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## Aberdeen Sustainable Urban Mobility Plan (SUMP)

### Appendices

Deliverable No.:	
Project Acronym:	1ABZ1
<b>Full Title:</b> Aberdeen Sustainable Urban Mobility Plan (SUMP) Appendices	
Grant Agreement No.:	
Workpackage/Measure No.:	WP1 1ABZ1
<b>Workpackage/ Measure Title:</b> SUMP and Port Optimisation	
<b>Responsible Author(s):</b> Will Hekelaar	
<b>Responsible Co-Author(s):</b>	
Date:	
Status:	Draft / Final
Dissemination level:	Public/ Confidential

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# Appendix A: SUMP Self – Assessment

## 1 Introduction

The European Commission's guidelines on *Developing and Implementing a Sustainable Urban Mobility Plan* (2014) define a Sustainable Urban Mobility Plan (SUMP) as:

*a strategic plan designed to satisfy the mobility needs of people and businesses in cities and their surroundings for a better quality of life. It builds on existing planning practices and takes due consideration of integration, participation, and evaluation principles.*

The Plan should address the following objectives:

- Ensure all citizens are offered transport options that enable access to key destinations and services;
- Improve safety and security;
- Reduce air and noise pollution, greenhouse gas emissions and energy consumption;
- Improve the efficiency and cost-effectiveness of the transportation of persons and goods; and
- Contribute to enhancing the attractiveness and quality of the urban environment and urban design for the benefits of citizens, the economy and society as a whole.

The guidelines identify the following basic characteristics of a SUMP:

- Long-term vision and clear implementation plan;
- Participatory approach;
- Balanced and integrated development of all transport modes;
- Horizontal and vertical integration;
- Assessment of current and future performance;
- Regular monitoring, review and reporting; and
- Consideration of external costs for all transport modes.

A draft SUMP for Aberdeen city centre was initially developed to accompany the publication of the Aberdeen City Centre Masterplan (CCMP) in 2015 but this was never presented to Aberdeen City Council (ACC) for formal adoption as it was recognised at the time that the SUMP, in its current form, could only be an interim strategy, given that the Council had no up to date and agreed city-wide Local Transport Strategy (LTS) and that there were additional aspirations for the city centre transport network emerging that a SUMP would need to take account of. These included plans to develop a new 'Roads Hierarchy' for the city in response to the opening of the Aberdeen Western Peripheral Route (AWPR) and to undertake a strategic car parking review. It was felt that the outcomes of these pieces of work, as well as other projects listed in Chapter 3, should be known (or at least such projects should be suitably advanced) to better set the context for a revised city centre transport plan.

Since then, ACC has adopted a revised LTS in 2016, with a supporting Active Travel Action Plan following in 2017. With the opening of the AWPR now imminent (with full opening scheduled for late 2018), the principles of a new Roads Hierarchy have been agreed by ACC, based on the concept of transforming Aberdeen city centre into a destination rather than a through-route for

traffic. Work is therefore underway to identify the measures required to 'lock in' the benefits of the new bypass and transform the urban core into a much more pleasant place to visit and spend time in, a space for people rather than vehicles. The strategic car parking review has likewise commenced and, complementing these strands of work, the Scottish Government has announced that Scotland's four largest cities will have a Low Emission Zone (LEZ) in place by 2020. As such, it is an apt time to revisit the SUMP, with the CCMP, Roads Hierarchy, car parking review, LEZ and SUMP working together to articulate the Council's and partners' aspirations for a city centre that is welcoming to pedestrians and cyclists, which enables healthy living and which encourages public transport accessibility and permeability, while discouraging unnecessary vehicular traffic.

At the same time, construction of Aberdeen South Harbour (ASH) at Bay of Nigg is underway and due for completion in 2020. The new harbour will be able to accommodate larger vessels than the existing city centre site, including modern cruise ships, hence the Council and partners see this as a significant opportunity to bring additional visitors to the region. Ensuring such visitors have a positive experience accessing and travelling around the city centre will be key to securing additional and repeat visits. The area covered by the SUMP will therefore be extended beyond the immediate city centre area to encompass connections between the city centre and the new harbour area.

Work being delivered under CIVITAS PORTIS measure 1ABZ1 SUMP and Port Optimisation therefore aims:

*To ensure the new Nigg Harbour Development is incorporated into the Sustainable Urban Mobility Plan (SUMP) which is the overall transport strategy for the City Centre.*

In terms of the first step in developing a SUMP, the guidance states that:

*A self-assessment at the beginning of the plan development process is needed to identify strengths and weaknesses of your current planning practices and to understand your own potential to successfully prepare a Sustainable Urban Mobility Plan. The assessment should determine how closely current transport planning practices align with the activities set out in this guidance document and identify the barriers and drivers that might influence the plan development process. This will help you to determine what the plan development process will look like in your own local context.*

This report therefore forms the self-assessment stage of SUMP development and forms the output for the first milestone of 1ABZ1:

- MS1: SUMP Self-Assessment.

The main steps adopted for the self-assessment process are:

1. A review of current national, regional and local policy and strategy (relevant to transport) to analyse the extent to which sustainability principles are part of the existing policy landscape (Chapter 2);
2. Identification of the linkages and interdependencies between a SUMP and other programmes of work being progressed by the Council and partners, including changes to the built environment (Chapter 3); and
3. An assessment of the strengths, weaknesses, opportunities and threats, in terms of the successful delivery of a SUMP, that might result from these framework conditions (Chapter 4).

The concluding section, Chapter 5, summarises the findings of these self-assessment exercises.

## 2 Policy Review

This section encompasses a review of the current policy and strategy landscape of relevance to transport, from European to local level. The purpose of this is twofold:

- 1) Firstly, it looks to assess the extent to which the current landscape offers a supporting environment for the development of a SUMP, in terms of established sustainability principles, thus providing an indication of how well-received, and therefore successful, a SUMP is likely to be in Aberdeen; and
- 2) Secondly, it aims to identify the surrounding context and any regulations within which the SUMP is being developed, which measures identified within the SUMP will be required to accord with and adhere to.

The following sections therefore summarise key relevant policies and regulations, and suggest the implications these will have on the development of a SUMP.

## 2.1 Environmental Policy Context

### 2.1.1 Climate Change

Policy / Strategy / Objective	Summary
<b>GLOBAL / EUROPEAN</b>	
<b>UN Framework Convention on Climate Change</b>	Sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change. Recognises that the climate system is a shared resource whose stability can be affected by industrial and other emissions of carbon dioxide and other greenhouse gases.
<b>Kyoto Protocol</b>	Sets binding obligations on industrialised countries to reduce emissions of greenhouse gases.
<b>Paris Agreement</b>	Commits signatories to aim to: hold the increase in global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C; increase the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production; and make finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development. Countries furthermore aim to <i>reach global peaking of greenhouse gas emissions as soon as possible</i> .
<b>NATIONAL</b>	
<b>The Clean Growth Strategy: Leading the Way to A Low Carbon Future</b>	Articulates the UK Government's plans to cut carbon emissions to address climate change and drive economic growth, with <i>Accelerating the shift to Low Carbon Transport</i> one of the key policies. Commits to ending the sale of new conventional petrol and diesel cars and vans by 2040.
<b>Climate Change (Scotland) Act 2009</b>	Sets targets for a reduction in greenhouse gas emissions in Scotland of 42% by 2020 and 80% by 2050. One of the outcomes is the <i>Almost complete decarbonisation of road transport by 2050 with significant progress by 2030 through wholesale adoption of electric cars and vans, and significant decarbonisation of rail by 2050</i> .

<b>Climate Change Delivery Plan</b>	Sets out the measures required to meet the targets of the Act, a number of which affect the transport sector including: <ul style="list-style-type: none"> <li>• Improvements in energy efficiency of petrol and diesel vehicles and increasing uptake of hybrid and electric engines with supporting infrastructure;</li> <li>• Smarter measures including reduced travel and modal shift to less carbon-intensive modes of transport such as public transport and active travel;</li> <li>• Demand management including road space reallocation;</li> <li>• Changes to the pattern of development to reduce the need to travel; and</li> <li>• Sustainable bio-fuels.</li> </ul>
<b>Climate Change Plan - The Third Report on Policies and Proposals 2017-2032</b>	Sets out how the Scottish Government will continue to reduce emissions over the period to 2032, including proposals and policies to reduce emissions from transport by 37% over the lifetime of the Plan. Contains commitments to phase out the need to buy petrol or diesel cars or vans by 2032, introduce LEZs in Scottish cities and make towns and cities friendlier for pedestrians and cyclists.
<b>Switched on Scotland: A Roadmap to Widespread Adoption of Plug-in Vehicles</b>	Sets a vision that, by 2050, Scottish towns, cities and communities will be free from the damaging effects of petrol and diesel fuelled vehicles, building on the Government's commitment to the almost complete decarbonisation of road transport by 2050. Establishes an ambition that, from 2040, almost all new vehicles sold will be near zero emission at the tailpipe and that, by 2030, half of all fossil-fuelled vehicles will be phased out of urban environments.
<b>LOCAL</b>	
<b>Aberdeen City Region Hydrogen Strategy and Action Plan</b>	Focusses on promoting hydrogen as a low carbon alternative to fossil fuels and as an energy vector to facilitate the deployment of renewable energy sources, with a focus on transport applications. Aims to <i>reinforce our place, now and in the future as the energy city by further enhancing the region's economic competitiveness, maximising the capacity and value of renewable energy and giving greater energy security by being at the forefront of a hydrogen economy.</i>
<b>Powering Aberdeen: Aberdeen's Sustainable Energy Action Plan (SEAP)</b>	Has a vision: <i>By 2030 Aberdeen is a vibrant, world class city which is an attractive and sustainable place to live and do business. The economy has diversified and is supported by efficient, low emission buildings and transport infrastructure. The health and wellbeing of citizens continues to improve and fuel poverty has been eliminated. Emissions have reduced by at least 50%. In relation to transport, the Plan aims to attain a low emission society by expanding the Car Club and hydrogen networks, increasing modal share for public transport and active travel, increasing the use of clean fuels and developing infrastructure that increases mobile working and digital connectivity.</i>
<b>Implications for the SUMP:</b>	

- There is a clear commitment to reducing greenhouse gas emissions and addressing the challenges of climate change at all levels of government, from European to local, and a recognition that transport is a key contributor to emissions, hence any efforts within the SUMP to address transport's impact on the environment and to facilitate low- or no emission alternatives will accord with established policy and should be well-supported;
- Transport measures identified within a SUMP should accord with the above objectives and aim for a reduction in harmful emissions from transport;
- There are commitments at a national level to phasing out petrol and diesel vehicles, hence any efforts of a SUMP to encourage and facilitate alternatives, especially within the city centre, will accord with this policy and are likely to be supported;
- A SUMP will accord well with Aberdeen's aspiration to become a low-emission society;
- A SUMP should recognise and reflect ACC's commitment to the further deployment of hydrogen technology in transport; and
- Proposals contained within a SUMP should support and complement proposals for a LEZ in Aberdeen.

## 2.1.2 Air Quality

Policy / Strategy / Objective	Summary
<b>EUROPEAN</b>	
<b>EC Air Quality Directive (2008/50/EC)</b>	Sets legally binding limits for concentrations in outdoor air of major pollutants that impact upon public health such as particulates (PM10 and PM2.5) and nitrogen dioxide.
<b>NATIONAL</b>	
<b>UK Air Quality Strategy (2007)</b>	Seeks to render polluting emissions harmless. Sets objectives for protecting human health to be included in regulations for the purposes of Local Air Quality Management relating to concentrations of, amongst others, carbon monoxide, lead, nitrogen dioxide, ozone and particulates.
<b>UK plan for tackling roadside nitrogen dioxide concentrations</b>	Sets out the government's ambition for a better environment and cleaner air. Re-affirms commitment to end the sale of conventional petrol and diesel vehicles by 2040.

<b>Air Quality (Scotland) Regulations</b>	Specifies the pollutants that require assessment by local authorities in Scotland, the objectives that require to be achieved and expected compliance dates.
<b>Scottish Government, Programme for Government</b>	Commits to the introduction of LEZs into Scotland's four biggest cities by 2020 and into all other Air Quality Management Areas (AQMAs) by 2023 where National Low Emissions Framework appraisals advocate such mitigation.
<b>LOCAL</b>	
<b>Aberdeen Air Quality Action Plan (AQAP)</b>	Recommends a range of initiatives to address air quality problems, focussing on increasing awareness, promoting sustainable transport, reducing the need to travel, improving traffic management and transport infrastructure. Identifies three AQMAs where pollutants regularly exceed European limits, one of which covers a large area of the city centre.
<b>Aberdeen Local Development Plan Supplementary Guidance on Air Quality</b>	Seeks to ensure that new development does not have a detrimental impact on air quality and sets a requirement for air quality assessments for new developments in sensitive areas.
<b>Implications for the SUMP:</b> <ul style="list-style-type: none"> <li>• Limits for harmful pollutants and targets for reducing these are well-established and have filtered down from European to local level;</li> <li>• There is a commitment to improving air quality at all levels of government and a recognition that transport is a key contributor to poor air quality, hence any measures identified within a SUMP that promote alternatives to fossil-fuelled vehicles have a clear precedent in existing policy and should be well-supported;</li> <li>• The SUMP should recognise and look to address air quality problems, especially in the city centre. Transport projects promoted within a SUMP should look to improve air quality, or at least have no detrimental impact; and</li> <li>• A SUMP covering the city centre and the harbour area accords well with the city centre's designation as an AQMA and a potential LEZ.</li> </ul>	

### 2.1.3 Noise

Policy / Strategy / Objective	Summary
<b>EUROPEAN</b>	
EC Environmental Noise Directive (2002/49/EC)	Sets actions to avoid, prevent or reduce the harmful effects of noise and aims to provide a basis for developing measures to reduce noise emitted by major sources, including transport.
<b>LOCAL</b>	
Aberdeen Agglomeration Noise Action Plan	Describes how obligations under the Environmental Noise Directive will be delivered locally. Identifies Noise Management Areas (NMAs) and Quiet Areas (QAs) which will be offered protection from a deterioration in noise quality and an increase in noise from adjacent land uses or new development. There are a number of NMAs identified in and around the city centre, including areas of King Street, Union Street, Rennie's Wynd, Wapping Street, Carmelite Street, Trinity Street, Guild Street, Market Street, Netherkirkgate, Virginia Street, Market Street, Palmerston Road and South College Street, attributable to road and rail noise.
Aberdeen Local Development Plan Supplementary Guidance on Noise	Seeks to ensure that new development (including road and rail projects) does not have a detrimental impact on noise and sets a requirement for Noise Impact Assessments for new developments in sensitive areas.
<b>Implications for the SUMP:</b> <ul style="list-style-type: none"> <li>There is a recognition that transport noise has an undesirable impact on quality of life in many areas of Aberdeen, including the city centre;</li> <li>The requirement to reduce noise from transport sources is well-established, therefore measures to encourage less vehicular traffic in the city centre, are supported by existing policy; and</li> <li>Projects promoted within a SUMP should avoid increasing noise in NMAs and should consider ways of limiting transport noise, primarily through facilitation of quiet (non-motorised) forms of transport.</li> </ul>	

## 2.2 Transport Policy Context



## 2.2.1 General Transport Policy

Policy / Strategy / Objective	Summary
<b>EUROPEAN</b>	
<b>EU White Paper: Roadmap to a single European transport area – towards a competitive and resource efficient transport system</b>	<p>Presents the European Commission's vision for the future of the EU transport system, identifying four vision statements:</p> <ul style="list-style-type: none"> <li>• Growing transport and supporting mobility while reaching a 60% emissions reduction target;</li> <li>• An efficient core network for multimodal intercity travel;</li> <li>• A global level playing field for long-distance travel and inter-continental freight; and</li> <li>• Clean urban transport and commuting.</li> </ul>
<b>NATIONAL</b>	
<b>National Transport Strategy (NTS)</b>	<p>Sets the Scottish Government's vision for transport: <i>An accessible Scotland with safe, integrated and reliable transport that supports economic growth, provides opportunities for all and is easy to use; a transport system that meets everyone's needs, respects our environment and contributes to health; services recognised internationally for quality, technology and innovation, and for effective and well-maintained networks; a culture where transport providers and planners respond to the changing needs of businesses, communities and users, and where one ticket will get you anywhere.</i></p> <p>Identifies 5 High Level Objectives:</p> <ul style="list-style-type: none"> <li>• Promote economic growth by building, enhancing, managing and maintaining transport services, infrastructure and networks to maximise their efficiency;</li> <li>• Promote social inclusion by connecting remote and disadvantaged communities and increasing the accessibility of the transport network;</li> <li>• Protect our environment and improve health by building and investing in public transport and other types of efficient and sustainable transport which minimise emissions and consumption of resources and energy;</li> </ul>

	<ul style="list-style-type: none"> <li>• Improve safety of journeys by reducing accidents and enhancing the personal safety of pedestrians, drivers, passengers and staff; and</li> <li>• Improve integration by making journey planning and ticketing easier and working to ensure smooth connection between different forms of transport.</li> </ul> <p>Establishes 3 strategic outcomes:</p> <ul style="list-style-type: none"> <li>• Improved journey times and connections, to tackle congestion and lack of integration and connections in transport;</li> <li>• Reduced emissions, to tackle climate change, air quality, health improvement; and</li> <li>• Improved quality, accessibility and affordability, to give choice of public transport, better quality services and value for money, or alternative to car.</li> </ul> <p>The NTS is in the process of being reviewed, with the first draft outcomes expected later in 2018.</p>
<b>Designing Streets</b>	Encourages improvement in the quality of urban street design, stressing that this should derive from an intelligent response to location rather than the rigid application of standards. An appropriate balance should be struck between the needs of different user groups, and traffic capacity will not always be the primary consideration in designing individual roads and road layout.
<b>Transport (Scotland) Bill</b>	Aims to empower local authorities and establish consistent standards in order to tackle current and future challenges, while delivering a more responsive and sustainable transport system for all. Proposed measures include: <ul style="list-style-type: none"> <li>• Providing local authorities and Regional Transport Partnerships with the flexibility to improve bus services through partnership working with operators or, where there is a good case for doing so, local franchising or running services themselves;</li> <li>• Enabling the creation and decriminalised enforcement of LEZs;</li> <li>• Prohibiting double parking and parking on pavements and giving local authorities the powers to enforce this;</li> <li>• Standardising smart ticketing technology to ensure compatibility and setting in place an advisory body to best support interoperable Scotland-wide smart ticketing.</li> </ul>
<b>REGIONAL AND LOCAL</b>	
<b>Nestrans Regional Transport Strategy (RTS)</b>	The current RTS sets a vision for transport in the north east to 2025 with 4 strategic objectives: <ul style="list-style-type: none"> <li>• Economy: To enhance and exploit the north east's competitive economic advantages and reduce the impacts of peripherality;</li> </ul>

	<ul style="list-style-type: none"> <li>• Accessibility, Safety and Social Inclusion: To enhance choice, accessibility and safety of transport for all in the north east, particularly for disadvantaged and vulnerable members of society and those living in areas where transport options are limited;</li> <li>• Environment: To conserve and enhance the north east's natural and built environment and heritage and reduce the effects of transport on climate, noise and air quality; and</li> <li>• Spatial Planning: To support transport integration and a strong, vibrant and dynamic city centre and town centres across the north east.</li> </ul>
Aberdeen Local Transport Strategy (LTS)	<p>Sets out the policies and interventions adopted by ACC to guide the planning and improvement of the local transport network over the next five years. Identifies 5 aims:</p> <ul style="list-style-type: none"> <li>• A transport system that enables the efficient movement of people and goods;</li> <li>• A safe and more secure transport system;</li> <li>• A cleaner, greener transport system;</li> <li>• An integrated, accessible and socially inclusive transport system; and</li> <li>• A transport system that facilitates healthy and sustainable living.</li> </ul> <p>Sets outcomes – by 2021 Aberdeen's transport system should have:</p> <ul style="list-style-type: none"> <li>• Increased modal share for public transport and active travel;</li> <li>• Reduced the need to travel and reduced dependence on the private car;</li> <li>• Improved journey time reliability for all modes;</li> <li>• Improved road safety within the city;</li> <li>• Improved air quality and the environment; and,</li> <li>• Improved accessibility to transport for all.</li> </ul>
Strategic Infrastructure Plan (SIP)	<p>Identifies the infrastructure (transport and non-transport) required to maximise Aberdeen's growth potential and continue to attract visitors, workers and investment to the city. Many of the transport projects identified (Dyce Drive link road, Diamond Bridge) have now been delivered although one priority project is 'Central Aberdeen Transport Infrastructure' which includes increasing road capacity along the Berryden corridor and junction improvements at South College Street.</p>

#### Implications for the SUMP:

- There exists a clear and consistent transport policy context from European to local level, with an emphasis at all levels of government on the need to encourage modal shift, reduce the need to travel, improve health and safety, improve the environment, improve accessibility, combat social

exclusion, improve integration between modes and support economic growth. The objectives of a SUMP are anticipated to accord well with these existing transport policy objectives, therefore it will be developed within a supportive context and its principles are likely to be well-received;

- A SUMP should contribute to meeting the vision, objectives and outcomes of the NTS, RTS and LTS and identify interventions that will contribute to the delivery of these respective, though linked, strategies;
- A SUMP must take cognisance of any changes in national policy resulting from the NTS review;
- Recognising the Council's existing commitments within the SIP, a SUMP should consider how these projects align with the SUMP's aims and objectives and opportunities should be investigated for positively influencing proposals as part of the SUMP development process so that the benefits to sustainable forms of transport can be maximised.

## 2.2.2 Active Travel

Policy / Strategy / Objective	Summary
<b>NATIONAL</b>	
<b>A Long Term Vision for Active Travel in Scotland 2030</b>	Sets a vision for active travel: <i>Scotland's communities are shaped around people, with walking or cycling the most popular choice for shorter everyday journeys. This helps people make healthy living choices and assists in delivering places that are happier, more inclusive and equal, and more prosperous. Travelling by foot or cycle, or with a personal mobility aid such as a mobility scooter, is a realistic option for all local journeys as individuals. People are confident to walk and cycle more often and they value and use their local transport networks (streets, roads and path networks), which offer safe, high quality, realistic and predictable journey options for active travel.</i>
<b>Cycling Action Plan for Scotland</b>	Sets a vision that 10% of all trips in Scotland will be by bicycle by 2020 and identifies a series of actions to achieve this.
<b>Let's Get Scotland Walking: The National Walking Strategy</b>	Sets a national vision for walking, of <i>A Scotland where everyone benefits from walking as part of their everyday journeys, enjoys walking in the outdoors and where places are well designed to encourage walking</i> , with 3 strategic aims: <ul style="list-style-type: none"> <li>• Create a culture of walking where everyone walks more often as part of their everyday travel and for recreation and well-being;</li> <li>• Better quality walking environments with attractive, well designed and managed built and natural spaces for everyone; and</li> <li>• Enable easy, convenient and safe independent mobility for everyone.</li> </ul>

REGIONAL AND LOCAL	
<b>Nestrans Active Travel Action Plan</b>	Sets out a vision of an environment in which walking and cycling are convenient, safe, comfortable, healthy and attractive travel choices for everyday journeys and identifies a strategic network of active travel routes, linking Aberdeen city and the main towns of Aberdeenshire, to be developed.
<b>Aberdeen Active Travel Action Plan</b>	Identifies the policies and design principles that ACC will abide by and a series of actions and interventions that will be pursued to increase the proportion of journeys undertaken by active travel and to contribute to meeting the vision set out in the Nestrans plan.
<b>Aberdeen Core Paths Plan</b>	Identifies a network of paths for the purpose of giving the public reasonable access throughout the area

**Implications for the SUMP:**

- There exists a clear national vision for active travel and this is supported by regional and local action plans, ensuring a consistent active travel policy environment in which the SUMP will be developed;
- A SUMP must reflect the national vision and regional and local objectives for active travel and identify how these aspirations can be delivered at a local level;
- Transport projects promoted by a SUMP should support and facilitate walking and cycling and look to enhance the core path network where possible;
- This commitment to active travel is increasingly influencing national and regional spending plans, with funds available to local authorities for the development and delivery of walking and cycling schemes increasing in recent years; and
- Any walking and cycling measures identified within a SUMP will be supported by existing policy and have a high chance of being (financially) deliverable.

## 2.2.3 Public Transport

Policy / Strategy / Objective	Summary
<b>NATIONAL</b>	
<b>Moving into the Future: An Action Plan for Buses in Scotland</b>	Published in support of the NTS, the Plan outlines a vision for Scotland to <i>have a comprehensive bus network where sustainable bus services are delivered to a high quality, and which move people efficiently to promote economic growth and social inclusion and to reduce congestion</i> , and identifies a series of actions to achieve this.
<b>Buses for Scotland - Progress Through Partnership: A Guide for Local Authorities, Regional Transport Partnerships and Bus Operators</b>	This guidance aims to facilitate the process of essential partnership working for Local Authorities, Regional Transport Partnerships and Bus Operators on bus planning, service information, regulation and funding issues.
<b>Smart Ticketing Delivery Strategy 2018</b>	<p>Sets out how Transport Scotland will achieve its ambition for smart and integrated ticketing and payment in Scotland to be an integral part of these journeys, identifying the following aims:</p> <ul style="list-style-type: none"> <li>• Increase the smart ticketing and payment offering and take up across all transport modes;</li> <li>• Increase smart ticketing interoperability across operators and modes;</li> <li>• Encourage a higher level of consistency in the smart ticketing customer proposition for members of the public;</li> <li>• Improve the provision of online ticketing and fares information along with the range of smart retail and payment options;</li> <li>• Simplify and improve access to the right price for customers as a result of improved information and ticketing options;</li> <li>• Increase the number of operator/local authority/regional transport partnership smart ticketing or payment schemes implemented, to meet local needs;</li> <li>• Ensure successful continuation of concessionary travel as an ITSO smart interoperable scheme; and</li> </ul>

	<ul style="list-style-type: none"> <li>Facilitate wide as possible use of a standardised platform for all public transport providers, with the purpose of bringing true interoperability.</li> </ul>
<b>Scotland's Railways</b>	Sets out the Scottish Ministers' 20 year vision for the rail network, highlighting 30 projects to deliver this, including improvements to the Aberdeen to Inverness and Aberdeen to Central Belt corridors.
<b>High Level Output Specification for Rail Control Period 5 (2014-2019)</b>	A blueprint aimed at improving performance, reducing journey times and increasing the capacity and capability of the Scottish rail network. Sets out a programme of over £3 billion investment in Scotland's railways, enabling Network Rail to operate, maintain and enhance the rail infrastructure from 2014 to 2019. Included within the programme is Aberdeen to Inverness Rail Line Improvements Phase 1, delivering the network capability to enable the operation of enhanced commuting services into both cities, working with station promoters to enable them to deliver Kintore and Dalcross stations, and enhancing the end to end service to support the longer term objective for an hourly interval service between the two cities with an average day journey time, calling at all stations, of around 2 hours. Identifies future projects including: Aberdeen to Inverness Corridor Improvements Phase 2 and Aberdeen to Central Belt.
<b>REGIONAL AND LOCAL</b>	
<b>Nestrans Bus Action Plan (BAP)</b>	Identifies a programme of actions to achieve the bus proposals set out in the RTS, including infrastructure, information and ticketing improvements.
<b>Fares and Ticketing Strategy for Aberdeen City and Shire</b>	Sets out in detail how certain bus aspirations of the RTS and BAP will be met, with an aim: <i>to work in partnership with operators to ensure that the travelling public are aware of, and have on offer, fares which represent value for money and ticket options which reflect their travel patterns.</i>
<b>Nestrans Rail Action Plan</b>	Identifies current issues and problems associated with rail travel in the north east and to/from the north east, and measures to address these.

#### Implications for the SUMP:

- The SUMP will be developed within a policy environment supportive of public transport improvements, thus potentially increasing the acceptability and deliverability of any public transport measures recommended by the SUMP;
- The region is currently benefitting from significant improvements to the rail network, which will make the city centre more accessible by public transport from outlying areas, hence according with SUMP objectives;
- There is a strong history of partnership working between local authorities and bus operators in the North East, with proposals currently being developed for a formal Bus Alliance;

- Ticketing improvements (especially the ability to slip seamlessly between operators and modes) are in accordance with SUMP principles to make it easier and more attractive to travel to and through the city centre using public transport;
- There are opportunities therefore for the SUMP to enhance current development and identify further measures to improve the public transport offering to, from and within the city centre, particularly efforts to improve journey times.

## 2.2.4 Car Parking

Policy / Strategy / Objective	Summary
<b>REGIONAL AND LOCAL</b>	
<b>Nestrans Regional Parking Strategy</b>	<p>Sets a policy framework under which actions can be delivered at a local level that ensure provision, management and control of parking in both the city and shire works towards and supports the wider objectives of the RTS and the two LTSs and considers the ways in which parking control can influence mode choice, environment and the economic vitality of the region. Articulates 2 strategic objectives: <i>To support the economic vitality of the city and town centres and the wider objectives of the Regional Transport Strategy through a balanced approach to the management of car parking; and To support and influence increases in the proportion of journeys undertaken by sustainable modes, particularly by bus and rail.</i> These are supported by various policies and actions aimed at supporting the economic vitality of the city and town centres including: reviewing parking charges (including the requirement for emissions-based charges), application of maximum parking standards, supporting low- or no-car developments, investigating new parking technologies and infrastructure, park and ride development, review of business permit policies, travel plan development and car club development.</p>
<b>Aberdeen Local Development Plan Supplementary Guidance on Transport and Accessibility</b>	<p>Sets maximum car parking standards for new developments, with the most stringent standards identified for city centre development. Also sets, for new developments, requirements for accessible (for the mobility impaired) parking and bicycle and motorcycle parking, introduces minimum standards of electric vehicle charging infrastructure, identifies car club requirements, and articulates support for low or no car development in areas of good accessibility.</p>

### Implications for the SUMP:

- There is an appreciation of the impact that car parking policies have on the economic wellbeing of the city centre and a recognition that these can be an important determinant of mode choice;
- Current car parking policies (in terms of electric vehicles, car clubs and low/no car development) support the sustainability aspirations of a SUMP; and
- A SUMP should consider the appropriateness of current parking standards in the city centre and contribute to the identification of any revised car parking standards which will be reviewed as part of the development of the next ALDP, due for publication in 2022.

## 2.3 Economic Policy Context

Policy / Strategy / Objective	Summary
<b>NATIONAL</b>	
<b>Scotland's Economic Strategy</b>	Identifies 6 priorities to accelerate economic recovery, drive sustainable economic growth and develop a more resilient and adaptable economy. Transition to a low carbon economy is an essential element within all of these. Recognises that an efficient transport system is key to enhancing productivity and delivering sustainable growth.
<b>Scotland's Cities: Delivering for Scotland</b>	Sets a vision for a <i>Scotland where our cities and their regions power Scotland's economy for the benefit of all</i> . Recognises that good connectivity within and between cities and their regions is key and the importance of international connections via air and high speed rail. Specific reference is made to the importance of inter-urban connectivity across road and rail resulting in better travel choices and improved journey times, particularly a reduction in journey times between Aberdeen and Inverness and Aberdeen and the Central Belt. The importance of low carbon transport, utilising new technologies and intelligent transport systems, is also highlighted.
<b>REGIONAL AND LOCAL</b>	
<b>Regional Economic Strategy</b>	Provides a vision and strategy for the future of the North East of Scotland's economy, with 4 key strands: Investment in Infrastructure, Innovation, Inclusive Economic Growth and Internationalisation. Recognises that rapid population and economic growth has put significant pressure on transport infrastructure and that public investment has not kept pace with the demands placed on it, resulting in relatively poor transport links. Objectives relevant to transport include:

	<ul style="list-style-type: none"> <li>• To develop infrastructure for commuter, visitor and freight transportation – nationally and internationally; and</li> <li>• To improve deployment of low carbon transport in the city and urban areas, through active travel networks.</li> </ul>
<b>Aberdeen City Region Deal (CRD)</b>	One delivery mechanism for the regional economic vision. Outlines a commitment (supported by financial commitments) from the UK Government, Scottish Government, ACC, Aberdeenshire Council and the private sector (Opportunity North East) to work together to address the economic challenges facing the region and capitalise on the substantial opportunities. Recognises transport has a key role to play in this with one key strand being a regional 20-year Strategic Transport Appraisal.
<b>Nestrans Freight Action Plan</b>	Identifies how Nestrans and partners can assist in the delivery of more effective and efficient freight operations for the benefit of the north east of Scotland.

**Implications for the SUMP:**

- There is recognition of the linkages between transport and the economy, particularly the role that sustainable transport can play in aiding economic growth;
- The need for improved transport infrastructure for commuters and visitors, particularly low carbon transport and active travel, is recognised in the Regional Economic Strategy, therefore any objectives of the SUMP to facilitate the use of low carbon transport and active travel accord with existing economic policy and should be supported at high levels;
- A SUMP must take cognisance of and reflect national and regional economic aspirations;
- A SUMP can support these aspirations through identifying measures to ‘de-carbonise’ the transport system and enhance the city centre experience for residents and visitors;
- A SUMP must take cognisance of emerging outputs from the Strategic Transport Appraisal; and
- A SUMP must recognise the importance of freight movements to the region’s economy and ensure that these are adequately considered within proposed measures.

## 2.4 Health and Physical Activity Policy Context

Policy / Strategy / Objective	Summary
<b>NATIONAL</b>	
<b>Let's Make Scotland More Active: A Strategy for Physical Activity</b>	Aims to increase the proportion of people in Scotland who are physically active.
<b>Preventing Overweight and Obesity in Scotland: A Route Map Towards Healthy Weight</b>	Sets the direction of national and local government decision making to avoid the consequences of obesity and aims for the majority of people in Scotland to be in a normal weight range. One of the intervention categories is Energy Expenditure, with <i>increasing opportunities for the uptake of walking, cycling and physical activity in our daily lives and minimising sedentary behaviour</i> identified as a priority.
<b>LOCAL</b>	
<b>The Strategy for an Active Aberdeen 2016-2020</b>	Looks to increase the number of people participating in sport and physical activity (including active commuting) and invest in infrastructure that allows them to do so.
<b>Health and Transport Action Plan (HTAP)</b>	Looks to address the negative health impacts of transport, including physical inactivity, obesity, poor air quality and poor access to healthcare. Sets out visions for: <ul style="list-style-type: none"> <li>• Transport and Public Health – <i>For people in Grampian to choose to travel by active modes, and For everyone in the region to live without unacceptable risk to their health caused by the transport network or its use; and</i></li> <li>• Health and Social Care – <i>For everyone in the region to be able to access the health and social care they need, and For the environmental impacts of journeys to be minimised.</i></li> </ul>

**Implications for the SUMP:**

- From national to local level, there is acceptance of the need to respond to the challenges of physical inactivity and obesity, and a recognition that transport has a role to play in this, through increasing opportunities for active travel;
- There is furthermore a recognition of the role that poor air quality, resulting from transport, has on public health and the need to address this;
- SUMP measures should therefore look to maximise opportunities for people to walk and cycle for everyday journeys and to reduce the impacts of air quality on health; and
- SUMP measures to enable more walking, cycling and public transport use will complement existing health and physical activity policies and should be well-supported.

## 2.5 Equalities

Policy / Strategy / Objective	Summary
<b>NATIONAL</b>	
<b>Equality Act 2010</b>	Sets a framework which protects individuals from unfair treatment and promotes a fair and more equal society.
<b>All Our Futures: Planning for a Scotland with an Ageing Population</b>	Provides a strategic approach which considers how best to respond to and plan for a Scotland with an ageing population.

### Implications for the SUMP:

- Measures identified within a SUMP should benefit all members of society and ensure that no groups (especially those with protected characteristics) are unfairly disadvantaged;
- A SUMP should consider the needs of an ageing population.

The above list is by no means exhaustive but is intended to be well representative of the current policy and strategy landscape within which a SUMP will be developed. This is, of course, constantly changing, and efforts will be made to ensure synchronicity between the SUMP and any new policy, strategy, legislation or guidance to emerge during the development process.



# 3 Linkages and Interdependencies

The next stage in the SUMP Self-Assessment process is to identify linkages and interdependencies between a SUMP and other key programmes of work being progressed by ACC and partners. These are summarised in the following sections.

## 3.1 Aberdeen City Centre Masterplan

The CCMP was adopted by ACC in 2015 and sets a 25-year blueprint for regenerating the city centre, with a goal of achieving greater prosperity and a better quality of life for all.

In terms of transport, the Masterplan seeks to transform the heart of the city from one which is heavily congested with motorised vehicles into a world class destination which encourages and facilitates pedestrian and cycle movement, similar to other advanced global cities.

*Connectivity will be improved to facilitate a constant flow of pedestrians and cyclists around the city centre. Attractive places need to feel safe and require the appropriate navigation tools such as good lighting, even surfacing, attention to visual contrast and clear way-finding. An improved public realm network and linked constellation of spaces will incorporate the substantial widening of footways on streets where flows do not presently meet capacity as well as the implementation of pedestrian priority and pedestrian only streetscapes to create a more inclusive environment...*

*A change in user hierarchy with regard to the reprioritisation of pedestrians in many of the city centre's streets and spaces creates the opportunity to design more engaging and comfortable spaces that encourage people to linger and dwell.*

The plan identifies a number of infrastructure and non-infrastructure projects which the Council will pursue, subject to further appraisal, feasibility and design work, grouped under four thematic strategies. One of these is 'The Connected City' which looks to develop a city centre that is accessible and wired. The following projects, of relevance to transport, are identified for further investigation:

- Walkable Aberdeen - creating a safer and more attractive city centre for pedestrians and other sustainable modes;
- City Centre Car Parking - maximising the potential offered by park and ride sites to reduce the number of vehicles entering the city centre; applying stricter parking standards within the city centre boundary, and increasing the number of car club locations in the city centre;
- Cycle Highways - implementation of traffic-free cycle highways within the city centre, complemented by cycle priority measures at signalised junctions and a programme of cycle friendly street improvements;
- Cycle Hire - roll out of a cycle hire scheme;
- Cycle Hubs - creation of cycle hubs in key areas of the city centre to provide high quality secure cycle parking;
- Bus Priority Measures - implement bus only streets on key corridors and introduce bus gates on the approach to city centre junctions in order to annul the impact of congestion on journey times;
- Bus Stops and Station - in order to provide a more enjoyable and attractive overall bus travel experience for all, mobility inclusive and significantly improved bus stop infrastructure will be installed. There also exists an opportunity to enhance the existing bus station as part of the expansion of Union Square shopping centre;

- Aberdeen Station - following the relocation of the existing taxi drop off facility to South College Street, refurbishment and expansion of the station concourse to create enhanced linkage for pedestrian and cyclists to the city centre; and
- Aberdeen Suburban Rail Network - as part of the committed Aberdeen to Inverness Rail Improvement Programme, which will dual the track from Aberdeen to Inverurie, there exists an opportunity to investigate and promote a local Aberdeen based rail service, as well as potential new rail halt locations.

The following more specific transport and public realm projects are identified:

- Broad Street - The space between Marischal College and the Marischal Square development will retain bus movements on a day to day basis but will be designed in a manner so that it can be transformed into an event ready space on special occasions;
- Guild Street - The experience of the city when arriving and departing from the train station will be vastly improved with the removal of car traffic and the reduction of bus traffic to one way only on Guild Street. This allows the existing plaza to the north of Union Square to be extended to create a more comfortable meeting place and an enhanced pedestrian linkage through the Merchant Quarter;
- Langstane Place/Justice Mill Lane/Windmill Brae - This key area for evening economy activities will be enhanced as a pedestrian priority area with new cycle routes, improved streetscape and lighting;
- Rose/Thistle/Chapel Street - A high quality streetscape scheme to enhance customer experience and the vitality and viability of this independent retail area;
- Union Street - Removal of private vehicular traffic (bus, taxi and access only) from the section of Union Street between Bridge Street and the Castlegate brings the focus back on to people with wider pavements, improved air quality and fewer obstacles to movement. Works will include the upgrade of the Back Wynd Steps to include a lift;
- Upperkirkgate/Schoolhill - The removal of all traffic from the central area of Upperkirkgate and a considerable reduction in traffic elsewhere creates the opportunity to enhance north/south connectivity and the retail environment;
- Castlegate - Castlegate will be presented as the 'central civic space' for Aberdeen, providing a strong focus and identity for the city centre;
- Union Terrace Gardens - Enhance the quality of the gardens as the city centre's main green space resource and seek to improve access, visibility and animation of the gardens;
- Golden Square - Re-engineering of this space from a vehicle dominated car park to a public square and events space associated with the Music Hall; and
- Bon Accord Square - Removal of some car parking and enhanced greening.

Proposed city centre vehicular restrictions and pedestrian and public transport networks are shown in Figures A1-3, extracts from the CCMP document.

Figure A1- Proposed Vehicular Restrictions

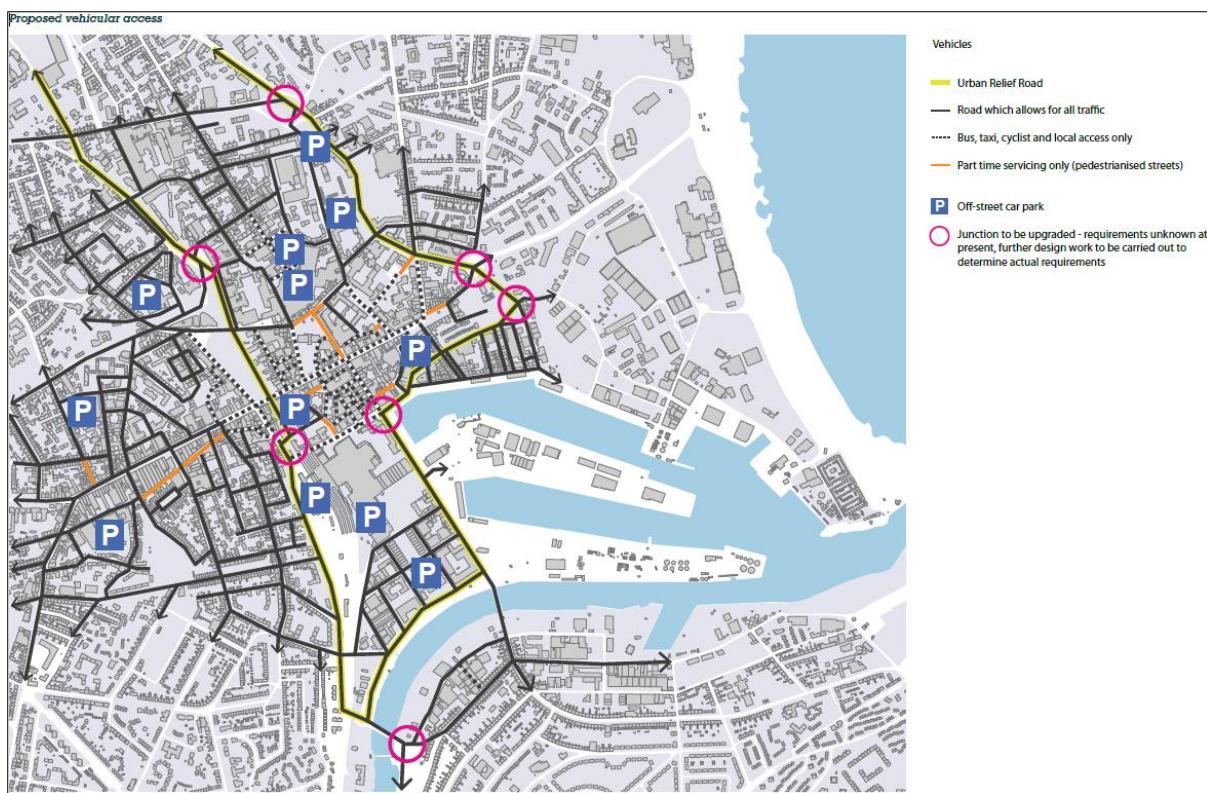


Figure A2- Proposed City Centre Cycle Network

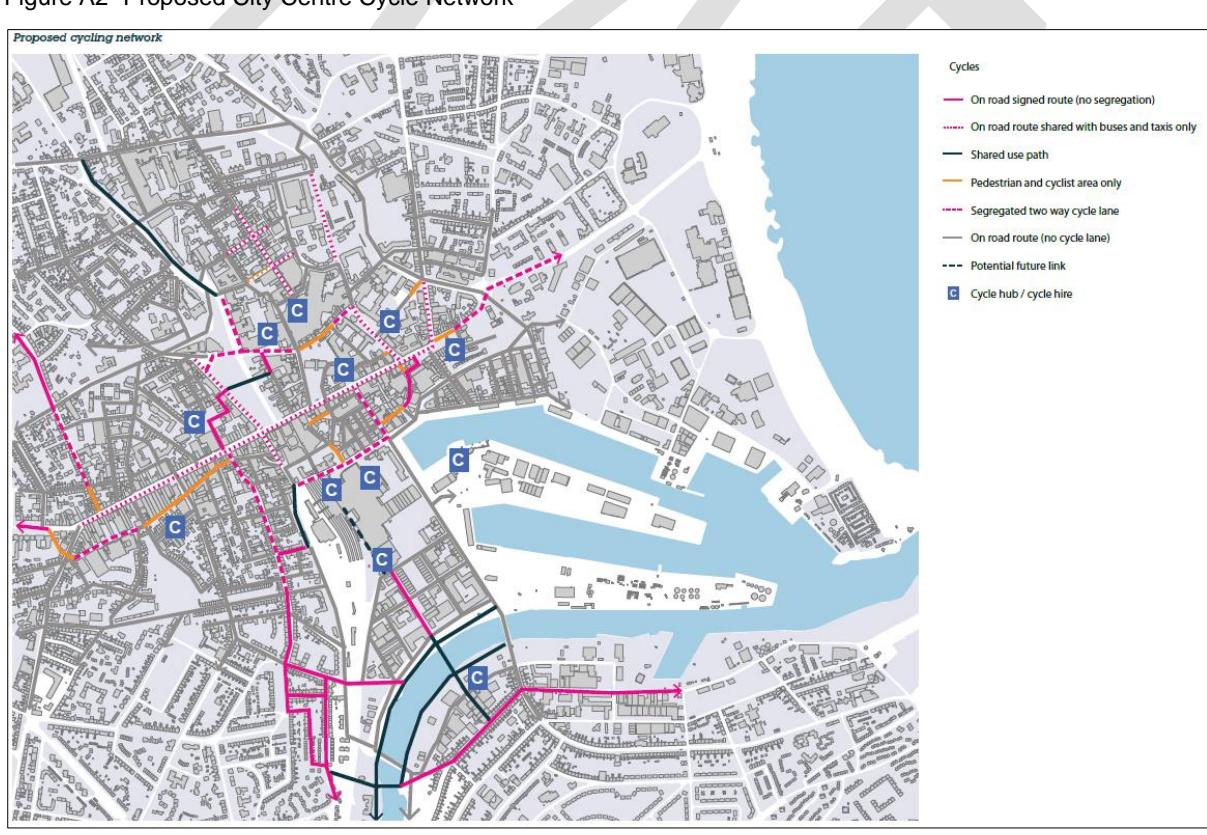
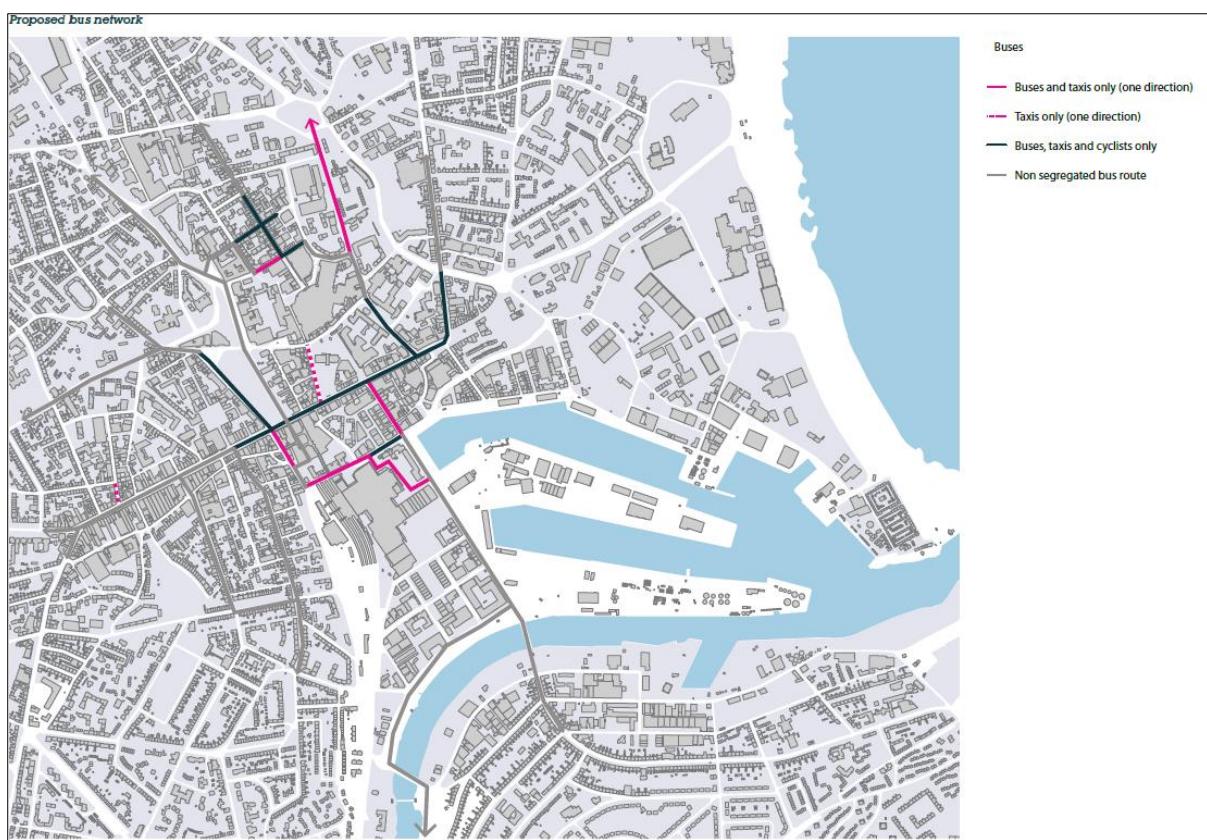


Figure A3 - Proposed City Centre Bus Network



Source: Aberdeen City Centre Masterplan

The projects identified within the CCMP are indicative, and will be subject to further option appraisal, feasibility and design in a phased and prioritised manner. Nevertheless, a number of these are now well-progressed:

- The part-pedestrianisation of Broad Street is nearing completion;
- Planning approval has been granted for the regeneration of Union Terrace Gardens, including enhanced pedestrian and cycle accessibility and permeability;
- A business case has been approved for the implementation of public realm improvements on Schoolhill around Aberdeen Art Gallery and Cowdray Hall; and
- Consultation is underway on proposals to fully or partially restrict vehicle access to parts of Justice Mill Lane, Windmill Brae, Windmill Lane, Bath Street, Bon Accord Terrace Langstane Place, Gordon Street and Bridge Street.

Separately, a report on the transport implications of CCMP projects identified the need to reduce general peak traffic levels by some 20% to enable the transportation and public realm objectives relating to pedestrian, cycle and bus movements in the city centre streets to be achieved.

### **Implications for the SUMP:**

- The need to transform the city centre to a more welcoming space for people, with improved walking and cycling infrastructure and public transport accessibility, has been recognised, with the CCMP approved unanimously by ACC in 2015;
- A SUMP shares the same overarching vision as the CCMP, of a city centre more accessible by, and welcoming to, sustainable modes of transport;
- The CCMP identifies a framework of interventions and a series of specific projects which could inform initial development of a SUMP;
- A SUMP will therefore not be starting from a blank slate but will review, expand upon and potentially add to, the transport interventions suggested by the CCMP, which have already been approved in principle;
- The CCMP was informed by wide-ranging public and stakeholder engagement, therefore it is assumed that there is a strong appetite for the sort of transport improvements likely to be identified within the SUMP and that proposals will have a high degree of acceptability amongst the public and stakeholders; and
- It has been noted that, in order to realise the CCMP, a significant proportion of traffic currently using the city centre needs to be removed— implementing a SUMP is one mechanism by which this can be delivered.



### 3.2 Aberdeen Western Peripheral Route/Balmedie to Tipperty and Roads Hierarchy

The Aberdeen Western Peripheral Route/Balmedie to Tipperty (AWPR/B-T) is due to fully open in late 2018 and will form a 58km long dual carriageway bypass of the city (Figure A4).

Figure A4 - Aberdeen Western Peripheral Route/Balmedie to Tipperty



Assessment and modelling exercises undertaken to inform the scheme indicate that the opening of the AWPR will result in the displacement of a sizeable proportion of strategic traffic, which currently uses the urban road network, onto the new bypass, with traffic flows anticipated to decrease in varying degrees on key corridors in and around the city. This offers ACC an opportunity to 'lock in' the benefits of the new bypass, to ensure this freed-up capacity

can be used more efficiently and for the benefit of sustainable modes of transport, to ensure our transport network better meets the current and future needs of the city and supports its continued economic wellbeing.

One of the key projects resulting from this opportunity is the development of a new Roads Hierarchy for Aberdeen, in recognition of the fact that the current road system, which allows all vehicle movements at most junctions, cannot be sustained if the benefits of the AWPR are to continue into the long term and not be slowly eroded by further traffic growth. It is acknowledged that car traffic is the most dominant mode of travel and therefore appropriate trips still need to be catered for. However, in managing the road network, there should be a focus on discouraging inappropriate trips that can be catered for in other more suitable ways or by different routes. With over 70% of journeys within Aberdeen city under 5km there is clearly scope to influence those relatively short journeys where possible to be by more sustainable modes which will require more suitable infrastructure to cater for the increase in demand. This package of improvements is anticipated to include improved walking and cycling infrastructure, bus priority facilities, additional demand management measures, limiting turning manoeuvres to allow traffic to move more efficiently at key junctions, and improving the local environment to be more focused on place rather than function.

The following Roads Hierarchy principles have been adopted by the Council:

- a) Through traffic (that without an Aberdeen City destination) is directed (by road signing) to the AWPR;
- b) Peripheral traffic (i.e. Bridge of Don to Altens or Cults to Dyce or Bucksburn to Torry) is directed to the AWPR;
- c) Traffic in Aberdeen with a destination away from Aberdeen is directed to the AWPR at the earliest opportunity (i.e. Mastrick to Peterhead is directed along the A96 Inverurie Road to the AWPR rather than through (the then city roads) Parkway/ Ellon Road);
- d) The city centre should be considered as a destination rather than a through route for vehicle traffic. Crossing the city centre by car should be discouraged (whilst giving due consideration for access to the harbour). Access and exiting from the city centre should, as far as possible, be by the same route. In other words people accessing the city centre from the north and not using public transport, walking or cycling should access it from the north, park in the north and return northwards. The same would be said for people accessing the city centre from the south and west. Crossing the city centre by foot/cycling/bus will be significantly improved by implementing the CCMP proposals. People in the north who particularly wish to access a south or west car park should be directed firstly round Aberdeen, as per b) above, then to access from the south or west. A similarly situation would exist for south and west access. The AWPR is already setting a signing strategy, agreed by the Council, pointing to Aberdeen North, Aberdeen West and Aberdeen South; and
- e) The benefits of the AWPR must be 'locked in' to prioritise the movement of active and sustainable travel through the re-allocation of carriageway space, junction capacity and other traffic management/prioritisation measures, as defined in the Council's LTS, which is consistent with the principles of other local, regional and national transport, land use, community planning and health strategies, plans and policies, not least Designing Streets, which seeks to 'provide guidance on street design towards place making and away from a system focused upon the dominance of motor vehicles'.

To replace the current 'grid' hierarchy with one more suitable for the delivery of the CCMP and other Council commitments the following high-level hierarchy of routes is being developed in accordance with the principles (a) to (e) set out above:

- 1) Highest priority route – the AWPR/B-T – in effect this is a national requirement and is reinforced by the AWPR grade separated (flyover) junctions;

- 2) Secondary priority routes would be identified as the major connectors between the city centre and the AWPR – the radials. Effectively within the bulk of the city these would be the main priority routes, such as King Street/Ellon Road and Wellington Road since through traffic would be diverted to the AWPR;
- 3) Identify a destination core for the city centre where through and cross traffic is discouraged or limited with priority given to active and sustainable modes;
- 4) Identify bus priority measures to improve public transport (making use of reduced traffic levels resulting from the AWPR-diverted traffic as defined in e) above) taking into account the new traffic patterns resulting from the city centre “destination” objective;
- 5) Optimise access to bus park and ride and train access to the city centre;
- 6) Establish tertiary priority orbital routes to permit connection between the secondary priority radial routes. These movements would still be necessary but should be reduced in demand by making best use of the AWPR and increased use of active and sustainable modes within the city. At this stage these cannot be fully defined as the wider impact needs to be assessed as they will likely impact on vehicle movements and local communities;
- 7) Ensure that our larger employment areas have suitable access that takes account of deliveries and Heavy Goods Vehicle (HGV) movements;
- 8) Identify areas bounded by radial and orbital routes. These areas should then contain only minor routes; and
- 9) Identify proposals to reduce junction movements into/out of/through the areas bounded by the main routes while improving opportunities for safe cycling, walking and routes to public transport.

Work to develop this new Roads Hierarchy commenced in summer 2018 with interim findings likely to emerge later in the year.

#### **Implications for the SUMP:**

- City centre traffic reduction, anticipated to result from the AWPR, allows roadspace to be reconfigured to afford greater priority to active travel and public transport, in accordance with SUMP principles;
- The approved Roads Hierarchy principles complement, and support the successful development of, a SUMP, in terms of recognising the need to implement measures to discourage car traffic in the city centre and prioritise sustainable modes; and
- Given the intertwining of these projects, the Roads Hierarchy and the SUMP can be developed in tandem, and mindful of the CCMP, to ensure a consistent vision for the city centre transport network emerges, and that opportunities for efficiencies, in terms of public engagement and reporting outcomes, are taken advantage of.

### **3.3 Low Emission Zone**

The Scottish Government is committed to the introduction of LEZs in Scotland's four biggest cities by 2020. As the city centre is an Air Quality Management Area, this would be the most likely location for a LEZ in Aberdeen, although ACC is currently working with the Government and partners to define the scope and extent of a LEZ.

#### **Implications for the SUMP:**

- A SUMP's efforts to improve the sustainable travel offering in the city centre would complement and be complemented by implementation of a LEZ, as any measures promoted by the SUMP would be likely to contribute to emission reduction targets by reducing traffic and promoting walking, cycling and public transport use in the city centre.

### **3.4 Central Aberdeen Transport Infrastructure**

Aberdeen's Strategic Infrastructure Plan identifies city centre transport improvements as one element of achieving the Council's growth aspirations for the city. Two schemes in particular are identified - South College Street junction improvements and Berryden Corridor dualling.

With the part-pedestrianisation of Broad Street approved, it was identified that the South College Street corridor required improvement prior to any further major interventions being implemented, particularly on Guild Street. An interim solution has since been agreed for one section of the corridor, although it is recognised that this solution does not provide any benefits to pedestrians or cyclists beyond the current situation (however, nor are there disbenefits). A review of the junction arrangements on the corridor is now taking place and it is recognised that any future option testing should be undertaken with the AWPR open, so that any traffic changes at this location are adequately taken account of, and subsequent to the development of the new roads hierarchy.

Proposals for the Berryden Corridor have focussed on dualling the existing single-track section of road from St. Machar Roundabout to Skene Square. However, designs are still evolving, and the exact form the changes will take is still to be fully determined.

#### **Implications for the SUMP:**

- A SUMP must take into account the Council's existing infrastructure commitments in and on the approach to the city centre;
- As plans and designs for these projects evolve, it will be necessary to assess the extent to which these projects accord with SUMP principles and to take opportunities, where required, to contribute to shaping the final form of these proposals so that the benefits to sustainable transport users, and complementarity with the SUMP, can be maximised.

### **3.5 Aberdeen Local Development Plan**

The Aberdeen Local Development Plan (ALDP) 2017 sets out the long-term land use planning framework for Aberdeen, identifying the location and scope of future development and establishing policies against which submissions for planning approval will be assessed.

Future development of the city centre is a key focus of the ALDP, which looks to promote the area as *the commercial, economic, social, civic and cultural heart of Aberdeen*. The Plan states that:

*The maintenance of a vibrant city centre and the enhancement of its fine buildings and open spaces is vital to Aberdeen's future prosperity and to sustaining its attractiveness as a place to live and visit...It is vital for the future prosperity of Aberdeen that the city centre is enhanced and promoted as a resilient, safe, attractive, accessible and well-connected place which contributes to an improved quality of life.*

Policy NC1 - City Centre Development – Regional Development states that:

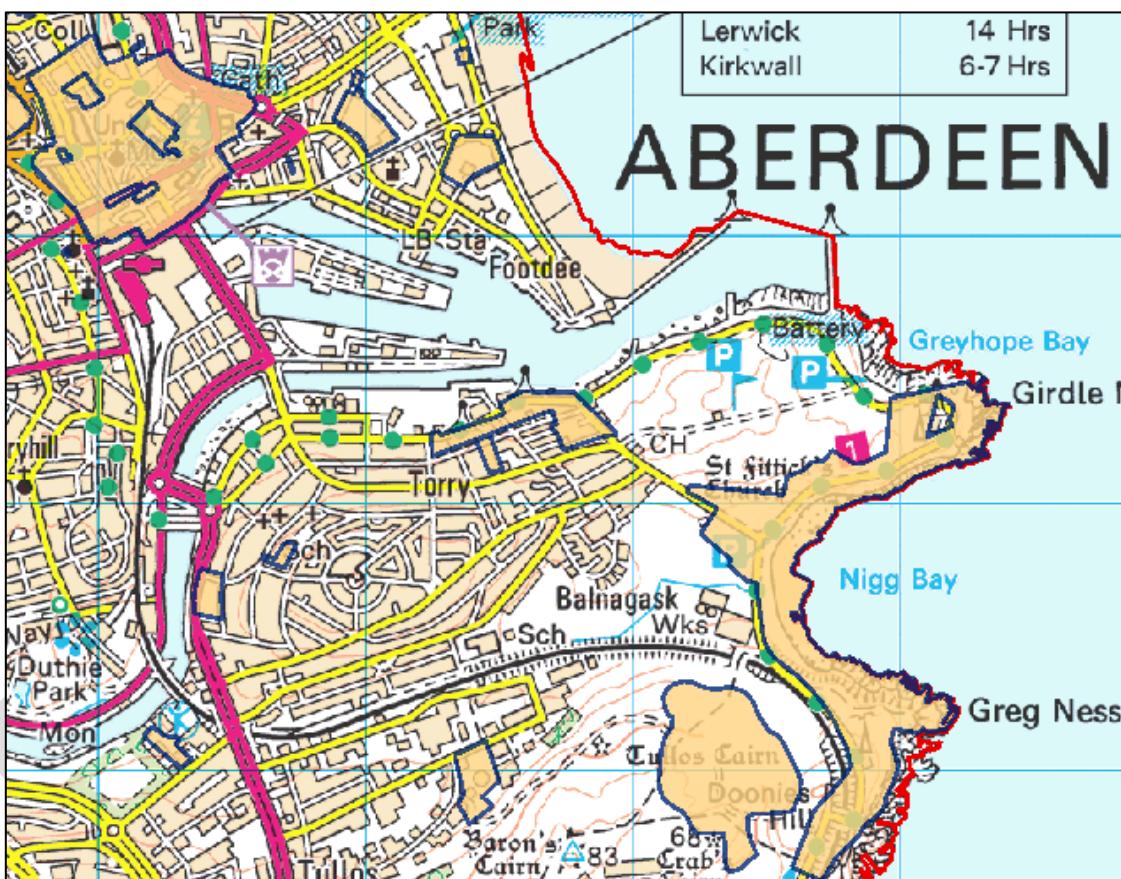
*Development within the city centre must contribute towards the delivery of the vision for the city centre as a major regional centre as expressed in the City Centre Masterplan and Delivery Programme. As such the city centre is the preferred location for retail, office, hotel, commercial leisure, community, cultural and other significant footfall generating development serving a city-wide or regional market. Proposals for new retail, office, hotel, commercial leisure, community, cultural and other significant footfall generating development (unless on sites allocated for that use in this plan) shall be located in accordance with the sequential approach referred to in this section of the Plan and in Supplementary Guidance.*

Relevant Opportunity Sites (OP) identified in the ALDP are summarised in Table A1 and shown in Figure 5, giving a sense of the scale and type of development anticipated within the city centre and towards the new harbour area to 2035.

Table A1- ALDP Opportunity Sites

Name	Size	Description
OP67 Aberdeen Market	0.33 ha	Opportunity for retail/mixed use improvement to include better pedestrian access from The Green to Union Street and address public realm issues.
OP79 Crown House	0.04 ha	City centre location suitable for residential use should the building be vacated in the future.
OP80 Bon Accord Masterplan	40.0 ha	Masterplan prepared for mixed use development comprising shops, professional services, food and drink, business, hotels, flats, serviced apartments, access, services and ancillary development.
OP81 Denburn and Woolmanhill	1.9 ha	Mix of uses including healthcare, hotel, residential, small-scale retail, food and drink, further education, offices/business and car parking.
OP88 Shore Porters Warehouse	0.02 ha	Redundant warehouse.
OP91 Marischal Square	0.9 ha	Mixed use (office, hotel, retail, restaurant, leisure) development, creation of civic space and pedestrianisation of Broad Street.
OP95 Triple Kirks, Schoolhill	0.14 ha	Office, retail, residential or hotel. Current Planning Permission for office use.
OP96 Upper/ Basement Floors, 73-149 Union Street		Potential opportunity to open up unused floors and link with existing used floor space.
OP97 Victoria Road Primary School	0.67 ha	Former Primary School. The site would be suited for sensitive residential development.
OP98 VSA Gallowgate	0.08 ha	Residential/Mixed use.
OP99 The Waterfront, Torry	6.6 ha	Planning Application approved for mixed use development.
OP102 George Street / Crooked Lane	0.96 ha	Opportunity for retail development, enhance George Street, link to John Lewis/extend Bon Accord Centre, address accessibility issues through the centre and address public realm issues

Figure A5- ALDP Opportunity Sites



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Work is currently underway to prepare the next ALDP, with a Main Issues Report due to be published in January 2019 and a proposed Plan to follow in early 2020. The Council hopes to have the next Plan adopted in February 2022.

#### Implications for the SUMP:

- A SUMP would support the ALDP's aspirations to revitalise the city centre and play a key role in helping to transform the area into a safe, accessible and sustainable place;
- A SUMP will play a role in realising ALDP aspirations to increase footfall in the city centre by helping make the area a pleasant and welcoming place to visit and spend time in;
- Significant development is proposed within the city centre over the next 20-25 years. The SUMP has a role to play in facilitating this and supporting complementary workstreams to ensure development takes place in a sustainable manner and does not simply induce more traffic to the city centre, with associated emissions, air quality, noise and congestion issues; and
- There are opportunities for the SUMP to contribute to a review of car parking policy within the city centre, including revised maximum standards for car parking provision, as part of the process for developing the next ALDP.

### 3.6 Aberdeen South Harbour

Aberdeen Harbour Board (AHB) is undergoing a major expansion which will see a new harbour delivered at Bay of Nigg, south of the existing city centre harbour. Identified as a scheme of national importance in the third National Planning Framework (NPF3), the harbour is being constructed with support from the UK and Scottish Governments via the Aberdeen City Region Deal (CRD) in recognition of the significant economic benefits, locally and nationally, that the development will bring. Due to open in 2020, Aberdeen South Harbour (ASH) can accommodate larger vessels than the existing harbour, facilitating economic expansion and diversification into areas such as decommissioning, renewables and tourism.

A complementary CRD project is currently underway to identify the optimum additional onshore transport infrastructure required to maximise the regional economic benefits of the new facility, in terms of enabling a more efficient movement of people and goods from the site to key destinations and the regeneration of surrounding areas. This includes a consideration of active travel and public transport links towards the city centre, with the following Transport Planning objectives identified, amongst others: *Provide appropriate public transport connections to/from ASH reflecting the type of activity at the harbour and Provide appropriate active travel connections to/from ASH reflecting the type of activity at the harbour.*

Figure A6 – Aberdeen South Harbour Area



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### **Implications for the SUMP:**

- The SUMP will be revised to take account of the new harbour and will identify measures to improve sustainable connectivity between the city centre and ASH, thus supporting regional economic and tourism aspirations; and
- Given that the remit of the external connections study also includes sustainable links to the city centre, the SUMP must maintain dialogue with this piece of work, and both should reflect the emerging findings of one other to ensure a complementary approach.

## **3.7 Other CIVITAS PORTIS Measures**

A range of other measures being taken forward as part of the CIVITAS PORTIS project will influence the development of, or be influenced by, a SUMP. A summary of these key projects is provided in the following sections.

### **3.7.1 2ABZ1 Walking and Cycling**

This measure complements the development of a SUMP by looking to implement projects in the shorter term that could encourage individuals to walk and cycle in the city centre. These include improved active travel links and wayfinding, additional cycle parking facilities and hubs and a bicycle hire scheme.

### **3.7.2 2ABZ2 Redesigning Collective Travel**

An action plan is being developed to meet the needs of current and future 'collective travel' users (pedestrians, cyclists, public transport users and car sharers) on the A96 corridor between the town of Inverurie in Aberdeenshire and Aberdeen city centre.

Objectives of the project are to:

- Increase the modal share of trips made by active travel along the A96 Collective Travel Study (CTS) corridor by 2021;
- Increase the modal share of trips made by public transport along the A96 CTS corridor by 2021;
- Increase awareness of collective travel options (including infrastructure, services and ticketing) on the A96 CTS corridor by 2021;
- Increase average car occupancy levels on the A96 CTS corridor by 2021; and
- Improve public transport journey times and reliability between key sites on the A96 CTS corridor to Aberdeen City Centre by 2021.

Measures that have been recommended for implementation or further appraisal include:

- Enhanced walking and cycling links across the corridor;
- Additional bus priority measures;
- Additional public transport incentives;
- Improved promotion of the Craibstone Park and Ride; and
- A review of cycle and car parking provision.

These measures are now in the process of being refined into specific actions, which will then be developed into a prioritised action plan and presented to Elected Members for approval, and funding is available via CIVITAS PORTIS to implement some physical measures by 2020.

Also as part of 2ABZ2, Nestrans is co-ordinating a Park and Ride Market Research and Action Plan. Nestrans and partners are keen to better understand current usage and barriers to using park and ride in the north east in order that action can be taken to maximise the benefits of the new site at Craibstone on the A96 and ensure growth in park and ride patronage across the network as a whole. The key outcomes of the study are anticipated to be:

- An improved understanding of usage and car park occupancy at each of the existing park and ride sites;
- An improved understanding of who is currently using park and ride and why;
- An improved understanding of why people do not use park and ride;
- Recommendations for increasing usage and development of an action plan; and
- Development of key marketing and promotion principles for individual sites and/or the network as a whole.

The findings of the research are due to be published later in 2018.

### 3.7.3 2ABZ3 Developing Travel Plans

This measure looks to expand travel planning activities to better engage with companies in the Altens/Nigg (near the new harbour) and North Dee (a key city centre development site) areas.

### 3.7.4 2ABZ4 Collecting and Managing Data to Support Travel Information

2ABZ4 looks to collate data to build a baseline to enable a better understanding of journeys made in and around the city region to inform the development of a journey planning app.

### 3.7.5 3ABZ3 Demand Management

3ABZ3 looks primarily at car parking policies, their impact on travel choices and behaviour and the potential for car parking to act as a demand management tool in Aberdeen city centre through undertaking a Strategic Car Parking Review (SCPR). The aim is to: *Undertake a review of strategic car parking across the City to consider the complex relationship of parking in the city centre with the city's economic, social and environmental wellbeing and how well the current provision of on and off-street parking (whether operated by the public or private sector) fits with ACC's strategic transport and land use plans.*

A draft Priority Actions and Options Report has been prepared which will inform the development of a future Car Parking Action Plan. The following objectives have been agreed amongst the project group, comprising representative of ACC and Nestrans:

- A car parking policy for Aberdeen that advocates appropriate use of parking in the city centre, with parking prioritised for short stay shoppers and visitors rather than long stay commuters, and which complements wider transport and economic policies of ACC;
- A car parking policy for Aberdeen that aligns with the Roads Hierarchy and facilitates routeing to appropriate car parks in the city centre through the use of technology;
- Provide high quality car parking that is accessible to all users and is inclusive of their needs;
- Provide flexible parking provision which can adapt to suit events and occasions of demand occurrences;
- A car parking policy for Aberdeen that supports a reduction in traffic in line with various policies for changing the modal split of access into the city centre and increasing the mode share of those using collective transport, walking and cycling within the city centre;

- A car parking policy for Aberdeen that complements a wider suite of demand management measures promoted by ACC;
- A car parking policy for Aberdeen that helps to promote city centre living for existing and future residents, realising opportunities to enhance public realm and the walkability and liveability of Aberdeen city centre; and
- Examine the establishment of a sustainable business model for ACC parking assets including consideration of tenant parking needs.

Priority Actions and Options recommended within the draft for further appraisal as part of a future Action Plan include: rationalising or closing some city centre car parks, exploring the potential for a workplace parking levy, moving to more restrictive car parking standards as part of the ALDP review process increasing park and ride promotion, and further roll-out of Controlled Parking Zones (CPZs).

It is intended that the findings and recommendations of the report will be presented to Elected Members in autumn 2018 and Members will be asked to provide a steer on future priorities to be identified within the Action Plan.

### **3.7.6 4ABZ1 Freight Gateway Interconnectivity**

This measure looks to undertake a review of freight traffic management post-AWPR and considering any changes resulting from the new harbour development, and exploring options for encouraging use of preferred freight corridors, such as revised route maps.

### **3.7.7 4ABZ3 Freight Distribution**

This measure looks at minimising the impact of freight vehicles in the city centre, including options for consolidation centres and low-emission vehicle use, especially for ‘last mile delivery’.

### **Implications for the SUMP:**

- Walking and cycling measures being appraised or implemented as part of other projects will contribute to the development of a city centre that is conducive to sustainable travel which is a key aspiration of any SUMP;
- Such projects will also form a solid basis upon which to build when identifying further measures or supporting measures as part of SUMP development processes;
- A SUMP, in turn, may identify additional projects that can be taken forward under the Walking and Cycling workstream;
- Measures promoted by the A96 CTS look at improving sustainable travel connections on one of the key approaches to the city centre, therefore the proposed SUMP will reflect progress on delivery of the A96 action plan and incorporate relevant measures within the SUMP action plan;
- Travel planning work within the city centre and harbour areas will support, and be supported by, a SUMP. Travel planning's emphasis on encouraging non-car travel fits well with the sustainability objectives of a SUMP, while any measures implemented as a result of a SUMP would support travel planning activities by facilitating behaviour change;
- Technology to facilitate seamless journey planning can encourage more sustainable and/or multimodal trips to the city centre, in accordance with SUMP aspirations to reduce car travel within the area;
- A revised car parking strategy for the city centre, depending on the form this ultimately takes, could support the sustainable transport aspirations of a SUMP should parking be rationalised and/or otherwise disincentivised. In turn, measures resulting from a SUMP can make alternatives to car travel more attractive, thus complementing a revised car parking policy;
- The SUMP can support recommendations in the SCPR to review car parking standards in the city centre as part of the ALDP review process;
- Measures to remove barriers to, and encourage more, Park and Ride use in the region accord with the aspirations of a SUMP to encourage fewer people to travel by car to the city centre;
- Work to encourage appropriate freight routeing supports a SUMP's emphasis on developing a safer and more welcoming city centre;
- Efforts being undertaken to consider more efficient/low emission delivery solutions accord well with the SUMP's aspirations for a low carbon city centre with fewer large and polluting vehicles.

## **3.8 City Region Deal Strategic Transport Appraisal**

A key project within the Aberdeen CRD is the Strategic Transport Appraisal which takes a 20-year strategic view of the transport implications of the investment unlocked by the Deal across all modes of transport and looks to identify future regional transport requirements to facilitate the economic growth and diversification anticipated to result from the CRD.

The Pre-Appraisal stage is currently nearing completion, with the following key themes and interim objectives developed, informed by substantive public and stakeholder engagement,

and endorsed by ACC, Aberdeenshire Council, Nestrans, Transport Scotland, the Department for Transport and the CRD Joint Committee.

**Key themes:**

- Connections to and integration of core growth areas;
- Maintaining and enhancing the natural & built environment so that the region remains a desirable place to live, work and visit;
- Increasing travel choices for all;
- Reducing the need to travel;
- Supporting key sectors and facilitating increased diversification of the region's economy;
- Creating a safe, resilient and affordable transport system; and
- Improving strategic connectivity.

**Interim objectives:**

- Increase access to a safe and sustainable transport system, in particular for disadvantaged and vulnerable users;
- Reduce the business costs of transport for all sectors of the economy to realise the aspirations of the City Region Deal;
- Reduce the adverse impacts of transport on the natural and built environment;
- Improve the integration of transport and land use to reduce the need to travel by private car;
- Improve the relative competitiveness of public transport compared to the private car;
- Maintain and enhance a safe and resilient transport network.
- The Appraisal is following Scottish Transport Appraisal Guidance (STAG) principles, meaning the next stage in the appraisal process will be the generation and sifting of options, and then a full STAG Part 1 Appraisal of remaining options. Emerging outcomes will also be used to provide north east Scotland input into national plans and strategies, namely the NTS and the Scottish Government's Strategic Transport Projects Review. The outcomes of the Strategic Transport Strategy are also expected to set the context for the next RTS.

**Implications for the SUMP:**

- Although the Strategic Transport Appraisal has a wider remit than a SUMP, the interim objectives align well with the SUMP's emphasis on sustainability;
- The results of the recent public consultation to identify regional problems and opportunities may be informative for the SUMP, should it be possible to extract those relevant to the city centre; and
- A SUMP must take cognisance of this wider piece of work and ensure that any Plan ultimately developed accords with the direction of the strategic appraisal and that no contradictions arise.

## **3.9 Rail Improvements**

Led by Transport Scotland, work is currently underway to deliver the Aberdeen to Inverness Rail Improvement Project, which aims to reduce passenger journey times and realise a more regular rail service between Aberdeen and Inverness. Phase 1, due for completion in 2019, will see the redoubling of the track between Aberdeen and Inverurie (currently a significant constraint on the network) and the re-opening of Kintore Station. Coupled with the 'Revolution

in Rail' proposals, announced by the Scottish Government in 2016, these improvements will realise a higher capacity and higher frequency local rail service between Montrose and Inverurie through Aberdeen city centre.

The new station at Kintore, and improvements to car parking capacity at Inverurie Station, will further increase the rail park and ride offering to Aberdeen, while work is ongoing to investigate requirements and opportunities for increasing car parking capacity at Dyce Station and at stations south of the city (Portlethen, Stonehaven and Laurencekirk) so that full advantages is taken of the Revolution in Rail changes to encourage further modal shift.

Furthermore, an associated CRD project sees Transport Scotland working with partners to investigate opportunities for reducing journey times by up to 20 minutes between Aberdeen and the Central Belt, further improving rail options for people travelling to the city centre from outside the region, although the final form of these changes is still to be defined.

#### **Implications for the SUMP:**

- Current and future rail improvements could result in modal shift from private to public (rail) transport amongst those travelling into the city centre from the wider region and beyond, thus complementing local measures identified within a SUMP to encourage more walking, cycling and bus use to, from and within the city centre.

### **3.10 Other Initiatives**

The following initiatives may also have a bearing on the successful delivery of a SUMP:

- The proposed Bus Alliance, although an agreement has yet to be finalised, would see a more formal and stronger quality partnership developing between local authorities and bus operators, with all parties committing to measures to encourage and enable more people to travel by bus to the city centre, thus supporting the public transport aspects of a SUMP;
- The ongoing development of strategic cycle routes along key corridors (A90 north, A96, A90 south, etc.) could result in more trips to the city centre by bicycle, thus supporting active travel aspirations of a SUMP;
- The continued expansion of the Co-Wheels Car Club is likely to see an increased car club presence in the city centre, thus potentially reducing the volume of private cars owned by those living in the area and facilitating no/low car development, thus supporting SUMP aspirations for fewer vehicle trips in central Aberdeen; and
- The ongoing roll-out of electric and hydrogen refuelling infrastructure plays a role in normalising these technologies, and the use of such vehicles in and around the city centre in preference to conventionally fuelled vehicles supports a SUMP's emphasis on developing a low-emission transport system that remains accessible to all, particularly those unable to walk, cycle or use public transport.

## 4 SWOT Analysis

Having set the context in terms of current policy, development aspirations and other ongoing and future workstreams that will have a bearing on the development of a SUMP, an assessment has been undertaken of the strengths, weaknesses, opportunities and potential problems, in terms of successful delivery of a SUMP, that might result from these framework conditions. This has taken the form of a traditional SWOT (strengths, weaknesses, opportunities, threats) analysis summarised in the chart below.

Strengths:	Opportunities:
<p><b>Strengths:</b></p> <ul style="list-style-type: none"><li>The transport policy environment is well defined, with a consistent approach filtering down from European to local level, thus setting a clear context for the development of a SUMP and a solid foundation upon which to build;</li><li>Transport policy's focus on sustainability aligns well with the sustainability principles of a SUMP;</li><li>Sustainability principles are well established across other disciplines at all levels of government;</li><li>There are commitments at all levels to reduce greenhouse gas emissions and improve air quality, and a recognition that transport is one of the key contributors to environmental problems – a SUMP offers a means of addressing these issues, therefore accords well with existing policy and legislation as one means of reducing emissions and achieving air quality targets;</li><li>There are national targets to phase out petrol and diesel vehicles, a local aspiration to be a low emission city and ongoing initiatives to trial and promote alternative technologies, particularly electricity and hydrogen. A SUMP can support and help realise these aspirations;</li><li>There is a national vision for active travel and aspirations to increase walking and cycling at both a regional and local level. As improving active travel opportunities is a key aim of a SUMP, this accords well with approved active travel policy;</li><li>To realise this, the Council and partners have been working to develop more and better active travel facilities in recent years, albeit with more of a focus on strategic routes on the outskirts of the city centre. A SUMP will complement, and expand upon, this work;</li><li>The renewed emphasis, both nationally, with the publication of the new Transport (Scotland) Bill, and regionally, with the proposed bus alliance, and a history of successful partnership working between</li></ul>	<p><b>Opportunities:</b></p> <ul style="list-style-type: none"><li>There exists a strong partnership network in the north east (including, but not limited to, ACC, Nestrans, and Aberdeenshire Council) supportive of the delivery of a SUMP;</li><li>The opening of the AWPR and the resulting displacement of traffic from the city centre offers the opportunity to 'lock in' the benefits of the freed-up capacity to prioritise sustainable modes of transport which a SUMP can ensure is reserved for favourable modes;</li><li>The development of ASH provides an opportunity to expand the SUMP beyond the city centre to consider links to and from the new port;</li><li>The approved CCMP, agreed Roads Hierarchy principles and existing draft SUMP offer a solid foundation from which to develop an up to date SUMP that articulates transport aspirations for the city centre and harbour areas in an holistic manner;</li><li>The development of the Roads Hierarchy in parallel with the SUMP allows these interlinked pieces of work to develop together, ensuring they complement one another and that there are opportunities to rationalise common tasks, such as stakeholder briefings, public consultation and committee reporting;</li><li>Many public engagement exercises have taken place in recent years to inform projects such as the CCMP, the previous draft SUMP, the Aberdeen Active Travel Action Plan and the CRD Strategic Transport Appraisal. There therefore already exists a wealth of consultation information that a SUMP can take advantage of;</li><li>The implementation of a LEZ in the city by 2020 will further necessitate a reconsideration of how people travel to the area, with a SUMP able to develop and implement realistic alternatives;</li></ul>

<p>local transport authorities and bus operators forms a strong foundation for public transport improvements in the city centre, which are likely to be key focus of any SUMP;</p> <ul style="list-style-type: none"> <li>• There is a recognition of the links between transport and the economy, especially the role that sustainable transport can play in economic growth and regeneration, ensuring the SUMP is seen to deliver economic benefits, as well as simply transport improvements, in the area;</li> <li>• There is likewise a recognition of the role that active travel can play in tackling inactivity and obesity, therefore the SUMP can also be shown to meet public health objectives;</li> <li>• The CCMP was approved unanimously by ACC in 2015 and was informed by wide-ranging public and stakeholder engagement, therefore there is clear political commitment to, and public interest in, regenerating the city centre and the SUMP has a role to play in this process by articulating transport interventions that could help realise the city centre vision;</li> <li>• Similarly, the approval of the principles of a new Roads Hierarchy for Aberdeen demonstrates political commitment to reconsidering how the city centre transport network operates, which the SUMP will play a significant part in realising;</li> <li>• Therefore, given its complementarity with approved policy and strategy objectives, and its potential to contribute to meeting the aims and objectives of a range of other priority disciplines (transport, environmental sustainability, economic development and health), the SUMP is in a strong position to be politically and publicly acceptable, notwithstanding that individual schemes detailed within a SUMP may not be universally popular.</li> </ul>	<ul style="list-style-type: none"> <li>• Although these designations are regrettable, with an AQMA and various NMAs in the city centre, there are opportunities to address these, as well as general transport concerns, via a SUMP;</li> <li>• With the progression of various other CIVITAS PORTIS workstreams focussing on active travel and/or the city centre, there are opportunities for the SUMP to inform, and be informed by, each of these so that city centre transport is considered in an holistic and integrated manner;</li> <li>• Significant match-funding is currently available for active travel projects from Transport Scotland via Sustrans and other bodies and taking advantage of such opportunities while they exist will help ensure that measures identified in the SUMP are deliverable from a financial perspective. ACC has a good track record in partnership working with organisations such as Sustrans, Living Streets and Paths for All, with Sustrans already inputting into CCMP projects, such as Broad Street and Union Terrace Gardens, so is well aware of, and supportive of, city centre ambitions;</li> <li>• Other sources of funding for the delivery of SUMP projects may be available, including ACC's Non-Housing Capital Programme and Bus Lane Enforcement surplus, Nestrans Capital and Revenue programmes and Developer Contributions;</li> <li>• Although the administration of any financial penalties resulting from the LEZ has yet to be determined, if these fall to local authorities, improving sustainable travel options within the city centre would be an apt use;</li> <li>• The Transport (Scotland) Bill and regional Bus Alliance demonstrate a renewed emphasis on public transport improvements that a SUMP can benefit from;</li> <li>• There may be opportunities to expand rail park and ride sites around the region and better promote, and improve services to, bus park and ride sites to minimise the impact of traffic in the city centre and make a positive contribution to the economy of the city;</li> <li>• Ongoing improvements to the local rail network offer opportunities for encouraging modal shift to the city centre which accords with SUMP principles; and</li> <li>• The outcomes of the SCPR may offer further incentives for behaviour change that a SUMP would look to support with</li> </ul>
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	<p>the identification of complimentary measures and demand management initiatives encouraging alternative forms of travel. There may furthermore be opportunities for the SUMP to review car parking standards for new development and influence the next iteration of these within the ALDP.</p>
<p><b>Weaknesses:</b></p> <ul style="list-style-type: none"> <li>• The policy and strategy landscape is very ‘busy’ and, with ongoing work to deliver the CCMP, develop a Roads Hierarchy and appraise external transport links to the new harbour, there may be questions over the degree of additional value that a SUMP will bring;</li> <li>• The final form of many CCMP projects is still to be determined which may limit the level of detail that can be included at this stage with the SUMP’s recommended improvements – it would be unfortunate, for example, to suggest an intervention on Union Street which was then superceded by a future CCMP project;</li> <li>• A SUMP will only set a framework for future improvements and cannot provide commitments in terms of delivery. At the current time, there is no funding identified for the implementation of any measures arising from a SUMP, while individual projects will be required to go through formal statutory processes before moving to delivery phase; and</li> <li>• As a result of this uncertainty over funding and approvals, timescales for delivery of SUMP projects cannot be guaranteed.</li> </ul>	<p><b>Threats:</b></p> <ul style="list-style-type: none"> <li>• There is no statutory requirement for a SUMP therefore ACC may decide to concentrate resources elsewhere;</li> <li>• Public interest in, and engagement with, the SUMP may be limited given the wealth of other consultations undertaken recently or likely to be running in parallel, with a risk of ‘consultation fatigue’;</li> <li>• Elected Members may reject the recommendations of the Roads Hierarchy and SCPR thus limiting the potential for these to set the context for a successful SUMP;</li> <li>• The SUMP itself will have to be formally adopted by ACC – this constitutes a risk, should Elected Members not agree with the content of a SUMP;</li> <li>• Even should the SUMP be adopted, it may be that projects are not universally popular amongst Elected Members and members of the public, therefore posing a risk to delivery. Projects are likely to be subject to approval on a case-by-case basis (as is the case with the CCMP), dependant on Council decision-making and other statutory processes, including public consultation;</li> <li>• Public acceptability in particular could pose a challenge to the successful realisation of the Roads Hierarchy vision and hence successful delivery of a SUMP – measures to discourage/restrict car use and prioritise the movement of alternative modes will not be universally popular and could result in a negative reaction and even formal objections to individual schemes;</li> <li>• The lack of any dedicated funding at this stage for the realisation of SUMP measures poses a risk to deliverability;</li> <li>• Privatised public transport networks limit the degree of influence that ACC has in delivering an attractive and affordable network;</li> <li>• Bus use (including park and ride) has been declining in the region for a number of years, resulting in recent service cuts and withdrawals. The recently opened Park and Ride site at Craibstone is</li> </ul>

	<p>severely underutilised. A significant step change will be required to reverse this trend and encourage modal shift to the bus which poses a challenge to the success of a SUMP;</p> <ul style="list-style-type: none"> <li>• While walking levels have remained healthy, Aberdeen has not seen the same increase in levels of cycling that other areas of Scotland have experienced in recent years, with cycling levels fairly stagnant throughout the city. Significant intervention will be required before Aberdeen is seen to be a safe and welcoming place for cyclists;</li> <li>• Car ownership and use remains higher in Aberdeen City and Aberdeenshire than in other areas of Scotland and may therefore be challenging to overcome; and</li> <li>• Other projects may pose challenges to the successful delivery of a SUMP and these risks will need to be identified as the SUMP develops and consideration given as to the impact these could have on the SUMP and how the SUMP can address these.</li> </ul>
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## 5 Summary and Conclusions

The purpose of this report is to outline the findings of the first stage in the SUMP development process, SUMP Self-Assessment. The main steps were:

- A review of current European, national, regional and local policy and strategy (relevant to transport) to analyse the extent to which sustainability principles are part of the existing policy landscape;
- Identification of the linkages and interdependencies between the proposed SUMP and other programmes of work being progressed by the Council and partners, including changes to the built environment; and
- An assessment of the strengths, weaknesses, opportunities and threats, in terms of the successful delivery of a SUMP, that might result from these framework conditions.

The key findings of the review are as follows:

- The SUMP will be developed within a policy context that recognises the need to reduce the environmental impacts of transport, the need for a safer and more sustainable transport system, the links between transport and the economy and the role that transport can play in improving public health. The issues typically addressed within a SUMP have appropriate precedence in, and are supported by, existing policy and strategy commitments, therefore proposed measures resulting from a SUMP should generally be supported by decision-makers and stakeholders. No contradictory policies or regulations have been identified at this stage that would act as a barrier or threat to the successful implementation of a SUMP. In turn, a SUMP will require to take account of existing policy directives and ensure that interventions proposed complement, and do not contravene, approved policy.
- There is commitment at all levels of government, from European to local level, and amongst key stakeholders, to sustainability principles. At a local level this is evident in the adoption and ongoing delivery of a range of strategies and action plans to tackle climate change, air quality and associated issues, including the Regional and Local Transport Strategies and subsidiary Action Plans, the Air Quality Action Plan, Hydrogen Strategy and Action Plan and the SEAP. Furthermore, the adoption of the CCMP and approval of revised Road Hierarchy principles demonstrate the Council's willingness to make use of the opportunities afforded by the AWPR to develop an improved and more sustainable city centre transport system.
- There are a number of other pieces of work being delivered by the Council and/or partners, both feasibility/research and physical improvements, that the SUMP will require to take cognisance of. In some cases, these workstreams will be complemented and enhanced by development and delivery of a SUMP. In other cases, these may influence the look and form of the eventual SUMP. In cases where the impact of these projects on the SUMP is uncertain, efforts will be made during the SUMP development process to better define these impacts and, where necessary, look to positively influence these pieces of work to maximise the sustainable transport benefits.
- There are both opportunities to be grasped and challenges to overcome in terms of successfully developing and delivering a SUMP in Aberdeen. Opportunities exist in terms of partnership working, various complimentary workstreams which can be built upon and developed, and the ability to make use of existing assets, such as Park and Ride sites, and take advantage of recent and ongoing improvements to the transport

network (AWPR, railway line upgrades) that will help achieve the aims and objectives of a SUMP. At the same time, it is recognised that there are risks inherent throughout the SUMP development and delivery process, in terms of timescales and processes for gaining approval and funding for SUMP measures, challenges in gaining public acceptability for proposed changes, and the extent to which the SUMP can be successful in engendering real change in the face of falling public transport usage and stagnant active travel levels.

On balance, therefore, and notwithstanding that challenges will be experienced throughout the process, it is considered that suitable conditions exist for the successful development of a SUMP in Aberdeen. As well as the existence of a strong foundation for a SUMP in the current policy and strategy landscape, the opening of the AWPR affords a once-in-a-generation opportunity to fundamentally review our urban transport network and make the changes necessary to ensure Aberdeen becomes an even more attractive place in which to live, visit and do business. The Council and partners have expressed a willingness (via approval of the CCMP and Roads Hierarchy principles) to take the steps to make this change, in recognition of the environmental, economic and quality of life benefits that could result for Aberdeen and its people, and this momentum and appetite for change should benefit the SUMP and the acceptability of any further measures proposed to improve the sustainable transport offering in the city centre and towards the harbours. As such, the timing of the SUMP review is fortuitous, being concurrent with AWPR completion, CCMP delivery, Roads Hierarchy review and the external connections to the harbour study, and the planned opening of the Aberdeen South Harbour in 2020, with these projects able to work together and support one another to present a coherent and holistic vision for the future of the city centre and its transport network, one which will hopefully be endorsed by decision-makers and members of the public.

# Appendix B : Stakeholder Engagement

## 1 Introduction

CIVITAS PORTIS measure 1ABZ1 - **SUMP and Port Optimisation** looks to develop a revised Sustainable Urban Mobility Plan (SUMP) for Aberdeen, encompassing the city centre area and connections to the new Aberdeen South Harbour (ASH) at the Bay of Nigg.

The European Commission's guidelines on *Developing and Implementing a Sustainable Urban Mobility Plan* (2014) define a SUMP as:

*a strategic plan designed to satisfy the mobility needs of people and businesses in cities and their surroundings for a better quality of life. It builds on existing planning practices and takes due consideration of integration, participation, and evaluation principles.*

It notes that a *participatory approach* is key to a successful SUMP, with public and stakeholder engagement and consultation encouraged throughout the development process so that the final plan adequately reflects the needs of city centre users and businesses, is supported by members of the public and decision-makers, and is therefore in a strong position to encourage and facilitate real and lasting change.

It was clear at the beginning of the SUMP revision process that a significant body of information relating to perceptions of transport in and around the city centre has already been gathered, and continues to be gathered, during consultation and engagement exercises to inform a range of other workstreams including:

- The original SUMP (engagement for which was undertaken in 2012);
- The Aberdeen City Centre Masterplan (2014-2018);
- The Aberdeen Local Transport Strategy (2014-2015);
- The Aberdeen Active Travel Action Plan (2016);
- The North East Scotland Roads Hierarchy review (2016-2018); and
- The Aberdeen City Region Deal Strategic Transport Appraisal (2017-18).

There therefore exists the opportunity to use this wealth of existing information as the foundation of a revised SUMP, rather than launching a separate bespoke public consultation. Whilst a sense check is undoubtedly needed to ensure previous findings remain relevant (as some of the data is a few years old now) and an element of engagement will still be required on the revised draft SUMP, this approach minimises the amount of new consultation required, thus reducing the risks of 'consultation fatigue' and perceptions that another consultation is duplicative or simply 'consultation for consultation's sake'. From the point of view of the public and many stakeholders, the city centre has not seen significant change in terms of transport, aside from the part-pedestrianisation of Broad Street (completed in summer 2018), since these previous exercises were undertaken in any case.

This report therefore summarises the key findings concerning transport and movement in the city centre that arose from these previous consultation exercises (Chapter 2). This information is then summarised in a problems and opportunities analysis (Chapter 3) which acts as the foundation of the revised SUMP.

## 2 Previous Consultation Findings

### 2.1 Previous SUMP Engagement

Initial engagement on a city centre SUMP took place in 2012, comprising on-street interviews with members of the public, an online questionnaire and public and stakeholder workshops. This was one of the first consultations in Aberdeen to make extensive use of social media to engage with and update interested parties, with this approach contributing towards Aberdeen City Council winning the EU's first SUMP Award in 2013.

#### 2.1.1 Survey Responses

On-street interviews took place in five locations across the city centre over two days and garnered 301 responses. This was supplemented by an online public questionnaire which was live for a month and gained 489 responses.

Just over half of respondents (54.2%) to the on-street interviews visited the city centre every day. The most common reason for visiting the city centre was shopping (82.1%), followed by visiting restaurants or cafes (41.2%), work (38.5%), visiting friends or relatives (31.6%), entertainment (23.6%) and visiting a bar or club (21.6%). Union Street, Union Square, Bon Accord and St Nicholas Centres were the most popular locations for people to visit.

The modes of transport that the greatest number of people had used to travel to the city centre were walking and bus, followed by car, and then taxi. Some people had tried cycling but very few had used a motorbike.

Respondents were asked what modes of transport they used to get to, from and around the city centre during the day and at night. Respondents could select as many modes as they used and the results can be seen in Figures 1 and 2 below.

Figure B7 – SUMP: Modes of travel to get to, from and around the city centre (day)

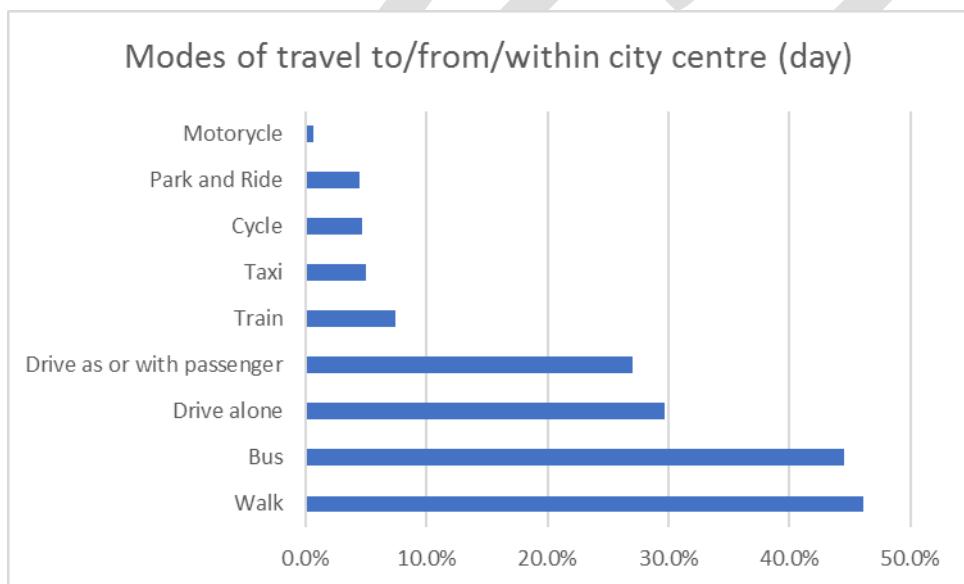
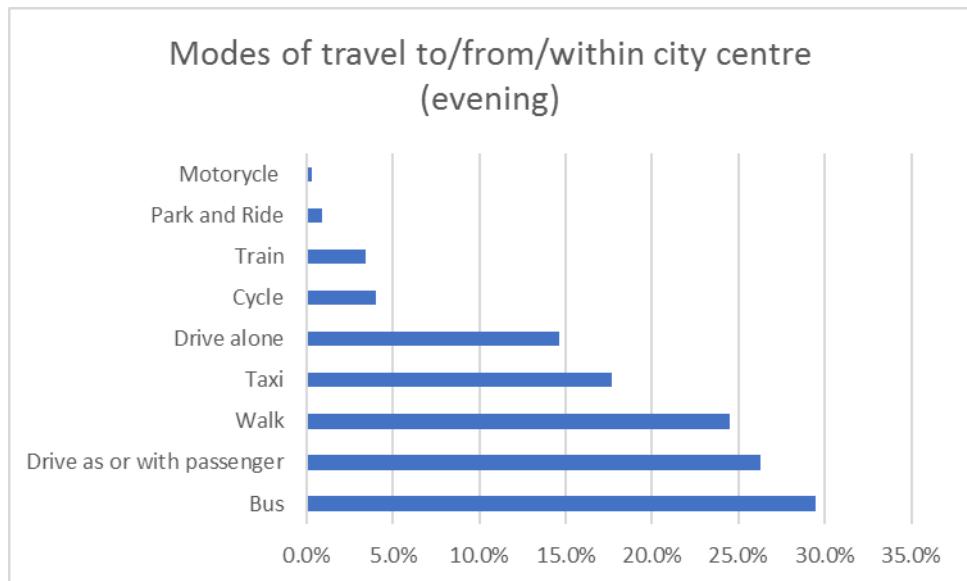
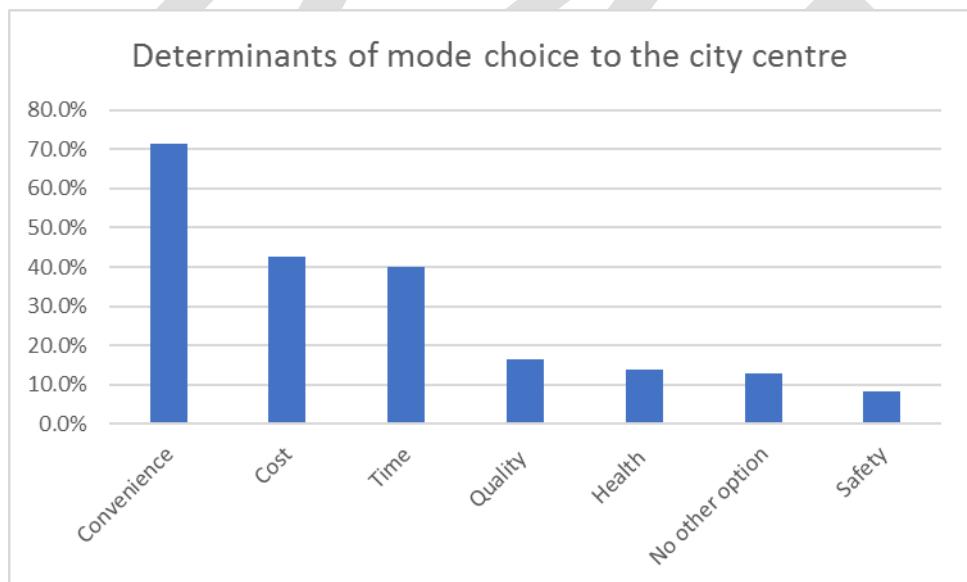


Figure B8 – SUMP: Modes of travel to get to, from and around the city centre (evening)



When asked about the main determinants behind their choice of mode, convenience emerged as the most important factor.

Figure B9 – SUMP: Determinants of mode choice to the city centre



In terms of the ease of getting around the city centre by various modes:

- 76.5% of respondents found walking ‘easy’ or ‘very easy’;
- 22.9% of respondents found cycling ‘easy’ or ‘very easy’, while 31.0% found it ‘difficult’ or ‘very difficult’;
- 41.4% of respondents found travelling by bus ‘easy’ or ‘very easy’ (28.1% found it neither easy nor hard);
- 49.7% of respondents found getting around by taxi ‘easy’ or ‘very easy’, with 10.3% finding it ‘difficult’ or ‘very difficult’;

- 39.8% of respondents found driving ‘easy’ or ‘very easy’, with 22.3% finding it ‘difficult’ or ‘very difficult’; and
- 30.0% of respondents found getting around by motorcycle ‘easy’ or ‘very easy’, with 7.5% finding it ‘difficult’ or ‘very difficult’.

For those who perceived each mode to be difficult, or had rated their experience as poor, the main reasons are given in the table below.

Table B2 - SUMP: Problems identified with each mode

<b>Walking</b>	Length of time it takes Safety fears Car dominance / priority Poor connectivity Narrow, badly maintained footways Crossing times
<b>Cycling</b>	Safety concerns / traffic volumes Driver attitudes Lack of good quality lanes / routes Road condition Lack of cycle parking Generally inhospitable city centre
<b>Bus</b>	Poor level of service Cost Frequency Reliability Routeing Length of time it takes Congestion Frequent stopping Information Bus drivers
<b>Taxi</b>	Cost Accessibility Congestion
<b>Car</b>	Traffic congestion Buses / bus lanes holding up traffic Traffic signals Poor infrastructure / poorly performing junctions Traffic management Difficulty parking
<b>Motorcycle</b>	Safety concerns

Respondents were asked, without prompts, what they thought could be improved in terms of transport to, from and within the city centre. The most common answers are summarised in Table B2 overleaf.

Table B3 - SUMP: What could be improved in terms of transport to, from and within the city centre

<b>Walking</b>	More pedestrianised areas, especially Union Street More pedestrian-friendly city centre Better pavements / wider walkways Better route between Union Street and Union Square Better connectivity Better crossing points Better wayfinding system
<b>Cycling</b>	More cycle lanes and routes Better cycle lanes and routes Segregated cycle routes Safer cycling conditions Better connectivity of routes Better maintained roads More cycle parking
<b>Public Transport</b>	Cheaper bus, train and taxi fares More regular / frequent bus and train services Improved bus priority Removal of bus lanes Fewer buses on Union Street More punctual / reliable bus and train services Quicker and more direct bus routes Better evening and night bus services More competition amongst bus operators Improved bus information Integrated / simplified ticketing Better integrated public transport Better bus and rail stations Better links between the ferry terminal and other public transport services
<b>Private Transport</b>	Less congestion Fewer cars in the city centre Improved traffic lights / flow Better road system Better maintenance Holistic / integrated transport /traffic management plan Better car parking Review car parking charges Congestion charge Low Emission Zone / encouragement of cleaner vehicles Better enforcement of traffic offences Signage
<b>Freight</b>	Restrict access times for deliveries

Respondents were also asked, without prompts, what they thought worked well in terms of transport to, from and within the city centre, with the most popular answers amongst respondents shown in Table B3.

Table B4 - SUMP: What works well in terms of transport to, from and within the city centre

<b>Walking</b>	Pedestrianised areas
<b>Cycling</b>	Cycle lanes
<b>Public Transport</b>	Bus services – volume, frequency, reliability, cleanliness and choice
	Park and ride services
	Train services
	Taxi services
	Bus lanes
	Convenient and accessible buses
	Night buses
	Union Street acting as a focal 'hub'
	Union Square as bus and rail hub
	Potential to better connect bus and rail station and the harbour
<b>Private Transport</b>	Taxi ranks – volume and locations
	Travelling by car easy, quick and efficient
	Good road system
	Traffic flows well
	Good supply of safe and convenient parking
	Car park cleanliness

As can be seen, there are some inevitable splits in opinion, with some people finding the public transport and private car networks easy to access and user-friendly, in contrast to the findings of the previous question.

When asked what they liked about other cities they had visited, the most popular answers from respondents were:

- Pedestrian friendliness;
- Good cycle culture and facilities;
- Integrated / affordable public transport system;
- Bus / park and ride services; and
- Trams.

When asked what they thought would make Aberdeen city centre a more pleasant place, the most popular answers from interviewees were:

- Pedestrianisation;
- Better walking links;
- Fewer cars / less traffic;
- Improving Union Terrace Gardens;
- Keeping buildings and streets clean; and
- Fewer empty shops.

Specific locations for improvement repeatedly raised by respondents were:

- Union Street - opportunities for pedestrianisation;
- Better linkages between Union Street and Union Square;
- Better walking and cycling links to Union Square and Bon Accord;
- Better links from the rail and bus station to Union Terrace Gardens; and
- Schoolhill – opportunities for pedestrianisation around the shopping centres.

## 2.1.2 Public Workshops

Officers attended a series of public workshops, undertaken as part of the Aberdeen Local Development Plan consultation process, to introduce and discuss the SUMP with members of the public. Due to low attendance, the volume of data gathered was limited but served to broadly confirm previous findings in terms of the transport issues that participants considered crucial to the future health of the city centre.

In terms of active travel, comments related to:

- The need for more and better walking and cycling infrastructure;
- The need for greater pedestrian priority, although a split in opinion arose between those who were pro-pedestrianisation, especially for Union Street, and those who were sceptical that pedestrianisation would solve any problems; and
- The need for safer cycling conditions.

For public transport, comments related to the need for:

- Cheaper bus fares;
- A more user-friendly, quicker, more reliable and more frequent bus service;
- More buses, especially in the evenings and weekends;
- A more accessible and user-friendly bus station; and
- More competition amongst bus operators.

For private transport the key requirements were seen as more and cheaper car parking, with a preference for free car parking in the evenings.

In terms of key intervention areas, the need for better pedestrian connections between Union Street and Union Square was mentioned, as was the need for a better route between Castlegate and the beach.

## 2.1.3 Stakeholder Workshops

Four stakeholder workshops were also held, three for organisations with an interest in the city centre and the fourth for Council officers whose work could be affected by the SUMP. Stakeholders were asked to identify positives and negatives in terms of city centre transport and to suggest possible solutions to any problems identified.

Table B5 - SUMP Stakeholder Workshop Outcomes

Mode	Problems	What works well	Solutions
Walking and cycling	Poor planning - planning process not prioritising walking and cycling and not planning for what is desired.  Lack of facilities / priority.  Lack of signage.  Access and links e.g. city centre and station.	Compact city centre.  Cycling facilities - parking and lanes.  Cycle map.  General environment.  Safe night time environment.	Pedestrianisation of city centre and public realm improvements.  Improvements to cycle networks and facilities.  Better walking and cycling links between areas of the city.  Continue safety campaigns/improve safety.

	<p>Movement – too many blockages and inconsistencies.</p> <p>Health and safety of pedestrians and cyclists.</p> <p>Road and pavement condition.</p>		<p>Better road surfaces and pavements.</p> <p>Better segregation of cyclists from traffic.</p> <p>Better wayfinding.</p>
Public transport	<p>Poor accessibility of bus / train station for all modes.</p> <p>Poor infrastructure at bus / train station – not disability friendly.</p> <p>Poor infrastructure for buses to get to and from the city centre / poor bus priority.</p> <p>Price of bus fares.</p> <p>Route issues.</p> <p>Park and ride issues.</p> <p>Inappropriate bus stop infrastructure.</p> <p>Incorrect information at bus stops.</p> <p>Union Street overcrowded with buses.</p>	<p>Links and integration (hubs and spokes).</p> <p>Bus and train station,</p> <p>Bus services.</p> <p>Information.</p>	<p>More and better infrastructure (bus lanes, stations etc.).</p> <p>Improved priority.</p> <p>Cheaper / subsidised public transport, especially strategic routes.</p> <p>Greater competition amongst bus operators.</p> <p>Park and ride improvements.</p> <p>Increased integration of all modes of public transport and ticketing (integrating all services and increasing the network as a whole).</p> <p>Better information about service and route changes.</p> <p>Potential to connect bus, rail and harbour.</p>
Freight	<p>Freight and lorry congestion.</p> <p>Poor freight delivery times and routes.</p> <p>Safety in terms of HGV movements.</p>		<p>Better routing of HGVs - possibly time restricted.</p> <p>Stop peak-time deliveries / review loading times / better management.</p> <p>Better enforcement of delivery vehicles that park inconsiderately.</p> <p>Improve signage especially directional.</p>
Car	Too many vehicles / traffic volume / traffic dominates.	Good supply of convenient, reasonably priced, safe parking.	<p>Enforcement.</p> <p>Traffic management.</p>

	<p>Congestion.</p> <p>Traffic offences - no enforcement.</p>	<p>Cheap parking at Union Square.</p> <p>Congestion outside peak hours acceptable.</p> <p>Congestion not as bad as some other cities.</p> <p>Proactive City Wardens.</p>	<p>Improve the reliability of the road network outwith peak hours.</p> <p>Encourage traffic to use alternative routes to Union Street.</p> <p>Improve signage especially directional.</p> <p>Encourage clean vehicles e.g. electric cars.</p> <p>Congestion Charge.</p> <p>Low Emission Zones.</p> <p>Exclusion Zones.</p> <p>Increase parking charges appropriately / target company car parking.</p> <p>Review parking charges.</p> <p>Reduce parking charges.</p>
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#### 2.1.4 Footfall surveys

Footfall surveys were also undertaken across 25 sites in the city centre between 6am and 10pm on two days, a Wednesday and a Saturday. The table below summarises the findings.

Table B6 - SUMP Footfall Surveys

Day	Wednesday 3 <sup>rd</sup> October	Saturday 6 <sup>th</sup> October
Total number of pedestrians passing through the 25 sites	171,521	199,863
Busiest times	1.00 - 1.30pm; 5.15 - 5.45pm	1.30pm - 3.15pm
Busiest sites (number of pedestrians in both directions)	Union Bridge (South side) – 15,271 Union St (North side at Music Hall) – 15,035 George St (south end at John Lewis) – 15,032	Station Steps (Guild St/ Union Square) – 23,785 Union Bridge (South side) – 21,511 George Street (south end) – 18,788 Union Street (North side at Music Hall) – 15,791

## 2.2 Aberdeen City Centre Masterplan

The Aberdeen City Centre Masterplan (CCMP) was adopted in 2015 and was informed by substantive public and stakeholder engagement. This commenced in September 2014 with a public drop-in exhibition over four days and a series of stakeholder workshops.

People visiting the exhibition were encouraged to complete a postcard, seeking feedback on a range of issues under the following headings that could improve Aberdeen city centre:

- Better and safer streets;
- Community facilities;
- More arts and leisure;
- A range of housing;
- Improved access;
- More businesses and jobs;
- Specialist shops;
- A network of public spaces;
- Better links to the harbour and beach; and
- Hotels and tourist visitors.

Respondents were asked to score these out of 5 (where 5 was high priority and 1 low priority). Transport issues scored highly, with the rank ordering of options, based on total weighting, being (with transport issues highlighted in **bold**):

- 1 Network of public spaces;
- 2 Improved access;
- 3 Better links to the harbour and beach;
- 4 Better and safer streets;
- 5 More arts and leisure;
- 6 Range of housing;
- 7 Specialist shops;
- 8 Community facilities;
- 9 More businesses and jobs; and
- 10 Hotels, tourist visitors

The order of the issues based on the number of times they scored a 5, was:

- 1 Network of public spaces;
- 2 Improved access;
- 3 Better and safer streets;
- 4 Better links to the harbour & beach;
- 5 More arts and leisure;
- 6 Range of housing;
- 7 Specialist shops;
- 8 More businesses and jobs;
- 9 Community facilities; and
- 10 Hotels and tourist visitors

Postcards also invited people to make specific suggestions for improving the city centre. The main comments, split by theme, are summarised in the table below.

Table B7 - CCMP postcard survey: suggestions for improving the city centre

Walking and Cycling	More and better infrastructure
	Better connectivity
	Improved links between shopping centres
	Increased pedestrian and cycle priority / more traffic-free spaces
	Pedestrianisation (although comments were split between those for and against)
	Covered walkways
	More cycling routes
	Safer conditions for cyclists

	Segregated cycleways
	Bicycle hubs / bike rental
<b>Public Transport</b>	More investment in public transport
	Better public transport links
	More bus services and routes
	Bus link between Union Square and Bon Accord
	Union Street shopper shuttle bus service
	Fewer buses on Union Street
	Improved park and ride services, including more (informal) sites
	Improved access for public transport
	Increased bus priority
	Improved bus information
	Improved bus station and access to the station for buses
	More reliable services
	Cheaper / free public transport
	More local rail services and stops
	More frequent rail services
	Improved access to the railway station (for pedestrians and cars)
	Railway station pick-up point
	More innovative public transport system
	Trams
	Underground system
<b>Private Transport</b>	Reduced congestion
	Congestion charging
	Improved traffic management
	More roads
	Better roads
	One-way systems
	Limit the number of cars in the city centre
	Ban diesel vehicles
	Reduce traffic speeds
	More car parking
	More conveniently located car parking
	Cheaper or free car parking
<b>Freight</b>	Remove HGVs
	Remove lorries from Union Street.
<b>General</b>	Safer city centre
	Better integrated transport facilities

Specific locations for improvements included:

- Pedestrianisation – Union Street, Bridge Street, Market Street, Belmont Street, Back Wynd;
- A better route between Castlegate and the beach;
- Open up Castlegate to traffic;
- Link the harbour and beach to the city centre;
- Improve access to the Green;
- Improve links between Union Street / Trinity Centre and Union Square / Guild Street;
- Cycle path from city centre to Garthdee.

Feedback suggested a strong desire for a city centre that puts people first before traffic, with recurring comments around the need for good public transport and active travel infrastructure to underpin a successful city centre, and the need for improved pedestrian access and comfort particularly across the topography of the north-south axis, from the station to Union Street.

Stakeholder workshops saw similar themes emerge:

- Aberdeen needs to get the balance right between car and people. Getting people to spend more time and money while in the city centre is related to the ratio of traffic to people. If transport matters could be addressed, assent could be gained to creating pedestrian only parts of the city centre;
- Address the north-south connections for pedestrians and enable deeper exploration of the city. This includes creating a better wayfinding strategy, with good orientation upon arrival in the city (by train, bus or ferry);
- Cycle infrastructure needs to be suitable for all ages and users and not just the active or young;
- Active travel is important to city vitality;
- City built on two rivers – they should play a role as cycle and pedestrian corridors. This presents an opportunity to create a positive relationship between the RGU campus and the city centre;
- Connectivity is a constraint currently – a move to public transport from cars will only happen if bus service is much improved;
- Traffic movement through the city centre – is this appropriate? Need to shift the travel / road hierarchy;
- Aberdeen Western Peripheral Route (AWPR) – create capacity to change traffic flows in the city; and
- Public transport is key to city centre functions, including a rapid transit solution, which adds to the viability of the city centre.

The following opportunities were also noted:

- Focus on the arrival experience in the city centre at the key arrival point of the bus and rail stations. Create a pedestrian-first experience at Guild Street by changing the way traffic currently uses this urban block as a gyratory;
- Key arrival point is Guild Street / bus / train station area – getting into the city needs to be underpinned by a public transport strategy including bus and light rail;
- Prioritise active travel and public transport, highlighting the city centre as an attractive and user-friendly destination and not a through route;
- Pedestrianise Union Street;
- Create an attractive pedestrian area around the Green / Merchant Quarter that links towards Bon Accord Centre; and
- Parking structures to support the core with public transport servicing the edge on a loop made up of existing routes.

In November 2014, a second stage of consultation was carried out to review the direction of the masterplan design and delivery strategy. Again, this comprised a public drop-in exhibition and stakeholder workshops. Then theme of 'The Connected City' was presented to attendees, supported by possible projects to make Aberdeen more pedestrian and cycle-friendly, make bus and rail travel easier and more attractive and to maximise existing car parking capacity.

Feedback questionnaires from the exhibition continued to see traffic, movement and transport repeatedly raised as key issues with 67.46% of respondents supporting projects under 'The Connected City' theme, and only 8.73% not supporting them (with 23.81% undecided). Comments received are summarised in Table 7 below.

Table B8 - Comments received at CCMP public exhibition by mode

<b>Walking</b>	There were many arguments on both sides relating to pedestrianisation and whether or not vehicular access should be restricted, although the majority of comments were supportive.
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	<p>Areas that could be the focus of pedestrian priority include the Green and the Merchant Quarter, the West End (Thistle Street, Chapel Street, Rose Street), Schoolhill and Upperkirkgate.</p> <p>Topography was seen as a barrier to movement.</p> <p>Lighting, good wayfinding, clear orientation points and widened pavements are needed to make the city more usable for pedestrians.</p> <p>The shopping centres (especially when closed at night) are seen as barriers to movement.</p> <p>Connections between green spaces are perceived as poor.</p> <p>Changes need to be inclusive of visually impaired and the less physically able.</p>
<b>Cycling</b>	<p>There was broad agreement on the need for a step change in cycling provision and much support for encouraging cycling.</p> <p>Approach should include continuous segregated cycle lanes and secure cycle parking.</p> <p>This should be part of a network, linking outlying areas to the city centre.</p>
<b>Bus</b>	<p>General agreement on the need to improve the public transport offering if this is to be attractive to members of the public.</p> <p>Concerns about costs, frequency, reliability, hours of service and overall quality.</p> <p>Need for bus stop improvements, real time information, integrated ticketing.</p> <p>Need for express bus services.</p> <p>Need to upgrade access to the bus station for pedestrians and vehicles.</p>
<b>Rail</b>	<p>Improved rail links were supported although there was a recognition that this was not easily deliverable.</p> <p>Light rail or trams could be a more viable approach.</p>
<b>Private Transport</b>	Mixed views over the need for more parking, although peripheral parking / park and ride was well supported.

At the stakeholder workshops, the following were key issues in terms of transport:

- Pedestrianisation supported as long as it kept areas ‘alive’;
- Topography is a challenge to walkability;
- Cycle proposals well-received, although questions about the viability of a cycle hire scheme;
- Cycle infrastructure requires to be properly integrated with the wider network;
- Congestion impacts on bus reliability and cost. Bus priority would have a positive impact;
- Public transport needs to underpin change and may require a reduction in vehicles in the city to improve services and lower cost;
- New development needs to be supported by good public transport accessibility;
- Access to the railway station seen as a key issue;
- Need to ensure that people outwith the city are not discouraged or prevented from accessing the city centre;
- Car parking for retail is supported but this needs to be controlled.

A third stage of consultation was undertaken in March and April 2015 and entailed presenting draft Masterplan proposals to the public for comment prior to the preparation of the final masterplan and delivery strategy. This comprised roaming public engagement at a series of venues throughout the city, a public drop-in exhibition over four days and further stakeholder workshops.

A questionnaire accompanied the public consultation and the key issues for people remained largely unchanged from previous stages. The main issue in terms of frequency of reference and expressed reason for concern was traffic, movement and transport. 83.52% of respondents supported the theme of providing more space for people, while 71.94% supported the theme of retained vehicle access and public transport permeability. Opinions diverged on the subject of Union Street, whether this should retain all vehicle access, whether it should be

fully pedestrianised or whether it should become bus and taxi only. There were concerns that displacing traffic from Union Street would simply cause problems elsewhere and concerns about proposals to revise parking standards and charges.

Table B9 - Support and concerns outlined during CCMP consultation

SUPPORT	CONCERNS
Private car traffic removed and streets redesigned to create a better environment for pedestrians and cyclists.	<p>Disabled access – in terms of parking and the usability of spaces.</p> <p>If vehicle access reduced, the impact on businesses in terms of footfall.</p> <p>Quality of street design and maintenance implications.</p> <p>Conflicts in terms of allowing buses and taxis into partially pedestrianised zones.</p> <p>Displaced traffic causing congestion elsewhere.</p> <p>Risks of making the area inaccessible from the wider catchment.</p> <p>Competition from out of town locations.</p> <p>The impact on footfall, especially around the west end shops.</p> <p>Impact on evening and weekend economy.</p> <p>Impact on residents in terms of parking and congestion.</p> <p>Need to maintain emergency access to city centre core</p>
Enhanced Back Wynd Steps and Trinity Centre access from Guild Street.	Safety in the dark.
A new pedestrian bridge between Belmont Street and Union Terrace across Union Terrace Gardens.	<p>Value for money.</p> <p>Preference for direct access solutions.</p> <p>Safety.</p> <p>Impact on heritage nature of the gardens.</p>
A network of cycle priority measures.	<p>Quality, in terms of usefulness and having the right infrastructure in the right place.</p> <p>Conflicts between pedestrians and cyclists.</p>
A new pedestrian and cycle bridge across the River Dee with a direct high-quality crossing on North Esplanade.	<p>Cost.</p> <p>Usefulness given proximity of Wellington Bridge.</p> <p>Impact on river users (e.g. rowing clubs).</p>
Redesign of roundabouts to create a better environment for pedestrians and cyclists.	
A local rail service and network of stations.	Feasibility of delivery.

	Development impact.
Improving bus reliability with bus and taxi only streets and bus priority measures on key routes.	<p>Impact on traffic flow and congestion.</p> <p>Need to improve the bus service.</p> <p>Tension between the need to improve access for public transport and not undermining any improvements to the pedestrian environment.</p> <p>The volume of buses on Union Street and the impacts of a two-lane arrangement.</p> <p>Costs and the ease of the ticketing process.</p> <p>The ability to deliver improvements when buses are run by private operators.</p>
An enhanced train station and pedestrian access.	<p>Disabled access.</p> <p>Access to the bus station.</p> <p>Need to improve private car access.</p>
Cycle parking and hubs and a bike hire scheme.	<p>Requirement for a bike hire scheme.</p> <p>How to deliver the right scheme.</p>
Promotion of park and ride facilities.	<p>Quality of current service.</p> <p>Impact of the development of new sites.</p> <p>Attractiveness and ease of use.</p>
Stricter parking standards for new development and revised parking charges to discourage commuter parking.	

The purpose of the stakeholder workshops was to allow participants to hear a more detailed presentation on the draft masterplan and participate in small group discussions on the emerging masterplan.

In terms of 'Transport and Movement', the following issues were discussed:

- Is the plan being bold enough in terms of measures to restrict traffic?;
- Getting cycle infrastructure right is crucially important;
- A longer term strategic cycle plan, integrated with the masterplan, is necessary;
- Rapid transit needed to make city centre employment work;
- Transport into the city needs to be a positive experience;
- Dualling of the railway line north provides the opportunity to look at local services between Aberdeen and Inverurie, while the line to Peterhead could also be examined;
- Servicing and deliveries still required for part-pedestrian and even full pedestrian areas;
- The bus station needs attention;
- Deeside railway line re-connection would be a bold step, as would a north-south light rail line running the Anderson Drive route.

## **2.3 Aberdeen Local Transport Strategy**

Various consultation exercises to inform the Aberdeen Local Transport Strategy (LTS) 2016-2021 took place between 2013 and 2015 with members of the public and stakeholders. Although the LTS covers the whole of Aberdeen, rather than just the city centre, any comments received on transport in the city centre were considered in terms of their relevance for the SUMP.

Feedback in terms of the city centre was concentrated around the following themes:

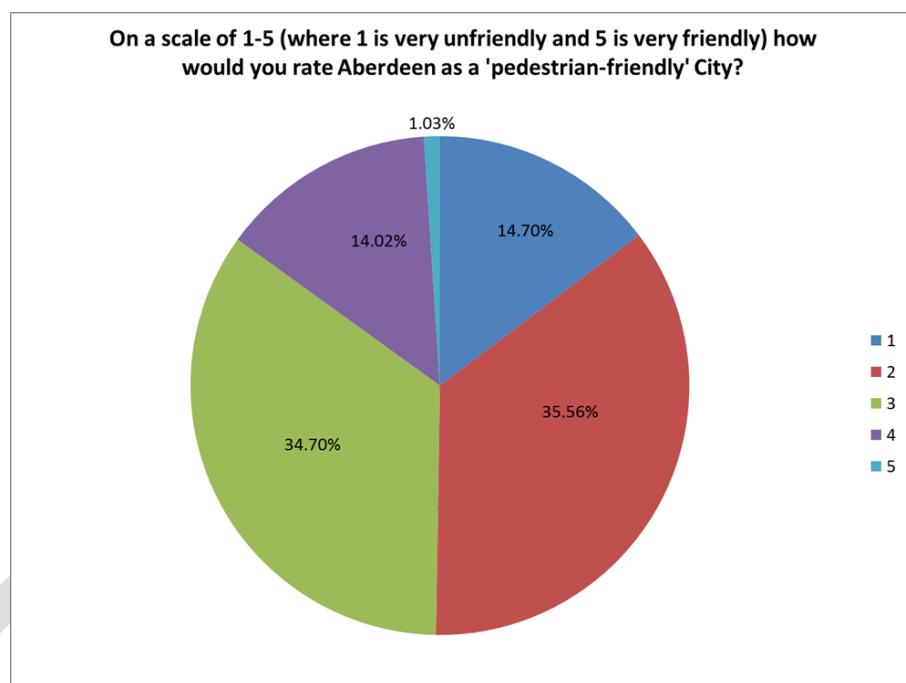
- Increasing footfall - people should be encouraged to travel to the city centre;
- Putting people first – consider walking, cycling and public transport before looking to accommodate car travel;
- The best way to reduce congestion and pollution is to create traffic-free city centre areas so that residents are encouraged to walk or cycle or use public transport;
- Supporting the city centre economy through providing better facilities for walking and cycling and enhancing public transport;
- An efficient public transport system and a pedestrian-friendly city centre environment have to be established to reduce dependence on the private car and before a number of LTS actions can be implemented;
- An excellent public transport system will attract people into the city centre. Encouraging more people onto public transport requires investment in infrastructure to enable more efficient public transport;
- The strategy to promote the use of electric and other low emission vehicles would demand special concessions for these vehicles i.e. low cost parking and unrestricted city centre access;
- The only way to improve air quality is to limit the volume of cars travelling in the city centre;
- Inadequate and expensive parking is likely to have a detrimental long-term impact on the city centre as it will drive people to shop in suburban shopping centres and encourage businesses to relocate to outside the City; and
- There is a need to reassess the existing road hierarchy, after the AWPR is open, and manage traffic away from sensitive areas such as Union Street and other Air Quality Management Areas. Unsuitable A-class roads should be removed from the hierarchy and traffic dissuaded from using them (Union Street).

## **2.4 Aberdeen Active Travel Action Plan**

The Aberdeen Active Travel Action Plan was adopted in 2017 and identifies the policies and design principles that ACC will abide by over the next five years (and in some cases beyond) and a series of actions and interventions that will be pursued in order to increase the proportion of journeys undertaken in the city by active travel. The Plan was informed by two rounds of public and stakeholder engagement in 2015 and 2016. As with the LTS, although the Action Plan has a broader focus than the city centre, many of the comments received during the consultation processes were relevant to the city centre and are therefore relevant to the SUMP.

, On the whole respondents indicated that Aberdeen is not a place that is welcoming to pedestrians and cyclists. When asked, on a scale of 1-5 (where 1 is ‘very unfriendly’ and 5 is ‘very friendly’) how they would rate Aberdeen as a ‘pedestrian-friendly’ city, the average weighting was 2.51, with only a handful of respondents finding Aberdeen very pedestrian-friendly.

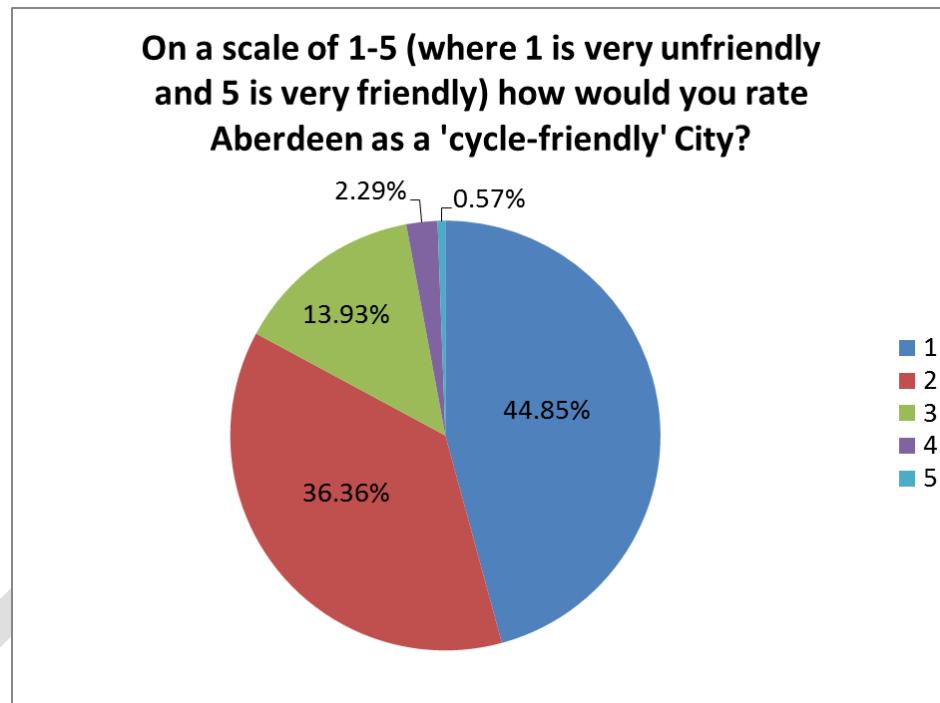
Figure B10 - Active Travel Action Plan: Is Aberdeen a pedestrian-friendly city?



The majority of barriers to walking identified related to traffic, particularly volumes and speeds and a feeling that too much priority is afforded to the car over the pedestrian, especially in the city centre. Poor driver behaviour was also raised as an issue, with respondents reporting speeding traffic and drivers continuing through red lights. Pavement parking is a problem, as is the ease of car access and parking in the city centre which can discourage walking. Many respondents would like to see more pedestrianised areas or pedestrians given greater priority. Many positives were also mentioned, namely the compactness of the city, the ease of walking around, and the quality of pedestrianised areas and covered shopping malls.

When respondents were asked how they would rate Aberdeen as a 'cycle-friendly' city, the weighted average was 1.75, suggesting that Aberdeen is viewed as fairly unwelcoming to cyclists. This is supported by the paucity of responses at the upper end of the category, with less than 1% stating that Aberdeen is a very friendly city for cyclists.

Figure B11 - Active Travel Action Plan: Is Aberdeen a cycle-friendly city?



When asked about the main barriers to cycling in the city, the majority of responses cited poor infrastructure. A significant number stated that there were not enough formal cycle routes and very little provision for cyclists. Where cycle routes do exist, many feel these are unsatisfactory, particularly on-road cycle lanes. Shared bus / cycle / taxi lanes are not well-received, with people feeling that cyclists sharing roadspace with heavy vehicles is dangerous. The state of the roads themselves is also seen as a barrier, in terms of potholes, while roundabouts are considered inherently dangerous.

There is a clear appetite for dedicated and segregated facilities but many respondents are against shared pedestrian and cycle facilities which force cyclists to mingle with pedestrians and offer no priority to cyclists who are forced to give way to traffic when crossing side roads.

Aside from infrastructure issues, the second most commonly-raised barrier to cycling was the attitude of drivers, with cyclists finding drivers rude and aggressive, encroaching into cycle lanes and Advanced Stop Lines (ASLs) and not giving cyclists enough space when passing. The need for better education of drivers regarding the needs of cyclists was repeatedly raised as an issue.

At the same time, a number of comments were received about the inconsiderate behaviour of some cyclists, as well as the attitude of some pedestrians, unhappy at sharing space with cyclists.

#### Other comments received concerned:

- Safety, with fears expressed over cycling in traffic with high-speed vehicles (again, the lack of segregated routes was raised) and fear of bicycle theft. Some respondents did feel however that perceptions were worse than reality in this regard;
- Connected to the above, traffic volumes and speeds;
- A lack of destination facilities for cyclists - parking, shower and changing facilities;
- Lack of enforcements of driving violations – parking, speeding, abuse of ASLs; and
- Pollution and poor air quality.

Many respondents did identify positives to cycling in Aberdeen, praising the infrastructure available, in terms of pleasant routes, cycle lanes, ASLs and off-road routes. The wealth of cycle parking facilities available, especially in the city centre and in shopping areas, was also well received. The compactness of Aberdeen also came in for praise, with people stating that the relative proximity of destinations is conducive to cycling, that the city is relatively easy to get around by bike and offers easy access to further cycling opportunities in the wider countryside.

Respondents were asked what commitments to walking and cycling they would like to see in an Active Travel Action Plan. In terms of walking, these were:

- Implementation of pedestrianised areas, especially in the city centre and particularly Union Street;
- Pedestrian priority in terms of the planning process and new road construction – it should be easier to walk around Aberdeen;
- Connected to these, less traffic, especially in the city centre;
- Improved infrastructure, in terms of more and better walkways and pathways, segregated facilities (from both motor vehicles and cyclists) and improved lighting of routes;
- Improved walking routes to main destinations and between key locations which are safe, pleasant and attractive. Many respondents would also like these separate from traffic;
- More and better pedestrian crossing facilities that work for the pedestrian rather than the driver – these should be more responsive to the pedestrian and give more time to cross;
- Urban realm improvements in terms of cleaner and more attractive places, with plenty of greenspace, more public toilets and less dog fouling;
- Better maintenance of routes in terms of surfacing, lighting, cleanliness and winter treatment;
- More promotion of routes via signage and maps. Many respondents also called for an increase in organised / themed walks / trails;
- A reduction in pavement parking;
- Traffic speed reduction and increased enforcement of traffic violations, particularly speeding vehicles and cycling on pavements;
- Improved safety in terms of safer routes and a safer walking environment;
- A quieter and cleaner environment; and
- Improvements to the public transport network to facilitate a greater integration of walking and bus use.

When asked what commitments to cycling they would like to see in the Action Plan, the majority of respondents called for more and better infrastructure:

- More cycle lanes and paths, particularly dedicated and segregated infrastructure;
- Restrictions to prevent motorists parking in cycle lanes;
- More toucan crossings;
- Priority for cyclists across side roads and advantages at junctions and signals;
- Safer conditions and lower speeds on the road; and
- Continuous, uninterrupted and connected routes.

In terms of the type of facilities desired, the majority of respondents (64%) would like to see a mix of on- and off-road facilities based on site-specific characteristics. A quarter (25%) prefer off-road / segregated cycle facilities, while 8% would prefer to see more on-road cycle facilities. The remainder of respondents did not know.

The following are specific points raised in terms of walking in the city centre:

- Overall, a perception that this is unpleasant due to high volumes of traffic and poor air quality, especially on Union Street;
- Generally unpleasant and unappealing public realm;
- General environment – pollution, noise, smell;
- Severance of Union Street caused by multiple traffic lanes;
- A perception that the movement of traffic takes precedence over the movement of people;
- Space for pedestrians is insufficient, with overcrowding of pedestrians on Union Street, often a result of people waiting at bus stops, although some respondents commented that they liked the wide pavements on Union Street;
- There is a desire for more pedestrian areas;
- Walking would be more pleasant if traffic was slowed down or removed;
- Compact city centre means most destinations are within walking distance;
- Convoluted routes between shopping centres;
- Poor linkage from the bus and rail station / Union Square to Union Street;
- The shopping centres are pedestrian-friendly;
- Multiple crossing points between key destinations is frustrating, although some respondents welcomed the presence of a large number of pedestrian crossings;
- Length of time it takes for signals to revert to pedestrian phase; and
- No incentive to walk when accessibility by car so easy and shopping centres have lots of parking.

And in terms of cycling:

- Split in comments between those saying there is good quality cycle parking provision and those saying there is not enough;
- Vehicles speeds need enforced (although contradictory comment saying that speed limits usually adhered to);
- Few safe and secure cycle lanes / routes and little high-quality cycling infrastructure;
- Cycle routes end abruptly;
- Poor road surfacing and maintenance of cycle lanes;
- Union Street, King Street and harbour area singled out as particularly dangerous;
- Mingling of bikes with freight vehicles seen as particularly dangerous;
- Volume of traffic discourages cycling; and
- Preference for safe and segregated infrastructure / off-road routes.

People would like to see:

- More pedestrianised / bus only / traffic-restricted areas, particularly Union Street;
- More, safer pedestrian crossings and increased green man time
- Reduced volumes of traffic;
- Better / wider pavements;
- More and better cycle routes and infrastructure, with Union Street and King Street singled out for mention;
- Continuous cycle routes;
- Designated / segregated cycle lanes / routes;
- Better cycle parking facilities;
- Restrictions on HGVs in the city centre (although many comments recognised that there was a case for maintaining access);
- Restrictions on diesel vehicles;
- More one-way streets; and
- Fewer car parking spaces.

The questionnaire also asked respondents for suggestions for routes that could be implemented or improved and there was significant demand for improved walking and cycling facilities in the city centre. Respondents would like to see more provision generally (in terms of better and wider pavements, off- and on-road cycle provision, ASLs) and more pedestrianised areas. Areas repeatedly identified as requiring attention, particularly for cyclists, were:

- Union Street;
- Access to, and the area around, Union Square and the bus and rail stations;
- Union Terrace and Union Terrace Gardens;
- King Street;
- Market Street;
- Guild Street;
- North Esplanade West and connections to Torry;
- South College Street;
- Holburn Street;
- Mounthooly;
- Rosemount; and
- Links between the city centre and key active travel destinations such as the beachfront, Duthie Park and Deeside Way.

## 2.5 Roads Hierarchy

Aberdeen City Council is currently working with partners to identify options for a revised Roads Hierarchy for Aberdeen, in recognition of the fact that the current road system, which allows all vehicle movements at most junctions, cannot be sustained if the benefits of the AWPR are to continue into the long term and not be slowly eroded by further traffic growth.

As part of the development of this work, a public questionnaire was launched in 2017 on 'Travelling around Aberdeen after the AWPR opens'. Relevant findings are discussed below.

Respondents were presented with 6 objectives for improving the transport network after the AWPR opens and asked to what extent they agreed or disagreed.

Table B10 - Agreement with Roads Hierarchy Objectives

OBJECTIVE	STRONGLY AGREE / AGREE	NEUTRAL / NO IMPACT	DISAGREE / STRONGLY DISAGREE	DON'T KNOW
To create a city centre that is better for walking and cycling.	69.7%	17.5%	11.5%	1.3%
To reduce bus journey times to make them more competitive with car journey times.	65.5%	19.1%	14.1%	1.3%
Improve reliability to make public transport more attractive.	66.5%	18.0%	13.9%	1.6%
Increase use of public transport and active travel, such as walking and cycling.	64.7%	21.1%	13.2%	1.0%
To ensure effective and efficient movement of goods to the city centre and access to Harbour.	67.0%	24.1%	7.2%	1.7%
To reduce the number and severity of road traffic incidents e.g. collisions.	73.9%	17.2%	6.9%	2.0%

The consultation introduced proposals to split the city centre into three zones (north, west and south) and restrict vehicular movements between zones, so that traffic entering from the north would be directed to park north of the city centre and return by the same route, traffic travelling from the south would park in a south car park and return the same way, and so on. In this way, car trips across the city centre would be discouraged. Respondents were asked what they thought the main advantages and drawbacks of such an approach would be. These are summarised in the table below in order of prominence of the issues raised.

Table B11 - Roads Hierarchy: Advantages and Disadvantages with zoning system

<b>Advantages</b>	<b>Disadvantages</b>
Less congestion – fewer vehicles on the roads, better traffic flow, better journey time reliability.	Problems with the zoning system – travelling to the wrong zone, more than one zone required on a single journey, concerns over being unable to cross zones, some drivers have a preferred car park, cars will continue to be dominant mode and drivers will continue to use existing routes.
Environmental – improved air quality, less noise, more attractive cityscape.	Inconvenience – of routes or car parks.
Public transport – better service, improved journey times.	Public transport – improvements required, too expensive, should not have priority over cars.
Active travel – opportunities for infrastructure, health benefits.	Congestion – number of vehicles on the network could stay the same or grow, less journey time reliability.
Safety – safer roads (particularly for pedestrians and cyclists), fewer accidents.	Increase in journey times.
Parking – easier to find parking, may become more affordable.	Driver frustration / confusion.
Reduced journey times.	Economy – people discouraged from travelling into the city centre.
Encourages modal shift.	Accessibility – adverse impact on impaired / elderly / pram users, etc.
	Environmental – increase in pollution and poor air quality, resulting impact on health of residents.
	Safety – more vehicles, more accidents.
	Active travel – potentially for walking and cycling infrastructure to be prohibited.

Respondents were also asked what they thought were the main advantages and drawbacks of keeping the road network operation the same after the AWPR opens to traffic.

Table B12 - Roads Hierarchy: Advantages and Disadvantages of keeping road network the same

<b>Advantages</b>	<b>Disadvantages</b>
Flexibility / ease.	Congestion – congestion continues or builds up again, pinch points remain the same.
Less congestion	Inflexibility – people won't change their behaviour.
Waiting for the AWPR to open will allow more informed choices to be made.	Active travel – unlikely to achieve benefits for pedestrians and cyclists or encourage active travel.
Cost – cheaper.	AWPR – does not get used to full potential.
Reduced journey times.	Environmental – no improvement in air quality, continued pollution.

Economy – keeps city centre vibrant and accessible, allows deliveries to shops.	Public transport – does not benefit, no encouragement to use, prohibits development of improved network.
Safety – familiarity results in safer driving and fewer accidents.	Economy – people discouraged from visiting the city centre.
Environmental – less pollution due to free-flowing traffic.	Modal shift not encouraged.
Opportunity to promote active travel.	Same problems will persist.
Inadequate bus services.	Increase in journey times.
	Safety – traffic will worsen, less safe for pedestrians and cyclists.
	Cost – excessive maintenance costs.

Respondents were asked what they considered would be the main advantages and drawbacks of providing bus priority measures such as bus lanes and bus gates to improve reliability and punctuality of bus services on bus routes into the city centre.

Table B13 - Roads Hierarchy: Advantages and Disadvantages of bus priority measures into the city centre

Advantages	Disadvantages
Less congestion – less traffic, faster and more reliable and punctual bus services.	Driver frustration and worsening of behaviour.
Reduced journey times.	Congestion – continues or moves to other areas.
Encourages modal shift.	Cost – public sector costs and costs of bus tickets to the customer.
Environmental – better air quality, less pollution.	Longer journey times for cars and active travel.
Safety – improved safety for cyclists and pedestrians.	Inflexibility – routes are not direct, restricts access to city centre shops and cafes.
Bus costs may reduce.	Environmental – results in congestion, causing pollution and poor air quality.
More convenient, greater choices of routes and destinations.	

Respondents were then asked what they considered the main advantages and drawbacks of providing improved cycle infrastructure, such as cycle paths and safer crossing facilities for cyclists, on cycle routes into the city centre.

Table 14 - Roads Hierarchy: Advantages and Disadvantages of improved cycle infrastructure into the city centre

Advantages	Disadvantages
Safety – improves safety, segregates cyclists from cars.	Routes need to be targeted, coherent and of a high standard
Encourages modal shift.	Cost – expensive in relation to benefits.
Health benefits.	Safety – concerns about cycle lanes.
Environmental benefits.	Driver frustration – more inconvenient and difficult for drivers, may result in complaints and objections.
Less congestion – fewer vehicles, improved traffic flow, improved journey time reliability.	Congestion – more cyclists will lead to more congestion. Environmental – more pollution as a result of increased congestion.

Respondents were asked what they considered the main advantages and drawbacks of providing safer crossing points and improved pavements for pedestrians on routes into the city centre.

Table B15 - Roads Hierarchy: Advantages and Disadvantages of improved pedestrian infrastructure into the city centre

<b>Advantages</b>	<b>Disadvantages</b>
Safety – pedestrians less likely to take risks.	Increased journey times for pedestrian vehicles as more crossings and signals.
Encourages modal shift.	Cost – expensive to implement.
Health benefits from more active travel	No existing issues – current provision good, no need for further infrastructure.
Environmental – less pollution due to modal shift, reduced noise, more attractive environment.	Driver frustration.
Accessibility – more user-friendly environment for mobility impaired.	Safety – accidents might increase, especially if crossings in unsuitable locations.
Economy – improves accessibility to, and maintains vibrant, city centre.	Congestion.
Less congestion as less traffic as a result of modal shift.	Crossing should be carefully located and not at the expense of road capacity.
Reduced journey times.	Environmental – increased pollution from stop-start driving.
	Cyclists may take advantage of pedestrian infrastructure.
	Economy – town centre diminished if vehicle accessibility reduces.

Respondents were also asked what they considered to be the main advantages and drawbacks of re-routing vehicles away from busy main streets such as Union Street.

Table B16 - Roads Hierarchy: Advantages and Disadvantages of re-routing vehicles away from the city centre

<b>Advantages</b>	<b>Disadvantages</b>
Environment – more attractive, less pollution.	Congestion may increase on other roads - some unable to cope.
Safety – especially for pedestrians and cyclists.	Accessibility – curtails access for taxis and delivery vehicles, makes things harder for the elderly and impaired.
Economy – greater accessibility, keeps city centre vibrant, attractive and friendly, allows for events / café culture.	Economy – people will be discouraged from travelling into the city centre.
Less congestion.	Lack of alternative routes for traffic.
Opportunities for greater pedestrian priority and / or pedestrianisation.	Increase in journey time.
Could result in more walking and cycling.	Driver frustration.
Improvements to public transport journey times and punctuality.	Public transport – bus provision needs considered, especially where people will be dropped off, adverse impact on reliability and punctuality.
Improves accessibility of city centre.	Environmental – adverse impacts of longer journeys, pollution increases in other areas.
Shorter and more reliable journey times.	Safety – increases in traffic in other areas may increase accidents in these areas.
Encourages modal shift.	Active travel – increases in traffic on other routes could negatively impact cyclists.

Respondents were asked what they considered the main advantages and drawbacks of providing bus priority measures such as bus lanes and bus gates to improve reliability and punctuality of bus services within the city centre.

Table B17 - Roads Hierarchy: Advantages and Disadvantages of bus priority measures within the city centre

<b>Advantages</b>	<b>Disadvantages</b>
Less congestion – faster, more reliable and punctual buses.	Congestion continues or moves elsewhere.
Improved bus journey times.	Driver frustration – harder to move around the city.
Modal shift.	Cost – expensive, additional maintenance costs, expensive buses.
Environmental – less pollution, better air quality.	Inflexibility – poor bus service, no alternative routes for cars, access issues.
Cost – cheaper bus tickets.	Increased and unreliable journey times.
Easier for buses to move around, more convenient.	Environmental – more pollution, poorer air quality.
Safety.	

Respondents were then asked what they considered the main advantages and drawbacks of providing more cycle parking and facilities in the city centre.

Table B18 - Roads Hierarchy: Advantages and Disadvantages of cycle parking and facilities in the city centre

<b>Advantages</b>	<b>Disadvantages</b>
Encourages modal shift.	Safety – risk of theft, increase in street furniture.
Safer storage and less clutter.	Cost – investment required.
Encourages healthier lifestyles.	Frustration – pedestrians impeded by street furniture, drivers may object.
Better for the environment.	
Less congestion from less traffic.	

Respondents were then asked what they considered to be the main advantages and drawbacks of reallocating road space to increase pavement size, provide cycle lanes or create pedestrian priority streets in the city centre.

Table B19 - Roads Hierarchy: Advantages and Disadvantages of reallocating roadspace to pedestrians and cyclists

<b>Advantages</b>	<b>Disadvantages</b>
Pedestrians and cyclists feel safer.	Increased congestion – alternative routes not available.
Easier for mobility impaired to move around.	Less convenient for cars.
Reduces noise and emissions.	Economy – problems for deliveries.
A more pleasing shopping experience.	Driver frustration.
Encourages walking.	Costs.
Less congestion.	Safety – not safe or pleasant if taxis still using these streets.
Encourages healthy lifestyles.	Increased pollution.

## 2.6 Aberdeen City Region Deal Strategic Transport Appraisal

In November 2016 Aberdeen City Council, Aberdeenshire Council and Opportunity North East (ONE) agreed a City Region Deal with the UK and Scottish Governments. This deal, worth £826.2 million over a 10-year period, provides a delivery mechanism for initiatives to support sustainable economic growth in the region. The allocation of funds is split between a variety of projects, one of which is a Strategic Transport Appraisal.

The Strategic Transport Appraisal takes a 20- year strategic view of the transport implications of the investment unlocked by the Deal across all modes of transport and looks to identify future regional transport requirements to facilitate economic growth and diversification. The

Pre-Appraisal stage was completed in summer 2018 and included significant public, stakeholder and Elected Member engagement (in the form of structured interviews, stakeholder workshops and online surveys for members of the public and community groups) to define the key problems and opportunities with transport provision in the region.

Problems and opportunities relevant to the city centre have been extracted from the information that was gathered during the consultation phases (Table B19).

Table B20 - Strategic Transport Appraisal: City centre problems and opportunities

Problems	Opportunities
City centre journey time reliability issues during peak times.	The ability to incorporate high quality active travel provision as part of CCMP.
City centre congestion.	Potential to improve the public realm for the benefit of all users and provide quality active travel routes.
Perception that HGVs travelling to and from the harbour result in congestion.	Prioritise place over movement in the city centre.
Perception that the Union Square and / or the bus station results in congestion.	Reduce traffic in the city centre in line with the CCMP.
Constrained road capacity in the city centre.	Pedestrianisation of Union Street between Market Street and Bridge Street with buses and taxis only on upper Market Street, Bridge Street and Union Terrace.
Vehicle dominant mode in city centre.	A direct link to Aberdeen Station from Union Street with easy access for pedestrians.
Difficulties with vulnerable users accessing public transport, e.g. connections to the rail / bus station from the city centre, pick up and drop off facilities at the bus station.	Dualling of College Street and new roundabout to Queen Elizabeth II Bridge.
Perceived high costs of public transport important for trips to / from the city centre.	

In the online survey, members of the public were asked to rate the Aberdeen city centre walking, cycling and road networks from 1-10 (where 10 is excellent and 1 is very poor). As can be seen in the graphs below, the majority of responses occupy the middle ground in terms of perceptions although, for all modes, there are far more responses at the lower end of the scale (1-2) than the upper end (9-10).

Figure B12 - Strategic Transport Appraisal: Perceptions of the city centre walking environment

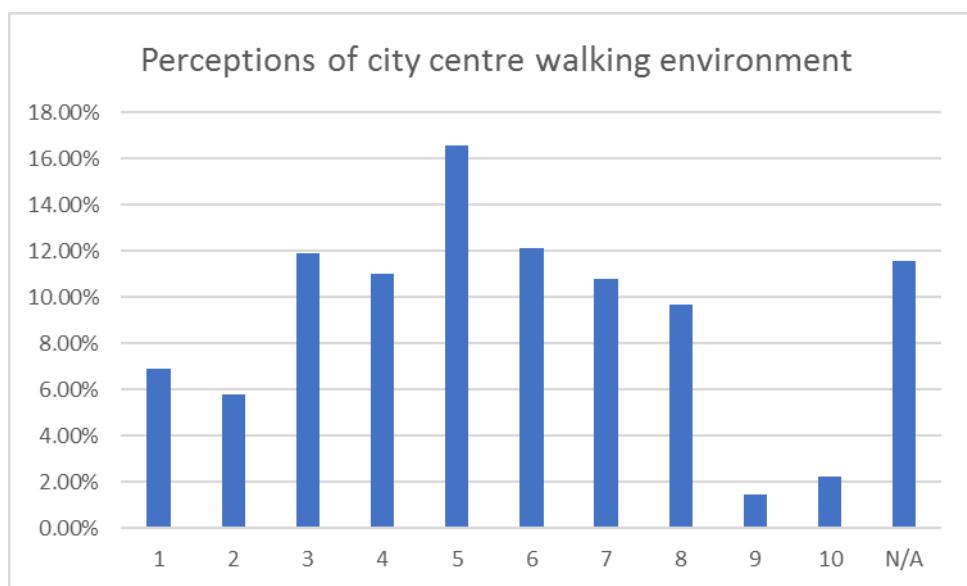


Figure B13 - Strategic Transport Appraisal: Perceptions of the city centre cycling environment

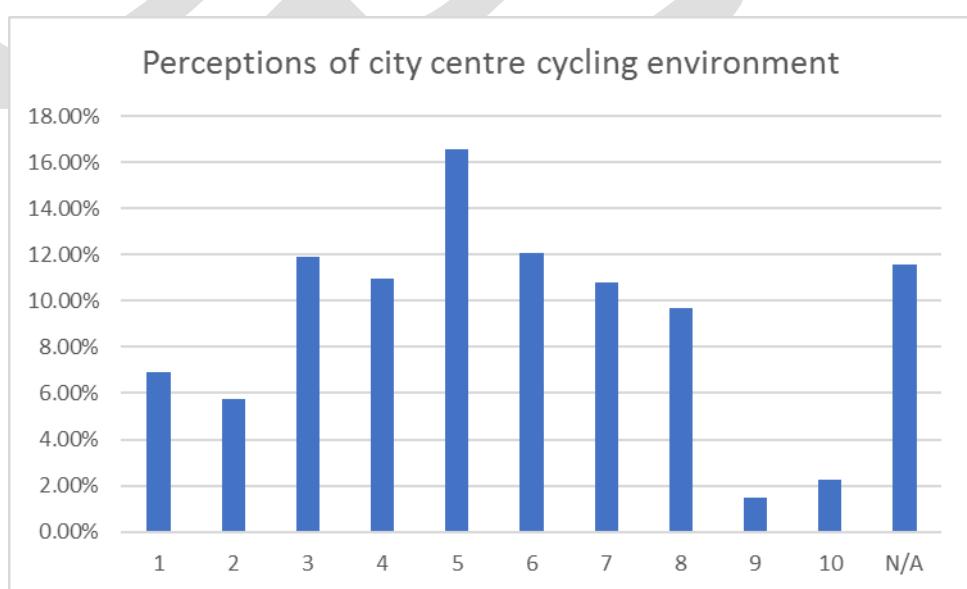
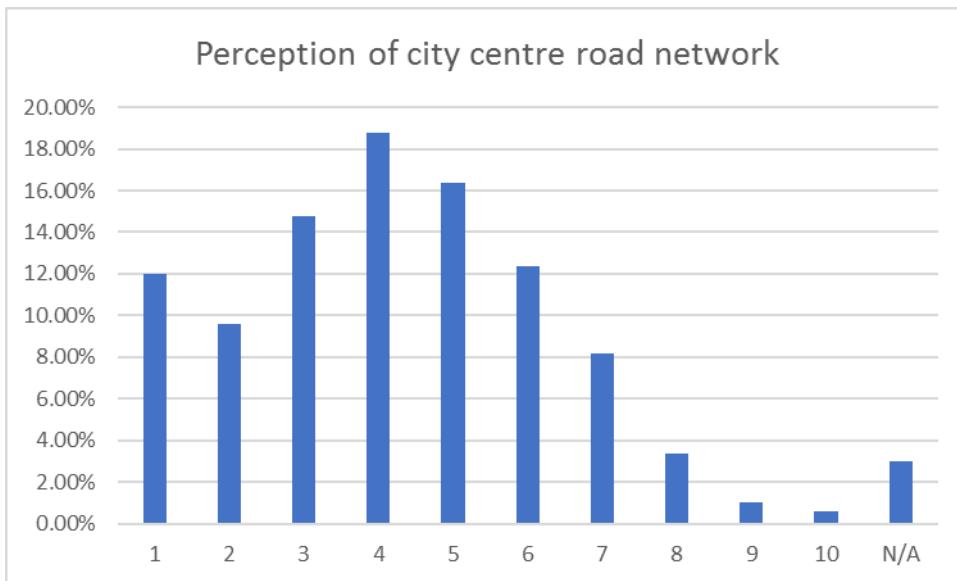


Figure B14 - Strategic Transport Appraisal: Perceptions of the city centre road network



## 2.7 Aberdeen Community Planning Partnership, City Voice 41<sup>st</sup> Survey Report

Aberdeen City Voice, the Citizens' Panel for Aberdeen, operates as a mechanism for residents to give their views on a range of topics via postal and online surveys. Feedback is used by Community Planning partners to shape service provision and policy and to measure performance. The 41st City Voice survey, issued in June 2017, covered views on various aspects of Aberdeen city centre, in the context of assessing the impact of the CCMP.

Respondents were asked to score (out of 7, where 1 means there is a lot of room for improvement and 7 means very little room for improvement) various statements regarding Aberdeen city centre.

Table B21 - City Voice Respondents' views on the city centre

Theme	Average Score	% of respondents scoring this as 1 or 2
I can easily walk and cycle around city centre	3.80	24%
Public transport to and from the city centre meets my needs	4.21	22%
Traffic / parking arrangements enable safe access to the city centre and meet my needs	3.59	31%

Respondents were also asked how they usually travelled to the city centre during the day and at night and what then factors affected their choice of mode.

Figure B15 - City Voice Respondents' usual mode of travel to the city centre

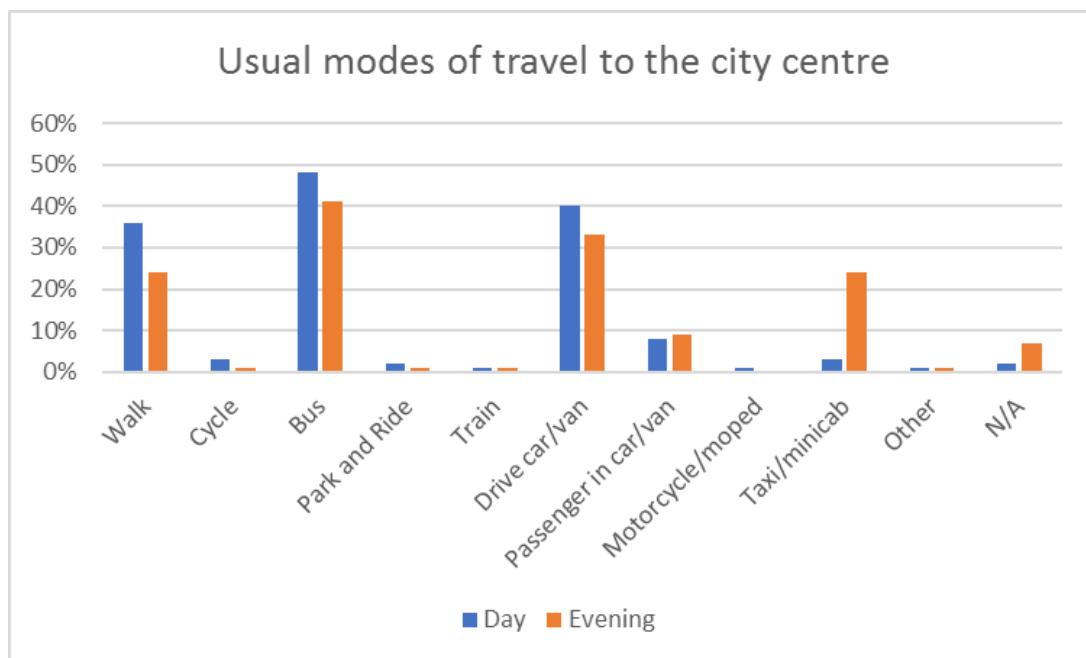
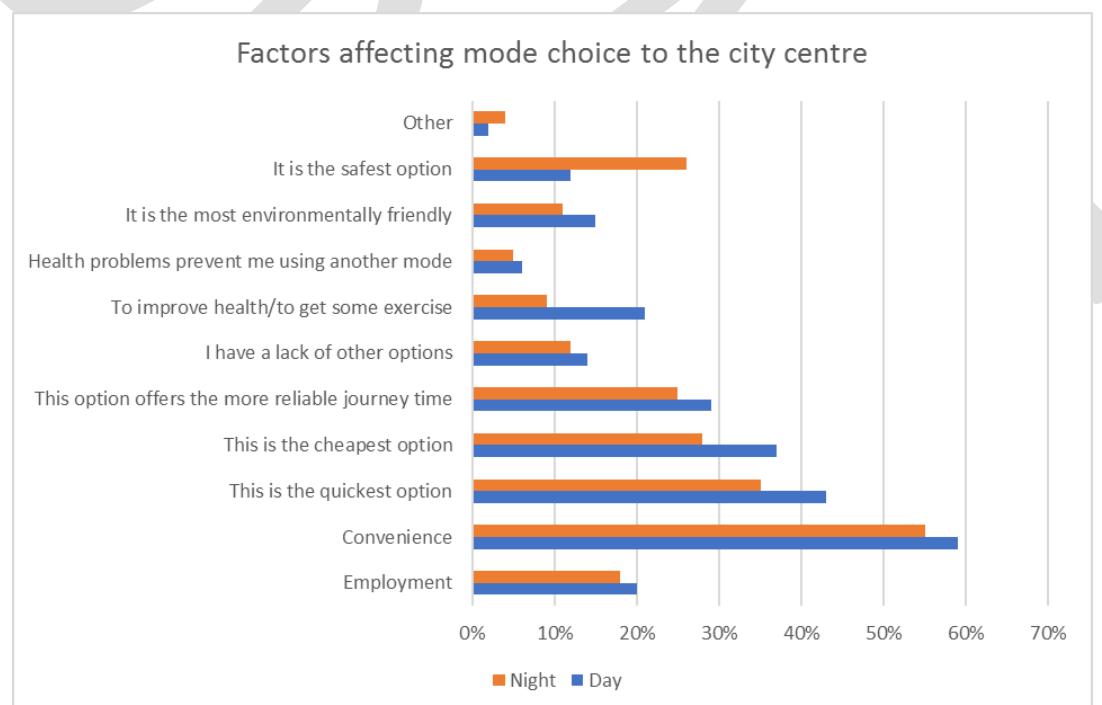


Figure B16 - City Voice Respondents - Factors affecting mode choice to the city centre



These supports the findings of the SUMP questionnaires which also found that walking, taking the bus and driving alone were the main modes of travel to Aberdeen city centre during the day and in the evenings and that convenience, cost and time are the main determinants of mode choice.

## **2.8 Conclusions**

From the many public and stakeholder engagement exercises undertaken with members of the public and stakeholders over the years, a broadly consistent picture has emerged.

There is a recognition that the city centre is dominated by traffic movements and this is to the detriment of the pedestrian and cycle experience. The city centre is not considered a pleasant place for walking or cycling and there are many perceived problems with the public transport networks.

On balance, and notwithstanding that many views to the contrary have been expressed, there is a strong desire for and support for measures to improve access to, from and within the city centre for walking, cycling and public transport. There is also a recognition that improving conditions for these modes and possibly even restricting vehicular movements could be key to securing the long-term health of the city centre.

With public and stakeholder engagement continuing into 2019 on the Roads Hierarchy and Strategic Transport Appraisal, concurrent to SUMP development, any relevant new findings from these engagement exercises will be incorporated into the SUMP to ensure it remains up to date and relevant and reflects as wide a range of opinions and information as possible.

## 3 Problems and Opportunities

The information gathered during the SUMP Self-Assessment has been combined with the information gathered from the consultation and engagement exercises described in the preceding chapter and summarised into a Problems and Opportunities Analysis. This will ultimately set the direction of the SUMP, in terms of identifying the key themes that the SUMP should look to address.

A summary of the perceived problems and opportunities with the city centre transport network is provided in the following sections. These have been split into themed categories, with some overlap between themes and some contradictions within the themes, reflecting the differing views of consultation respondents which the SUMP will have to negotiate.

Opportunities encompass both:

- Perceived positives with the existing transport network that can be taken advantage of and / or enhanced; and
- Opportunities for improvements to the network that have been identified by consultees.

Theme 1: Traffic and Congestion	
Problems	
1PR1	A perception that vehicular traffic dominates and vehicle movements take precedence over people movements.
1PR2	A perception that accessibility to, travelling around and parking in the city centre by car is too easy and this discourages other modes of transport.
1PR3	The volume of traffic and the attitude of some drivers creates an unsafe environment for pedestrians and cyclists.
1PR4	Traffic levels result in noise, emissions and poor air quality.
1PR5	The city centre is congested and road capacity is constrained.
1PR6	A perception that road infrastructure and road conditions are poor and that junctions and signals perform poorly, resulting in delays and congestion.
1PR7	Poor journey time reliability, especially at peak times.
1PR8	The permeability of Union Street is severed by multiple traffic lanes.
1PR9	Difficulty of enforcing traffic offences.
1PR10	Perceived difficulties with parking in the city centre.
Positives	
1PO1	Travelling by car is generally seen as easy, quick and efficient.
1PO2	The opening of the AWPR should see the removal of a sizeable proportion of through-traffic from the city centre.
1PO3	Congestion in the city centre outside peak hours is viewed as acceptable.
1PO4	Congestion in the city centre is seen as not as bad as some other cities.
1PO5	There are commitments at a national level to phase out the purchase of conventional petrol and diesel vehicles.
1PO6	There is a commitment to delivering a Low Emission Zone in Aberdeen by 2020.
1PO7	Some people perceive there is good supply of convenient, reasonably priced and safe parking.
1PO8	City Wardens are seen to be pro-active in terms of enforcement.
Opportunities	

<b>1OP1</b>	Review the current Roads Hierarchy and move away from the concept of the city centre as a through route for traffic.
<b>1OP2</b>	Reduce traffic volumes.
<b>1OP3</b>	Reduce traffic speeds.
<b>1OP4</b>	Reduce congestion.
<b>1OP5</b>	Introduce congestion charging.
<b>1OP6</b>	Introduce a Low Emission Zone.
<b>1OP7</b>	Improve the road network and maintenance of the network.
<b>1OP8</b>	Improve traffic flow.
<b>1OP9</b>	Implement more one-way streets.
<b>1OP10</b>	Better enforce traffic violations.
<b>1OP11</b>	Improve car parking.
<b>1OP12</b>	Reduce car parking availability.
<b>1OP13</b>	Review car parking charges
<b>1OP14</b>	Introduce emissions-based parking charges.
<b>1OP15</b>	Review car parking standards for new development.

<b>Theme 2: Walking and Cycling</b>	
<b>Problems</b>	
<b>2PR1</b>	Insufficient space for pedestrians and a lack of pedestrian priority.
<b>2PR2</b>	The city centre is seen as inhospitable to cyclists and not an easy place to cycle around.
<b>2PR3</b>	The city centre walking and cycling environment is generally perceived as unsafe.
<b>2PR4</b>	Poor quality pedestrian facilities e.g. narrow, poorly maintained footways.
<b>2PR5</b>	Poor pedestrian crossing facilities in terms of the time given for pedestrians to cross roads and the need to cross in multiple stages.
<b>2PR6</b>	A lack of cycling infrastructure or, where facilities are available, poor quality infrastructure, including parking and signage.
<b>2PR7</b>	Poor connectivity between key locations e.g. Union Street and Union Square.
<b>Positives</b>	
<b>2PO1</b>	Aberdeen has an adopted CCMP that recognises the need to develop a more pedestrian and cycle-friendly city centre with improved public transport penetration.
<b>2PO2</b>	Most respondents to the SUMP survey found getting around the city centre on foot easy or very easy.
<b>2PO3</b>	Most respondents to the initial Roads Hierarchy survey agreed with the objective of creating a city centre that is better for walking and cycling.
<b>2PO4</b>	There is a perception that the city centre is compact and that most destinations are within walking and cycling distance.
<b>Opportunities</b>	
<b>2OP1</b>	Develop more pedestrian priority / pedestrianised / traffic-free areas.
<b>2OP2</b>	Improve the city centre arrival experience for pedestrians, especially at the bus and rail stations.
<b>2OP3</b>	Improve, and better maintain, footway provision.
<b>2OP4</b>	Develop more and safer pedestrian crossings with increased green man time.
<b>2OP5</b>	Improve pedestrian and cycle connectivity, wayfinding and orientation.
<b>2OP6</b>	Develop a safer cycling environment.
<b>2OP7</b>	Develop safe, continuous (and where possible segregated) cycle routes to, from and within the city centre.
<b>2OP8</b>	Better connect existing cycle routes.
<b>2OP9</b>	Improve and increase cycle parking provision.

<b>2OP10</b>	Deliver a bicycle rental scheme.
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<b>Theme 3: Public Transport</b>	
<b>Problems</b>	
<b>3PR1</b>	Poor infrastructure, in terms of bus priority, on the approach to and within the city centre.
<b>3PR2</b>	Concerns over the cost of bus services.
<b>3PR3</b>	Concerns over the quality of bus services, in terms of frequency, reliability, journey times and journey time reliability, routeing choices, and the attitude of bus drivers.
<b>3PR4</b>	Concerns over the quality and accuracy of bus stop infrastructure and the information provided therein.
<b>3PR5</b>	Concerns over the impacts on Union Street of the presence of a large volume of buses.
<b>Positives</b>	
<b>3PO1</b>	According to the SUMP survey, more people find getting around the city centre by bus easy or very easy than the numbers finding it difficult or very difficult.
<b>3PO2</b>	People like that Union Street acts as a 'bus hub' and Union Square a 'bus and rail' hub.
<b>3PO3</b>	Enhancements to the local rail network will improve opportunities for rail travel to and from the city centre.
<b>Opportunities</b>	
<b>3OP1</b>	Improve and increase bus priority measures to, from and within the city centre.
<b>3OP2</b>	Increase bus services / routes, particularly weekend, evening and night bus services.
<b>3OP3</b>	Deliver a shuttle bus service around the city centre for shoppers.
<b>3OP4</b>	Reduce the number of buses on Union Street.
<b>3OP5</b>	Deliver more frequent and reliable / punctual bus and train services.
<b>3OP6</b>	Provide faster / more direct bus services.
<b>3OP7</b>	Deliver better Park and Ride services.
<b>3OP8</b>	Better promote Park and Ride opportunities.
<b>3OP9</b>	Develop more (informal) Park and Ride sites.
<b>3OP10</b>	Provide cheaper / subsidised fares
<b>3OP11</b>	Develop simplified or integrated public transport ticketing
<b>3OP12</b>	Improve bus information, including route and service changes.
<b>3OP13</b>	Improve the bus and rail stations.
<b>3OP14</b>	More competition amongst bus operators.
<b>3OP15</b>	Develop a more innovative public transport system.

<b>Theme 4: Motorcycling</b>	
<b>Problems</b>	
<b>4PR1</b>	Getting around by motorcycle is generally perceived as difficult.
<b>4PR2</b>	Travelling by motorcycle is generally perceived as unsafe.
<b>Positives</b>	
<b>4PO1</b>	Respondents to the SUMP survey found travelling around the city centre by motorcycle more easy than difficult.

<b>Theme 5: Taxis</b>	
<b>Problems</b>	
<b>5PR1</b>	Taxis perceived as expensive.
<b>5PR2</b>	Concerns over the accessibility of taxis.
<b>Positives</b>	
<b>5PO1</b>	Respondents to the SUMP survey found travelling around the city centre by taxi more easy than difficult.

<b>5PO2</b>	There is seen to be a good supply of taxis and taxi ranks.
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### Theme 6: Freight

#### Problems

<b>6PR1</b>	Safety concerns with freight vehicles accessing and stopping in the city centre at busy times of the day and mingling with vulnerable users.
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#### Opportunities

<b>6OP1</b>	Restrict HGVs.
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<b>6OP2</b>	Restrict access times for deliveries.
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<b>6OP3</b>	Improve HGV routeing
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### Theme 7: Accessibility

#### Problems

<b>7PR1</b>	Poor accessibility of the bus and rail station by all modes.
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<b>7PR2</b>	Poor infrastructure at the bus and rail stations, especially for mobility impaired passengers, e.g. lack of pick up and drop off facilities.
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<b>7PR3</b>	Poor linkages between the stations / Union Square and Union Street.
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<b>7PR4</b>	Poor linkages between shopping centres.
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#### Positives

<b>7PO1</b>	Perceptions of a safe night time environment in the city centre.
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#### Opportunities

<b>7OP1</b>	Improve walking and cycling links between public transport nodes (bus station, rail station, ferry terminal).
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<b>7OP2</b>	Improve walking and cycling links between Union Street and Union Square.
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<b>7OP3</b>	Better walking and cycling links between shopping centres.
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<b>7OP4</b>	Improve walking and cycling links between the city centre and the beach.
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<b>7OP5</b>	Develop a better integrated transport network
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## 4 Stakeholder Identification

This section identifies the key stakeholders that will be consulted with throughout the remainder of the SUMP development process.

### Primary Stakeholders

- Residents:
  - Members of the public
  - Relevant Community Councils – City Centre, George Street, Castlehill and Pittodrie, Queens Cross and Harlaw, and Torry
  - Aberdeen Civic Forum
- Local Business Community:
  - Aberdeen Inspired
  - Opportunity North East
  - Aberdeen and Grampian Chamber of Commerce
  - Scottish Council Development and Industry
  - Scottish Enterprise Grampian
  - CBI Scotland
  - Institute of Directors Aberdeen
  - Federation of Small Businesses
  - Aberdeen Council of Voluntary Organisations
  - Visit Aberdeenshire
- Equalities Groups:
  - Disability Equity Partnership
  - Bon Accord Access Panel
  - North East Sensory Services
  - Mobility and Access Committee for Scotland
  - Aberdeen City Youth Council
  - Grampian Senior Citizens Forum
  - Grampian Regional Equality Council

### Key Actors

- Aberdeen City Council Teams:
  - Transport Strategy and Programmes
  - Public Transport Unit
  - Economic Development – Programmes and Projects
  - City Centre Masterplan
  - Roads Projects
  - Roads Development Management
  - Traffic Management and Road Safety
  - Traffic Engineering
  - Local and Regional Development Planning
  - Masterplanning, Design and Conservation
  - Environmental Policy
  - Environmental Health
  - Environmental Services
- Project Partners:
  - Nestrans
  - Aberdeenshire Council
  - Aberdeen Harbour Board

## Intermediaries

- Active Travel Representatives:
  - Sustrans Scotland
  - Cycling Scotland
  - Living Streets
  - Paths for All
  - Aberdeen Cycle Forum
  - CTC Grampian
  - Grampian Cycle Partnership
  - Aberdeen Outdoor Access Forum
  - Active Aberdeen Partnership
- Public Transport Operators and Representatives:
  - First Aberdeen
  - Stagecoach Bluebird
  - North East Bus Alliance
  - Confederation of Passenger Transport
  - Abellio Scotrail
  - Northlink
  - Cowheels
  - Taxi Groups
- Freight Representatives:
  - North East Freight Forum
  - Freight Transport Association
  - Road Haulage Association
- Private Transport Representatives:
  - Motorcycle Action Group
  - RAC Foundation
  - Electric Vehicle Association Scotland
- Emergency Services:
  - Police Scotland
  - Scottish Ambulance Service
  - Fire and Rescue
- Health:
  - NHS Grampian
  - Health and Transport Action Plan
  - Aberdeen Health and Social Care Partnership

# **Appendix C : Problems, Opportunities, Issues and Constraints**

## **1 Introduction**

To establish the ‘building blocks’ of the SUMP, all of the information gathered during the Self-Assessment and engagement exercises have been summarised into a ‘problems, opportunities, issues and constraints’ analysis. This set the future direction of the SUMP, in terms of identifying what needs to be addressed (the problems and opportunities) and what the SUMP must be aware of (the issues and constraints).



## 2 Problems and Opportunities

A summary of the perceived problems and opportunities with the city centre transport network is provided in the following sections. These have been split into themed categories, with some overlap between themes and some contradictions within the themes, reflecting the differing views of consultation respondents which the SUMP will have to negotiate.

Opportunities encompass both:

- Perceived positives with the existing transport network that can be taken advantage of and/or enhanced; and
- Opportunities for improvements to the network that have been identified by consultees.

Table C22 – Problems and Opportunities

Theme 1: Traffic and Congestion	
Problems	
1PR1	A perception that vehicular traffic dominates and vehicle movements take precedence over people movements.
1PR2	A perception that accessibility to, travelling around and parking in the city centre by car is too easy and this discourages other modes of transport.
1PR3	The volume of traffic and the attitude of some drivers creates an unsafe environment for pedestrians and cyclists.
1PR4	Traffic levels result in noise, emissions and poor air quality.
1PR5	The city centre is congested and road capacity is constrained.
1PR6	A perception that road infrastructure and road conditions are poor and that junctions and signals perform poorly, resulting in delays and congestion.
1PR7	Poor journey time reliability, especially at peak times.
1PR8	The permeability of Union Street is severed by multiple traffic lanes.
1PR9	Difficulty of enforcing traffic offences.
1PR10	Perceived difficulties with parking in the city centre.
Positives	
1PO1	Travelling by car is generally seen as easy, quick and efficient.
1PO2	The opening of the AWPR should see the removal of a sizeable proportion of through-traffic from the city centre.
1PO3	Congestion in the city centre outside peak hours is viewed as acceptable.
1PO4	Congestion in the city centre is seen as not as bad as some other cities.
1PO5	There are commitments at a national level to phase out the purchase of conventional petrol and diesel vehicles.
1PO6	There is a commitment to delivering a Low Emission Zone in Aberdeen by 2020.
1PO7	Some people perceive there is good supply of convenient, reasonably priced and safe parking.
1PO8	City Wardens are seen to be pro-active in terms of enforcement.
Opportunities	
1OP1	Review the current Roads Hierarchy and move away from the concept of the city centre as a through route for traffic.
1OP2	Reduce traffic volumes.
1OP3	Reduce traffic speeds.
1OP4	Reduce congestion.
1OP5	Introduce congestion charging.

<b>1OP6</b>	Introduce a Low Emission Zone.
<b>1OP7</b>	Improve the road network and maintenance of the network.
<b>1OP8</b>	Improve traffic flow.
<b>1OP9</b>	Implement more one-way streets.
<b>1OP10</b>	Better enforce traffic violations.
<b>1OP11</b>	Improve car parking.
<b>1OP12</b>	Reduce car parking availability.
<b>1OP13</b>	Review car parking charges
<b>1OP14</b>	Introduce emissions-based parking charges.
<b>1OP15</b>	Review car parking standards for new development.

### Theme 2: Walking and Cycling

#### Problems

<b>2PR1</b>	Insufficient space for pedestrians and a lack of pedestrian priority.
<b>2PR2</b>	The city centre is seen as inhospitable to cyclists and not an easy place to cycle around.
<b>2PR3</b>	The city centre walking and cycling environment is generally perceived as unsafe.
<b>2PR4</b>	Poor quality pedestrian facilities e.g. narrow, poorly maintained footways.
<b>2PR5</b>	Poor pedestrian crossing facilities in terms of the time given for pedestrians to cross roads and the need to cross in multiple stages.
<b>2PR6</b>	A lack of cycling infrastructure or, where facilities are available, poor quality infrastructure, including parking and signage.
<b>2PR7</b>	Poor connectivity between key locations e.g. Union Street and Union Square.

#### Positives

<b>2PO1</b>	Aberdeen has an adopted CCMP that recognises the need to develop a more pedestrian and cycle-friendly city centre with improved public transport penetration.
<b>2PO2</b>	Most respondents to the SUMP survey found getting around the city centre on foot easy or very easy.
<b>2PO3</b>	Most respondents to the initial Roads Hierarchy survey agreed with the objective of creating a city centre that is better for walking and cycling.
<b>2PO4</b>	There is a perception that the city centre is compact and that most destinations are within walking and cycling distance.

#### Opportunities

<b>2OP1</b>	Develop more pedestrian priority/pedestrianised/traffic-free areas.
<b>2OP2</b>	Improve the city centre arrival experience for pedestrians, especially at the bus and rail stations.
<b>2OP3</b>	Improve, and better maintain, footway provision.
<b>2OP4</b>	Develop more and safer pedestrian crossings with increased green man time.
<b>2OP5</b>	Improve pedestrian and cycle connectivity, wayfinding and orientation.
<b>2OP6</b>	Develop a safer cycling environment.
<b>2OP7</b>	Develop safe, continuous (and where possible segregated) cycle routes to, from and within the city centre.
<b>2OP8</b>	Better connect existing cycle routes.
<b>2OP9</b>	Improve and increase cycle parking provision.
<b>2OP10</b>	Deliver a bicycle rental scheme.

### Theme 3: Public Transport

#### Problems

<b>3PR1</b>	Poor infrastructure, in terms of bus priority, on the approach to and within the city centre.
<b>3PR2</b>	Concerns over the cost of bus services.
<b>3PR3</b>	Concerns over the quality of bus services, in terms of frequency, reliability, journey times and journey time reliability, routeing choices, and the attitude of bus drivers.

<b>3PR4</b>	Concerns over the quality and accuracy of bus stop infrastructure and the information provided therein.
<b>3PR5</b>	Concerns over the impacts on Union Street of the presence of a large volume of buses.
<b>Positives</b>	
<b>3PO1</b>	According to the SUMP survey, more people find getting around the city centre by bus easy or very easy than the numbers finding it difficult or very difficult.
<b>3PO2</b>	People like that Union Street acts as a 'bus hub' and Union Square a 'bus and rail' hub.
<b>3PO3</b>	Enhancements to the local rail network will improve opportunities for rail travel to and from the city centre.
<b>Opportunities</b>	
<b>3OP1</b>	Improve and increase bus priority measures to, from and within the city centre.
<b>3OP2</b>	Increase bus services/routes, particularly weekend, evening and night bus services.
<b>3OP3</b>	Deliver a shuttle bus service around the city centre for shoppers.
<b>3OP4</b>	Reduce the number of buses on Union Street.
<b>3OP5</b>	Deliver more frequent and reliable/punctual bus and train services.
<b>3OP6</b>	Provide faster/more direct bus services.
<b>3OP7</b>	Deliver better Park and Ride services.
<b>3OP8</b>	Better promote Park and Ride opportunities.
<b>3OP9</b>	Develop more (informal) Park and Ride sites.
<b>3OP10</b>	Provide cheaper/subsidised fares
<b>3OP11</b>	Develop simplified or integrated public transport ticketing
<b>3OP12</b>	Improve bus information, including route and service changes.
<b>3OP13</b>	Improve the bus and rail stations.
<b>3OP14</b>	More competition amongst bus operators.
<b>3OP15</b>	Develop a more innovative public transport system.
<b>Theme 4: Motorcycling</b>	
<b>Problems</b>	
<b>4PR1</b>	Getting around by motorcycle is generally perceived as difficult.
<b>4PR2</b>	Travelling by motorcycle is generally perceived as unsafe.
<b>Positives</b>	
<b>4PO1</b>	Respondents to the SUMP survey found travelling around the city centre by motorcycle more easy than difficult.
<b>Theme 5: Taxis</b>	
<b>Problems</b>	
<b>5PR1</b>	Taxis perceived as expensive.
<b>5PR2</b>	Concerns over the accessibility of taxis.
<b>Positives</b>	
<b>5PO1</b>	Respondents to the SUMP survey found travelling around the city centre by taxi more easy than difficult.
<b>5PO2</b>	There is seen to be a good supply of taxis and taxi ranks.
<b>Theme 6: Freight</b>	
<b>Problems</b>	
<b>6PR1</b>	Safety concerns with freight vehicles accessing and stopping in the city centre at busy times of the day and mingling with vulnerable users.
<b>Opportunities</b>	
<b>6OP1</b>	Restrict HGVs.
<b>6OP2</b>	Restrict access times for deliveries.
<b>6OP3</b>	Improve HGV routeing
<b>Theme 7: Accessibility</b>	

Problems	
<b>7PR1</b>	Poor accessibility of the bus and rail station by all modes.
<b>7PR2</b>	Poor infrastructure at the bus and rail stations, especially for mobility impaired passengers, e.g. lack of pick up and drop off facilities.
<b>7PR3</b>	Poor linkages between the stations/Union Square and Union Street.
<b>7PR4</b>	Poor linkages between shopping centres.
Positives	
<b>7PO1</b>	Perceptions of a safe night time environment in the city centre.
Opportunities	
<b>7OP1</b>	Improve walking and cycling links between public transport nodes (bus station, rail station, ferry terminal).
<b>7OP2</b>	Improve walking and cycling links between Union Street and Union Square.
<b>7OP3</b>	Better walking and cycling links between shopping centres.
<b>7OP4</b>	Improve walking and cycling links between the city centre and the beach.
<b>7OP5</b>	Develop a better integrated transport network

As some of the engagement exercises used to inform the problems and opportunities analysis date as far back as 2012, a number of changes to the transport system have been made in the interim, while, in other cases, firm commitments to change have been made by partners and will be delivered during the lifetime of the SUMP. Certain commitments will fully address some of the problems and opportunities identified, while others will partially address them. Nothing these committed improvements and their impacts is useful in terms of 'sifting out' problems and opportunities that are being addressed by other means and identifying the residual problems and opportunities that the SUMP needs to address.

Table C23 - Recent/proposed transport changes relevant to the SUMP

Recently Completed and Ongoing Projects
<b>Aberdeen Western Peripheral Route</b>
<b>Project</b> - The AWPR, which should see a significant reduction in urban traffic volumes, including city centre traffic, should be fully operational by late 2018.
<b>Problem or Opportunity Addressed</b> - 1PR1, 1PR3, 1PR4, 1PR5, 1PR7, 1OP2, 1OP4, 1OP8, 2PR1, 2PR2, 2PR3, 2OP6
<b>Verdict</b> – The AWPR should significantly improve the city centre environment for walking and cycling, thus contributing towards addressing a number of problems and opportunities, although it is appreciated that further measures will be required to lock in these benefits and ensure these are maintained in the longer term and the SUMP will have a role to play in this.
<b>Project</b> - A supporting Roads Hierarchy, looking at options for 'locking in the benefits' of the AWPR and making the city centre a destination, rather than a through-route, is underway. ACC has approved the principle of a 'three zone' system for the city, where traffic movement between zones is restricted and all through-traffic diverted to the AWPR.
<b>Problem or Opportunity Addressed</b> - 1PR1, 1PR2, 1PR3, 1PR4, 1PR5, 1PR7, 1OP1, 1OP2, 1OP3, 1OP4, 1OP7, 1OP8, 1OP9, 2PR1, 2PR2, 2PR3, 2PR6, 2OP1, 2OP5, 2OP6, 2OP7, 3PR1, 3OP1, 4PR1, 4PR2
<b>Verdict</b> – The Roads Hierarchy will build upon the opening of the AWPR and look at measures for making the city centre more accessible and welcoming to those walking, cycling and using public transport, thus partially addressing a number of problems and opportunities. The SUMP will, in turn, develop this further, looking in more detail at the city centre interventions required.
<b>City Centre Masterplan</b>
<b>Project</b> - The part-pedestrianisation of Broad Street (open to pedestrians, cyclists and buses only) was completed in August 2018.

<p><b>Problem or Opportunity Addressed</b> - 1PR1, 1PR2, 1PR3, 2PR1, 2PR2, 2PR3, 2PR4, 2OP1, 2OP6, 3PR1, 3OP1</p> <p><b>Verdict</b> – Broad Street is the first CCMP project to be delivered that seeks a re-balance of priority in the city centre from vehicles to walking, cycling and public transport. Further projects require to be identified, however, to make the city centre even more welcoming and accessible and the SUMP will play a role in identifying these.</p>
<p><b>Project</b> - Planning approval has been granted for the regeneration of Union Terrace Gardens, including enhanced pedestrian and cycle accessibility and permeability.</p> <p><b>Problem or Opportunity Addressed</b> - 2PR1, 2PR2, 2PR3, 2PR4, 2PR6, 2OP1</p> <p><b>Verdict</b> – The Union Terrace Gardens project will contribute towards improve the city centre walking and cycling environment. Further projects require to be identified, however, to make the city centre even more welcoming and accessible and the SUMP will play a role in identifying these.</p>
<p><b>Project</b> – ACC is in the process of identifying and designing public realm improvements for delivery on Schoolhill around Aberdeen Art Gallery and Cowdray Hall.</p> <p><b>Problem or Opportunity Addressed</b> - 1PR1, 1PR2, 1PR3, 1PR4, 2PR1, 2PR2, 2PR3, 2PR4, 2OP6</p> <p><b>Verdict</b> - The Schoolhill project will contribute towards improve the city centre walking and cycling environment. Further projects require to be identified, however, to make the city centre even more welcoming and accessible and the SUMP will play a role in identifying these.</p>
<p><b>Project</b> - Consultation is underway on proposals to fully or partially restrict vehicle access to parts of Justice Mill Lane, Windmill Brae, Windmill Lane, Bath Street, Bon Accord Terrace, Langstane Place, Gordon Street and Bridge Street</p> <p><b>Problem or Opportunity Addressed</b> - 1PR1, 1PR2, 1PR3, 1PR4, 1OP2, 2PR1, 2PR2, 2PR3, 2OP1, 2OP6</p> <p><b>Verdict</b> - This project will contribute towards improve the city centre walking and cycling environment. Further projects require to be identified, however, to make the city centre even more welcoming and accessible and the SUMP will play a role in identifying these.</p>
<p><b>City Region Deal Projects</b></p> <p><b>Project</b> - Construction of the new Aberdeen South Harbour at the Bay of Nigg is underway, with the facility due to open in 2020.</p> <p><b>Problem or Opportunity Addressed</b> – None, although it has been recognised that the SUMP must take into account this new facility.</p> <p><b>Project</b> - A study is underway to identify the supporting transport infrastructure required to optimise the regional economic benefits of the new harbour, and this will include consideration of active travel and public transport links to and from the city centre.</p> <p><b>Problem or Opportunity Addressed</b> – 2PR6, 2PR7, 2OP5, 3OP2</p> <p><b>Verdict</b> – The SUMP will work with this project to identify the optimum walking, cycling and public transport infrastructure between the city centre and the new harbour.</p> <p><b>Project</b> – An Associated CRD project sees Transport Scotland working with partners to investigate opportunities for reducing rail journey times between Aberdeen and the Central Belt, thus improving opportunities to access the city centre by rail for those living south of the city.</p> <p><b>Problem or Opportunity Addressed</b> - 3OP5</p> <p><b>Verdict</b> – Rail connections between Aberdeen City Centre and the Central Belt are being fully considered within this alternative workstream so will not form part of the SUMP. Rail matters are typically dealt with at a national level in any case, therefore scope for the SUMP to influence this is extremely limited.</p>
<p><b>CIVITAS PORTIS Projects</b></p> <p><b>Project</b> – An origin-destination study has commenced, to enable a better understanding of where people are travelling to and from within the region.</p> <p><b>Problem or Opportunity Addressed</b> – None specifically, although the outcomes of this work will be useful when prioritising SUMP measures, in terms of allowing a better understanding of the dominant flows and resources for improvements to be prioritised accordingly.</p>

<p><b>Project</b> – A study into the requirements for additional city centre pedestrian wayfinding is underway.</p> <p><b>Problem or Opportunity Addressed</b> – 2PR6, 2OP5</p> <p><b>Verdict</b> – As pedestrian wayfinding is being looked at as part of a separate workstream, it will not form a core part of the SUMP, although the linkages between these projects are noted.</p>
<p><b>Project</b> – An appraisal of options for a bicycle rental scheme is now underway.</p> <p><b>Problem or Opportunity Addressed</b> – 2OP10</p> <p><b>Verdict</b> – As a bicycle rental scheme is being looked at as part of another project, it will not form part of the SUMP, although the linkages between these projects are noted.</p>
<p><b>Project</b> – The A96 Collective Travel study is underway looking at opportunities for sustainable transport improvement measures along the A96 corridor between Inverurie and Aberdeen city centre.</p> <p><b>Problem or Opportunity Addressed</b> – 2PR7, 2OP8, 3PR1, 3OP1, 3OP6, 3OP7, 3OP8</p> <p><b>Verdict</b> – This project adequately covers access to the city centre from the A96 corridor but there are a number of other such corridors that the SUMP will have to address. Promotion of the Park and Ride site at Craibstone is also a focus of this work.</p>
<p><b>Project</b> – A Park and Ride Market Research and Action Plan has been developed to better understand current usage and barriers to using park and ride in the north east.</p> <p><b>Problem or Opportunity Addressed</b> – 3OP7, 3OP8, 3OP9</p> <p><b>Verdict</b> – As ways of encouraging more park and ride use from existing sites to the city centre is the focus of a separate project, the SUMP will not look to specifically address Park and Ride, while recognising the linkages between these pieces of work.</p>
<p><b>Project</b> – Travel planning work is being undertaken with employers in the North Dee and Altens/Nigg areas.</p> <p><b>Problem or Opportunity Addressed</b> – None specifically, although this work should encourage more smarter travel to and from the city centre which is a key objective of the SUMP.</p>
<p><b>Project</b> – A smart journey planning app is in development.</p> <p><b>Problem or Opportunity Addressed</b> – 1PR5, 1PR7, 1OP4, 1OP8, 2OP5</p> <p><b>Verdict</b> - This should encourage more smarter travel to and from the city centre which is a key objective of the SUMP.</p>
<p><b>Project</b> – A Strategic Car Parking Review has been completed to identify options for better using car parking in the city centre as a demand management tool, in the context of the City Centre Masterplan and Roads Hierarchy aspirations.</p> <p><b>Problem or Opportunity Addressed</b> – 1PR2, 1PR4, 1PR10, 1OP11, 1OP12, 1OP13, 1OP14, 1OP15</p> <p><b>Verdict</b> – Car parking issues are being fully addressed under this alternative workstream. Car parking will therefore not be a focus of the SUMP although the SUMP will reflect the emerging outcomes of the review.</p>
<p><b>Project</b> - A review of freight traffic management post-AWPR is taking place, exploring options for encouraging use of preferred freight corridors, such as revised route maps. Work is also ongoing looking at options for minimising the impact of freight vehicles in the city centre, including options for consolidation centres and low-emission vehicle use, especially for 'last mile delivery'</p> <p><b>Problem or Opportunity Addressed</b> – 1PR1, 1PR4, 2PR2, 2PR3 6PR1, 6OP1, 6OP2, 6OP3</p> <p><b>Verdict</b> – Recognising that freight issues are being considered as part of alternative workstreams, freight will not form a key component of the SUMP, although the linkages between these projects will continue to be reflected.</p>
<p><b>Public Transport Improvements</b></p> <p><b>Project</b> – A new North East Bus Alliance has recently been established, a more formal partnership between Nestrans, the two councils and bus operators, with all parties working together to improve the public transport experience in the region.</p> <p><b>Problem or Opportunity Addressed</b> – 3PR1, 3PR2, 3PR3, 3PR4, 3PR5, 3OP1, 3OP2, 3OP5, 3OP6, 3OP7, 3OP8, 3OP9, 3OP10, 3OP11, 3OP12, 3OP13</p>

<p><b>Verdict</b> – The Bus Alliance will be an important mechanism for addressing many of the problems and opportunities identified. The SUMP will look to support this by considering the city centre public transport environment in particular.</p>
<p><b>Project</b> - The local Grasshopper multi-operator ticket has been introduced in Aberdeen City and Aberdeenshire. The proposed Transport (Scotland) Bill furthermore suggests establishing a National Smart Ticketing Advisory Body (NSTAB).</p>
<p><b>Problem or Opportunity Addressed</b> – 3OP11</p> <p><b>Verdict</b> – As the region now has a multi-operator ticket and efforts are ongoing at a national level to improve ticketing arrangements, public transport ticketing will not be a key focus of the SUMP.</p>
<p><b>Project</b> - A new bus Park and Ride site at Craibstone opened in 2017, while Aberdeenshire Council continues to work on the delivery of an A90(S) site at Portlethen, as well as mini park and ride hubs at Oldmeldrum and Crathes. In terms of rail park and ride, Inverurie station car park was expanded in 2017, the first phase of a proposed full transport interchange, while Kintore Station is due to open in 2019. Nestrans is currently looking at options for expanding Dyce Station car park and is working with Aberdeenshire Council to identify options for improvements at Portlethen, Stonehaven and Laurencekirk car parks.</p>
<p><b>Problem or Opportunity Addressed</b> – 3OP9</p> <p><b>Verdict</b> – As increasing bus and rail park and ride opportunities are being looked at by Nestrans, ACC and Aberdeenshire Council via separate workstreams, growing the park and ride network will not be a key focus of the SUMP.</p>
<p><b>Project</b> - Work is underway to deliver the Aberdeen to Inverness Rail Improvement Project, which will reduce passenger journey times and realise a more regular rail service between Aberdeen and Inverness. Phase 1, due for completion in 2019, will see the redoubling of the track between Aberdeen and Inverurie and the re-opening of Kintore Station. Coupled with the Scottish Government's 'Revolution in Rail', which will realise a higher capacity and higher frequency local rail service between Montrose and Inverurie through Aberdeen city centre, this will greatly improve opportunities to access the city centre by rail for those living in the wider region.</p>
<p><b>Problem or Opportunity Addressed</b> – OP5</p> <p><b>Verdict</b> – As regional rail connections and links between Aberdeen and Inverness are being fully considered within this alternative workstream, they will not form part of the SUMP. Rail matters are typically dealt with at a national level in any case, therefore scope for the SUMP to influence this is extremely limited.</p>
<p>A feasibility study is ongoing, looking at the costs and benefits of re-opening the railway line between Dyce, Newmachar and Ellon.</p>
<p><b>Problem or Opportunity Addressed</b> – None specifically, although any efforts to improve the accessibility of the city centre by sustainable modes will require to be reflected in the SUMP.</p>
<p><b>Project</b> – ACC has a policy in place that the whole taxi fleet in the city must be wheelchair-accessible by 2023, although discussions are ongoing as to the best approach to take in terms of taxi accessibility issues.</p>
<p><b>Problem or Opportunity Addressed</b> – 5PR2</p>
<p><b>Verdict</b> – As this issue is already subject to a separate discussion, taxi accessibility will not form a key component of the SUMP.</p>
<p><b>Environmental Commitments</b></p>
<p><b>Project</b> - The Scottish Government has announced that Aberdeen will have a Low Emission Zone operational from 2020.</p>
<p><b>Problem or Opportunity Addressed</b> – 1PR4, 1OP6</p>
<p><b>Verdict</b> – As options for a LEZ are being looked at as part of an alternative workstream, there will be no need for the SUMP to also tackle this, albeit proposals will need to be reflected within the SUMP.</p>
<p><b>Project</b> - The Scottish Government has committed to phasing out the need to buy new petrol and diesel vehicles by 2032.</p>

**Problem or Opportunity Addressed – 1PR4**

**Verdict** – This will be recognised as one of the measures in place to improve city centre air quality. The SUMP therefore has a role in terms of identifying further measures.

**Project** - Noise Management Areas have been introduced which are protected from a deterioration in noise quality and an increase in noise from adjacent land uses or new development.

**Problem or Opportunity Addressed** – None specifically, although the SUMP should reflect this designation.

Also relevant in terms of opportunities are the various options for improvements that have been suggested by stakeholders and members of the public during consultation and engagement exercises. The most commonly recurring suggestions are summarised below.

- Pedestrianisation of (or improved pedestrian environment on):
  - Union Street;
  - King Street;
  - Schoolhill/Upperkirkgate;
  - Market Street;
  - Belmont Street;
  - Back Wynd;
  - Union Terrace;
  - Bridge Street;
  - Green/Merchant Quarter; and
  - The West End (Thistle Street, Chapel Street, Rose Street).
- Improved cycle provision:
  - Union Street (or a parallel route);
  - George Street;
  - Mounthooly roundabout;
  - King Street (or a parallel route);
  - Shiprow;
  - Market Street;
  - To Union Square;
  - From City Centre/Union Square to beachfront;
  - From City Centre/Union Square along River Dee to Garthdee;
  - Virginia Street;
  - Guild Street;
  - Bridge Street;
  - South College Street;
  - Holburn Street (or a parallel route);
  - Hardgate; and
  - Rosemount.
- Improved linkages/connections:
  - From Union Street to the bus and rail stations and Union Square;
  - Between the shopping centres;
  - Between the bus and rail station and Union Terrace Gardens;
  - Into and within Union Terrace Gardens;
  - Across Union Terrace Gardens (bridge from Belmont Street to Union Terrace);
  - To the Green;
  - Between the city centre and the harbour;
  - Across the River Dee (pedestrian and cycle bridge);
  - From North Esplanade West to Torry;

- Towards Duthie Park and the Deeside Way; and
- Between the city centre and the beach.



## 3 Issues

In contrast to problems and opportunities, issues are matters that the SUMP must be aware of, or uncertainties that it may not be in a position to resolve but must work within the context of.

Issues for the SUMP to be aware of are therefore:

- According to 2012 survey results, the most common reason for people visiting the city centre is for shopping. The most popular destinations are Union Street and the shopping centres (Union Square and Bon Accord St. Nicholas). The areas noting the highest footfall were the station steps at Guild Street/Union Square, Union Street (south side, Union Bridge), George Street (John Lewis) and Union Street (north side, Music Hall);
- The most common modes of transport people use to access the city centre are walking, taking the bus and driving alone;
- The main determinants of mode choice to the city centre are convenience, time and cost;
- Aberdeen has seen very limited modal shift towards cycling in recent years and a significant decline in bus patronage (including park and ride), although rail patronage has generally been increasing year on year;
- Aberdeen City and Aberdeenshire traditionally have the highest car ownership and usage figures amongst, respectively, Scotland's major cities and of all Scottish local authority areas;
- The ongoing development of strategic cycle routes along key corridors (A90 north, A96, A90 south, etc.) could result in more trips to the city centre by bicycle;
- The Bus Alliance should result in a stronger and more formal quality partnership between local authorities and bus operators, with all parties committing to measures to encourage and enable more people to travel by bus to the city centre
- There are generally mixed views on pedestrianisation, with some people in favour and some against. Most comments against pedestrianisation raised concerns that this would exacerbate congestion or push existing problems elsewhere;
- Large parts of the city centre are designated an Air Quality Management Area (AQMA) and/or Noise Management Areas (NMA);
- The ongoing roll-out of electric and hydrogen vehicles and refuelling infrastructure plays a role in normalising these technologies and could see more of such vehicles in and around the city centre in preference to conventionally fuelled vehicles; and
- The continued expansion of the Co-Wheels Car Club is likely to see an increased car club presence in the city centre, thus potentially reducing the volume of private cars owned by those living in the area and facilitating no/low car development.

In terms of uncertainties:

- Despite predictive traffic modelling, there remains a degree of uncertainty over the impact that the AWPR will have on traffic levels within the city centre;
- Likewise, there is uncertainty over the impact of other committed transport projects, such as Berryden dualling and South College Street junction improvements, will have on the city centre traffic;
- Although the CCMP has been adopted, there is uncertainty over the delivery of (and timescales for) individual projects, as each will be dependent on a successful business case and the availability of funding for delivery. The exact scope of a number of projects (such as the future of Union Street) are still to be fully defined;

- The future Roads Hierarchy has yet to be properly defined therefore there are uncertainties over how this should look, as well as risks in terms of getting the necessary agreement and approvals to deliver physical changes;
- There are uncertainties over the rate of development in the city centre, while the next iteration of the Local Development Plan could see additional city centre sites brought forward for development; and
- The form and extent of any LEZ in the city centre is still to be determined.

As noted, the existence of the CCMP is also a baseline ‘issue’ that requires consideration as part of the SUMP, especially the transport proposals contained therein, given that the principles of the CCMP have been adopted unanimously by ACC and the SUMP will have to be developed within the context of these.

In terms of transport, the Masterplan seeks to transform the heart of the city from one which is heavily congested with motorised vehicles into a world class destination which encourages and facilitates pedestrian and cycle movement, similar to other advanced global cities.

*Connectivity will be improved to facilitate a constant flow of pedestrians and cyclists around the city centre. Attractive places need to feel safe and require the appropriate navigation tools such as good lighting, even surfacing, attention to visual contrast and clear way-finding. An improved public realm network and linked constellation of spaces will incorporate the substantial widening of footways on streets where flows do not presently meet capacity as well as the implementation of pedestrian priority and pedestrian only streetscapes to create a more inclusive environment...*

*A change in user hierarchy with regard to the reprioritisation of pedestrians in many of the city centre’s streets and spaces creates the opportunity to design more engaging and comfortable spaces that encourage people to linger and dwell.*

Table C3 below summarised the transport projects identified in the CCMP along with an indication of their current status.

Table C24 – CCMP Projects

Project		Status
EN01 Broad Street	The part-pedestrianisation (walking, cycling and bus only) of Broad Street between Marischal College and the Marischal Square development, designed so that it can be transformed into an event ready space on special occasions.	Completed in August 2018.
EN02 Guild Street	Removal of car traffic and the reduction of bus traffic to one way only on Guild Street, thus allowing the existing plaza to the north of Union Square to be extended to create a more comfortable meeting place and an enhanced pedestrian linkage through the Merchant Quarter.	Development brief approved in January 2016.
EN03 Langstane Place / Justice Mill Lane / Windmill Brae	This key area for evening economy activities will be enhanced as a pedestrian priority area with new cycle routes, improved streetscape and lighting.	Plans to transform Justice Mill lane, Langstane Place, Windmill Brae, Bath Street, Windmill Lane and Bridge Place into

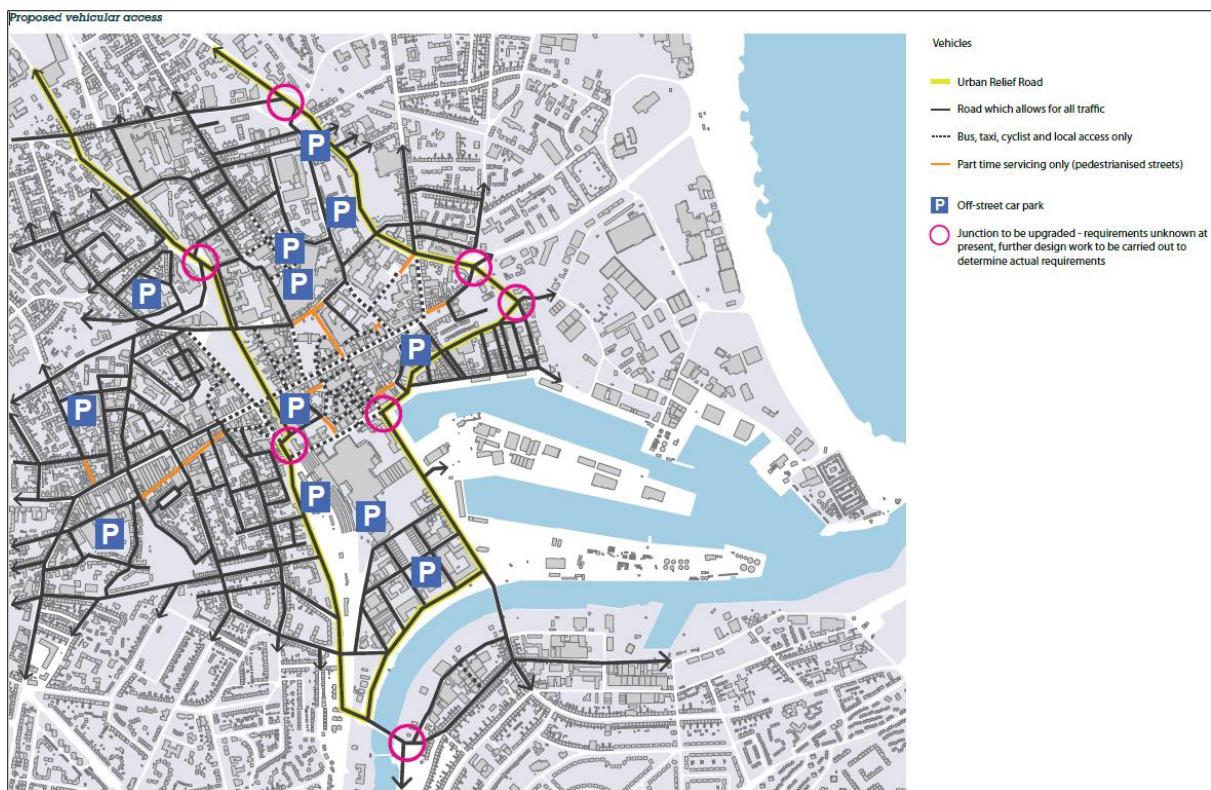
		pedestrian/cycle priority areas in the evenings were approved in April 2018 and are currently out for consultation.
EN04 Rose / Thistle / Chapel Street	A high-quality streetscape scheme to enhance customer experience and the vitality and viability of this independent retail area.	No progress.
EN05 Union Street	Removal of private vehicular traffic (bus, taxi and access only) from the section of Union Street between Bridge Street and the Castlegate, with wider pavements and fewer obstacles to movement. Works will include the upgrade of the Back Wynd Steps to include a lift.	No progress.
EN06 Upperkirkgate / Schoolhill	The removal of all traffic from the central area of Upperkirkgate.	No progress.
EN08 Union Terrace Gardens	This project will enhance the quality of the gardens as the city centre's main green space resource and will seek to improve access, visibility and animation of the gardens. Changes in levels will be improved by creating new accessible bridges and paths between Union Terrace and Belmont Street with easy walking surfaces and gradients as well as escalators and lifts.	Plans approved in March 2018. Target completion date is summer 2020.
EN09 Golden Square	Re-engineering of this space from a vehicle dominated car park towards to a public square and events space associated with the Music Hall.	No progress.
EN10 Bon Accord Square	Removal of some car parking and enhanced greening.	No progress.
IN01 Walkable Aberdeen	Creating a safer and more attractive city centre for pedestrians and other sustainable modes by rerouting non-essential traffic from the city centre core.	AWPR due for completion late 2018.  Roads Hierarchy study has commenced.  Wayfinding study underway.  The SUMP will seek to identify further projects to improve the pedestrian experience in Aberdeen.
IN02 City centre car parking	Proposals for city centre car parking include:	Proposals are being

	<p>Park and Ride - Maximise the potential offered by existing and proposed park and ride sites in order to reduce the overall number of vehicles entering the city centre;</p> <p>Off-street parking - Maximise the potential offered by existing car park capacity;</p> <p>New development parking - Apply stricter parking standards within the city centre boundary to enforce 'zero parking' for new development; and</p> <p>Aberdeen Car Club - The number of conventional as well as electric city centre car club locations would be increased in order to allow for incidental car use for residents and businesses without the need for car ownership.</p>	progressed via separate workstreams, such as the Nestrans Park and Ride study, SCPR and ongoing car club development.
IN03 Cycle highways	Implementation of traffic-free cycle highways within the city centre to connect with NCR 195, NCR 1 and the beach promenade. These would be complemented by cycle priority measures at signalised junctions, and a programme of cycle friendly street improvements.	The SUMP will identify projects to improve the cycling experience in Aberdeen city centre.
IN04 Cycle hire scheme	Roll out of a cycle hire scheme similar to that in Glasgow to capture the transient nature of those working and visiting Aberdeen city centre. Bikes would be constructed to be resilient to vandalism and equipped with GPS tracking.	Currently being progressed via separate CIVITAS PORTIS work package.
IN05 Cycle hubs	Creation of cycle hubs in key areas of the city centre in order to provide high quality secure cycle parking. These hubs will be covered and equipped with easily identifiable branding in areas of high footfall to ensure a sense of community surveillance.	No progress.
IN06 Bus Priority Infrastructure	Implement bus-only streets on key city centre corridors and introduce bus gates on the approach to city centre junctions in order to annul the impact of congestion on journey times.	The SUMP will identify projects to improve the bus experience in Aberdeen city centre.
IN07 Bus stop infrastructure and bus station	In order to provide a more enjoyable and attractive overall bus travel experience for all, mobility inclusive and significantly improved bus stop infrastructure will be installed. There also exists an opportunity to enhance the existing bus station as part of the expansion of Union Square shopping centre.	Bus stop improvements ongoing.
IN08 Aberdeen Station	Following the relocation of the existing taxi drop off facility to South College Street, refurbishment and expansion of the station concourse to create enhanced linkage for pedestrian and cyclists to the city centre.	No progress.
IN10 Aberdeen suburban railway network	As part of the committed Aberdeen to Inverness Rail Improvement Programme, there exists an opportunity to investigate and promote a local Aberdeen based rail service, as well as potential new rail halt locations.	The Aberdeen to Inverness Rail Improvement Programme is now underway, with dualling of the Aberdeen to

		Dyce rail track completed in summer 2018. The 'Revolution in Rail' will see significantly enhanced local rail services operating from late 2019, including the opening of a new station at Kintore.
EC02 North Dee Business Quarter	Full redevelopment of this area to include a network of attractive streets and open spaces with opportunities for enhanced permeability for pedestrians and cyclists.	Ongoing.
CM02 Queen Street	New residential led mixed use development, supported by a network of public spaces, offering opportunities for enhanced permeability for pedestrians and cyclists.	No progress.
CM03 Torry Waterfront	A new riverside housing development on the south bank of the Dee, with enhanced access to the city centre through a new pedestrian bridge.	No progress.
CM05 Woolmanhill	Redevelopment for residential development with opportunities for enhanced permeability for pedestrians and cyclists.	No progress.

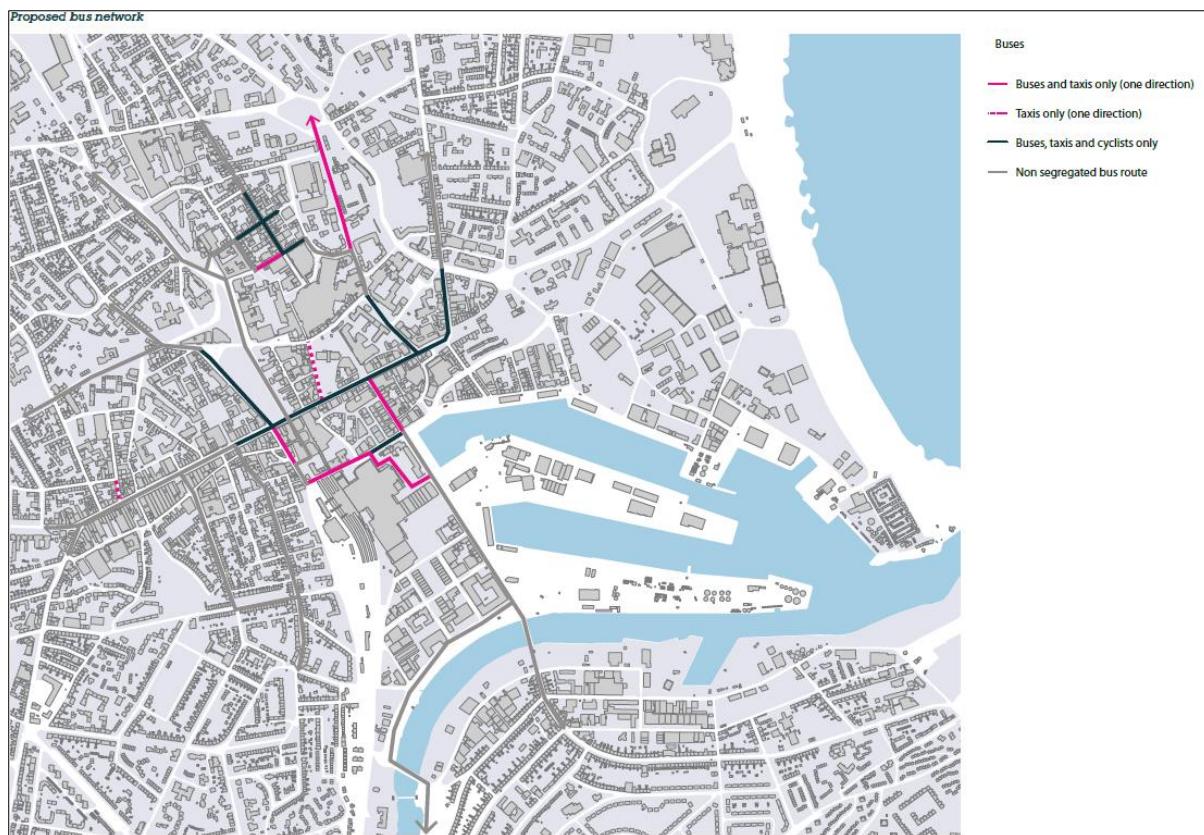
Proposed CCMP city centre vehicular restrictions and pedestrian and public transport networks are shown in Figures C1-3, extracts from the Masterplan Report.

Figure C17 - Proposed Vehicular Restrictions



Source: Aberdeen City Centre Masterplan Report

Figure C18 - Proposed City Centre Bus Network



Source: Aberdeen City Centre Masterplan Report

Proposed measures are therefore for the following streets to be made bus/cycle/taxi and local access only:

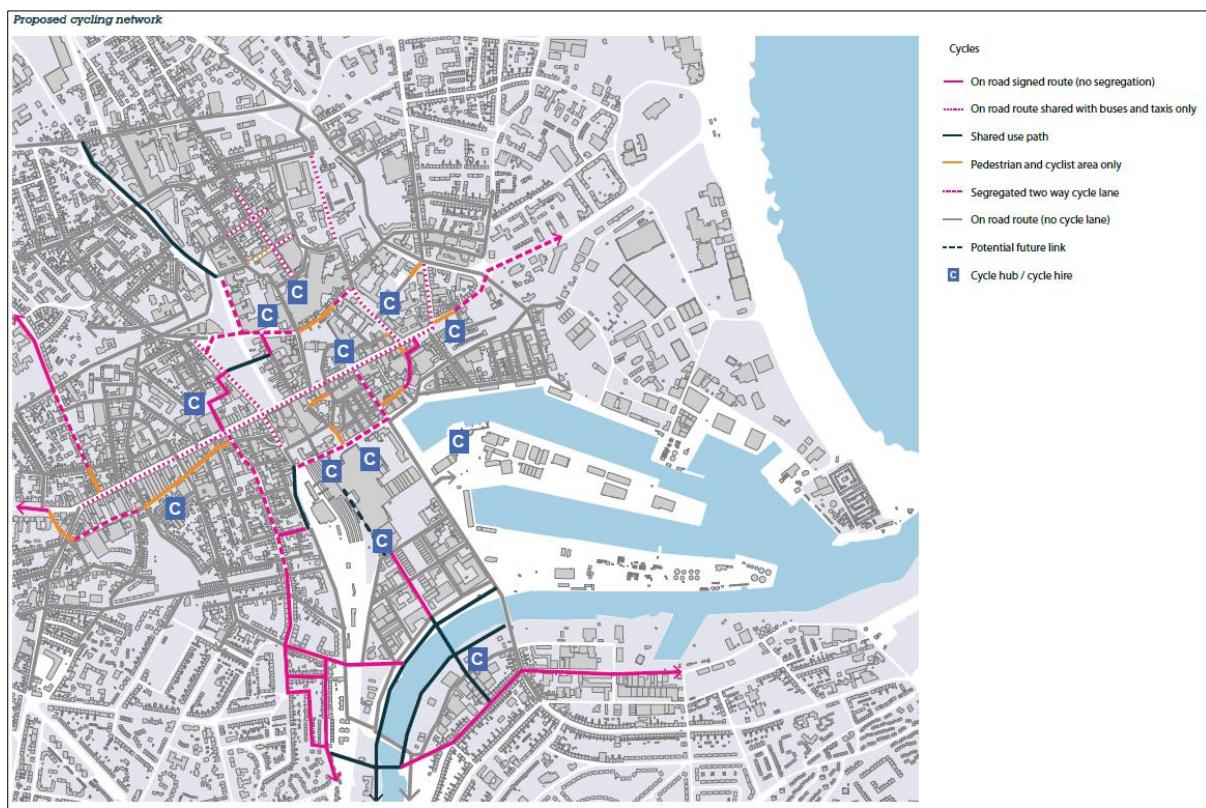
- King Street (West North Street to Castlegate);
- Union Street (Castlegate to Crown Street);
- Broad Street and Queen Street;
- Correction Wynd and St Nicholas Street;
- Back Wynd, Belmont Street and Gaelic Lane area;
- Union Terrace;
- Silver Street/North Silver Street to Union Terrace;
- Bridge Street (Union Street to Wapping Street) – one way;
- Market Street (Union Street to Guild Street) – one way;
- Guild Street and Merchant Quarter area;
- Gallowgate (Berry Street to Mounthooly);
- George Street (St. Andrews Street to Craigie Street), John Street and St. Andrews Street (Loch Street to Charlotte Street).

Suggestions for additional pedestrianised/cycle only streets (with part time servicing only) are:

- Upperkirkgate, between Back Wynd and Flourmill Lane;
- Langstane Place; and
- Rose Street, between Union Street and Thistle Street.

Junction upgrades (as yet undefined) are also suggested for the Beach Boulevard, A965 / Commerce Street, Market Street / Guild Street, Guild Street / Bridge Street, Denburn / Woolmanhill and Mounthooly.

Figure C19 – Proposed City Centre Cycle Network



Source: Aberdeen City Centre Masterplan Report

In terms of additional specific cycling infrastructure, the CCMP envisages:

- Shared use paths:
  - On Skene Square (Westburn Road to Denburn Road);
  - Through Union Terrace Gardens;
  - On South College Street (Guild Street to Marywell Street);
  - On the banks of the River Dee and over the Queen Elizabeth II Bridge into Torry; and
- Segregated two-way cycle lanes:
  - From Castlegate towards the Beach along Justice Street/Beach Boulevard;
  - On Market Street (Union Street to Guild Street);
  - On Guild Street;
  - On Crown Street (Union Street to Springbank Terrace);
  - On Justice Mill Lane;
  - On Rose Street (Thistle Street to Skene Street);
  - On Rosemount Viaduct and Schoolhill (Union Terrace to Back Wynd);
  - Upperkirkgate (Flourmill Lane to Broad Street); and
  - Blackfriars Street.

These are not necessarily committed projects, however, with each subject to its own feasibility study and business case.

## 4 Constraints

Constraints represent the bounds within which the SUMP is being developed, including any limitations/restrictions that threaten the achievement of the SUMP's objectives.

The following constraints have therefore been identified:

- Many initiatives recommended by the SUMP will be subject to public acceptability via statutory approval processes, such as Traffic Regulation Orders (TROs), which could affect delivery and timescales should there be significant objections to proposals;
- There currently exists no dedicated funding stream for SUMP delivery, therefore delivery of SUMP projects will be subject to successfully attracting funding on a project by project basis;
- There may be difficulties retrofitting infrastructure within the confines of an existing busy built-up area;
- Many streets within the city centre are in conservation areas which may add a layer of complexity when looking to implement changes e.g. the need to obtain conservation area consent;
- Topography – level differences in the city centre act as a barrier to active travel and may limit the ability of mobility restricted individuals in particular to walk and cycle more;
- Other barriers to movement exist such as the railway line, the River Dee and the shopping centres which are closed in the evenings;
- The CCMP and Roads Hierarchy also acts as constraints in that many SUMP projects will depend upon the rate of delivery of CCMP and Roads Hierarchy projects. For example, a significant intervention on Union Street cannot be delivered until there is an agreed vision for how the street will look within the context of the masterplan;
- The deregulated public transport market inhibits the ability of the local authority to affect significant change in terms of bus service, pricing and routeing decisions unless in a position to subsidise services.

## 4.1 Sifting Out Problems and Opportunities

Must be realistic about what can actually be achieved and delivered by the SUMP.

The following table summarises the problems and opportunities that have been ‘sifted out’ of the SUMP, following a consideration of other pieces of work that are likely to address these.

Table C25 – Problems and Opportunities sifted out following consideration of other relevant workstreams

<b>Problem/Opportunity</b>	<b>Rationale</b>
1PR10, 1OP11, 1OP12, 1OP13, 1OP14, 1OP15	City Centre car parking is being fully considered within the SCPR and resulting Action Plan.
1PR2	Any measures to change the accessibility and permeability of the city centre by private vehicle is being considered as part of the Roads Hierarchy study. Car parking issues are being considered within the SCPR.
1PR4, 1OP2, 1OP4	A series of complementary workstreams (CCMP, Roads Hierarchy) are looking to reduce traffic and congestion in the city centre. Air quality and emissions are being addressed by LEZ proposals.
1PR5	The SUMP is not concerned with improving road capacity, but with making better use of existing assets.
1OP1	Work to revise the Roads Hierarchy is already underway and is a key influence on the SUMP.
1OP6	Options for a LEZ are being looked at as part of a separate workstream
2OP10	Options for a bike hire scheme are being looked at as part of a separate CIVITAS PORTIS workstream
3OP7, 3OP8, 3OP9	Park and Ride growth and improvements are being fully considered as part of separate workstreams.
3OP11	Ticketing improvements continue to be considered as part of alternative workstreams.
5PR2	Taxi accessibility continues to be a theme of wider discussion within ACC.
6OP3	Options for improved HGV routeing are being looked at as part of a separate CIVITAS PORTIS workstream

Following further consideration of the issues and constraints, a number of other problems and opportunities have been identified for sifting out, for the reasons provided in the table below.

Table C26 – Further Problems and Opportunities Sifting

<b>Problem/Opportunity</b>	<b>Rationale</b>
1PR9, 1OP10	Notwithstanding that traffic offences can cause serious issues in the city centre, in terms of congestion and safety, any difficulties experienced in terms of enforcing these are likely due to resource constraints on ACC and Police Scotland and therefore outwith the ability of the SUMP to resolve.
1OP3	The city centre is already covered by a 20mph zone, suggesting any perceived problems result from a lack of enforcement which the SUMP is not in a position to address, other than encouraging greater intervention from Police Scotland.

1OP5	The need for a congestion charge would be determined at regional level via the Strategic Transport Appraisal and the Regional Transport Strategy rather than via the SUMP.
3PR2	ACC has very limited ability to address the cost of bus fares in the deregulated market. Such issues will be considered as part of the Bus Alliance.
3PR5, 3OP4	ACC considers that it is the volume of all traffic on Union Street, rather than just bus traffic, that contributes to congestion. The AWPR, CCMP and Roads Hierarchy should address general congestion issues, thus freeing up roadspace on Union Street. Attracting more bus services to the city centre is a key component of any sustainable transport strategy.
3OP2, 3OP10	In a deregulated bus market, there are few opportunities for the SUMP to influence routes and services or fares. The focus instead should be on improving journey times and reliability to enable bus operators to achieve efficiencies that may then be passed into customers and encourage the trialling of new routes and services.
3OP3	A shuttle bus service has previously been trialled in the festive period by Aberdeen Inspired but was poorly used. Given the cost of implementing and maintaining such a service, this should not be a key consideration within the SUMP.
3OP14	ACC recognises that the number of bus operators in the city is dependent on market conditions.
5PR1	All taxis and most private hire cars carry calibrated taximeters and the maximum fare that can be charged for a journey within Aberdeen is set out in the Taxi Fare Tariff set by the Licensing Committee. Any problems or issues would therefore be dealt with as part of the Committee business.

Taking all this into account, the finalised list of problems and opportunities to be addressed by the SUMP is provided in Table 5 below.

Table C27 – Final Problems and Opportunities

<b>Traffic and Congestion</b>	
<b>Problems</b>	
A perception that vehicular traffic dominates and vehicle movements take precedence over people movements.	
The volume of traffic and the attitude of some drivers creates an unsafe environment for pedestrians and cyclists.	
A perception that road infrastructure and road conditions are poor and that junctions and signals perform poorly, resulting in delays and congestion.	
Poor journey time reliability, especially at peak times.	
The permeability of Union Street is severed by multiple traffic lanes.	
<b>Opportunities</b>	
Improve the road network and maintenance of the network.	
Improve traffic flow.	
Implement more one-way streets.	
<b>Walking and Cycling</b>	
<b>Problems</b>	
Insufficient space for pedestrians and a lack of pedestrian priority.	
The city centre is seen as inhospitable to cyclists and not an easy place to cycle around.	

The city centre walking and cycling environment is generally perceived as unsafe.
Poor quality pedestrian facilities e.g. narrow, poorly maintained footways.
Poor pedestrian crossing facilities in terms of the time given for pedestrians to cross roads and the need to cross in multiple stages.
A lack of cycling infrastructure or, where facilities are available, poor quality infrastructure, including parking and signage.
Poor connectivity between key locations e.g. Union Street and Union Square.
<b>Opportunities</b>
Develop more pedestrian priority/pedestrianised/traffic-free areas.
Improve the city centre arrival experience for pedestrians, especially at the bus and rail stations.
Improve, and better maintain, footway provision.
Develop more and safer pedestrian crossings with increased green man time.
Improve pedestrian and cycle connectivity, wayfinding and orientation.
Develop a safer cycling environment.
Develop safe, continuous (and where possible segregated) cycle routes to, from and within the city centre.
Better connect existing cycle routes.
Improve and increase cycle parking provision.
<b>Public Transport</b>
<b>Problems</b>
Poor infrastructure, in terms of bus priority, on the approach to and within the city centre.
Concerns over the quality of bus services, in terms of frequency, reliability, journey times and journey time reliability, routeing choices, and the attitude of bus drivers.
Concerns over the quality and accuracy of bus stop infrastructure and the information provided therein.
<b>Opportunities</b>
Improve and increase bus priority measures to, from and within the city centre.
Deliver more frequent and reliable/punctual bus services.
Provide faster/more direct bus services.
Improve bus information, including route and service changes.
Improve the bus and rail stations.
Develop a more innovative public transport system.
<b>Motorcycling</b>
<b>Problems</b>
Getting around by motorcycle is generally perceived as difficult.
Travelling by motorcycle is generally perceived as unsafe.
<b>Freight</b>
<b>Problems</b>
Safety concerns with freight vehicles accessing and stopping in the city centre at busy times of the day and mingling with vulnerable users.
<b>Opportunities</b>
Restrict HGVs.
Restrict access times for deliveries.
<b>Accessibility</b>
<b>Problems</b>
Poor accessibility of the bus and rail station by all modes.
Poor infrastructure at the bus and rail stations, especially for mobility impaired passengers, e.g. lack of pick up and drop off facilities.
Poor linkages between the stations/Union Square and Union Street.

Poor linkages between shopping centres.

**Opportunities**

Improve walking and cycling links between public transport nodes (bus station, rail station, ferry terminal).

Improve walking and cycling links between Union Street and Union Square.

Better walking and cycling links between shopping centres.

Improve walking and cycling links between the city centre and the beach.

Develop a better integrated transport network



# Appendix D: Infrastructure Audit, Option Generation and Sifting

This Appendix outlines the processes that were undertaken to identify the infrastructure measures that are recommended by the SUMP. These processes encompassed:

- Splitting the city centre into zones;
- Identifying the key movement corridors within each zone;
- Assessing the current travel conditions on each of the corridors;
- Consideration of existing proposals (such as City Centre Masterplan projects) and the impacts of these;
- Generating a wide range of options for improvement for each corridor; and
- Appraising each of the options to derive a final list of recommended measures.

The appraisal followed a Scottish Transport Appraisal Guidance (STAG)-type process, whereby each potential intervention was appraised against:

- The extent to which it contributes towards achieving the vision (VIS) and objectives of the SUMP (TPO1-8);
- Its fit with established policy directives (EPD), such as the City Centre Masterplan (CCMP), Local Transport Strategy (LTS) and Active Travel Action Plan;
- The STAG criteria (Environment (Env), Safety (Saf), Economy (Eco), Integration (Int), and Accessibility and Social Inclusion (ACC)); and
- The feasibility (Fea), affordability (Aff) and public acceptability (PA) of options.

STAG is considered best practice in the appraisal of transport schemes, being objective-led and evidence-based, and is a necessary process to follow for projects that are likely to seek funding from the Scottish Government.

The appraisal follows a standard ‘traffic lights’ system whereby:

Green	Intervention has a positive impact on the appraisal criteria (on a scale of +1 to +3)
Yellow	Intervention has a neutral or balanced impact on the appraisal criteria (0)
Red	Intervention has a negative impact on the appraisal criteria (on a scale of -1 to -3)

When it comes to recommendations:

Green	The intervention is recommended for implementation
Yellow	Intervention could be implemented if preferred options prove unfeasible; or the option requires further assessment to understand the benefits and impacts
Red	The intervention is not recommended for implementation

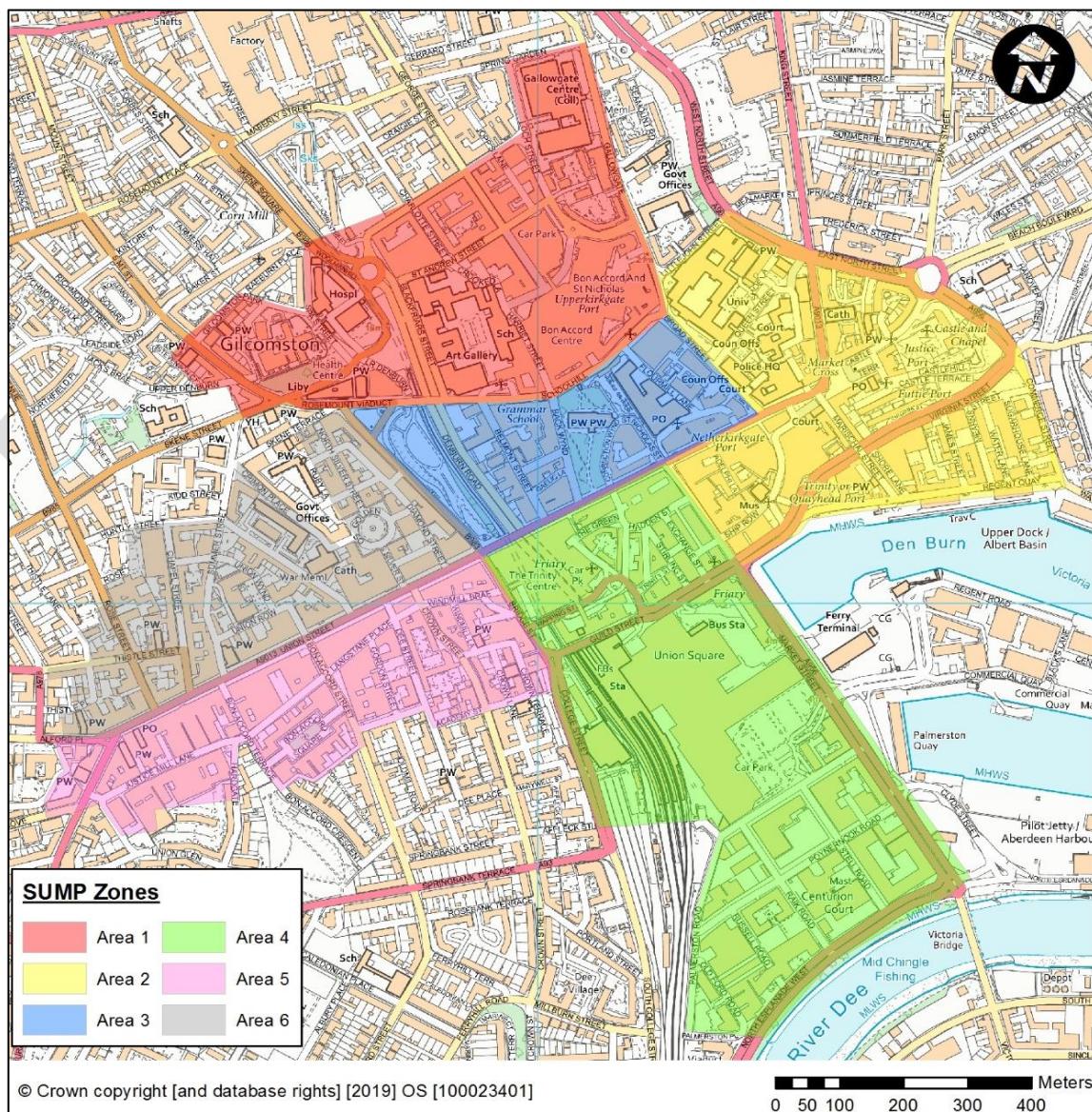
In terms of the generation and appraisal of options, the following guiding principles have been adhered to:

- Where cycle facilities are proposed, it is assumed these would be on both sides of the carriageway;
- On-road cycling provision is generally taken to be a mandatory cycle lane. In some areas, this would require the removal of car parking;
- In relation to segregated facilities, no strict definition is made, in recognition that segregation can take many forms and different solutions may be more appropriate in different locations;
- Where streets have been suggested as ‘local access only’, the presumption is that delivery vehicles would be free to access;
- Where speed limit reductions are suggested this is assumed to be 20mph.

# D1 SUMP Zones

For ease of identifying and appraising infrastructure interventions, the CCMP area has been broken down into 6 zones.

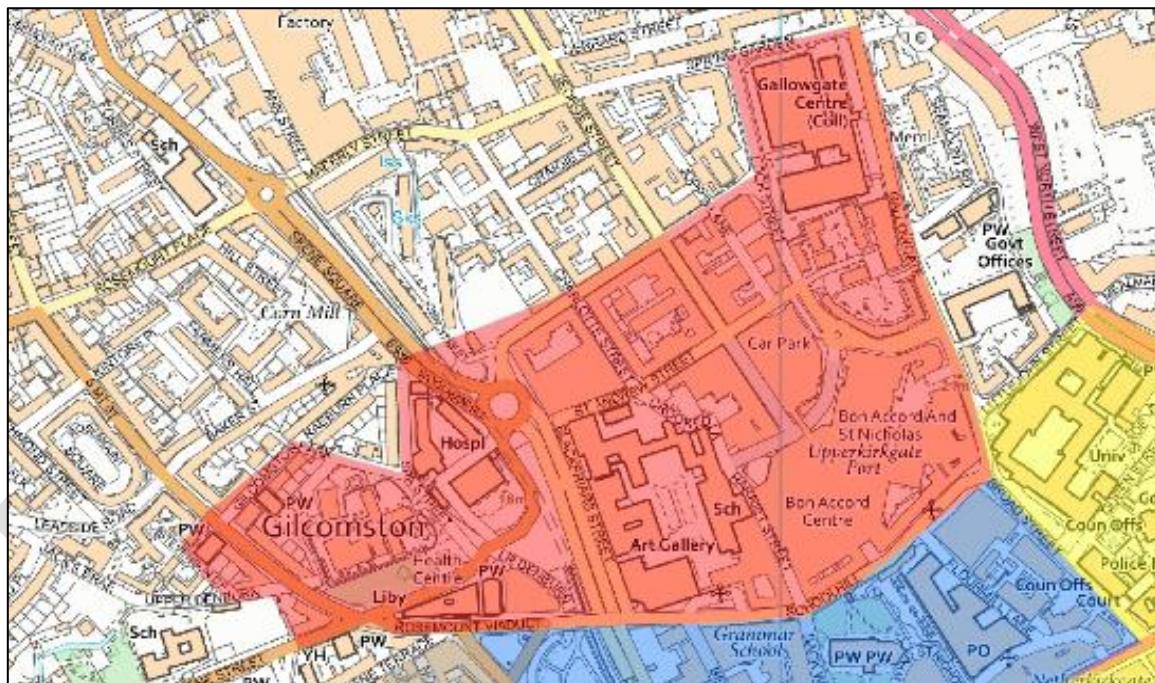
Figure D1 – SUMP Zones



## D1.1 Zone 1

Zone 1 sits at the northern extent of the CCMP area, bounded to the north by Spring Garden / John Street / Woolmanhill, by Gallowgate and Broad Street to the east, Union Street to the south and Rosemount to the west.

Figure D2 – SUMP Zone 1



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Table D1 summarises existing conditions on each of the key movement links within the zone, any proposed changes and further options for improvement.

### D1.1.1 Zone 1 Corridor Assessment and Option Generation

Table D1 - Zone 1 Corridor Assessment and Options

Link		Current walking conditions	Current cycling conditions	Current public transport conditions	Current commitments, or CCMP/Roads Hierarchy proposals	Options
1	Rosemount Viaduct	<p>Footways on both sides of the carriageway, although cracked and uneven in places; pedestrian crossing provision at key intervals.</p>	<p>Forms part of National Cycle Network Route 1 (NCN1).</p> <p>On-road provision, consisting of Advanced Stop Lines (ASLs) on the approach to junctions and a small section of (faded) advisory cycle lane on the westbound approach to the Union Terrace junction.</p> <p>Between Woolmanhill and Schoolhill, the speed limit is 20mph. Beyond Woolmnhill, this increases to 30mph.</p> <p>West of Woolmanhill, there is car parking on both sides of the carriageway.</p> <p>Cycle parking is available outside the Central Library.</p>	<p>Currently a public transport route but no formal provision.</p>	<p>The CCMP envisages segregated two-way cyce lanes on Rosemount Viaduct.</p> <p>The Roads Hierarchy Study recommends downgrading the B983, which includes a section of Rosemount Viaduct (Skene Street to Union Terrace), as a local tertiary route (C-road).</p>	<p>Option 1 - Do Nothing</p> <p>Option 2 – Resurface footways</p> <p>Option 3 - Improve on-road cycle provision</p> <p>Option 4 - Improve off-road cycle provision (shared use)</p> <p>Option 5 – Improve off-road cycle provision (segregation) as per the CCMP</p> <p>Option 6 - Reduce the speed limit west of Woolmanhill</p> <p>Option 7 – Introduce bus priority</p> <p>Option 8 – Make this a bus and cycle only road</p>

						Option 9 - Introduce one-way traffic restriction
<b>2</b>	Schoolhill	Footways on both sides of the carriageway and pedestrian crossings at key intervals.	NCN1 but no formal cycle provision. 20mph speed limit.  Cycle parking is available outside Robert Gordons College and at the Belmont Street junction.	Currently a public transport route but no formal provision.	The CCMP recommends segregated cycle lanes on Schoolhill.  A CCMP project is underway to deliver public realm improvements, encompassing improvement and expansion of the footway around the Art Gallery and Cowdray Hall and a reduced carriageway width that maintains a two-way traffic flow while reducing vehicular speeds and flow.  With the incremental delivery of CCMP projects, traffic should drop substantially at this location in the future.	Option 1 – Do Nothing  Option 2 - Improve on-road cycle provision  Option 3 - Improve off-road cycle provision (shared use)  Option 4 – Improve off-road cycle provision (segregation)  Option 5 – Make Schoolhill a bus and cycle-only road  Option 6 – Make Schoolhill a bus, cycle and access only road  Option 7 - Introduce one-way traffic restriction
<b>3</b>	Upperkirkgate	Footways on both sides of the carriageway.	NCN1 but no formal cycling provision. 20mph speed limit.	Currently a public transport route but no formal provision.	The CCMP proposes the removal of all traffic from the central area of Upperkirkgate, with Back Wynd to Flourmill Lane proposed as	Option 1 – Do Nothing  Option 2- Pedestrian and cycle improvements as per CCMP proposals

					pedestrian and cycle only, and segregated 2-way cycle lanes between Flourmill Lane and Broad Street.	Option 3 - Improve on-road cycle provision  Option 4 – Improve off-road cycle provision (shared use)  Option 5 - Improve off-road cycle provision (segregation)  Option 6 – Make Upperkirkgate a bus and cycle-only road  Option 7 – Make Upperkirkgate a bus, cycle and access only road  Option 7 - Introduce one-way traffic restriction
4	Skene Street (Summer Street to Woolmanhill)	Footways on both sides of the carriageway, although cracked and uneven in places.  Crossing provision at Rosemount Viaduct junction.	No formal cycling provision, other than an ASL on the approach to Rosemount Viaduct.  Car parking on both sides of the carriageway.  30mph speed limit.	Currently not a public transport route.	The Roads Hierarchy Study identifies an option to upgrade the B9119 (which includes Skene Street) to a priority route (A-road), meaning it should be considered for bus priority and/or segregated cycle facilities.	Option 1 – Do Nothing  Option 2 – Resurface footways  Option 3 - Improve on-road cycle provision  Option 4 - Improve off-road cycle provision (shared use)  Option 5 – Improve off-road cycle

						provision (segregation)
5	St. Andrew Street	<p>Footway on both sides of the carriageway, although cracked and uneven in places, with crossing provision at junctions.</p>	<p>No formal cycling provision other than ASLs on approach to junctions.</p> <p>George Street to Loch Street is one-way traffic only with a contraflow bus lane.</p> <p>20mph speed limit between Blackfriars Street and Charlotte Street. 30mph limit from Charlotte Street to Loch Street.</p>	<p>Currently a public transport route with contraflow bus lane (operational 24/7) between George Street and Loch Street.</p>	<p>The CCMP proposes that Loch Street to Charlotte Street becomes bus, cycle, taxi and local access only.</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 – Resurface footways</p> <p>Option 3 - Deliver CCMP proposals</p> <p>Option 4 - Improve on-road cycle provision</p> <p>Option 5 - Improve off-road cycle provision (shared use)</p> <p>Option 6 – Improve off-road cycle provision (segregation)</p> <p>Option 7 – Reduce speed limit between Charlotte Street and Loch Street</p> <p>Option 8 – Make a bus and cycle-only road</p> <p>Option 9 – Extend one-way traffic restrictions</p>

						Option 10 – Exempt cyclists from access and one-way restrictions
6	John Street (North St. Andrew Street to Loch Street)	<p>Footways on both sides of the carriageway, although cracked and uneven in places, with crossing provision at junctions.</p>	<p>No formal cycling provision other than some faded ASLs.</p> <p>One-way traffic only between Charlotte Street and Loch Street (eastbound).</p> <p>There is car parking on both sides of the carriageway between George Street and Loch Street.</p> <p>30mph speed limit.</p> <p>Cycle parking available at the John Street / George Street junction.</p>	<p>Currently a public transport route but no formal provision.</p>	<p>The CCMP proposes John Street becomes bus, cycle, taxi and local access only.</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 – Resurface footways</p> <p>Option 3 - Improve on-road cycle provision</p> <p>Option 4 - Improve off-road cycle provision (shared use)</p> <p>Option 5 – Improve off-road cycle provision (segregation)</p> <p>Option 6 – Reduce speed limit</p> <p>Option 7 – Make a bus and cycle-only road</p> <p>Option 8 - Make a bus, cycle and access only road, as per CCMP proposal</p> <p>Option 9 – Extend one-way traffic restrictions</p>

						Option 10 - Exempt cyclists from access and one-way restrictions
7	Woolmanhill	<p>Footways on both sides of the carriageway, although cracked and uneven in places.</p> <p>Crossing provision at the roundabout and at Rosemount Viaduct junction, with a pedestrian refuge island between the Denburn car park and the theatre.</p>	<p>No formal cycling provision other than minor sections of on-road priority at junctions and narrowings and an ASL on the approach to Rosemount Viaduct junction.</p> <p>30mph speed limit.</p>	<p>Currently a public transport route north of the Denburn / Woolmanhill roundabout but no formal provision.</p>	<p>The CCMP proposes the redevelopment of the hospital site for residential development with opportunities for enhanced permeability for pedestrians and cyclists.</p> <p>The previous SUMP developed to accompany the CCMP recommended removal of the roundabout.</p> <p>The Roads Hierarchy Study identifies options to upgrade the B9119 and B986 (which includes Woolmanhill) to a priority route (A-road), meaning it should be considered for bus priority and/or segregated cycle facilities.</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 – Resurface footways</p> <p>Option 3 - Improve on-road cycle provision</p> <p>Option 4 - Improve off-road cycle provision (shared use)</p> <p>Option 5 – Improve off-road cycle provision (segregation)</p> <p>Option 6 – Reduce the speed limit</p> <p>Option 7 – Public transport priority measures on relevant sections</p> <p>Option 8 – Make a bus and cycle-only road</p> <p>Option 9 – Make a bus, cycle and access only road</p>

						<p>Option 10 – Introduce one-way traffic restrictions</p> <p>Option 11 – Signalise roundabout</p> <p>Option 12 – Replacement of the roundabout with traffic signals</p>
<b>8</b>	Denburn Road (Woolmanhill to Rosemount Viaduct)	No pedestrian provision.	Busy dual carriageway with no cycle provision. 30mph speed limit.	Currently a public transport route but no formal provision.	<p>None proposed.</p> <p>Traffic modelling suggests that Denburn Road will remain a busy road, and could become even busier in the medium term, as the CCMP is delivered.</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 – Install pedestrian footways</p> <p>Option 3 - Improve on-road cycle provision</p> <p>Option 4 - Improve off-road cycle provision (shared use)</p> <p>Option 5 – Improve off-road cycle provision (segregation)</p> <p>Option 6 – Reduce the speed limit</p> <p>Option 7 – Public transport priority measures</p> <p>Option 8 – Make a bus and cycle-only road</p>

						Option 9 - Make a bus, cycle and local access only road  Option 10 – Remove traffic lanes to give priority to sustainable modes of transport
<b>9</b>	Blackfriars Street	Footway on one side of the carriageway only. Although of sufficient width, this is cracked and uneven places.  Crossing provision at Schoolhill junction.	No formal cycling provision other than an ASL on approach to Schoolhill.  20mph speed limit.	Currently a public transport route but no formal provision.	The CCMP proposes segregated 2-way cycle lanes (with 1-way traffic proposed by previous SUMP).	Option 1 – Do Nothing  Option 2 – Resurface footway  Option 3 - Improve on-road cycle provision  Option 4 - Improve off-road cycle provision (shared use)  Option 5 – Improve off-road cycle provision (segregation) as per CCMP  Option 6 – Introduce one-way traffic restriction  Option 7 - Make a bus and cycle-only road

						Option 8 - Make a bus, cycle and local access only road
<b>11</b>	Charlotte Street (John Street to St. Andrew Street)	Footways on both sides of the carriageway, although cracked and uneven in places.	No formal cycling provision.  Cobbled surface north of John Street.  Car parking on the northbound side of the carriageway (John Street to St. Andrew Street) and on both sides between John Street and Maberly Street.  30mph speed limit.	Currently a public transport route (John Street to St. Andrew Street) with a contraflow bus lane (northbound).	None proposed.	Option 1 – Do Nothing  Option 2 - Resurface footways  Option 3 - Improve on-road cycle provision  Option 4 - Improve off-road cycle provision (shared use)  Option 5 – Improve off-road cycle provision (segregation)  Option 6 – Reduce the speed limit  Option 7 – Make a bus and cycle only street  Option 8 – Make a bus, cycle and local access only street  Option 9 – Exempt cyclists from one-way and access restrictions

						Option 10 – Extend one-way traffic restrictions
11	Crooked Lane / Harriet Street	Footways on both sides of the carriageway, although narrow.	Narrow, constrained road with no formal cycling provision.  Traffic restricted to one-way only eastbound.  20mph speed limit.	Currently not suitable as a public transport route.	None proposed.	Option 1 – Do Nothing  Option 2- Improve on-road cycle provision  Option 3 - Improve off-road cycle provision (shared use)  Option 4 – Improve off-road cycle provision (segregation)  Option 5 – Make this road cycle and access only  Option 6 – Exempt cyclists from one-way and access restrictions
12	Loch Street	Footways on both sides of the carriageway, although cracked and uneven in places, with crossing provision at junctions.	No formal cycling provision.  Car parking outside the college.  30mph speed limit.  Cycle parking available across from the college.	Currently not a public transport route.	None proposed.	Option 1 – Do Nothing  Option 2 - Resurface footways  Option 3 - Improve on-road cycle provision  Option 4 - Improve off-road cycle provision (shared use)

						<p>Option 5 – Improve off-road cycle provision (segregation)</p> <p>Option 6 – Reduce speed limit</p> <p>Option 7 – Make the road bus, cycle and local access only</p> <p>Option 8 – Introduce one-way traffic restriction</p> <p>Option 9 – Signalise roundabout</p> <p>Option 10 - Replace roundabout with traffic signals</p>
13	Berry Street	Footways on both sides of the carriageway, although cracked and uneven in places, with crossing provision at the Gallowgate junction and a refuge island on the approach to the roundabout.	No formal cycling provision.  Dual carriageway arrangement.  30mph speed limit.  Cycle parking outside the Regus building.	Currently a public transport route but no formal provision.	None proposed.	<p>Option 1 – Do Nothing</p> <p>Option 2 - Resurface footways</p> <p>Option 3 - Improve on-road cycle provision</p> <p>Option 4 - Improve off-road cycle provision (shared use)</p> <p>Option 5 – Improve off-road cycle</p>

						provision (segregation)
						Option 6 – Reduce the speed limit
14	Gallowgate	Footways on both sides of the carriageway, although cracked and uneven in places, with crossing provision at intervals.	NCN1, although little formal cycling provision other than an advisory cycle lane northbound between Gallowgate car park and the college and some ASLs, all of which are in need of refurbishment.  30mph zone.  Cycle parking available at the Gallowgate car park.	Currently a public transport route but no formal provision.	The CCMP proposes that Berry Street to Mounthooly becomes bus, cycle, taxi and local access only.  The previous SUMP proposed an on-street cycle lane on the northbound approach to Mounthooly, with a contraflow bus lane in the opposite direction and a bus gate on the northbound approach to Powis Place.	Option 1 – Do Nothing  Option 2 - Resurface footways  Option 3 – Deliver CCMP proposals  Option 4 - Improve on-road cycle provision  Option 5 - Improve off-road cycle provision (shared use)

					While traffic modelling in support of the CCMP indicates that, in a reference case scenario, traffic levels on Gallowgate are such that physical segregation would be desirable, these should fall substantially with the delivery of CCMP projects such that a shared carriageway arrangement could ultimately become acceptable.	Option 6 – Improve off-road cycle provision (segregation)  Option 7 – Reduce the speed limit  Option 8 – Introduce bus priority  Option 9 – Introduce one-way traffic restriction  Option 10 – Make the entire road bus, cycle and local access only
15	George Street (south of John Street)	<p>St. Andrew Street to the Bon Accord St. Nicholas shopping centre is a pedestrian priority zone with access for motor traffic restricted.</p> <p>Footways are not of a particularly high standard but pedestrians can normally wander fairly freely throughout the area.</p> <p>North of this, footways and crossing points are present throughout the</p>	<p>No formal cycling provision other than an ASL on the southbound approach to the pedestrian zone.</p> <p>St. Andrew Street to the Bon Accord St. Nicholas shopping centre is a pedestrian priority zone, with access for motor traffic restricted.</p> <p>Beyond this, there is car parking on the east side of the carriageway and a speed limit of 30mph.</p>	<p>Currently a public transport route but no formal provision.</p>	<p>The CCMP proposes that George Street between St. Andrew Street and Craigie Street becomes bus, cycle, taxi and local access only.</p> <p>The previous SUMP proposed a relocation of parking to neighbouring streets (Charlotte Street, John Street and Loch Street) and the implementation of cycle, bus and taxi only restriction on the southern approach to the Bon Accord St.</p>	Option 1 – Do Nothing  Option 2 – Deliver CCMP proposals  Option 3 - Improve on-road cycle provision north of St. Andrew Street  Option 4 - Improve off-road cycle provision (shared use) north of St. Andrew Street  Option 5 – Improve off-road cycle provision (segregation) north of St. Andrew Street

		corridor and are of good quality.		Nicholas shopping centre.	<p>Option 6 – Exempt cyclists from vehicle access restrictions</p> <p>Option 7 - Reduce the speed limit north of St. Andrew Street</p> <p>Option 8 – Public transport priority measures north of St. Andrew Street</p> <p>Option 9 – Make the carriageway north of St. Andrew Street a bus and cycle only link</p> <p>Option 10 – Introduce one-way traffic restrictions north of St. Andrew Street</p>
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## D1.1.2 Zone 1 Option Appraisal and Recommendations

### Rosemount Viaduct

Table D2 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	1	17
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	0	1	1	-1	9
5 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	1	25
6 - Reduce the speed limit west of Woolmanhill	2	2	1	1	2	0	0	0	0	3	1	2	0	2	0	2	2	0	20
7 - Introduce bus priority	2	1	1	2	0	3	1	0	0	3	2	0	2	2	2	1	1	0	23
8 - Make this a bus and cycle only road	2	1	2	-1	2	3	0	0	0	2	2	1	1	1	0	1	2	-1	18
9 - Introduce one-way traffic restriction	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	1	2	-1	1

Table D3 – Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	x
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Positive impacts on most of the objectives and STAG criteria, although option 5 (segregated cycle facilities) scores higher. Should be pursued if option 5 proves undeliverable.	✓
4	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	x
5	Strongest-performing option, therefore should be subject to further investigation. May be an expensive option however.	✓
6	Strong-performing option with positive impacts on most of the objectives and STAG criteria.	✓
7	Strong-performing option with positive impacts on most of the objectives and STAG criteria. However, may conflict with options to improve cycle facilities and there is little evidence of buses being delayed at this location in any case so may be little merit in pursuing at this time.	x
8	Likely to have negative implications on the accessibility criteria by removing the ability to 'pick up' and 'drop off' at key destinations such as His Majesty's Theatre and the Central Library.	x

9	Minimal impact on TPOs or STAG criteria. Likely to have negative impacts on public transport movements and to meet resistance from members of the public.	x
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Recommendations for Rosemount Viaduct are therefore to:

- Resurface footways;
- Reduce the speed limit west of Woolmanhill; and
- Investigate the optimum level of cycle provision in the context of the delivery of CCMP projects on Schoolhill and Gallowgate to ensure coherent provision through this corridor.

### Schoolhill

Table D4 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	3	3	0	3	
2- Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	1	
3 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	1	1	-1	
4 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-1	-1	1	
5 - Make Schoolhill a bus and cycle-only road	2	-1	2	-1	2	3	0	0	0	2	2	1	1	1	0	1	2	-3	
6 - Make Schoolhill a bus, cycle and access only road	2	2	1	1	1	1	1	0	0	2	2	1	1	2	0	2	2	-1	
7 - Introduce one-way traffic restriction	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	1	2	-1	-1	

Table D5 – Appraisal Summary and Recommendations

Option Appraisal Summary															Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.															x
2 Positive impacts on most of the objectives and STAG criteria, although option 4 (segregated cycle facilities) and option 6 (making the road bus, cycle and local access only) score higher.															✓
3 Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.															x
4 Strong-performing option, therefore should be subject to further feasibility. May be an expensive option. There is also a risk that formal provision of this nature proves unnecessary should the delivery of future CCMP proposals cause traffic levels to drop substantially at this location.															✓
5 Negative impacts anticipated against accessibility and acceptability criteria.															x

6	Strong-performing option against the majority of criteria, although may not be popular with members of the public.	✓
7	Poor performing option with few discernible benefits.	✗

Recommendations for Schoolhill are therefore to:

- Make the space bus, cycle and local access only; and
- Investigate optimum level of cycle provision in the context of the delivery of CCMP projects on Schoolhill and Upperkirkgate.

### Upperkirkgate

Table D6 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	3	3	0	3
2- Pedestrian and cycle improvements as per CCMP proposals	0	-1	2	-1	3	0	1	0	0	3	2	3	2	1	0	2	-1	-1	15
3- Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	1	17
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	0	1	1	-2	8
5- Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	-1	23
6 - Make Upperkirkgate bus and cycle-only road	2	-1	2	-1	2	3	0	0	0	2	2	1	1	1	0	1	2	-3	14
7 - Make Upperkirkgate bus, cycle and access only	2	2	1	1	1	1	0	0	0	2	2	1	1	2	0	1	2	-1	19
8 - Introduce one-way traffic restriction	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	1	2	-1	-1

Table D7 – Appraisal Summary and Recommendations

Option Appraisal Summary													Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.													✗
2 May have negative impacts on local businesses if suitable provision not made for access and deliveries. Likely to have negative impacts on the acceptability and accessibility criteria. May be an expensive option.													✗
3 Positive impacts on most of the objectives and STAG criteria, although options 5 (segregated cycle facilities) and 7 (making a bus, cycle and local access only road) score higher.													✓
4 Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.													✗
5 Strong-performing option, therefore should be subject to further feasibility. May be an expensive option however, while there is a risk that formal provision of this nature proves unnecessary should the delivery of future CCMP proposals cause traffic levels to drop substantially at this location.													✓

6	May have negative impacts on local businesses if suitable provision not made for access and deliveries. Negative impacts anticipated against accessibility and acceptability criteria.	x
7	Strong-performing option against the majority of the criteria, although may not be popular with members of the public.	✓
8	Poor performing option.	x

Recommendations for Upperkirkgate are therefore to:

- Make the space bus, cycle and local access only;
- Investigate optimum level of cycle provision in the context of the delivery of CCMP projects on Schoolhill and Upperkirkgate.

#### Skene Street (Summer Street to Woolmanhill)

Table D8 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2- Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3- Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	-1	15
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	1	1	1	-1	10
5 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	-1	23
6 - Introduce one-way traffic restriction.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	-1	2

Table D9 – Appraisal Summary and Recommendations

Option Appraisal Summary															Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.															x
2 Positive impacts on most of the objectives and STAG criteria.															✓
3 Positive impacts on most of the objectives and STAG criteria (other than acceptability, given the removal of car parking this could necessitate), although option 5 (segregated cycle facilities) scores higher. Should be pursued if option 5 proves undeliverable.															✓
4 Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.															x
5 Strong-performing option, therefore should be subject to further investigation. May be an expensive option however, and unpopular with the public as likely to necessitate the removal of car parking.															✓
6 Poor-performing option that may not be popular with members of the public.															x

Recommendations for Skene Street are therefore to:

- Resurface the footways; and
- Investigate the feasibility of segregated cycle facilities; if not feasible, implement mandatory on-road cycle lanes.

### St. Andrew Street

Table D10 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2- Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3- Deliver CCMP proposals	2	2	1	1	1	1	1	0	0	3	1	1	1	1	0	1	2	-1	18
4- Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	1	17
5 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	0	1	1	-1	9
6 – Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	1	2	0	-1	1	23
7 – Reduce speed limit between Charlotte Street and Loch Street	2	2	1	1	2	0	0	0	0	3	1	2	0	2	0	2	2	1	21
8 – Make a bus and cycle-only road	2	-1	2	-1	2	3	0	0	0	2	2	1	1	1	0	2	2	-1	17
9 – Extend one-way traffic restrictions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	3
10 – Exempt cyclists from access and one-way restrictions	1	0	0	1	0	0	1	0	0	1	1	0	1	1	1	3	3	1	15

Table D11 – Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Positive impacts on most of the TPOs and STAG criteria. May not be universally popular with the public, however.	✓
4	Positive impacts on most of the objectives and STAG criteria, although options 3 (a bus, cycle and local access only) road and 6 (segregated cycle facilities) score higher overall.	✗
5	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	✗
6	Strong-performing option, although may be expensive to implement and difficult to deliver while maintaining existing level of bus priority.	✗
7	Strong-performing option with positive impacts on most of the objectives and STAG criteria.	✓
8	May have negative impacts on local businesses if suitable provision not made for access and deliveries. Negative impacts anticipated against accessibility and acceptability criteria.	✗

9	Poor-performing option with minimal impacts on the TPOs and STAG criteria.	x
10	Positive impacts on most of the objectives and STAG criteria.	✓

Recommendations for St. Andrew Street are therefore to:

- Resurface the footways;
- Deliver CCMP project to make a walking, cycling and bus priority space (local access only for general traffic) between Loch Street and Charlotte Street. Determine optimal level of infrastructure west of Charlotte Street in the context of CCMP delivery;
- Reduce the speed limit between Charlotte Street and Loch Street; and
- Exempt cyclists from one-way traffic restriction and allow cyclists to access to the bus lane.

#### John Street (North St. Andrew Street to Loch Street)

Table D12 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2- Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3- Improve on-road cycle provision	1	1	1	-1	1	0	1	0	0	1	1	1	1	1	1	2	2	-1	13
4- Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	0	1	1	-1	9
5- Improve off-road cycle provision (segregation)	2	1	2	-1	2	0	1	0	0	3	2	3	2	2	-1	1	-1	-1	17
6 - Reduce the speed limit	2	2	1	1	2	0	0	0	0	3	1	2	0	2	0	2	2	1	21
7 - Make a bus and cycle-only road.	2	-1	2	-1	2	3	0	0	0	2	2	1	1	1	-1	-3	2	-3	9
8 - Make a bus, cycle and access only road, as per CCMP proposal	2	2	1	1	1	1	1	0	0	3	2	1	1	2	0	2	2	-1	21
9 - Extend one-way traffic restrictions	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	1	2	0	2
10 - Exempt cyclists from access and one-way restrictions	0	0	0	0	0	0	1	0	0	1	1	-1	1	1	1	3	3	0	11

Table D13 – Appraisal Summary and Recommendations

Option Appraisal Summary															Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.															x
2 Positive impacts on most of the objectives and STAG criteria.															✓
3 Positive impacts on most of the objectives and STAG criteria, although may negatively impact on accessibility criteria given the loss of on-street car parking spaces (including residential parking) that this would require. Feasibility of delivering a bi-directional route without impacting the street's viability as a bus route also questionable. Scores lower than alternative options that also benefit cyclists (5 and 8).															x

4	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	x
5	Strong-performing option, although may be expensive, and may negatively impact on accessibility criteria given the loss of on-street car parking spaces (including residential parking) that this would require. Feasibility of delivering a bi-directional route without impacting the street's viability as a bus route also questionable.	x
6	Strong-performing option against a number of TPOs and STAG criteria.	✓
7	May have negative impacts on local businesses if suitable provision not made for access and deliveries. Negative impacts anticipated against accessibility and acceptability criteria.	x
8	Positive impacts on most of the TPOs and STAG criteria. May not be universally popular with the public, however.	✓
9	Poor performing option with negative implications on bus operations.	x
10	Not recommended for progression as a standalone option as a result of safety concerns.	x

Recommendations for John Street are therefore to:

- Resurface the footways;
- Make the space bus, cycle and local access only;
- Reduce the speed limit.

#### Woolmanhill

Table D14 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2- Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3- Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	1	17
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	1	1	1	0	11
5 – Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	1	2	3	2	2	2	1	-1	1	23
6 - Reduce the speed limit	2	2	1	1	2	-1	0	0	0	2	1	2	0	2	2	2	0	0	18
7- Public transport priority measures on relevant sections.	2	1	1	2	0	3	1	0	0	-1	2	0	2	2	2	1	-1	19	
8 - Make a bus and cycle-only road.	2	-1	2	-1	2	3	0	0	0	-3	2	1	1	1	0	-2	2	-3	6
9 - Make a bus, cycle and access only road	2	2	1	1	1	1	1	0	0	-3	2	1	1	2	0	2	2	-1	15
10 – Introduce one-way traffic restrictions on single carriageway section	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	-1	2
11 – Signalise roundabout	0	0	0	0	0	0	0	0	0	1	0	1	1	1	-1	0	0	4	
12 - Replacement of the roundabout with traffic signals	1	0	0	1	1	0	0	0	0	-1	2	0	1	1	2	-2	0	7	

Table D15 – Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Positive impacts on most of the objectives and STAG criteria, although option 5 (segregated cycle facilities) scores higher so would be preferable although this option could be pursued if option 5 proves undeliverable. May conflict with Option 7.	✓
4	Poorest-performing of the cycle options, with shared use provision generally unfavourable in the city centre.	✗
5	Strong-performing option, although could be expensive. May conflict with Option 7 and may be incompatible with Berryden corridor proposals.	✓
6	Generally performs well (or at least neutrally) against the TPOs and STAG criteria. Could slow down buses using this corridor although overall impact likely to be negligible.	✓
7	Generally performs well against the TPOs and STAG criteria. May be in contradiction with Berryden corridor proposals however and unlikely to be popular with members of the public. May conflict with options to improve cycle permeability.	✓
8	May have negative impacts on businesses if suitable provision not made for access and deliveries. Will have negative impacts on accessibility and acceptability by restricting access to Denburn car park.	✗
9	Generally performs well against the TPOs and STAG criteria but likely to be in conflict with Berryden corridor proposals and to be unpopular with members of the public.	✗
10	Feasible and affordable but minimal impact on TPOs or STAG criteria.	✗
11	Poor performing option overall.	✗
12	Will have safety benefits for cyclists but may have negative environmental implications resulting from the loss of green space and likely to be an expensive option.	✓

When considering Woolmanhill, it is apparent that options to improve cycling provision may conflict with options to improve public transport provision. In accordance with the street user hierarchy, therefore, which prioritises active travel over vehicular transport, it is recommended that active travel options are prioritised in the first instance. Recommendations for Woolmanhill are therefore, to:

- Resurface the footways;
- Reduce the speed limit;
- Implement cycle provision, preferably segregated facilities but, if this proves unfeasible, mandatory on-road cycle lanes;
- Recognising that the roundabout could be a barrier to active travel, while serving an important greenspace function, undertake a full option appraisal for improving the cycle experience at this roundabout; and

- Should public transport journey times be a concern at this location even with planned improvements (AWPR, Berryden Corridor), look at options for implementing public transport priority measures at a suitable point in the future.

#### Denburn Road (Woolmanhill to Rosemount Viaduct)

Table D16 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Install pedestrian footways	1	1	0	1	1	0	1	0	0	1	1	2	1	1	2	-2	-2	0	9
3- Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	-1	1	1	1	0	2	0	12
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	1	-2	-2	-1	4
5 – Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-2	-1	0	21
6 - Reduce the speed limit	2	2	1	1	2	-1	0	0	0	3	1	2	0	2	0	2	2	0	19
7 – Public transport priority measures	2	1	1	2	0	3	1	0	0	3	2	0	2	2	2	-2	1	-2	18
8 – Make a bus and cycle-only road	2	0	2	-1	2	3	0	0	0	2	2	1	1	1	0	-3	2	-2	12
9 - Make a bus, cycle and local access only road	2	2	1	1	1	1	0	0	2	2	1	1	2	0	-2	2	-2	15	
10 – Remove traffic lanes to give priority to sustainable modes of transport	1	1	2	1	2	2	0	0	0	1	1	2	1	1	1	-3	2	-2	13

Table D17 – Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Meets a number of objectives and STAG criteria but likely to be unfeasible and unaffordable without relocation of carriageway space which may not be feasible or acceptable if this has to remain a key road transport corridor to facilitate the delivery of other measures to achieve CCMP outcomes.	✗
3	Positive impacts on most of the objectives and STAG criteria. There are concerns over the safety of on-road cycling, however, given that traffic levels are likely to remain high at this location (and may even increase) as the CCMP is delivered.	✗
4	Poor performing option that will be undeliverable without relocation of carriageway space (see option 2) and unlikely to be publicly acceptable.	✗
5	Strong-performing option, although may be expensive and unfeasible if this must remain a key road transport corridor to facilitate delivery of the CCMP. Can be sifted out on the basis of availability of alternative quieter routes.	✗
6	Strong-performing option. May negatively impact on public transport journey times but overall impact likely to be negligible.	✓
7	Strong-performing option, although concerns over the feasibility and public acceptability if this is to remain a key road transport corridor to facilitate the delivery of the CCMP.	✗

8	Unlikely to be feasible or acceptable if this is to remain a key road transport corridor to facilitate delivery of the CCMP.	x
9	Unlikely to be feasible or acceptable if this is to remain a key road transport corridor to facilitate delivery of the CCMP.	x
10	Unlikely to be feasible or acceptable if this is to remain a key road transport corridor to facilitate delivery of the CCMP.	x

The recommendation for Denburn Road is therefore to reduce the speed limit.

### Blackfriars Street

Table D18 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	3	3	0	3
2- Resurface footway	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3- Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	-1	1	1	1	1	1	2	2	1	15
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	1	2	1	0	12
5 - Improve off-road cycle provision (segregation) as per CCMP proposal	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	-1	23
6- Introduce one-way traffic restrictions.	0	0	0	0	0	-1	0	0	0	2	0	0	0	0	0	1	2	-1	3
7- Make a bus and cycle-only road.	2	1	2	-1	2	3	0	0	0	1	2	2	1	1	1	-1	3	-1	18
8 - Make a bus, cycle and local access only road	2	2	1	1	1	1	1	0	0	2	2	1	1	2	0	2	2	-1	20

Table D19 – Appraisal Summary and Recommendations

Option Appraisal Summary											Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts the CCMP.											x
2 Positive impacts on most of the objectives and STAG criteria.											✓
3 Positive impacts on most of the objectives and STAG criteria, although other options to improve cycle conditions (5 and 8) score higher. Should be pursued if these prove undeliverable.											✓
4 Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.											x
5 Strong-performing option, although it is unlikely that traffic volumes and speeds would be significant enough to justify this level of intervention, especially given proposals at either end of the corridor. May negatively impact on ability for two-way bus flow.											✓
6 Poor-performing option in its own right, with potentially negative impacts on public transport services, but may form an element of option 5.											x

7	Potentially negative impacts on the acceptability and accessibility criteria, although there are no direct frontages onto Blackfriars Street. May have to remain open to wider traffic to wider CCMP aspirations	x
8	Strong-performing option, although requires consideration in the context of wider CCMP and Roads Hierarchy proposals.	✓

The recommendations for Blackfriars Street are therefore to:

- Resurface the footway; and
- Determine the optimum cycle infrastructure for Blackfriars Street in the context of CCMP delivery.

#### Charlotte Street (John Street to St. Andrew Street)

Table D20 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Improve on-road cycle provision	1	1	1	-1	1	0	1	0	0	1	1	1	1	1	1	2	2	-1	13
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	1	1	1	-1	10
5 - Improve off-road cycle provision (segregation)	2	1	2	-1	2	0	1	0	0	3	2	3	2	2	-1	1	-1	-1	17
6 - Reduce the speed limit	2	2	1	1	2	0	0	0	0	3	1	2	0	2	0	2	2	1	21
7 - Make a bus and cycle only street	2	1	2	-1	2	3	0	0	0	-1	2	1	1	1	0	-3	2	-3	9
8 - Make a bus, cycle and local access only street	2	2	1	1	1	1	1	0	0	-1	2	1	1	2	0	2	2	-1	17
9 - Exempt cyclists from one-way and access restrictions	1	0	0	1	0	0	1	0	0	1	1	0	1	1	1	3	3	0	14
10 - Extend one-way traffic restrictions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	-1	5

Table D21 – Appraisal Summary and Recommendations

Option Appraisal Summary														Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.														x
2 Positive impacts on most of the objectives and STAG criteria.														✓
3 Positive impacts on most of the objectives and STAG criteria, although may negatively impact on accessibility criteria given the loss of on-street car parking spaces (including residential parking) that this would require. Scores lower than other options that will benefit cycling (5 and 8) but should be retained in case these options prove unfeasible.														✓
4 Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.														x

5	Positive impacts on most of the objectives and STAG criteria, although may negatively impact on accessibility criteria given the loss of on-street car parking spaces (including residential parking) that this would require. Scores less than Option 8 which would also benefit cyclists, while it is questionable whether traffic speeds and volumes would justify this level of intervention in any case.	x
6	High-performing option with no negative impacts noted.	✓
7	Unlikely to be feasible, given the number of residential properties and the need to maintain a degree of on-street car parking for residents.	x
8	High-performing option although contradicts CCMP.	x
9	Generally positive or neutral impacts against all criteria.	✓
10	Feasible and affordable but no obvious benefits.	x

The recommendations for Charlotte Street are therefore to:

- Resurface the footways;
- Reduce the speed limit; and
- Permit cyclists to use the bus lane.

#### Crooked Lane / Harriet Street

Table D22 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2- Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	-1	2	1	14
3 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	-2	1	-2	4
4 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-3	-1	0	20
5 - Make this road pedestrian, cycle and access only	2	2	1	1	2	0	1	0	0	2	1	1	1	1	1	3	2	0	21
6 - Exempt cyclists from one-way and access restrictions	1	0	0	0	0	0	1	0	0	1	1	-1	1	1	1	3	3	0	12

Table D23 – Appraisal Summary and Recommendations

Option Appraisal Summary																	Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.																	x
2 Performs well against most objectives and the STAG criteria but the carriageway width is likely to preclude the implementation of fit-for-purpose cycle lanes.																	x

3	Poor-performing option; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	x
4	Although a high-performing option, unlikely to be feasible given the width of the carriageway.	x
5	High-performing option against a range of objectives and criteria	✓
6	Not recommended on safety grounds due to constrained widths	x

The recommendation for Crooked Lane / Harriet Street is therefore to:

- Make the space cycle and local access only.

### Loch Street

Table D24 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2- Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3- Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	0	16
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	1	1	1	-1	10
5 – Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	-1	23
6 - Reduce the speed limit	2	2	1	1	2	0	0	0	0	3	1	2	0	2	0	2	2	1	21
7 – Make the road bus, cycle and local access only	2	2	1	1	1	1	1	0	0	2	2	1	1	2	0	3	2	-1	21
8 - Introduce one-way traffic restriction	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	1	2	-1	1
9 - Signalise roundabout	0	0	0	0	0	0	0	0	2	0	1	0	1	1	1	-1	0	5	
10 – Replace roundabout with traffic signals	1	0	0	1	1	0	0	0	0	2	0	2	0	1	1	2	-2	0	9

Table D25 – Appraisal Summary and Recommendations

Option Appraisal Summary													Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.													x
2 Positive impacts on most of the objectives and STAG criteria.													✓
3 Positive or neutral impacts against all objectives and criteria, although other options for cyclists (5 and 7) anticipated to have wider benefits. Could be pursued if these options prove unfeasible.													✓
4 Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.													x
5 Strong-performing option, although may be expensive to deliver. Likely to necessitate the removal of on-street car parking which could be unpopular.													✓

6	High-performing option with positive impacts across a range of criteria.	✓
7	High-performing option with positive impacts across a range of criteria, although may be unpopular with the public. Could be pursued if segregated cycle facilities prove unfeasible.	✓
8	Feasible and affordable but otherwise a poor performing option.	✗
9	Neutral impacts against all objectives.	✗
10	Positive or neutral impacts against all objectives and criteria but likely to be an expensive option. Not a high-performing option in its own right, although should be investigated as part of an overall cycling strategy for the corridor.	✓

Recommendations for Loch Street are therefore to:

- Resurface the footways;
- Reduce the speed limit;
- Undertake further work to determine the feasibility of segregated cycle facilities; and
- If segregated facilities prove unfeasible, consider making the street bus, cycle and local access only and/or providing mandatory on-road cycle lanes.

### Berry Street

Table D26 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2- Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3- Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	1	17
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	1	1	1	-1	10
5 – Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	2	-1	-1	24
6 - Reduce the speed limit	2	2	1	1	2	0	0	0	0	3	1	2	0	2	0	2	2	1	21
7- Public transport priority measures	2	1	1	2	0	3	1	0	0	3	2	0	2	2	2	2	1	-1	23
8 - Make a bus and cycle-only road	2	-1	2	-1	2	3	0	0	0	2	2	1	1	1	0	-3	2	-3	10
9 - Make a bus, cycle and local access only road	2	2	1	1	1	1	1	0	0	2	2	1	1	2	0	3	2	-1	21
10 – Remove traffic lanes to give priority to sustainable modes of transport	1	1	2	1	2	2	0	0	0	2	1	2	1	1	1	2	2	-1	20

Table D27 – Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	x
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Positive or neutral impacts against all objectives and criteria, although other options for cyclists (5 and 9) anticipated to have wider benefits. Could be pursued if these options prove unfeasible.	✓
4	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	x
5	Strong-performing option, although may be expensive to deliver and may require reallocation of carriageway space to cyclists.	✓
6	High-performing option with positive impacts across a range of criteria.	✓
7	High-performing option although little evidence of a current problem at this location at this time.	✓
8	Unlikely to be feasible given the road provides access and egress to the Bon Accord car park.	x
9	High-performing option with positive impacts across a range of criteria, although may be unpopular with the public.	✓
10	High-performing option but may be unpopular with members of the public. Given that there is existing pedestrian provision and little evidence of a public transport problem at this location, any roadspace reallocation would be at the service of cyclists. This option is therefore sifted out on the basis that it effectively duplicates option 5.	x

Recommendations for Berry Street are therefore to:

- Resurface the footways;
- Reduce the speed limit;
- Undertake further work to determine the feasibility of segregated cycle facilities;
- If segregated facilities not feasible, consider alternative means of improving conditions for cyclists in the context of wider CCMP delivery; and
- Should public transport journey times become a concern at this location even with planned improvements, look at options for implementing public transport priority measures at a suitable point in the future.

## Gallowgate

Table D28 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2- Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Deliver CCMP proposals	2	2	1	1	1	1	1	0	0	3	1	1	1	1	1	3	1	-1	20
4- Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	1	17
5 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	1	1	1	-1	10
6 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	1	25
7 - Reduce the speed limit	2	2	1	1	2	0	0	0	0	3	1	2	0	2	0	2	2	1	21
8 - Introduce bus priority	2	1	1	2	0	3	1	0	0	3	2	0	2	2	2	1	1	0	23
9 - Introduce one-way traffic restriction	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	1	2	-1	1	1
10 – Make the entire road bus, cycle and local access only	2	2	1	1	1	1	1	0	0	2	2	1	1	2	0	2	2	-1	20

Table D29 – Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Strong-performing option, although may meet some resistance from members of the public. No obvious reason why this would be pursued in place of option 10, however, so sifted out on that basis.	✗
4	Positive impacts on most of the objectives and STAG criteria, although other options (segregated cycle facilities and making the street bus, cycle and access only) score higher. Could be pursued if these options prove undeliverable.	✓
5	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	✗
6	Strongest-performing option, therefore should be subject to further feasibility. May be an expensive option however.	✓
7	High-performing option with positive impacts across a range of criteria.	✓
8	Strong-performing option but little evidence of a problem at this location.	✓
9	Poor-performing option with no discernible benefits.	✗
10	Strong-performing option, although may meet some resistance from members of the public.	✓

Recommendations for Gallowgate are therefore to:

- Resurface the footways;
- Reduce the speed limit;
- Undertake further work to determine the feasibility of segregated cycle facilities;
- If segregated facilities not feasible, consider alternative means of improving conditions for cyclists in the context of wider CCMP delivery;
- Investigate feasibility of making Gallowgate bus, cycle and local access only in the context of wider CCMP delivery.

### George Street (south of John Street)

Table D30 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	3	3	0	3
2 - Deliver CCMP proposals.	1	2	2	1	2	2	0	0	0	3	1	1	1	1	1	2	1	-1	20
3 - Improve on-road cycle provision north of St. Andrews Street	1	1	1	-1	1	0	1	0	0	1	1	1	-1	1	-1	1	2	0	9
4 - Improve off-road cycle provision (shared use) north of St. Andrews Street	1	0	0	0	1	0	1	0	0	1	1	1	1	1	0	1	1	-2	8
5 - Improve off-road cycle provision (segregation) north of St. Andrews Street	2	-1	2	-1	2	0	1	0	0	3	2	3	0	2	-1	1	-1	-1	13
6 - Exempt cyclists from vehicle access restrictions.	1	1	0	2	0	0	1	0	0	1	1	1	1	1	1	3	3	2	19
7 - Reduce the speed limit north of St. Andrews Street	2	2	1	1	2	-1	0	0	0	3	1	2	0	2	0	2	2	0	19
8 - Public transport priority measures north of St. Andrew Street	2	1	1	0	0	3	1	0	0	3	2	0	2	2	0	-2	1	-1	15
9 - Make the carriageway north of St. Andrew Street a bus and cycle only link	2	-1	2	-1	2	3	0	0	0	2	2	1	1	1	0	2	2	-1	17
10 - Introduce one-way traffic restrictions north of St. Andrews Street	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	1	2	-1	1

Table D31 – Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives, especially the CCMP.	x
2	Strong-performing option against a range of criteria, although could be unpopular with members of the public. Given that this area is largely pedestrianised anyway and there does not appear to be significant demand for this as a bus route, then this proposal could actually negatively impact on the walking and cycling environment so is sifted out on that basis.	x
3	Difficult to achieve without the removal of on-street car parking outside shops and services which would have a negative impact on accessibility and economic criteria at this location.	x
4	Shared provision in a busy city centre location unlikely to be acceptable to members of the public.	x
5	Although the optimum level of cycling provision, segregated facilities here would necessitate the removal of on-street car parking outside shops and services which would have a negative impact on the accessibility criteria and mixed impacts in terms of the local economy. There may also be negative impacts in terms of loading and unloading for adjacent businesses.	x

6	High-performing option with positive impacts across a range of criteria.	✓
7	High-performing option with positive impacts across a range of criteria.	✓
8	Unlikely to be feasible without the removal of on-street car parking which could have mixed impacts on accessibility and economic criteria. Little evidence of a problem at this location in any case.	✗
9	Performs poorly against accessibility and acceptability criteria. Would restrict the ability of local business to receive deliveries and load and unload.	✗
10	No discernible benefits and likely to negatively impact on public transport movements.	✗

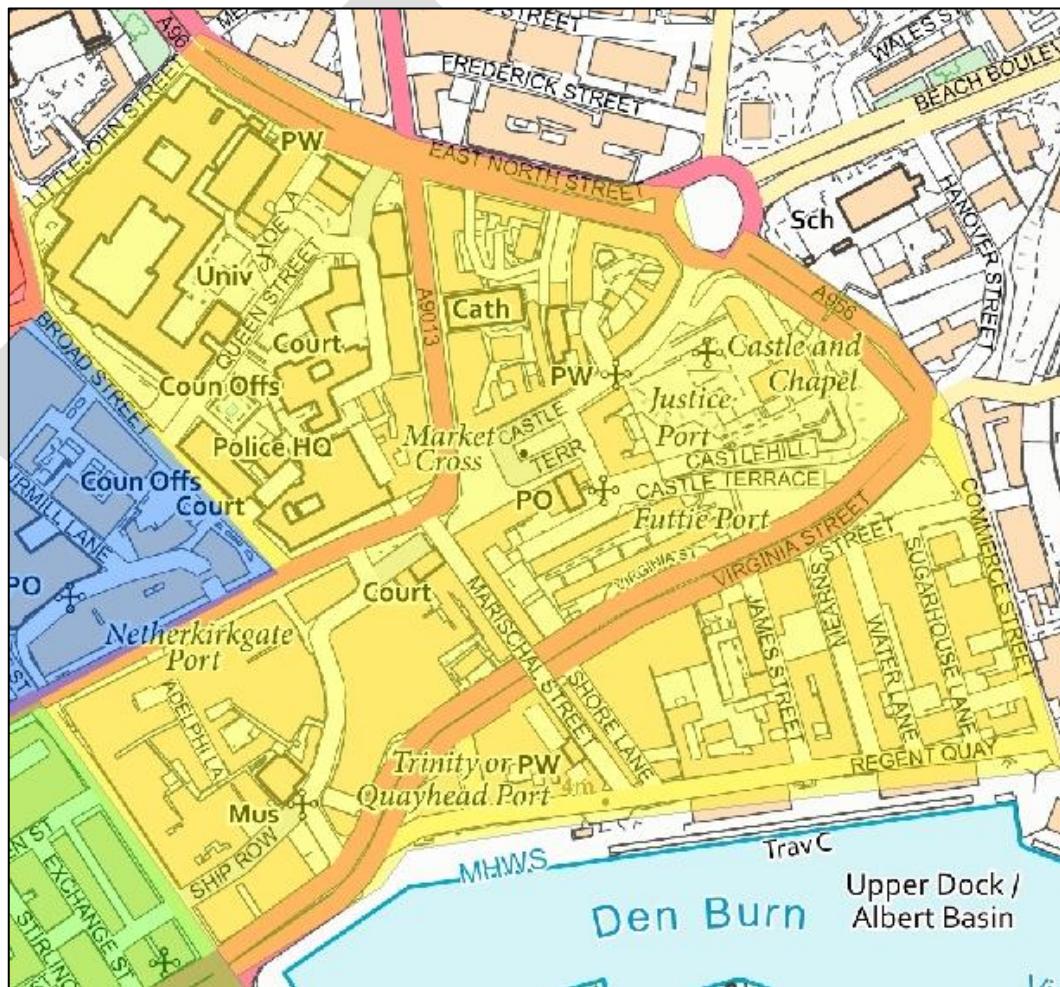
Recommendations for George Street are therefore to:

- Reduce the speed limit north of St. Andrew Street; and
- Exempt cyclists from 'No Entry' restriction south of St. Andrew Street.

## D1.2 Zone 2

Zone 2 forms the east of the CCMP area, bounded to the east by Commerce Street, to the south by Regent Quay, to the west by Broad Street and Market Street and to the north by Littlejohn Street and West North Street.

Figure D3 – SUMP Zone 2



### D1.2.1 Zone 2 Corridor Assessment and Option Generation

Table D32 – Zone 2 Corridor Assessment and Options

Link		Current walking conditions	Current cycling conditions	Current public transport conditions	Current commitments, or CCMP/Roads Hierarchy proposals	Options
1	West North Street / East North Street (Littlejohn Street to Beach Boulevard)	Footways on both sides of the carriageway, although cracked and uneven in places, with crossing provision at junctions.	Dual carriageway with no formal cycling provision.  30mph speed limit.  Cycle parking available at the Arts Centre and Timmer Market.	Currently a public transport route but no formal provision.	Traffic modelling in support of the CCMP suggests that traffic levels are high in a reference case scenario and will grow further with the delivery of CCMP interventions.	Option 1 – Do Nothing  Option 2 – Resurface footways  Option 3 – Improve on-road cycle provision  Option 4 – Improve off-road cycle provision (shared use)  Option 5 – Improve off-road cycle provision (segregation)  Option 6 – Reduce speed limit  Option 7 – Introduce bus priority  Option 8 – Remove traffic lanes to give priority to sustainable modes
2	Beach Boulevard Roundabout	Footways and crossing points on all approaches.	No formal cycling provision.	Currently a public transport route but no formal provision.	The CCMP recommends an undefined improvement at this location.	Option 1 – Do Nothing  Option 2 – Cycle provision at roundabout

						Option 3 – Signalise roundabout  Option 4 – Remove roundabout and replace with traffic signals
3	Littlejohn Street	Footways on both sides of the carriageway, although cracked and uneven in places, with crossing provision at southern end.	No formal cycling provision.  Traffic is one-way only (eastbound).  20mph speed limit.	Currently a public transport route but no formal provision.	None proposed.	Option 1 – Do Nothing  Option 2 – Resurface footways  Option 3 – Improve on-road cycle provision  Option 4 – Improve off-road cycle provision (shared use)  Option 5 – Improve off-road cycle provision (segregation)  Option 6 – Introduce bus priority  Option 7 – Exempt cyclists from access and one-way restrictions  Option 8 – Make bus, cycle and local access only

<b>4</b>	Shoe Lane / Queen Street	Footways in the area but cracked, uneven and narrow in places.	No formal provision. Not a through-route for traffic so essentially cycle and local access only.  20mph speed limit.	Not currently a public transport route.	The CCMP proposes a new residential led mixed use development on Queen Street, supported by a network of public spaces, offering opportunities for enhanced permeability for pedestrians and cyclists. Work is now underway to realise this.	Option 1 – Do Nothing  Option 2 – Resurface footways  Option 3 – Widen and otherwise improve footways  Option 4 – Improve on-road cycle provision  Option 5 – Improve off-road cycle provision (shared use)  Option 6 – Improve off-road cycle provision (segregation)
<b>5</b>	Broad Street	Pedestrian priority zone between Upperkirkgate and Queen Street.  Recently refurbished footways on both sides of the carriageway between Queen Street and Union Street.  Pedestrian crossing at Union Street junction.	Upperkirkgate to Queen Street is a pedestrian, cycle and bus only zone.  Shared pedestrian and cycle facilities on both sides of the carriageway between Queen Street and Union Street.  Cycle parking available at Marischal Square, Marischal College and the Town House.	Pedestrian, cycle and bus only between Upperkirkgate and Queen Street.	CCMP project completed in 2018.	No further intervention proposed.
<b>6</b>	King Street (East/West North)	Footways on both sides of the carriageway.	Intermittent cycle provision in the form of	Peak time bus / cycle / taxi lane (southbound)	The CCMP proposes that West North Street	Option 1 – Do Nothing

	Street to Castle Street)	Although of adequate width, the paving is cracked and uneven in places.  Crossing provision at junctions.	an advisory cycle lane (northbound) and a peak time bus / cycle / taxi lane (southbound) between Castlegate and the Arts Centre, and a peak time bus / cycle / taxi lane southbound from Summerfield Terrace to Princes Street.  20mph speed limit between East / West North Street and Castlegate, 30mph limit further north.	between Castlegate and the Arts Centre and between Summerfield Terrace and Princes Street.	to Castlegate becomes bus, cycle, taxi and local access only.  The previous SUMP proposed a bus gate on the southbound approach to Union Street.  The Roads Hierarchy Study recommends declassifying this section of King Street.	Option 2 – Resurface footways  Option 3 – Improve on-road cycle provision  Option 4 – Improve off-road cycle provision (shared use)  Option 5 – Improve off-road cycle provision (segregation)  Option 6 – Increase bus lane provision  Option 7 - Increase bus lane hours of operation  Option 8 – CCMP proposal  Option 9 – Bus gate on approach to Union Street
7	Union Street (Castle Street to Broad Street)	Footways on both sides of the carriageway and crossing provision at junctions.	Dual carriageway arrangement with no formal cycling provision.  20 mph speed limit.	Currently a public transport route, but no formal provision on this section.	The CCMP proposes that Castlegate to Bridge Street becomes bus, cycle taxi and local access only.  Traffic modelling in support of the CCMP indicates that, in the reference case scenario, traffic levels are such that physical	Option 1 – Do Nothing  Option 2 – Improve on-road cycle provision  Option 3 – Improve off-road cycle provision (shared use)  Option 4 – Improve off-road cycle provision (segregation)

					segregation of cyclists is recommended. In the longer term, as CCMP projects are delivered, traffic on Union Street should fall to such an extent that a shared carriageway arrangement would be acceptable.  The Roads Hierarchy Study recommends the declassification of Union Street.	Option 5 – Introduce bus priority measures  Option 6 – Remove traffic lanes to give priority to sustainable modes  Option 7 – CCMP project  Option 8 – Make Union Street one-way for traffic
<b>8</b>	Peacock's Close	Mixed provision – some sections with footways, some without. One section is a traffic-free lane.  The Close is access only and traffic levels are such that the area is easily navigable by pedestrians.	Not suitable as formal cycle route.	Not suitable as a public transport route.	None.	None proposed – this is a useful pedestrian cut-through but there is limited scope to bring it up to a higher standard.
<b>9</b>	Justice Street / Castlegate	Justice Street has footways on both sides of the carriageway, although these are cracked and uneven in places.  Castlegate is a pedestrian priority zone, although the surface is poor.	No formal cycling provision.  Justice Street is a 20mph zone, with intermittent parking (including motorcycle and disabled parking) on both sides of the carriageway.	Not currently suitable as a public transport route.	The CCMP proposes improved surfacing and lighting of the Castlegate and segregated two-way cycle lanes from Castlegate towards the Beach along Justice Street and Beach Boulevard.	Option 1 – Do Nothing  Option 2 – Resurface footways on Justice Street  Option 3 – Castlegate improvements as per CCMP proposals

			<p>Justice Street is essentially local access only, as there is no egress from Castlehill or Castle Terrace.</p> <p>Castlegate is a pedestrian priority zone although cyclists are able to use the area.</p> <p>Cycle parking is available at the Castlegate.</p>			<p>Option 4 – Improve on-road cycle provision (Justice Street)</p> <p>Option 5 – Improve off-road cycle provision (shared use on Justice Street)</p> <p>Option 6 – CCMP proposals for segregated cycle facilities on Justice Street</p>
<b>10</b>	Commerce Street	<p>Footways on both sides of the carriageway, although cracked and uneven in places, and narrow at the southern end on the approach to Regent Quay.</p> <p>Pedestrian crossings near junctions.</p> <p>A busy and noisy street.</p>	<p>Busy dual carriageway in places with no cycle provision.</p> <p>30mph speed limit.</p>	<p>Not currently a public transport route.</p>	<p>The Roads Hierarchy Study recommends downgrading the section of the A956 in the CCMP area to a secondary route, but that its A-list status should be maintained.</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 – Resurface footways</p> <p>Option 3 – Widen footways</p> <p>Option 4 – Improve on-road cycle provision</p> <p>Option 5 – Improve off-road cycle provision (shared use)</p> <p>Option 6 – Improve off-road cycle provision (segregation)</p> <p>Option 7 – Reduce speed limit</p> <p>Option 8 – Remove traffic lanes to give</p>

						priority to sustainable modes
11	Virginia Street / Trinity Quay	<p>Footways on both sides of the carriageway along most of the route (one section has remote path rather than footway) and pedestrian crossings at key locations.</p> <p>Footways are cracked and uneven in places.</p>	<p>Busy dual carriageway with no cycle provision. 30mph speed limit.</p>	<p>Not currently a public transport route.</p>	<p>The Roads Hierarchy Study recommends downgrading the section of the A956 in the CCMP area to a secondary route, but that its A-list status should be maintained.</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 – Resurface footways</p> <p>Option 3 – Improve on-road cycle provision</p> <p>Option 4 – Improve off-road cycle provision (shared use)</p> <p>Option 5 – Improve off-road cycle provision (segregation)</p> <p>Option 6 – Reduce speed limit</p> <p>Option 7 – Remove traffic lanes to give priority to sustainable modes</p>
12	Castle Terrace	<p>Footways, although narrow, on both sides of the carriageway.</p> <p>Step access from Castle Terrace to Virginia Street.</p> <p>Remote path access to Commerce Street and Virginia Street.</p>	<p>No formal cycle provision.</p> <p>Street is busy with parking although is not a through-route for traffic so traffic will be access only.</p> <p>Remote path access to Commerce Street and Virginia Street, but no</p>	<p>Not currently suitable as a public transport route.</p>	<p>None proposed.</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 – Widen footways</p> <p>Option 3 – Improve on-road cycle provision</p> <p>Option 4 – Improve off-road cycle provision (shared use)</p>

			indication that cyclists can use this link. 20 mph speed limit.			Option 5 – Improve off-road cycle provision (segregation)  Option 6 – Enable cyclists to access paths to Commerce Street and Virginia Street
13	Marischal Street	Footways on both sides of the carriageway, although cracked and uneven in places.	No formal cycling provision.  Car parking on both sides of the carriageway.  20 mph speed limit.	Not currently a public transport route.	None proposed.	Option 1 – Do Nothing  Option 2 – Resurface footways  Option 3 – Improve on-road cycle provision  Option 4 – Improve off-road cycle provision (shared use)  Option 5 – Improve off-road cycle provision (segregation)  Option 6 – Make the street one-way to traffic  Option 7 – Make pedestrian and cycle only  Option 8 – Make the road cycle and local access only
14	James Street	Very narrow and substandard footways	No formal cycling provision.	Not currently a public transport route.	None proposed.	Option 1 – Do Nothing

		on both sides of the carriageway.	Cobbled surface. 30mph speed limit.			Option 2 – Resurface footways  Option 3 – Widen footways  Option 4 – Improve on-road cycle provision  Option 5 – Improve off-road cycle provision (shared use)  Option 6 – Improve off-road cycle provision (segregation)  Option 7 – Reduce speed limit  Option 8 – Make pedestrian and cycle only  Option 9 – Make the street cycle and local access only  Option 10 - Make the street one-way to traffic
15	Mearns Street	Footways on both sides of the carriageway, although cracked and uneven and narrow in places.	No formal cycling provision.  Car parking on both sides of the carriageway.	Not currently a public transport route.	None proposed.	Option 1 – Do Nothing  Option 2 – Resurface footways  Option 3 – Widen footways

		Cobbled surface. 30mph speed limit.			Option 4 – Improve on-road cycle provision  Option 5 - Improve off-road cycle provision (shared use)  Option 6 – Improve off-road cycle provision (segregation)  Option 7 – Reduce speed limit  Option 8 – Make pedestrian and cycle only  Option 9 – Make the street cycle and local access only  Option 10 – Make the street one-way to traffic
16	Regent Quay	Sufficiently wide footway on one side of the carriageway and pedestrian crossings near junctions.  No formal cycling provision.  Traffic is one-way only (westbound) between Marischal Street and Virginia Street.  30mph speed limit.	Not currently a public transport route.	None proposed.	Option 1 – Do Nothing  Option 2 – Improve on-road cycle provision  Option 3 – Improve off-road cycle provision (shared use)  Option 4 – Improve off-road cycle provision (segregation)

						<p>Option 5 – Reduce speed limit</p> <p>Option 6 – Make pedestrian and cycle only</p> <p>Option 7 – Make the street cycle and local access only</p> <p>Option 8 – Make the entire street one-way to traffic</p> <p>Option 9 – Exempt cyclists from access and one-way restrictions</p>
17	Shore Brae	Footways on both sides of the carriageway, although cracked and uneven in places.	No formal cycling provision.  One-way traffic only (northbound).  Cobbled surface.  20mph speed limit.	Not currently a public transport route.	None proposed.	<p>Option 1 – Do Nothing</p> <p>Option 2 – Resurface footways</p> <p>Option 3 – Improve on-road cycle provision</p> <p>Option 4 – Improve off-road cycle provision (shared use)</p> <p>Option 5 – Improve off-road cycle provision (segregation)</p> <p>Option 6 – Make pedestrian and cycle only</p>

							Option 7 – Make the street cycle and local access only
18	Ship Row	<p>Pedestrian and cycle only between Union Street and Exchequer Row.</p> <p>Pedestrian zone between Shore Brae and Market Street with restricted loading only.</p> <p>Footways on both sides of the carriageway although cracked and uneven in places.</p>	<p>Good quality soft segregated cycle facility but signage to indicate its presence is poor.</p> <p>Cycle parking at Visit Aberdeen site.</p>	<p>Not currently a public transport route.</p>	<p>None proposed.</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 – Resurface footways</p>	

### D1.2.2 Options Appraisal

#### West North Street / East North Street (Littlejohn Street to Beach Boulevard)

Table D33 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3- Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	1	17
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	1	1	1	-1	10
5 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-1	-1	-1	21
6 - Reduce the speed limit	2	2	1	1	2	-1	0	0	0	3	1	2	0	2	0	2	2	0	19
7 - Introduce bus priority	2	1	1	2	0	3	1	0	0	3	2	0	2	2	2	-1	1	-1	20
8 - Remove traffic lanes to give priority to sustainable modes	1	1	2	1	2	2	0	0	0	2	3	2	1	2	2	-2	1	-1	19

Table D34 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Strong-performing option, although option 5 (segregated cycle facilities) performs better. Could be pursued as an alternative if segregated facilities prove unfeasible.	✓
4	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	✗
5	Strong-performing option, although may be expensive. There are questions over the feasibility of this option, given that traffic levels on this road are due to increase with the delivery of CCMP interventions, and a reduction in carriageway space here may be incompatible with the CCMP, although the overall road width seems generous enough. Further feasibility work is recommended.	✓
6	High-performing option against multiple criteria.	✓
7	Strong-performing option, although may not be feasible, given that traffic levels on this road are due to increase with the delivery of CCMP interventions, and removal of roadspace from general traffic here may be incompatible with the CCMP. Little evidence of a significant problem here for public transport in any case, although could be borne in mind for the future.	✓
8	Duplicates options 5 and 7 so sifted out on that basis.	✗

Recommendations for West North Street / East North Street are therefore to:

- Resurface the footways;
- Reduce the speed limit;
- Investigate the feasibility of segregated cycle facilities;
- If segregated facilities not feasible, implement mandatory on-road cycle lanes;
- Should public transport journey times become a concern at this location even with planned improvements, look at options for implementing public transport priority measures at a suitable point in the future.

## Beach Boulevard Roundabout

Table D35 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Cycle provision at roundabout	1	0	0	1	1	0	1	0	0	2	0	1	0	1	1	1	-1	1	10
3 - Signalise roundabout	1	0	0	1	1	0	1	0	0	2	0	1	0	1	1	1	-1	1	10
4 - Remove roundabout and replace with traffic signals	1	0	0	1	1	0	1	0	0	2	-1	2	0	1	1	1	-2	1	9

Table D36 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	As these options all perform similarly, it is recommended that a more detailed study is undertaken to identify the optimum pedestrian and cycle intervention at this location.	✓
3		
4		

The recommendation for the Beach Boulevard Roundabout is therefore to:

- Undertake a study to identify the optimum pedestrian and cycle improvements.

## Littlejohn Street

Table D37 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	2	2	0	16	
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	1	1	0	11	
5 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	0	24
6 - Introduce bus priority	2	1	1	2	0	3	1	0	0	3	2	0	2	2	2	1	1	-1	22
7 - Exempt cyclists from access and one-way restrictions	0	0	0	0	0	0	1	0	0	1	1	-1	1	1	1	3	3	-1	10
8 - Make bus, cycle and local access only	2	2	1	1	1	1	1	0	0	1	1	1	1	1	0	-2	2	-1	13

Table D38 - Appraisal Summary and Recommendations

Option Appraisal Summary																	Recommendation	
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.																	x
2	Positive impacts on most of the objectives and STAG criteria.																	✓
3	Positive impacts on most of the objectives and STAG criteria, although unlikely to be required should wider CCMP aspirations for Gallowgate and Upperkirkgate be delivered.																	x
4	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.																	
5	Strong-performing option, although may be expensive to deliver and would necessitate the removal of on-street car parking. Unlikely that traffic volumes and speeds in this location would justify this level of intervention, however, compared to busier areas of the city. May not be required in any case should wider CCMP aspirations for Gallowgate and Upperkirkgate be delivered.																	x
6	A strong-performing option, although would necessitate the removal of on-street car parking. Little evidence of delays to public transport at this location, however, to justify this intervention.																	x
7	Mostly a neutral impact on the TPOs, while this would raise some safety concerns.																	x
8	A strong-performing option, although not recommended for progression in its own right, as may form a necessary consequence of wider proposals for Gallowgate in any case.																	x

The recommendation for Littlejohn Street is therefore to:

- Resurface the footways.

### Shoe Lane / Queen Street

Table D39 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Widen and otherwise improve footways	1	1	0	1	1	0	1	0	0	1	1	1	1	1	1	2	2	1	16
4 - Improve on-road cycle provision.	1	1	1	-1	1	0	1	0	0	1	1	0	1	1	1	1	1	-1	10
5 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	1	1	1	-1	10
6 - Improve off-road cycle provision (segregation)	2	1	2	-1	2	0	1	0	0	3	2	0	2	2	2	1	-1	-1	17

Table D40 - Appraisal Summary and Recommendations

Option Appraisal Summary																Recommendation		
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.																x	
2	Positive impacts on most of the objectives and STAG criteria.																✓	
3	Positive impacts on most of the objectives and STAG criteria.																✓	
4	Positive impacts on most of the objectives and STAG criteria, although there may be negative impacts on accessibility given this would necessitate the removal of on-street car and motorcycle parking, which is likely to be unpopular with members of the public and could have mixed impacts on the local economy.																x	
5	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.																x	
6	Positive impacts on most of the objectives and STAG criteria, although there may be negative impacts on accessibility (given this would necessitate the removal of on-street car and motorcycle parking, which is likely to be unpopular with members of the public and could have mixed impacts on the local economy).																x	

Given the scope for improvements offered by the proposed Queen Street redevelopment project, the recommendation for Shoe Lane / Queen Street is therefore to:

- Deliver an improved pedestrian and cycle experience alongside Queen Street redevelopment.

#### King Street (East/West North Street to Castle Street)

Table D41 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-2	0	0	0	0	0	3	3	0	4
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	1	17
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	0	1	1	-1	9
5 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	2	-1	1	26
6 - Increase bus lane provision	1	1	1	1	0	3	1	0	0	3	2	0	2	2	2	1	1	0	21
7 - Increase bus lane hours of operation	1	1	1	1	0	2	1	0	0	2	1	0	1	1	1	2	3	0	18
8 - CCMP proposal	2	2	1	1	1	1	1	0	0	3	1	1	1	2	0	2	2	-1	20
9 - Bus gate on approach to Union Street	1	-1	1	-1	0	2	0	0	0	2	1	1	-1	1	0	1	-1	-1	5

Table D42 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	x
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Positive impacts on most of the objectives and STAG criteria, although a number of options, particularly option 5 (segregated cycle facilities) scores higher. Could be pursued if other options prove undeliverable. May conflict with option 6.	✓
4	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	x
5	Strong-performing option, though could be expensive to deliver. May conflict with option 6.	✓
6	Positive impacts on most of the objectives and STAG criteria. Given the existing layout of the carriageway, improved provision would have to be on the northbound section. This may conflict with options to improve cycle facilities, however.	✓
7	Positive impacts on most of the objectives and STAG criteria, although requires consideration as part of a wider package of options looking at cycle and bus priority.	✓
8	Strong-performing option, although may be unpopular with members of the public.	✓
9	Poor-performing option that could have negative impacts on local businesses by restricting access to Union Street for deliveries, etc. from the north, as well as the accessibility criteria.	x

Clearly, pedestrian, cycle and public transport improvements achieve multiple objectives at this location and a balance must be struck between public transport and cycle priority in particular. Given the width of the carriageway, it is unlikely that both segregated cycle facilities and further bus lane provision could both be delivered. An acceptable compromise, therefore, could be to turn this section of road into a bus, cycle, taxi and local access only street (as per the CCMP) with the provision of segregated cycle facilities or mandatory on-road cycle lanes if deemed necessary. This would then preclude the requirement for Option 7 as the street would become restricted access 24/7 in any case.

Recommendations for King Street (East/West North Street to Castle Street) are therefore to:

- Resurface the footways;
- Deliver CCMP project to make this section bus, cycle, taxi and local access only; and
- Consider the need for segregated or mandatory on-road cycle facilities alongside delivery of this project.

## Union Street (Castle Street to Broad Street)

Table D43 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	3	3	-2	1
2 - Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	1	17
3 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-2	1	1	-3	5
4 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	2	-1	1	26
5 - Introduce bus priority measures	2	1	1	2	0	3	1	0	0	3	2	0	2	2	2	2	1	0	24
6 - Remove traffic lanes to give priority to sustainable modes	1	1	2	1	2	2	0	0	0	2	2	2	2	2	2	1	0	0	24
7 - CCMP project	2	2	1	1	1	1	0	0	3	1	1	1	2	0	2	2	2	23	
8 - Make Union Street one-way for traffic	0	0	0	0	0	-2	0	0	0	0	0	0	0	0	0	1	2	-1	0

Table D44 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Strongly contradicts the CCMP and unlikely to be publicly acceptable.	✗
2	Positive impacts on most of the objectives and STAG criteria, although other cycling interventions score higher.	✓
3	Shared pedestrian and cycle provision unlikely to be acceptable to members of the public.	✗
4	Strong-performing option, although could prove expensive.	✓
5	Option performs well against most criteria.	✓
6	Effectively duplicates option 4 and 5 so sifted out on that basis.	✗
7	Option performs well against most criteria.	✓
8	No discernible benefits and could have a significantly negative impact on public transport movements.	✗

A number of options score highly at this location, meaning that a package of measures that best meets the needs of pedestrians, cyclists and public transport users is required. It is therefore recommended that the CCMP project to make this section of Union Street bus, cycle and access only is delivered, with the carriageway width reduced to afford more space to pedestrians and cyclists. Appreciating that the majority of residual traffic on Union Street will be buses, segregated cycle facilities are also recommended.

Recommendations for Union Street (Castle Street to Broad Street) are therefore to:

- Deliver CCMP project to make this area bus, cycle and local access only and
- Install segregated cycle facilities.

## Justice Street / Castlegate

Table D45 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	3	3	-1	2
2 - Resurface footways on Justice Street	1	0	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	12
3 - Castlegate improvements as per CCMP proposals.	1	1	0	1	1	0	0	0	0	3	0	1	1	1	1	3	-2	3	15
4 - Improve on-road cycle provision (Justice Street).	1	1	1	-1	1	0	1	0	0	-1	1	1	1	1	1	2	2	-1	11
5 - Improve off-road cycle provision (shared use on Justice Street)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	0	2	1	-1	10
6 - CCMP proposals for segregated cycle lanes on Justice Street	2	1	2	-1	2	0	1	0	0	3	2	3	2	2	2	-1	-1	-1	21

Table D46 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts the approved CCMP and unlikely to be publicly acceptable.	x
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Positive impacts on most of the objectives and STAG criteria, although likely to be an expensive option.	✓
4	Positive impacts on most of the objectives and STAG criteria, although contradicts the CCMP which advocates segregated cycle lanes on Justice Street. May have negative impacts on accessibility and acceptability criteria, given that this would necessitate the removal or relocation of car and motorcycle parking bays (including blue badge spaces).	x
5	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	x
6	Positive impacts on most of the objectives and STAG criteria, although may have negative impacts on accessibility and acceptability criteria, given that this would necessitate the removal or relocation of car and motorcycle parking bays (including blue badge spaces). Given traffic volumes on Justice Street and the fact that it does not act as a through-route for traffic, it is questionable whether an intervention of this magnitude would be required at this location in any case. It is certainly unlikely to be high on a list of priorities.	x

Recommendations are therefore to resurface the footways on Justice Street and deliver the CCMP project to resurface Castlegate.

## Commerce Street

Table D47 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Widen footways	1	1	0	1	1	0	1	0	0	1	0	0	0	1	1	2	-1	1	10
4 - Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	-1	15
5 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	1	-1	1	-1	8
6 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	-1	23
7 - Reduce the speed limit	2	2	1	1	2	0	0	0	0	3	1	2	0	2	0	2	2	0	20
8 - Remove traffic lanes to give priority to sustainable modes	1	1	2	1	2	2	0	0	0	2	3	2	1	2	2	-1	1	-1	20

Table D48 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Positive impacts on most of the objectives and STAG criteria, although could be an expensive option.	✓
4	Positive impacts on most of the objectives and STAG criteria, although option 6 (segregated cycle facilities) scores higher and would be a significantly safer option given that Commerce Street provides access to the city centre harbour from the north so is likely to remain busy with Heavy Goods Vehicles (HGVs) even with the delivery of the CCMP and Roads Hierarchy proposals. Should be retained as an option though should option 6 proves undeliverable. May necessitate the removal of on-street parking at the southern end which could be unpopular.	✓
5	Shared provision generally unacceptable to members of the public within the city centre. Unlikely to be feasible given existing footway widths at the southern end.	✗
6	Strong-performing option, therefore should be subject to further feasibility. May be an expensive option however.	✓
7	Strong-performing option against a range of criteria.	✓
8	Although a strong-performing option, as this is not a public transport corridor, the main beneficiaries would be pedestrians and cyclists, therefore this option effectively duplicates options 3, 4 and 6 so can be sifted out on that basis.	✗

Recommendations for Commerce Street are therefore to:

- Resurface the footways;

- Widen footways at the southern end;
- Reduce the speed limit;
- Undertake further work to determine the feasibility of segregated cycle facilities between the Beach Boulevard Roundabout and Virginia Street; and
- If segregated facilities are not feasible, consider provision of mandatory on-road cycle lanes between the Beach Boulevard Roundabout and Virginia Street.

### Virginia Street / Trinity Quay

Table D49 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	1	17
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	1	2	1	1	13
5 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-1	-1	1	23
6 - Reduce the speed limit	2	2	1	1	2	0	0	0	0	3	1	2	0	2	0	2	2	0	20
7 - Remove traffic lanes to give priority to sustainable modes.	1	1	2	1	2	2	0	0	0	2	3	2	1	2	2	-1	1	-1	20

Table D50 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Positive impacts on most of the objectives and STAG criteria, although option 5 (segregated cycle facilities) scores higher and would be a significantly safer option given that Commerce Street provides access to the city centre harbour from the north so is likely to remain busy with HGVs even with the delivery of the CCMP and Roads Hierarchy proposals. Could be pursued if option 5 proves undeliverable.	✓
4	Given traffic volumes and composition and pedestrian flows at this location, a shared use facility may be acceptable here, although other cycling options better meet the objectives.	✓
5	Strong-performing option but further work required to determine feasibility.	✓
6	Strong-performing option against a range of criteria.	✓

7	Although a strong-performing option, as this is not a public transport corridor, the main beneficiaries would be cyclists, therefore this option effectively duplicates options 3 and 5 so can be sifted out on that basis.	x
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Recommendations for Virginia Street / Trinity Quay are therefore to:

- Resurface the footways;
- Reduce the speed limit;
- Undertake further work to determine the feasibility of segregated cycle facilities;
- If segregated facilities are not feasible, consider provision of mandatory on-road cycle lanes; and
- If on-road cycle facilities also prove unfeasible or unadvisable from a safety perspective, consider off-road cycle provision.

### Castle Terrace

Table D51 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Widen footways	1	1	0	1	1	0	1	0	0	1	0	0	0	1	1	-1	-1	-2	4
3 - Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	-1	2	-2	11
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	0	-1	1	-1	7
5 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-1	-1	-2	20
6 - Enable cyclists to access paths to Commerce Street and Virginia Street	1	0	0	0	1	0	1	0	0	2	0	1	0	1	1	3	3	2	16

Table D52 - Appraisal Summary and Recommendations

Option Appraisal Summary															Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.															x
2 Performs well against objectives and STAG criteria but unlikely to be feasible without removing residential car parking spaces which is not likely to be acceptable in such a densely populated area where alternative parking locations are not obvious.															x
3 Performs well against objectives and STAG criteria but unlikely to be feasible without removing residential car parking spaces which is not likely to be acceptable in such a densely populated area where alternative parking locations are not obvious. It is not considered that on-road cycling without provision would be particularly problematic at this location in any case.															x
4 Shared provision in a densely populated area unlikely to be acceptable to members of the public. Existing footway widths likely to be insufficient for a shared pedestrian and cycle route.															x

5	Performs well against objectives and STAG criteria but unlikely to be feasible without removing residential car parking spaces which is not likely to be acceptable in such a densely populated area where alternative parking locations are not obvious. It is not considered that on-road cycling without provision would be particularly problematic at this location in any case.	x
6	Reasonably strong-performing option with no negative implications noted.	✓

Given this is not a through-route for traffic, traffic levels are unlikely to be such that on-road cycling without provision would be particularly problematic at this location. The recommendation for Castle Terrace is therefore to ensure the path linking to Commerce Street and Virginia Street if fully accessible to cyclists.

### Marischal Street

Table D53 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	-1	2	-1	12
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	-1	1	1	0	-1	1	-1	5
5 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-1	-1	-1	21
6 - Make the street one-way to traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	-1	2	
7 - Make pedestrian and cycle only	1	0	3	-1	3	0	1	0	0	2	1	2	1	1	-1	-1	2	-1	13
8 - Make the road cycle and local access only	3	2	1	2	1	0	1	0	0	2	1	1	1	1	0	2	2	-1	19

Table D54 - Appraisal Summary and Recommendations

Option Appraisal Summary															Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.															x
2 Positive impacts on most of the objectives and STAG criteria.															✓
3 Performs well against objectives and STAG criteria but unlikely to be feasible without removing residential car parking spaces which is not likely to be acceptable in such a densely populated area where alternative parking locations are not obvious.															x
4 Unlikely to be safe or acceptable to have shared use facility in a relatively busy city centre location. Existing footways unlikely to be of sufficient width in any case. There may also be safety issues with the bridge parapet heights.															x
5 Performs well against objectives and STAG criteria but unlikely to be feasible without removing residential car parking spaces which is not likely to be acceptable in such a densely populated area where alternative parking locations are not obvious.															x

6	No discernible benefits and may not be popular with the public.	x
7	Unlikely to be feasible given the large number of residential properties requiring access and parkin.	x
8	Performs well against the majority of criteria but may not be universally popular. Likely to become so anyway should proposals for Union Street come forward so unnecessary to carry forward as a standalone option.	x

The recommendation for Marischal Street is therefore to resurface the footways.

### James Street

Table D55 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	3	3	0	5	
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Widen footways	1	1	0	1	1	0	1	0	0	1	0	0	0	1	1	1	-1	-1	7
4 - Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	2	2	1	17	
5 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	0	-2	1	-1	6
6 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-1	-1	-1	21
7 - Reduce the speed limit	2	2	1	1	2	0	0	0	0	3	1	2	0	2	0	2	2	1	21
8 - Make pedestrian and cycle only	1	-1	3	-1	3	0	1	0	0	2	1	1	0	1	-1	-2	2	-3	7
9 - Make the street cycle and local access only	3	2	1	2	1	0	1	0	0	2	1	1	0	1	0	2	2	0	19
10 - Make the street one-way to traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	-1	2	

Table D56 - Appraisal Summary and Recommendations

Option Appraisal Summary													Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.													x
2 Positive impacts on most of the objectives and STAG criteria.													✓
3 Unlikely to be possible without restricting carriageway space which may be unpopular.													x
4 Positive impacts on most of the objectives and STAG criteria, although cobbled surface likely to preclude this being a key cycle route and removal of cobbles likely to be unpopular from a conservation perspective.													x
5 Shared provision generally acceptable to members of the public in city centre areas. Unlikely to be feasible given existing footway widths, nor are traffic levels likely to justify off-road provision at this location.													x

6	Strong-performing option, although cobbled surface likely to preclude this being a key cycle route and removal of cobbles likely to be unpopular from a conservation perspective. Traffic levels at this location unlikely to justify off-carriageway solutions in any case.	x
7	Strong-performing option against a range of criteria.	✓
8	Unlikely to be feasible or acceptable given that the road provides access to a number of residential and business premises. Negative impacts anticipated against some of the TPOs.	x
9	Strong-performing option against a range of criteria, although it is unlikely that the street acts as a significant through-route in any case and the road surface is not conducive to this being a significant cycling corridor.	x
10	No discernible benefits.	x

The recommendations for James Street are therefore :

- Resurface the footways; and
- Reduce the speed limit.

### Mearns Street

Table D57 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Widen footways	1	1	0	1	1	0	1	0	0	1	0	0	0	1	1	1	-1	-1	7
4 - Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	1	2	0	15
5 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	-1	1	-1	6
6 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-2	-1	-1	20
7 - Reduce the speed limit	2	2	1	1	2	0	0	0	0	3	1	2	0	2	0	2	2	1	21
8 - Make pedestrian and cycle only	1	-1	3	-1	3	0	1	0	0	2	2	2	0	1	-1	-2	2	-3	9
9 - Make the street cycle and local access only	3	2	1	2	1	0	1	0	0	2	1	1	0	1	0	2	2	0	19
10 - Make the street one-way to traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	-1	2	

Table D58 - Appraisal Summary and Recommendations

Option Appraisal Summary													Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.													x
2 Positive impacts on most of the objectives and STAG criteria.													✓

3	Generally positive or neutral impacts against the TPOs although a low-scoring option overall. May not be feasible without the removal of on-street car parking which may be unpopular.	x
4	Positive impacts on most of the objectives and STAG criteria, although cobbled surface likely to preclude this being a key cycle route and removal of cobbles likely to be unpopular from a conservation perspective.	x
5	Shared provision generally acceptable to members of the public in city centre areas. Unlikely to be feasible given existing footway widths, nor are traffic levels likely to justify off-road provision at this location.	x
6	Strong-performing option, although cobbled surface likely to preclude this being a key cycle route and removal of cobbles likely to be unpopular from a conservation perspective. Traffic levels at this location unlikely to justify off-carriageway solutions in any case.	x
7	Strong-performing option against multiple criteria.	✓
8	Unlikely to be feasible given the presence of residential and business properties.	x
9	Strong-performing option against a range of criteria, although it is unlikely that the street acts as a significant through-route in any case and the road surface is not conducive to this being a significant cycling corridor.	x
10	No discernible benefits.	x

The recommendations for Mearns Street are therefore :

- Resurface the footways; and
- Reduce the speed limit.

### Regent Quay

Table D59 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2- Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	-1	2	1	14
3 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	1	1	-1	8
4 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	1	25
5 - Reduce the speed limit	2	2	1	1	2	0	0	0	0	3	1	2	0	2	0	2	2	0	20
6 - Make pedestrian and cycle only	1	-3	3	-1	3	0	1	0	0	1	2	3	-1	0	-1	-3	2	-3	4
7 - Make the street cycle and local access only	3	-2	1	2	1	0	1	0	0	1	1	1	-2	0	0	-2	2	-1	6
8 - Make the entire street one-way to traffic	0	-1	0	0	0	0	0	0	0	0	0	-1	0	0	1	2	-1	0	0
9 - Exempt cyclists from access and one-way restrictions	0	0	0	0	0	0	1	0	0	1	1	-1	1	1	3	3	-1	10	

Table D60 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on most of the objectives and STAG criteria, although the road is likely to be busy with harbour and freight traffic which may make on-road cycling unpleasant for some. The carriageway width may prevent implementation of meaningful on-road cycle lanes in any case.	✗
3	Generally, shared use provision is unpopular with both pedestrian and cyclists in city centre locations. May have negative impacts on accessibility for pedestrians.	✗
4	Generally a strong-performing option, although unlikely to be feasible while maintaining two-way traffic (likely to be required for the continued effective operation of the harbour) due to road widths and existing constraints on either side of the road.	✗
5	Strong-performing option against multiple criteria.	✓
6	Unlikely to be feasible given the road provides access to the harbour side. Likely to have negative economic and accessibility implications.	✗
7	Unlikely to be feasible given the potential impacts on the efficient operation of the harbour.	✗
8	Option has no discernible benefits.	✗
9	Sifted out on the basis of safety concerns.	✗

A high-quality cycle route along Regent Quay would effectively duplicate any provision on Virginia Street. A route may be more deliverable on Virginia Street with less impact to harbour traffic, given the space available. The preference is therefore to progress a cycle route on Virginia Street in the first instance and consider route along Regent Quay if the former proves undeliverable.

The recommendation for Regent Quay is therefore to:

- Reduce the speed limit.

## Shore Brae

Table D61 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	1	2	1	16
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	0	2	1	-1	10
5 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	2	26
6 - Make pedestrian and cycle only.	1	-1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-3	9
7 - Make the street cycle and local access only.	3	2	1	2	1	0	1	0	0	2	1	1	1	0	3	2	3	24	

Table D62 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Option performs well against a number of criteria.	✓
3	Positive impacts on most of the objectives and STAG criteria, although cobbled surface likely to preclude this being a key on-road cycle route and removal of cobbles likely to be unpopular from a conservation perspective.	✗
4	Shared pedestrian and cycle provision in the city centre unlikely to be acceptable to members of the public.	✗
5	Strong-performing option. Preference would be for completion of the 'soft segregated' network with a facility on the west side of Shore Brae to mirror provision on the east side and on Ship Row. Could be combined with Option 2.	✓
6	Not feasible as the road provides access to a number of businesses and car parks.	✗
7	Although a strong-performing option, it is questionable to what extent Shore Brae and Ship Row act as a through-route in any case, especially as entry is restricted from the Castle Street end. Unlikely to be required if Option 5 progressed as the preference.	✗

The recommendation for Shore Brae is therefore to:

- Resurface the western footway and complete the 'soft segregated' network to ensure consistent provision on Shore Brae and Ship Row.

## Ship Row

Table D63 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	6
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13

Table D64 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but no benefits in terms of the TPOs.	✗
2	Positive impacts on most of the objectives and STAG criteria.	✓

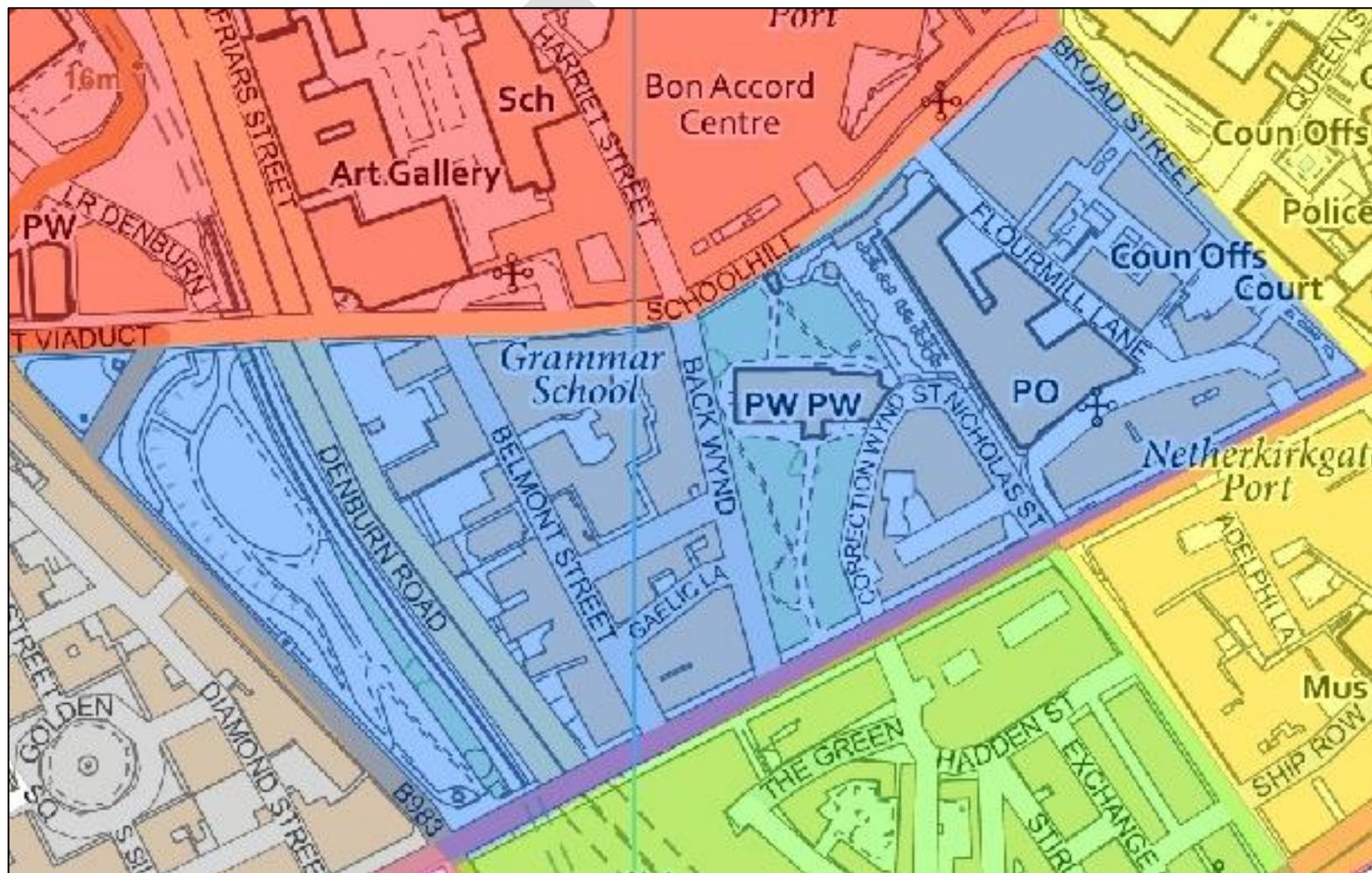
The recommendation for Ship Row is therefore to:

- Resurface the footways.

## D1.3 Zone 3

Zone 3 is the central section of the CCMP area bounded by Broad Street to the east, Union Street to the south, Union Terrace to the west and Rosemount Viaduct / Upperkirkgate to the north.

Figure D4 – SUMP Zone 3



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### D1.3.1 Zone 3 Corridor Assessment and Option Generation

Table D65 - Zone 3 Corridor Assessment and Options

Link	Current walking conditions	Current cycling conditions	Current bus conditions	Current commitments, or CCMP/Roads Hierarchy proposals	Options
1 Union Street (Broad Street to Bridge Street / Union Terrace)	Footways on both sides of the carriageway and crossing provision at junctions.	<p>Westbound: on-road cycle lane or bus / cycle / taxi lane between Castle Street and Adelphi.</p> <p>Bus/cycle/taxi lane from old BHS building to just in advance of Market Street / Bridge Street junction.</p> <p>Eastbound: near-continuous bus / cycle / taxi lane.</p> <p>20 mph speed limit.</p>	<p>Westbound:</p> <p>Bus/cycle/taxi lane Between Castle Street and Alephi from old BHS building to just in advance of Market Street / Bridge Street junction.</p> <p>Eastbound: near-continuous bus / cycle / taxi lane.</p>	<p>The CCMP proposes that Castlegate to Bridge Street becomes bus, cycle taxi and local access only.</p> <p>Traffic modelling in support of the CCMP indicates that, in the reference case scenario, traffic levels are such that physical segregation of cyclists is recommended. In the longer term, as CCMP projects are delivered, traffic on Union Street should fall to such an extent that a shared carriageway arrangement would be acceptable.</p> <p>The Roads Hierarchy Study recommends the declassification of Union Street.</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 – Improve on-road cycle provision</p> <p>Option 3 – Improve off-road cycle provision (shared use)</p> <p>Option 4 – Improve off-road cycle provision (segregation)</p> <p>Option 5 – CCMP project</p> <p>Option 6 – Increase bus lane hours of operation</p> <p>Option 7 - Make the entirety of Union Street a bus and cycle-only road</p>

<b>2</b>	Union Terrace	<p>Footways on both sides of the carriageway. These are generally wide enough, although the available space narrows around bus stops and the surface is of variable quality.</p> <p>Pedestrian crossing provision at either end of the street.</p> <p>More leisurely routes are available via Union Terrace Gardens but involve a level difference.</p>	<p>NCN 1 but no formal cycling provision, other than ASLs at junctions.</p> <p>The carriageway feels wide but the surface is poor in places.</p> <p>Access is restricted from Union Terrace to Diamond Place.</p> <p>There is car parking on the west side of the carriageway between Diamond Place and Union Street and disabled parking provision on the approach to the Rosemount Viaduct junction.</p> <p>20mph speed limit.</p>	<p>Currently a bus route but no formal provision.</p>	<p>The CCMP proposes that Union Terrace becomes bus, cycle, taxi and local access only and access to Union Terrace Gardens is improved via accessible bridges and paths as well as escalators and lifts.</p> <p>The Union Terrace Gardens transformation is now underway, and is likely to include modifications to the footways on Union Terrace and enhanced disabled parking provision.</p> <p>Traffic modelling indicates that, in the reference case scenario, traffic conditions on Union Terrace are such that physical segregation of cyclists is recommended, although levels would be expected to drop with the delivery of the CCMP to a level such that a shared carriageway arrangement would be acceptable.</p>	<p>Option 1 – Do Nothing.</p> <p>Option 2 – Resurface footways</p> <p>Option 3 – Increase crossing provision</p> <p>Option 4 – Improve on-road cycle provision</p> <p>Option 5 – Improve off-road cycle provision (shared use)</p> <p>Option 6 - Improve off-road cycle provision (segregation)</p> <p>Option 7 – Exempt cyclists from access restrictions</p> <p>Option 8 – Resurface the carriageway</p> <p>Option 9 - Introduce bus priority</p> <p>Option 10 – Introduce one-way restriction for traffic.</p> <p>Option 11 – Deliver CCMP project</p>
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					The Roads Hierarchy Study recommends downgrading the B983, which includes Union Terrace, to a tertiary route / c-road (generally formal bus and cycle priority not required, although depends on local circumstances).	
3	Denburn Road (Rosemount Viaduct to Wapping Street)	Limited and substandard footway provision.	Busy dual carriageway with no formal cycling provision.  30mph speed limit.	Currently a bus route but no formal provision.	None, although traffic modelling in support of the CCMP suggests that traffic levels are high in a reference case scenario and not forecast to fall significantly with the delivery of CCMP interventions.	Option 1 – Do Nothing  Option 2 - Improve pedestrian provision  Option 3 – Improve on-road cycle provision  Option 4 – Improve off-road cycle provision (shared use)  Option 5 - Improve off-road cycle provision (segregation)  Option 6 - Introduce bus priority  Option 7 – Remove traffic lanes to give priority to sustainable modes

						Option 8 – Make this a bus, cycle and local access only road  Option 9 – Reduce the speed limit
4	Belmont Street	Pedestrian and cycle priority zone, with high quality streetscape and good quality carriageway and footways.	Pedestrian and cycle priority zone.  Access for motor vehicles is prohibited at each end, while there is a one-way restriction for traffic (northbound) between Little Belmont Street and Schoolhill.  20mph speed limit.	Not currently a bus route.	No changes proposed.	Option 1 – Do Nothing  Option 2 - Exempt cyclists from access and one-way restrictions  Option 3 - Make the street pedestrian and cycle only
5	Little Belmont Street	High quality streetscape and well surfaced footways.	No formal provision, but traffic is access only. There is a one-way restriction (westbound) and the speed limit is 20mph.	Not currently a bus route.	No changes proposed.	Option 1 – Do Nothing  Option 2 - Exempt cyclists from one-way restrictions  Option 3 - Make the street pedestrian and cycle only
6	Back Wynd	Good quality footway on one side of the carriageway only. No scope for footway on the other side due to cemetery wall.	No formal provision.  Access for motor vehicles is restricted (access, taxis and blue badge holders only) and only permitted from Schoolhill, so traffic is	Not currently a bus route.	None proposed.	Option 1 – Do Nothing  Option 2 - Exempt cyclists from access and one-way restrictions

			one-way only southbound.			Option 3 - Make the street pedestrian and cycle only
7	St. Nicholas Street / Correction Wynd	<p>The area between Union Street and the shopping centre is a pedestrian priority zone with access for loading only (6pm to 11am).</p> <p>Footways are narrow on Correction Wynd, although the paving is good quality and the low traffic volumes and historic setting contribute towards a pleasant pedestrian environment.</p> <p>Stairs provide access to the St. Nicholas Kirk and Union Street, while access to the Green is via an underpass of Union Street. The underpass is imposing and unattractive, although it is lit.</p>	<p>No formal cycling facilities.</p> <p>Vehicular access to St. Nicholas Street is restricted to loading vehicles (6pm - 11am).</p> <p>Vehicles on Correction Wynd would be local access only and can only enter via Hadden Street.</p> <p>The road surface is good quality on St. Nicholas Street but cobbled on Correction Wynd, reflecting the historic nature of the area.</p> <p>The speed limit is 20mph.</p> <p>Cycle parking is available by the St. Nicholas Centre.</p>	<p>Not suitable as a bus route.</p>	<p>The CCMP envisages this as a cycle, taxi and local access only area (essentially maintaining the existing situation).</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 - Exempt cyclists from access and one-way restrictions</p> <p>Option 3 – Make Correction Wynd pedestrian and cycle only</p>
8	Flourmill Lane	<p>Footways on both sides of the carriageway.</p> <p>Although the south footway is narrow, the north footway has</p>	<p>No formal cycle provision.</p> <p>Traffic is local access only.</p>	<p>Not currently a public transport route.</p>	<p>None proposed.</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 – Improve on-road cycle provision</p>

		recently been upgraded and widened as part of the Marischal Square development.	20mph zone. Cycle parking at Marischal Sqaure.			Option 3 – Improve off-road cycle provision (shared use)  Option 4 - Improve off-road cycle provision (segregation)  Option 5 – Make pedestrian and cycle only
<b>9</b>	Netherkirkgate	Pedestrian and cycle priority zone.  The footways on the approach to the underpass are poor quality but this is not a through-route for traffic so pedestrians are generally safe walking on the carriageway.  The road under St. Nicholas Street is dark and unwelcoming.	Pedestrian and cycle priority zone.  Traffic restricted to access only, can only enter via Flourmill Lane and is one-way only between Flourmill Lane and Union Street.  General traffic is prevented from travelling under St. Nicholas Street. Although cyclists are able to, the underpass is dark and imposing.  There is a waiting prohibition and a 20mph speed limit.	Not currently a public transport route.	None proposed.	Option 1 – Do Nothing  Option 2 – Resurface footways  Option 3 – Underpass improvements  Option 4 – Make Netherkirkgate pedestrian and cycle only

### D1.3.2 Zone 3 Option Appraisal and Recommendations

#### Union Street (Broad Street to Bridge Street / Union Terrace)

Table D66 – Option Appraisal

Option	Vis	TPOs	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	3	3	-2	1
2 - Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	1	1	1	15
3 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-2	1	1	-2	6
4 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	2	2	3	2	2	2	1	-1	-1	22
5 - CCMP project	3	2	1	2	1	0	1	0	0	3	1	1	1	1	1	2	-1	-1	18
6 - Increase bus lane hours of operation	1	1	1	1	0	2	0	0	0	2	1	0	1	1	1	3	3	0	18
7 - Make the entirety of Union Street a bus and cycle-only road	2	-1	2	-1	2	3	0	0	0	3	2	1	1	1	0	2	2	1	20

Table D67 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but no benefits in terms of the TPOs.	✗
2	Generally performs well although other options to improve cycling conditions (4 and 5) score higher. Should be retained as an option in case these prove undeliverable.	✓
3	Shared use provision in a busy city centre location unlikely to be welcomed by members of the public.	✗
4	Strong-performing option although likely to be expensive to deliver and likely to require reallocation of carriageway space. Requires consideration in terms of wider CCMP proposals but could be key to delivering high-quality east-west cycle route.	✓
5	Strong-performing option although likely to be expensive to deliver and may not be universally unpopular.	✓
6	Strong-performing option although may not be required if current CCMP proposals fully delivered.	✓
7	Strong-performing option although would need to be considered as part of wider CCMP proposals for Union Street.	✓

Recommendations for Union Street (Broad Street to Bridge Street / Union Terrace) are therefore to:

- Deliver the CCMP project to make Union Street bus, cycle and local access only;
- As part of CCMP project delivery, implement segregated cycle facilities to realise a high-quality east-west cycle route through the city centre.

## Union Terrace

Table D68 – Option Appraisal

Option	Vis	TPOs	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	3	3	-1	2
2 - Resurface footways	1	1	0	1	1	0	1	0	0	2	0	1	0	0	1	2	1	2	14
3 - Increase crossing provision	1	1	0	1	1	0	1	0	0	2	0	1	0	1	1	2	-1	1	12
4 - Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	0	16
5 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	2	1	-1	9
6 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	2	2	3	2	2	2	1	-1	-1	22
7 - Exempt cyclists from access restrictions	0	0	0	0	0	0	1	0	0	1	1	-1	1	1	1	3	3	2	13
8 - Resurface the carriageway	0	0	0	1	0	0	0	0	0	1	0	1	0	1	0	2	-2	3	7
9 - Introduce bus priority	2	1	1	2	0	3	1	0	0	2	2	0	2	2	2	1	1	-1	21
10 - Introduce one-way restriction for traffic	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	1	2	-1	1
11 - Deliver CCMP project	2	2	2	2	2	1	1	0	0	3	1	1	1	2	1	2	2	1	26

Table D69 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but no benefits in terms of the TPOs.	✗
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Positive impacts on most of the objectives and STAG criteria.	✓
4	Generally performs well although other options to improve cycling conditions (6 and 11) score higher. Should be retained as an option in case these prove undeliverable.	✓
5	Shared use provision in a busy city centre location unlikely to be welcomed by members of the public.	✗
6	Strong-performing option although could meet some resistance due to the need to relocate car parking, including disabled parking provision. May be incompatible with option 9.	✓
7	Minimal impact on TPOs and could raise safety concerns.	✗
8	Fairly low-scoring option in its own right so sifted out on that basis, although may form an important part of the delivery of preferred option or package.	✗
9	Strong-performing option although could meet some resistance due to the need to relocate car parking, including disabled parking provision. May be incompatible with option 6.	✓

10	No obvious benefits and could have negative impacts on the efficiency of bus movements.	x
11	Strong-performing option against a range of criteria.	✓

Recommendations for Union Terrace are therefore to:

- Deliver the CCMP project to make Union Terrace bus, cycle and local access only;
- As part of CCMP project delivery, look at opportunities for footway resurfacing and improved crossing provision;
- Install segregated cycle facilities as part of a high-quality north-south cycle route through the city centre. Should these be unfeasible, deliver mandatory on-road cycle facilities.

#### Denburn Road (Rosemount Viaduct to Wapping Street)

Table D70 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Improve pedestrian provision	1	1	0	1	2	0	1	0	0	2	0	1	0	1	1	-2	-2	1	8
3 - Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	-1	1	1	1	0	2	0	12
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	1	-2	-2	-1	4
5 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-2	-1	0	21
6 - Introduce bus priority.	2	1	1	2	0	3	1	0	0	3	2	0	2	2	2	-2	1	-2	18
7 - Remove traffic lanes to give priority to sustainable modes	1	1	2	1	2	2	0	0	0	1	2	2	1	1	1	-3	2	-1	15
8 - Make this a bus, cycle and local access only road	2	2	1	1	1	1	1	0	0	2	2	1	1	2	0	-2	1	-1	15
9 - Reduce the speed limit	2	2	1	1	2	-1	0	0	0	3	1	2	0	2	0	2	2	0	19

Table D71 - Appraisal Summary and Recommendations

Option Appraisal Summary															Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.															x
2 Meets a number of objectives and STAG criteria but likely to be unfeasible and unaffordable without relocation of carriageway space which may not be possible if Denburn Road has to remain a key traffic corridor to enable CCMP projects to be realised.															x
3 Positive impacts on most of the objectives and STAG criteria. There are concerns over the safety of on-road cycling, however, given that traffic levels are likely to remain high at this location (and even increase) to allow the delivery of CCMP measures.															x
4 Poor performing option that will be undeliverable without relocation of carriageway space and unlikely to be publicly acceptable.															x

5	Strong-performing option, although may be expensive and unfeasible to deliver if this is to remain a key road transport corridor to facilitate the delivery of the CCMP. Unlikely to be a popular cycling corridor with the availability of quieter routes through the city centre in any case.	x
6	Strong-performing option, although concerns over the feasibility and public acceptability if this is to remain a key road transport corridor to facilitate delivery of the CCMP.	x
7	Unlikely to be feasible or acceptable if this is to remain a key road transport corridor to facilitate delivery the CCMP.	x
8	Unlikely to be feasible or acceptable if this is to remain a key road transport corridor to facilitate delivery the CCMP.	x
9	Strong-performing option. May negatively impact on public transport journey times but overall impact likely to be negligible.	✓

The recommendation for Denburn Road is therefore to reduce the speed limit.

### Belmont Street

Table D72 – Option Appraisal

Link		Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
4	Belmont Street	1 - Do Nothing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	6
		2 - Exempt cyclists from access and one-way restrictions	1	0	0	1	0	0	1	0	0	1	1	0	1	1	1	3	3	1	15
		3 - Make the street pedestrian and cycle only	1	-1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-2	2	-2	11

Table D73 - Appraisal Summary and Recommendations

Option Appraisal Summary															Recommendation
1 Feasible and affordable but overall neutral impact on objectives.															x
2 Although there may be safety concerns with one-way exemptions, access exemptions could be successful provided such a solution can be delivered safely.															✓
3 Unlikely to be feasible given the needs of local business in the area and may have negative impacts on accessibility objectives.															x

The recommendation for Belmont Street is therefore to exempt cyclists from the current access restriction.

## Little Belmont Street

Table D74 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	6
2 - Exempt cyclists from one-way restrictions	1	0	0	1	0	0	1	0	0	1	1	0	1	1	1	3	3	1	15
3 - Make the street pedestrian and cycle only	1	-1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	2	2	1	18

Table D75 - Appraisal Summary and Recommendations

Option Appraisal Summary															Recommendation	
1	Feasible and affordable but overall neutral impact on objectives.															x
2	May be negative safety implications.															x
3	Unlikely to be feasible given the needs of local business in the area and may have negative impacts on accessibility objectives.															x

The recommendation for Little Belmont Street is therefore to do nothing.

## Back Wynd

Table D76 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	6
2 - Exempt cyclists from access and one-way restrictions	1	0	0	1	0	0	1	0	0	1	1	-1	1	1	1	3	3	0	13
3 - Make the street pedestrian and cycle only	1	-1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-1	-2	-2	12

Table D77 - Appraisal Summary and Recommendations

Option Appraisal Summary															Recommendation	
1	Feasible and affordable but overall neutral impact on objectives.															x
2	May be negative safety implications.															x
3	Unlikely to be feasible given the needs of local business in the area and may have negative impacts on accessibility objectives.															x

The recommendation for Back Wynd is therefore to do nothing.

### St. Nicholas Street / Correction Wynd

Table D78 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	6
2 - Exempt cyclists from access and one-way restrictions	1	0	0	1	0	0	1	0	0	1	1	0	1	1	1	3	3	0	14
3 - Make Correction Wynd pedestrian and cycle only	1	-1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	2	-1	13	

Table D79 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but overall neutral impact on objectives.	✗
2	Some positive impacts noted, provided such a solution can be delivered safely.	✓
3	Unlikely to be feasible given the needs of local business in the area and may have negative impacts on accessibility objectives.	✗

The recommendation for St. Nicholas Street / Back Wynd is therefore to exempt cyclists from the access restriction.

### Flourmill Lane

Table D80 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	6
2 - Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	-1	2	1	14
3 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	-1	1	-1	6
4 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-2	-1	1	22
5 - Make Flourmill Lane pedestrian and cycle only	1	-1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-3	9

Table D81 - Appraisal Summary and Recommendations

Option Appraisal Summary																	Recommendation	
1	Feasible and affordable but overall neutral impact on objectives.																	✓
2	Generally positive or neutral impacts across all criteria but road width unlikely to support the implementation of bi-directional cycle lanes.																	✗
3	Footway widths unlikely to support shared use arrangement while such infrastructure generally unacceptable to members of the public in a city centre location.																	✗
4	Generally positive or neutral impacts across all criteria but road width unlikely support the implementation of segregated cycle facilities.																	✗
5	Unlikely to be feasible or acceptable given that the street provides access to Marischal Square car parking, Marks and Spencers Collect by Car and other local businesses.																	✗

The recommendation for Flourmill Lane is therefore to do nothing given that pedestrian facilities are adequate, it is not a public transport route and Broad Street offers a much more welcoming alternative cycle route.

### Netherkirkgate

Table D82 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	6
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3- Underpass improvements.	1	1	0	1	1	0	0	0	0	1	0	2	0	1	1	2	1	2	14
4 – Make Netherkirkgate pedestrian and cycle only	1	-1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-1	2	-1	13

Table D83 - Appraisal Summary and Recommendations

Option Appraisal Summary																	Recommendation	
1	Feasible and affordable but overall neutral impact on objectives.																	✗
2	Positive impacts on a number of objectives and STAG criteria.																	✓
3	Positive impacts on a number of objectives and STAG criteria.																	✓

4	Likely to be negative impacts on local businesses in terms of making it difficult to receive deliveries and there may be negative impacts on accessibility and hence public acceptability.	x
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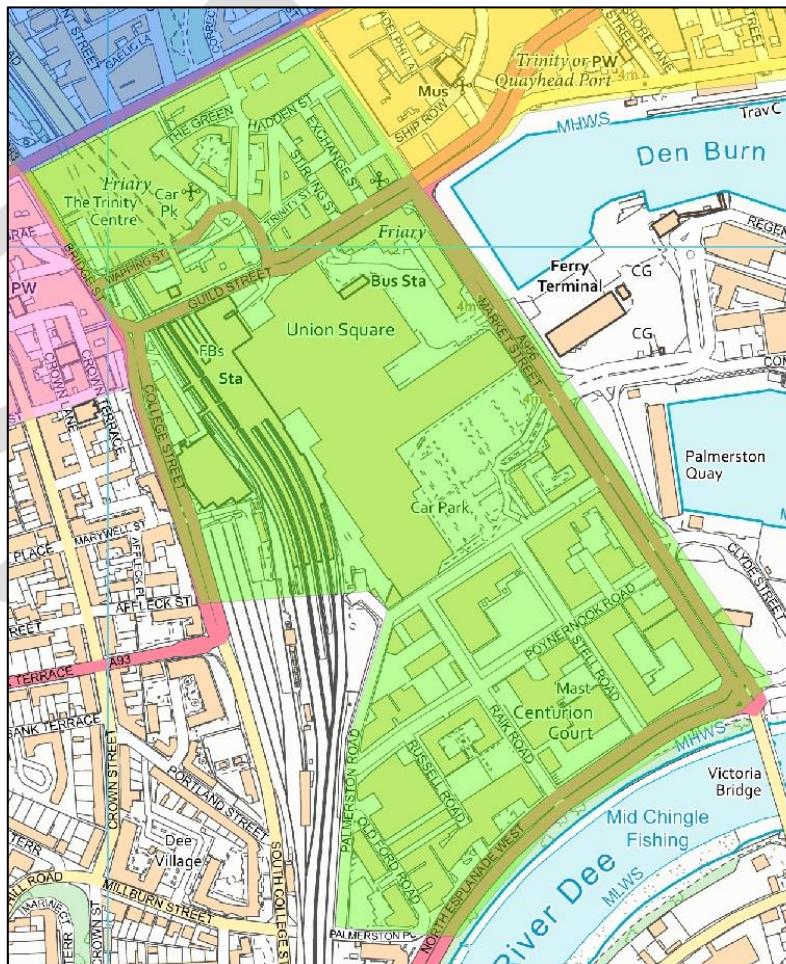
Recommendations for Netherkirkgate are therefore:

- Resurface the footways; and
- Improve the underpass to make more welcoming to pedestrians and cyclists.

#### D1.4 Zone 4

Zone 4 is the central section of the CCMP area bounded by Market Street to the east, North Esplanade West to the south, Palmerston Road / South College Street / Bridge Street to the west and Union Street to the north.

Figure D5 – SUMP Zone 4



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### D1.4.1 Zone 4 Corridor Assessment and Option Generation

Table D84 - Zone 4 Corridor Assessment and Options

Link		Current walking conditions	Current cycling conditions	Current public transport conditions	Current commitments, or CCMP/Roads Hierarchy proposals	Options
1	Market Street	<p><u>Union Street to Guild Street</u> Good quality footways on both sides of the carriageway. Pedestrian crossing at Union Street junction and north of Ship Row..</p> <p><u>Guild Street to North Esplanade West</u> Footway on the west side only between Guild Street and Commercial Quay (with the harbour acting as a constraint on the other side) and both sides thereafter. Cracked and uneven in places.</p> <p>Adequate crossing provision across Market Street (including at the ferry terminal entrance) and across side roads.</p> <p>Wayfinding totem at Union Square directing</p>	<p><u>Union Street to Guild Street</u> No formal cycling provision other than ASLs on approach to junctions. 20mph speed limit.</p> <p><u>Guild Street to North Esplanade West</u> Faded on-road mandatory cycle lanes on both sides of the carriageway between Palmerston Road and North Esplanade West. Busy dual carriageway arrangement.</p> <p>30mph speed limit</p>	Currently a public transport route but no formal provision.	<p>The CCMP proposes a one-way traffic system on the northern section (Union Street to Guild Street) with bus, cycle and taxi only traffic, and segregated two-way cycle lanes.</p> <p>While traffic modelling undertaken in support of the CCMP suggest that traffic levels on Market Street are such that physical segregation of cyclists is necessary, with the delivery of CCMP projects, levels should fall on the northern section to such an extent that a shared carriageway arrangement would be acceptable.</p> <p>The Roads Hierarchy Study recommends downgrading the A956 (which includes the</p>	<p>Option 1 – Do Nothing.</p> <p>Option 2 – Resurface footways on southern end</p> <p>Option 3 – Pedestrian crossing at Guild Street junction</p> <p>Option 4 – Improve on-road cycle provision</p> <p>Option 5 – Improve off-road cycle provision (shared use)</p> <p>Option 6 - Improve off-road cycle provision (segregation)</p> <p>Option 7 – Reduce speed limit on southern section</p> <p>Option 8 – Introduce bus priority</p>

		pedestrians to the ferry terminal.			southern section of Market Street) through the CCMP area to a secondary route but maintaining its A-road status.	Option 9 – Introduce one-way restriction for traffic  Option 10 – Make the street bus and cycle only  Option 11 – Make the street bus, cycle and local access only  Option 12 – Remove traffic lanes to give priority to sustainable modes  Option 13 - Deliver CCMP project
2	Bridge Street	Footways on both sides of the carriageway, although cracked and uneven in places, and crossing provision at northern and southern extents.	No formal provision other than ASLs.  One-way traffic only (northbound) between Guild Street and Wapping Street.  20mph speed limit between Union Street and Wapping Street; 30mph thereafter.	Currently a public transport route but no formal provision.	The CCMP proposes a one-way traffic system for buses, cycles and taxis only between Union Street and Wapping Street.  Traffic modelling undertaken in support of the CCMP suggest that, based on reference case traffic levels, physical segregation of cyclists would be preferred at this location in the short term. With the delivery of CCMP projects, it is predicted that levels	Option 1 – Do Nothing  Option 2 – Resurface footways  Option 3 – Improve on-road cycle provision  Option 4 – Improve off-road cycle provision (shared use)  Option 5 - Improve off-road cycle provision (segregation)  Option 6 – Exempt cyclists from one-way restriction

					would fall to such an extent that a shared carriageway arrangement would be acceptable.  The Roads Hierarchy Study recommends downgrading the B983, which includes Bridge Street, to a tertiary route / C-class road (generally formal bus and cycle priority not required, although depends on local circumstances).	Option 7 – Reduce the speed limit south of Wapping Street  Option 8 - Introduce one-way restriction for traffic along the whole street  Option 9 - Make Bridge Street bus, cycle and local access only  Option 10 – Deliver CCMP project
3	College Street	Footways on both sides of the carriageway and crossing provision at appropriate intervals.	No formal provision other than ASLs.  Dual carriageway between Bridge Street and Springbank Terrace.  30mph speed limit.	Not currently a public transport route.	The CCMP envisages shared use paths between Guild Street and Marywell Street  Although outside the immediate CCMP / SUMP area, there is an approved revised layout for the South College Street / Millburn Street / Palmerson Place junction.  The Roads Hierarchy Study recommends downgrading the A93 College Street to a	Option 1 – Do Nothing  Option 2 – Improve on-road cycle provision  Option 3 – Improve off-road cycle provision (shared use) as per CCMP  Option 4 - Improve off-road cycle provision (segregation)  Option 5 – Reduce the speed limit  Option 6 – Remove traffic lanes to give priority to sustainable modes

					secondary route / B-class road.	Option 7 – Make College Street pedestrian and cycle only  Option 8 – Make College Street pedestrian, cycle and local access only
4	Hadden Street	Footway provision on both sides of the carriageway.	No formal cycling provision.  There is a taxi rank located here.  Cobbled surface.  20mph speed limit.  Cycle parking available.	Not currently a public transport route.	None proposed.	Option 1 – Do Nothing  Option 2 – Improve on-road cycle provision  Option 3 – Improve off-road cycle provision (shared use)  Option 4 - Improve off-road cycle provision (segregation)  Option 5 – Introduce one-way restriction for traffic  Option 6 – Make the space pedestrian and cycle only.  Option 7 – Make the street cycle and local access only
5	The Green	Pedestrian priority zone with access to vehicles	Pleasant thoroughfare for cycling.	Not suitable as a public transport route.	The CCMP is unlikely to result in significant change at this location.	No intervention proposed.

		for loading only (4pm – 10am).  Pleasant public realm.	Cycle parking available.			
<b>6</b>	Rennie's Wynd	Footway provision on both sides of the carriageway.  Pleasant public realm.	No formal cycling provision.  Car parking on the eastern side of the carriageway.  Cobbled surface.  20mph speed limit.	Not currently a public transport route.	None proposed.	Option 1 – Do Nothing Option 2 – Improve on-road cycle provision Option 3 – Improve off-road cycle provision (shared use) Option 4 - Improve off-road cycle provision (segregation) Option 5 – Introduce one-way restriction for traffic Option 6 – Make the space pedestrian and cycle only Option 7 – Make the street cycle and local access only
<b>7</b>	Carmelite Street	Welcoming public realm where all users have equal priority and street furniture prohibits the fast movement of traffic.	Welcoming public realm where all users have equal priority and street furniture prohibits the fast movement of traffic.  One-way traffic only (southbound).	Not currently a public transport route.	None proposed.	Option 1 – Do Nothing Option 2 – Make the space pedestrian and cycle only

<b>8</b>	Wapping Street / Carmelite Street	<p>Footway provision on both sides of the carriageway.</p> <p>Crossing points along the route.</p>	<p>No formal cycling provision.</p> <p>Multiple traffic lanes.</p> <p>Traffic is one-way only (eastbound).</p> <p>30mph speed limit.</p>	<p>Currently a public transport route but no formal provision.</p>	<p>Roads Hierarchy Study recommends downgrading these sections of the A93 to secondary / B-road (Wapping Street) and tertiary / C-road (Carmelite Street).</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 – Improve on-road cycle provision</p> <p>Option 3 – Improve off-road cycle provision (shared use)</p> <p>Option 4 - Improve off-road cycle provision (segregation)</p> <p>Option 5 – Reduce the speed limit</p> <p>Option 6 - Introduce bus priority</p> <p>Option 7 – Remove traffic lanes to give priority to sustainable modes</p> <p>Option 8 – Make the street bus and cycle only</p> <p>Option 9 - Make the space bus, cycle and local access only</p>
<b>9</b>	Stirling Street	<p>Footway provision on both sides of the carriageway.</p>	<p>No formal cycling provision.</p> <p>One-way traffic only northbound.</p>	<p>Not currently a public transport route.</p>	<p>The CCMP proposes this area becomes bus, cycle, taxi and local access only.</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 – Improve on-road cycle provision</p>

			Parked cars on both sides of the carriageway.  Cobbled surface.  20mph speed limit.			Option 3 – Improve off-road cycle provision (shared use)  Option 4 - Improve off-road cycle provision (segregation)  Option 5 – Exempt cyclists from one-way and access restrictions  Option 6 – CCMP proposal  Option 7 – Make the space pedestrian and cycle only
<b>10</b>	Trinity Street	Footways on both sides of the carriageway.	No formal cycling provision.  Parked cars on both sides of the carriageway.  Cobbled surface.  20mph speed limit.	Not currently a public transport route.	The CCMP proposes this area becomes bus, cycle, taxi and local access only.	Option 1 – Do Nothing  Option 2 – Improve on-road cycle provision  Option 3 – Improve off-road cycle provision (shared use)  Option 4 - Improve off-road cycle provision (segregation)  Option 5 – Introduce one-way restriction for traffic  Option 6 – CCMP proposal

						Option 7 – Make the space pedestrian and cycle only
11	Carmelite Lane	Footways on both sides of the carriageway.	No formal cycling provision.  One-way traffic only northbound.  Parked cars on the west side of the carriageway.  Cobbled surface.  20mph speed limit.	Not suitable as a public transport route.	The CCMP proposes public realm interventions here and that the area becomes bus, cycle, taxi and local access only.	Option 1 – Do Nothing  Option 2 – Improve on-road cycle provision  Option 3 – Improve off-road cycle provision (shared use)  Option 4 - Improve off-road cycle provision (segregation)  Option 5 – Exempt cyclists from one-way and access restrictions  Option 6 – CCMP proposal  Option 7 – Make the space pedestrian and cycle only
12	Exchange Street	Footways on both sides of the carriageway.	No formal cycling provision.  Traffic is one-way only southbound.  Cobbled surface.  20mph speed limit.	Not currently a public transport route.	The CCMP proposes this area becomes bus, cycle, taxi and local access only.	Option 1 – Do Nothing  Option 2 – Improve on-road cycle provision  Option 3 – Improve off-road cycle provision (shared use)  Option 4 - Improve off-road cycle provision (segregation)

						<p>Option 5 – Exempt cyclists from one-way and access restrictions</p> <p>Option 6 – CCMP proposal</p> <p>Option 7 – Make the space pedestrian and cycle only</p>
13	Guild Street	<p>Footways on both sides of the carriageway, although the quality deteriorates around the Trinity Mall.</p> <p>Crossings available but movement inhibited by guardrail.</p>	<p>No formal provision other than ASLs.</p> <p>One-way traffic only (westbound) between Wapping Street and Bridge Street; 2 way dual carriageway arrangement between Carmelite Street and Trinity Quay.</p> <p>30mph speed limit.</p> <p>Cycle parking at Union Square.</p>	<p>Currently a public transport route but no formal provision.</p>	<p>The CCMP proposes the removal of car traffic and the reduction of bus traffic to one way only on Guild Street, thus allowing the existing plaza to the north of Union Square to be extended to create a more comfortable meeting place and an enhanced pedestrian linkage through the Merchant Quarter. Segregated two-way cycle lanes also proposed.</p> <p>The previous SUMP proposed a covered walkway across Guild Street from the station to elevators to carry people up to the Union Street level of the Trinity Centre, or a pedestrian bridge over</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 – Resurface footways between Union Square and Bridge Street</p> <p>Option 3 – Improve pedestrian permeability</p> <p>Option 4 – Covered walkway with elevators between the station and Trinity Mall</p> <p>Option 5 - Pedestrian bridge between the station and Trinity Mall</p> <p>Option 6 – Improve on-road cycle provision</p> <p>Option 7 – Improve off-road cycle provision (shared use)</p>

					Guild Street to the Trinity Centre.  The Roads Hierarchy Study recommends the A93 Guild Street is downgraded to a tertiary route / C-class road.	Option 8 - Improve off-road cycle provision (segregation)  Option 9 – Reduce the speed limit  Option 10 – Exempt cyclists from one-way restrictions  Option 11 – Introduce one-way restriction for traffic throughout the corridor  Option 12 - Introduce bus priority  Option 13 – CCMP proposal  Option 14 – Remove traffic lanes to give priority to sustainable modes
14	Palmerston Road	Footways on both sides of the carriageway.  Pleasant environment at the eastern extent around Union Square and North Dee.  Crossing provision at Union Square.	No formal provision.  One-way traffic only eastbound with the exception of a short stretch between Old Ford Road and Poynerhook Road.  Poor surface carriageway.	Not currently a public transport route.	The CCMP envisages the full redevelopment of this area to include a network of attractive streets and open spaces with opportunities for enhanced permeability for pedestrians and cyclists.	Option 1 – Do Nothing  Option 2 – Resurface carriageway  Option 3 – Improve on-road cycle provision  Option 4 – Improve off-road cycle provision (shared use)

			Cars parking on both sides of the carriageway.  Cobbled surface.  30mph speed limit.  Cycle parking at Union Square.			Option 5 - Improve off-road cycle provision (segregation)  Option 6 – Exempt cyclists from one-way and access restrictions  Option 7 – Make the space pedestrian and cycle only  Option 8 - Make the street cycle and local access only  Option 9 - Reduce the speed limit
15	Raik Road	Footways on both sides of the carriageway.  Prohibition of pavement parking.	No formal provision.  One-way traffic only northbound between Poynerook Road and Palmerston Road.  30mph speed limit.	Not currently a public transport route.		Option 1 – Do Nothing  Option 2 – Improve on-road cycle provision  Option 3 – Improve off-road cycle provision (shared use)  Option 4 - Improve off-road cycle provision (segregation)  Option 5 – Exempt cyclists from one-way and access restrictions  Option 6 – Make the entire stretch one-way

						Option 7 – Make the space pedestrian and cycle only
16	Stell Road	<p>Footways on both sides of the carriageway.</p> <p>Prohibiton of pavement parking.</p>	<p>No formal provision.</p> <p>One way traffic - northbound from North Esplanade West to Poynerook Road and southbound from Palmerston Road to Poynerook Road.</p> <p>Car parking on both sides of the carriageway.</p> <p>30mph speed limit.</p>	<p>Not currently a public transport route.</p>		<p>Option 8 - Make the street cycle and local access only</p> <p>Option 9 - Reduce the speed limit</p> <p>Option 1 – Do Nothing</p> <p>Option 2 – Improve on-road cycle provision</p> <p>Option 3 – Improve off-road cycle provision (shared use)</p> <p>Option 4 - Improve off-road cycle provision (segregation)</p> <p>Option 5 – Exempt cyclists from one-way and access restrictions</p> <p>Option 6 – Make the space pedestrian and cycle only</p> <p>Option 7 - Make the street cycle and local access only</p> <p>Option 8 - Reduce the speed limit</p>

17	Palmerston Place	<p>Footways on both sides of the carriageway.</p> <p>Pedestrian connection to North Esplanade West but free movement inhibited by guardrail.</p>	<p>No formal provision.</p> <p>One-way traffic eastbound between Old Ford Road and Palmerston Road.</p> <p>30mph speed limit.</p> <p>No cycle access to North Esplanade West.</p>	<p>Not currently a public transport route.</p>		<p>Option 1 – Do Nothing</p> <p>Option 2 – Improve on-road cycle provision</p> <p>Option 3 – Improve off-road cycle provision (shared use)</p> <p>Option 4 - Improve off-road cycle provision (segregation)</p> <p>Option 5 – Make the entire stretch one-way</p> <p>Option 6 – Exempt cyclists from one-way and access restrictions</p> <p>Option 7 – Reduce the speed limit</p> <p>Option 8 – Make the space pedestrian and cycle only</p> <p>Option 0 - Make the street cycle and local access only</p>
18	Poyneroak Road	<p>Footways on both sides of the carriageway.</p> <p>Prohibiton of pavement parking.</p> <p>Zebra crossing at Raik Road crossroads.</p>	<p>No formal provision.</p> <p>One-way traffic only, westbound from Market Street to Raik Road.</p> <p>30mph speed limit.</p>	<p>Not currently a public transport route.</p>		<p>Option 1 – Do Nothing</p> <p>Option 2 – Improve on-road cycle provision</p> <p>Option 3 – Improve off-road cycle provision (shared use)</p>

			Parked cars on both sides of the carriageway.  Cobbled surface between Raik Road and Palmerston Road.			Option 4 - Improve off-road cycle provision (segregation)  Option 5 – Make the entire stretch one-way  Option 6 – Exempt cyclists from one-way and access restrictions  Option 7 – Reduce the speed limit  Option 8 – Make the space pedestrian and cycle only  Option 9 - Make the street cycle and local access only
19	North Esplanade West	Footways on both sides of the carriageway.  Crossing provision at Market Street, Raik Road and in advance of the Queen Elizabeth II (QE2) bridge.	Shared use path along the north bank of the river with opportunities to access this via Market Street, Raik Road and QE2 bridge.  Little on-road provision other than ASLs on approach to junctions.  Dual carriageway arrangement.  30mph speed limit.	Not currently a public transport route.	The CCMP envisages a new pedestrian bridge to connect with a new housing development on the south bank of the Dee.  The Roads Hierarchy Study recommends downgrading the A956 North Esplanade West to a secondary route, although maintaining its A-class status..	Option 1 – Do Nothing  Option 2 – Improve on-road cycle provision  Option 3 – Improve off-road cycle provision (shared use)  Option 4 - Improve off-road cycle provision (segregation)  Option 5 – Reduce the speed limit


## D1.4.2 Zone 4 Option Appraisal and Recommendations

### Market Street

Table D85 – Option Appraisal

1 - Do Nothing	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	3	3	0	3	
2 - Resurface footways on southern end	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Pedestrian crossing at Guild Street junction	1	1	0	1	1	0	1	0	0	2	0	1	0	1	1	2	-1	2	13
4- Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	-1	1	1	1	1	1	2	2	1	15
5 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	-1	1	-1	6
6 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-1	-1	-1	21
7 - Reduce speed limit on southern section	2	2	1	1	2	0	0	0	0	3	1	2	0	2	0	2	2	0	20
8 - Introduce bus priority	2	-1	1	2	0	3	1	0	0	2	2	0	-1	2	2	2	1	-1	17
9 - Introduce one-way restriction for traffic	0	-1	0	0	0	-1	0	0	0	2	0	0	-1	0	0	1	2	-1	1
10 - Make the street bus and cycle only	2	-3	2	-1	2	3	0	0	0	2	2	1	-3	1	0	-3	2	-3	4
11 - Make the street bus, cycle and local access only	2	2	1	1	1	1	0	0	0	3	2	1	1	2	0	-1	2	-1	18
12 - Remove traffic lanes to give priority to sustainable modes	1	-1	2	1	2	2	0	0	0	1	1	2	1	1	-1	2	-1	14	
13 - Deliver CCMP project.	1	-1	1	1	1	1	0	0	3	2	1	1	2	0	2	2	-1	17	

Table D86 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives, particularly the CCMP.	✗
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Positive impacts on most of the objectives and STAG criteria.	✓
4	Positive impacts on most of the objectives and STAG criteria, although contradicts existing policy directives as the CCMP advocates segregated cycle facilities, at least at the northern end. Worth retaining as an option though in case alternative provision proves unfeasible.	✓
5	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	✗
6	Strong-performing option, therefore should be subject to further feasibility, although may be constrained by width. May be an expensive option however and could be unpopular with the public if it necessitates the removal of lanes for general traffic. May be incompatible with option 8.	✓

7	Strong-performing option with benefits across a range of criteria.	✓
8	Reasonably strong-performing option, although may have negative economic impacts, given the importance of freight movements in the area. May be incompatible with options to improve cycling provision.	✓
9	Could have negative implications on public transport movements and the movement of freight to and from the harbour and Union Square.	✗
10	Likely to raise significant economic concerns in terms of freight access to the harbour and Union Square and unlikely to be acceptable as a result.	✗
11	There are concerns about the economic impact of this option given the importance of freight movements in the area.	✗
12	Can be sifted out on the basis that it duplicating options 6 and 8.	✗
13	Strong-performing option, although there might be minor negative impacts if access is restricted for deliveries to businesses at the northern end of Market Street.	✓

Market Street is another corridor where the needs of pedestrians, cyclists, public transport and freight all need to be taken into account when devising an optimum solution. As the CCMP project already has general agreement and benefits both cyclists and public transport users, it is recommended for implementation, although the preference would be to make it bus, cycle and local access only so as not to disadvantage local businesses. Opportunities for improved cycle facilities along the whole route should also be looked at given that it will remain a busy bus and freight corridor. Cycling infrastructure is prioritised over public transport improvements south of Market Street, given that there are relatively few services using the section south of the bus station.

Recommendations for Market Street are therefore to:

- Implement a modified CCMP project to deliver a one-way traffic system (bus, cycle and local access only) between Union Street and Guild Street, with segregated cycle facilities;
- Resurface footways on the southern section (Guild Street to North Esplanade West);
- Reduce the speed limit along the entire street;
- Investigate the feasibility of implementing a pedestrian crossing phase at the signals at the Market Street / Guild Street junction; and
- Undertake further work to determine the feasibility of improved cycle facilities on the southern section of Market Street.

## Bridge Street

Table D87 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	3	3	0	3
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3- Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	1	17
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	-1	1	-1	6
5 – Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-1	-1	-1	21
6 – Exempt cyclists from one-way restriction	0	0	0	0	0	0	1	0	0	1	1	-1	1	1	1	3	3	0	11
7 – Reduce the speed limit south of Wapping Street	2	2	1	1	2	0	0	0	0	3	1	2	0	2	0	2	2	0	20
8 - Introduce one-way restriction for traffic along the whole street	0	0	0	0	0	-1	0	0	0	3	0	0	0	0	0	1	2	-1	4
9 – Make Bridge Street bus, cycle and local access only	2	2	1	1	1	1	1	0	0	3	2	1	1	2	0	2	2	-1	21
10 - Deliver CCMP project	1	-1	1	1	1	1	1	0	0	3	2	1	1	2	0	2	2	-1	17

Table D88 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives, particularly the CCMP.	✗
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Positive impacts on most of the objectives and STAG criteria, although options 5 and 9 score higher. Should be pursued if these prove undeliverable.	✓
4	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	✗
5	Strong-performing option, therefore should be subject to further feasibility. May be an expensive option however.	✓
6	This option has minimal impacts on the TPOs and raises significant safety concerns.	✗
7	Strong-performing option against a range of criteria.	✓
8	Minimal impact on TPOs and could cause significant disruption to public transport.	✗
9	Strong-performing option but may meet some resistance from members of the public.	✓
10	Strong-performing option, although may some negative impacts on local businesses.	✗

Recommendations for Market Street are therefore to:

- Implement a modified CCMP project to deliver a one-way traffic system (bus, cycle and local access only) between Union Street and Wapping Street;
- Resurface footways;
- Reduce the speed limit along the entire street;
- Undertake further work to determine the feasibility of segregated cycle facilities; and
- If segregated facilities not feasible, consider provision of mandatory on-road cycle lanes.

### College Street

Table D89 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	3	3	0	3
2 - Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	1	17
3 - Improve off-road cycle provision (shared use) as per CCMP	1	0	0	0	1	0	1	0	0	3	1	1	1	1	-1	1	1	-1	10
4 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	1	2	3	2	2	2	-2	-1	-1	18
5 - Reduce the speed limit	2	2	1	1	2	0	0	0	0	1	1	2	0	2	0	2	2	0	18
6 - Remove traffic lanes to give priority to sustainable modes	1	2	2	1	2	2	0	0	0	-3	2	2	1	2	1	2	2	-2	17
7 - Make College Street pedestrian and cycle only	1	-1	3	-1	3	0	1	0	0	-3	2	2	1	1	-1	-3	2	-2	5
8 - Make College Street pedestrian, cycle and local access only	2	2	1	1	1	0	1	0	0	-3	2	1	1	2	0	1	2	-1	13

Table D90 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Poorest-performing of the cycle options; shared provision in the city centre generally unwelcome to members of the public.	✗
4	Strong-performing option, although there are significant constraints on deliverability, given the road width.	✗
5	Strong-performing option against a range of criteria.	✓
6	Strong-performing option against a range of criteria, although as this is not a public transport corridor, this option effectively duplicates Option 4 (segregated cycle facilities) so can be sifted out on that basis.	✗
7	Unlikely to be feasible or acceptable given the presence of College Street car park and there may be accessibility implications for Union Square and the train station if the car park is inaccessible. Contradicts existing proposals for South College Street.	✗
8	Although generally performs well, contradicts existing proposals for South College Street.	✗

Recommendations for College Street are therefore to:

- Reduce the speed limit; and
- Investigate the feasibility of implementing on-road cycle provision, preferably mandatory cycle lanes.

### Hadden Street

Table D91 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	1	2	0	15
3 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	-1	1	-1	6
4 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	2	-1	-1	24
5 - Introduce one-way restriction for traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	-1	3
6 - Make the space pedestrian and cycle only	1	-1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-2	10
7 - Make the street cycle and local access only	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	2	2	1	23

Table D92 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on most of the objectives and STAG criteria, although cobbled surface unlikely to make this a key cycle route.	✗
3	Poor-performing option; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	✗
4	Strongest-performing option, although cobbled surface unlikely to make this a key cycle route in the presence of improved alternatives elsewhere.	✗
5	Minimal impact on TPOs. No discernible benefit.	✗
6	Likely to negatively impact on local businesses. Would necessitate relocation of taxi rank which could have negative implications on accessibility and be unpopular.	✗
7	Strong-performing option against the majority of criteria.	✓

The recommendation for Hadden Street is therefore to make the space cycle and local access only.

## Rennie's Wynd

Table D93 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2- Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	1	17
3 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	0	1	1	0	10
4 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-1	-1	-1	21
5 - Introduce one-way restriction for traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	-1	2
6 - Make the space pedestrian and cycle only	1	-1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-3	9
7 – Make the street cycle and local access only	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	2	2	1	23

Table D94 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	x
2	Positive impacts on most of the objectives and STAG criteria, although cobbled surface unlikely to make this a key cycle route.	x
3	Poor-performing option; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	x
4	Strongest-performing option, although cobbled surface unlikely to make this a key cycle route in the presence of improved alternatives elsewhere.	x
5	Minimal impact on TPOs. No discernible benefit.	x
6	Likely to negatively impact on local businesses.	x
7	Strong-performing option against the majority of criteria. However, likely to function in this manner in any case given that the Green is a pedestrian priority zone.	x

No actions are therefore recommended for Rennie's Wynd.

## Carmelite Street (Wapping Street to Hadden Street)

Table D95 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	6
2 - Make the space pedestrian and cycle only	1	1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-3	11

Table D96 - Appraisal Summary and Recommendations

Option Appraisal Summary											Recommendation
1   No discernible impact on TPOs or STAG criteria but street works well in any case.											✓
2   Unfeasible due to the street providing access to residential car parks.											✗

No actions are therefore recommended for Carmelite Street (Wapping Street to Hadden Street).

## Wapping Street / Camelite Street

Table D97 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	0	16
3 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	1	1	-1	8
4 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	-1	23
5 - Reduce the speed limit	2	2	1	1	2	0	0	0	0	3	1	2	0	2	0	2	2	0	20
6 - Introduce bus priority	1	1	1	1	0	2	1	0	0	3	2	0	2	2	2	1	1	-1	19
7 - Remove traffic lanes to give priority to sustainable modes	1	1	2	1	2	2	0	0	0	2	2	2	1	2	1	1	2	-1	21
8 - Make the space bus and cycle only	2	-1	2	-1	2	3	0	0	0	2	2	1	1	1	0	-2	2	-2	12
9 - Make the street bus, cycle and local access only	2	2	1	1	1	1	0	0	0	-2	2	1	1	2	0	1	2	-1	15

Table D98 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on most of the objectives and STAG criteria, although option 4 (segregated cycle facilities) scores higher. Could be pursued if option 4 proves undeliverable. May be incompatible with option 6.	✓
3	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	✗
4	Strongest-performing option, therefore should be subject to further feasibility. May be an expensive option however. May be incompatible with option 6.	✓
5	Strong-performing option against the majority of criteria.	✓
6	Strong-performing option. Would need to be considered within the context of CCMP proposals for Guild Street. May be incompatible with options for improving cycle provision.	✓
7	Effectively duplicates options 4 and 6 so sifted out on that basis.	✗
8	Unlikely to be feasible given the road provides access to the Denburn corridor and Trinity Mall parking.	✗
9	May be incompatible with wider Berryden and South College Street proposals and contrary to recommendations of Roads Hierarchy review.	✗

Recommendation for Wapping Street / Carmelite Street are therefore to:

- Reduce the speed limit
- Undertake further work to determine the feasibility of segregated cycle facilities; and
- If segregated facilities not feasible, consider provision of mandatory on-road cycle lanes.

## Stirling Street

Table D99 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	0	16
3 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	-1	1	1	-1	-1	8
4 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	-1	23
5 - Exempt cyclists from one-way and access restrictions	0	0	0	0	0	0	1	0	0	1	1	-1	1	1	1	2	3	-1	9
6 - CCMP proposal	2	2	1	1	1	0	1	0	0	3	2	1	1	2	0	2	2	1	22
7 - Make the space pedestrian and cycle only	1	0	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-1	2	-1	14

Table D100 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on most of the objectives and STAG criteria, although cobbled surface unlikely to make this a key cycle route.	✗
3	Poor-performing option; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	✗
4	Strong-performing option, although cobbled surface unlikely to make this a key cycle route in the presence of improved alternatives elsewhere.	✗
5	Minimal impacts on the TPOs and may raise some safety concerns.	✗
6	Strong performing option against a range of criteria.	✓
7	Would require the removal of on-street car parking which may have negative impacts on accessibility and could be unpopular and would impact on the ability to pick-up and drop-off at the Carmelite Hotel. May impact on the ease with which local businesses can receive deliveries.	✗

The recommendation for Stirling Street is therefore to make the space cycle and local access only as per the CCMP.

## Trinity Street

Table D101 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	0	16
3 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	-1	1	1	-1	-1	8
4 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	-1	23
5 - Introduce one-way restriction for traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	-1	2
6 - CCMP proposal	2	2	1	1	1	0	1	0	0	3	2	1	1	2	0	2	2	1	22
7 - Make the space pedestrian and cycle only	1	0	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-2	2	-2	12

Table D102 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on most of the objectives and STAG criteria, although cobbled surface unlikely to make this a key cycle route.	✗
3	Poor-performing option; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	✗
4	Strong-performing option, although cobbled surface unlikely to make this a key cycle route in the presence of improved alternatives elsewhere.	✗
5	No discernible benefit and may not be popular with members of the public.	✗
6	Strong performing option against a range of criteria.	✓
7	Would require the removal of on-street car parking which may have negative impacts on accessibility and could be unpopular. May impact on the ease with which local businesses can receive deliveries.	✗

The recommendation for Trinity Street is therefore to make the space cycle and local access only as per the CCMP.

## Carmelite Lane

Table D103 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2- Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	-1	2	0	13
3 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	-1	1	-1	6
4 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-2	-1	-2	19
5 - Exempt cyclists from one-way and access restrictions	0	0	0	0	0	0	1	0	0	1	1	-1	1	1	1	3	3	-1	10
6 - CCMP proposal	2	2	1	1	1	0	1	0	0	3	2	1	1	2	0	2	2	1	22
7 – Make the space pedestrian and cycle only	1	1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	2	2	-1	18

Table D104 - Appraisal Summary and Recommendations

Option Appraisal Summary											Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.											✗
2 Positive impacts on most of the objectives and STAG criteria, although cobbled surface unlikely to make this a key cycle route. Road width unlikely to allow for bi-directional cycle lanes in any case.											✗
3 Poor-performing option; shared provision in a busy city centre location unlikely to be acceptable to members of the public. Footway widths unlikely to be wide enough in any case.											✗
4 Strong-performing option, although cobbled surface unlikely to make this a key cycle route in the presence of improved alternatives elsewhere. Road width unlikely to allow for segregated cycle facilities in any case.											✗
5 Minimal impact on TPOs. Road width raises safety concerns with this option.											✗
6 Strong performing option against a range of criteria.											✓
7 Would require the removal of on-street car parking which may have negative impacts on accessibility and could be unpopular. May impact on the ease with which local businesses can receive deliveries.											✗

The recommendation for Carmelite Lane is therefore to make the space cycle and local access only as per the CCMP.

## Exchange Street

Table D105 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	3	3	0	5	
2 - Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	2	2	0	16	
3 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	-1	1	1	-1	8	
4 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	-1	-1	-1	21	
5 - Exempt cyclists from one-way and access restrictions	1	0	0	0	0	0	1	0	0	1	1	-1	1	1	3	3	-1	11	
6 - CCMP proposal	2	2	1	1	1	0	1	0	0	3	2	1	1	2	0	2	2	1	22
7 - Make the space pedestrian and cycle only	1	-1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-3	9

Table D106 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on most of the objectives and STAG criteria, although cobbled surface unlikely to make this a key cycle route.	✗
3	Poor-performing option; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	✗
4	Strong-performing option, although cobbled surface unlikely to make this a key cycle route in the presence of improved alternatives elsewhere.	✗
5	Minimal impact on TPOs. Road width raises safety concerns with this option.	✗
6	Strong performing option against a range of criteria.	✓
7	Would require the removal of on-street car parking which may have negative impacts on accessibility and could be unpopular. May impact on the ease with which local businesses can receive deliveries.	✗

The recommendation for Exchange Street is therefore to make the space cycle and local access only as per the CCMP.

## Guild Street

Table D107 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	3	3	0	3
2- Resurface footways between Union Square and Bridge Street	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	1	12
3 - Improve pedestrian permeability	1	1	1	1	1	0	1	0	0	3	1	-1	1	1	1	3	2	2	19
4 - Covered walkway with elevators between the station and Trinity Mall	1	1	1	1	1	0	1	0	0	1	0	0	1	1	2	1	-2	3	13
5 - Pedestrian bridge between the station and Trinity Mall	1	1	1	1	1	0	1	0	0	1	0	1	1	1	1	-1	-3	3	10
6 - Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	1	17
7 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	1	1	-1	8
8 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	0	24
9 - Reduce the speed limit	2	2	1	1	2	0	0	0	0	3	1	2	0	2	0	2	2	0	20
10 – Exempt cyclists from one-way restrictions	0	0	0	0	0	0	1	0	0	1	1	-2	1	1	1	3	3	-1	9
11 – Introduce one-way restriction for traffic throughout the corridor	0	0	0	0	0	-3	0	0	0	3	0	0	0	0	0	1	2	-1	2
12 – Introduce bus priority.	2	1	1	2	0	3	1	0	0	3	2	0	2	2	2	3	1	-1	24
13 – CCMP proposal	1	-1	1	1	1	1	0	0	3	2	2	0	2	1	2	2	-1	18	
14 – Remove traffic lanes to give priority to sustainable modes	1	1	2	1	2	2	0	0	0	3	2	2	1	2	1	2	2	-1	23

Table D108 - Appraisal Summary and Recommendations

Option Appraisal Summary														Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives, particularly the CCMP.														✗
2 Positive impacts on most of the objectives and STAG criteria.														✓
3 Not recommended as an option in its own right due but worth progressing as part of a wider improvement package.														✗
4 Performs well against a range of criteria but likely to be an expensive option.														✓
5 Performs well against a range of criteria but question marks over feasibility and affordability. Preference is therefore to progress option 4 over this option in the first instance.														✓
6 Positive impacts on most of the objectives and STAG criteria, although other options score higher and could bring similar or improved benefits for cyclists. Worth retaining as an option though in case these other options prove undeliverable.														✓
7 Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.														✗

8	Strong-performing option therefore should be subject to further feasibility. May be an expensive option however and may conflict with option 12 (introduce bus priority),	✓
9	Strong-preforming option against multiple criteria.	✓
10	Minimal impacts on TPOs and likely to raise significant safety concerns.	✗
11	Minimal impacts on TPOs and could be significant disadvantages to bus operations given proximity to bus station.	✗
12	Strong-performing option, although may conflict with option 8 (segregated cycle facilities).	✓
13	A strong-performing option with wider benefits in terms of creating a more welcoming arrival experience to the city centre from the bus and rail stations. There are risks of negative impacts on local businesses however if loading and unloading at shopfronts is prohibited. Could be progressed as a hybrid option with benefits to both cyclists and public transport movements	✓
14	Effectively a duplication of option 13 so sifted out on that basis.	✗

Recommendations for Guild Street are therefore to:

- Resurface footways between Union Square and Bridge Street;
- Work with partners to look at options for improved connectivity (including lifts) between Union Square and Trinity Mall;
- Deliver CCMP project to remove car traffic and reduce bus traffic to one-way only on Guild Street, while allowing local access only for deliveries;
- Undertake further work to determine the requirement for and feasibility of segregated cycle facilities; and
- If segregated facilities not feasible, consider provision of mandatory on-road cycle lanes.

### Palmerston Road

Table D109 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Resurface the carriageway	1	1	0	1	0	0	0	0	0	1	0	1	0	1	0	-1	-1	-1	3
3 - Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	0	16
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	1	1	-1	8
5 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-2	-1	-2	19
6 - Exempt cyclists from one-way and access restrictions	1	0	0	0	0	0	1	0	0	1	1	0	1	1	1	3	3	0	13
7 - Make the space pedestrian and cycle only	1	-1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-3	9
8 - Make the street cycle and local access only	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	3	1	1	23
9 - Reduce the speed limit	2	2	1	1	2	0	0	0	0	3	1	2	0	2	0	2	2	1	21

Table D110 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	x
2	Poor-performing option.	x
3	Positive impacts on most of the objectives and STAG criteria, although cobbled surface unlikely to make this a key cycle route. There would be merit however in terms of implementing formal cycling provision east of Raik Road (to Market Street) should the proposed pedestrian and cycle bridge over the Dee be delivered. This could be mandatory cycle lanes or a segregated route, depending on conditions at the time.	✓
4	Poor-performing option; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	x
5	Positive impacts on most of the objectives and STAG criteria, although cobbled surface unlikely to make this a key cycle route. There would be merit however in terms of implementing formal cycling provision east of Raik Road (to Market Street) should the proposed pedestrian and cycle bridge over the Dee be delivered. This could be mandatory cycle lanes or a segregated route, depending on conditions at the time.	✓
6	Safety implications of this option are unclear.	x
7	Would require the removal of a significant volume of on-street car parking which raises accessibility concerns and could be unpopular with members of the public, although alternative parking provision is available nearby at Union Square. The street does, however, provide access to private off-street car parks and local business may experience difficulties if they are not able to load and unload easily outside their premises.	x
8	Strong-performing option with multiple benefits.	✓
9	Strong-performing option with multiple benefits.	✓

## Raik Road

Table D111 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2- Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	1	17
3 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	1	1	-1	8
4 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	-1	23
5 - Exempt cyclists from one-way and access restrictions	1	0	0	0	0	0	1	0	0	1	1	0	0	1	1	3	3	0	12
6 - Make the entire stretch one-way	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3
7 - Make the space pedestrian and cycle only	1	-1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-3	9
8 - Make the street cycle and local access only	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	1	1	0	20
9 - Reduce the speed limit	2	2	1	1	2	0	0	0	0	3	1	2	0	2	0	2	2	1	21

Table D112 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on most of the objectives and STAG criteria, although option 4 (segregated cycle facilities) scores higher. Should be pursued if option 4 proves undeliverable.	✓
3	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	✗
4	Strong-performing option, therefore should be subject to further feasibility. May be an expensive option however.	✓
5	Safety implications of this option are unclear.	✗
6	No discernible benefits.	✗
7	Unlikely to be feasible as the street provides access to a number of premises which will require access for deliveries and which have their own off-street car parking.	✗
8	Strong-performing option with multiple benefits.	✓
9	Strong-performing option with multiple benefits.	✓

It seems prudent to strike a balance on Palmerston Road and Raik Road based on their short- and long-term function as a cycle route. In the short term, there is nothing to suggest that Palmerston Road / Raik Road would be a key cycle corridor therefore there is sense in proceeding with minor interventions to make the area generally more permeable to pedestrians and cyclists, similar to that proposed for other streets in the

North Dee area (i.e. make cycle and local access only and reduce the speed limit). In the longer term, the CCMP proposes a new pedestrian bridge over the River Dee between Torry and North Esplanade West, anticipated to land on the north bank near Raik Road. Should this be delivered and accommodate cyclists, one would anticipate Raik Road / Palmerson Road becoming part of a key cycle link between Torry and the city centre, which would then justify more significant intervention in the form of formal cycling provision.

Recommendations for Palmerston Road and Raik Road are therefore to:

- Make the space cycle and local access only;
- Reduce the speed limit; and
- Should the new pedestrian and cycle bridge across the Dee be delivered, implement more formal cycling provision between Raik Road and Market Street

### Stell Road

Table D113 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	0	16
3 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	1	1	-1	8
4 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	1	25
5 - Exempt cyclists from one-way and access restrictions	1	0	0	0	0	0	1	0	0	1	1	-1	1	1	1	3	3	-1	11
6 - Make the space pedestrian and cycle only	1	-1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-3	9
7 - Make the street cycle and local access only	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	2	1	1	22
8 - Reduce the speed limit	2	2	1	1	2	0	0	0	0	3	1	2	0	2	0	2	2	1	21

Table D114 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	x
2	Positive impacts on most of the objectives and STAG criteria. Scores less than other options to improve cycling (4 and 7) but could be pursued if these prove undeliverable.	✓
3	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	x
4	Strong-performing option, therefore should be subject to further feasibility. May be an expensive option however.	✓
5	Road width at the northern end may make this an unsafe option.	x

6	Unlikely to be feasible as the street provides access to a number of premises which will require access for deliveries and which have their own off-street car parking.	x
7	Strong-performing option with multiple benefits.	✓
8	Strong-performing option with multiple benefits.	✓

Although the implementation of formal cycle provision scores highly on Stell Road, there are benefits to maintaining a consistent level of provision in the North Dee area, hence the recommendations for Stell Road are to:

- Make the space cycle and local access only and;
- Reduce the speed limit.

### Palmerston Place

Table D115 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	3	3	0	3
2 - Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	-1	1	1	1	1	1	2	2	1	15
3 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	-1	1	1	1	1	-1	1	1	-1	6
4 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	-1	2	3	2	2	2	1	-1	-1	19
5 - Make the entire stretch one-way	0	0	0	0	0	0	0	0	0	-2	0	0	0	0	0	1	2	0	1
6 - Exempt cyclists from one-way and access restrictions	1	0	0	0	0	0	1	0	0	-1	1	0	1	1	1	3	3	0	11
7 - Reduce the speed limit.	2	2	1	1	2	0	0	0	0	0	1	2	0	2	0	2	2	1	18
8 - Make the space pedestrian and cycle only	1	-1	3	-1	3	0	1	0	0	-3	2	2	1	1	-1	-3	2	-3	4
9 - Make the street cycle and local access only	3	2	1	2	1	0	1	0	0	-3	2	1	1	2	0	2	2	1	18

Table D116 - Appraisal Summary and Recommendations

Option Appraisal Summary																Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives, especially aspirations for South College Street.																x
2 Positive impacts on most of the objectives and STAG criteria, although does not at present form part of approved South College Street scheme.																✓
3 Poorest-performing of the cycle options; shared provision in a city centre location unlikely to be acceptable to members of the public.																x

4	Positive impacts on most of the objectives and STAG criteria, although does not at present form part of approved South College Street scheme.	✓
5	No discernible benefit and does not form part of approved South College Street scheme.	✗
6	Some benefits, although does not currently form part of approved South College Street scheme.	✓
7	Strong-performing option, although would need to ensure compatibility with approved South College Street scheme.	✓
8	Unlikely to be feasible as the street provides egress from a private car park.	✗
9	Some benefits although likely to be incompatible with approved South College Street scheme.	✗

As Palmerston Place is impacted by the Council's proposals for South College Street, it is hard to recommend interventions until the final form of these changes is determined. It is recommended, however, that attention is given to the needs of cyclists when devising final proposals to ensure a consistent level of cycling provision within the area.

### Poynerhook Road

Table D117 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	0	16
3 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	1	1	-1	8
4 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	1	25
5 - Make the entire stretch one-way	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3
6 - Exempt cyclists from one-way and access restrictions	1	0	0	0	0	0	1	0	0	1	1	0	1	1	1	3	3	0	13
7 - Reduce the speed limit	2	2	1	1	2	0	0	0	0	3	1	2	0	2	0	2	2	1	21
8 - Make the space pedestrian and cycle only	1	-1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-3	9
9 - Make the street cycle and local access only	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	2	2	1	23

Table D118 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	x
2	Positive impacts on most of the objectives and STAG criteria. Does not score as highly as other options to improve cycling provision (4 and 9) but worth retaining as an option in case these prove undeliverable.	✓
3	Poorest-performing of the cycle options; shared provision in a city centre location unlikely to be acceptable to members of the public.	x
4	Strongest-performing option, although may be expensive to deliver.	✓
5	No discernible benefits on TPOs or STAG criteria.	x
6	Safety implications unclear.	x
7	Strong-performing option against a range of criteria.	✓
8	Unlikely to be feasible as the street provides access to a number of premises which will require access for deliveries and which have their own off-street car parking.	x
9	Strong-performing option against a range of criteria.	✓

As with Stell Road, there are benefits to maintaining a consistent level of provision in the North Dee area, hence the recommendations are to:

- Make the space cycle and local access only; and
- Reduce the speed limit.

## North Esplanade West

Table D119 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2- Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	1	17
3 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	1	1	-1	8
4 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	2	-1	-1	24
5 - Reduce the speed limit	2	2	1	1	2	0	0	0	0	3	1	2	0	2	0	2	2	0	20
6 - Make the space pedestrian and cycle only	1	-2	3	-1	3	0	1	0	0	2	2	2	-1	1	-1	-3	2	-3	6
7 - Make the street cycle and local access only	3	-1	1	2	1	0	1	0	0	2	2	1	-1	2	0	-3	1	-3	8
8 - New pedestrian bridge (as per CCMP) over the Dee	1	1	1	1	1	0	1	0	0	3	-1	1	0	1	1	1	-3	2	11
9 - New pedestrian and cycle bridge over the Dee	2	1	1	1	2	0	2	0	0	3	-1	2	0	1	2	1	-3	3	17

Table D120 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on most of the objectives and STAG criteria, although option 4 (segregated cycle facilities) performs better. This option could be pursued if segregated facilities prove undeliverable.	✓
3	A shared pedestrian and cycle path already exists on one side of the carriageway by the river. Further provision on the north side of the carriageway unlikely to be a preferred option given the aversion to such provision amongst both pedestrians and cyclists.	✗
4	Strong-performing option, although may be expensive to deliver.	✓
5	Strong-performing option against a range of criteria.	✓
6	Unlikely to be feasible without negative implications on accessibility and the operation of local businesses. This also forms part of a strategic route between the south of the city and the harbour	✗
7	Unlikely to be feasible as this forms part of a strategic route between the south of the city and the harbour	✗
8	Positive impacts against a range of criteria although there may be negative environmental impacts on the River Dee and this is likely to be expensive. Option 9 similar but with additional benefits.	✗
9	Positive impacts against a range of criteria although there may be negative environmental impacts on the River Dee and is likely to be expensive.	✓

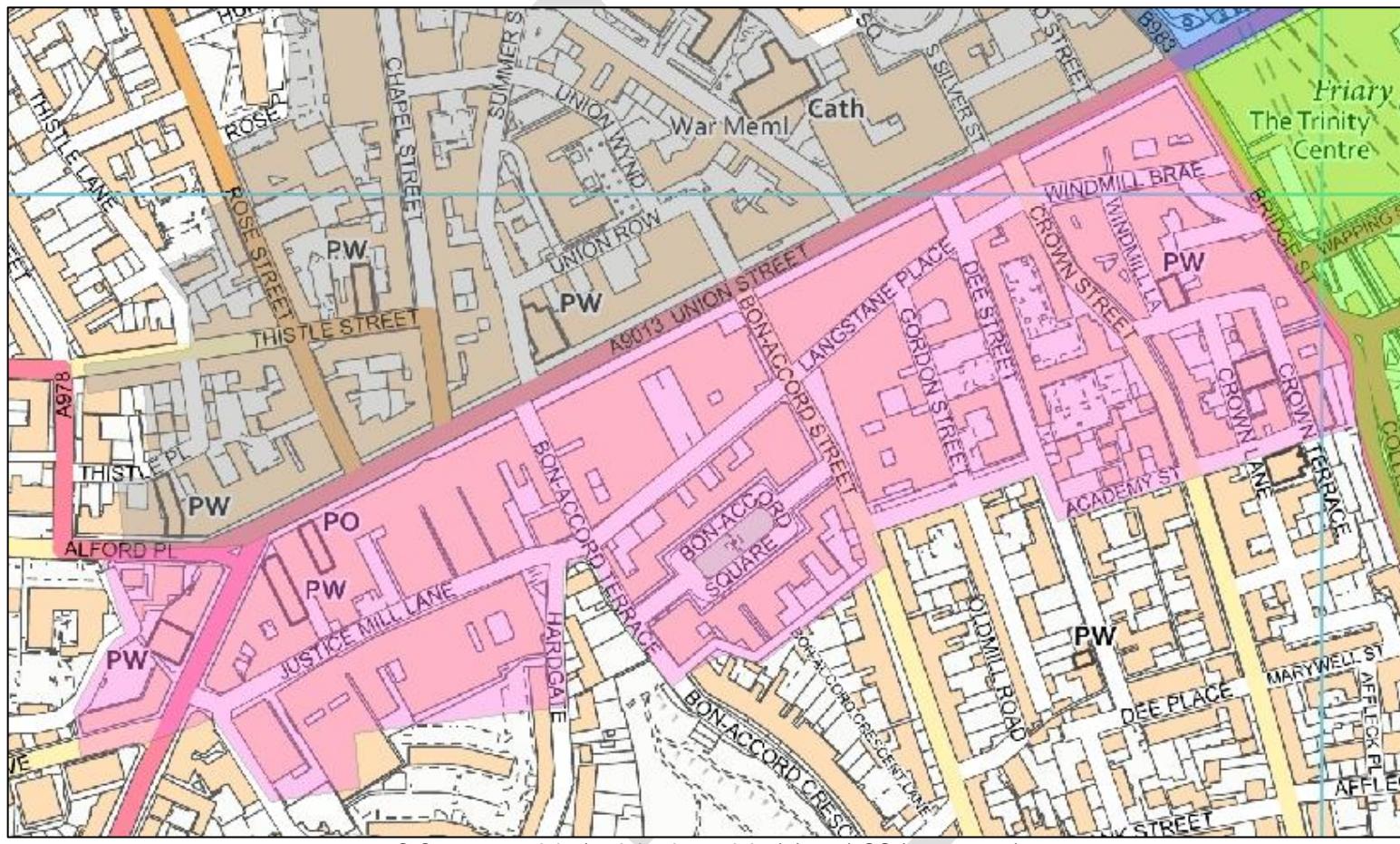
Recommendations for North Esplanade West are therefore:

- Reduce the speed limit to 20mph;
- Undertake further work to determine the feasibility of segregated cycle facilities;
- If segregated facilities not feasible, consider provision of mandatory on-road cycle lanes; and
- Progress delivery of a new pedestrian and cycle bridge over the River Dee as part of CCMP delivery.

## D1.5 Zone 5

Zone 5 is the south-western section of the CCMP area bounded by Bridge Street to the east, Academy Street / Bon Accord Lane / Craibstone Lane to the south, Justice Mill Brae / Albyn Lane / Alford Lane to the west and Alford Place / Union Street to the north.

Figure D6 – SUMP Zone 5



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### D1.5.1 Zone 5 Corridor Assessment and Option Generation

Table D121 - Zone 5 Corridor Assessment and Options

Link		Current walking conditions	Current cycling conditions	Current public transport conditions	Current commitments, or CCMP/Roads Hierarchy proposals	Options
1	Holburn Street (Union Street to Union Grove / Justice Mill Lane)	<p>Footways on both sides of the carriageway, although cracked and uneven in places and narrow around the bus stops.</p> <p>Crossing provision at each end of the route and a pedestrian refuge island at Union Grove.</p>	<p>Dual carriageway arrangement.</p> <p>ASLs at main junctions.</p> <p>Part-time bus, cycle and taxi lane (northbound) between Great Western Road and Union Grove.</p> <p>Right-turn ban from Holburn Street to Justice Mill Lane.</p> <p>20mph zone.</p> <p>Cycle parking available at Alpine Bikes.</p>	<p>Part-time bus, cycle and taxi lane (northbound) between Great Western Road and Union Grove.</p>	<p>The previous SUMP proposed a bus gate on the eastbound approach to Union Street.</p> <p>The Roads Hierarchy Study recommends downgrading the A9013 Holburn Street to a secondary route / B-class road.</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 – Resurface footways</p> <p>Option 3- Improve on-road cycle provision</p> <p>Option 4 - Improve off-road cycle provision (shared use)</p> <p>Option 5 – Improve off-road cycle provision (segregation)</p> <p>Option 6 – Exempt cyclists form right-turn ban</p> <p>Option 7 – Bus gate on approach to Union Street</p> <p>Option 8 – Make Holburn Street a bus and cycle-only road</p> <p>Option 9 – Make Holburn Street a bus,</p>

						cycle and access only road  Option 10 - Remove traffic lanes to give priority to sustainable modes of transport
2	Bon Accord Terrace (Union Street to Langstane Place)	Footways on both sides of the carriageway, although cracked and uneven in places.	No formal provision.  Traffic is one-way only (southbound).  Cobbled surface on the northern section.  20mph speed limit.	Not currently a public transport route.	There are proposals to prohibit motor vehicles (except for access, taxis, blue badge holders and cyclists) between 10pm and 7am 7 days a week.	Option 1 – Do Nothing  Option 2 – Resurface footways  Option 3 – Improve on-road cycle provision  Option 4 - Improve off-road cycle provision (shared use)  Option 5 – Improve off-road cycle provision (segregation)  Option 6 – Current proposal  Option 7– Exempt cyclists from one-way and access restrictions  Option 8 - Make a pedestrian and cycle-only space  Option 9 – Make a cycle and access only road

<b>3</b>	Langstane Place	Footways on both sides of the carriageway, although cracked and uneven and narrow in places.  Zebra crossing near Bon Accord Street junction.	No formal provision.  Car parking on the south side of the carriageway.  Traffic is one-way only eastbound between Bon Accord Street and Dee Street (with traffic calming) and one-way only westbound between Crown Street and Langstane Place, preventing Langstane Place being used as a through-route or rat-run for traffic.  20mph speed limit.	Not currently a public transport route.	The CCMP proposes that Langstane Place be reserved for pedestrians and cyclists.  Current proposals are to prohibit vehicles (except for access, taxis, blue badge holders and cyclists) between 10pm and 7am 7 days a week between Bon Accord Crescent and Dee Street. A proposed 24-hour prohibition of motor vehicles on Langstane Place between Dee Street and Crown Street, with a timed exemption for delivery by goods vehicles between 6am and 11am Monday to Saturday, is also proposed along with a reversal of the current one-way system between Bon Accord Street and Dee Street.	Option 1 – Do Nothing  Option 2 – Resurface footways  Option 3 – Widen footways  Option 4 - Improve on-road cycle provision  Option 5 - Improve off-road cycle provision (shared use)  Option 6 – Improve off-road cycle provision (segregation)  Option 7 – Current proposal  Option 8 – CCMP project  Option 9 - Exempt cyclists from one-way and access restrictions
<b>4</b>	Justice Mill Lane	Footways on both sides of the carriageway, although narrow, cracked and uneven on the north side.	No formal provision.  20mph speed limit.  Cycle parking available at the gym, the old Bon Accord Baths site and	Not currently a public transport route.	The CCMP proposes segregated cycle lanes.  There is a current proposal to prohibit motor vehicles (except for access, taxis, blue	Option 1 – Do Nothing  Option 2 – Resurface footways  Option 3- Improve on-road cycle provision

		<p>Good quality and wide footways outside the hotels on the south side.</p> <p>Pedestrian refuge island at Holburn Street junction.</p>	<p>at the Bon Accord Terrace junction.</p>		<p>badge holders and cyclists) between 10pm and 7am 7 days a week.</p>	<p>Option 4 - Improve off-road cycle provision (shared use)</p> <p>Option 5 – CCMP proposal (segregated cycle lanes)</p> <p>Option 6 – Current proposal</p> <p>Option 7 – Make the space pedestrian and cycle only</p> <p>Option 8 – Make the street cycle and local access only</p> <p>Option 9 – Make traffic one-way only.</p>
5	Windmill Brae / Bath Street	<p>Footways on both sides of the carriageway, although narrow, cracked and uneven.</p> <p>Steep topography.</p>	<p>No formal provision.</p> <p>Cobbled surface.</p> <p>Intermittent car parking on both sides of the carriageway.</p> <p>20mph speed limit.</p> <p>Steep topography.</p>	<p>Not currently a public transport route.</p>	<p>There is a proposal to prohibit motor vehicles (except for access, taxis, blue badge holders and cyclists) between 10pm and 7am 7 days a week, and to implement a one-way system between Crown Street and Bath Street.</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 – Resurface footways</p> <p>Option 3 - Widen footway.</p> <p>Option 4 – Improve on-road cycle provision</p> <p>Option 5 - Improve off-road cycle provision (shared use)</p>

						<p>Option 6 – Improve off-road cycle provision (segregation)</p> <p>Option 7 – Current proposal</p> <p>Option 8 – Make the space pedestrian and cycle only</p> <p>Option 9 – Make the street cycle and local access only</p> <p>Option 10 – Make traffic one-way only</p>
<b>6</b>	Dee Street (Union Street to Bon Accord Lane)	Footways on both sides of the carriageway, although narrow, cracked and uneven in places.	No formal provision.  One-way traffic only (southbound).  Banned right turn into Langstane Place.  Car parking on both sides of the carriageway and a taxi rank.  20mph speed limit with traffic calming.	Not currently a public transport route.	None proposed.	<p>Option 1 – Do Nothing</p> <p>Option 2 – Resurface footways</p> <p>Option 3 – Widen footways</p> <p>Option 4- Improve on-road cycle provision</p> <p>Option 5 - Improve off-road cycle provision (shared use)</p> <p>Option 6 – Improve off-road cycle provision (segregation)</p>

						Option 7 – Exempt cyclists from one-way and access restrictions  Option 8 – Make the space pedestrian and cycle only  Option 9 – Make the street cycle and local access only
7	Crown Street (Union Street to Academy Street)	Footways on both sides of the carriageway, although cracked and uneven.  Pedestrian crossing at Union Street.	NCN1 but little provision - ASL on approach to Union Street, with a small section of advisory on-road cycle lane on the approach.  Cars parked intermittently on both sides of the carriageway.  20mph speed limit.  Cycle parking available.	Currently a public transport route but no formal provision.	The CCMP envisages segregated two-way cycle lanes between Union Street and Springbank Terrace.  To enable this the previous SUMP proposed a one way traffic system in a southerly direction, with a reverse on Bon Accord Street.	Option 1 – Do Nothing  Option 2 – Resurface footways  Option 3- Improve on-road cycle provision  Option 4 - Improve off-road cycle provision (shared use)  Option 5 – CCMP proposal (segregated cycle facilities)  Option 6 – Introduce bus priority  Option 7 – Make Crown Street a bus, cycle and access only road  Option 8 – Make bus and cycle only

						Option 9 – Make traffic one-way only
<b>8</b>	Bon Accord Lane	Narrow footway provision on both sides of the carriageway. Cracked and uneven in places.	No formal provision. One-way traffic only westbound.  Cobbled surface.  20mph speed limit.	Not currently a public transport route.	None proposed.	Option 1 – Do Nothing  Option 2 – Resurface footways  Option 3 – Widen footways  Option 4 - Improve on-road cycle provision  Option 5 – Improve off-road cycle provision (shared use)  Option 6 – Exempt cyclists from one-way and access restriction  Option 7 – Make the road cycle and access only  Option 8 – Make the space pedestrian and cycle only
<b>9</b>	Academy Street	Narrow footway provision on both sides of the carriageway.	No formal provision. Cobbled surface.  20mph speed limit.	Not currently a public transport route	None proposed.	Option 1 – Do Nothing  Option 2- Improve on-road cycle provision  Option 3 - Improve off-road cycle provision (shared use)

						Option 4 – Make traffic one-way only  Option 5 – Make the space pedestrian and cycle only  Option 6 – Make the road cycle and local access only
10	Craibstone Lane	No footway provision but unlikely to be busy with traffic.	No formal provision but unlikely to be busy with traffic.	Not currently a public transport route	None proposed.	Option 1 – Do Nothing  Option 2 - Improve on-road cycle provision  Option 3 – Segregated cycle facilities  Option 4 – Make traffic one-way only  Option 5 – Make the space pedestrian and cycle only  Option 6 – Make the road cycle and local access only
11	West / East Craibstone Street	Footways on both sides of the carriageway, although cracked and uneven.	No formal provision.  Parking on both sides of the carriageway.  20mh speed limit.	Not currently a public transport route.	None proposed.	Option 1 – Do Nothing  Option 2 – Resurface footways  Option 3 - Improve on-road cycle provision

						<p>Option 4 - Improve off-road cycle provision (shared use)</p> <p>Option 5 – Improve off-road cycle provision (segregation)</p> <p>Option 6 – Make traffic one-way only</p> <p>Option 7 – Make the space pedestrian and cycle only</p> <p>Option 8 – Make the road cycle and local access only</p>
12	Bon Accord Square	Footways on both sides of the carriageway, although cracked and uneven.	No formal provision.  Parking on both sides of the carriageway.  One-way traffic circulation.  20mph speed limit.  Cycle parking available.	Not currently a public transport route.	The CCMP proposes removing car parking and enhanced greening of this square to create a local garden space with improved perimeter planting and seating areas to encourage casual meetings and contemplation, with a new ramped access and new paving.	<p>Option 1 – Do Nothing</p> <p>Option 2 – Resurface footways</p> <p>Option 3 - Improve on-road cycle provision</p> <p>Option 4 - Improve off-road cycle provision (shared use)</p> <p>Option 5 – Improve off-road cycle provision (segregation)</p> <p>Option 6 – CCMP proposal</p>

						<p>Option 7 – Exempt cyclists from one-way and access restriction</p> <p>Option 8 – Make the space pedestrian and cycle only</p> <p>Option 9 – Make the road cycle and local access only</p>

### D1.5.2 Zone 5 Options Appraisal and Recommendations

Holburn Street (Union Street to Union Grove / Justice Mill Lane)

Table D122 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2- Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3- Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	2	2	1	17	
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	1	1	-1	8
5 – Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	1	25
6 - Exempt cyclists from right-turn ban	1	0	0	0	0	0	1	0	0	1	1	0	1	1	1	3	3	0	13
7 – Bus gate on approach to Union Street	1	-1	1	-1	1	2	0	0	0	3	1	1	1	1	1	1	-1	-1	10
8 – Make Holburn Street a bus and cycle-only road	2	-1	2	-1	2	3	0	0	0	2	2	1	1	1	0	-3	2	-3	10
9 – Make Holburn Street a bus, cycle and access only road	2	2	1	1	1	1	1	0	0	2	2	1	1	2	0	2	1	-1	19
10 - Remove traffic lanes to give priority to sustainable modes of transport	1	1	2	1	2	2	0	0	0	2	2	2	1	2	1	2	2	-1	22

Table D123 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Positive impacts on most of the objectives and STAG criteria, although option 5 (segregated cycle facilities) scores higher. Should be pursued if option 5 proves undeliverable.	✓
4	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	✗
5	Strong-performing option, therefore should be subject to further feasibility. May be an expensive option.	✓
6	May be safety concerns with removing this restriction.	✗
7	Restricting access to Union Street from Holburn Street may have negative implications on accessibility criteria and impacts on local businesses if access is restricted for deliveries, etc.	✗
8	May have negative implications on accessibility criteria and impacts on local businesses if access is restricted for deliveries, etc.	✗
9	Strong-performing option against a range of criteria. May not align with future roads hierarchy proposals, however.	✓
10	Effectively duplicates options for improved bus priority and cycling provision so can be sifted out on that basis.	✗

Recommendations for Holburn Street are therefore to:

- Resurface the footways;
- Install segregated cycle lanes on the approach to Union Street to link with proposed segregated cycle facilities on Union Street; and
- If segregated facilities unfeasible, consider provision of mandatory on-road cycle lanes.

As the CCMP area only covers the area of Holburn Street between the Union Grove junction and Union Street, recommendations concentrate primarily on his section. Recognising, however that Holburn Street is a key link to the city centre from the south of Aberdeen, it is recommended that in the longer-term, consideration be given to making the entirety of Holburn Street more friendly for public transport and active travel.

## Bon Accord Terrace (Union Street to Lanstane Place)

Table D124 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2- Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	1	17
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	1	1	-1	8
5 – Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-2	-1	-2	19
6 - Current proposal	1	1	0	1	0	0	0	0	0	2	0	1	1	1	1	2	2	1	14
7 - Exempt cyclists from one-way and access restrictions	1	0	0	0	0	0	1	0	0	1	1	0	1	1	1	3	3	0	13
8 - Make a pedestrian and cycle-only space	1	-1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-3	9
9 – Make a cycle and access only road.	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	2	2	1	23

Table D125 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	x
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Positive impacts on most of the objectives and STAG criteria, although cobbled surface unlikely to make this a key cycle route in the presence of alternatives.	x
4	Shared provision in a busy city centre location unlikely to be acceptable to members of the public.	x
5	Positive impacts on most of the objectives and STAG criteria, although cobbled surface unlikely to make this a key cycle route in the presence of alternatives.	x
6	Generally positive or neutral impacts across all criteria.	✓
7	May be negative safety implications.	x
8	Unlikely to be feasible as the street provides access to off-street car parking. May impact the operations of local businesses if access to frontages is restricted.	x
9	Strong-performing option against a range of criteria. Likely to become cycle and local access only by proxy, however, given it is sandwiched between Union Street and Justice Mill Lane (for which access restrictions are proposed) therefore may not require formal designation.	x

It is therefore recommended that footways are resurfaced.

## Langstane Place

Table D126 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	3	3	0	3
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Widen footways	1	1	0	1	1	0	1	0	0	1	0	0	0	1	1	1	-2	1	8
4 - Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	1	1	-1	13
5 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-2	-1	1	-1	5
6 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-1	-1	-1	21
7 - Current proposal	1	1	0	1	0	0	0	0	0	2	0	1	1	1	2	2	1	14	
8 - CCMP project	1	-1	3	-1	3	0	1	0	0	3	1	3	1	1	-1	-2	2	-1	13
9 - Make a cycle and local access only street	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	2	2	-1	21
10 - Exempt cyclists from one-way and access restrictions	1	0	0	0	0	0	1	0	0	1	1	0	1	1	1	3	3	0	13

Table D127 - Appraisal Summary and Recommendations

Option Appraisal Summary												Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.												✗
2 Benefits across a range of criteria.												✓
3 Benefits across a range of criteria, although may be incompatible with options for improving cycle provision. May not be required in the future if CCMP proposals for pedestrianisation come to fruition.												✓
4 Positive impacts on most of the objectives and STAG criteria, other than acceptability given that the removal of on-street car parking (including disabled parking provision) is likely to be required. May not be required in the future if CCMP proposals for pedestrianisation come to fruition.												✓
5 Footway widths currently inadequate, while shared provision in a busy city centre location unlikely to be acceptable to members of the public.												✗
6 Strong-performing option, although could be expensive to deliver. This standard of infrastructure arguably may not be required if high-quality provision is available on Union Street and it may be more cost-effective to consider more modest cycling proposals.												✗
7 A range of benefits across multiple criteria.												✓
8 Full pedestrianisation of this area likely to be unfeasible, given that it provides access to private off-street car parking and there are multiple loading bays for which access will continue to be required.												✗
9 Strong-performing option which would maintain access to loading bays and private parking areas.												✓

10	May be negative safety implications	x
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As with Bon Accord Terrace, while there is merit in progressing the night-time proposals currently proposed, option 9 (making the street cycle and local access only) has wider benefits and is recommended for implementation in the longer-term as further elements of the CCMP are delivered. It is therefore recommended that:

- Footways are resurfaced;
- The space is made pedestrian, cycle and local access only; and
- Should cycle safety prove to be a concern at this location following the above interventions, the feasibility of mandatory on-road cycle lanes is investigated.

### Justice Mill Lane

Table D128 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	3	3	0	3
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3- Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	1	17
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	1	1	-1	8
5 - CCMP proposal (segregated cycle lanes)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-3	-1	-1	19
6 - Current proposal	1	1	0	1	0	0	0	0	0	2	0	1	1	1	1	2	2	1	14
7 - Make a pedestrian and cycle-only space	1	1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-3	11
8 - Make the street cycle and local access only	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	2	2	1	23
9- Make traffic one-way only	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	-1	2

Table D129 - Appraisal Summary and Recommendations

Option Appraisal Summary															Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives, including the CCMP															x
2 Positive impacts on most of the objectives and STAG criteria.															✓
3 Positive impacts on most criteria. Likely to require the removal of on-street car parking which may not be popular with the public.															✓
4 Shared provision in a busy city centre location unlikely to be acceptable to members of the public.															x
5 Strong-performing option, although could be expensive to deliver. This standard of infrastructure may not be required if high-quality alternative provision is available on Union Street.															x
6 A range of benefits across multiple criteria.															✓

7	Unlikely to be feasible given the street provides access to multiple off-street car parking areas and loading bays as well as enabling pick-up and drop-off at the hotels.	x
8	Strong-performing option which would maintain access to loading bays and private car parking areas.	✓
9	No discernible benefits.	x

As with Bon Accord Terrace and Langstane Place, while there is merit in the night-time proposals, option 9 (making the street cycle and local access only) has wider benefits and is recommended for implementation as further elements of the CCMP are delivered. Although the CCMP proposes segregated cycle facilities here, this level of provision is unlikely to be required if a high quality parallel route is in place on Union Street, thereby allowing more modest proposals to be taken forward for Justice Mill Lane which are more affordable and deliverable, and consistent with Langstance Place. It is therefore recommended that:

- Footways are resurfaced;
- The space is made pedestrian, cycle and local access only; and
- Should cycle safety prove to be a concern at this location following the above interventions, investigate the feasibility of mandatory on-road cycle lanes.

### Windmill Brae / Bath Street

Table D130 – Option Appraisal

1 - Do Nothing	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5	
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Widen footways	1	1	0	1	1	0	1	0	0	1	0	0	0	1	1	1	-2	1	8
4 - Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	2	2	-1	15
5 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	-1	1	-1	6
6 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-2	-1	-1	20
7 - Current proposal	1	1	0	1	0	0	0	0	2	0	1	1	1	1	2	2	1	14	
8 - Make a pedestrian and cycle-only space	1	1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-3	11
9 - Make the street cycle and local access only	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	2	2	1	23
10 - Make traffic one-way only	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	-1	2	

Table D131 - Appraisal Summary and Recommendations

Option Appraisal Summary															Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.															x
2 Positive impacts on most of the objectives and STAG criteria.															✓

3	Positive impacts on a number of objectives and STAG criteria.	✓
4	Positive impacts on most of the objectives and STAG criteria, although cobbles likely to prevent this being a popular cycle route in the presence of alternatives and removal of cobbles likely to be undesirable from a conservation perspective.	✗
5	Existing footways unlikely to be wide enough for such an arrangement. Shared provision in a busy city centre location unlikely to be acceptable to members of the public.	✗
6	Strong-performing option, although cobbles likely to prevent this being a popular cycle route in the presence of alternatives and removal of cobbles likely to be undesirable from a conservation perspective.	✗
7	A range of benefits across multiple criteria.	✓
8	Unlikely to be feasible given the requirements of local business for loading and unloading, rubbish collection, etc.	✗
9	A range of benefits across multiple criteria.	✓
10	No discernible benefits.	✗

As with the rest of the Justice Mill Lane / Langstane Place / Windmill Brae corridor, while there is merit in the current night-time proposals, making the street cycle and local access only has wider benefits and is recommended for implementation as further elements of the CCMP are delivered. It is also recommended that footways are widened and resurfaced.

#### Dee Street (Union Street to Bon Accord Lane)

Table D132 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Widen footways	1	1	0	1	1	0	1	0	0	1	0	0	0	1	1	1	-2	1	8
4- Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	0	-1	2	-1	11
5 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	1	1	-1	8
6 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	0	-1	-1	-1	19
7 - Exempt cyclists from one-way and access restrictions	1	0	0	0	0	0	1	0	0	1	0	-1	0	1	1	3	3	0	10
8 - Make the space pedestrian and cycle only	1	1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-3	11
9 - Make the street cycle and local access only	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	2	2	-1	21

Table D133 - Appraisal Summary and Recommendations

Option Appraisal Summary														Recommendation	
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.														x
2	Positive impacts on most of the objectives and STAG criteria.														✓
3	Positive impacts on a number of objectives and STAG criteria.														✓
4	Positive impacts on most of the objectives and STAG criteria but would require the relocation of a taxi rank which may be unpopular and could have negative accessibility implications. Other options to benefit cyclists score higher in any case.														x
5	Shared provision in a busy city centre location unlikely to be acceptable to members of the public.														x
6	Positive impacts on most of the objectives and STAG criteria but would require the relocation of a taxi rank which may be unpopular and could have negative accessibility implications Would effectively duplicate improved provision on Crown Street as recommended by the CCMP in any case.														x
7	Some positive impacts but not recommended on safety grounds.														x
8	Unlikely to be feasible, given the presence of a taxi rank and the fact that the street provides access to private car parks.														x
9	Positive impacts against a range of criteria.														✓

Although there are difficulties with delivering formal cycling infrastructure on Dee Street, the presence of a parallel cycle route on Crown Street should offer an alternative. While the option to make this a walking, cycling and bus priority space (local access only for general traffic) scores highly, this is likely to occur anyway with the delivery of wider CCMP, SUMP and Roads Hierarchy proposals so does not require progression as a stand alone option. It is therefore recommended that on Dee Street the footways are widened and resurfaced.

#### Crown Street (Union Street to Academy Street)

Table D134 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	3	3	0	3
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3- Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	-1	1	1	1	1	1	2	2	-1	13
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	-1	1	1	1	1	-1	1	1	-1	6
5 - CCMP proposal (segregated cycle lanes)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	-1	23
6 - Introduce bus priority	2	1	1	2	0	3	1	0	0	-1	2	0	2	2	2	-1	1	-1	16
7 - Make Crown Street a bus, cycle and access only road	2	2	1	1	1	1	1	0	0	1	2	1	1	2	0	2	2	-1	19
8 - Make bus and cycle only	2	1	2	-1	2	3	0	0	0	1	2	2	1	1	-1	-3	2	-3	11
9 - Make traffic one-way only	0	0	0	0	0	-2	0	0	0	0	0	0	0	0	0	1	2	-1	0

Table D135 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives, particularly the CCMP.	✗
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Positive impacts on most of the objectives and STAG criteria, although may not be popular with members of the public as it would require the removal of on-street parking. Option 5 (segregated cycle facilities) scores higher but this could be pursued as an alternative if option 5 proves undeliverable.	✓
4	Shared provision in a busy city centre location unlikely to be acceptable to members of the public.	✗
5	Strong-performing option, although may not be popular with members of the public as it would require the removal of on-street parking. May be an expensive option.	✓
6	Although a strong-performing option, this may be incompatible with the existing CCMP project to deliver segregated cycle facilities. There are limited bus services currently using Crown Street in any case and little evidence of delays at this location.	✗
7	Generally, a strong-performing option, although may not be required if Option 5 successfully delivered.	✗
8	Unlikely to be feasible given that Crown Street provides access to private off-street car parks and frontage access to local businesses may be required.	✗
9	No discernible benefit and may be negative impacts on public transport movements.	✗

Recommendations for Crown Street are therefore to:

- Resurface the footways;
- Make the space bus, cycle and local access only; and
- Deliver CCMP project to implement segregated cycle facilities between Springbank Terrace and Union Street.

## Bon Accord Lane

Table D136 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Widen footways	1	1	0	1	1	0	1	0	0	1	0	0	0	1	1	-3	-2	1	4
4 - Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	-3	1	1	11
5 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	-3	1	-1	4
6 - Exempt cyclists from one-way and access restrictions	1	0	0	0	0	0	1	0	0	1	1	0	1	1	1	3	3	0	13
7 - Make the road cycle and local access only	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	-1	2	1	20
8 - Make the space pedestrian and cycle only	1	1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-3	11

Table D137 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria	✗
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Unlikely to be feasible given the road width.	✗
4	Unlikely to be feasible given the road width.	✗
5	Unlikely to be feasible given footway widths.	✗
6	May be negative safety implications.	✗
7	A strong-performing option although may not be feasible in the context of wider proposals i.e. may have to remain open to all traffic to facilitate north section of Dee Street becoming local access only.	✗
8	Unlikely to be feasible in a dense residential area providing access to multiple off-street car parks.	✗

The recommendation for Bon Accord Lane is therefore to resurface the footways.

## Academy Street

Table D138 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	-1	1	1	13
3 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	2	1	1	0	1	-1	-1	-1	0	5
4 - Make traffic one-way only	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	-1	2
5 - Make the space pedestrian and cycle only	1	1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-3	11
6 - Make the road cycle and local access only	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	2	2	1	23

Table D139 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. In the absence of feasible alternatives however, this becomes the preferred option.	✓
2	Option performs well but cobbled surface likely to prevent this being designated a popular cycle route.	✗
3	Unlikely to be feasible without footway widening, while shared use provision in a residential area unlikely to be popular with the public.	✗
4	No discernible benefit and may not be popular with the public.	✗
5	Unlikely to be feasible in a dense residential area providing access to multiple off-street car parks.	✗
6	A strong-performing option but would be a relatively isolated link with few wider benefits	✗

The recommendation for Academy Street is therefore to do nothing.

## Craigstone Lane

Table D140 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	-2	1	1	1	12
3 - Segregated cycle lane(s)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	-3	-1	-2	-2	18
4 - Make traffic one-way only	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	-1	2
5 - Make the space pedestrian and cycle only	1	1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-3	11
6 - Make the road cycle and local access only	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	2	2	1	23

Table D141 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. In the absence of feasible alternatives however, this becomes the preferred option.	✓
2	Unlikely to be feasible given road width.	✗
3	Unlikely to be feasible given road width.	✗
4	No discernible benefit.	✗
5	Unlikely to be feasible in a dense residential area providing access to multiple off-street car parks.	✗
6	A strong-performing option. Would be an isolated link, however, in the wider context so little necessity for this intervention.	✗

The recommendation for Craigstone Lane is therefore to do nothing.

## West / East Craibstone Street

Table D142 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3- Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	0	1	1	1	1	-1	12
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	-1	1	-1	6
5 – Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	-1	23
6 - Make traffic one-way only	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	-1	2
7 – Make the space pedestrian and cycle only	1	1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-3	11
8 – Make the road cycle and local access only	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	2	2	1	23

Table D143 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Positive impacts on most of the objectives and STAG criteria, although may be unpopular due to the necessity of removing on-street car parking spaces. Would be an isolated piece of infrastructure in any case, thus limiting its usefulness.	✗
4	Shared provision in a busy city centre location unlikely to be acceptable to members of the public. Footways unlikely to be wide enough for proper shared use facility in any case.	✗
5	Positive impacts on most of the objectives and STAG criteria, although may be unpopular due to the necessity of removing on-street car parking spaces. Could be an expensive option. Would be an isolated piece of infrastructure in any case, thus limiting its usefulness.	✗
6	No discernible benefit.	✗
7	Unlikely to be feasible given business and servicing requirements of the various properties. Removal of car parking may have accessibility implications and is unlikely to be popular with members of the public.	✗
8	Strong-performing option. Would be an isolated link, however, in the wider context so little necessity for this intervention.	✗

The recommendation for Craibstone Lane is therefore to resurface the footways.

## Bon Accord Square

Table D144 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	3	3	0	3
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3- Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	0	1	1	1	1	-1	12
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	-1	1	-1	6
5 – Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	-1	23
6 - CCMP proposal	1	1	3	1	0	0	0	0	0	3	1	1	0	1	1	2	-2	-1	12
7 - Exempt cyclists from one-way and access restriction	1	0	0	0	0	0	1	0	0	1	1	0	1	1	1	3	3	0	13
8 - Make the space pedestrian and cycle only	1	1	3	-1	3	0	1	0	0	-3	2	2	1	1	-1	-3	2	-3	6
9 - Make the road cycle and local access only	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	2	2	1	23

Table D145 - Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Positive impacts on most of the objectives and STAG criteria but does not score as highly as other options that would similarly benefit cycling such as options 5 and 9. May be unpopular with members of the public if car parking spaces have to be removed.	✗
4	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	✗
5	Strong-performing option but may be expensive to deliver and could meet resistance from members of the public due to the loss of car parking spaces. It is unlikely that traffic conditions in this location would justify the provision of segregated facilities.	✗
6	Likely to be an expensive option and may meet resistance due to the removal of car parking spaces. While there is merit in progressing as a CCMP project, this will not be promoted as a SUMP project.	✗
7	May be negative safety implications	✗
8	Unlikely to be feasible given business and servicing requirements of the various properties. Removal of car parking may have accessibility implications and is unlikely to be popular with members of the public. Contradicts CCMP.	✗
9	Strong-performing option. Would be an isolated link, however, so little necessity for this intervention.	✗

The recommendations for Bon Accord Square is therefore to resurface the fooyways.

## D1.6 Zone 6

Zone 6 is the north-western section of the CCMP area, bounded by Union Terrace to the east, Union Street to the south, Victoria Street / Thistle Lane / Rose Street / Rose Place to the west and Huntly Street / Skene Terrace to the north.

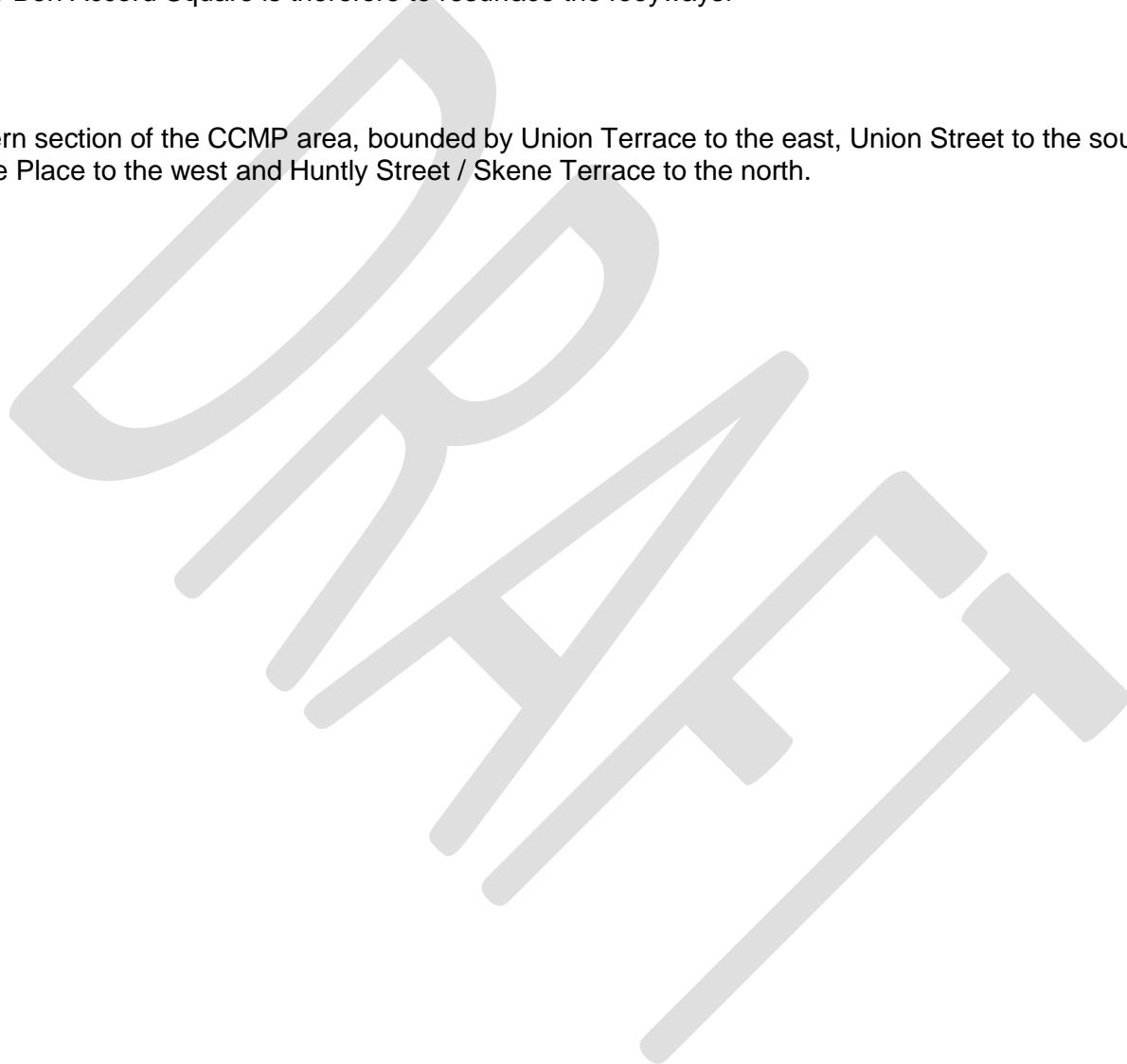
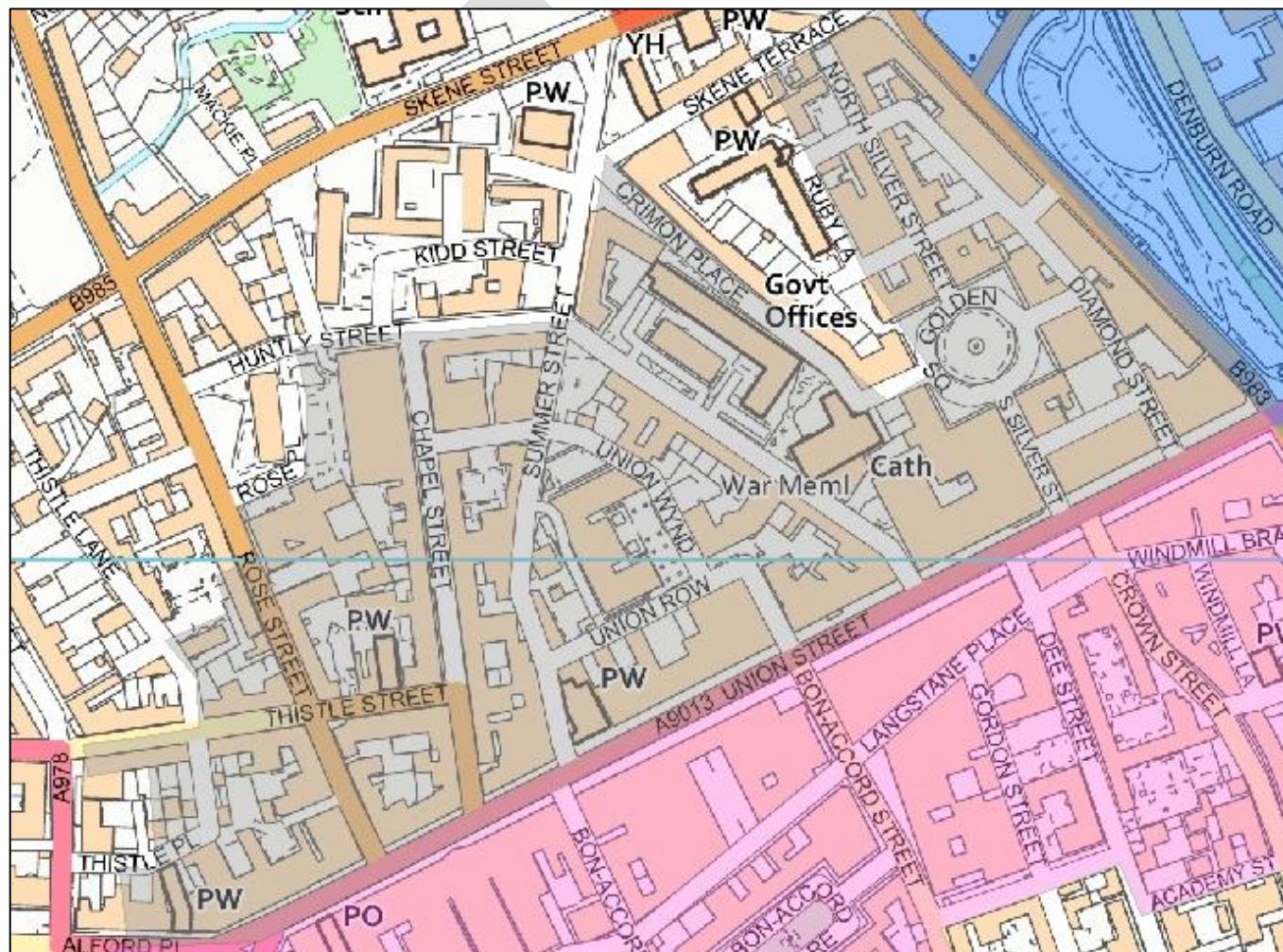


Figure D7 – SUMP Zone 6



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### D1.6.1 Zone 6 Corridor Assessment and Option Generation

Table D146 – Zone 6 Corridor Assessment and Options

Link		Current walking conditions	Current cycling conditions	Current public transport conditions	Current commitments, or CCMP/Roads Hierarchy proposals	Options
1	Union Street (Union Terrace to Holburn Street)	<p>Footways along both sides of the carriageway, reasonably wide and well-surfaced throughout.</p> <p>Good pedestrian crossing provision.</p>	<p>South side: Part-time bus, cycle and taxi lane (with gaps to enable left-turning traffic) between Union Terrace and Chapel Street.</p> <p>North side: Part-time bus, cycle and taxi lane (with gaps to enable left-turning traffic) between Rose Street and Diamond Street.</p> <p>Peak-time loading restrictions in place.</p> <p>ASLs at junctions.</p> <p>20mph speed limit.</p> <p>Cycle parking available at intervals along the corridor.</p>	<p>South side: Part-time bus, cycle and taxi lane (with gaps to enable left-turning traffic) from Union Terrace to Chapel Street.</p> <p>North side: Part-time bus, cycle and taxi lane (with gaps to enable left-turning traffic) from Rose Street to Diamond Street.</p>	<p>The CCMP envisages Union Street as bus, cycle and taxi only between Castlegate and Crown Street.</p> <p>Traffic modelling in support of the CCMP indicates that, in the reference case scenario, traffic levels are such that physical segregation of cyclists is recommended. In the longer term, as CCMP projects are delivered, traffic on Union Street should fall to such an extent that a shared carriageway arrangement would be acceptable.</p> <p>The Roads Hierarchy Study recommends the declassification of Union Street.</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 - Improve on-road cycle provision</p> <p>Option 3 - Improve off-road cycle provision (shared use)</p> <p>Option 4 – Improve off-road cycle provision (segregation)</p> <p>Option 5 – Increase bus lane hours of operation</p> <p>Option 6 – CCMP project</p> <p>Option 7 – Make the entirety of Union Street a bus and cycle-only road</p> <p>Option 8 – Remove traffic lanes to give greater priority to sustainable modes</p>

<b>2</b>	Allford Place (Allford Lane to Union Street)	<p>Footways on both sides of the carriageway, although uneven in places and narrow on the south side.</p> <p>Pedestrian crossing at the Union Street junction.</p>	<p>Advisory cycle lanes on both sides of the carriageway on the approach to Union Street, with double-yellow lines to prevent parking.</p> <p>North side cycle lane stops in advance of Union Street, although there is an ASL at the junction.</p> <p>20mph zone between Victoria Street and Union Street.</p>	<p>Currently a public transport route but no formal provision.</p>	<p>The previous SUMP recommended a bus gate on the eastbound approach to Union Street.</p> <p>The Roads Hierarchy Study recommends downgrading the A978 Allford Place to a secondary route / B-class road.</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 – Resurface footways</p> <p>Option 3 – Widen footways</p> <p>Option 4 - Improve on-road cycle provision</p> <p>Option 5 - Improve off-road cycle provision (shared use)</p> <p>Option 6 – Improve off-road cycle provision (segregation)</p> <p>Option 7 – Introduce bus priority</p> <p>Option 8 – Bus gate on approach to Union Street</p> <p>Option 9 – Make Victoria Street to Union Street a bus and cycle-only space</p> <p>Option 10 – Make Victoria Street to Union Street pedestrian and cycle only</p>
<b>3</b>	Rose Street	Footways on both sides of the carriageway,	No formal provision other than ASL on	Not currently a public transport route.	The CCMP envisages a high-quality	Option 1 – Do Nothing

		<p>alhtough cracked and uneven.</p> <p>Pedestrian crossing provision at the Union Street junction.</p>	<p>approach to Skene Street.</p> <p>One-way traffic only (northbound) between Thistle Street and Union Street.</p> <p>Car parking on the west side of the carriageway.</p> <p>20mph zone.</p> <p>Cycle parking available at the junction with Thistle Street.</p>		<p>streetscape scheme to enhance customer experience and the vitality and viability of this independent retail area.</p> <p>Rose Street proposed as bus, cycle and taxi only between Union Street and Thistle Street, with segregated cycle lanes from Thistle Street to Skene Street.</p> <p>The previous SUMP recommended a one-way system for traffic and removal of car parking.</p> <p>The Roads Hierarchy Study recommends downgrading the B985 Rose Street (Skene Street to Thistle Street) to a tertiary route / C-class road.</p>	<p>Option 2 – Resurface footways</p> <p>Option 3- Improve on-road cycle provision</p> <p>Option 4 - Improve off-road cycle provision (shared use)</p> <p>Option 5 – Improve off-road cycle provision (segregation)</p> <p>Option 6 – Make the whole street one-way</p> <p>Option 7 – Exempt cyclists from one-way and access restrictions</p> <p>Option 8 – Make the space pedestrian and cycle only</p> <p>Option 9 – Make the street cycle and local access only</p> <p>Option 10 – CCMP project</p>
4	Thistle Street	<p>Footways on both sides of the carriageway, although cracked and uneven in places.</p>	<p>No formal provison.</p> <p>One-way traffic (eastbound) only between Rose Street and Thistle Street.</p>	<p>Not currently a public transport route.</p>	<p>The CCMP recommends streetscape improvements as above.</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 – Resurface footways</p> <p>Option 3- Improve on-road cycle provision</p>

			<p>Intermittent car parking on both sides of the carriageway.</p> <p>20mph zone.</p> <p>Cycle parking available at Chapel Street junction.</p>		<p>The Roads Hierarchy Study recommends downgrading the B985 Thistle Street (Rose Street to Chapel Street) to a tertiary route / C-class road.</p>	<p>Option 4 - Improve off-road cycle provision (shared use)</p> <p>Option 5 – Improve off-road cycle provision (segregation)</p> <p>Option 6 – Make the whole street one-way</p> <p>Option 7 – Exempt cyclists from one-way and access restrictions</p> <p>Option 8 – Make the space pedestrian and cycle only</p> <p>Option 9 – Make the street cycle and local access only</p>
5	Chapel Street	<p>Footways on both sides of the carriageway, although cracked, uneven and narrow in places.</p> <p>Pedestrian crossing at Union Street junction.</p>	<p>No formal provision other than ASL at Union Street junction.</p> <p>Car parking on the east carriageway.</p> <p>20mph zone.</p> <p>Cycle parking available at Union Street junction.</p>	<p>Not currently a public transport route.</p>	<p>The CCMP recommends streetscape improvements as above.</p> <p>The Roads Hierarchy Study recommends downgrading the B985 Chapel Street (Thistle Street to Union Street) to a tertiary route / C-class road.</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 – Resurface footways</p> <p>Option 3- Widen footways</p> <p>Option 4 - Improve on-road cycle provision</p> <p>Option 5 - Improve off-road cycle provision (shared use)</p>

						Option 6 – Improve off-road cycle provision (segregation)  Option 7 – Make the street one-way  Option 8 – Make the space pedestrian and cycle only  Option 9 – Make the street cycle and local access only
<b>6</b>	Little Chapel Street	Footways on both sides of the carriageway, although cracked, uneven and narrow in places.	No formal provision.  Car parking on the north carriageway.  Cobbled surface.  20mph zone.	Not currently a public transport route.	None proposed.	Option 1 – Do Nothing  Option 2 – Resurface footways  Option 3 - Widen footways  Option 4 - Improve on-road cycle provision  Option 5 - Improve off-road cycle provision (shared use)  Option 6 – Improve off-road cycle provision (segregation)  Option 7 – Make the street one-way

						Option 8 – Make the space pedestrian and cycle only
7	Summer Street	Footways on both sides of the carriageway, although cracked, uneven and narrow in places.	No formal provision. One-way traffic northbound between Union Street and Union Row and southbound between Huntly Street and Union Row so not a through-route.  20mph zone.	Not currently a public transport route.	None proposed.	Option 1 – Do Nothing Option 2 – Resurface footways Option 3 - Widen footways Option 4 - Improve on-road cycle provision Option 5 - Improve off-road cycle provision (shared use) Option 6 – Improve off-road cycle provision (segregation) Option 7 – Exempt cyclists from one-way and access restrictions Option 8 – Make the space pedestrian and cycle only Option 9 – Make the street cycle and local access only

<b>8</b>	Huntly Street	Footways on both sides of the carriageway, although cracked, uneven and narrow in places.	No formal provision.  One-way traffic northbound between Union Street and Summer Street.  Cobbled surface between Union Street and Summer Street.  Intermittent car parking provision.  20mph zone.  Cycle parking available near the Union Street junction.	Not currently a public transport route.	None proposed.	Option 1 – Do Nothing  Option 2 – Resurface footways  Option 3 - Widen footways  Option 4 - Improve on-road cycle provision  Option 5 - Improve off-road cycle provision (shared use)  Option 6 – Improve off-road cycle provision (segregation)  Option 7 – Exempt cyclists from one-way and access restrictions  Option 8 – Make the whole street one-way to traffic  Option 9 – Make the space pedestrian and cycle only  Option 10 – Make the street cycle and local access only
<b>9</b>	Skene Terrace	Footways on both sides of the carriageway, although narrow and uneven.	No formal provision.	Not currently a public transport route.	None proposed	Option 1 – Do Nothing

			<p>One-way traffic only (westbound).</p> <p>Parking on the north side of the carriageway.</p> <p>20mph speed limit with traffic calming.</p> <p>Steep topography.</p>			<p>Option 2 – Resurface footways</p> <p>Option 3 - Widen footways</p> <p>Option 4 - Improve on-road cycle provision</p> <p>Option 5 - Improve off-road cycle provision (shared use)</p> <p>Option 6 – Improve off-road cycle provision (segregation)</p> <p>Option 7 – Exempt cyclists from one-way and access restrictions</p> <p>Option 8 – Make the space pedestrian and cycle only</p> <p>Option 9 – Make the street cycle and local access only</p>
<b>10</b>	South Silver Street	<p>Footways on both sides of the carriageway, though poorly surfaced.</p> <p>Pedestrian crossing at Union Street junction.</p>	<p>No formal provision.</p> <p>Car parking alongside the Music Hall.</p> <p>Cobbled surface.</p> <p>20mph zone.</p>	<p>Not currently a public transport route.</p>	<p>The CCMP recommends this street becomes cycle, taxi and local access only.</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 – Resurface footways</p> <p>Option 3 - Improve on-road cycle provision</p>

						<p>Option 4 - Improve off-road cycle provision (shared use)</p> <p>Option 5 – Improve off-road cycle provision (segregation)</p> <p>Option 6 – CCMP project</p> <p>Option 7 - Make the space pedestrian and cycle only</p> <p>Option 8 – Introduce a one-way restriction for traffic</p>
11	North Silver Street	<p>Footways on both sides of the carriageway, although these are cracked and uneven.</p> <p>Stepped access to Skene Terrace.</p>	<p>No formal provision</p> <p>T-junction so access-only traffic.</p> <p>Car parking on both sides of the carriageway.</p> <p>20mph speed limit.</p>	<p>Not suitable as a public transport route.</p>	<p>None proposed.</p>	<p>Option 1 – Do Nothing</p> <p>Option 2 – Resurface footways</p> <p>Option 3 - Improve on-road cycle provision</p> <p>Option 4 - Improve off-road cycle provision (shared use)</p> <p>Option 5 – Improve off-road cycle provision (segregation)</p> <p>Option 6 – Make the space cycle and local access only</p>

						Option 7 – Make the space pedestrian and cycle only
12	Golden Square	Footways around the square.	No formal provision.  One-way traffic circulation around the central parking area.  Cycle parking available.  20mph zone.	Not currently a public transport route.	The CCMP recommends re-engineering of this space from a car park towards to a public square and events space associated with the Music Hall.	Option 1 – Do Nothing  Option 2 – Resurface footways  Option 3 - Improve on-road cycle provision  Option 4 - Improve off-road cycle provision (shared use)  Option 5 – Improve off-road cycle provision (segregation)  Option 6 – Exempt cyclists from one-way restriction  Option 7 – CCMP Project  Option 8 - Make the space pedestrian and cycle only  Option 9 – Make the street cycle and local access only

RPA

## D1.6.2 Zone 6 Option Appraisal and Recommendations

### Union Street (Union Terrace to Holburn Junction)

Table D147 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	3	3	-2	1
2 - Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	1	1	1	15
3 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-2	1	1	-2	6
4 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	2	2	3	2	2	2	1	-1	-1	22
5 - Increase bus lane hours of operation	1	1	1	1	0	2	0	0	0	2	1	0	1	1	1	3	3	0	18
6 - CCMP project	3	2	1	2	1	0	1	0	0	3	1	1	1	1	1	2	-1	-1	18
7 - Make the entirety of Union Street a bus and cycle-only road	2	-1	2	-1	2	3	0	0	0	3	2	1	1	1	0	2	2	1	20
8 - Remove traffic lanes to give greater priority to sustainable modes	1	1	2	1	2	2	0	0	0	2	2	2	1	2	1	2	2	2	25

Table D148 –Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendations
1	No impact on TPOs and STAG criteria. Contradicts approved policy, particularly the CCMP.	✗
2	Positive impacts on most of the objectives and STAG criteria, although other cycling options score higher.	✗
3	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	✗
4	Strong-performing option but may be expensive to deliver and could be incompatible with public transport priority measures on the corridor.	✓
5	Strong-performing option but potential conflicts between public transport and cycling priority on this corridor.	✓
6	Strong-performing option.	✓
7	Potential negative impacts on local businesses and accessibility if frontage access to properties and services not maintained.	✗
8	Sifted out on the basis that this effectively duplicates other options to improve space for buses and cycling outlined above.	✗

In order to ensure consistency with the eastern section of Union Street, recommendations for the west section of Union Street are to:

- Deliver CCMP project to make the section between Castle Street and Crown Street bus, cycle and local access only;
- Investigate the feasibility of making the whole of Union Street a walking, cycling and bus priority space (local access only for general traffic) in the context of wider CCMP proposals and an agreed future strategy for Union Street; and

- In recognition of the fact that Union Street will still be busy at times with large public transport and delivery vehicles, install segregated cycle facilities.

#### Alford Place (Alford Lane to Union Street)

Table D149 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	6
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Widen footways	1	1	0	1	1	0	1	0	0	1	0	0	0	1	1	1	-1	1	9
4 - Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	1	1	0	14
5 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	1	1	-1	8
6 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-1	1	1	26
7 - Introduce bus priority	2	1	1	2	0	3	1	0	0	3	2	0	2	2	2	1	1	1	24
8 - Bus gate on approach to Union Street	1	-1	1	-1	1	2	0	0	0	2	1	1	1	1	1	1	-1	11	
9 - Make Victoria Street to Union Street a bus and cycle-only road	2	-1	2	-1	2	3	0	0	0	2	2	1	1	1	0	3	2	1	20
10 – Make Victoria Street to Union Street pedestrian and cycle only	0	-1	3	-1	3	-2	1	0	0	2	2	2	1	1	-1	-1	2	-1	10

Table D150 –Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but no impact on TPOs or STAG criteria.	✗
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Positive impacts on most of the objectives and STAG criteria. May be incompatible with options to improve space for cyclists and buses however.	✓
4	Positive impacts on most of the objectives and STAG criteria, although option 6 (segregated cycle facilities) scores higher. Should be pursued if option 6 proves undeliverable.	✓
5	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	✗
6	Strong-performing option, therefore should be subject to further feasibility. May be an expensive option however. May be incompatible with option 7.	✓
7	Strong-performing option but may be incompatible with option 6.	✓

8	Likely to be negative impacts on accessibility and freight movements if traffic restricted from accessing Union Street from this direction.	x
9	Likely to be negative impacts on accessibility and freight movements if traffic restricted from this section.	x
10	Likely to be negative impacts on accessibility and bus and freight movements if traffic restricted from this section.	x

Improvements to this section require a balance between the needs of pedestrians, cyclists and bus users. With segregated cycle facilities scoring highest against the appraisal criteria, it is recommended that these are installed on the approach to Union Street in the first instance and any residual space given over to pedestrians, in accordance with the street user hierarchy. Resurfacing of footways is also recommended.

### Rose Street

Table D151 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	3	3	0	3
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	1	1	0	14
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	1	1	-1	8
5 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-1	-1	-1	21
6 - Make the whole street one-way	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2	0	4
7 - Exempt cyclists from one-way and access restrictions	1	0	0	0	0	0	1	0	0	1	1	-1	1	1	1	3	3	-1	11
8 - Make the space pedestrian and cycle only	1	-1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	1	2	-1	15
9 - Make the street cycle and local access only	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	2	2	1	23
10 - CCMP project	2	1	2	2	2	0	1	0	0	3	1	1	2	1	2	1	-1	1	21

Table D152 –Appraisal Summary and Recommendations

Option Appraisal Summary															Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.															x
2 Positive impacts on most of the objectives and STAG criteria.															✓
3 Positive impacts on most of the objectives and STAG criteria, although other options that could benefit cyclists score higher. Should be pursued if these options prove undeliverable.															✓
4 Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.															x

5	Strong-performing option but may be expensive to deliver and may not be popular with members of the public as likely to require the relocation of car parking spaces. There are concerns about the feasibility of segregated facilities on the southern section given width constraints.	x
6	No impact on TPOs or STAG criteria.	x
7	Although may provide some benefits, this option raises safety concerns.	x
8	Likely to have negative impacts on local businesses if frontage access no longer permitted for loading and unloading. May also be negative impacts on accessibility criteria.	x
9	Strong-performing option against a range of criteria.	✓
10	Likely to have negative impacts on local businesses if frontage access no longer permitted for loading and unloading.	x

It is recommended that the feasibility of making Huntly Street to Union Street a walking, cycling and bus priority space (local access only for general traffic) is investigated in the context of wider CCMP proposals and an agreed future strategy for Union Street.

### Thistle Street

Table D153 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	3	3	0	3
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	1	1	0	14
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	-1	1	-1	6
5 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-1	-1	-1	21
6 - Make the whole street one-way	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	
7 - Exempt cyclists from one-way and access restrictions	1	0	0	0	0	0	1	0	0	1	1	-1	1	1	1	3	3	-1	11
8 - Make the space pedestrian and cycle only	1	-1	3	-1	3	0	1	0	0	2	2	2	1	1	-3	-1	2	-3	9
9 - Make the street cycle and local access only	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	2	2	1	23

Table D154 –Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on multiple objectives and STAG criteria.	✓
3	Positive impacts on most of the objectives and STAG criteria, although other options that could benefit cyclists score higher. Should be pursued if these options prove undeliverable.	✓
4	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	✗
5	Strong-performing option but may be expensive to deliver and may not be popular with members of the public as likely to require the relocation of car parking spaces. There are also questions over the feasibility of this option unless the street was made one-way to general traffic.	✓
6	No impacts on TPOs and STAG criteria so sifted out as an option in its own right although could form part of a package with option 5.	✗
7	Although may provide some benefits, this option raises safety concerns for cyclists	✗
8	Likely to have negative impacts on local businesses if frontage access no longer permitted for loading and unloading. Removal of frontage parking and access may also raise accessibility issues.	✗
9	Strong-performing option.	✓

Given that there are feasibility and affordability concerns associated with segregated cycle facilities and that an alternative east-west cycle route is recommended on Alford Place and Union Street, it is recommended that Thistle Street is made cycle and local access only. Footway improvements are also recommended.

## Chapel Street

Table D155 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	3	3	0	3
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Widen footways	1	1	0	1	1	0	1	0	0	1	0	0	0	1	1	1	-1	1	9
4- Improve on-road cycle provision	1	1	1	0	1	0	1	0	0	1	1	1	1	1	0	1	1	0	12
5 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	1	1	-1	8
6 - Improve off-road cycle provision (segregation)	2	1	2	0	2	0	1	0	0	3	2	3	2	2	0	1	-1	-1	19
7 - Make the street one-way	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	-1	2
8 - Make the space pedestrian and cycle only	1	1	3	-1	3	0	1	0	0	2	2	2	1	1	-2	-2	2	-2	12
9 - Make the street cycle and local access only	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	2	2	1	23

Table D156 – Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on multiple objectives and STAG criteria.	✓
3	Positive impacts on multiple objectives and STAG criteria, although may be expensive and incompatible with options to increase space for cycling.	✓
4	Positive impacts on most of the objectives and STAG criteria, although other options to improve facilities for cyclists score higher. Should be pursued if these options prove undeliverable. Would require the relocation of a taxi rank, accessibility implications.	✓
5	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public.	✗
6	Strong-performing option, therefore should be subject to further feasibility. May be an expensive option however. Would require the relocation of a taxi rank, accessibility implications.	✓
7	No impacts on TPOs and STAG criteria.	✗
8	Likely to have negative impacts on local businesses if frontage access no longer permitted for loading and unloading. Removal of frontage parking and relocation of taxi rank may also raise accessibility issues.	✗
9	Strong-performing option.	✓

It is therefore recommended that ACC investigate the feasibility of making Chapel Street a walking, cycling and bus priority space (local access only for general traffic) in the context of wider CCMP proposals and an agreed future strategy for Union Street.

### Little Chapel Street

Table D157 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Widen footways	1	1	0	1	1	0	1	0	0	1	0	0	0	1	1	1	-2	1	8
4 - Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	1	1	0	14
5 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	0	1	-1	7
6 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-1	-1	23
7 - Make the street one-way	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	5
8 - Make the space pedestrian and cycle only	1	1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-3	11
9 - Make the street cycle and local access only	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	2	1	1	22

Table D158 – Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Positive impacts on multiple objectives and STAG criteria although could be expensive to implement.	✓
4	Positive impacts on most of the objectives and STAG criteria, although cobbled surface means this is unlikely ever to be a key cycle route.	✗
5	Shared provision in a city centre location unlikely to be acceptable to members of the public.	✗
6	Positive impacts on most of the objectives and STAG criteria, although cobbled surface means this is unlikely ever to be a key cycle route.	✗
7	No obvious benefits in terms of TPOs and STAG criteria.	✗
8	Street provides access to off-street car parking so unlikely to be feasible or acceptable and likely to raise accessibility concerns.	✗
9	Strong-performing and feasible option, although will become this by proxy anyway should Chapel Street itself be made cycle and local access only so unlikely to require formal designation.	✗

The recommendation for Little Chapel Street is therefore to widen and resurface the footways.

### Summer Street

Table D159 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	0	0	1	1	1	1	1	11
3 - Widen footways	1	1	0	1	1	0	1	0	0	1	0	0	0	1	1	1	-2	1	8
4- Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	0	1	1	1	1	1	14
5 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	0	1	-1	7
6 – Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-2	-1	-1	20
7 – Exempt cyclists from one-way and access restrictions	1	0	0	0	0	0	1	0	0	1	1	0	1	1	1	3	3	0	13
8 - Make the space pedestrian and cycle only	1	1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-3	11
9 – Make the street cycle and local access only	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	2	2	1	23

Table D160 – Appraisal Summary and Recommendations

Option Appraisal Summary		Recommendation
1	Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.	✗
2	Positive impacts on most of the objectives and STAG criteria.	✓
3	Positive impacts on multiple objectives and STAG criteria although may be incompatible with options to increase space for other modes.	✓
4	Positive impacts on most of the objectives and STAG criteria, although other options that benefit cyclists score higher. Should be pursued if these other options prove undeliverable.	✓
5	Poorest-performing of the cycle options; shared provision in a bus city centre location unlikely to be acceptable to members of the public.	✗
6	Although a strong-performing option, there are significant question marks over feasibility given the width of the street particularly on the approach to Union Street.	✗
7	May be negative safety implications.	✗
8	Street provides access to off-street car parking so unlikely to be feasible or acceptable and likely to raise accessibility concerns. Businesses may be negatively impacted by inability to load/unload at the front of their properties.	✗

9	Strong-performing option but likely to already perform this function given existing traffic restrictions so unlikely to require formal designation.	x
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Recommendations for Summer Street are therefore to:

- Resurface and otherwise improve footways; and
- Consider the requirement for, and feasibility of, on-road cycle lanes at this location should safety concerns arise in the future.

### Huntly Street

Table D161 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Widen footways	1	1	0	1	1	0	1	0	0	1	0	0	0	1	1	1	-2	1	8
4- Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	0	1	1	1	1	0	13
5 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	1	1	-1	8
6 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	0	-1	-1	22
7 - Exempt cyclists from one-way and access restrictions	1	0	0	0	0	0	1	0	0	1	1	-1	1	1	1	3	3	-1	11
8 - Make the whole street one-way to traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3
9 - Make the space pedestrian and cycle only	1	1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-3	11
10 - Make the street cycle and local access only	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	2	2	1	23

Table D162 – Appraisal Summary and Recommendations

Option Appraisal Summary															Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.															x
2 Positive impacts on most of the objectives and STAG criteria.															✓
3 Positive impacts on multiple objectives and STAG criteria.															✓
4 Positive impacts on most of the objectives and STAG criteria, although the cobbled section is unlikely to make this a popular cycling route. Provision could be considered at the western end (Summer Street to Rose Street), although this would be a small stretch of cycling infrastructure with limited benefits.															x
5 Shared provision in a busy city centre location unlikely to be acceptable to members of the public.															x

6	Positive impacts on most of the objectives and STAG criteria, although the cobbled section is unlikely to make this a popular cycling route. Provision could be considered at the western end although, as a fairly isolated stretch of infrastructure, this would be unlikely to justify the level of investment required.	x
7	Some benefits for cyclists but safety concerns prevent this from being taken forwards as an option.	x
8	No discernible benefits.	x
9	Unlikely to be feasible given the street provides access to numerous public and private car parks. May have negative impacts on local businesses in terms of restricting the ability to load and unload at their frontages, as well as accessibility implications by preventing drop-off opportunities at key locations such as the hotel.	x
10	Strong-performing option.	✓

Although making the space cycle and local access only schires highly, it is likely that this will occur by naturally anyway given wider SUMP, CCMP and Roads Hierarchy propoals for Union Street so there may be little merit in carrying this forward as a standalone option. The recommendation for Huntly Street is therefore to resurface and widen the footways.

### Skene Terrace

Table D163 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Widen footways	1	1	0	1	1	0	1	0	0	1	0	0	0	1	1	1	-2	1	8
4- Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	0	1	1	-2	1	0	10
5 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-2	-2	1	-2	3
6 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-3	-1	-1	19
7 - Exempt cyclists from one-way and access restrictions	1	0	0	0	0	0	1	0	0	1	1	-1	1	1	1	3	3	-1	11
8 - Make the space pedestrian and cycle only	1	1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-3	2	-3	11
9 - Make the street cycle and local access only.	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	2	2	1	23

Table D164 – Appraisal Summary and Recommendations

Option Appraisal Summary															Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.															x
2 Positive impacts on most of the objectives and STAG criteria.															✓

3	Positive impacts on most of the objectives and STAG criteria although unlikely to be feasible given road width.	x
4	Positive impacts on most of the objectives and STAG criteria, although there is unlikely to be sufficient space for cycle lanes of the required quality.	x
5	Poorest-performing of the cycle options; shared provision in a busy city centre location unlikely to be acceptable to members of the public. Current footway widths do not allow for shared use arrangement in any case.	x
6	Strong-performing option, although unlikely to be sufficient space.	x
7	Sifted out on the grounds of safety.	x
8	Unlikely to be feasible as the street provides access to multiple properties and private car parking areas.	x
9	Strong-performing option, although topography unlikely to be attractive to cycling and this would be a relatively isolated link in any case.	x

The recommendation for Skene Terrace is therefore to resurface the footways.

### South Silver Street

Table D165 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3 - Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	0	1	1	1	1	0	13
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	1	1	-1	8
5 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-1	-1	-1	21
6 - CCMP project	3	2	1	2	1	0	1	0	0	3	1	1	1	1	1	2	2	1	23
7 - Make the space pedestrian and cycle only	1	1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-1	2	-1	15
8 - Introduce a one-way restriction for traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	

Table D166 – Appraisal Summary and Recommendations

Option Appraisal Summary															Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.															x
2 Positive impacts on most of the objectives and STAG criteria.															✓
3 Positive impacts on most of the objectives and STAG criteria, although cobbled surface means this is unlikely to be a popular cycle route.															x

4	Shared provision in a city centre location unlikely to be acceptable to members of the public.	x
5	Positive impacts on most of the objectives and STAG criteria, although cobbled surface means this is unlikely to be a popular cycle route.	x
6	Strong-performing option.	✓
7	Likely to result in accessibility concerns given the need to relocate blue badge parking spaces and the inability of visitors to be dropped near the Music Hall.	x
8	No discernible benefits.	x

Recommendations for South Silver Street are therefore to:

- Resurface the footways; and
- Make the space pedestrian, cycle and local access only as per the CCMP.

#### North Silver Street

Table D167 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	3	3	0	5
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3- Improve on-road cycle provision.	1	1	1	1	1	0	1	0	0	1	1	1	0	1	1	1	1	0	13
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	-1	1	-1	6
5 – Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	1	-2	-1	22
6 - Make the space cycle and local access only	3	2	1	2	1	0	1	0	0	3	0	0	0	1	0	2	2	1	19
7 - Make the space pedestrian and cycle only	1	1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	-2	2	-2	13
8 – Create a cut-through onto Skene Terrace for cyclists	1	0	0	1	1	0	1	0	0	3	1	1	0	1	1	-1	1	2	13

Table D168 – Appraisal Summary and Recommendations

Option Appraisal Summary																	Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.																	x
2 Positive impacts on most of the objectives and STAG criteria.																	✓
3 Positive impacts on most of the objectives and STAG criteria. Would require the removal of on-street car parking, however, which may not be popular. Would be a very short stretch of isolated cycle infrastructure with limited benefits.																	x
4 Poor-performing option; shared provision in a city centre location unlikely to be acceptable to members of the public.																	x

5	Strong-performing option, although likely to be expensive and could be unpopular due to the necessity of removing car parking. Would be a very short stretch of isolated cycle infrastructure with limited benefits.	x
6	Strong-performing option., although likely to perform this function in any case so unlikely to require formal designation.	x
7	Unlikely to be feasible as the street provides access to multiple properties and private car parking areas.	x
8	May be difficult to achieve for limited benefit.	x

The recommendations for North Silver Street is therefore to resurface and widen the footways.

### Golden Square

Table D169 – Option Appraisal

Option	Vis	TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	TPO7	TPO8	EPD	Env	Saf	Eco	Int	Acc	Fea	Aff	PA	Total
1 - Do Nothing	0	0	0	0	0	0	0	0	0	-3	0	0	0	0	0	3	3	0	3
2 - Resurface footways	1	1	0	1	1	0	1	0	0	1	0	1	0	0	1	2	1	2	13
3- Improve on-road cycle provision	1	1	1	1	1	0	1	0	0	1	1	1	0	1	1	1	1	0	13
4 - Improve off-road cycle provision (shared use)	1	0	0	0	1	0	1	0	0	1	1	1	1	1	-1	0	1	-1	7
5 - Improve off-road cycle provision (segregation)	2	1	2	2	2	0	1	0	0	3	2	3	2	2	2	-2	-1	-2	19
6 - Exempt cyclists from one-way restriction	1	0	0	0	0	0	1	0	0	1	1	0	1	1	1	3	3	0	13
7 - CCMP project	1	2	2	1	1	0	1	0	0	3	1	1	1	1	0	2	-2	1	16
8 - Make the space pedestrian and cycle only	1	1	3	-1	3	0	1	0	0	2	2	2	1	1	-1	2	2	-1	18
9 - Make the street cycle and local access only	3	2	1	2	1	0	1	0	0	2	2	1	1	2	0	2	2	1	23

Table D170 – Appraisal Summary and Recommendations

Option Appraisal Summary																	Recommendation
1 Feasible and affordable but minimal impact on TPOs or STAG criteria. Contradicts existing policy directives.																	x
2 Positive impacts on most of the objectives and STAG criteria. May be incorporated within CCMP project.																	✓
3 Positive impacts on most of the objectives and STAG criteria but would be a short stretch of isolated infrastructure with limited benefits.																	x
4 Poor-performing options shared provision in a busy city centre location unlikely to be acceptable to members of the public.																	x
5 Strong-performing option, although hard to see how this would be feasible given the existing layout of the space, and likely to be expensive. Would be a very short stretch of isolated cycle infrastructure with limited benefits.																	x
6 May be negative safety implications																	x

7	Positive impacts on most of the objectives and STAG criteria, although likely to be an expensive option.	✓
8	Likely to result in accessibility concerns relating to the businesses and services located in the area.	✗
9	Strong-performing option.	✓

Until such time as the CCMP project is delivered, it is recommended that Golden Square is made cycle and local access only.

Following delivery of the CCMP project, a reassessment of conditions for pedestrians and cyclists is recommended.

## D1.7 Recommendations Summary

Figure D8 – Proposed City Centre Cycle Network

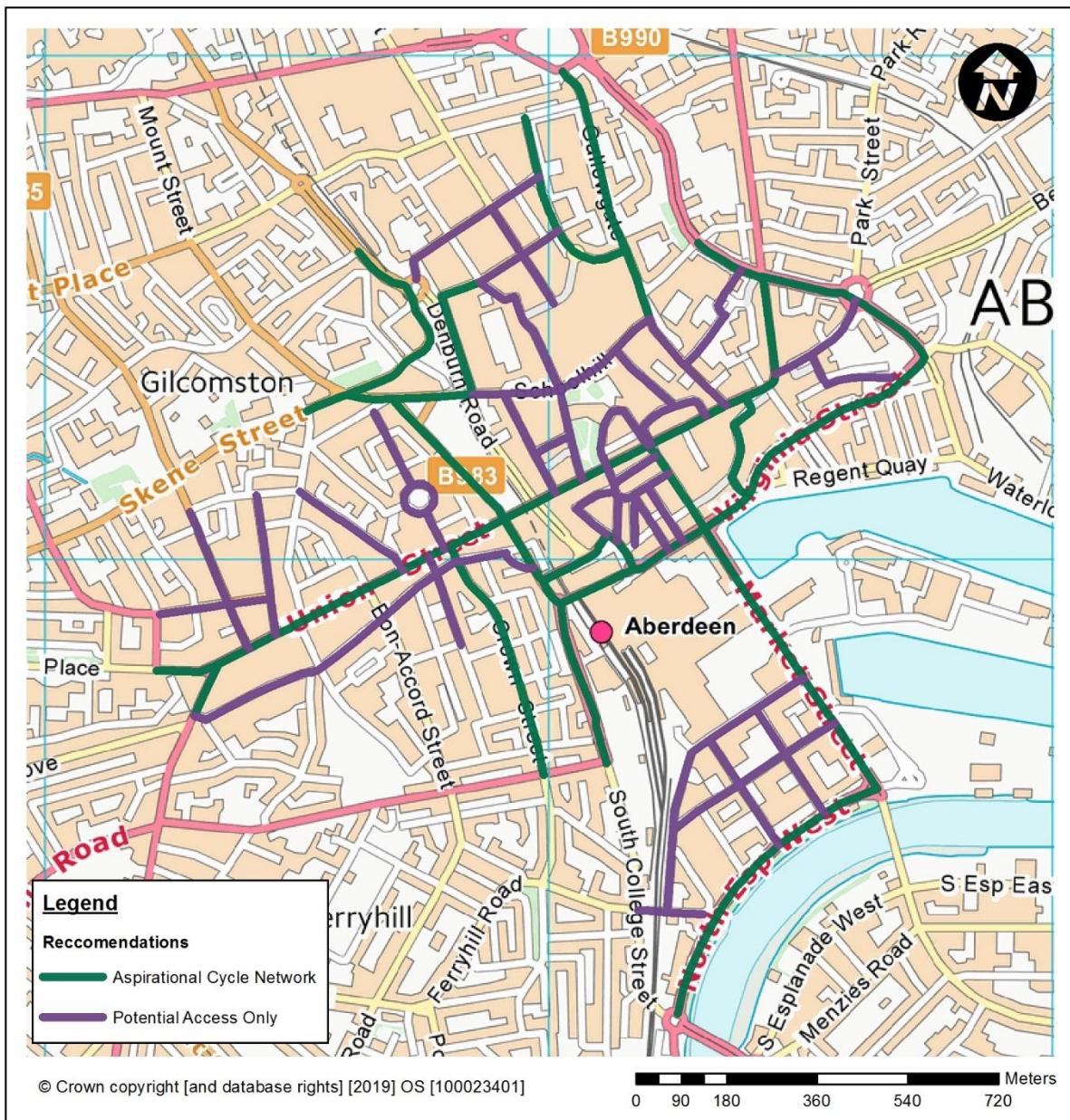
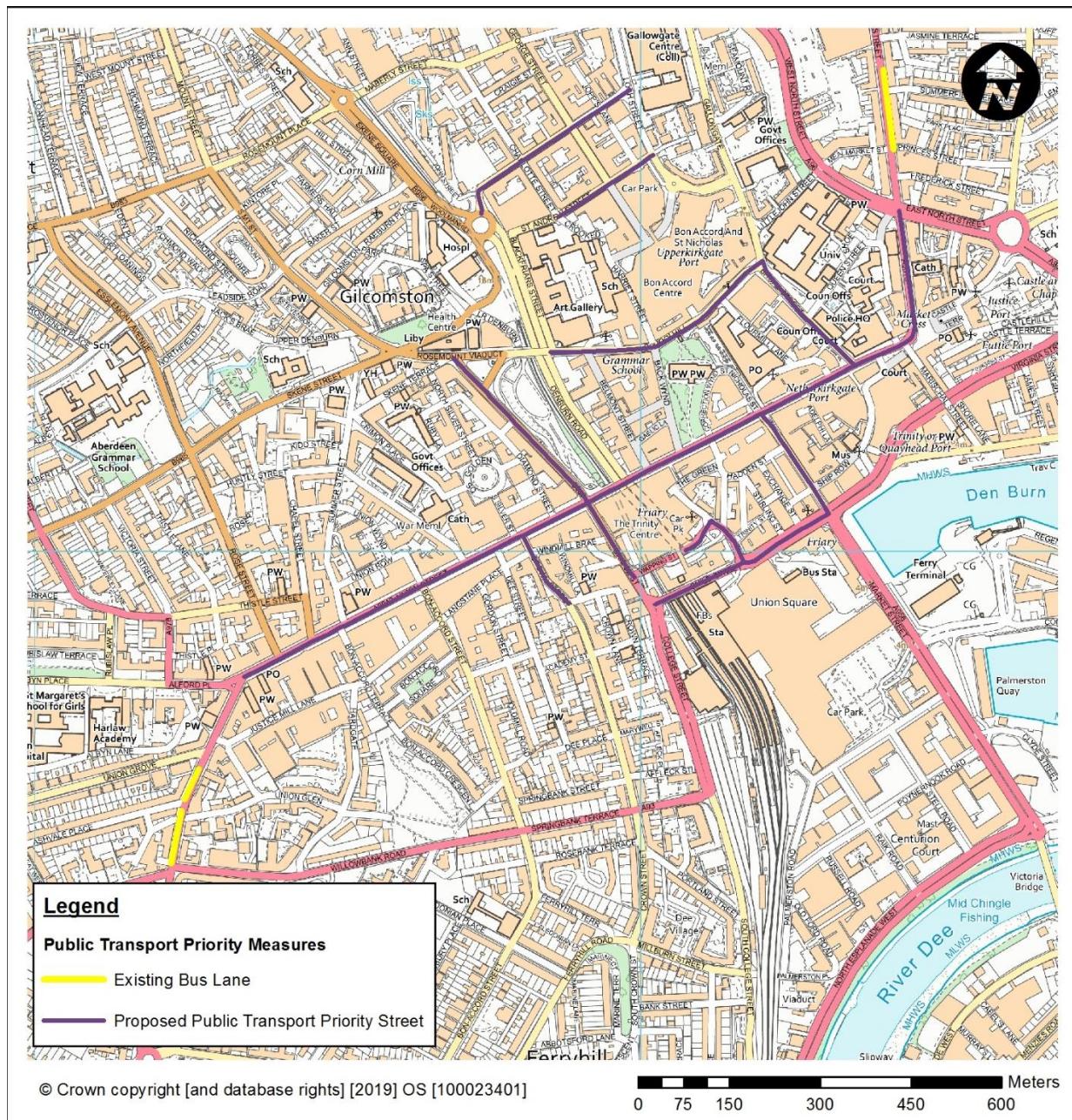


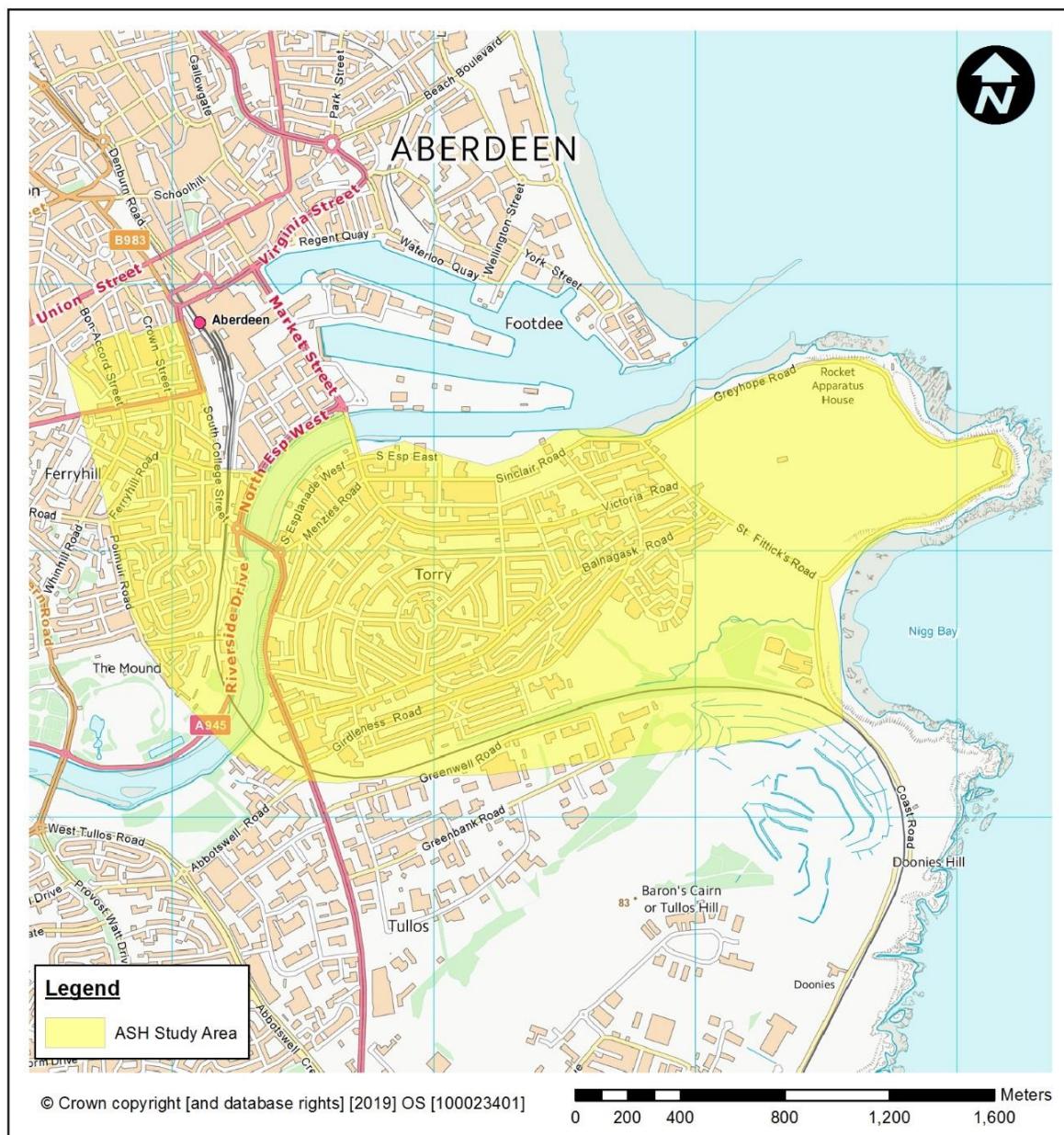
Figure D9 – Proposed city centre bus network



## D2 Aberdeen South Harbour Connections

The area under consideration for potential active travel links between the city centre and Aberdeen South Harbour (ASH) is bounded by Greyhope Road / Coast Road to the east, the railway line to the south, Polmuir Avenue / Polmuir Road to the west and Bon Accord Lane / Academy Street / Palmerston Place / North Esplanade West to the north.

Figure D10 – City Centre to ASH study area



Potential interventions in this area have been appraised in a different way to city centre interventions. While it is the intention that the city centre should be fully permeable to all those walking, cycling and using public transport, the volume of person trips between the city centre and the harbour is likely to be more limited. Therefore, rather than identifying a range of options for the area, the approach has been to identify, and recommend interventions to realise, one

high quality primary walking route and one primary cycling route between the city centre and ASH based on an assessment of existing conditions in the area. This is not to say that the other corridors in the area are not important for walking and cycling, rather that, given the anticipated low number of movements between these sites compared to movements within the city centre, resources should be concentrated where there is likely to be most impact.



## D2.1 City Centre to ASH Corridor Assessment

Table D171 – City Centre to ASH Corridor Assessment

<b>Link</b>	<b>Current walking conditions</b>	<b>Current cycling conditions</b>	<b>Current public transport conditions</b>	<b>Current commitments, or CCMP/Roads Hierarchy proposals</b>	
1	Greyhope Road  The road is unlit and cuts an indirect path between the city centre and ASH, although does afford pleasant views.	No provision in sections, forcing pedestrians to mix with traffic travelling at speeds of up to 60mph.  Steep gradient from ASH to Girdle Ness lighthouse.	NCN1 but no formal provision.  The road has varying speed limits with a maximum of 60mph.	Not currently a public transport route.	None proposed.
2	St. Fitticks Road	Footpaths on either side of the road, although poor condition.	Dual use path exists for the first c.40m of the south western side of the road from ASH.  30mph speed limit.	Currently a public transport route for a short length (Balnagask Road to Victoria Road) but no formal provision.	None proposed.
3	Victoria Road  Being the main corridor through Torry, it is the most direct option for walking to and from the city centre and offers interchange with public transport.	Footways on both sides of the carriageway and adequate crossing position.  30mph speed limit.	NCN1 for a short section between Sinclair Road / Menzies Road and South Esplanade West.  Intermittent on-road cycling provision in the form of advisory cycle lanes but route characterised by heavy traffic, parked cars and numerous bus stops.	Currently a public transport route but no formal provision.	None proposed.
4	Victoria Bridge	Offers a direct course across the river and is an attractive period structure.	No formal cycling provision.  Cobbled surface.	Currently a public transport route but with no formal provision.	None proposed.

		The footways either side are of good quality and there are pedestrian crossings at either end.			
5	Abbey Road	No footway provision along much of its length.	No formal cycling provision but road is wide and visibility is good although there are cars parked along the route.  There is an island close to the Abbey Place junction imposing a width restriction on the route, preventing it being used as a through-route for HGVs.  20mph speed limit.	Not currently suitable as a public transport route.	None proposed.
6	Crombie Road	Footways on both sides of the carriageway although pavement parking evident.	No formal provision although good visibility.  Car parking along the length of the route.  30 mph speed limit.	Not currently a public transport route.	None proposed.
7	Walker Road (Crombie Road to Grampian Place)	Footway provision on both sides of the carriageway.	No formal cycling provision.  Cars parked on both sides but visibility good.  20mph speed limit.	Currently a public transport route but no formal provision.	None proposed.
8	Walker Place	Footway provision on both sides of the carriageway.	No formal cycling provision.  Traffic restricted to one-way only (northbound).  20mph speed limit.	Not currently a public transport route.	None proposed.
9	Craig Place	Footway provision on both sides of the carriageway.	No formal cycling provision.	Not currently a public transport route.	None proposed.

			Traffic restricted to one-way only (westbound).  20mph speed limit.		
10	Wellington Road/ QE2 Bridge Roundabout and QE2 Bridge	Footways around the roundabout and along the bridge but no formal crossing provision.	No formal cycling provision.  30mph speed limit.	Currently a public transport route but no formal provision.	Wellington Road will a priority route in any revised roads hierarchy. The corridor is currently subject to a multimodal STAG appraisal, considering a range of improvements.
11	North Esplanade West	Footway provision on both sides of the carriageway.  Pedestrian crossing facilities at either end.	Shared use path on the west bank of the river between QE2 Bridge and Torry Bridge.	Not currently a public transport route.	The Roads Hierarhc study recommends that North Esplanade West (Victoria Bridge to Palmerston Place) be downgraded to a secondary route, but maintaining its A-class designation.
12	Wellington Road (Balnagask Road to Wellington Suspension Bridge)	Footway provision of both sides of the carriageway.	Cyclists offered a degree of priority via the bus lane between Kerloch Place and the approach to the QE2 roundabout.	Currently a public transport route, with a bus lane on the northbound carriageway between Kerloch Place and the approach to the QE2 roundabout.	Wellington Road will a priority route in any revised roads hierarchy. The corridor is currently subject to a multimodal STAG appraisal, considering a range of improvements.
13	Wellington Suspension Bridge	Traffic free route.	NCN1. Traffic free route.	Not suitable as a public transport route.	None proposed.
14	St. Fitticks Park	Existing paths of variable quality.	Paths are poor quality for cycling.	Not suitable as a public transport route.	None proposed.
15	Sinclair Road	Footways on both sides of the carriageway.	NCN1 but no formal provision.  Provides access to quayside businesses and warehouses so	Not currently a public transport route.	None proposed.

		Industrial nature of area reduces attractiveness.	frequented by HGVs and other industrial vehicles.  Cars parked along the length of one side of the carriageway.  30mph speed limit.		
<b>16</b>	Balnagask Road (St. Fittick's Road to Mansefield Road)	Footways on both sides of the carriageway and crossing provision at intervals.	No formal cycling provision although visibility is good.  There is a roundabout to negotiate at the Mansefield Road junction.  Cars parking along the length of the route.  30mph speed limit.	Currently a public transport route but with no formal provision.	None proposed.
<b>17</b>	Kirkhill Place	Footway on the north side of the carriageway.	No formal provision.  Not a through-route for traffic so should be reasonably quiet, although provides access to Tullos School so may be busy at school pick-up and drop-off times.  30mph speed limit.	Not currently a public transport route.	None proposed.
<b>18</b>	Kirkhill Road (Kirkhill Place to Fernie Brae)	Footway on both sides of the carriageway although pavement parking evident.	No formal provision.  Cars parked on both sides of the road although visibility decent.  30mph speed limit.	Not currently a public transport route.	None proposed.
<b>19</b>	Fernie Brae	Footway on both sides of the carriageway although pavement parking evident.	No formal provision.  Cars parked on both sides of the road although visibility decent.	Not currently a public transport route.	None proposed.

			30mph speed limit.		
20	Girdleness Road (Fernie Brae to Old Church Road)	Footway on both sides of the carriageway.	No formal provision.  30mph speed limit.	Currently a public transport route but with no formal provision.	None proposed.
21	Balnagask Road (Old Church Road to Wellington Road)	Footway on both sides of the carriageway.  Crossing provision at Wellington Road junction.	No formal provision.  Cars parked on both sides of the road although visibility decent.  30mph speed limit.	Not currently a public transport route.	None proposed.
22	Grampian Place	Footway on both sides of the carriageway.	No formal provision.  Intermittent car parking on both sides but reasonably good visibility.  20mph speed limit.	Currently a public transport route but no formal provision.	None proposed.
23	Tullos Circle	Footway on both sides of the carriageway.	No formal provision.  Intermittent car parking on both sides of the road.  20mph speed limit.	Currently a public transport route but no formal provision.	None proposed.
24	Tullos Place	Footway on both sides of the carriageway.	No formal provision.  Intermittent car parking on both sides but reasonably good visibility.  20mph speed limit.	Currently a public transport route but no formal provision.	None proposed.
25	Mansefield Road	Footways on both sides of the carriageway.  Steep topography in places.	No formal provision.  Car parking on both sides of the carriageway.  Steep topography in places.	Not currently a public transport route.	None proposed.

			30mph speed limit.		
26	Crombie Place	Footways on both sides of the carriageway.  Industrial area which may not be attractive for walking.	NCN1 but no formal provision.  Frequented by HGVs and other industrial vehicles.  30mph speed limit.	Not currently a public transport route.	None proposed.
27	South Esplanade East	Reasonably wide footways on both sides, although a heavy industrialised area.	NCN1 but no formal provision.  Frequented by HGVs and other industrial vehicles.  30mph speed limit.	Not currently a public transport route.	None proposed.
28	South Esplanade West	Reasonably wide footways on both sides, although a heavy industrialised area.	NCN1 but no formal provision.  Frequented by HGVs and other industrial vehicles.  30mph speed limit.	Not currently a public transport route.	None proposed.
29	South College Street (Wellington Suspension Bridge to Wellington Brae)	Footways on both sides of the carriageway.	NCN1. No formal cycling provision but reasonably quiet as no through-traffic.  Cobbled surface.	Not suitable as a public transport route.	None proposed for this section.
30	Wellington Brae	Traffic-free path.	NCN1. Traffic-free path.	Not suitable as a public transport route.	None proposed.
31	Devanha Terrace	Footways on both sides of the carriageway.	NCN1 but no formal provision.  One-way traffic only (northbound).  20 mph speed limit.	Not currently a public transport route.	None proposed.
32	South Crown Street	Footways on both sides of the carriageway.	NCN1 but no formal provision.  20 mph speed limit.	Not currently a public transport route.	None proposed.
33	Prospect Terrace	Narrow footways on both side of the carriageway.	NCN1 but no formal provision.	Not currently a public transport route.	None proposed.

			One-way traffic only (southbound).		
34	Bank Street	Narrow footways on both side of the carriageway.	No formal provision.  Cars parked on both sides of the carriageway throughout.  30mph speed limit.	Not currently a public transport route.	None proposed.
35	Millburn Street	Footways on both sides of the carriageway.	NCN1 but no formal provision.  30mph speed limit.	Not currently a public transport route.	None proposed.
36	South College Street	Footways on both sides of the carriageway.	No formal cycling provision.  30mph speed limit.	Not currently a public transport route.	Approved layout for the South College Street / Millburn Street / Palmerson Place junction agreed by ACC.  The Roads Hierarchy report recommends upgrading to a secondary route / B-class road.
37	Menzies Road	Footpaths of reasonable width on both sides	NCN1.  Traffic is one-way only southbound, with a contraflow bus lane in the opposite direction.  Cars parked on the southbound side of the carriageway.  30mph speed limit.	Contraflow northbound bus lane (24/7).	None proposed.

## D2.2 Route Options

From the corridor identification and assessment work, the following active travel route options have emerged:

1. South Route: St. Fitticks Park – Kirkhill Place – Kirkhill Road – Fernie Brae – Old Church Road – Balnagask Road – Wellington Road – Wellington Suspension Bride – Wellington Brae – Devanha Terrace / Prospect Terrace – South Crown Street – Millburn Street – South College Street.
2. Middle Route:
  - a. St. Fitticks Road – Balnagask Road – Tullos Place – Tullos Circle – Grampian Place – Wellington Road - Wellington Suspension Bride – Wellington Brae – Devanha Terrace / Prospect Terrace – South Crown Street – Millburn Street – South College Street.
  - b. St. Fitticks Road – Balnagask Road – Tullos Place – Tullos Circle – Grampian Place – Walker Road – Walker Place – Craig Place – QE2 Bridge – South College Street
  - c. St. Fitticks Road – Balnagask Road – Tullos Place – Tullos Circle – Grampian Place – Walker Road – Walker Place – Criag Place – QE2 Bridge – North Esplanade West .
3. Northern Route:
  - a. St Fitticks Road – Victoria Road – Victoria Bridge
  - b. St. Fitticks Road – Abbey Road – Crombie Road – Victoria Road – Victoria Bridge
  - c. St. Fitticks Road – Abbey Road – Crombie Road – Walker Road – Walker Place – Craig Place – QE2 Bridge – South College Street
  - d. St. Fitticks Road – Abbey Road – Crombie Road – Walker Road – Walker Place – Craig Place – QE2Bridge – North Esplanade West
  - e. Greyhope Road – Sinclair Road – Victoria Road – Victoria Bridge
  - f. St. Fitticks Road – Abbey Road – Crombie Road – Walker Road - Walker Lane – Menzies Road – New pedestrian and cycle bridge (as per CCMP)
  - g. St. Fitticks Road – Victoria Road – Menzies Road - New pedestrian and cycle bridge (as per CCMP).
4. Recreational Loop: Greyhope Road – St. Fitticks Road

An assessment of the pros and cons of each route is provided Table 171.

## D2.3 Route Assessments

Table D172 – ASH to City Centre Route Option Assessment

Option	Pros	Cons	Recommendation
1	<p>Existing pedestrian provision good.</p> <p>Uses quiet residential streets in sections and some traffic-free paths</p> <p>Uses a number of existing 20mph streets.</p> <p>Scope to reduce speed limits in other sections.</p> <p>Uses existing infrastructure in places – Wellington Suspension Bridge, Wellington Brae.</p> <p>Wider benefits for the communities along the route.</p>	<p>Convoluted route.</p> <p>Least direct option.</p> <p>Requires path upgrades in St. Fittick's Park.</p> <p>May require intervention on Wellington Road to make safe and attractive for users – this may not be possible in the short term until the outcomes of the Wellington Road Multimodal Corridor Study STAG Part 2 Appraisal are known.</p> <p>May require intervention on South College Street which may be difficult to deliver in the short term until the future layout of this corridor and its junctions is fully established.</p>	<p>Do not progress primarily on the grounds of lack of directness but also the scale of work required to deliver a high-quality route through St. Fitticks Park and the lack of clarity at this time on the future of Wellington Road and South College Street.</p>
2a	<p>Existing pedestrian provision good.</p> <p>Uses a number of existing 20mph streets.</p> <p>Scope to reduce speed limits in other sections.</p> <p>Uses existing infrastructure in places – Wellington Suspension Bridge, Wellington Brae.</p> <p>Wider benefits for the communities along the route.</p>	<p>Not a particularly direct option.</p> <p>May require intervention on Wellington Road and South College Street which may be difficult to deliver in the short term.</p>	<p>Do not progress on the grounds of directness and lack of clarity at this time on the future of Wellington Road and South College Street.</p>
2b	<p>Existing pedestrian provision good.</p> <p>Uses a number of existing 20mph streets.</p> <p>Scope to reduce speed limits in other sections.</p> <p>Wider benefits for the communities along the route.</p>	<p>Not a particularly direct option.</p> <p>May require intervention on South College Street which may be difficult to deliver in the short term.</p>	<p>Do not progress on the grounds of directness and lack of clarity at this time on the future of South College Street.</p>
2c	<p>Existing pedestrian provision good.</p> <p>Uses a number of existing 20mph streets.</p> <p>Scope to reduce speed limits in other sections.</p> <p>Uses existing infrastructure in places – North Esplanade West.</p>	<p>Not a particularly direct option compared to others (3.5km).</p> <p>One-way system on Craig Place may limit scope to deliver safe two-way cycle route.</p>	<p>Do not progress on the grounds of directness.</p>

	Wider benefits for the communities along the route.		
3a	<p>Existing pedestrian provision good on Victoria Road.</p> <p>Some existing cycle provision on Victoria Road.</p> <p>Most direct option (2.2km).</p> <p>Scope to reduce speed limits.</p> <p>Links with existing and proposed cycling provision on Market Street.</p> <p>Wider benefits for the communities along the route.</p>	<p>Steep topography on Victoria Road. Victoria Road generally busy with traffic including buses.</p> <p>Victoria Bridge has a cobbled surface which may be uncomfortable for cyclists and resurfacing unlikely to be acceptable from a conservation perspective.</p> <p>An off-road cycle solution may be unfeasible at this location due to the parapet height of the bridge.</p>	<p>Optimum pedestrian route so should be progressed as such.</p> <p>Not recommended as a cycle route without significant intervention.</p>
3b	<p>Existing pedestrian provision good on Victoria Road.</p> <p>Abbey Road and Crombie Road are reasonably quiet so may be suitable for on-road cycling with minimal interventions.</p> <p>Scope to reduce speed limits.</p> <p>Fairly direct option (2.3km).</p> <p>Links with existing (and proposed) cycling provision on Market Street.</p> <p>Wider benefits for the communities along the route.</p>	<p>Poor pedestrian provision on Abbey Road. HGVs on Crombie Road at particular times of the day.</p> <p>Victoria Bridge has a cobbled surface which may be uncomfortable for cyclists and resurfacing unlikely to be acceptable from a conservation perspective.</p> <p>An off-road cycle solution may also be unfeasible at this location due to the parapet height of the bridge.</p>	<p>Not recommended as a pedestrian route but preferable to 3a as a cycle route given that it keeps cyclists away from Victoria Road for much of its length so may be safer and is not significantly less direct.</p>
3c	<p>Some streets have good pedestrian provision.</p> <p>Scope to reduce speed limits.</p> <p>Wider benefits for the communities along the route.</p>	<p>Poor pedestrian provision on Abbey Road. May require intervention on South College Street which may be difficult to deliver in the short term.</p> <p>One-way restrictions on Walker Place and Criag Place may limit scope to deliver a safe two-way cycle route.</p>	<p>Do not progress on the grounds of safety and lack of clarity at this time on the future of South College Street.</p>
3d	<p>Existing pedestrian and cycle provision on which to build.</p> <p>Utilises existing riverside path on North Esplanade West.</p> <p>Scope to reduce speed limits.</p> <p>Wider benefits for the communities along the route.</p>	<p>Poor pedestrian provision on Abbey Road. Less direct than alternative options (3.2km).</p> <p>One-way restrictions on Walker Place and Craig Place may limit scope to deliver a safe two-way cycle route.</p> <p>Requires cyclists to negotiate Wellington Road / QE2 roundabout which reduces the safety and</p>	<p>Do not progress on the grounds of safety.</p>

		attractiveness of this option. While it may be possible to address the roundabout in the future, it does not currently feature on any approved strategy or plan so would not be a short-term solution. Nor would an off-road solution allowing cyclists to avoid the roundabout be practical due to bridge parapet heights.	
3e	Existing pedestrian provision on Sinclair Road and Victoria Road. Scope to reduce speed limits. Direct option. Wider benefits for the communities along the route.	Poor quality walking and cycling environment on the western section of Greyhope Road and on Sinclair Road to the heavily industrialised nature of the area.	Do not progress on the grounds of poor-quality walking and cycling environment.
3f	Existing pedestrian provision in most areas. New pedestrian and cycle bridge would be safe and attractive. Scope to reduce speed limits. Wider benefits for the communities along the route.	Poor pedestrian provision on Abbey Road. Delivery timescales for CCMP project are uncertain, not is it clear how infrastructure would be funded, so may not be a short-term solution.  May be negative environmental impacts on the River Dee.	A good long-term solution although uncertainties exist around the delivery of the bridge.
3g	Existing pedestrian provision in most areas. New pedestrian and cycle bridge would be safe and attractive. Scope to reduce speed limits. Wider benefits for the communities along the route.	Delivery timescales for CCMP project are uncertain, not is it clear how infrastructure would be funded, so may not be a short-term solution.  May be negative environmental impacts on the River Dee.	A good long-term solution although uncertainties exist around the delivery of the bridge.
4	Would be an attractive recreational route for residents and visitors. Scope to reduce speed limits.	Not a direct option to the city centre. Limited wider benefits beyond recreational potential.	Although current conditions on the route are unfavourable to walking and cycling and significant deviation is required to reach the city centre, there could be merit in improving this as a recreational active travel facility, offering pleasant views of Greyhope Bay, Girdle Ness and Torry Battery, although the route becomes more industrialised the closer one gets to the harbour.

RPA

## D2.4 Recommendations

While the CCMP aspirations for a new pedestrian and cycle bridge over the River Dee between North Dee and Torry are noted and would have clear benefits, this is not being promoted as the optimum solution by the SUMP at this stage, due to uncertainties around, and the likely longer-term nature of, a project of this nature at this location.

In the short term, the following options emerge as the most practical walking and cycling routes between ASH and the city centre and can be realised with minimal interventions:

- Recommended Walking Route - Option 3a: St Fitticks Road – Victoria Road – Victoria Bridge (Figure 22); and
- Recommended Cycling Route - Option 3a: St Fitticks Road – Abbey Road – Crombie Road - Victoria Road – Victoria Bridge (Figure 23).

Table D173 – ASH Infrastructure Recommendations

Location	Recommendations
St. Fitticks Road	Install segregated pedestrian and cycle facilities between Coast Road and Abbey Road. Implement signage to indicate that this is the recommended walking and cycling route between ASH and the city centre.
Abbey Road	Implement signage to indicate that this is the recommended cycling route between ASH and the city centre. Change priorities at the Baxter Street and Mansfield Road junctions to give priority to Abbey Road traffic.
Crombie Road	Implement signage to indicate that this is the recommended cycling route between ASH and the city centre. Reduce the speed limit to 20mph.
Victoria Road (St. Fitticks Road to Crombie Road)	Implement signage to indicate that this is the recommended walking route between ASH and the city centre.
Victoria Road (Crombie Road to Victoria Bridge)	Implement signage to indicate that this is the recommended walking and cycling route between ASH and the city centre. Reduce the speed limit to 20mph.
Victoria Bridge	Implement signage to indicate that this is the recommended walking and cycling route between ASH and the city centre. Reduce the speed limit to 20mph.
Greyhope Road	Reduce the speed limit to 20mph.

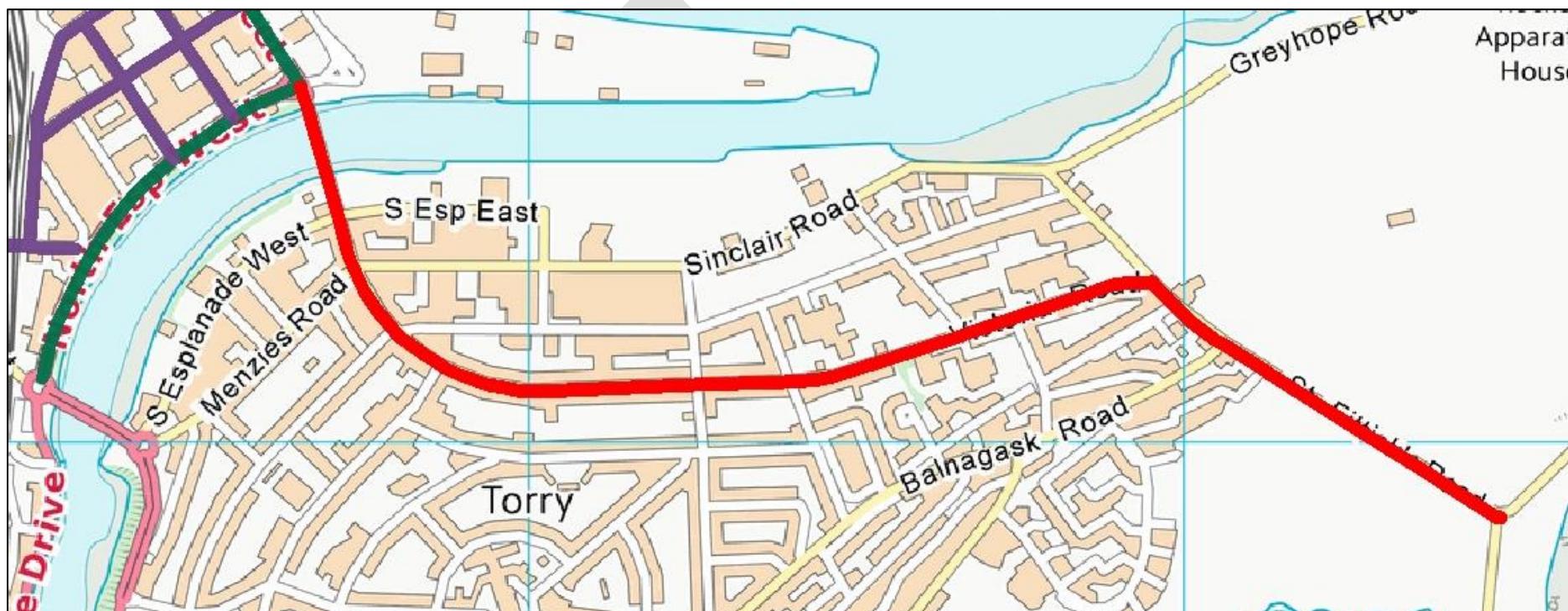
While these proposals are modest, they are very much a short-term solution – a STAG appraisal is underway looking to define the optimum long-term transport connections to and from ASH to maximise the regional economic benefits of this new asset, and this includes consideration of walking and cycling connections to the city centre. With funding for appraisal and delivery available via the Aberdeen City Region Deal (CRD), the appraisal is due to be completed in late 2020/early 2021. The SUMP has sought therefore to not pre-suppose the outcomes of this work but to identify a workable short-term solution that can be delivered at low-cost such that, should the STAG appraisal and CRD process allow for the identification and delivery of a higher-quality cycle route between the new harbour and the city centre, there is minimal risk of abortive work.

Figure D11 - Recommended Walking Route: ASH to City Centre



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Figure D12 – Recommended Cycling Route: ASH to City Centre



# D3 Summary of Recommendations

Table D174 – Zone 1 Infrastructure Recommendations

<b>Link</b>	<b>Recommendation(s)</b>
Rosemount Viaduct	Resurface footways
	Reduce the speed limit west of Woolmanhill to 20mph
	Investigate optimum level of cycle provision in the context of the delivery of CCMP projects on Schoolhill and Upperkirkgate
Schoolhill	Make a walking, cycling and bus priority space (local access only for general traffic)
	Investigate optimum level of cycle provision in the context of the delivery of CCMP projects on Schoolhill and Upperkirkgate
Upperkirkgate	Make a walking, cycling and bus priority space (local access only for general traffic)
	Investigate optimum level of cycle provision in the context of the delivery of CCMP projects on Schoolhill and Upperkirkgate
Skene Street (Summer Street to Woolmanhill)	Resurface footways
	Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities.
St. Andrew Street	Deliver CCMP project to make a walking, cycling and bus priority space (local access only for general traffic) between Loch Street and Charlotte Street. Determine optimal level of infrastructure west of Charlotte Street in the context of CCMP delivery
	Exempt cyclists from one-way traffic restriction and allow access to the bus lane
	Resurface footways
	Reduce the speed limit between Charlotte Street and Loch Street to 20mph
John Street (North St. Andrew Street / to Loch Street)	Make a walking, cycling and bus priority space (local access only for general traffic)
	Resurface footways
Woolmanhill	Reduce the speed limit to 20mph
	Resurface footways
	Reduce the speed limit to 20mph
	Investigate the feasibility of implementing formal cycle provision on the approach to the city centre, preferably segregated facilities.
	Undertake a full appraisal of options for improving the cycle experience at the roundabout while remaining mindful of environmental considerations.
Denburn Road (Woolmanhill to Rosemount Viaduct)	Should public transport journey times be a concern following delivery of planned improvements, look at options for implementing public transport priority measures
	Reduce the speed limit to 20mph
Blackfriars Street	Determine the optimal cycle infrastructure for Blackfriars Street in the context of CCMP delivery
	Resurface the footway
Charlotte Street (John Street to St. Andrew Street)	Permit cyclists to use the contraflow bus lane
	Resurface the footways
	Reduce the speed limit to 20mph
Harriet Street / Crooked Lane	Make a walking, cycling and bus priority space (local access only for general traffic)
Loch Street	Resurface footways
	Reduce the speed limit to 20mph
	Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities.

Berry Street	Resurface footways Reduce the speed limit to 20mph Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities. If segregated facilities not feasible, consider alternative means of improving conditions for cyclists in the context of wider CCMP delivery Should public transport journey times be a concern at this location even with planned improvements, look at options for implementing public transport priority measures at a suitable point in the future
Gallowgate	Resurface footways Reduce the speed limit to 20mph Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities If segregated facilities not feasible, consider alternative means of improving conditions for cyclists in the context of wider CCMP delivery. Investigate the feasibility of making Gallowgate bus, cycle and local access only in the context of wider CCMP delivery
George Street (south of John Street)	Exempt cyclists from 'No Entry' restriction south of St. Andrew Street Reduce the speed limit north of St. Andrew Street to 20mph

Table D175 – Zone 2 Infrastructure Recommendations

Link	Recommendation(s)
West North Street / East North Street (Littlejohn Street to Beach Boulevard)	Resurface footways Reduce the speed limit to 20mph Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities
Beach Boulevard Roundabout	Undertake a study to identify optimum pedestrian and cycle improvements.
Littlejohn Street	Resurface footways
Shoe Lane / Queen Street	Deliver an improved walking and cycling experience alongside the Queen Street redevelopment
King Street (East/West North Street to Castle Street)	Resurface footways Deliver CCMP project to make this space bus, cycle, and local access only Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities alongside delivery of CCMP project
Union Street (Castle Street to Broad Street)	Deliver CCMP project to make this space bus, cycle and local access only Install segregated cycle facilities
Justice Street	Resurface footways
Castlegate	Resurface as per CCMP
Commerce Street	Resurface footways Widen footways at the southern end (Virginia Street to Regent Quay) Reduce the speed limit to 20mph. Undertake further work to determine the feasibility of segregated cycle facilities (Beach Boulevard to Virginia Street) If segregated facilities not feasible, consider provision of mandatory on-road cycle lanes (Beach Boulevard to Virginia Street)
Virginia Street / Trinity Quay	Resurface footways. Reduce the speed limit to 20mph Undertake further work to determine the feasibility of segregated cycle facilities. If segregated facilities not feasible, investigate provision of mandatory on-road cycle lanes If on-road cycle facilities also unfeasible or unadvisable from a safety perspective, investigate off-road cycle provision

Castle Terrace	Ensure the path linking to Commerce Street and Virginia Street is fully accessible to cyclists.
Marischal Street	Resurface footways
James Street	Resurface footways
	Reduce the speed limit to 20mph
Mearns Street	Resurface footways
	Reduce the speed limit to 20mph
Regent Quay	Reduce the speed limit to 20mph
Shore Brae	Resurface the western footway and complete the 'soft segregated' network to ensure consistent provision on Shore Brae and Ship Row
Ship Row	Resurface footways.

Table D176 – Zone 3 Infrastructure Recommendations

Link	Recommendation(s)
Union Street (Broad Street to Bridge Street / Union Terrace)	Deliver CCMP project to make Union Street bus, cycle and local access only As part of CCMP project delivery, implement segregated cycle facilities to realise a high-quality east-west cycle route through the city centre
Union Terrace	Deliver CCMP project to make the space bus, cycle and local access only Look at opportunities for footway resurfacing and improved crossing provision Investigate the feasibility of implementing formal cycle provision, preferably segregated cycle facilities, alongside delivery of CCMP project
Denburn Road (Rosemount Viaduct to Wapping Street)	Reduce the speed limit to 20mph.
Belmont Street	Exempt cyclists from access restrictions
St. Nicholas Street / Correction Wynd	Exempt cyclists from access restrictions
Netherkirkgate	Resurface footways Underpass improvements

Table D177 - Zone 4 Infrastructure Recommendations

Link	Recommendation(s)
Market Street	Implement a modified CCMP project to deliver one-way traffic system (bus, cycle and local access only) between Union Street and Guild Street with segregated facilities
	Resurface footways on southern section (Guild Street to North Esplanade West)
	Reduce the speed limit along the entire street to 20mph
	Investigate the feasibility of implementing a pedestrian crossing phase at the Market Street / Guild Street signalised junction
	Investigate the feasibility of implementing formal cycle provision, preferably segregated cycle facilities, on the southern section of Market Street
Bridge Street	Modify CCMP proposal to deliver one-way traffic system (bus, cycle and local access only) between Union Street and Wapping Street
	Resurface footways.
	Reduce the speed limit along the entire street to 20mph
	Investigate the feasibility of implementing formal cycle provision, preferably segregated cycle facilities
College Street	Reduce the speed limit to 20mph
	Investigate the feasibility of implementing on-road cycle provision, preferably mandatory cycle lanes
Hadden Street	Make a walking, cycling and bus priority space (local access only for general traffic)
Wapping Street	Reduce the speed limit to 20mph

	Investigate the feasibility of implementing formal cycle provision, preferably segregated cycle facilities
Stirling Street	Make a walking, cycling and bus priority space (local access only for general traffic)
Trinity Street	Make a walking, cycling and bus priority space (local access only for general traffic)
Carmelite Lane	Make a walking, cycling and bus priority space (local access only for general traffic)
Exchange Street	Make a walking, cycling and bus priority space (local access only for general traffic)
Guild Street	Resurface footways between Union Square and Bridge Street
	Work with partners to look at options for improved connectivity (including lifts) between Union Square and Trinity Mall
	Deliver CCMP project to remove car traffic and reduce bus traffic to one-way only on Guild Street while allowing local access only for deliveries
	Investigate the feasibility of implementing formal cycle provision, preferably segregated cycle facilities
Palmerston Road	Make a walking, cycling and bus priority space (local access only for general traffic)
	Reduce the speed limit to 20mph
	Should a new pedestrian and cycle bridge across the River Dee be delivered, implement more formal cycling provision between Raik Road and Market Street
Raik Road	Make a walking, cycling and bus priority space (local access only for general traffic)
	Reduce the speed limit to 20mph
	Should a new pedestrian and cycle bridge across the River Dee be delivered, implement more formal cycling provision
Stell Road	Make a walking, cycling and bus priority space (local access only for general traffic)
	Reduce the speed limit to 20mph
Palmerston Place	Ensure that attention is given to the needs of cyclists when devising the final layout of South College Street improvements to ensure a consistent level of cycling provision within the area
Poynternook Road	Make a walking, cycling and bus priority space (local access only for general traffic)
	Reduce the speed limit to 20mph
North Esplanade West	Investigate the feasibility of implementing formal cycle provision, preferably segregated cycle facilities
	Reduce the speed limit to 20mph
	Progress delivery of a new pedestrian and cycle bridge over the River Dee as part of CCMP delivery.

Table D178 - Zone 5 Infrastructure Recommendations

Link	Recommendation(s)
Holburn Street (Union Street to Union Grove / Justice Mill Lane)	Exempt cyclists from the right-turn ban into Justice Mill Lane
	Resurface footways
	Investigate the feasibility of implementing formal cycle provision, preferably segregated cycle facilities
Bon Accord Terrace (Union Street to Lanstane Place)	Resurface footways
Langstane Place	Make a walking, cycling and bus priority space (local access only for general traffic)
	Resurface footways.
	Should cycle safety be a concern at this location following the above interventions, investigate the feasibility of mandatory on-road cycle lanes

Justice Mill Lane	Make a walking, cycling and bus priority space (local access only for general traffic) Resurface footways Should cycle safety be a concern at this location following the above interventions, investigate the feasibility of mandatory on-road cycle lanes
Windmill Brae / Bath Street	Make a walking, cycling and bus priority space (local access only for general traffic) Widen and resurface footways
Dee Street (Union Street to Bon Accord Lane)	Widen and resurface footways.
Crown Street (Union Street to Academy Street)	Resurface footways. Deliver CCMP project to implements segregated cycle facilities between Springbank Terrace and Union Street. If segregated facilities prove unfeasible, look at the implementation of mandatory on-road cycle lanes as an alternative
Bon Accord Lane	Resurface footways
West / East Craibstone Street	Resurface footways
Bon Accord Square	Exempt cyclists from one-way and access restrictions Resurface footways

Table D179 - Zone 6 Infrastructure Recommendations

Link	Recommendation(s)
Union Street (Union Terrace to Holburn Street)	Deliver CCMP project to make the section between Castle Street and Crown Street bus, cycle and local access only Install segregated cycle facilities Investigate the feasibility of making the whole of Union Street a walking, cycling and bus priority space (local access only for general traffic) in the context of wider CCMP proposals and an agreed future strategy for Union Street.
Alford Place (Alford Lane to Union Street)	Investigate the feasibility of implementing formal cycle provision, preferably segregated cycle facilities Resurface footways and widen as space permits
Rose Street	Investigate the feasibility of making Huntly Street to Union Street a walking, cycling and bus priority space (local access only for general traffic) in the context of wider CCMP proposals and an agreed future strategy for Union Street.
Thistle Street	Make a walking, cycling and bus priority space (local access only for general traffic)
Chapel Street	Investigate the feasibility of making a walking, cycling and bus priority space (local access only for general traffic) in the context of wider CCMP proposals and an agreed future strategy for Union Street. Resurface and widen footways Consider opportunities for formal cycle provision if safety proves a concern at this location following delivery of wider proposals.
Little Chapel Street	Resurface and widen footways
Summer Street	Resurface and widen footways Consider implementation of on-road cycle lanes if safety proves a concern at this location
Huntly Street	Resurface and widen footways
Skene Terrace	Resurface and widen footways
South Silver Street	Make cycle and local access only as per the CCMP Resurface footways
North Silver Street	Resurface footways
Golden Square	Make a walking, cycling and bus priority space (local access only for general traffic)

Table D180 – City Centre to ASH Infrastructure Recommendations

<b>Link</b>	<b>Recommendation(s)</b>
St. Fitticks Road	Implement signage to indicate that this is the recommended walking and cycling route between ASH and the city centre
	Install segregated pedestrian and cycle facilities between Coast Road and Abbey Road
Victoria Road (St. Fittick's Road to Crombie Road)	Implement signage to indicate that this is the recommended walking route between ASH and the city centre
Victoria Road (Crombie Road to Victoria Bridge)	Implement signage to indicate that this is the recommended walking and cycling route between ASH and the city centre
	Reduce the speed limit to 20mph
Victoria Bridge	Implement signage to indicate that this is the recommended walking and cycling route between ASH and the city centre
	Reduce the speed limit to 20mph
Abbey Road	Implement signage to indicate that this is the recommended cycling route between ASH and the city centre.
	Change priorities at the Baxter Street and Mansfield Road junctions to give priority to Abbey Road traffic.
Crombie Road	Implement signage to indicate that this is the recommended cycling route between ASH and the city centre
	Reduce the speed limit to 20mph
Greyhope Road	Reduce the speed limit to 20mph

# Appendix E : Implementation Plan

This Appendix forms the Implementation Plan for the Aberdeen Sustainable Urban Mobility Plan (SUMP) and relates to the delivery of the infrastructure measures identified in the SUMP.

Measures have been categorised into high (H), medium (M) or low (L) priority based on the following criteria:

- Their ability to deliver the objectives of the SUMP;
- Their ability to achieve modal shift in the city centre;
- The extent to which interventions contribute to the development of high-quality cycle routes through the city centre;
- The importance of each corridor to walking, cycling and public transport, with strategic routes prioritised over local routes; and
- The availability and quality of infrastructure already in place or the presence of usable alternatives.

Furthermore, interventions have been classed as short (S), medium (M) or long (L) term, based on their likely implementation timescales, taking into account, in some cases, the need for further feasibility and design work. It is presumed that short-term measures can be delivered / progressed within 2 years of adoption of the SUMP, medium-term measures within 2-15 years and long-term measures beyond 10 years.

Measure categorisation is summarised in the following tables.

Table E1 – Categorisation of Zone 1 Measures

Link	Recommendation(s)	Priority	Timescale
Rosemount Viaduct	Resurface footways	L	M
	Reduce the speed limit west of Woolmanhill to 20mph	M	S
	Investigate the optimum level of cycle provision in the context of the delivery of CCMP projects on Schoolhill and Upperkirkgate	M	M
Schoolhill	Make a walking, cycling and bus priority space (local access only for general traffic)	M	M
	Investigate optimum level of cycle provision in the context of the delivery of CCMP projects on Schoolhill and Upperkirkgate	M	M
Upperkirkgate	Make a walking, cycling and bus priority space (local access only for general traffic)	M	M
	Investigate optimum level of cycle provision in the context of the delivery of CCMP projects on Schoolhill and Upperkirkgate	M	M
Skene Street (Summer Street to Woolmanhill)	Resurface footways	L	M
	Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities	L	M
St. Andrew Street	Deliver CCMP project to make a walking, cycling and bus priority space (local access only for general traffic) between Loch Street and Charlotte Street. Determine optimal level of infrastructure west of Charlotte Street in the context of CCMP delivery	M	M
	Allow cyclists access to contraflow bus lane	M	S
	Resurface footways	L	M
	Reduce the speed limit between Charlotte Street and Loch Street to 20mph	M	S
	Make a walking, cycling and bus priority space (local access only for general traffic)	M	M

John Street (North St. Andrew Street / to Loch Street)	Resurface footways	L	M
	Reduce the speed limit to 20mph	M	S
Woolmanhill	Resurface footways	L	M
	Reduce the speed limit to 20mph	M	S
	Investigate the feasibility of implementing formal cycle provision on the approach to the city centre, preferably segregated facilities	M	M
	Undertake a full appraisal of options for improving the cycle experience at the roundabout while remaining mindful of environmental considerations	M	L
	Should public transport journey times be a concern following delivery of planned improvements, look at options for implementing public transport priority measures	M	L
Denburn Road (Woolmanhill to Rosemount Viaduct)	Reduce the speed limit to 20mph	M	S
Blackfriars Street	Determine the optimal cycle infrastructure for Blackfriars Street in the context of CCMP delivery	M	M
	Resurface the footway	L	M
Charlotte Street (John Street to St. Andrews Street)	Permit cyclists to use the contraflow bus lane	M	S
	Resurface the footways	L	M
	Reduce the speed limit to 20mph	M	S
Harriet Street / Crooked Lane	Make a walking, cycling and bus priority space (local access only for general traffic)	M	M
Loch Street	Resurface footways	L	M
	Reduce the speed limit to 20mph	M	S
	Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities	L	L
Berry Street	Resurface footways	L	M
	Reduce the speed limit to 20mph	M	S
	Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities	L	L
	If segregated facilities not feasible, consider alternative means of improving conditions for cyclists in the context of wider CCMP delivery	L	L
	Should public transport journey times become a concern at this location even with planned improvements, look at options for implementing public transport priority measures at a suitable point in the future	L	L
Gallowgate	Resurface footways	L	M
	Reduce the speed limit to 20mph	M	S
	Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities	M	M
	If segregated facilities not feasible, consider alternative means of improving conditions for cyclists in the context of wider CCMP delivery	M	M
	Investigate the feasibility of making Gallowgate bus, cycle and local access only in the context of wider CCMP delivery	M	M
George Street (south of John Street)	Exempt cyclists from 'No Entry' restriction south of St. Andrew Street	M	S
	Reduce the speed limit north of St. Andrew Street to 20mph	M	S

Table E2 – Categorisation of Zone 2 Measures

Link	Recommendation(s)	Priority	Timescale
West North Street / East North Street (Littlejohn Street to Beach Boulevard)	Resurface footways	L	M
	Reduce the speed limit to 20mph	M	S
	Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities	L	L
Beach Boulevard Roundabout	Undertake a study to identify the optimum pedestrian and cycle improvements	L	L
Littlejohn Street	Resurface footways	L	M
Shoe Lane / Queen Street	Deliver an improved pedestrian and cycle experience alongside Queen Street redevelopment	M	M
King Street (East/West North Street to Castle Street)	Resurface footways	M	M
	Investigate the feasibility of delivering CCMP project to make this space bus, cycle, and local access only	H	M
	Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities , alongside delivery of the CCMP project and in the context of a wider review of active travel facilities along the A956 (north) corridor in the context of an agreed new roads hierarchy	H	M
Union Street (Castle Street to Broad Street)	Deliver CCMP project to make this space bus, cycle and local access only	H	M
	Install segregated facilities	H	M
Justice Street	Resurface footways	L	M
Castlegate	Resurface as per CCMP	L	L
Commerce Street	Resurface footways	L	M
	Widen footways at the southern end (Virginia Street to Regent Quay)	L	M
	Reduce the speed limit to 20mph	M	S
	Undertake further work to determine the feasibility of segregated cycle facilities (Beach Boulevard to Virginia Street)	L	L
	If segregated facilities not feasible, consider provision of mandatory on-road cycle lanes (Beach Boulevard to Virginia Street)	L	L
Virginia Street / Trinity Quay	Resurface footways	L	M
	Reduce the speed limit to 20mph	M	S
	Undertake further work to determine the feasibility of segregated cycle lanes	M	M
	If segregated facilities not feasible, investigate provision of mandatory on-road cycle lanes	L	L
	If on-road cycle facilities also prove unfeasible or unadvisable from a safety perspective, investigate off-road cycle provision	L	L
Castle Terrace	Ensure the path linking to Commerce Street and Virginia Street is fully accessible to cyclists	L	S
Marischal Street	Resurface footways	L	M
James Street	Resurface footways	L	M
	Reduce the speed limit to 20mph	M	S
Mearns Street	Resurface footways	L	M
	Reduce the speed limit to 20mph	M	S
Regent Quay	Reduce the speed limit to 20mph	M	S
Shore Brae	Resurface the western footway and complete the 'soft segregated' network to ensure consistent provision on Shore Brae and Ship Row	M	M
Ship Row	Resurface footways	L	M

Table E3 – Categorisation of Zone 3 Measures

Link	Recommendation(s)	Priority	Timescale
Union Street (Broad Street to Bridge Street / Union Terrace)	Deliver CCMP project to make Union Street bus, cycle and local access only	H	M
	As part of CCMP project delivery, implement segregated cycle facilities to realise a high-quality east-west cycle route through the city centre	H	M
Union Terrace	Investigate the feasibility of delivering a modified CCMP project to make this a pedestrian, bicycle and public transport priority space.	H	M
	Look at opportunities for footway resurfacing and improved crossing provision	M	M
	Investigate the feasibility of implementing formal cycle provision, preferably segregated cycle facilities alongside delivery of CCMP project	H	M
Denburn Road (Rosemount Viaduct to Wapping Street)	Reduce the speed limit to 20mph	M	S
Belmont Street	Exempt cyclists from access restrictions	S	S
St. Nicholas Street / Correction Wynd	Exempt cyclists from access restriction	L	S
Netherkirkgate	Resurface footways	L	M
	Underpass improvements	L	M

Table E4 – Categorisation of Zone 4 Measures

Link	Recommendation(s)	Priority	Timescale
Market Street	Implement a modified CCMP project to deliver one-way traffic system (bus, cycle and local access only) between Union Street and Guild Street, with segregated cycle facilities	H	M
	Resurface footways on southern section (Guild Street to North Esplanade West)	L	M
	Reduce the speed limit along the entire street to 20mph	H	S
	Investigate the feasibility of implementing a pedestrian crossing phase at the signals at the Market Street / Guild Street junction	L	M
	Determine the feasibility of improved cycle facilities on the southern section of Market Street	H	M
Bridge Street	Modify CCMP proposal to deliver one-way traffic system (bus, cycle and local access only) between Union Street and Wapping Street	H	M
	Resurface footways	M	M
	Reduce the speed limit along the entire street to 20mph	H	S
	Investigate the feasibility of implementing formal cycle provision, preferably segregated cycle facilities	H	M
College Street	Reduce the speed limit to 20mph	H	M
	Investigate the feasibility of implementing on-road cycle provision, preferably mandatory cycle lanes	H	M
Hadden Street	Make a walking, cycling and bus priority space (local access only for general traffic)	M	M
Wapping Street	Reduce the speed limit to 20mph	M	M
	Investigate the feasibility of implementing formal cycle provision, preferably segregated cycle facilities	M	M
Stirling Street	Make a walking, cycling and bus priority space (local access only for general traffic)	M	M
Trinity Street	Make a walking, cycling and bus priority space (local access only for general traffic)	M	M

Carmelite Lane	Make a walking, cycling and bus priority space (local access only for general traffic)	M	M
Exchange Street	Make a walking, cycling and bus priority space (local access only for general traffic)	M	M
Guild Street	Resurface footways between Union Square and Bridge Street	M	M
	Work with partners to look at options for improved connectivity (including lifts) between Union Square and Trinity Mall	M	M
	Deliver CCMP project to remove car traffic and reduce bus traffic to one-way only on Guild Street, while allowing local access only for deliveries	M	M
	Investigate the feasibility of implementing formal cycle provision, preferably segregated cycle facilities	M	M
Palmerston Road	Make a walking, cycling and bus priority space (local access only for general traffic)	M	M
	Reduce the speed limit to 20mph	M	S
	Should a new pedestrian and cycle bridge across the River Dee be delivered, implement more formal cycling provision between Raik Road and Market Street	M	L
Raik Road	Make a walking, cycling and bus priority space (local access only for general traffic)	M	M
	Reduce the speed limit to 20mph	M	S
	Should a new pedestrian and cycle bridge across the River Dee be delivered, implement more formal cycling provision	M	L
Stell Road	Make a walking, cycling and bus priority space (local access only for general traffic)	M	M
	Reduce the speed limit to 20mph.	M	S
Palmerston Place	Ensure that attention is given to the needs of cyclists when devising the final form of South College Street improvements to ensure a consistent level of cycling provision within the area	M	M
Poynternook Road	Make a walking, cycling and bus priority space (local access only for general traffic)	M	M
	Reduce the speed limit to 20mph	M	S
North Esplanade West	Investigate the feasibility of implementing formal cycle provision, preferably segregated cycle facilities	M	M
	Reduce the speed limit to 20mph	M	S
	Progress delivery of a new pedestrian and cycle bridge over the River Dee as part of CCMP delivery	M	L

Table E5 – Categorisation of Zone 5 Measures

Link	Recommendation(s)	Priority	Timescale
Holburn Street (Union Street to Union Grove / Justice Mill Lane)	Resurface footways	M	M
	Investigate the feasibility of implementing formal cycle provision, preferably segregated cycle facilities	H	M
Bon Accord Terrace (Union Street to Lanstane Place)	Resurface footways	L	M
Langstane Place	Make a walking, cycling and bus priority space (local access only for general traffic)	M	M
	Resurface footways.	L	M
	Should cycle safety prove to remain a concern at this location even following the above interventions, investigate the feasibility of mandatory on-road cycle lanes	L	M

Justice Mill Lane	Make a walking, cycling and bus priority space (local access only for general traffic)	M	M
	Resurface footways	L	M
	Should cycle safety prove to remain a concern at this location even following the above interventions, investigate the feasibility of mandatory on-road cycle lanes	L	M
Windmill Brae / Bath Street	Make a walking, cycling and bus priority space (local access only for general traffic)	M	M
	Widen and resurface footways	L	M
Dee Street (Union Street to Bon Accord Lane)	Widen and resurface footways	L	M
Crown Street (Union Street to Academy Street)	Resurface footways	L	M
	Deliver CCMP project to implement segregated cycle facilities between Springbank Terrace and Union Street.	M	M
	If segregated facilities prove unfeasible, look at the implementation of mandatory on-road cycle lanes as an alternative	M	M
Bon Accord Lane	Resurface footways	L	M
West / East Craibstone Street	Resurface footways	L	M
Bon Accord Square	Resurface footways	L	M

Table E6 – Categorisation of Zone 6 Measures

Link	Recommendation(s)	Priority	Timescale
Union Street (Union Terrace to Holburn Street)	Deliver CCMP project to make the section between Castle Street and Crown Street bus, cycle and local access only	H	M
	Install segregated cycle facilities	H	M
	Investigate the feasibility of making the whole of Union Street a walking, cycling and bus priority space (local access only for general traffic) in the context of wider CCMP proposals and an agreed future strategy for Union Street	H	M
Alford Place (Alford Lane to Union Street)	Investigate the feasibility of implementing formal cycle provision, preferably segregated cycle facilities on the approach to Union Street, giving consideration to onward connections along Alyn Place, and look at opportunities for footway resurfacing as part of this work	H	M
Rose Street	Investigate the feasibility of making Huntry Street to Union Street a walking, cycling and bus priority space (local access only for general traffic) in the context of wider CCMP proposals and an agreed future strategy for Union Street	M	M
Thistle Street	Make a walking, cycling and bus priority space (local access only for general traffic)	M	M
Chapel Street	Investigate the feasibility of making a walking, cycling and bus priority space (local access only for general traffic) in the context of wider CCMP proposals and an agreed future strategy for Union Street	M	M
	Resurface and widen footways	L	M
	Consider opportunities for formal cycle provision if safety proves a concern at this location	M	M
Little Chapel Street	Resurface and widen footways	L	M
Summer Street	Resurface and widen footways	L	M

	Consider implementation of on-road cycle lanes if safety proves a concern at this location	M	M
Huntly Street	Resurface and widen footways	L	M
Skene Terrace	Resurface footways	L	M
South Silver Street	Make cycle and local access only as per the CCMP	M	M
	Resurface footways	L	M
North Silver Street	Resurface footways	L	M
Golden Square	Make a walking, cycling and bus priority space (local access only for general traffic)	M	M

Table E7 – Categorisation of Links to ASH Measures

Link	Recommendation(s)	Priority	Timescale
St. Fitticks Road	Implement signage to indicate that this is the recommended walking and cycling route between ASH and the city centre	M	S
	Install segregated pedestrian and cycle facilities between Coast Road and Abbey Road	M	M
Victoria Road (St. Fittick's Road to Crombie Road)	Implement signage to indicate that this is the recommended walking route between ASH and the city centre	M	S
Victoria Road (Crombie Road to Victoria Bridge)	Implement signage to indicate that this is the recommended walking and cycling route between ASH and the city centre	M	S
	Reduce the speed limit to 20mph	M	S
Victoria Bridge	Implement signage to indicate that this is the recommended walking and cycling route between ASH and the city centre	M	S
	Reduce the speed limit to 20mph	M	S
Abbey Road	Implement signage to indicate that this is the recommended cycling route between ASH and the city centre	M	S
	Change priorities at the Baxter Street and Mansfield Road junctions to give priority to Abbey Road traffic	M	S
Crombie Road	Implement signage to indicate that this is the recommended cycling route between ASH and the city centre	M	S
	Reduce the speed limit to 20mph	M	S
Greyhope Road	Reduce the speed limit to 20mph	M	S

In order to facilitate project planning and resource programming, projects are grouped in the following tables by priority, with the assumption that delivery, or at least further progression of, high priority projects will commence soon after adoption of the SUMP. The majority of these, despite being high priority projects, are anticipated to have medium-term delivery periods, meaning that, while further feasibility and design work can be prioritised in the short term, actual delivery is likely to be at least medium term.

It is worth noting that, in the interests of resource efficiency, for those cases where a speed reduction is recommended, the outcomes of the Restricted Roads (20mph Speed Limit) (Scotland) Bill, introduced in September 2018 and recommending a blanket 20mph speed limit on restricted (C-class and unclassified) roads will be awaited before these projects are progressed. This will allow measures to be progressed as a package rather than as individual schemes, with resulting time and cost savings. Should the Bill not succeed in Parliament, these proposals can be progressed as individual measures.

Table E8 – High Priority Projects

SHORT TERM		
Location		Project
1	Market Street	Reduce the speed limit along the entire street to 20mph
2	Bridge Street	Reduce the speed limit along the entire street to 20mph
3	Belmont Street	Exempt cyclists from access restrictions
MEDIUM TERM		
Location		Project
1	Union Street	<p>Investigate the feasibility of making the whole of Union Street a walking, cycling and bus priority space (local access only for general traffic) in the context of wider CCMP proposals and an agreed future strategy for Union Street</p> <p>Install segregated cycle facilities along the length of Union Street alongside wider CCMP proposals</p>
2	King Street (East/West North Street to Castle Street)	<p>Investigate the feasibility of delivering CCMP project to make this space bus, cycle, and local access only. As part of this work, consider opportunities for resurfacing, widening and otherwise improving footways</p> <p>Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities, alongside delivery of the CCMP project and in the context of a wider review of active travel facilities along the A956 (north) reflecting any agreed new roads hierarchy</p>
3	Holburn Street (Union Grove to Union Street)	Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities, in the context of a wider review of active travel facilities along Holburn Street, reflecting any agreed new roads hierarchy
4	Alford Place	Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities, giving consideration to onward connections along Albyn Place, and look at opportunities for footway resurfacing as part of this work
5	Union Terrace	<p>Investigate the feasibility of delivering a modified CCMP project to make this a pedestrian, bicycle and public transport priority space. Look at opportunities for footway resurfacing and improved crossing provision</p> <p>Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities, alongside delivery of CCMP project</p>
6	Bridge Street	<p>Modify CCMP project to deliver one-way traffic system (bus, cycle and local access only) between Union Street and Wapping Street</p> <p>Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities, alongside delivery of CCMP project and linking in with any wider improvements to Union Terrace and College Street. Look at opportunities for footway resurfacing as part of this work</p>
7	College Street	<p>Reduce the speed limit to 20mph</p> <p>Investigate the feasibility of implementing on-road cycle provision, potentially mandatory cycle lanes, looking for opportunities to complement the wider South College Street improvement scheme</p>
8	Market Street	<p>Implement modified CCMP project to deliver one-way traffic system (bus, cycle and local access only) with segregated cycle facilities between Union Street and Guild Street</p> <p>Determine the feasibility of improved cycle facilities on the southern section of Market and resurface footways as part of any improvement works</p>

Following commencement and / or completion of the high priority projects listed above, work will then begin to progress the medium priority projects outlined in Table E9 below. Any opportunities to progress medium priority projects within higher priority pieces of work will be taken to enable efficiencies to be achieved wherever possible.

Table E9 – Medium Priority Projects

SHORT TERM		
Location	Project	
1 West North Street / East North Street	Reduce the speed limit to 20mph	
2 Commerce Street	Reduce the speed limit to 20mph	
3 Virginia Street / Trinity Quay	Reduce the speed limit to 20mph	
4 Woolmanhill	Reduce the speed limit to 20mph	
5 Denburn Road	Reduce the speed limit to 20mph	
6 Rosemount Viaduct	Reduce the speed limit west of Woolmanhill to 20mph	
7 George Street	Exempt cyclists from 'No Entry' restriction south of St. Andrew Street Reduce the speed limit north of St. Andrew Street to 20mph	
8 Gallowgate	Reduce the speed limit to 20mph	
9 Loch Street	Reduce the speed limit to 20mph	
10 Berry Street	Reduce the speed limit to 20mph	
11 St. Andrew Street	Allow cyclists access to contraflow bus lane Reduce the speed limit between Charlotte Street and Loch Street to 20mph	
12 John Street	Reduce the speed limit to 20mph	
13 Charlotte Street	Permit cyclists to use the contraflow bus lane Reduce the speed limit to 20mph	
14 Palmerston Road	Reduce the speed limit to 20mph	
15 Raik Road	Reduce the speed limit to 20mph	
16 Stell Road	Reduce the speed limit to 20mph	
17 Poynerhook Road	Reduce the speed limit to 20mph	
18 James Street	Reduce the speed limit to 20mph	
19 Mearns Street	Reduce the speed limit to 20mph	
20 Regent Quay	Reduce the speed limit to 20mph	
21 St. Fitticks Road	Implement signage to indicate that this is the recommended walking and cycling route between ASH and the city centre	
22 Victoria Road / Victoria Bridge	Implement signage to indicate that this is the recommended walking route between ASH and the city centre Reduce the speed limit to 20mph	
23 Abbey Road	Implement signage to indicate that this is the recommended cycling route between ASH and the city centre Change priorities at the Baxter Street and Mansefield Road junctions to give priority to Abbey Road traffic	
24 Crombie Road	Implement signage to indicate that this is the recommended cycling route between ASH and the city centre Reduce the speed limit to 20mph	
25 North Esplanade West	Reduce the speed limit to 20mph	
26 Greyhope Road	Reduce the speed limit to 20mph	
MEDIUM TERM		
Location	Project	
1 Rosemount Viaduct	Investigate the optimum level of cycle provision in the context of the delivery of CCMP projects on Schoolhill and Upperkirkgate Look at opportunities for footway resurfacing as part of this work.	
2 Schoolhill	Make a walking, cycling and bus priority space (local access only for general traffic) Investigate optimum level of cycle provision in the context of wider CCMP delivery, particularly projects on Schoolhill and Upperkirkgate	
3 Upperkirkgate	Make a walking, cycling and bus priority space (local access only for general traffic)	

		Investigate optimum level of cycle provision in the context of wider CCMP delivery, particularly projects on Schoolhill and Upperkirkgate
4	Gallowgate	Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities and giving consideration to onward connections northwards along the A96 and westwards along the A944. If segregated facilities not feasible, consider alternative means of improving conditions for cyclists in the context of wider CCMP delivery. Look at opportunities for footway resurfacing as part of this work.
		Investigate the feasibility of making Gallowgate (or sections of Gallowgate) a walking, cycling and bus priority space (local access only for general traffic) in the context of wider CCMP delivery
5	Guild Street	Resurface footways between Union Square and Bridge Street
		Work with partners to look at options for improved connectivity between Union Square and Trinity Mall
		Deliver CCMP project to remove car traffic and reduce bus traffic to one-way only on Guild Street, while allowing local access only for deliveries
		Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities, alongside CCMP project
6	Skene Street (Summer Street to Woolmanhill)	Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities, on this section, mindful of opportunities for continuing onward connections westwards along the current B9119. Look at opportunities for footway resurfacing as part of this work
7	Woolmanhill	Investigate the feasibility of implementing formal cycle provision on the approach to the city centre, preferably segregated facilities, in the context of wider Berryden corridor improvements and the opportunity for onward connections to the north. Look at opportunities for footway resurfacing as part of this work
8	Crown Street (Union Street to Academy Street)	Deliver CCMP project to implement segregated two-way cycle lanes between Springbank Terrace and Union Street. If segregated facilities prove unfeasible, look at the implementation of mandatory on-road cycle lanes as an alternative. Look at opportunities for footway resurfacing as part of this work
9	Rose Street	Investigate the feasibility of making Huntly Street to Union Street a walking, cycling and bus priority space (local access only for general traffic) in the context of wider CCMP proposals and an agreed future strategy for Union Street
10	Thistle Street	Make a walking and cycling priority space (local access only for general traffic)
11	Chapel Street	Investigate the feasibility of making a walking, cycling and bus priority space (local access only for general traffic) in the context of wider CCMP proposals and an agreed future strategy for Union Street. Look at opportunities for footway resurfacing and widening as part of this work
		Consider opportunities for formal cycle provision if safety proves a concern at this location following implementation of wider proposals
12	Palmerston Road	Make a walking and cycling priority space (local access only for general traffic)
13	Raik Road	Make a walking and cycling priority space (local access only for general traffic)
14	Stell Road	Make a walking and cycling priority space (local access only for general traffic)
15	Palmerston Place	Ensure that attention is given to the needs of cyclists when devising the final form of South College Street improvements to ensure a consistent level of cycling provision within the area
16	Poynternook Road	Make a walking and cycling priority space (local access only for general traffic)
17	St. Andrew Street	Deliver CCMP project to make a walking, cycling and bus priority space (local access only for general traffic) between Loch Street and Charlotte Street. Determine optimal level of infrastructure west of Charlotte Street in the context of CCMP delivery. Look at opportunities for footway resurfacing as part of this work
18	John Street	Make a walking, cycling and bus priority space (local access only for general traffic). Look at opportunities for footway resurfacing as part of this work
19	Blackfriars Street	Determine the optimal cycle infrastructure in the context of CCMP delivery

<b>20</b>	Harriet Street / Crooked Lane	Make a walking and cycling priority space (local access only for general traffic)
<b>21</b>	Shoe Lane / Queen Street	Deliver an improved pedestrian and cycle experience alongside Queen Street redevelopment
<b>22</b>	Shore Brae	Resurface the western footway and complete the 'soft segregated' network to ensure consistent provision on Shore Brae and Ship Row
<b>23</b>	Hadden Street	Make a walking and cycling priority space (local access only for general traffic)
<b>24</b>	Wapping Street / Carmelite Street	Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities
		Reduce the speed limit to 20mph
<b>25</b>	Stirling Street	Make a walking and cycling priority space (local access only for general traffic) as per CCMP
<b>26</b>	Trinity Street	Make a walking and cycling priority space (local access only for general traffic) as per CCMP
<b>27</b>	Carmelite Lane	Make a walking and cycling priority space (local access only for general traffic) as per CCMP
<b>28</b>	Exchange Street	Make a walking and cycling priority space (local access only for general traffic) as per CCMP
<b>29</b>	South Silver Street	Make cycle and local access only as per the CCMP. Look at opportunities for footway resurfacing as part of this work
<b>30</b>	Golden Square	Make a walking and cycling priority space (local access only for general traffic)
<b>31</b>	Langstane Place	Make a walking and cycling priority space (local access only for general traffic). Look at opportunities for footway resurfacing as part of this work
<b>32</b>	Justice Mill Lane	Make a walking and cycling priority space (local access only for general traffic). Look at opportunities for footway resurfacing as part of this work
<b>33</b>	Windmill Brae / Bath Street	Make a walking and cycling priority space (local access only for general traffic). Look at opportunities for footway resurfacing and widening as part of this work.
<b>34</b>	St. Fitticks Road	Install segregated pedestrian and cycle facilities between Coast Road and Abbey Road
<b>35</b>	North Esplanade West	Investigate the feasibility of implementing formal cycle provision, preferably segregated facilities

#### LONG TERM

	<b>Location</b>	<b>Project</b>
<b>1</b>	Woolmanhill	In recognition of the fact that roundabouts can act as a barrier to cycling, while simultaneously aiding the smooth flow of traffic and performing an important green space function, undertake an options appraisal to look at ways of improving the cycle experience at the roundabout while remaining mindful of wider considerations.
		Should public transport journey times be a concern following delivery of planned improvements, look at options for implementing public transport priority measures
<b>2</b>	North Esplanade West	Progress delivery of a new pedestrian and cycle bridge over the River Dee as part of CCMP delivery
<b>3</b>	Palmerston Road	Should a new pedestrian and cycle bridge across the Dee be delivered, implement more formal cycling provision between Raik Road and Market Street
<b>4</b>	Raik Road	Should the new pedestrian and cycle bridge across the Dee be delivered, implement more formal cycling provision

Following commencement and / or completion of both the high and medium priority projects listed above, work is then anticipated to begin to progress the lower priority projects outlined in Table E10 below. Again, any opportunities to progress lower priority projects within high or medium priority pieces of work will be taken to enable efficiencies to be achieved wherever possible. There may also be opportunities earlier in the SUMP process to deliver low-priority projects relatively quickly and cost-effectively which will likewise be taken advantage of.

Table E10 – Low Priority Projects

SHORT TERM		
	Location	Project
1	St. Nicholas Street / Correction Wynd	Exempt cyclists from access restriction
2	Castle Terrace	Ensure the path linking to Commerce Street and Virginia Street is fully accessible to cyclists
MEDIUM TERM		
	Location	Project
1	Market Street	Investigate the feasibility of implementing a pedestrian crossing phase at Market Street / Guild Street signalised junction
2	Netherkirkgate	Resurface footways Underpass improvements
3	Summer Street	Resurface and widen footways If space permit, consider implementation of on-road cycle lanes if safety proves a concern at this location following delivery of wider proposals
4	Bon Accord Terrace (Union Street to Langstane Place)	Resurface footways
5	Littlejohn Street	Resurface footways
6	Marischal Street	Resurface footways
7	Justice Street	Resurface footways
8	Blackfriars Street	Resurface footways
9	Charlotte Street	Resurface footways
10	James Street	Resurface footways
11	Mearns Street	Resurface footways
12	Ship Row	Resurface footways
13	Dee Street (Union Street to Bon Accord Lane)	Widen and resurface footways
14	Hunty Street	Widen and resurface footways
15	Bon Accord Lane	Resurface footways
16	West / East Craibstone Street	Resurface footways
17	Bon Accord Square	Resurface footways
18	North Silver Street	Resurface footways
19	Langstane Place	Should cycle safety be a concern at this location following high- and medium-priority interventions, investigate the feasibility of mandatory on-road cycle lanes
20	Justice Mill Lane	Should cycle safety be a concern at this location following high- and medium-priority interventions, investigate the feasibility of mandatory on-road cycle lanes
21	Commerce Street	Widen footways (Virginia Street to Regent Quay)
22	Little Chapel Street	Resurface and widen footways
23	Skene Terrace	Resurface footways
LONG TERM		
	Location	Project
1	Castlegate	Resurface as per CCMP
2	West North Street / East North Street (Littlejohn Street to Beach Boulevard)	Investigate the requirement for, and feasibility of, implementing formal cycle provision, preferably segregated facilities. Look at opportunities for footway resurfacing as part of this work
3	Beach Boulevard Roundabout	Undertake a study to identify the optimum pedestrian and cycle improvements
4	Commerce Street	Undertake further work to determine the feasibility of segregated cycle facilities (Beach Boulevard to Virginia Street). If not feasible, consider provision of mandatory on-road cycle lanes. Look at opportunities for footway resurfacing as part of this work
5	Virginia Street / Trinity Quay	Undertake further work to determine the requirement for, and feasibility of, segregated cycle facilities. If not feasible, investigate

		provision of mandatory on-road cycle lanes. If on-road cycle facilities also prove unfeasible or unadvisable from a safety perspective, investigate off-road cycle provision. Look at opportunities for footway resurfacing as part of this work
<b>6</b>	Loch Street	Investigate the requirement for, and feasibility, of implementing formal cycle provision, preferably segregated cycle facilities, in the context of wider CCMP proposals. Look at opportunities for footway resurfacing as part of this work
<b>7</b>	Berry Street	Investigate the requirement for, and feasibility of, implementing formal cycle provision, preferably segregated cycle lanes. If segregated facilities not feasible, consider alternative means of improving conditions for cyclists in the context of wider CCMP delivery. Look at opportunities for footway resurfacing as part of this work  Should public transport journey times become a concern at this location even with planned improvements, look at options for implementing public transport priority measures at a suitable point in the future

An indicative programme has been developed to guide the SUMP during its initial years of implementation. This is an ambitious programme, subject to available funding and changing Council priorities, especially those related to the City Centre Masterplan, but acts as a statement of intent as to what the Council hopes to achieve for the city centre in the coming years. Progress in terms of delivering this programme will be reflected in biennial progress report.

# Appendix F : Monitoring and Evaluation Plan

The following vision, objectives and outcomes have been identified for the SUMP.

## Vision:

*A city centre transport network that enhances accessibility and permeability by those walking, cycling and using public transport and which contributes to wider aspirations to deliver a safe, sustainable and economically buoyant city centre with an enhanced sense of place.*

## Objectives:

1. Support delivery of the Aberdeen City Centre Masterplan by contributing to the regeneration of the city centre and developing a network of streets that prioritise the movement of people over the movement of vehicles, whilst maintaining necessary and efficient access for business and industry.
2. Minimise the adverse environmental impacts of transport in the city centre and incorporate green infrastructure into new transport schemes wherever possible.
3. Ensure that the city centre is accessible to, and safe for, all and is resilient to the effects of climate change.
4. Encourage and enable more walking and cycling in the city centre, particularly through the provision of more and better infrastructure.
5. Improve the public transport experience to, from and within the city centre, particularly in terms of achieving shorter and more reliable journey times.
6. Improve connectivity between key destinations in and around the city centre by sustainable modes of transport.
7. Support and encourage all vehicular journeys within the city centre to be undertaken in low emission vehicles.
8. Raise awareness of opportunities for travel to, from and within the city centre by clean and sustainable forms of transport, including the potential for multimodal journeys.

## Outcomes:

1. A more pedestrian- and cycle-friendly city centre;
2. A city centre that prioritises the movement of people over the movement of vehicles;
3. Improved air quality in the city centre;
4. Reduced carbon dioxide (CO<sub>2</sub>) emissions in the city centre;
5. A city centre that is accessible to all;
6. A safer city centre;
7. Increased mode share for active travel to, from and within the city centre;
8. Increased mode share for public transport to, from and within the city centre;
9. Shorter public transport journey times and improved journey time reliability through the city centre; and
10. An increase in the proportion of vehicular journeys in the city centre undertaken by low-emission or emission-free vehicles.

Table F1 identifies the indicators that have been established to measure progress towards delivering the SUMP and achieving these objectives and outcomes.

Table F1 – Objectives, Outcomes and Indicators

<b>Objective</b>	<b>Outcomes</b>	<b>Indicators</b>
Support delivery of the Aberdeen City Centre Masterplan by contributing to the regeneration of the city centre and developing a network of streets that prioritise the movement of people over the movement of vehicles, whilst maintaining necessary and efficient access for business and industry.	A more pedestrian- and cycle-friendly city centre.  A city centre that prioritises the movement of people over the movement of vehicles.	Delivery of SUMP and CCMP transport projects.  Growth of the city centre cycle network.  Number of city centre streets prioritising people movements over vehicle movements.
Minimise the adverse environmental impacts of transport in the city centre and incorporate green infrastructure into new transport schemes wherever possible.	Improved air quality in the city centre.	Air quality within the city centre Air Quality Management Area (AQMA).
Ensure that the city centre is accessible to, and safe for, all and is resilient to the effects of climate change	A city centre that is accessible to all.  A safer city centre.	Perceptions of the city centre as an accessible destination.  Perceptions of ease of movement in the city centre by various modes.  Availability of bicycle parking spaces in the city centre.  Road traffic collisions in the city centre.  Casualties in road traffic collisions.
Encourage and enable more walking and cycling in the city centre, particularly through the provision of more and better infrastructure.	Increased modal share for active travel to, from and within the city centre	Growth of the city centre cycle network.  The proportion of trips undertaken to, from and within the city centre on foot.  The proportion of trips undertaken to, from and within the city centre by bike.  The proportion of those living in the city centre travelling to work on foot or by bike.

		<p>The proportion of those working in the city centre travelling to work on foot or by bike.</p> <p>Number of walking and cycling casualties in road traffic collisions in the city centre.</p>
Improve the public transport experience to, from and within the city centre, particularly in terms of achieving shorter and more reliable journey times	<p>Increased modal share for public transport to, from and within the city centre.</p> <p>Shorter public transport journey times and improved journey time reliability through the city centre.</p>	<p>The proportion of trips to, from and within the city centre undertaken on public transport.</p> <p>The proportion of those living in the city centre travelling to work by public transport.</p> <p>The proportion of those working in the city centre travelling to work by public transport.</p> <p>Bus journey times to and within the city centre.</p> <p>Volume of public transport priority measures to, from and within the city centre.</p>
Improve connectivity between key destinations in and around the city centre by sustainable modes of transport.	<p>A city centre that prioritises the movement of people over the movement of vehicles.</p> <p>A city centre that is accessible to all.</p> <p>Increased modal share for active travel to, from and within within the city centre.</p>	<p>Perceptions of the city centre as an accessible destination.</p> <p>Perceptions of ease of movement in the city centre by various modes.</p> <p>The proportion of trips undertaken to, from and within the city centre on foot.</p> <p>The proportion of trips undertaken to, from and within the city centre by bike.</p>
Support and encourage all vehicular journeys within the city centre to be undertaken in low emission vehicles	<p>Improved air quality in the city centre.</p> <p>An increase in the proportion of vehicular journeys in the city centre undertaken by low-emission or emission-free vehicles.</p>	<p>Air quality within the city centre AQMA.</p> <p>The proportion of the bus fleet operated by zero- or low-emission vehicles.</p> <p>The number of low emission vehicles in the car club fleet.</p>

		The number of electric vehicle charging points in the city centre.  Usage of electric vehicle charging points in the city centre.
Raise awareness of opportunities for travel to, from and within the city centre by clean and sustainable forms of transport, including the potential for multimodal journeys.	<p>Increased modal share for active travel to, from and within within the city centre.</p> <p>Increased modal share for public transport to, from and within within the city centre.</p> <p>An increase in the proportion of vehicular journeys in the city centre undertaken by low-emission or emission-free vehicles.</p>	<p>The proportion of trips undertaken to, from and within the city centre on foot.</p> <p>The proportion of trips undertaken to, from and within the city centre by bike.</p> <p>The proportion of trips to, from and within the city centre undertaken on public transport.</p> <p>Usage of city centre car club vehicles.</p> <p>Usage of electric vehicle charging points in the city centre.</p>

A total of 24 indicators have been established. Each of these will be monitored at 2-yearly intervals and the findings reflected in biennial SUMP Progress Reports summarising progress towards achieving the vision, objectives and outcomes, and key achievements, successes and setbacks over the previous period.

Table F2 identifies the baseline for each of the indicators (based upon 2018 data unless otherwise specified) against which progress will be measured and the source of the monitoring information.

Table F2 Baseline Monitoring

Indicator		Baseline (2018)	Source
1	Delivery of SUMP and CCMP transport projects	First CCMP transport project (Broad Street) delivered in 2018.	ACC
2	Growth of the city centre cycle network.	Length of on-road cycle lane – 596m Length of bus / cycle / taxi lane- 1175m Length of segregated cycle facility – 102m Length of bus and cycle only road – 126m Length of shared pedestrian and cycle route – 583m	ACC
3	Number of city centre streets prioritising people movements above vehicle movements	Pedestrian and cycle priority streets - 7: George Street (St. Andrew Street to Bon Accord Street), Belmont Street, The Green, Carmelite Street, Ship Row (Union Street to Exchequer Row and	ACC

		Shore Brae to Market Street), Castlegate and St. Nicholas Street.  Local access only streets - 9: Queen Street, Peacock's Close, Castle Terrace, Justice Street, Little Belmont Street, Back Wynd, Correction Wynd, Flourmill Lane and North Silver Street.	
4	Air quality within the city centre AQMA	Union Street: Annual mean NO2 – 39 µg/m <sup>3</sup> Annual mean PM10 – 15 µg/m <sup>3</sup> Annual mean PM2.5 - 8 µg/m <sup>3</sup>  Market Street: Annual mean NO2 – 32 µg/m <sup>3</sup> Annual mean PM10 – 17 µg/m <sup>3</sup> Annual mean PM2.5 - 8 µg/m <sup>3</sup>	Air Quality in Scotland
5	Perceptions of the city centre as an accessible destination	Average scores (out of 7, where 1 means there is a lot of room for improvement and 7 means very little room for improvement) for the following statements:  I can easily walk and cycle around city centre – 3.8	Aberdeen Community Planning Partnership City Voice Survey (2017)
6	Perceptions of ease of movement in the city centre by various modes	Public transport to and from the city centre meets my needs – 4.21 Traffic / parking arrangements enable safe access to the city centre and meet my needs – 3.59  Perceptions of getting around Aberdeen by each of the following modes (easy or very easy): Walking – 66% Cycling – 19% Public transport – 42% Taxi – 69% Motorbike/moped – 56%	
7	Availability of bicycle parking spaces in the city centre.	Baseline unknown. Progress will be measured by an increase in the number of publicly available cycle parking spaces.	ACC
8	Road traffic collisions in the city centre	4 serious accidents. 3 slight accidents.	Crash Map
9	Casualties in road traffic collisions	All 4 serious accidents involved a pedestrian casualty, 3 of which were child casualties. Of the 3 slight accidents, 2 involved pedestrian casualties, 1 of which was a child casualty.	Crash Map
10	Number of walking and cycling casualties in road traffic collisions in the city centre.	There were no pedal cycle or motorcycle casualties in 2018.	
11	The proportion of trips undertaken to, from and within the city centre on foot	Proportion of respondents travelling to the city centre on foot during the day – 36% Proportion of respondents travelling to the city centre on foot at night– 24%	City Voice Survey (2017)

12	The proportion of trips undertaken to, from and within the city centre by bike	Proportion of respondents travelling to the city centre by bike during the day – 3% Proportion of respondents travelling to the city centre by bike at night – 1% Cycling levels on key corridors – monitoring before and after an intervention	City Voice Survey (2017)
13	The proportion of those living in the city centre travelling to work on foot or by bike.	Proportion of residents living in the city centre travelling to work on foot. Proportion of residents living in the city centre travelling to work by bike.	CIVITAS Origin-Destination Study
14	The proportion of those working in the city centre travelling to work on foot or by bike	The proportion of those working in the city centre travelling to work on foot The proportion of those working in the city centre travelling to work by bike	CIVITAS Origin-Destination Study
15	The proportion of trips to, from and within the city centre undertaken on public transport	Proportion of respondents travelling to the city centre by bus during the day – 48% Proportion of respondents travelling to the city centre by bus at night – 41% Proportion of respondents travelling to the city centre on park and ride during the day – 2% Proportion of respondents travelling to the city centre on park and ride at night – 1% Proportion of respondents travelling to the city centre by train during the day – 1% Proportion of respondents travelling to the city centre by train at night – 1% Proportion of respondents travelling to the city centre by taxi during the day – 3% Proportion of respondents travelling to the city centre by taxi at night – 24%	City Voice Survey (2017)
16	The proportion of those living in the city centre travelling to work by public transport.	The proportion of those living in the city centre travelling to work by bus The proportion of those living in the city centre travelling to work by train	CIVITAS Origin-Destination Study
17	The proportion of those working in the city centre travelling to work by public transport	The proportion of those working in the city centre travelling to work by bus The proportion of those working in the city centre travelling to work by train	CIVITAS Origin-Destination Study
18	Bus journey times to and within the city centre	Journey times from key locations throughout the region (measured for 0730-0800 departure): Peterhead Bus Station to Aberdeen Bus Station – 75 mins Balgownie Road, Bridge of Don to Union Street – 33 mins Newmachar to Aberdeen Bus Station – 53 mins Craibstone Park and Ride to Broad Street – 44 mins Bucksburn to Broad Street – 27 mins Inverurie to Aberdeen Bus Station – 60 mins Northfield to Guild Street – 29 mins	Traveline Scotland

		Mastrick to Guild Street – 29 mins Woodside to Broad Street – 17 mins Tillydrone to Broad Street – 27 mins Old Aberdeen to Castle Street – 26 mins Westhill to Aberdeen Bus Station – 50 mins Kingswells to Aberdeen Bus Station – 50 mins Airyhall to Union Street – 19 mins Hazlehead (Queens Road) to Union Street – 18 mins Peterculter to Union Street – 40 mins Cults to Union Street – 22 mins Garthdee to Union Street – 17 mins Portlethen to Aberdeen Bus Staion – 45 mins Stonehaven to Aberdeen Bus Station – 53 mins							
19	Volume of public transport priority measures to, from and within the city centre	Length of full time bus lane – 164m Length of part time bus lane – 1175m Length of bus and cycle only road – 126m	ACC						
20	The proportion of the bus fleet operated by zero- or low-emission vehicles	First Aberdeen – 4 hydrogen buses Stagecoach Bluebird – 8.9% hydrogen or hybrid	First Aberdeen / Stagecoach Bluebird						
21	The number of low emission vehicles (less than 75g CO <sub>2</sub> /km) in the car club fleet based in the city centre	17	Co-wheels						
22	The number of publicly available electric vehicle charging points in the city centre	Total – 29 (Chapel Street – 4, Golden Square – 2, College Street – 2, Union Square – 11, Marischal College – 5, Gallowgate – 5)	Zap Map						
23	Usage of city centre car club vehicles	Annual averaeg percentage usage of vehicles at the following location (based on monthly averages where available, tkaing into account periods where vehciles not available) Queen Street – 29.9% Marischal Street – 29.7% Littlejohn Street - 27.1% Rose Street – 23.1% West Craibstone Street – 22.0% Rosemount Viaduct – 21.3% Marischal College – 21.1% Golden Square – 17.5% Chapel Street – 16.2% Palmerstone Road – 10.7%	Co-wheels						
24	Usage of electric vehicle charging points in the city centre	<table border="1"> <thead> <tr> <th>Site</th> <th>Total Sessions</th> <th>Total Energy (kWh)</th> </tr> </thead> <tbody> <tr> <td>50204 – Marischal College</td> <td>501</td> <td>2410.08</td> </tr> </tbody> </table>	Site	Total Sessions	Total Energy (kWh)	50204 – Marischal College	501	2410.08	Chargeplace Scotland
Site	Total Sessions	Total Energy (kWh)							
50204 – Marischal College	501	2410.08							

	50205 – Marischal College	261	1299.56	
	50206 – Marischal College	234	1189.16	
	50499 – Golden Square	775	6404.503	
	50580 – Chapel Street	1045	10540.88	
	50681 – Chapel Street	104	900.3	
	50958 – Palmerston Road	206	2025.876	
	51244 – Queen Street	705	6428.54	

The SUMP will be reviewed and updated every 5 years to ensure it remains relevant and continues to reflect the needs and desires of the travelling public and any new challenges and opportunities that may affect the continued successful delivery of the SUMP.

DRAFT

