling facility is being designed as a 'quiet route' and will support access to a wider range of cyclists. The cycling facility once complete will provide an attractive infrastructure provision to encourage those less confident to take up cycling as an everyday from of travel. In doing so, it will benefit public health and contribute to Edinburgh's commitment towards achieving a low carbon economy and contributions towards the climate emergency. Whilst the CCWEL is a strategic cycling route, George Street and the First New Town must be recognised as both a route and as a destination where cyclists can enjoy the heritage assets of a UNESCO World Heritage site. The design of George Street as a key active travel connector must be cognisant of the historic volumes of pedestrian, vehicles, and cyclists converging at St. Andrew Square and Charlotte Square.

National Cycle Routes 75 and 76 and many core paths pass through the study area, these vary from busy main roads (with and without cycle lanes) to quieter traffic-restricted streets. The First New Town is known to serve the important purpose of linking other key local cycle links including the Union Canal, The Meadows, Leith Walk and Easter Road.

The Meadows to George Street Active Travel Route is also being progressed. This route will intersect with George Street at Hanover Street. For the cycling links to be successful, it is critical that all designs are developed to take cognisance of each other and provide a coherent and consistent Active Travel Network whilst retaining a balanced approach to the requirements of all other users and the built natural heritage.



George Street in Relation to other City Centre Projects

Proposed Provision

The concept design proposals include cycle facilities on both George Street and Hanover Street including:

- Restriction of all but essential motorised vehicles from entering George Street with Loading and Servicing activity promoted only during specific times of the day via 'service windows'. This will ultimately result in low volumes of motorised vehicle activity. The method of enforcement is discussed elsewhere in this report.
- Cycle priority use of a 7m wide central carriageway similar to a European style cycling street spanning between Charlotte Square to St Andrew Square. This "carriageway" is modelled from the European-style cycling street where vehicles are made to feel like guests and cyclists are the priority.
- Increased cycle parking provision, including cycle hire stations and e-bike charging, on each of the streets in the First New Town.
- Signalised junction phases arranged to improve cycle connectivity along the main City Centre West to East Link and Meadows to George Street cycle routes.
- Introduction of 3m wide bi-directional segregated cycleway along the east side of Hanover Street between Queen Street and Thistle Street.
- Improved cycle priority crossing facilities at each of the junctions on George Street and Hanover Street.
- Infrastructure connections to the proposed CCWEL route at Charlotte Square and St Andrew Square.
- Integration with the proposed Meadows to George Street cycle route at Hanover Street.

Proposed George Street Cycling Facility

Cycle Parking

Cycle parking is proposed, adjacent to the cycleway at regular intervals along the both sides of George Street. These cycle stands also provide a sense of symmetry within the wider context of the streetscape as they are provided opposite to pedestrians seating and dwell zones. This creates convenient stopping points for work, shopping or leisure activity. Eight Sheffield-style cycle stands are proposed within each of the four blocks of George Street with further cycle provision located on Castle Fredrick and Hanover Streets with additional areas provided at either end of George St. This would increase the formal cycle parking of the area to around 100 bicycles.

Proposed Cycle Parking Locations – Total Capacity 100 bicycles (50 cycle stands)

Indicative Cycle Parking Infrastructure

Connections with Other Cycle Facilities

As noted earlier, the proposed design will connect several local cycling routes including National Cycle Routes 75 & 76, Goldenacre Cycle Path and Leith Walk. This also includes two proposals being brought forward alongside the GNT Design. The GNTs primary interface with adjacent facilities is at key junctions.

As part of the proposed redesign and implementation of cycle facilities, desire lines, crossing types and the operation of the five key junctions between George Street, Charlotte Street, Castle Street, Frederick Street, Hanover Street and St Andrew Square will change.

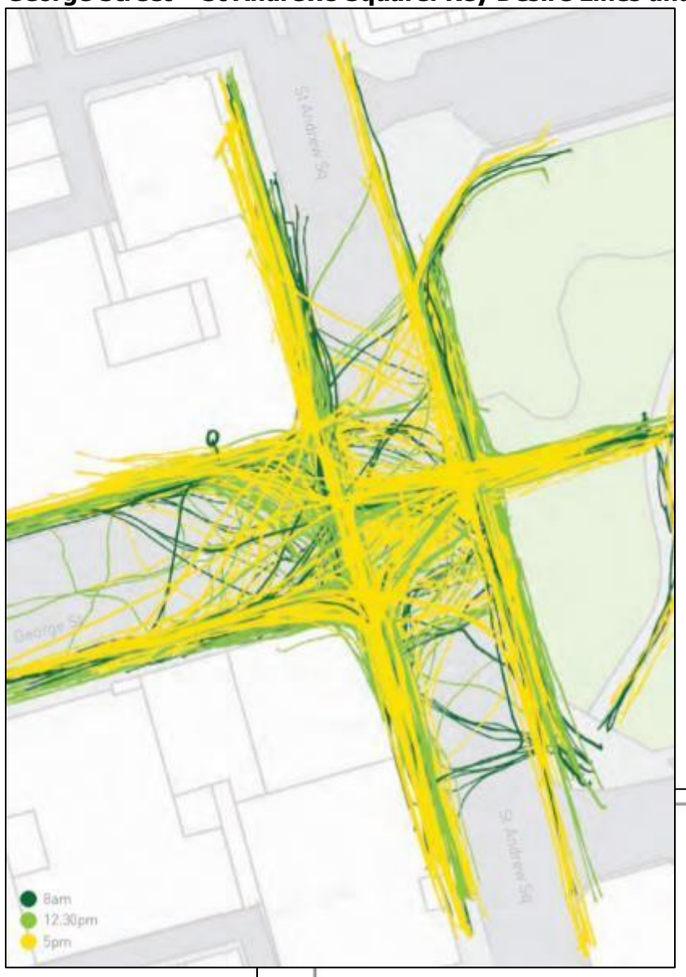
Cycle Segregation

There are a variety of design solutions when considering segregation between cyclists, pedestrians and motorists along George Street. Edinburgh Streets Design Guide highlights four preferred options for cycle facilities. This guidance prescribes horizontal segregation through buffer strips and allows options to have a cycleway level with an adjacent footway, level with the carriageway or on an intermediate level.

The proposed cycle carriageway will be segregated from the adjacent footway / dwell zones through use of a 60mm kerbed upstand. Pedestrians will be encouraged to informally cross the cycle route as per their desire lines to support a more accessible and welcoming street design by recognising the priority of non-motorised user groups. Cyclists and pedestrians will be expected to progress through the streetscape utilising appropriate due care and attention and it is therefore envisaged that cycling and essential vehicles speeds are maintained at low levels.

Junction Layout Proposals

George Street – St Andrews Square: Key Desire Lines and Proposed Layout



Key Desire Lines

- East/west between George Street and public realm areas within St Andrew Square.
- Increased pedestrian and cyclist activity between St Andrew Square and George Street will place pressure on this junction following the completion of the St James Quarter and the CCWEL.
- North/south vehicle access and public transport activity expected to be retained although general traffic volumes likely to be reduced through implementation of future general traffic restrictions on South St David's Street.

Proposed Design Measures

- Priority cycle use of central carriageway space within George Street up to St Andrew Square.
- Mini zebra crossings at convenient locations to cross the east cycleway and provide pedestrian access to St Andrew Square.
- Reconfiguration of signal timing and stages to improve cycling / pedestrian movement.
- No segregated provision for cyclists on George Street on approach to the junction considered necessary in support of simple / legible design.
- All kerb lines to be 60mm high with tactile paving and dropped kerbs provided at all crossing points as shown in the adjacent design layout.
- Removal of central pedestrian islands, realigning crossings and reducing crossing distances.
- Use of median lining and markings to visually narrow the carriageway are being considered as part of the stage 3 developed design. In the future as the city develops to become more car free, the GNT design will align with a future streetscape that is not dominated by motor vehicles.

Proposed Operation

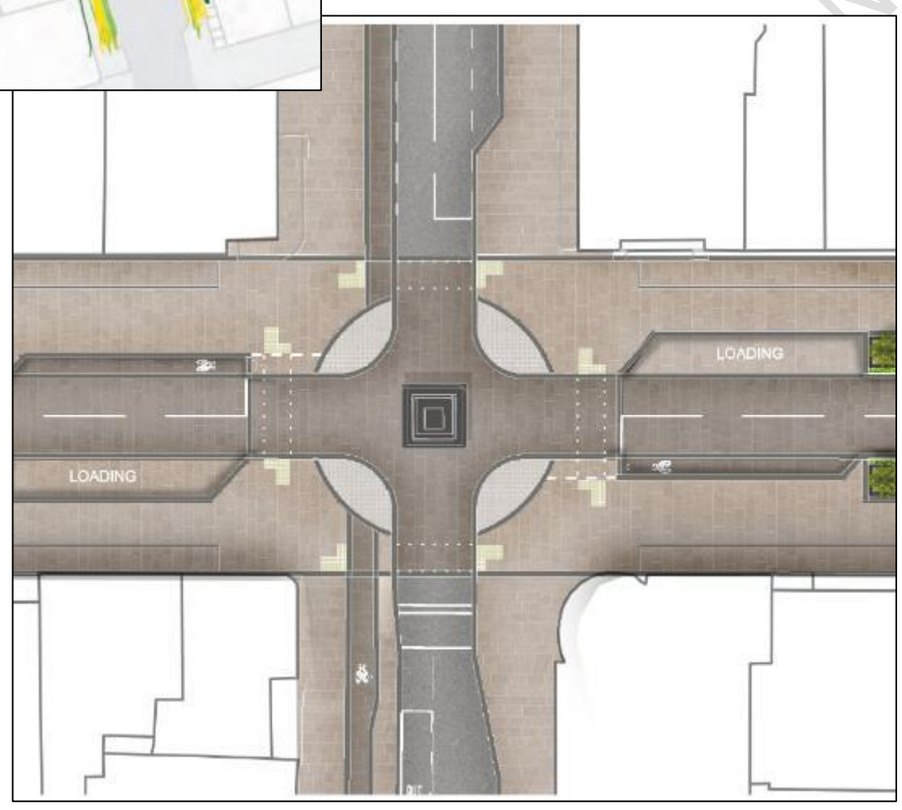
- Junction will continue under traffic signal operation with 2 vehicle stages (St Andrew Square North/South and George Street) and an all-movement pedestrian stage.
- Cyclists will travel through the junction during the vehicle stage.
- Further consideration, as part of the stage 3 developed design, to ban vehicles from making right turns at the junction to further improve user safety and public transport accessibility.

Summary

The proposed design improves both east/west and north/south connectivity by realigning crossings to the north and south of George Street better matching desire lines at this junction. Crossing from west to east towards St Andrew Square from George Street currently involves a multi-stage crossing using a pedestrian island in the centre of the carriageway, this also requires extended periods of waiting due to traffic signals. By removing this island, crossing distances and pedestrian and cycle journey times are efficiently reduced.

The volume of pedestrians and cyclists is anticipated to significantly increase at this location following the completion of St James Quarter and the CCWEL cycle route.

George Street – Hanover Street: Key Desire Lines and Proposed Layout



Key Desire Lines

- East/west on the south side of George Street, crossing Hanover Street.
- North/south on the east side of Hanover Street, crossing George Street.
- All active travel movements are anticipated to be subject to intensification in the future following the completion of CCWEL and Meadows to George Street.
- North/south vehicle access and public transport activity will be retained although general traffic volumes are likely to be reduced through implementation of future general traffic restrictions on the Mound as a result of Meadows to George Street.

Proposed Design Measures

- Priority cycle use of central carriageway space within George Street.
- Bi-directional cycleway on westside of Hanover Street (See Meadows to George Street Active Travel Design).
- The reduction of vehicle space within the junction based around swept path analysis including the provision of 'overrun area' (shown in grey on adjacent image), offering visual traffic calming in order to reduce vehicle speeds within the junction. The overrun areas will be formed through 20mm kerblines around the radii of the overrun area on each quadrant of the junction.
- Revisions to signals arrangement to provide cyclists a 'green' phase. Removal of central pedestrian islands, realigning crossings and reducing crossing distances.
- Use of median lining and markings to visually narrow carriageway width are being considered as part of the stage 3 developed design. In the future as the city develops to become more car free, the GNT design will align with a future streetscape that is not dominated by motor vehicles.

Proposed Operation

- Junction will remain under traffic signal operation with 4 vehicle stages (one for each arm), a cycle only stage, and an all-movement pedestrian stage.
- Cyclists on George St will travel through the junction with early release during the associated vehicle stage with cyclists on Hanover St provided with a separate cycle-only stage.
- Further development as part of the stage 3 developed design to include consideration of the following:
    - Combining the Hanover St vehicle stages.
    - Combining the George St vehicle stages.
    - Restricting vehicle right turns.

Summary

A common feature with all junctions in the area are multi-stage island crossings. These are seen to cause disruption for pedestrians and increase the risk of inappropriate and unsafe crossing behaviour. By removing these islands, existing guard railings and other street clutter, pedestrians have a greater level of freedom and safety.

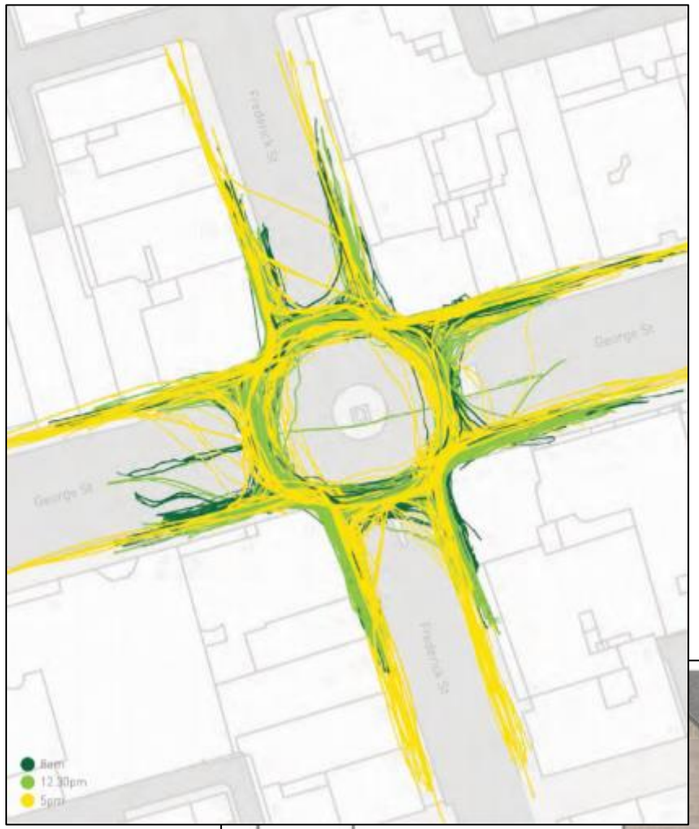
This junction will form a key interchange for east / west and north / south movements including north / south motorised traffic. The significant reduction in road space based on swept path analysis combined with the retention of the central statue will provide traffic calming effects by encouraging reduced vehicle speeds. Additionally, the use of materials within 'overrun areas' include changes in surface material visually reinforce the need to reduce vehicle speed.

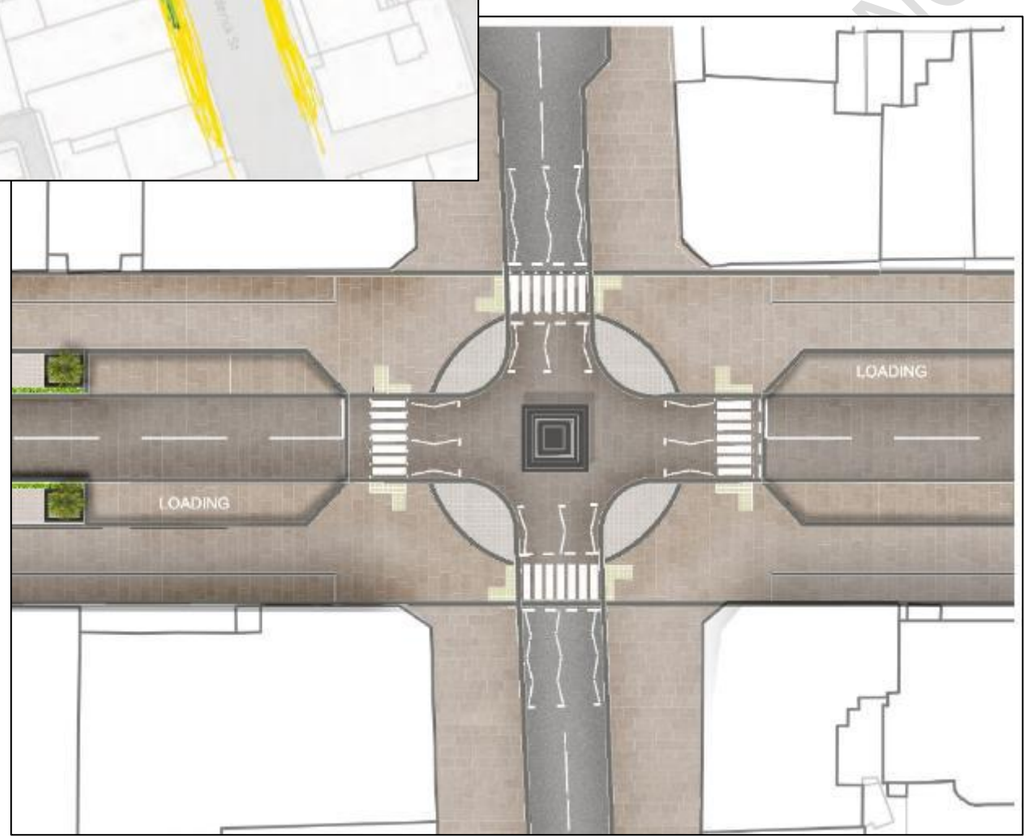
The signals operation at this junction would be simplified where possible to optimise movement for all modes by integrating anticipated reductions of general traffic via wider traffic restrictions implemented by CCT. Cycle movements on Hanover Street would be provided with a dedicated phase within the arrangement, minimising potential conflicts with turning vehicles. Cycle movements on George Street are likely to operate as an early release green in advance of the vehicle green noting that vehicle movements on George St out with the proposed loading window will be negligible. Stop lines and other markings will be used within the cycleways to clearly denote the locations where pedestrians will cross.

With the current design, cyclists will be required to 'bump up' the 20mm kerbline which, given the kerb radii, will require caution to avoid front wheel slippage, particularly during periods of wet weather. The use of the overrun areas, whilst beneficial to vehicle speed management, is noted to potentially cause confusion with pedestrians as to whether the 'road space' is essentially 'shared' with priority access otherwise unclear.

Signage and lining at this junction will require careful consideration during the developed design stage.

George Street – Frederick Street: Key Desire Lines and Proposed Layout





Key Desire Lines

- East / west on the south side of George Street, crossing Frederick Street.
- North / south on the east side of Frederick Street, crossing George Street.
- East / west active travel movements are anticipated to be subject to intensification in the future following the completion of CCWEL.

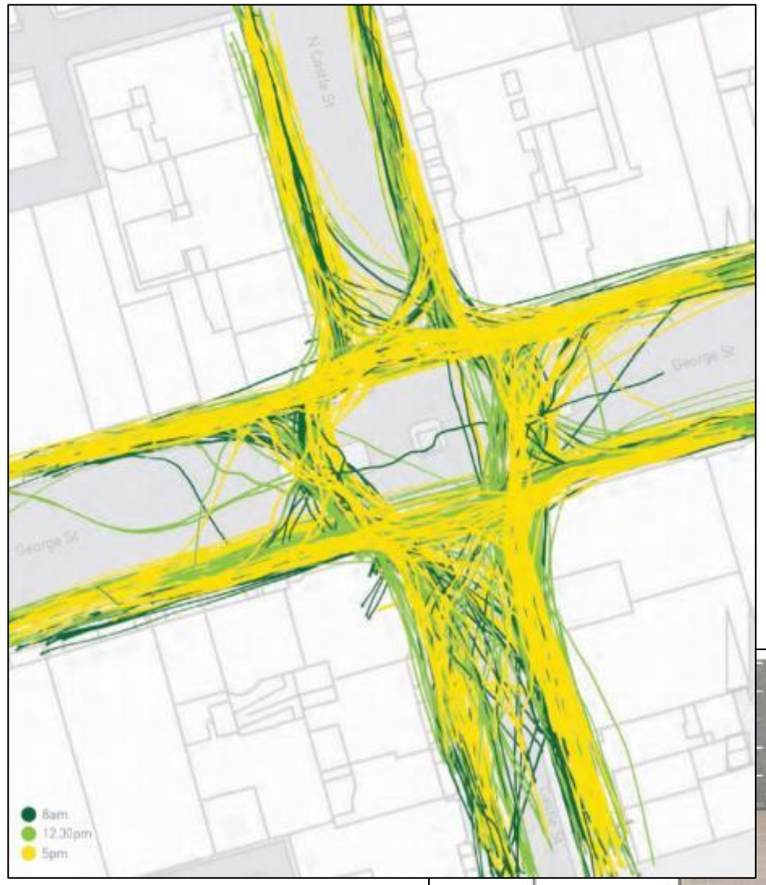
Proposed Design Measures

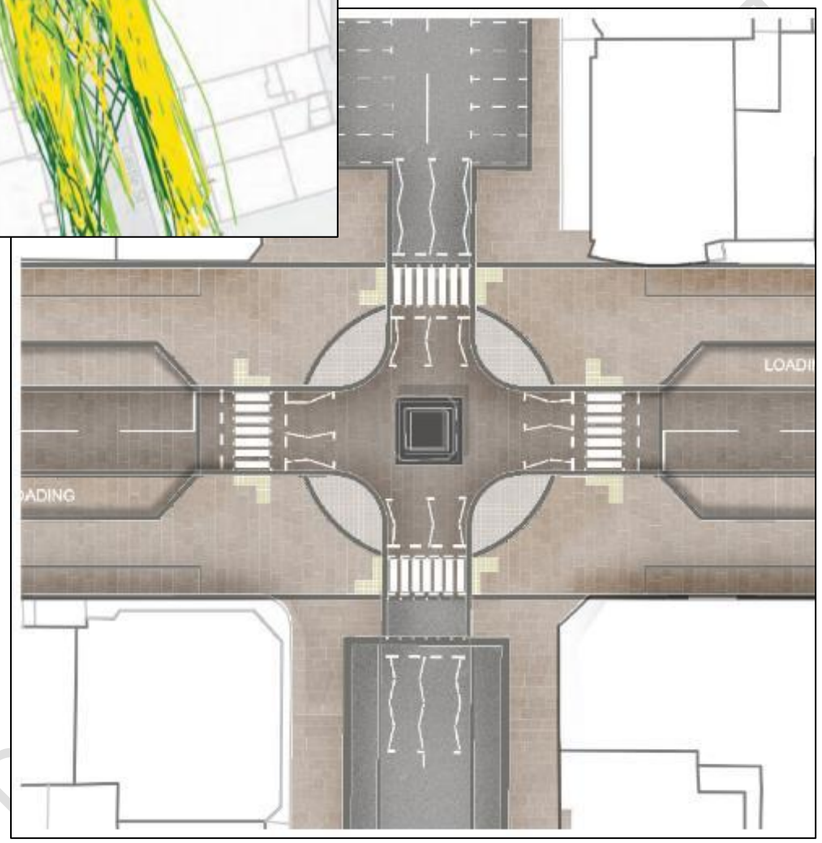
- Priority cycle use of central carriageway space within George Street.
- Provision of overrun area offering visual traffic calming in order to reduce vehicle speeds within the junction.
- Removal of central pedestrian islands, realigning crossings and reducing crossing distances.
- Use of median lining and markings to visually narrow carriageway width is being considered as part of the stage 3 developed design. In the future as the city develops to become more car free, the GNT design will align with a future streetscape that is not dominated by motor vehicles.

Summary

The operation of this junction is to remain comparable to the existing arrangement. Zebra crossings are provided on each approach, requiring vehicle drivers to stop and give way to pedestrians waiting to cross or already on the carriageway. Vehicles would perform manoeuvres within the reduced carriageway widths, while areas are provided to allow turning movements from large vehicles such as HGVs.

George Street – Castle Street: Key Desire Lines and Proposed Layout





Key Desire Lines

- South / north travelling from Castle Street to George Street.
- East / west on the south side of George Street, crossing Castle Street.
- East / west active travel movements through the junction are anticipated to be subject to intensification in the future following the completion of CCWEL.

Proposed Design Measures

- Priority cycle use of central carriageway space within George Street.
- Provision of overrun area offering visual traffic calming in order to reduce vehicle speeds within the junction.
- Removal of central pedestrian islands, realigning crossings and reducing crossing distances.
- Use of median lining and markings to visually narrow carriageway width are being considered as part of the stage 3 developed design. In the future as the city develops to become more car free, the GNT design will align with a future streetscape that is not dominated by motor vehicles.

Summary

The operation of this junction is to remain comparable to the existing arrangement. Zebra crossings are provided on each approach, requiring vehicle drivers to stop and give way to pedestrians waiting to cross or already on the carriageway. Vehicles would perform manoeuvres within the reduced carriageway widths, while areas are provided to allow turning movements from large vehicles such as HGVs.

George Street – Charlotte Street: Key Desire Lines and Proposed Layout

Key Desire Lines

- All pedestrian / cyclist movements east / west and north / south currently including east / west between George Street and public realm areas within Charlotte Square.
- Increased pedestrian and cyclist activity between Charlotte Square Gardens and George Street will place pressure on this junction.
- North / south general traffic and bus activity retained.

Proposed Design Measures

- Priority cycle use of central carriageway space within George Street up to Charlotte Square;
- Inclusion of 60mm kerb heights to differentiate the central carriageway from the adjacent footways;
- Removal of central pedestrian islands, realigning crossings and reducing crossing distances;
- Provision of tactile paving and dropped kerbs at all crossing locations; and
- Reconfiguration of signal timing and stages to cater for improved cycling / pedestrian movement.
- No segregated provision for cyclists on George Street on approach to the junction considered necessary in support of simple / legible design.
- Use of median lining and markings to visually narrow carriageway width is being considered as part of the stage 3 developed design. In the future as the city develops to become more car free, the GNT design will align with a future streetscape that is not dominated by motor vehicles.

Proposed Operation

- Junction will remain under traffic signal operation with 2 vehicle stages (St Andrews Square North/South and George Street) and an all-movement pedestrian stage.
- Cyclists will travel through the junction during the vehicle stage.
  Further consideration, as part of the stage 3 developed design, to ban vehicles from making right turns at the junctions to further improve user safety and public transport accessibility

Summary

Similar to the George Street/St Andrew Square junction, the proposed design improves both east-west and north-south connectivity by realigning crossings by removing the existing pedestrian island on the George Street approach. Extended periods of waiting associated with multi-stage traffic signals would be removed and pedestrian and cycle journey times are reduced.

Active travel users should be able to 'naturally align' with George Street from Charlotte Square without the need for deviation from intended desire line.

Operational Considerations

Cyclists will be provided with priority use of central carriageway facilities which, combined with restrictions on vehicular traffic to low volumes per hour and the use of service and loading 'windows' to manage motorised access, will provide a greater level of safety and freedom of mobility for cyclists of all ages and abilities. It is anticipated that the cycle carriageway will be constructed 60mm lower than the level of the footway in order to provide a level of physical segregation between pedestrians and cyclists.

The design approach to cycling is to support intuitive design where the facilities provided provide priority support to this user group in a proportionate manner. This is most noticeable when compared to the rest of the CCWEL route which supports largely segregated cycling design providing a priority cycling route. Whilst George Street is a central part of the CCWEL, the design must note that George Street and the First New Town is itself also a destination where cyclists and other users group are encouraged to travel to and interchange from other routes.

This configuration also allows cyclists to transition from the cycleway to the carriageway and merge with facilities on Queen Street. Beyond the study area cyclists would continue on the carriageway as part of the regular flows of traffic similar to current operation. This approach allows flexibility in relation to the future expansion of dedicated active travel provision to the north of Queen Street.

George Street Carriageway Cycling Concept

Summary of Operational Impact (Active Travel and Cycling)

Operational Change	Evaluation	Rationale
Reprioritisation of central carriageway space as predominately for use by cyclists	Strong Benefit	7m carriageway provides uncongested cycling space that mimics the effect of European style cycle street, giving cyclist priority.
Alteration to junctions to provide cycle priority measures	Strong Benefit	Supports movement and accessibility of cyclists through the streetscape.
Shared use of carriageway with service vehicles and crossing pedestrians	Benefit	Whilst predominately for cycle use, the carriageway like any other will be used by other user groups. This will encourage responsible cycling and crossing behaviours
Retention of junctions 'punctuating' the George Street Route	Strong Benefit	Maintains through direct intervention that George Street is a destination. Stop and start manages cycling speeds.
Pedestrian / cycle priority designs with interfaces with adjacent active travel projects	Strong Benefit	Supports pedestrian and cyclist movement through the streetscape.
Use of 20mm kerb upstands on overrun areas at Hanover Street / Fredrick Street / Castle Street junctions.	Disbenefit	Likely to be a trip hazard for mobility impaired and may result in surface water drainage issues at the developed design stage. Will support access by cyclists although 'flush' surface finish may be preferred for safety reasons due to the angle of approach by cyclists.

5. Motorised Vehicle Access

Overview

Through earlier consultation during 2018 with the public and key stakeholders during the development of the concept design, there has been support for the consideration of a managed vehicle access strategy for George Street and the First New Town project area in lieu of full pedestrianisation. Supplementary to this and as part of the Council's bold response to the climate emergency, through policy documents such as the CMP and ECCT, the Council is seeking to promote a largely car free city centre by 2030. To support this aim, all general traffic will be excluded from access to George Street including access by service and tour buses. The 'boundary' of where this restriction will be implemented is subject to ongoing consideration although initial suggestions support an alignment with the Cities Low Emission Zone (LEZ).

The First New Town consists of a diverse assortment of local business, office and commercial operations. A number of the properties are also residential, and these will require a right of access for loading, servicing and general maintenance. Whilst it is noted that it will take time to influence change in the size, type and frequency of service vehicles accessing the city, access by permitted vehicles will be supported by the design during appropriate times of the day (see loading and servicing section for more detail). Implementation of a managed vehicle access strategy also needs to take account of access to the adjoining streets including Rose Street, Hill Street and Thistle Street along with the adjoining lanes.

The removal of general parking (non-essential parking) along George Street will significantly reduce the volumes of traffic attracted to the area noting that due to existing turning restrictions at various junctions, George Street is not a strategic east-west vehicular route. The majority of traffic within George Street is attracted there due to the city central parking availability with significant numbers of car-based trips made from relatively short distances originating from within the city boundary. The adjacent St James Centre and its associated 1,500 vehicle parking spaces is likely to have a much greater influence on traffic diversion through the city and will generally viewed to offset any losses to George Street parking provision supporting the Council's ambition to reduce on-street parking overall.

Vehicle Access Proposals Overview

The key access proposals include restricted vehicle access on George Street for the following:

- buses (including tour buses) on George Street although Frederick and Hanover Streets will remain as core public transport corridors.
- taxis on George Street although taxi rank provision will be increased within the side streets.
- general traffic on George Street although access maintained within the side streets.

The key access proposals include continued vehicle access on George Street for the following

- Loading and servicing access restricted to certain time of the day.
- Unrestricted Blue Badge access.

It is not anticipated that major changes to vehicle access will be implemented with the wider First New Town although the management of future vehicle access and demand within the City centre is a key proposal of the City Centre Transformation project.

Loading and Servicing

Proposed Provision

George Street

It is proposed that each block of George Street would operate using a combination of the following measures;

- Adaptable space which can be used for servicing and loading. A minimum of two dedicated inset loading bays of approximately 110m in total length located on both the north and south sides of each block. This includes use of the flexible space within the central spaces of each block which can be used for loading during permitted 'windows' of operation.
- The 23m long loading bays located towards the end of each block will be suitable for the accommodation of small to medium sized (up to 10m in length) servicing vehicles in forward gear. The 32m long central spaces will be suitable for the accommodation of larger vehicles (up to 16.5m in length).
- Optimisation of service, loading and waste collection functions through the implementation of CCT to reduce the frequency of current on-demand servicing and the volume of service vehicle overall; and
- Whilst a future ambition and not likely to be available from the design opening, the city is looking towards the implementation of strategic freight hubs and optimised methods of 'last mile' logistics to support service operation. This will be achieved through the implementation of CMP Policy 'Movement 26' which aims to reduce the impact of delivery and servicing vehicles through access and timing restrictions, edge of town consolidation centres, micro distribution centres and local click and collect facilities while supporting deliveries by foot and bicycle.

This results in an increase of approximately 40m of dedicated roadside space (equivalent to around 5 light goods vehicles) allocated for loading in comparison to dedicated loading space within the existing layout with the four central flexible spaces of 32m each in addition.

The on-street loading bays at either end of each block would be provided with dropped kerb facilities with direct access to the footway at level with the loading areas within the central areas being at the same level as the footway.

First New Town Streets

Through conversations with key users groups the requirements of local business and refuse collection, loading bays on these streets have been evenly distributed on Frederick Street and Hanover Street. The design proposes:

- Two inset 35m long loading bays are proposed on the west side of Frederick Street, one north and one south of George Street.
- One inset 40m long loading bay on the east side of Hanover Street north of George Street; and
- Two 13m long on-carriageway loading bays on the south side of Hanover Street with one on each side of the carriageway.

The existing pedestrianised area to the south of Castle Street is to be retained; this area allows loading between 11:30pm and 10:30am on roadside spaces adjacent to storefronts. Existing loading areas and facilities on Hill Street, Rose Street, Thistle Street and Young Street and their adjoining lanes are also to be retained.

Proposed Operation

George Street

Loading on George Street is proposed to be performed via dedicated/demarcated loading bays[1] to the north and south side and through the central spaces located mid-block. It is proposed that loading spaces ideally operate

[1] Further review of the designation of loading bays will be required. It may be an option that the loading bays are not designated as such within the future TRO.

during certain times to avoid conflict with peak demand of other user groups. Where available, servicing from the rear of the buildings via the lanes would be promoted.

One 'service window' is proposed. This will involve the coordination of all scheduled deliveries associated with local businesses, restaurants and workplaces and servicing/refuse providers to manage all loading/unloading activity within this period.

Currently, a number of streets within Edinburgh city centre successfully operate with a restricted servicing window model including:

- Princes Street – loading permitted 8pm to 7am.
- Castle Street – loading permitted 8pm to 10:30am
- Rose Street – loading permitted 11pm to 10:30am
- High Street – loading permitted 6:30am to 10:30am
- Grassmarket – loading permitted 6:30am to 12 noon

The exact hours of operation on George Street will be subject to further consideration and refinement based on lessons learned from existing operational examples and will be defined to support the broadest sizes of business.

While overnight servicing is viable for larger retail businesses and may be beneficial to facilitate ongoing building maintenance, the mix of business types and sizes within George Street needs careful consideration particularly in relation to potential additional cost to business associated with the availability of staff in a scenario with a narrow servicing window including overnight provision. Further consideration is also required of the safety implications associated with intensifying vehicle activity within George Street during the peak morning servicing period based on the volume of predicted vehicles and the associated availability of loading facilities.

Most logistical suppliers will not operate deliveries during the weekend period and therefore weekend servicing is anticipated to be reduced compared to a weekday. Although it is noted that some deliveries would be occurring during the summer evening periods and weekends when the café culture supporting outdoor dining is at its peak. The World Heritage nature of the street will also likely severely limit the signage used to communicate the servicing plan and therefore the 'simplest' approach is preferential to minimise signage.

The management of deliveries and servicing across the city, including the development of a city centre operation plan to improve the way freight and servicing is undertaken, is a key objective of CMP Policy Movement 26 as detailed below:

- **MOVEMENT 26 - Managing Deliveries and Servicing** Reduce the impact of delivery and servicing vehicles such as through access and timing restrictions, edge of town consolidation centres, micro distribution centres and local click and collect facilities while supporting deliveries by foot and bicycle.

It is recommended that further ongoing street service surveys are undertaken during Stage 3 and following an easing of COVID19 restrictions in order to assist the finalisation of the proposed servicing window taking into account the available loading capacity within the block. As with other pedestrianised streets within the city, the coordination of vehicles within the loading spaces provided is unlikely to be an issue.

<u>First New Town Streets</u>

Similar to the present operation, loading and servicing on adjoining streets will be done using designated loading bays at the kerbside. At these locations, service vehicles can freely load and unload at any time of day.

The integration of the Meadows to George Street route within the southern section of Hanover Street combined with the requirements associated with bus stop provision has removed the ability to provide dedicated loading facilities in this location. Further consideration is required at this location to facilitate adequate loading provision.

Based on the current design layout, there may be flexibility (subject to further consultation) to provide additional loading bays through the shared use of parking bays should this be desirable.

It is anticipated that the side streets will not be subject to the same service window restrictions as George Street although it is hoped that services would naturally align to occur with the George Street service windows.

Managing Scheduled/Unscheduled Access During Restricted Periods

Regardless of the timing of the proposed servicing and loading window there will be a requirement to facilitate requests for both scheduled and unscheduled vehicle access to George Street during the restricted period. Examples of the type of access request likely to be received could include the following:

- Access for scheduled wedding/funeral vehicles.
- Access for scheduled armoured cash vehicles.
- Access for scheduled coach pick-up/drop-off.
- Access for scheduled building maintenance work.
- Access for emergency building maintenance.

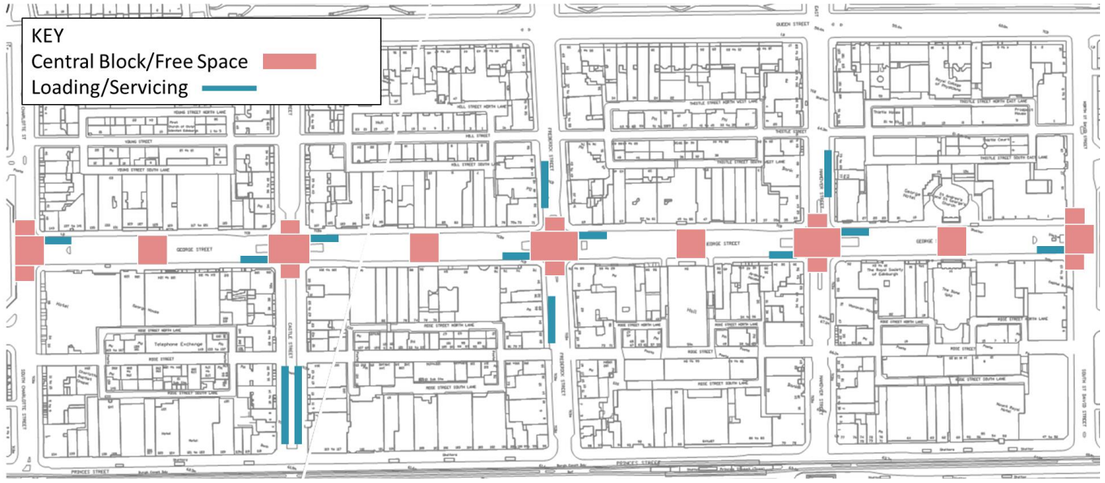
Management of access during the restricted period would be facilitated through a permit-based system which could vary from a paper-based permit to a virtual electronic version depending on the number of permits required, associated back office management arrangements/costs and a review of existing best practice within the city (such as school streets) and the wider UK.

The management of requests for scheduled/unscheduled access and exemptions will depend on the type of enforcement model deployed although would likely consist of the following process:

1. Pre-planned scheduled access during restricted period – Access would be dependent on a proof of need, identification of the vehicles, time and date required and issuing of virtual/paper permit through the council database in advance of the required access.
2. Unscheduled access during the restricted period – Access would be dependent of a proof of need on a one-off basis, identification of the vehicles, time and date required and issuing of virtual permit through the council database. Issuing of the virtual permit in this case will be dependent on the method of enforcement operation.

The anticipated high volume of requests for scheduled/unscheduled access to the street particularly relating to building maintenance based on the historic nature of buildings within the street will require an equitable and transparent appraisal method of approval in order to restrict vehicle access to very low levels. It is recommended that early engagement is undertaken with City of York Council to understand the impact of strict access vehicle restrictions on building maintenance within a similar historic city centre.

A key challenge of the city centre and an observation arising from the 2018 parking survey is the volume of white service vans parked within the First New Town. It is understood that the majority of this parking is in support of trades accessing both properties within the FNT and those located nearby to undertake scheduled renovations or scheduled/unscheduled maintenance works. Trade parking within any city centre continues to be a challenge when considering changes to parking and access design although the method of management is well evidenced through examination of other city streets including the Royal Mile as well as other cities. However, a key challenge for the FNT design is the critical management of vehicle numbers to support the multi-user design principles of the carriageway space.



Proposed Loading/Servicing and Parking Provision

Public Transport

Provision for Buses

A review of the public transport network and the option to remove bus access from George Street is being considered as part of the City Mobility Plan. While the scope of change is still to be fully determined, it is proposed that bus access including tour buses within George Street will be removed by 2025. Whilst the bus network is subject to ongoing review and reform, bus services will still be accessible from bus stop provision on the adjacent side streets including:

- 3 bus stops on Frederick Street, one north of George Street on the west side and two to the south on either side of the carriageway. These will be provided with seated shelters at the roadside; and
- 3 bus stops on Hanover Street, one on north of George Street on the east side and two to the south on either side of the carriageway.

The existing stop on the west side of Hanover Street is proposed to be redesigned to become a floating bus stop in order to facilitate the introduction of segregated cycling. In line with Edinburgh City Council's Street Design Guidance, the shelter and hardstanding area for passengers to alight is contained within a 'floating' pedestrian island allowing the proposed cycleway to continue around the bus stop. Mini zebra crossings with coloured tactile paving would be used to denote the crossing locations between the footway and island allowing users of all user groups to safely and comfortably access buses.

Proposed Bus Stop and Taxi Bay Locations

The advantage of the floating bus stop configuration is that buses do not have to overtake cycles on the carriageway between stops, and those cycling do not have to negotiate around stopped buses or other vehicles, removing the conflicts that typically occur between motor vehicle traffic and cyclists. When using this type of facility, cyclists travelling north or south would be required to give way to pedestrians crossing the cycleway to access the bus stop, while buses would continue to stop on the carriageway in a similar way to the existing layout.

Provision for Taxi

Current proposals recommend that access by Taxis to George Street will be prohibited although taxi and private hire access to the surrounding First New Town streets will be maintained. Taxi Rank locations have been rationalised and relocated to adjoining streets, allowing for increased capacity of blue badge spaces and loading facilities on George Street. The proposal includes:

- A taxi rank for 4 vehicles on the east side of Castle Street;
- A taxi rank for 6 vehicles to the east side Frederick Street north of George Street
- A taxi rank for 6 vehicles to the east side Frederick Street north of George Street
- A taxi rank for 2 vehicles to the west side of Hanover Street south of George Street

These facilities are proposed to be centrally located within the First New Town, therefore reducing the required walking distance to access taxis for surrounding streets and key attractors nearby. The Council is currently in the process of undertaking a Taxi Rank Review and the outcomes of this study will help refine the final location and capacity of Taxi Ranks within the First New Town. Further engagement will also take place during the Stage 3 detailed design stage before any final Taxi proposals are agreed for George Street and the First New Town area.

Operational Considerations

It is noted that the bus and taxi services currently travelling along George Street provide an essential travel mode to a number of users including those with mobility impairments, older people and the very young. Whilst the removal of taxi service will introduce some inconvenience, bus services can be readily accessed from the current stops located on the adjacent side street within a 300m walk with taxi ranks located throughout the First New Town.

The public transport network within the city centre is subject to ongoing change and improvement through the delivery of the following public transport policies within CMP:

- **MOVEMENT 1 Mass Rapid Transit** Expand the tram/mass rapid transport network to the north and south of the city as well as to Newhaven and explore the potential to develop or extend mass rapid transit routes into Fife, West, Mid and East Lothian.
- **MOVEMENT 2 – Bus Network Review** the city's bus network to better align with the Council's strategic priorities including improving accessibility, integration and reducing congestion in the city centre.
- **MOVEMENT 3 City Interchanges** Develop public transport interchanges at key locations in the city to enable better connections between services and modes. Support the integration of taxi ranks with interchanges.

The above polices are due to be implemented in parallel with the delivery programme for George Street and by 2025, a comprehensive integrated public transport system will be agreed, including stops, routes and public transport interchanges will have been agreed and moving towards completion by 2030.

First New Town Side Streets

Bus access on Frederick Street and Hanover Street will operate similarly to the present situation with on-carriageway bus stops present. Widened footways in the area will reduce the conflicts between passengers alighting at the roadside and passing pedestrians.

Restrictions to tour bus access and private coach pick-up/drop-off on George Street may increase the number of buses operating on Frederick and Hanover Streets with potential capacity implication for existing bus stops on these streets. It is recommended that a review of tour bus coach pick-up/drop-off access within the city centre is included within the overall review of the bus network undertaken through CMP.

On Hanover Street the northbound and southbound bus stop locations closest to George Street have been moved closer to the junction with George Street increasing their accessibility. Implementing the floating bus stops on the west side is also an effective way to separate those alighting for buses and pedestrians, this maximises the available footway space while offering cyclists convenient north-south facilities.

The introduction of the revised junction arrangement at Hanover Street in combination with the removal of the northern southbound stop is likely to require the re-routing of service 67 which currently terminates at this location.

Re-Prioritisation of Parking

Proposed Provision

George Street

- It is proposed all non-essential pay & display parking be removed from George Street; further consideration will be given to increasing availability of provision on streets such as Castle Street within the surrounding First New Town area. Capacity of blue badge holder parking will be upgraded similar to the current provision and observed usage, 15 blue badge holder spaces will be distributed throughout the street.

Proposed Blue Badge Holder Parking Provision

First New Town Side Streets

- Retained parking is proposed on North Castle Street (74 spaces) and to the north of Frederick Street (18 spaces). This will provide short stay parking up to 2/3 hours to serve local business and shopping and residential permit parking through shared-use. These also include 2 spaces allocated for motorcycles.
- Current resident permit holder and pay & display parking on Hill Street, Thistle Street and Young Street to the north would also become shared-use parking.
- As described above, blue badge provision is proposed to be concentrated on George Street. In line with the distribution of existing spaces and their observed demand, 3 blue badge holder spaces have been provided on Castle Street with 2 on the north side of Frederick Street and 2 (1 north and 1 south) on Hanover Street ensuring those with impaired mobility have the ability to park and access any part of the study area with a minimal onward journey to their final destination.

Proposed General Use Parking Provision

Operational Considerations

George Street

With the removal of all non-essential parking from George Street, badge those wishing to park in the area would be required to park within short stay 90° bays on Castle Street and Frederick Street or parallel bays on Hill Street, Thistle Street or Young Street. This parking is anticipated to have a maximum stay of up to 2/3 hours and would be patrolled and monitored by CEC wardens.

Blue badge holders would have unrestricted parking within the 18 bays provided on George Street throughout the day. Residents would be provided with 7 resident permit holders-only bays on the west side of Castle Street similar to the current layout.

First New Town Side Streets

Parking in the area is proposed to be rebalanced to remove general traffic from George Street. This would require vehicles to park elsewhere within the First New Town and streets within the wider area such as St James Quarter. Parking capacity on adjoining streets has been optimised while providing essential spaces for blue badge holders, loading and bus stops. Capacity would increase on these streets within the design from 149 total spaces to 184 spaces.

Parking and Loading Restrictions

The re-distribution of parking and loading across the First New Town area will require the existing Traffic Regulation Orders to be amended and it is recommended that an approach is taken that seeks to reduce the impact of signing and lining with the aim of reducing street clutter.

General Traffic

Enforcement and Operation

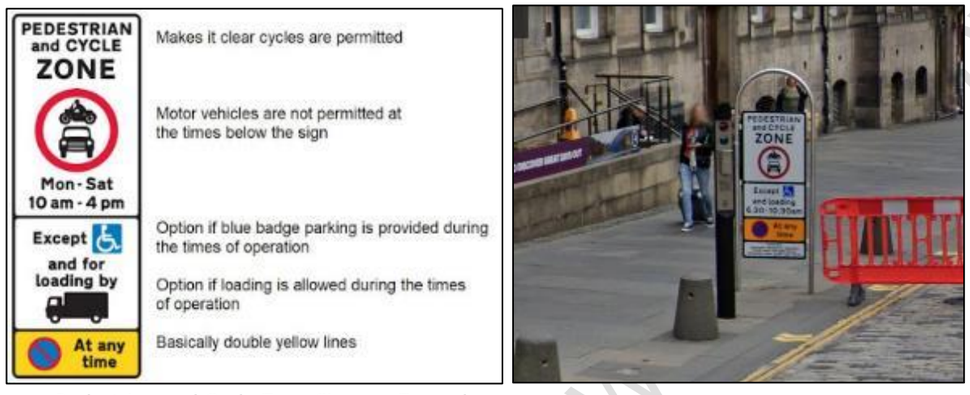
Enforcement is critical to the successful realisation of a new bold and ambitious vision for George Street. The final enforcement strategy adopted will primarily be developed through the ongoing delivery of the City Centre Transformation Plan (ECCT). A final enforcement strategy for George Street will need to be agreed before the end of 2021 and in place by construction completion in late 2025.

A number of enforcement methods will be investigated with the preferred option being the use of a technological solution rather than physical restrictions. Council officers have already commenced engagement with the Scottish Governments (Low Emissions Zone) LEZ team who are developing a camera-based cordon (reliant on ANPR cameras) which will facilitate controlled exemptions, for example blue badge holders. Other examples of best practice where car free city centres have been created using modern technological methods will also be reviewed. Any camera enforcement method employed by 2025 will necessitate early investigation of legislative changes which will be undertaken collaboratively with the Scottish Government.

Proposed Vehicle Restrictions and Enforcement

The proposed George Street Concept Design is based on the operational assumption that vehicle access to the street is to be restricted to very low levels with access permitted only to blue badge holders and loading/service vehicles (the latter only permitted during set loading windows). The proposed vehicle access restrictions are necessary to facilitate a safe and welcoming environment for walking, wheeling and to facilitate cycling activity to be accommodated within the central zone of the street.

The proposed vehicles access restrictions will require the introduction of a Traffic Regulation Order (TRO) that is likely to designate George Street as a "Pedestrian and Cycle Zone" (or appropriate alternative wording through agreement with the Scottish Government) including signage similar to that illustrated in the example below noting that the restrictions to general traffic on George Street will operate at all times.



Pedestrian and Cycle Zone Signage Examples

The proposed "Pedestrian and Cycle Zone" would be similar to existing examples within Edinburgh including the High Street, Grassmarket and residential streets included with the Council's School Streets programme. Based on current guidance, the entry and exit points to the "Pedestrian and Cycle Zone" would require the provision of signage to enable enforcement. Taking into consideration the heritage constraints associated the World Heritage status of the First New Town, the final extent of the zone and associated signage requirements will require careful consideration in order to minimise the visual impact of street clutter.

In Scotland, the enforcement of the majority of moving traffic offences including "Pedestrian and Cycle Zones" remain the responsibility of the police and is dependent on the availability of suitable levels of resource in order to deter contravention.

Within Edinburgh, in addition to the provision of road signage, the High Street and Grassmarket assist enforcement through the provision of automatic bollards to physically restrict access to the street during the periods when vehicle access is restricted. It is noted that both locations have suffered from continued ongoing maintenance issues with the installed automatic bollards with additional temporary measures having previously been required to replace the bollards during periods of scheduled/unscheduled maintenance.

It is recommended that early engagement is undertaken with City of York Council in relation to lessons learnt through the management of their Foot streets zone within the city centre which is strictly enforced through bollard entry control between 10:30AM – 5PM.

The preference in George Street would be to investigate alternative methods of enforcement without resorting to the introduction of physical measures such as bollards in order to reduce the future maintenance burden on the Council and enable efficient access to the street for blue badge holders.

Additional solutions exist for the enforcement of traffic restrictions through the use of ANPR Automatic Number plate Recognition Cameras with examples currently in operation at various locations in Edinburgh to enforce bus lane restrictions using powers contained in the Transport (Scotland) Act 2001. The proposed LEZ zone to be introduced in central Edinburgh will also utilise ANPR camera enforcement using powers contained in the Transport (Scotland) Act 2019 around a central cordon.

The use of camera enforcement also has challenges particularly surrounding access for 'blue badge' as the badges are attached to the user rather than the vehicle which prevents identification of badge holders by ANPR cameras. In recognition of this challenge, the Scottish Government is currently developing an APP which will enable blue badge holders to identify the vehicle they are travelling in thereby assisting local authorities in the use of ANPR cameras for enforcement while still enabling blue badge access.

The use of ANPR cameras to enforce moving traffic offences within "Pedestrian and Cycle Zones" is common within London utilising specific powers contained within the Traffic Management Act which does not apply in Scotland. Parallel Scottish legislation does not currently exist that would enable this type of enforcement in Scotland. Subject to further investigation, it is considered that the provision of such powers for use both within George St and the wider implementation of CCT would require primary legislation with associated timescale constraints.

Outside of London, camera enforcement of restricted vehicle access zones is often combined with a "bus gate" and this type of enforcement would be feasible within Edinburgh based on current legislation with a similar timed scheme currently in operation on Glasgow's Union Street restricting access to buses, cycle, taxis and loading between 7am-7pm.

The George Street Concept Design promotes the removal of all buses and taxis from the Street and the proposed restrictions would therefore complicate the use of this option in that a bus gate would greatly restrict the ability to remove bus access from the street.

Through the development of the City Centre Transformation Plan, the Council will continue to investigate innovative methods of enforcement within current legislation and working collaboratively with the Scottish Government in order to advance changes in legislation including a review of 'best practice examples.

Key System Requirements

The enforcement method must support a low number of vehicles on George Street and be able to readily identify legitimacy of purpose. It is likely that all vehicles required to access the FNT will require to be registered within an access database owned and managed by the Council. Signage to drivers will make clear that the street cannot be accessed without a valid permit which will be part of the vehicle registration process.

Vehicles choosing to enter George Street will be subject to penalty charge notification with the emphasis placed on the driver to provide a justified reason for access and have the notification absolved.

Summary of Motorised Traffic (Enforcement and Operation)

Operational Change	Evaluation	Rationale
Prohibitions on access by general traffic	neutral	Strong positive towards cities wider ambitions but unqualified impact on accessibility in the short term which may impact on street vitality affecting some businesses more than others. Risk of creating a 'barren windswept street' and creating an unsafe streetscape during the evening economy due to a lack of open unrestricted access. Possibility of creating a strong pedestrian dominated space which will bolster local economy activity through promotion of footfall.
Method for application of virtual exemptions permit may be cumbersome if user friendly ICT platform is not in place	disbenefit	Any exceptions application will presumably need to be processed quickly. Fairness and equality challenges may result. Any final solution subject to a full IIA. Effective ICT platform key to addressing risk. Option to implement an innovative and dynamic system that supports future operation demands.
Equipment maintenance and efficiency management	disbenefit	Enforcement of prohibitions likely to be both fiscal and staff time intensive. Processing of back office functions will be at cost to council (albeit some costs will be off-set by potential fiscal policy)
Restrictions on essential access	disbenefit	Whilst any system will support a degree of flexibility in operation, this system will require proactive application to support ongoing access. A robust and effective ICT platform key to addressing this risk

6. Operation During Events

Whilst the Councils policy on the size and scale of events within the First New Town is yet be developed, events such as the Edinburgh Book Festival, Annual Holiday Celebrations and Fringe Festival result in temporary closures within George Street and the First New Town. Spatial requirements on-street and the temporary measures deployed (such as mass barriers or pedestrian guard railings) are noted to vary from event to event resulting in a 'ad-hoc' approach to access. The continually changing streetscape as a result of event is noted to present challenges to access for those with protected characteristics due to the lack of continuity in layout. The exact details of operation during event is subject to further consideration as the design matures, however, the following key points should be noted in relation to the proposed design:

Pedestrians

- The proposed design, through the availability of 'free space' will likely limit the size and scale of events. The central spaces will support event footprints up to 40x20m. This space is unlikely to support events of a larger scale (Spiegel tent or large fairground rides) although through consultation with businesses, the general consensuses is towards a limited appetite for continuation of these larger type events in preference for smaller more locally manged alternatives.
- With events in place the design through its continuous footway provision will retain consistent and continuous pedestrian access through and along George Street.
- Operation of events across multiple street blocks may still be possible subject to the cities emerging event policy.
- The design supports the use of temporary barriers and pedestrian guard barriers utilising flexible design elements such as planters provided within the street. During events, these can be moved and used as barriers to assist in demarcation of 'zones'.

Open Space Event Mode Example

Cycling

- In terms of operations within the proposed design, it is anticipated that servicing during event periods would continue to operate in line with the existing situation although dedicated cycle access would be retained throughout any given event using the provided cycleways.

Emergency Access

- Emergency Access during any event would be set out within the Event Plan associated with each individual event and agreed with the council's Events team following consultation with the emergency services similar to the existing situation.

Servicing and Loading

- Loading and Servicing during any event would be set out within the Event Plan associated with each individual event and agreed with the council's Events team similar to the existing situation.

Summary of Events

Operational Change	Evaluation	Rationale
Subject to City Policy. Flexible design supports open space use for events although scale of event likely to be limited by design space. Option to close street blocks to create liner event.	neutral	Likely to require change in approach for some event suppliers. Scale may affect adversely the commercial viability of events. General street support is for limitation on event scale.

7. Operation During Construction

The construction programme for George Street and the First New Town design is as ambitious as the concept design. With the intention being for construction completion by end of 2025 the approach to construction will require to draw upon the expertise learned through a range of worldwide examples. The following section of this report sets out the key ambitions and operating principles supporting rapid low impact construction within a city context and will be developed through the future stage 3 process of design.

Approach to Construction

- Reduce net construction time.
- Construct in sections (modular approach).
- Minimise Disruption to All User Groups.
- Promote and enhance access to business.
- Consider and Manage 'Ripple Effect' of construction to wider City Centre.
- Provide continuous project representation On-Street.
- Provide advanced notification of phased delivery.
- Incorporate Lessons Learnt from other construction projects – Rose Street / St James Quarter / Tram / other cities.
- Consider Synergy with other City Centre Projects to manage interrelated impacts.
- Incorporate businesses and residents in the construction process.
- Consider Interim bus and service plans.
- Consider Emergency Access.
- Risk and Construction impacts.
- Temporary Traffic Management.
- Maintaining Freight Service and Access - Setting out good practice and legacy changes.
- Understand an incorporate future planned buildings maintenance within schedule.

Forecast Programme

- Promoting Early Contractor Involvement (ECI).
- Phased Construction being considered.
- Early confirmation of need to support construction embargos during festival events.
- Anticipated to be 24-month total construction time.
- Construction planned start January 2023.
- Critically dependent upon statutory process concluding pre 2023.
- Construction concluded by winter 2025.

Contractor Options

- Early Contractor Involvement (ECI) highly recommended.
- Bulk Order of Materials due to supply chain logistics
- East to West Construction Order (maximum impacts early).
- Materials and Storage – location and access to the compound.
- Early traffic management proposals.
- Engagement with local businesses / Residents in a continuous, meaningful way is critical.