BusConnects Galway: Cross-City Link (University Road to Dublin Road)

August 2022

Options Assessment Report

BUS CONNECTS GALWAY

SUSTAINABLE TRANSPORT FOR A BETTER CITY.

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1 Introduction

Arup has been commissioned by Galway City Council to develop and appraise potential options for implementation of elements of the BusConnects Galway programme. The BusConnects Galway programme has been developed to implement several elements of the overall Galway Transport Strategy (GTS), including the 'Cross-City Link', a public transport corridor across the city on an east-west axis, the 'City Centre Access Network', an orbital traffic route around Galway City Centre for two-way traffic flow, and the 'Inner-City Access Route' an inner distributor road for localised traffic movements. Details on these three elements are presented below and further information can be found in the Galway Transport Strategy reports, available at www.galwaycity.ie.

This report sets out the Multi-Criteria Analysis (MCA) of potential options for the Cross-City Link (from University Road to the Dublin Road), and sections of the City Centre Access Network (along College Road), the Inner-City Access Route (from Bóthar Na mBan to Lough Atalia Road) and a section of the Dublin Road approaching the City Centre Access Network and Cross-City Link. These elements from the GTS have been amalgamated into a single scheme, titled 'BusConnects Galway – Cross-City Link (University Road to Dublin Road)'.

1.1 The Galway Transport Strategy

The Galway Transport Strategy (GTS) is a comprehensive transport strategy for Galway City and its environs, intended to establish a framework for the development of the transport network over the next 20 to 30 years. The GTS sets out proposals for the road network, public transport network, walking network and cycling network, and contains a number of significant proposals which will allow the city to continue to grow in a sustainable manner.

The GTS contains a number of comprehensive proposals across a number of transport modes, including the following significant measures:

- Establishment of a new cross-city bus network to serve Galway City;
- Establishment of primary, secondary and feeder cycle networks;
- Provision of a safe and efficient plan for general traffic to access key destinations in Galway City Centre, while discouraging non-essential through traffic;
- Creation of a high-quality public transport corridor through the city from west to east, which will be utilised to some extent by all proposed bus services (the Cross-City Link);
- Transformation of Galway City Centre into a new space where walking, cycling and public transport are all prioritised over private car traffic;
- Establishment of an orbital two-way traffic route around Galway City Centre;
- Establishment of an inner-city two-way traffic route in the environs of Galway City Centre;

- Implementation of the N6 Galway City Ring Road (N6GCRR) scheme to provide an additional crossing of River Corrib to the north of Quincentenary Bridge; and
- Localised route and junction improvement works at a number of locations to improve junction efficiency, to improve pedestrian and cyclist facilities and to incorporate priority for public transport services.

The GTS is underpinned by an extensive volume of supporting material, including Environmental Screening Assessments, Technical Feasibility Reports and Scheme Appraisal Reports using the Western Regional Multi-Modal Model, to ensure that a robust, evidence-based strategy can be put in place. The GTS was completed in September 2016 and has subsequently been incorporated into the Galway City and County Development Plans.

The GTS examined a number of options for each project identified and undertook a Multi-Criteria Analysis of each option utilising the Common Appraisal Framework (CAF) for Transport Projects and Programmes appraisal categories.

Utilising the assessment criteria above, the GTS identified the proposed improvements to the city transport network including the 'Cross-City Link', 'City Centre Access Network', and 'Inner-City Access Route'. These three elements are illustrated below in **Diagram 1.1: Cross-City Link, City Centre Access Network and Inner-City Access Route (source: Galway Transport Strategy)**.

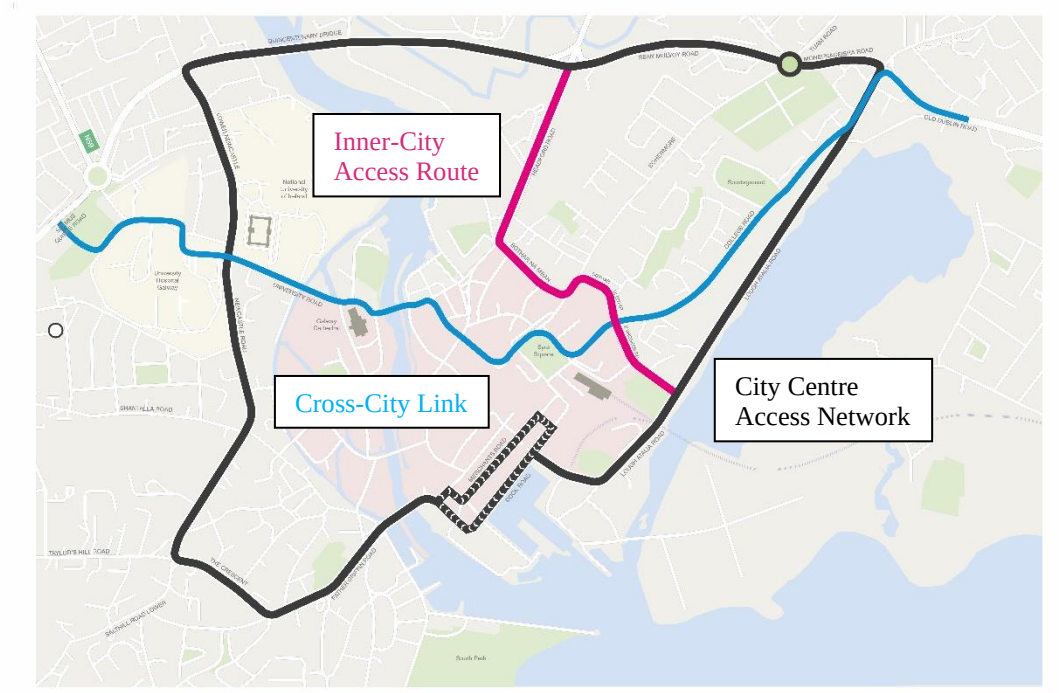


Diagram 1.1: Cross-City Link, City Centre Access Network and Inner-City Access Route (source: Galway Transport Strategy)

1.1.1 Cross-City Link

The Cross-City Link (CCL) consists of a central corridor traversing the core city centre area, which will be restricted to use by public transport vehicles, pedestrians, cyclists and local access only.
It will enable efficient and reliable public transport to and through the city centre from University Road, across Salmon Weir Bridge, along Eglinton Street, around Eyre Square and along Forester Street and College Road to Dublin Road.

The 'corridor' will ensure that public transport services can access key areas within Galway City. This forms a central route for public transport, cyclists and pedestrians accessing key areas such as University Hospital Galway, NUIG, the retails and recreational centre of the city and public transport hubs at the train and bus stations. Public realm improvements are proposed along the Cross-City Link to provide and enhance environments for cycling and walking, which will overall create more pleasant surroundings for journeys to and through the city centre.

The Cross-City Link shall complement the proposed new city bus network routes approaching from the west and east of the city centre, which coalesce along this high-quality corridor, providing high-frequency services with journey time reliability and opportunities for interchange.

1.1.2 City Centre Access Network

It is clear that the future increase in travel demand cannot be catered for by private vehicle trips alone. In order to ensure that the overall transport system can facilitate this demand, some road space will need to be dedicated to active modes and public transport. However, given the catchment of Galway City, some journeys by private car will still be necessary, and HGVs will continue to need access to the city and the port. A clearly defined 'City Centre Access Network' is proposed to enable traffic to access and move around the core city centre area.

This will facilitate access to car parks, permit traffic to access the city centre at the most appropriate entry points for its ultimate destination and allow for reduced cross-city traffic along specified corridors.

1.1.3 Inner-City Access Route

A two-way Inner-City Access Route comprising Bóthar Na mBan, Bóthar Bhreandáin Uí hEithir and Fairgreen Road will provide an additional inner link from the Headford Road to Lough Atalia Road. In effect, private motorised traffic will be able to access the city centre from all directions, and to exit on the same side. In order to circulate within the city however, cars will have to use the orbital River Corrib crossings on the City Centre Access Network.

1.2 BusConnects Galway – Cross-City Link (R863 University Road to R338 Dublin Road)

As outlined in the National Development Plan (2019-2027), the major infrastructure projects identified include 'BusConnects' projects for Ireland's cities. The GTS is recognised in the National Development Plan as the foundation for the BusConnects program for Galway.

A number of the intervention measures identified within the GTS are therefore being delivered via the BusConnects funding programme, itself delivered by the National Transport Authority (NTA).

As outlined above, the Cross-City Link and part of the Inner-City Access Route as indicated in **Diagram 1.1: Cross-City Link, City Centre Access Network and Inner-City Access Route (source: Galway Transport Strategy)** above have been amalgamated into a single scheme. These intervention measures in combination represent the proposed changes to city centre traffic management. The scheme is to be delivered under the BusConnects funding strategy, and henceforth in this report the proposed scheme that is the subject of this options assessment is titled 'BusConnects Galway – Cross-City Link (University Road to Dublin Road)', or the 'Cross-City Link'.

1.3 Report Structure

The structure for the remainder of this report is set out as follows:

- Section 2: Planning and Policy Context – This chapter outlines the general background information to the CCL. It also outlines the policy context in which the proposed scheme was developed and presents the concept of the CCL as outlined in the Galway Transport Strategy.
- Section 3: Study Area – This chapter identifies the extents of the area assessed.
- Section 4: Options Assessment – This chapter describes the three primary end-to-end options considered as part of the assessment.
- Section 5: Multi Criteria Analysis and Recommendation – This chapter presents the MCA carried out for each sub-section where an MCA was required. Alternative options considered are also presented.
- Section 6: Public Consultation Summary – This chapter outlines the summary of the first public consultation;
- Section 7: Description of the Preferred Option – A detailed description of the preferred option is presented on a section-by-section basis.
- Section 8: Next Steps – This chapter details the "next steps" in the delivery of the CCL.

2 Planning Policy and Context

2.1 National Planning Framework

The National Planning Framework (NPF) is the Government's high-level strategic plan for shaping the future growth and development of Ireland to the year 2040. The NPF is intended to establish a framework by which a population increase of approximately 1 million people by 2040 can be accommodated.

The NPF seeks to establish more concentrated growth in Ireland's five major cities (Dublin, Cork, Limerick Galway and Waterford), with 50% of national growth to be accommodated therein, and the remaining 50% in Ireland's large and smaller towns, villages and rural areas.

The NPF, which provides the framework for future development and investment in Ireland, is fully supported by the Government's investment strategy for public capital investment and investment by the State sector in general. It is the overall Plan from which other, more detailed plans will take their lead, including city and county development plans and regional strategies, hence the title, National Planning 'Framework'.

The National Strategic Outcomes identified within the NPF include the following:

- Compact Growth;
- Enhanced Regional Accessibility;
- Strengthened Rural Economies and Communities;
- Sustainable Mobility;
- A strong economy, supported by Enterprise, Innovation and Skills;
- High-Quality International Connectivity;
- Enhanced Amenity and Heritage;
- Transition to a low-carbon and climate-resilient society;
- Sustainable management of water, waste and other environmental resources; and
- Access to quality childcare, education and health services.

The goals of the NPF are expressed as National Strategic Outcomes and are illustrated in **Diagram 2.1**.

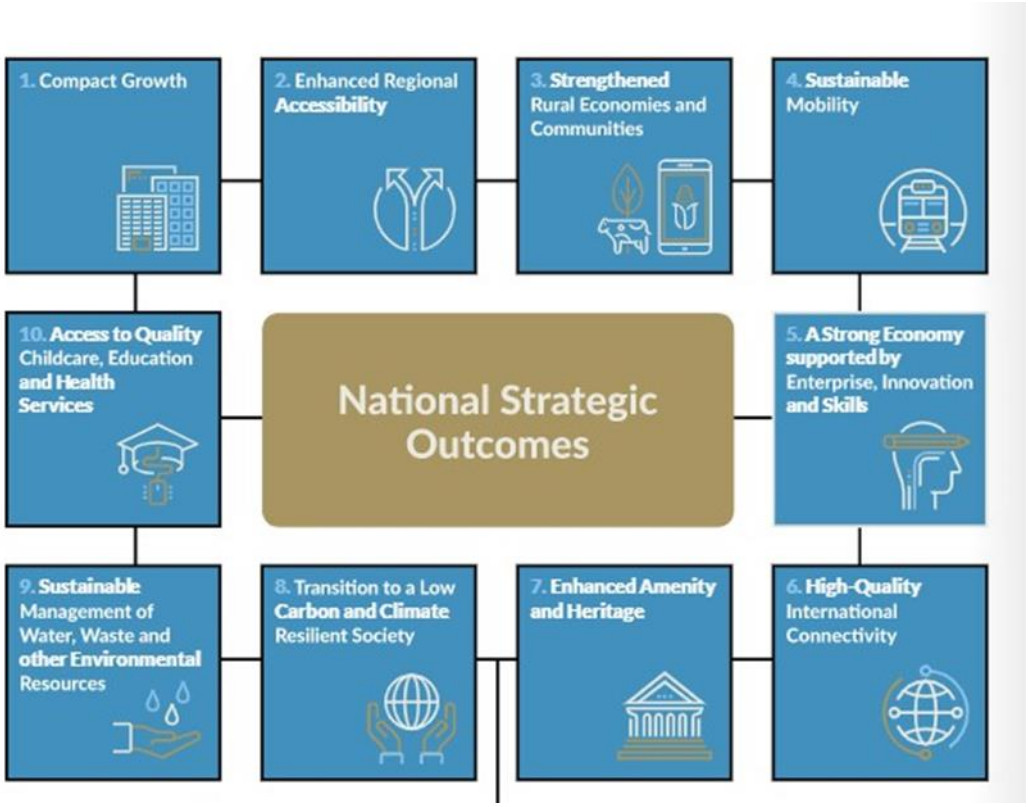


Diagram 2.1: Strategic Outcomes of National Planning Framework (source: Project Ireland 2040)

A number of these outcomes are further described below.

2.1.1.1 Compact Growth

The NPF states:

'Carefully managing the sustainable growth of compact cities, towns and villages will add value and create more attractive places in which people can live and work. All our urban settlements contain many potential development areas, centrally located and frequently publicly owned, that are suitable and capable of re-use to provide housing, jobs, amenities and services, but which need a streamlined and co-ordinated approach to their development, with investment in enabling infrastructure and supporting amenities, to realise their potential. Activating these strategic areas and achieving effective density and consolidation, rather than more sprawl of urban development, is a top priority.'

2.1.2 Sustainable Mobility

The NPF states:

'In line with Ireland's Climate Change mitigation plan, we need to progressively electrify our mobility systems moving away from polluting and carbon intensive propulsion systems to new technologies such as electric vehicles and introduction of electric and hybrid traction systems for public transport fleets, such that by 2040 our cities and towns will enjoy a cleaner, quieter environment free of combustion engine driven transport systems.'

2.1.3 Transition to a Low Carbon and Climate Resilient Society

The NPF states:

'The National Climate Policy Position establishes the national objective of achieving transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050. This objective will shape investment choices over the coming decades in line with the National Mitigation Plan and the National Adaptation Framework. New energy systems and transmission grids will be necessary for a more distributed, renewables-focused energy generation system, harnessing both the considerable on-shore and off-shore potential from energy sources such as wind, wave and solar and connecting the richest sources of that energy to the major sources of demand.'

The proposed Cross-City Link will transform the city centre through the establishment of a priority corridor for sustainable transport modes, in turn supporting the continued modernisation of the public transport fleet and a transition towards low-carbon modes of transport.

2.1.4 Galway City and Metropolitan Area

Specifically, in relation to Galway, the National Planning Framework identifies the following relevant key future growth enablers:

1. Improving access and sustainable transport links to, and integration with, the existing employment areas to the east of the city at Parkmore, Ballybrit and Mervue;
2. Provision of a city-wide public transport network, with enhanced accessibility between existing and proposed residential areas and the city centre, third level institutions and the employment areas to the east of the city;
3. Public realm and urban amenity projects, focused on streets and public spaces, particularly in support of an extended city centre area and where residential and employment areas can be linked to pedestrian routes; and
4. Development of a strategic cycleway network with a number of high-capacity flagship routes.

The proposed Cross-City Link aligns with these 'growth enablers' by improving sustainable transport connectivity, providing opportunities for substantial improvements to the public realm and through removal of non-essential vehicle traffic from the city centre core area, thereby supporting walking, cycling and public transport.

2.2 National Development Plan (2019-2027)

The National Development Plan (NDP) is fully integrated with the National Planning Framework, and is intended to drive Ireland's economic, environmental, and social progress across all parts of the country over the next decade.

As mentioned above, major national infrastructural projects identified in the NDP include the implementation of BusConnects schemes in Ireland's cities.

Under 'National Strategic Outcome 4 – Sustainable Mobility', the GTS is recognised as the foundation from which BusConnects Galway will be delivered through the NDP. A number of the necessary interventions identified within the GTS are therefore to be delivered via the BusConnects programme, including the Cross-City Link.

2.3 The Galway Transport Strategy

The GTS will facilitate Galway with an opportunity to grow both physically and economically, offering better transport choices, and creating a public realm to be enjoyed by residents and visitors alike. This in turn will underpin the objectives of the current and future City and County Development Plans.

The overall vision is:

"to create a connected city region driven by smarter mobility"

To address the current and future transport needs of the city, a fundamental shift is needed towards sustainable travel, reducing the dependency on the private car and taking action to make Galway more accessible and connected, enhancing quality of life within the City for all.

In order to achieve this vision, the guiding principles underpinning the preparation of the Transport Strategy are as follows:

1. To promote and encourage sustainable transport, and in particular to make it convenient and attractive to walk, cycle or use public transport;
2. To improve accessibility and permeability to and within the city centre for pedestrians, cyclists and public transport users, while also maintaining an appropriate level of access for vehicular traffic for commercial and retail purposes;
3. To maximise the safety and security of pedestrians, cyclists and other transport users, particularly within the core city centre;
4. To manage and increase transport capacity, where necessary, for the efficient movement of people and goods into and withing the city;

5. To provide opportunities to enhance the city centre public realm through traffic management and transport incentives;
6. To maintain and develop transport infrastructure and services to a high degree of quality and resilience; and
7. To adopt a 'smarter technology' approach to all transport interventions, whereby transport infrastructure and services are future-proofed.

One of the key proposals in the GTS is the Cross-City Link, a corridor linking the western and eastern suburbs of the city, through the city centre – linking homes with places of work, study, retail and recreation. In addition to facilitating accessibility to and through the city centre for public transport, the Cross-City Link scheme also reinforces the walkable core of the city and will complement and connect places of interest along its route, in line with Galway City Council's award-winning Public Realm Strategy.

The GTS examined a number of options for each project identified and undertook a Multi-Criteria Assessment of each option utilising the Common Appraisal Framework (CAF) for Transport Projects and Programmes appraisal categories. The categories, criteria, and key performance indicators utilised are shown below in **Diagram 2.2**.

Category	Assessment Criteria	Key Performance Indicators
Economic	Ensure **value for money** in the implementation of proposals	Utilisation of existing infrastructure and extent of new infrastructure requirements
	Support Galway City's function as a regional centre for employment, education, retail, leisure and tourism by providing **access for all** through an **efficient and reliable transport network**	Peak hour journey times by mode Capacity versus demand Congestion
Safety	Develop a **safer** city centre for all transport modes and users	Consider safety implication of all interventions Traffic management measures
	Exploit transport's role in facilitating a **healthier lifestyle**	Measures which support walking and cycling
Environment	Provide opportunities for better **integration between transport and urban form**	Reduced traffic volumes in sensitive areas
	Minimise harmful **transport emissions**	Reduced transport emissions
Integration	Support integration between **sustainable transport and land-use planning and policies**	Compatibility of transport measures with local, regional and national spatial planning and transport policy
	Provide for better **transport integration**	Park & Ride facilities Public transport interchange opportunities
Accessibility and Social Inclusion	Improve **multi-modal accessibility** within residential, employment and retail centres	Accessibility by walking and cycling, public transport, car and HGV
	Provide a **socially-inclusive** transport network	Coverage and quality of service of public transport network

Diagram 2.2: Common Appraisal Framework (CAF) assessment criteria used as part of Galway Transport Strategy

Utilising the assessment criteria above, the GTS identified the proposed improvements to the city transport network including the 'Cross-City Link', 'City Centre Access Network', and 'Inner-City Access Route'. These three elements are illustrated below in **Diagram 2.3Diagram 2.2**.

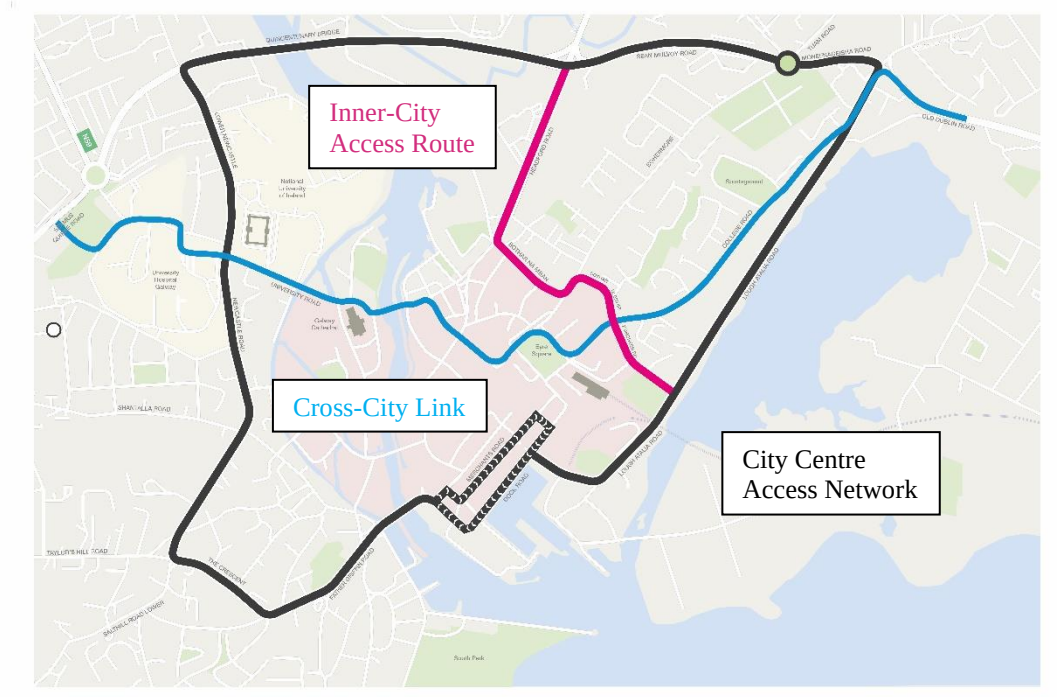


Diagram 2.3: Cross-City Link, City Centre Access Network and Inner-City Access Route (source: Galway Transport Strategy)

2.4 BusConnects Galway – The Cross-City Link

Following completion of the GTS, and subsequent incorporation of the strategy into the Galway City and Galway County Development Plans, a number of major projects as identified in the GTS have been initiated by Galway City Council. One of these is the proposed change to traffic management within Galway City Centre.

The overall objective of the city centre transport management plan, as identified in the brief developed by Galway City Council and the National Transport Authority, is as follows:

"The key challenge of the GCCTMP will be to ensure that carrying capacity of the road and street network is maximised. The GCCTMP will set out proposals as to how the management of the existing road and street network can be reconfigured to provide for the most appropriate types of movement, on the correct 'level' of the network hierarchy, to match the journey types. While the plan aims to improve the walking, cycling and public transport networks, the dispersed nature of travel to and from Galway City will still necessitate sufficient capacity to accommodate trips by private car. However, it is an objective of Galway City Council to remove non-essential motorised traffic from the core city centre area. The GCCTMP will see the advancement of this objective through 8 specific elements."

2.4.1 Cross-City Link (R863 University Road to R338 Dublin Road)

As part of the Galway Transport Strategy (GTS), a new bus network for the city was developed based on cross-city services that link the east and west of the city, through the city centre. The new bus network will ensure shorter journey times, increased frequency and reliability of service and will provide opportunities for passengers to interchange between bus services, regional bus and rail services or to undertake part of their journey on foot or by bike.

The proposed bus network for the city will need dedicated priority over other vehicles, through measures such as bus lanes in order to deliver a frequent, efficient service. The route along the roads between the east and west, where the proposed city bus services coalesce creates a major sustainable transport corridor – the Cross-City Link.

2.5 Development Plan, Local Area Plans and Strategic Development Zones

The Galway City Development Plan (2017-2023) sets out a strategic transport aim as follows:

'To integrate sustainable land use and transportation, facilitating access and choice to a range of transport modes, accessible to all sections of the community that ensures safety and ease of movement to and within the city and onward connectivity to the wider area of County Galway and the West Region.'

The implementation of the GTS is also a strategic aim of Galway City Council, as set out within the City Development Plan; in particular the implementation of the Cross-City Link and a reduction in car movements through the city centre and the implementation of the proposed cross-city radial bus network as identified in the GTS.

The Galway City Development Plan also lists the following specific objectives in relation to Transportation and specifically in relation to Public Transport and Pedestrians:

- Implement traffic management and infrastructural changes to facilitate the provision of the 'Cross-City Link' as part of the Galway Transport Strategy (GTS);
- Implement traffic management and infrastructural changes to facilitate the development of a public bus network in accordance with the Galway Transport Strategy (GTS);
- Support the improvement of access for public transport, pedestrian and cyclists to and within major employment areas and institutions;
- Prioritise improvements to pedestrian movements and safety within the city centre including extension of pedestrianisation, provision of wider footpaths and shared streets; and

- Prioritise improvements to pedestrian movements and safety between the City Centre, Woodquay and Bóthar Na mBan to the Headford Road LAP area.

This project is directly in keeping with each of the strategic and specific objectives of the City Development Plan identified above.

2.6 BusConnects Galway Cross-City Link Scheme Objectives

The objective of the Proposed Scheme were initially prepared by Galway City Council and identified in the project brief published. This brief provided objectives for specific sections of the overall brief and network. This brief is described below.

The eastern section (east of the river Corrib) of the bus priority/bus only route forms a central route for public transport, cyclists and pedestrians that access key areas including the following:

- Retail & recreational centre of the city;
- Public transport hubs at the rail & bus stations;
- City & County Halls; and
- City centre hotels and bed & breakfasts on College Road.

The Consultant shall examine the junctions and links along the route and in particular, the introduction of a bus-gate on College Road, two-way bus movements on Forster Street and Eyre Square East, access to Ceannt Station, Taxi Ranks and access to the Eglinton Street Post Office. The maintenance of a high level of priority for the safe and efficient movement of Pedestrians & Cyclists on and crossing the route is also required.

The western section (west of the river Corrib) of the bus priority/bus-only route forms a central route for public transport, cyclists and pedestrians accessing key areas such as University Hospital Galway, NUI Galway and the car parking & coach facilities at Galway Cathedral…… this element will have to develop proposals for revised parking arrangements for cars and coaches at Galway Cathedral, as well as an examination of bus & pedestrian movements across the Corrib River.

Galway City Council's strategic objectives for transport as outlined in the Galway Transport Strategy (GTS, 2016) are:

- to promote and encourage sustainable transport;
- to manage the traffic in a way which maximises mobility and safe movement; and
- to maintain and develop/upgrade infrastructure.

The Proposed Scheme aims to improve access along the corridor which will enable and deliver efficient, safe, and integrated sustainable transport movement to meet travel demand. The objectives of the overall BusConnects programme are to:

- Enhance the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality through the provision of bus lanes and other measures to provide priority to bus movements over general traffic movements;
- Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable;
- Support the delivery of an efficient, low carbon and climate resilient public transport service, which supports the achievement of Ireland's emission reduction targets;
- Enable compact growth, regeneration opportunities and more effective use of land, for present and future generations, through the provision of safe and efficient sustainable transport networks;
- Improve accessibility to jobs, education and other social and economic opportunities through the provision of improved sustainable connectivity and integration with other public transport services; and
- Ensure that the public realm is carefully considered in the design and development of the transport infrastructure and seek to enhance key urban focal points where appropriate and feasible.

The planning and design of the Proposed Scheme has been guided by these aims and objectives, with the need for the Proposed Scheme described in detail in Chapter 2 (Need for the Proposed Scheme) of the EIAR which accompanies the application to An Bord Pleanála.

The outcomes achieved from delivering the Proposed Scheme will be:

- An attractive, resilient, equitable public transport network better connecting communities and improving access to work, education and social activity;
- Facilitate a transport infrastructure network that prioritises walking and cycling and a mode shift to public transport resulting in better air quality; and
- Support increased economic and social potential through integrated land-use and transport planning to reduce the time burden of travel.

3 Study Area

3.1 Introduction

For the purpose of developing options for assessment, the Cross-City Link, Inner-City Access Route and a section of the City Centre Access Network, was sub-divided into a number of sub-sections. In addition to the Cross-City Link, the Inner-City Access Route and a section of the City Centre Access Network, other city centre streets and routes are included in the scheme due to proposed alterations to the transport network and the knock on implications arising from the creation of a bus priority corridor along the Cross-City Link.

3.2 Study Area Sections

3.2.1 Scheme Options Assessment Sections

With the GTS broadly establishing the route through the City Centre for the Cross-City Link, the next stage in the Proposed Scheme development process was to look in more detail at potential scheme level route variants.

For the purpose of development of route level scheme options and assessment of same, the Cross-City Link and Inner-City Access routes were sub-divided into a number of sub-sections. In addition to the Cross-City Link and the Inner-City Access Route, other city centre streets and routes were assessed in terms of impact and modifications needed arising from the creation of a bus priority corridor along the Cross-City Link.

The scheme study area considered comprises the Cross-City Link from R863 University Road to R338 Dublin Road and the Inner-City Access Route from Headford Road to Lough Atalia Road, together with impacted adjacent streets including Woodquay, Waterside, Newtownsmith, R336 Merchants Road and Forthill Street.

For the purposes of options assessment, these have been divided into the following sub-sections:

For the Cross-City Link:

- R863 University Road to R866 St. Francis Street;
- R866 St. Francis Street and R866 Eglinton Street;
- R866/R336 Eyre Square to R339 Forster Street;
- R339 College Road (R339 Forster Street to Lough Atalia Road);
- R339 College Road (Lough Atalia Road to Moneenageisha Junction);
- R338 Dublin Road.

For the Inner-City Access Route:

- Fairgreen Road;

- Bóthar Uí hEithir and R336 Prospect Hill;
- Bóthar na mBan / St. Brendan's Avenue / R866 Headford Road / Dyke Road.

For the impacted adjacent streets:

- Woodquay / Walsh's Terrace / Daly's Place / Mary Street; and
- Forthill St. / R336 Merchants Road / Queen Street.

The Proposed Scheme sections are illustrated in **Diagram 3.1**:

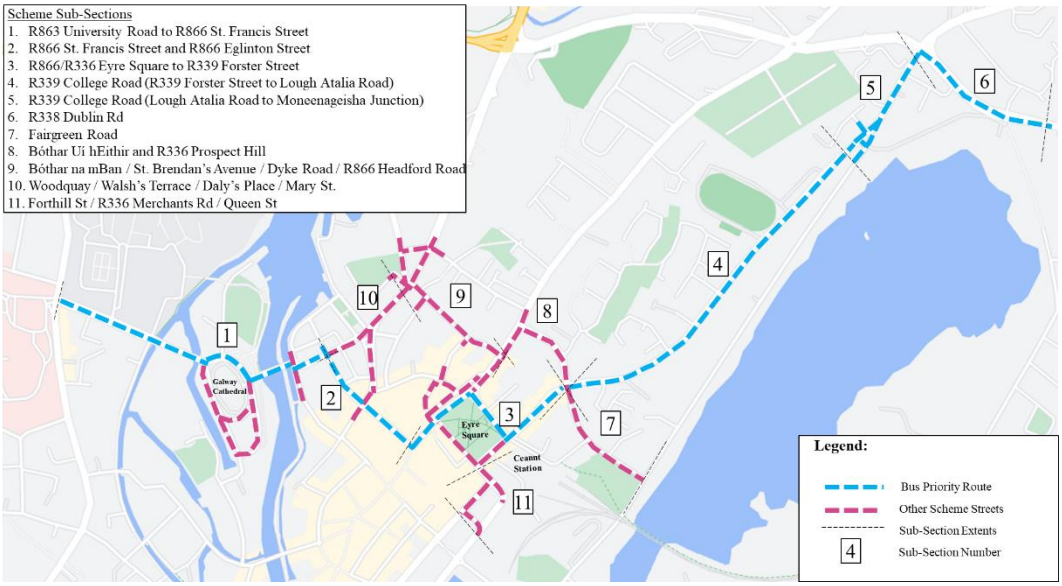


Diagram 3.1: Proposed Scheme Sections

The start and end points considered represent logical break points in the context of identifying the extremities of a Proposed Scheme and that of other projects which would follow and could be phased independently under the GTS.

The University Road / Newcastle Road junction was chosen as the extremity of the scheme to the west due to this being the location were all five GTS bus routes converge onto a single corridor, as well as representing a logical start point for the Cross-City Link. A future scheme is proposed to address connectivity from University Road to the Seamus Quirke Road, potentially via University Hospital Galway.

R338 Dublin Road was chosen due to constraints on the transport network at Moneenageisha junction. The Cross-City Link and the City Centre Access Network overlap along College Road, between Lough Atalia Road and Moneenageisha junction. However, regular delays are experienced for all vehicles passing through the Moneenageisha junction in all directions, with downstream queuing observed in particular in the PM peak. The benefits of the Cross-City Link will be maximised by providing bus priority through this junction.

The GTS identified a bus priority corridor along Dublin Road from Moneenageisha junction to the Martin Roundabout. By extending the Cross-City Link scheme onto Dublin Road, the Cross-City Link can avail of the bus journey time benefits that will be achieved through the Moneenageisha junction and provide an interface with any future scheme along the Dublin Road, however a future scheme would not be a pre-requirement for the Cross-City Link scheme to accrue benefits for public transport.

The Lough Atalia Road junction with Fairgreen Road represents one end of the Inner-City Access Route.

This was chosen as the extent of the Cross-City Link scheme, due to the restrictions placed along the Cross-City Link for general traffic. It is expected the traffic volumes along Fairgreen Road and the Inner-City Access Route will increase with the introduction of the Cross-City Link.

Headford Road / Dyke Road was chosen as the other end of the Inner-City Access Route to be included in this scheme. This was chosen due to the requirement to convert Fairgreen Road, Bóthar Ui Eithir, Prospect Hill, Bóthar na mBan and St. Brendan's Avenue a two-way link along its length, due to the restrictions placed along the Cross-City Link for general traffic. With the Cross-City Link in place, access to numerous car-parks along the Inner-City Access Route will be required to be maintained. The most significant current constraint on this route for traffic and pedestrians is at St. Brendan's Avenue and Headford Road. It is expected that the traffic volumes at this junction will increase with the introduction of the Cross-City Link. This is also the location where one of the GTS bus routes intersects with the Inner-City Access Network. The section of the Inner-City Access Route along Headford Road, between St. Bridgit's Place and the N6 Bóthar na dTreabh will likely be subject to another future scheme to be developed by Galway City Council to address the demands of all modes along that corridor.

The Merchants Road, Forthill Street and Dock Road junctions were chosen at the extremities of the scheme to the south-west, as this is the location where access to Eyre Square and the Cross-City Link will be impacted. As Eyre Square will no longer be a through-route, vehicle demand to access it will reduce significantly, requiring a realignment of Merchants Road onto Forthill Street onto Dock Road.

Similarly, Walsh's Terrace, Woodquay and Daly's Place will no longer form part of a through route and will become local access only, hence changes to the layout of these streets will be necessary to facilitate the implementation of the Cross-City Link.

3.3 Physical Constraints and Opportunities

A series of constraint studies were carried out for the proposed scheme, to include Engineering and Environmental constraints.

Engineering Constraints included the following topics:

- Applicable route characteristics;
- The surrounding environment;

- Relevant junctions and links;
- Route functionality;
- Existing restrictions to traffic flow;
- Infrastructure;
- Property/landownership;
- Geometric constraints; and
- Utilities.

Environmental Constraints included the following topics:

- Population and Human Health;
- Ecology;
- Soils and Geology;
- Hydrogeology;
- Hydrology;
- Archaeological and Architectural Heritage;
- Air Quality and Climate;
- Noise and Vibration;
- Material Assets;
- Land-Use Zoning; and
- Protected Structures.

3.4 Integration with Existing and Proposed Public Transport Network

City, Regional and National buses will play a crucial role in the connectivity and mobility of Galway in the future. The Galway Transport Strategy proposes a revised bus network for Galway City comprising of five cross-city bus services, with each service travel along some or all of the Cross-City Link. The Cross-City Link will transform the operation of Galway City's bus services, which include the following features:

- Buses will travel through the city without being delayed in traffic, improving journey times and reliability;
- Buses that spend less time stuck in traffic are available to run more frequent services;
- As more people use the bus, private bus operators will become more confident to invest in their business and fleet; and
- Provision of bus priority measures through the city is an important support for future Park & Ride proposals identified in the GTS;

- Tourist buses will be more willing to travel to Galway on day trips due to the reliability of journey times and reduced risk of encountering delays due to traffic congestion.

For the purposes of this report, it has been assumed that these bus routes will all be put in place before or in tandem with the implementation of this scheme.

4 Options Assessment

Utilising the Common Appraisal Framework (CAF) assessment criteria, assessment sub-criteria have been developed. Across the scheme study area, an optioneering development and assessment exercise was undertaken and a Multi-Criteria Analysis (MCA) carried out on route options identified to determine the preferred route option for the Proposed Scheme.

For the purposes of assessment, the Proposed Scheme has been considered in the road sections as detailed in Section 3. Where feasible, three options for each road section have been considered. These three options can be broadly considered as minor, moderate and major interventions. These categories of interventions are considered as follows:

- Option 1: Minor Interventions - Requiring no land acquisition and minimal works;
- Option 2: Moderate Interventions - Minimising land acquisition and moderate works; and
- Option 3: Major Interventions - Maximising segregated bus priority.

Additional commentary on alternatives which were explored but not put forward for full assessment due to their unsuitability is provided for each road section.

4.1 Assessment Criteria

Table 1 presents a summary of the assessment criteria and sub-criteria proposed as part of the detailed options assessment process.

Table 1: Summary of Assessment Criteria

Assessment Criteria	Assessment Sub-Criteria
1. Economy	1.a. Capital Cost
	1.b. Transport Reliability and Quality (PT Journey Time)
	1.c. Transport Reliability and Quality (Pedestrian and Cyclist Journey Quality and Time)
	1.d Transport Reliability and Quality (All Vehicles Journey Time)
2. Safety	2.a. Pedestrian User Safety
	2.b. Cyclist User Safety
	2.c. Public Transport User Safety
	2.d. Other Road User Safety.
3. Physical Activity	3.a. Promotion of Active Travel Modes
4. Environment	4.a. Archaeology and Cultural Heritage
	4.b. Architectural Heritage
	4.c. Flora & Fauna

	4.d. Soils and Geology
	4.e. Hydrology
	4.f. Landscape and Visual
	4.g Air Quality
	4.h. Noise & Vibration
	4.i. Land Use Character
5. Accessibility and Social Inclusion	5.a. Access to Key Trip Attractors (Education/Health/Transport/Commercial/Employment)
	5.b. Mobility Impaired User Benefits
6. Integration	6.a. Public Transport Network Integration
	6.b. Cycle Network Integration
	6.c. Road Network Integration
7. GTS Policies	7.a. Efficient and Reliable public transport to and through the city centre
	7.b Enable Traffic to access and move around the city centre.
	7.c. Provision of Access to existing facilities
	7.d. Safe and efficient movement of Pedestrians and Cyclists on and crossing the routes.
	7.e. Remove non-essential motorised traffic from core city centre.

For each road section, where options are available to compare, an options summary table, shall be prepared which collates and summarises the appraisal of each option under each of the assessment criterion.

For each individual assessment criterion considered, options shall be compared against a 'do-nothing' scenario based on a five-point scale, ranging from having significant advantages to having significant disadvantages.

For illustrative purposes, this five-point scale is colour-coded as presented in **Table 2**, with advantageous options graded as dark green and disadvantageous options graded as dark red.

Table 2: Options Colour-Coded Ranking Scale

Colour	Description
	Significant advantages over the current (do nothing) scenario
	Some advantages over the current (do nothing) scenario
	Neutral compared to the current (do nothing) scenario
	Some disadvantages over the current (do nothing) scenario
	Significant disadvantages over to the current (do nothing) scenario

A qualitative appraisal of, and conclusion from, the options assessment will then be provided, highlighting the key issues considered in determining recommended options ('preferred' and in some instances, where applicable, 'next preferred'). It should be noted that a balanced approach will be taken when assessing the preferred options.

All criteria will be considered in undertaking the assessment, and a lower ranking on one criterion, for example, will not necessarily mean that the option is not suitable.

The recommended options from element sub-sections shall be collated to provide the emerging preferred option for the scheme.

4.2 R863 University Road to R866 St. Francis Street Junction (Route Section 'UR')

4.2.1 Extent of Route Section UR

Diagram 4.1 illustrates the extent of the route sub-section being considered. The blue dashed line represents the Cross-City Link alignment, while the pink dashed line shows adjacent streets which were considered as potentially needing additional modification to facilitate the Cross-City Link.

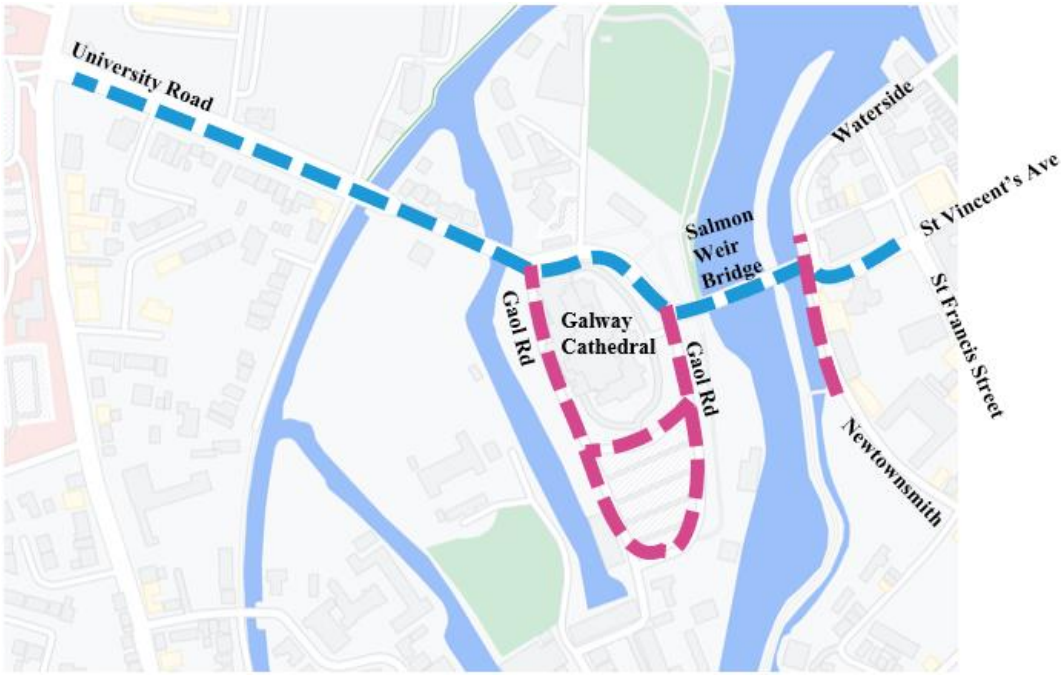


Diagram 4.1: R863 University Road to R866 St. Francis Street Junction Route Sub-section

The route sub-section and Proposed Scheme commences at the junction of R864 Newcastle Road and R863 University Road, thereby accommodating existing and future bus services feeding from R864 Newcastle Road. Longer-term, the Cross-City Link as envisaged in the GTS extends through and directly serves the University Hospital Galway Campus from the R338 Seamus Quirke Road. It is envisaged that such a route will be developed in partnership with University Hospital Galway as part of their future development planning for the campus.

4.2.2 Option UR1: Minor Interventions

Interventions considered under this option primarily comprise of:

- Upgrading and widening pedestrian footways and crossing points to improve pedestrian accessibility along R863 University Road;
- New public realm space to be created in front of Galway Cathedral with Gaol Road to the west of the Cathedral to be converted to two-way general traffic movements;
- Improved bus priority achieved along R863 University Road through demand management at traffic signals at R863 University Road and Bóthar na mBan;
- Re-configured bus and car parking within existing Cathedral car park;
- Newtownsmith and Waterside to be closed off onto St. Vincent's Avenue; and
- Reconfiguration of footpaths on Salmon Weir Bridge.

This option involves achieving improved bus priority through demand management at traffic signals at R863 University Road and Bóthar Na mBan. This option requires restrictions on the volume of general traffic travelling along R863 University Road and over Salmon Weir bridge through control of 'green time' offered to traffic. To provide bus priority through these junctions, segregations for buses approaching the R863 University Road and Bóthar na mBan junctions would be necessary. No dedicated bus priority measures are proposed along R863 University Road or the Salmon Weir Bridge.

On the Salmon Weir Bridge, the existing narrow footpath on the southern side of the bridge will be removed and replaced with a rubbing strip, while the northern footpath will be widened to a 1.8m wide footpath, retaining an iconic view of the weir for pedestrians.

An additional proposal within this option is the conversion of Gaol Road (west) into a two-way street alongside the Cathedral to the west and south, with the Gaol Road (east) junction to R863 University Road being closed off to all public transport and vehicular traffic. This creates a natural 'gateway' whereby general traffic is diverted from R863 University Road in advance of Salmon Weir Bridge and facilitates local access to Nun's Island and the environs of Galway Cathedral.

The diversion of general traffic onto Gaol Road (west of the Cathedral) affords an opportunity to enhance the public realm in the Galway Cathedral area, including improved pedestrian facilities and a main plaza area. In tandem with these works, the existing car park to the south of Galway Cathedral is also proposed to be amended, to provide additional coach parking facilities, with a reduction in the number of general parking spaces as a result.

4.2.3 Option UR2: Moderate Interventions

Interventions considered under this option primarily comprise of:

- Upgrading and widening pedestrian footways and crossing points to improve pedestrian accessibility along R863 University Road;
- Improved bus priority achieved along R863 University Road through removal of vehicular traffic demand;

- New public realm space to be created in front of Galway Cathedral with Gaol Road to the west of the Cathedral to be converted to two-way general traffic movements;
- Re-configured bus and car parking within existing Cathedral car park;
- Salmon Weir Bridge to be restricted to a Bus Gate, closed to general traffic and redesignated for bus use only;
- Newtownsmith and Waterside to be closed off onto St. Vincent's Avenue; and
- Bus only lane inbound provided on St. Vincent's Avenue.

This option examines closing the Salmon Weir Bridge to general vehicular traffic, and re-designating to allow for bus use only. No dedicated bus priority measures are proposed along R863 University Road. Bus priority would be achieved through the removal of through traffic from R863 University Road and Salmon Weir Bridge.

In conjunction with the closure of the bridge, this option would include widening footways along the route and the rationalisation of on-street parking. Traffic calming features are proposed along the route entailing the provision of raised tables and signalised pedestrian crossings on R863 University Road. These works would likely impact upon the existing on-street parking provision with a potential reduction in parking spaces.

Proposals within this option around Gaol Road (West) and Gaol Road (east) create a natural 'gateway', whereby general traffic is diverted from R863 University Road in advance of Salmon Weir Bridge and facilitates local access to Nun's Island and the environs of Galway Cathedral. The diversion of general traffic onto Gaol Road (west of the Cathedral) affords an opportunity to enhance the public realm in the Galway Cathedral area, including improved pedestrian facilities and a main plaza area. Additional coach parking facilities will be provided in the carpark to the south of Galway Cathedral, which will reduce the number of general parking spaces as a result

In addition to these proposals, Newtownsmith is to be converted to a cul-de-sac, with only to a one-way northbound egress permitted at specified times, while it is also proposed to close the junction of Waterside/St. Vincent's Avenue (adjacent to Galway Courthouse) to control the flow of traffic onto the Cross-City Link.

4.2.4 Option UR3: Major Interventions

Interventions considered under this option primarily comprise of:

- Road widening along R863 University Road to provide inbound and outbound bus lanes. Property frontage acquisition;
- Segregated cycle tracks along R863 University Road;
- No restrictions on Salmon Weir Bridge;
- No changes to circulatory around Galway Cathedral;
- No changes to Newtownsmith and Waterside; and

- Significant accommodation works to retain access to existing properties.

This option examines the potential to achieve bus priority along R863 University Road without the closure of the Salmon Weir Bridge to general traffic. This option therefore would involve the provision of discontinuous bus lanes along R863 University Road where possible to do so on the approach to the existing bridge.

These bus lanes would be provided in both directions, with an inbound bus lane provided from the Eglinton Canal Bridge to the Salmon Weir Bridge, and the outbound bus lane provided from the Eglinton Canal Bridge to R864 Newcastle Road.

On approach to the Salmon Weir Bridge, the section of R863 University Road to the north of the Cathedral would be for buses only, with vehicular traffic to be routed along Gaol Road and around Galway Cathedral before crossing the bridge. Salmon Weir Bridge would remain open to all traffic; however public transport priority would be strengthened on the approach from R863 University Road.

This option would result in on-street parking being removed along the entirety of R863 University Road. Segregated cycle tracks in both directions along R863 University Road would also be required. Consequently, footpath widths would need to be altered in places to facilitate implementation of bus lanes. Land acquisition along the majority of R863 University Road would be necessary for this option.

4.2.5 Section UR Alternative Options Considered

Other options considered along this section of the route but not carried forward to assessment stage are outlined below:

- An option of providing inbound and outbound bus lanes along R863 University Road - This option was examined and sifted out as this option, including the construction of cycle tracks, would require a cross-section of a minimum of 20m. This would require the replacement of two bridges over the Eglinton Canal, the acquisition of frontage from 24 properties including removal of driveways and the demolition of part of the NUIG boundary wall. It was considered that this option would not provide any significant benefits over options UR2 and UR3 while requiring significantly more land acquisition, infrastructure provision and disruption during construction;
- An option of widening or replacing the Salmon Weir Bridge to facilitate bus lanes. This could permit buses and general traffic the utilise this river crossing, however the pinch point would remain along St. Vincent's Avenue were a 12m cross-section only is available. The acquisition and demolition of Galway Courthouse and / or part of the Franciscan Abbey buildings was not considered to be feasible. As such, widening the Salmon Weir bridge would not provide sufficient bus priority relative to the infrastructure required.

4.3 R866 St. Francis Street and R866 Eglinton Street (Route Section 'FS')

4.3.1 Extent of Route Section FS

Diagram 4.2 illustrates the extent of the route sub-section being considered. The blue dashed line represents the Cross-City Link alignment.

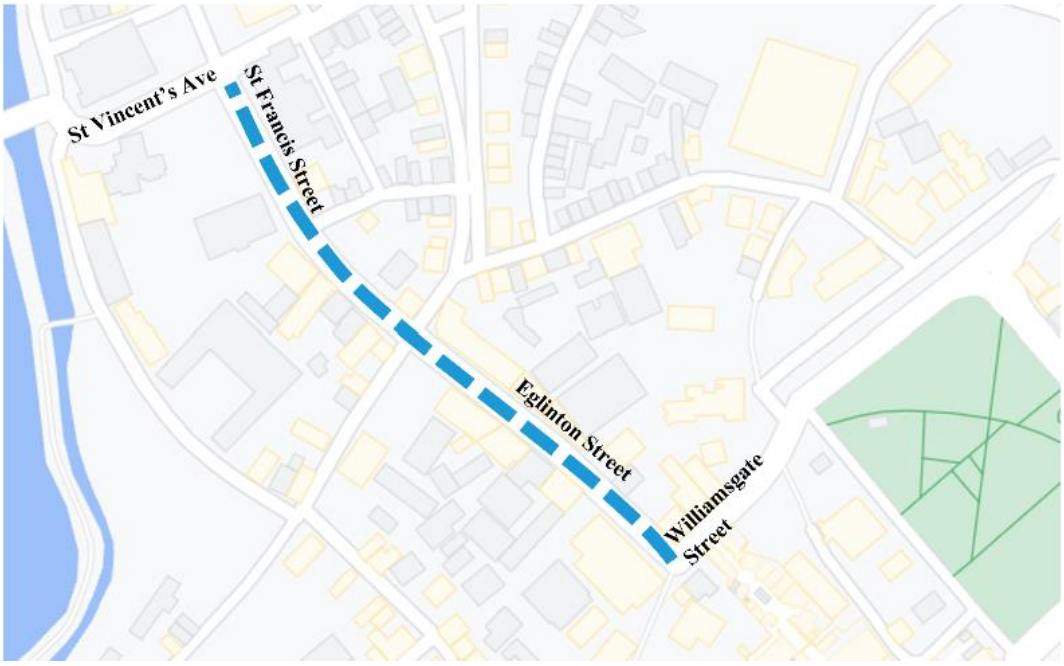


Diagram 4.2: R866 St. Francis Street and R866 Eglinton Street Route Sub-section

4.3.2 Option FS1: Minor Interventions

Interventions considered under this option primarily comprise of:

- R866 St. Francis St. reconfigured to being bus lane only inbound;
- Eglington Street reconfigured to being bus lane only inbound;
- Footpath widening on R866 Eglinton Street;
- The provision of a signal-controlled pedestrian crossing on R866 St. Francis Street; and
- Signalisation of the junction of R866 St. Francis Street / R866 Eglinton Street / Mary Street / Daly place.

This option involves converting the inbound lane of both R866 St. Francis Street and R866 Eglinton Street into a bus-only lane while maintaining the outbound lanes as general traffic lanes. This option also proposes to reverse the one-way direction of traffic on Daly's Place from Woodquay to R866 Eglinton Street to retain access to R866 St. Francis Street from the Headford Road direction.

All traffic from Mary Street, will be required to turn left onto R866 St. Francis Street unless permitted to enter a bus lane, while all traffic from Daly's Place will be required to turn right unless permitted to enter a bus lane.

Local access to R866 Eglinton Street will remain possible via Eyre Street and R866/R336 Eyre Square, however R866 Eglinton Street outbound will effectively be removed as a through route, thereby providing bus priority over general traffic. Footpaths along R863 Eglinton St. and parts of R866 St. Francis Street in the vicinity of the new signalised junction will be replaced and widened.

Due to the constraints along R866 St. Francis Street and R866 Eglinton Street, road widening for the construction of bus segregation or cycle segregation is not considered a feasible option. As such, no alternate infrastructure options have been assessed for this section.

4.3.3 Route Section FS Alternative Options Considered

Other options considered along this section of the route but not carried forward to assessment stage are outlined below:

- Option of converting both inbound and outbound lanes along R866 St. Francis Street and R866 Eglinton Street to bus lanes. This option was examined and sifted out as this would remove opportunities to access properties and car parks along this street during the hours of operation of the bus lane. Existing premises requiring vehicular access include the Mercy Primary School, The Franciscan Abbey grounds, Galway Post Office and the car park and delivery access to the rear of the Imperial Hotel.

4.4 R866/R336 Eyre Square to R339 Forster Street (Route Section 'ES')

4.4.1 Extent of Route Section ES

Diagram 4.3 illustrates the extent of the route sub-section being considered. The blue dashed line represents the Cross-City Link alignment, while the pink dashed line shows adjacent streets which were considered as potentially needing additional modification to facilitate the Cross-City Link.

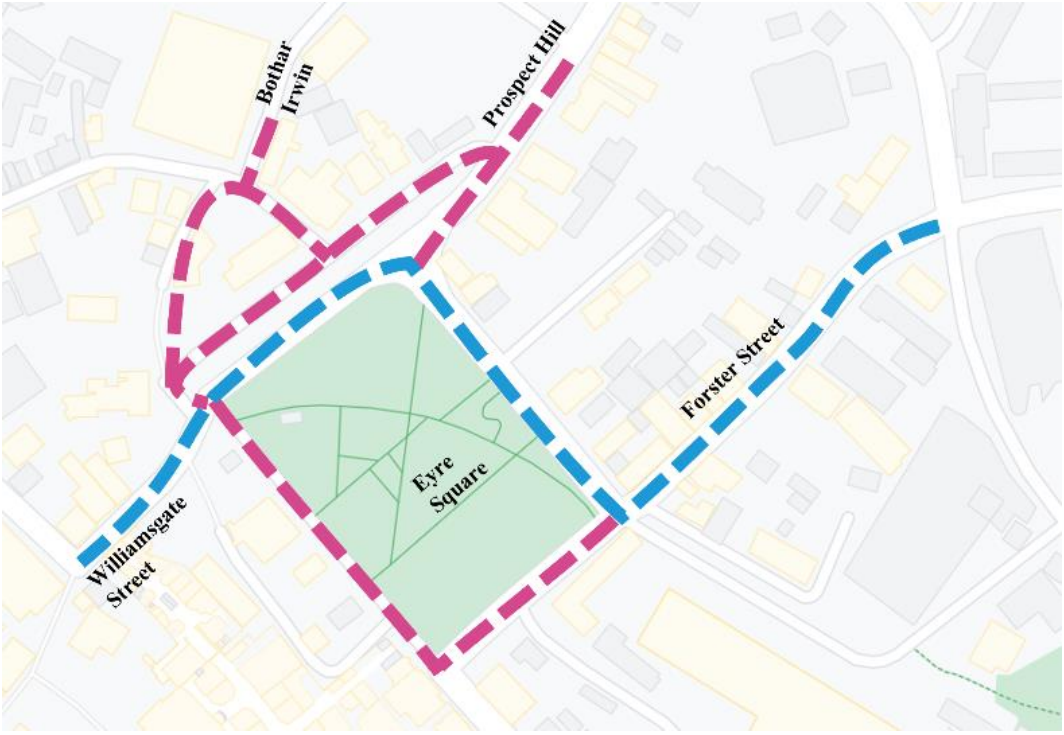


Diagram 4.3: R866/R336 Eyre Square to R339 Forster Street Route Sub-section

4.4.2 Option ES1: Minor Interventions

Interventions considered under this option primarily comprise of:

- R866/R336 Eyre Square north and east becoming two-way bus only;
- R339 Forster Street being reconfigured to two-way bus only;
- Access from Prospect Hill to R866/R336 Eyre Square removed with access only permitted onto Shop Street via bollard control at designated times;
- Vehicular access permitted from Eyre Street to R866 Eyre Square North, with traffic required to exit R866 Eyre Square via Williamsgate Street/Eglington Street;
- Vehicular access permitted from R336 Eyre Square south to St. Patricks Avenue and Frenchville Lane; and

- Removal of vehicular access to the northern section of R866 Eyre Square and the creation of an expanded public realm space;

This option involves converting R339 Forster Street and R336 Eyre Square East into two-way public transport-only streets, as well as Williamsgate Street (in the eastbound lane only). Vehicular access would be permitted from Eyre Street to R866 Eyre Square North for private vehicles, however in the proposed arrangement this vehicular traffic would be required to exit R866 Eyre Square via Williamsgate Street/Eglington Street (i.e., no left-turn would be permitted from Eyre Street onto R866 Eyre Square North). To route on to Prospect Hill, right-turning movements would be permitted to R866 Eyre Square North only).

Due to physical constraints at Garvey's Corner, it is unlikely that two buses could pass in either direction simultaneously, therefore traffic signals would be required to operate on a shuttle basis to allow buses from each direction to run one at a time.

The restricting of traffic to buses and authorised vehicles only includes the removal of traffic from the northern section of R866 Eyre Square. This provides the opportunity to expand the public realm space at the north end of Eyre Square. Local access to St. Patricks Avenue and Frenchville Lane would be maintained, while access to and from R866 Eyre Square from Eyre Street and Rosemary Avenue would be controlled via bollards.

Along R339 Forster Street, footpath widening is proposed along with the removal of on-street parking, relocated the loading zone and increased public realm space.

Due to the constraints along R866/R336 Eyre Square and R339 Forster Street, road widening for the construction of bus segregation or cycle segregation is not considered a feasible option. As such, no alternate infrastructure options have been assessed for this section.

4.4.3 Route Section ES Alternative Options Considered

Other options considered along this section of the route but not carried forward to assessment stage are outlined below:

- An option where R336 Forster St, R866/R336 Eyre Square, Prospect Hill and Bóthar Ui Eithir remain one-way and one lane of dedicated bus lane is provided along its entirety. This option was examined and sifted out as this would introduce unnecessary traffic onto the Cross-City Link. Traffic with no origin or destination on the Cross-City Link could route along R336 Forster Steet and R336 Eyre Square East to cross the city centre, resulting in delay to public transport services;
- An option of R339 Forster Street becoming a two-way street only accessible by public transport. Similarly, R866 Eglinton Street southbound and Williamsgate St. eastbound were also proposed to convert to public transport only streets. R866 Eyre Square North and R336 Eyre Square East would be closed and Eyre Square West reopened to vehicles.

This option was examined and sifted out as although it would provide continuous public realm space connectivity between Eyre Square North, East and Kennedy Park, new bus stop facilities would be required along Eyre Square West and South and access for taxis and deliveries would also be required. This was considered to remove any benefits of opening Eyre Square West to traffic.

4.5 R339 College Road from R339 Forster Street to Lough Atalia Road (Route Section 'CR')

4.5.1 Extent of Route Section CR

Diagram 4.4 illustrates the extent of the route sub-section being considered. The blue dashed line represents the Cross-City Link alignment.

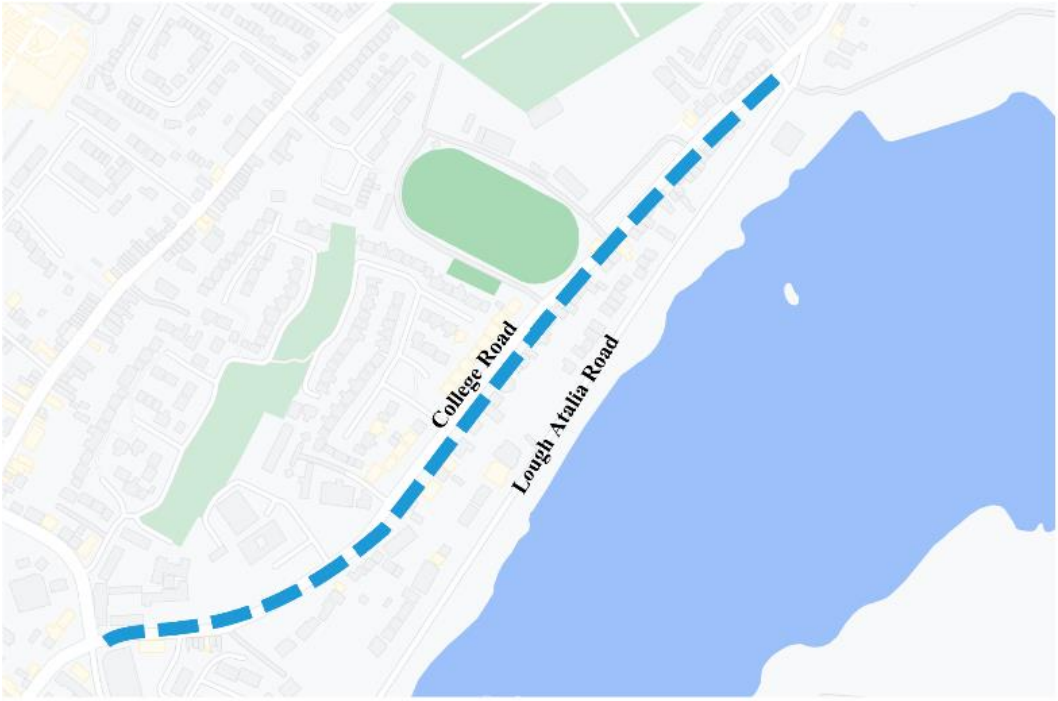


Diagram 4.4: R339 College Road (R339 Forster Street to Lough Atalia Road) Route Sub-section

4.5.2 Option CR1: Minor Interventions

Interventions considered under this option primarily comprise of:

- A 'Bus Gate' provided on R339 College Road (between City Hall and R339 Forster St);
- Upgrading of pedestrian footways and crossing points to improve pedestrian accessibility;
- Amendments to the junction of R339 College Road and Lough Atalia Road to permit vehicles to turn right from R339 College Road to Lough Atalia Road; and

- Maintaining current on street parking and access arrangements.

This option includes the provision of a bus gate on R339 College Road to restrict through movement for vehicular traffic, whilst facilitating the movement of public transport vehicles directly to and from R339 Forster Street. This bus gate would take the form of a short section of bus lane so that only pedestrians, cyclists, buses and emergency vehicles are permitted to pass through by means of prioritised alternate movements.

Local access to all properties would be maintained via one end of R339 College Road or the other, depending on a property's location relative to the bus gate. Bus priority and a traffic-calmed street environment supporting cycle priority would be established through the removal of all through traffic on R339 College Road.

This option would also involve upgrading pedestrian footways and crossing points to improve pedestrian amenity along the route. This would include widening footways to at least 1.8m, where possible. Pedestrian crossings would be installed in the vicinity of the Connacht Rugby sportsgrounds and in the vicinity of Yeats College (close to Galway City Hall).

As the proposal contained in Option CR1 meets the requirements of both a minor and moderate intervention, without the need for land acquisition, no additional moderate interventions were considered.

4.5.3 Option CR2: Major Interventions

Interventions considered under this option primarily comprise of:

- Road widening along R339 College Road to provide inbound and outbound bus lanes;
- Provision of inbound and outbound segregated cycle tracks;
- Property frontage acquisition and demolition of 2 no. residential properties; and
- The removal of all on-street parking.

This option achieves the provision of dedicated bus lanes on R339 College Road. The bus lanes would be continuous along both sides of the entire length of the road. As no traffic removal would be achieved in this option, segregated cycle tracks would also be required.

Pedestrian crossings would be installed in the vicinity of bus stops, and at other key pedestrian desire lines. This option would require the removal of all on-street car parking along R339 College Road.

Significant land acquisition would be necessary to achieve the minimum (20m) cross section necessary from properties along the road, including the Magdalene Convent, the Sportsground, frontage from a minimum of 16 no. residential properties and the acquisition and demolition of a minimum of 2 no. residential properties.

4.5.4 Route Section CR Alternative Options Considered

Other options considered along this section of the route but not carried forward to assessment stage are outlined below:

- An option of creating a one-way system around Lough Atalia Road and R339 College Road with a bus lane on each road. This option was examined and sifted out. This option would result in either bus services utilising a route not on the Cross-City Link, meaning inbound bus services would not serve key destinations including City Hall, Yeats College and the Sportsground or, alternatively, city bus services would continue to utilise College Road and no benefits would be gained by the provision of bus priority on Lough Atalia Road; and
- Providing back-to-back inbound and outbound bus lanes on R339 College Road with the direction of the bus lane changing at approximately at City Hall. This option was examined and sifted out as queueing of traffic on R339 College Road has been regularly observed to extend beyond this point in both directions. This option would therefore not provide the bus priority necessary for the Cross-City Link.

4.6 R339 College Road from Lough Atalia Road to Moneenageisha (Route Section 'CRM')

4.6.1 Extent of Route Sub-Section CRM

Diagram 4.5 illustrates the extent of the route sub-section being considered. The blue dashed line represents the Cross-City Link alignment.

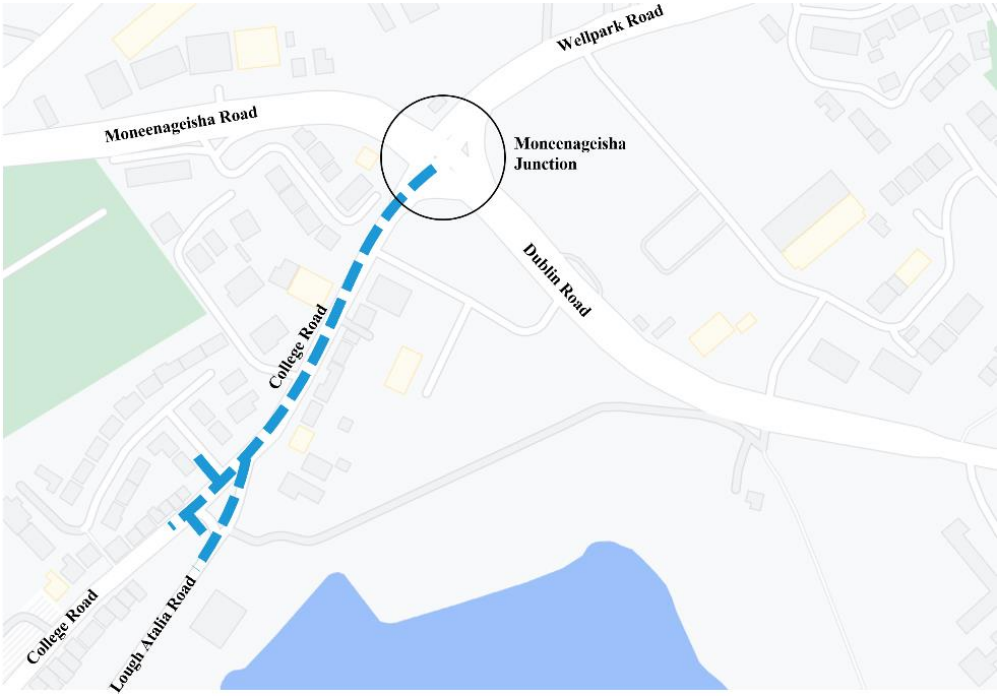


Diagram 4.5: R339 College Road (Lough Atalia Road to Moneenageisha) Route Sub-section

4.6.2 Option CRM1: Minor Interventions

Interventions considered under this option primarily comprise of:

- Maintaining R339 College Road, between Lough Atalia Road and Moneenageisha Road at its current width;
- One outbound lane to be converted to a bus lane;
- Localised flaring being provided at Loyola Park to allow for a right turning lane; and
- Minor amendments to Moneenageisha Junction.

This option proposes maintaining the existing road width, converting one of the existing outbound general traffic lanes to a bus only lane. This option would require an upgrading of the junction with Lough Atalia Road and R339 College Road to accommodate changes to traffic movements and bus priority.

Outbound bus priority on R339 College Road approaching Moneenageisha junction would be achieved through the provision of this bus lane. All other traffic would be required to use the remaining single lane approach to Moneenageisha junction. Some minor amendments to Moneenageisha junction would be required to provide bus priority signals from the bus lane on R339 College Road through the junction. No cycle facilities are proposed as part of this option due to the constraint of maintaining R339 College Road, between Lough Atalia Road and Moneenageisha Road at its current width.

4.6.3 Option CRM2: Moderate Interventions

Interventions considered under this option primarily comprise of:

- R339 College Road, between Lough Atalia Road and Moneenageisha Road being widened to provide an additional inbound raised cycle track and an outbound bus lane;
- Major amendments to Moneenageisha and Lough Atalia Junctions; and
- The provision of a ‘bus gate’ to allow outbound buses to turn right on to the R338 Dublin Road bus lane or to continue straight to Wellpark Road.

The provision of a new outbound bus lane on R339 College Road between Lough Atalia Road and Moneenageisha under this option requires road widening to the northern aspect of R339 College Road. At the junction with Moneenageisha, a bus gate is proposed to allow outbound buses to turn right on to the R338 Dublin Road bus lane or to continue straight to Wellpark Road.

The existing two outbound traffic lanes are retained in addition to the new bus lane, while a single traffic lane in the inbound direction is proposed. The inbound traffic lane would then flare locally to provide right-turning facilities to Loyola Park and R339 College Road. This option also includes the provision of an inbound raised adjacent cycle lane from Moneenageisha junction to R339 College Road/Lough Atalia Road junction

This option would require a degree of land acquisition on R339 College Road in order to provide the necessary infrastructure for the various transport modes using the route.

4.6.4 Option CRM3: Major Interventions

Interventions considered under this option primarily comprise of:

- Significant widening along R339 College Road between Lough Atalia Road and Moneenageisha Road to provide inbound and outbound bus lanes;
- The provision of an inbound and outbound segregated cycle track;
- Associated major amendments to the Moneenageisha and Lough Atalia Junctions; and
- Property frontage land acquisition.

This provides dedicated inbound and outbound bus lanes and cycle tracks on R339 College Road between Lough Atalia Road and Moneenageisha, requiring significant road widening. The existing two-lane outbound and one-lane inbound traffic lanes are proposed to be retained. At the junction at Moneenageisha, a bus gate is provided to allow outbound buses to proceed through the junction to the R338 Dublin Road/R339 Wellpark Road.

Inbound, a single traffic lane is retained, which widens locally to provide a right-turning lane to the Loyola Park and to R339 College Road.

4.6.5 Route Section CRM Alternative Options Considered

Other options considered along this section of the route but not carried forward to assessment stage are outlined below:

- An option of providing signal-controlled bus priority between the R339 College Road Lough Atalia Road junction and the Moneenageisha Junction was examined and sifted out. It is not considered feasible to gate outbound traffic on Lough Atalia sufficiently in one lane to keep the downstream lane clear for bus priority as this storage capacity is required on the City Centre Access Network due to redistribution of traffic arising from the Cross-City Link. For this option to work, it would likely reduce the anti-clockwise capacity of the City-Centre Access Network in half, while not guaranteeing bus priority; and
- An option of providing the cross-section proposed in Option CRM2 with road widening to predominantly take place on the eastern side of the road. This option was examined and sifted out due to the alignment of R339 College Road approaching the Moneenageisha junction and also due to the relative proximity of 11 no. residential properties to the road edge. Widening in this direction would result in the removal of entire private frontages to properties resulting in doors opening directly onto footpaths and would not provide sufficient width to negate the requirement for land acquisition from the western side of the road. For these reasons, this option was not considered further.

4.7 R338 Dublin Road (Route Section 'DR')

4.7.1 Extent of Route Sub-Section DR

Diagram 4.6 illustrates the extent of the sub-section being considered. The blue dashed line represents the Cross-City Link alignment.

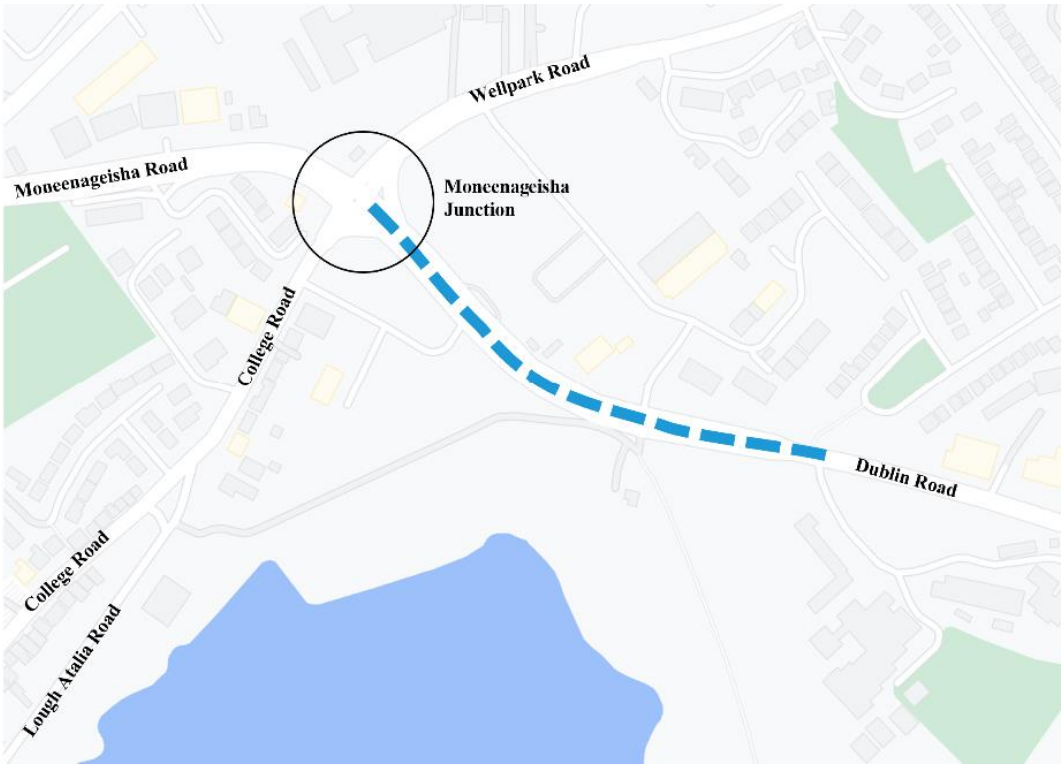


Diagram 4.6: R338 Dublin Road Route Sub-section

The extent of the route along the R338 Dublin Road to be incorporated within the Proposed Scheme is intended to ensure that there is continuous bus priority provided between the Moneenageisha Junction connecting to where the existing bus lane operates in the outbound direction. On the inbound approach to the Moneenageisha Junction, it is considered beneficial to provide bus priority to bypass queuing general traffic during peak commuter periods. Additionally, more comprehensive public transport and active travel infrastructure along the R338 Dublin Road is envisaged as part of the GTS and will be delivered under a separate project by GCC.

4.7.2 Option DR1: Minor Interventions

Interventions considered under this option primarily comprise of:

- Converting one inbound traffic lane to a bus lane;
- Maintaining the existing road width; and
- No additional segregated cycle facilities being provided.

This option maintains the existing road width along R338 Dublin Road. On the inbound approach, from the access junction to Wellpark Retail Park to the Moneenageisha junction, one existing traffic lane will be converted to a bus-only lane. The existing outbound configuration of an outbound bus lane and outbound general traffic lane will be maintained.

At the Moneenageisha junction, a bus gate with bus priority signals will be provided for the inbound bus lane. Straight ahead, and left turn traffic will complete their manoeuvres from a single lane.

No segregated cycle facilities are proposed as part of this option due to the constraint of maintaining the existing road width.

4.7.3 Option DR2: Moderate Interventions

Interventions considered under this option primarily comprise of:

- R338 Dublin Road is widened between 'Brothers of Charity' and Moneenageisha junction to provide bus lanes in both directions;
- The existing number of general traffic lanes are maintained in both directions;
- A bus gate is provided at the Moneenageisha junction on approach from R338 Dublin Road to permit left turning for buses in advance of general traffic; and
- A segregated cycle track is provided in both directions.

In this option, bus lanes are provided in both the inbound and outbound directions. In the inbound direction, the existing two general traffic lanes are proposed to be retained as a straight-ahead lane and a right turn lane. The inbound bus lane will have a bus priority signal at the Moneenageisha junction.

In the outbound direction, the existing configuration is proposed to be maintained, with two vehicular lanes from Moneenageisha Road merging into a single outbound traffic lane. The outbound bus lane is proposed to be extended back to begin at the Moneenageisha junction.

Segregated cycle tracks are proposed on both the inbound and outbound directions. At the Moneenageisha junction, the inbound cycle track, located to the left of the bus lane and the left turn traffic lane, will enter onto a shared space and a 'toucan crossing' for straight ahead cyclists to continue onto Moneenageisha Road.

No additional major interventions were considered as the proposals contained in Option DR2 meets the requirements of both a moderate and major intervention. This is due to the provision of fully segregated bus lanes, cycle tracks and pedestrian footpaths, while maintaining the existing number of general traffic lanes.

4.7.4 Route Section DR Alternative Options Considered

No substantiative alternative options were assessed for this route sub-section of the Proposed Scheme.

4.8 Fairgreen Road (Route Section 'FR')

4.8.1 Extent of Route Sub-Section FR

Diagram 4.7 illustrates the extent of the Inner-City Access Route sub-section being considered where modifications are required to accommodate the delivery of the Cross-City Link.

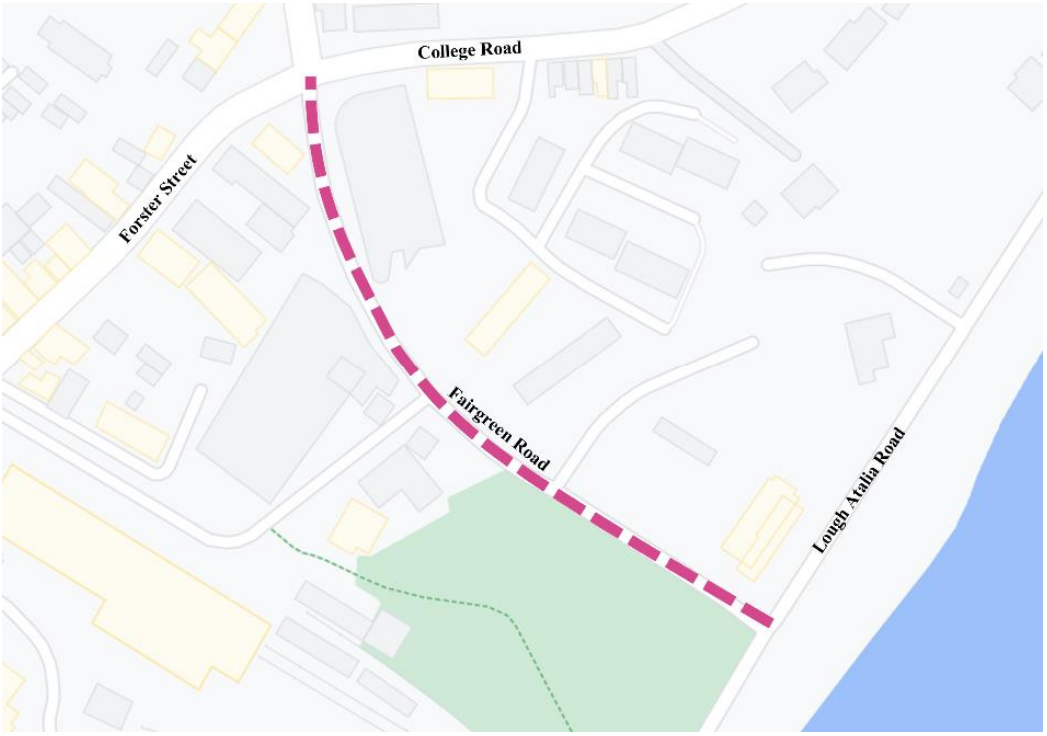


Diagram 4.7: Fairgreen Road Inner-City Access Route Sub-section

4.8.2 Option FR1: Minor Interventions

Interventions considered under this option primarily comprise of:

- Fairgreen Road being retained as one lane in both directions with a central turning lane at the northern and southern ends of the route; and
- The provision of enhanced pedestrian facilities.

Fairgreen Road forms part of the Inner-City Access Route. The GTS does not propose that any of the revised bus network route utilise this street, however the access to Galway Bus Station and exit from Galway Coach Station are both located on Fairgreen Road.

The Inner-City Access Route intersects with the Cross-City Link at the junction of Fairgreen Road and R399 Forster Street. With the introduction of the Cross-City Link, vehicular movement is expected to be required along the Inner-City Access Route. It is therefore proposed to maintain the existing two-lane vehicle configuration of Fairgreen Road.

In relation to traffic capacity, there would be minimal impact at the R339 Forster Street junction, as turning movements onto the Cross-City Link (either at R339 Forster Street or R339 College Road) would be discouraged at specific times (for R339 Forster Street) or restricted to local access (on R339 College Road).

As Fairgreen Road forms part of the Inner-City Access Route, this route is proposed to be maintained as a two-way general traffic route in all options considered. As such, no alternate infrastructure options have been assessed for this section.

4.8.3 Route Section FR Alternative Options Considered

Other options considered along this section of the route but not carried forward to assessment stage are outlined below:

- An option of converting Fairgreen Road, R339 College Road and Lough Atalia Road into a one-way circulatory as described in Section 4.5.4. This option was examined and sifted out as Fairgreen Road forms part of the Inner-City Access Route and it was not considered feasible to alter this street into a one-way route given its importance and function going forward providing an orbital route around the city centre for general traffic and to facilitate access routes to city centre car parks.

4.9 Bóthar Uí hEithir and Prospect Hill (Route Section 'BEPH')

4.9.1 Extent of Route Sub-Section BEPH

Diagram 4.8 illustrates the extent of the Inner-City Access Route sub-section being considered where modifications are required to accommodate the delivery of the Cross-City Link.

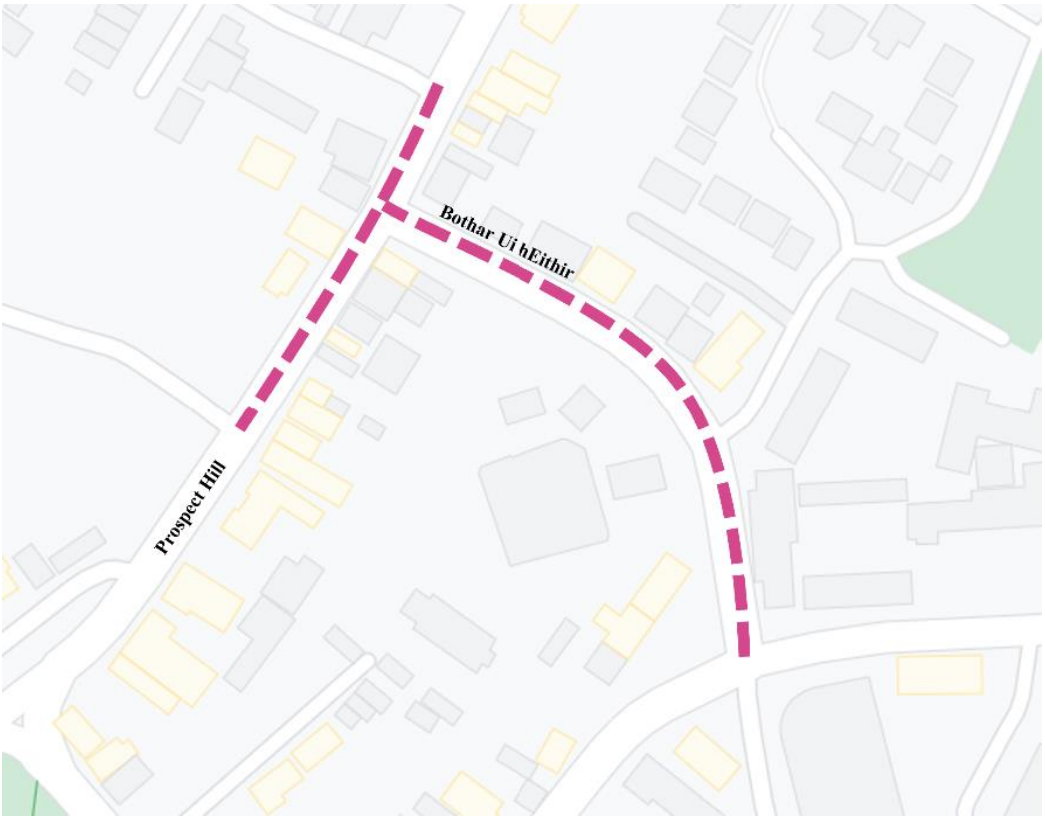


Diagram 4.8: Bóthar Uí hEithir and Prospect Hill Route Inner-City Access Route Sub-section

4.9.2 Option BEPH1: Minor Interventions

Interventions considered under this option primarily comprise of:

- Prospect Hill being converted to a two-way street;
- Bóthar Uí hEithir being converted to a two-way street; and
- The signalisation of the junction of Prospect Hill and Bóthar Uí hEithir.

As all options assessed for the Cross-City Link require the conversion of R336 Eyre Square East and R336 Forster St to a two-way bus route, the existing one-way, clockwise circulatory of Prospect Hill, Bóthar Uí hEithir, R339 Forster Street and R336 Eyre Square East would no longer be accessible to traffic. Therefore, to facilitate movement along the Inner-City Access Route, both Prospect Hill and Bóthar Uí hEithir are required to be converted to two-way general traffic routes, connecting Fairgreen Road to Bóthar na mBan. This in turn connects the Headford Road to Lough Atalia Road via the Inner-City Access Route.

Due to the constraints of building frontages at the junction of Prospect Hill and Bóthar Uí hEithir, this junction must be signalised to control movements. Footpath enhancements are proposed along the length of this route.

No alternate infrastructure options have been assessed for this section.

4.10 Bóthar Na mBan / St. Brendan's Avenue / R866 Headford Road / Dyke Road (Route Section 'BA')

4.10.1 Extent of Route Sub-Section BA

Diagram 4.9 illustrates the extent of the Inner-City Access Route sub-section being considered where modifications are required to accommodate the delivery of the Cross-City Link.

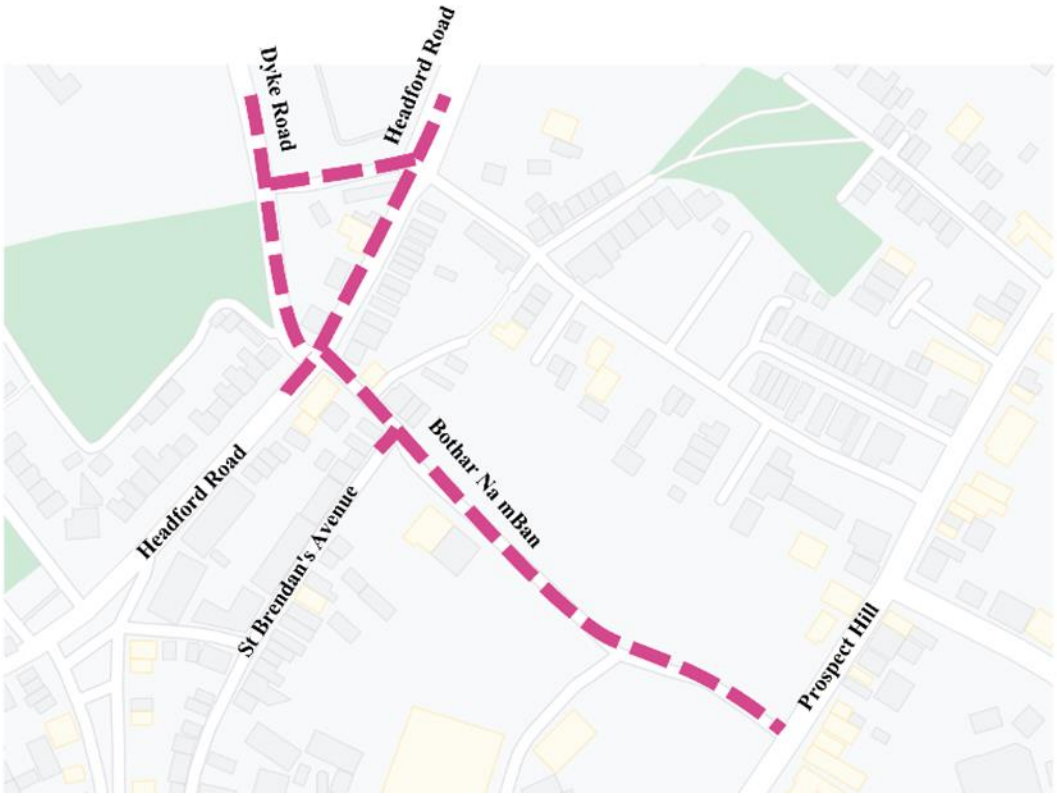


Diagram 4.9: Bóthar na mBan / St. Brendan's Avenue / Headford Road / Dyke Road Inner-City Access Route Sub-section

4.10.2 Option BA1: Minor Interventions

Interventions considered under this option primarily comprise of:

- The provision of a pedestrian footpath on the eastern side of St. Brendan's Avenue;
- The relocation of existing traffic signals and the Stop line further from the junction with Headford Road; and
- A reduction in available carriageway width, which would require traffic flow along a section of St. Brendan's Avenue to operate on a shuttle-type system.

This option proposes to provide an additional pedestrian footpath on the eastern side of St. Brendan's Avenue between Bóthar Na mBan and Headford Road. Currently this road corridor is 7.3m wide and contains a single sub-standard footpath on its western side. Providing a full standard footpath on both sides of the road would require setting back the stop line for traffic on St. Brendan's Avenue back to its junction with Bóthar Na mBan, a set-back of approximately 40m.

This would result in a traffic shuttle system over a distance of approximately 45m. The proposed additional footpath would create an enhanced pedestrian environment. However, the relocation of signals and the stop line would also require alterations to the control of the traffic signalling to provide sufficient inter-green time to allow cars turning left from Headford Road to pass by the traffic waiting on St. Brendan's Avenue / Bóthar Na mBan. The requirement for such a 'shuttle' situation would have a significant impact on the overall capacity of the junction.

Due to the existing width, it would not be possible to provide cycle tracks along this shuttle system.

No amendments to the Headford Road or Dyke Road configurations are proposed as part of this option. The proposed city bus route that runs along Headford Road would not therefore receive any additional physical priority.

4.10.3 Option BA2: Moderate Interventions

Interventions considered under this option primarily comprise of:

- New footpath being provided on both sides of the road on St. Brendan's Avenue between Bóthar Na mBan and Headford Road;
- Major changes to the Headford Road / Dyke Road junction to provide outbound bus lane contraflow on Headford Road, two lanes outbound from Bóthar Na mBan;
- The implementation of a one-way traffic circulation system clockwise around the Headford Road/Dyke Road 'triangle';
- The provision of a two-way cycle track along Dyke Road connecting the Dyke Road to The Plots and Headford Road;
- The acquisition of 2 no. residential properties; and
- The realignment of Bóthar Na mBan at its junction with Prospect Hill to prioritise movement along the Inner-City Access Road.

This option proposes to widen St. Brendan's Avenue/Bóthar Na mBan as it approaches the junction with Headford Road in order to provide footpaths on both sides and two vehicle lanes for left turn and straight ahead movements. This would require the acquisition and demolition of 2 no. residential properties along the south-western side of St. Brendan's Avenue to enable the works.

The existing width of 7.3m on St. Brendan's Avenue is insufficient to provide a standard footpath on both sides of the road and retain two-way traffic along the Inner-City Access Route.

This option would also implement a one-way traffic circulation system clockwise around the Headford Road/Dyke Road 'triangle' (and hence no right-turn from Bóthar Na mBan directly onto Headford Road). Traffic from St. Brendan's Avenue, seeking to turn right to Headford Road would route north to Dyke Road and then east to Headford Road. This would permit traffic to travel along both directions of the Inner-City Access Route simultaneously.

The resultant free space on Headford Road would allow for an outbound bus lane to be provided between the junction with St. Brendan's Avenue and the junction with St. Bridget's Place, which would ensure that outbound bus services on the Headford Road are afforded a degree of priority over general traffic from St. Brendan's Avenue/Bóthar Na mBan (which would route on the clockwise loop outlined above).

Due to the implementation of a one-way vehicle circulatory, a contra-flow cycle track connecting the Dyke Road to The Plots is proposed to maintain cyclist priority as part of this option.

In order to provide a two-way cycle track and realigned footpaths and traffic signals at Dyke Road, road widening into The Plots and the Dyke Road car park would be necessary.

At the junction of Bóthar Na mBan with Prospect Hill, realignment of Bother na mBan is proposed, in order to provide priority for two-way movements along the Inner-City Access Route. This would require land acquisition from Galway County Council's County Hall.

As the proposal contained in Option BA2 meets the requirements of both moderate and major intervention, and provides new footpaths along St. Brendan's Avenue, contra flow bus lane along Headford Road, a contra flow cycle track at Dyke Road, while providing two-way movement along the Inner-City Access Route, no additional major intervention is considered.

4.10.4 Route Section BA Alternative Options Considered

Other options considered along this section of the route but not carried forward to assessment stage are outlined below:

- An option similar to BA2, however, road widening to occur on the opposite side of St. Brendan's Avenue was examined and sifted out. This option would result in the acquisition of 6 no. residential properties and would further exacerbate the 'swan-neck' alignment of the road approaching the junction. Furthermore, it would create a staggered junction with Headford Road and Dyke Road rather than a crossroad junction;
- An option of making St. Brendan's Avenue one-way in either direction between Headford Road and Bóthar na mBan. This option was examined and sifted out.

As this street forms part of the Inner-City Access Network, diversions (likely onto St. Bridget's Place or St. Brendan's Avenue to Woodquay) would not meet the objectives of the Inner-City Access Route and would likely result in strategic traffic movements diverting onto residential streets; and

- A Do-Nothing Option. Due to the requirement of residential property acquisition at this location for Option BA2, a do-nothing option was also examined to fully establish the need for works at this section. As the proposed Inner-City Access Route will play a key role in managing traffic movements around the city centre once traffic is displaced by the Cross-City Link, including retaining and improving access to city centre car parks, it is important that an appropriate level of service for general traffic movement is provided for. Similarly, as the GTS envisages Galway as a 'walking city' and identified the need to improve and update pedestrian networks, adequate provision for pedestrians needs to be considered as part of the implementation of the Inner-City Access Route. As the footpath on eastern side of St. Brendan's Avenue is currently 1.2m wide, which is further restricted to an effective width of 0.6m in places, and there is a 23m section of road on the eastern side of St. Brendan's Avenue with no footpath present, a do-nothing option in this location was not considered feasible based on achieving the Proposed Scheme and GTS objectives.

4.11 Woodquay / Walsh's Terrace / Daly's Place / Mary Street (Route Section 'WWDM')

4.11.1 Extent of Route Sub-Section WWDM

Diagram 4.10 illustrates the extent of the Inner-City Access Route sub-section being considered where modifications are required to accommodate the delivery of the Cross-City Link.

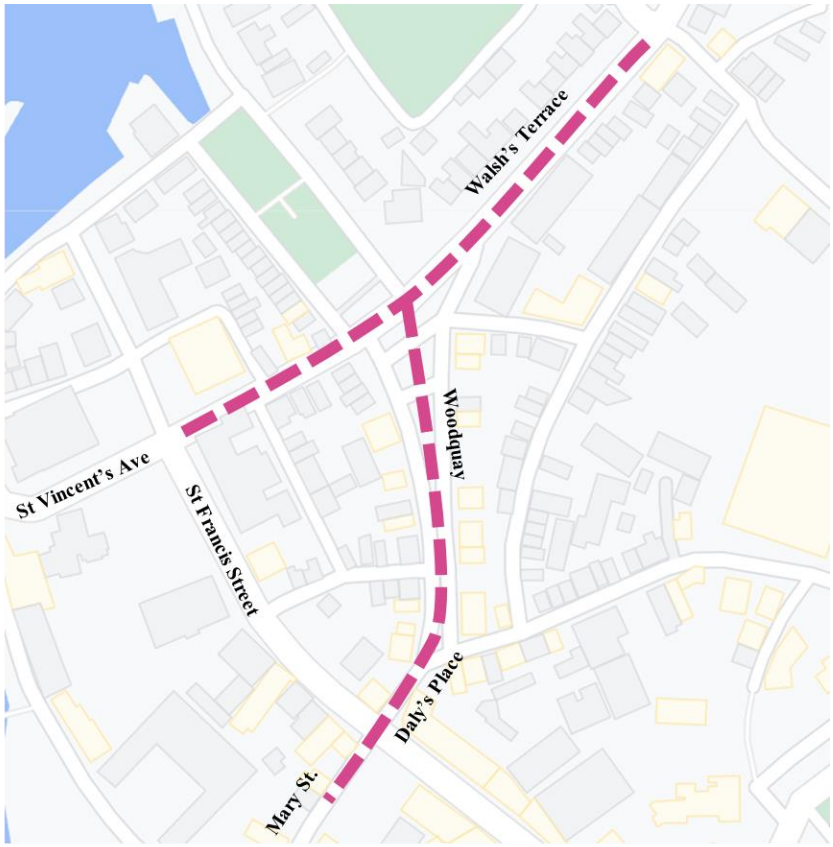


Diagram 4.10: Woodquay / Walsh's Terrace / Daly's Place / Mary Street Inner-City Access Route Sub-section

4.11.2 Option WWDM1: Minor Interventions

Interventions considered under this option primarily consist of:

- Wood Quay upgraded to provide a single, southbound traffic lane to connect to Eyre Street;
- Rationalisation of on-street parking along Walsh's Terrace and Wood Quay;
- Daly's Place converted from a one-way northbound route to a one-way southbound route;
- Walsh's Terrace west of Woodquay reconfigured to being bus lane only outbound;
- Upgrading and widening pedestrian footways and crossing points to improve pedestrian accessibility along Walsh's Terrace; and
- New public realm space to be created along Wood Quay;

This option looks at the conversion of Wood Quay to provide a single southbound traffic lane to connect to Eyre Street. West of the junction with Bóthar na mBan, along Walsh's Terrace is proposed to involve rationalisation of on-street parking and carry out localised footpath widening. Walsh's Terrace will also have a new signalised pedestrian crossing installed to the east of Wood Quay.

The on-street parking within Wood Quay would be reduced from 66 no. spaces to 22 no. (with some parking provided alongside the southbound traffic lane), and the remaining area to be converted to a public space. Thus, instead of continuing to the Salmon Weir Bridge, westbound traffic would be diverted south via Wood Quay. This traffic will continue south along Daly's Place (also converted from a northbound route to a southbound route) to the junction with Mary Street/Eglinton Street. This junction would be signalised, with pedestrian crossings provided on all arms. The junction to Corrib Terrace would be closed (vehicles will instead access from the Riverside junction to the east). To the east of the junction with Wood Quay, Walsh's Terrace would have on-street parking rationalised.

West of the junction with Wood Quay, on Walsh's Terrace it is proposed to designate the westbound carriageway as a time-regulated bus lane (similar to the approach to the Salmon Weir Bridge west of the junction with St. Francis Street. This would provide a mixture of virtual bus priority and full bus priority, improving bus speeds, reliability and punctuality. Bus stops along the route would be provided with shelters, where feasible.

This virtual bus priority and full bus priority along Walsh's Terrace and St. Vincent's Avenue will enable safer and more efficient cycling in the inbound and outbound travel lanes, due to traffic calming effects. A segregated cycle lane is also to be provided in the outbound direction along Woodquay.

No alternate infrastructure options have been assessed for this section.

4.11.3 Route Section WWDM MCA

As only one feasible option was considered as part of this options assessment, no MCA was undertaken for this route section of the Proposed Scheme.

It was therefore recommended that Option WWDM1 becomes the preferred route scheme option for this sub-section.

4.12 Forthill St. / R336 Merchants Road / Queen Street (Route Section 'FMQ')

4.12.1 Extent of Route Sub-Section FMQ

Diagram 4.11 illustrates the extent of the Inner-City Access Route sub-section being considered where modifications are required to accommodate the delivery of the Cross-City Link.

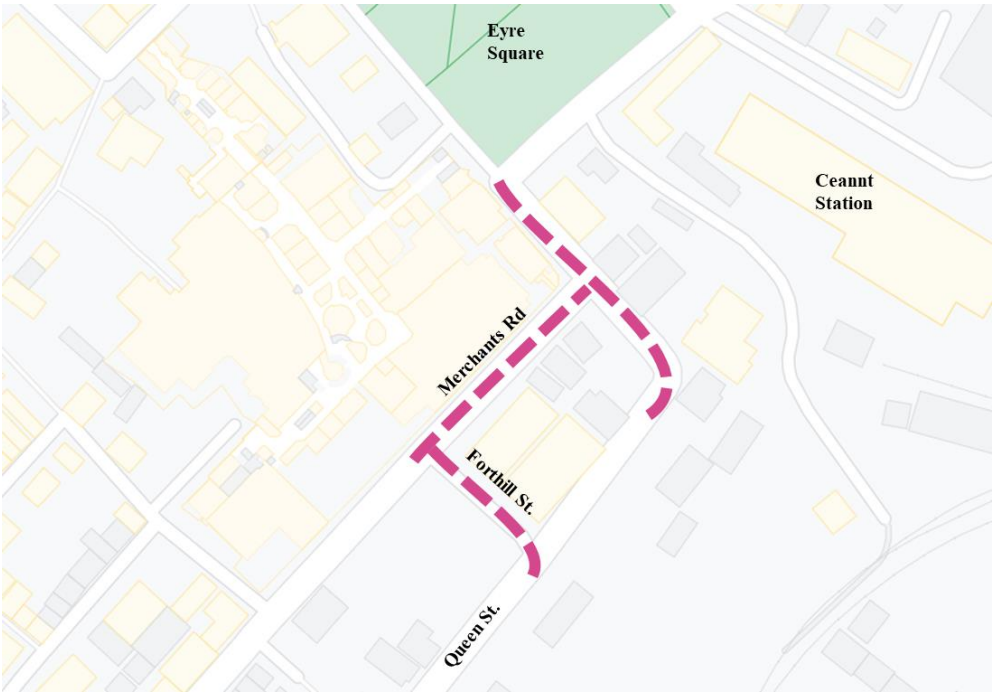


Diagram 4.11: Forthill St. / R336 Merchants Road / Queen Street Inner-City Access Route Sub-section

4.12.2 Option FMQ1: Minor Interventions

Interventions considered under this option primarily consist of:

- Provision of raised pedestrian crossings at both ends of Merchants Road;
- On-street parking rationalised and reduced on Forthill Road and the carriageway footprint reduced so as to provide wider footpaths;
- Provision of signalised pedestrian crossings on Merchants Road and Forthill Road.

This option involves converting the carriageway approaching from the south-west via Merchants Road, to provide two right-turning lanes onto Forthill Road (there is a single right-turning lane at present). Straight-ahead traffic would share a lane with right-turning traffic. Continuing east, raised, uncontrolled pedestrian crossings are proposed at both ends of Merchants Road (i.e. one to the east of the junction with Forthill Road and another to the west of the junction with Victoria Place).

Forthill Road would be improved, with on-street parking rationalised and reduced and the carriageway footprint reduced so as to provide wider footpaths. Signalised pedestrian crossings are proposed on Forthill Road at the junction with Merchants Road and also at the junction with Queen Street (four in total).

There is no bus priority or bus related infrastructure on this part of the scheme.

No segregated cycle lanes or cycle priority are to be provided on this part of the scheme.

4.12.3 Route Section FMQ Alternative Options Considered

No alternate infrastructure options have been assessed for this section.

4.12.4 Route Section FMQ MCA

As only one feasible option was considered as part of this options assessment, no MCA was undertaken for this route section of the Proposed Scheme.

It was therefore recommended that Option FMQ1 becomes the preferred route scheme option for this sub-section.

5 Multi Criteria Analysis and Recommendation

Utilising the methodology outlined in Section 4, a Multi-Criteria Analysis (MCA) for each of the options for each of the sub-sections has been completed. This chapter presents the outcomes of this MCA and identified the recommended options.

5.1 R863 University Road to R866 St. Francis Street Junction

5.1.1 Summary of Options Considered

A number of options for University Road to St. Francis Street have been developed with the objective of identifying the Preferred Option. These options have been presented in Section 4 and are summarised below:

- Option UR1: Improved bus priority achieved along University Road through demand management at traffic signals at University Road and Bóthar na mBan;
- Option UR2: Salmon Weir Bridge to be restricted to a Bus Gate, closed to general traffic and redesignated for bus use only; and
- Option UR3: Road widening along University Road to provide inbound and outbound bus lanes. Property frontage acquisition.

5.1.2 Options Assessment

Details of the route options assessment undertaken for the R863 University Road to R866 St. Francis Street Junction section are presented in **Appendix C**. The results of the MCA options assessment based on the above descriptions is shown in **Table 3**.

Table 3: Options Assessment results for the University Road to St. Francis Street sub-section

Assessment Criteria/sub-criteria		Option		
Criterion	**Assessment Sub-Criterion**	**UR1**	**UR2**	**UR3**
Economy	1.a. Capital Cost			
	1.b. Transport Reliability and Quality (PT Journey Time)			
	1.c. Transport Reliability and Quality (Pedestrian and Cyclist Journey Quality and Time)			
	1.d Transport Reliability and Quality (All Vehicles Journey Time)			
Safety	2.a. Pedestrian User Safety			
	2.b. Cyclist User Safety			
	2.c. Public Transport User Safety			
	2.d. Other Road User Safety			

Physical Activity	3.a. Promotion of Active Travel			
Environment	Archaeological, Architectural and Cultural Heritage			
	Flora & Fauna			
	Soils and Geology			
	Hydrology			
	Landscape and Visual			
	Air Quality			
	Noise & Vibration			
	Land Use Character			
Accessibility and Social Inclusion	5.a. Access to Key Trip Attractors			
	5.b. Mobility Impaired User Benefits			
Integration	6.a. Public Transport Network Integration			
	6.b. Cycle Network Integration			
	6.c. Road Network Integration			
GTS Policies	7.a. Efficient and Reliable public transport (to and through the city centre)			
	7.b Enable Traffic to access and move around the city centre.			
	7.c. Provision of Access to existing facilities			
	7.d. Safe and efficient movement of Pedestrians and Cyclists on and crossing the routes.			
	7.e. Remove non-essential motorised traffic from core city centre			

The MCA concluded that Option UR2 provides the most benefits relative to achieving the scheme objectives, while also recognising that there is the potential for negative impacts, primarily related to general traffic redistribution.

The closure of Salmon Weir Bridge to private car traffic is clearly the most beneficial in terms of the performance of the Cross-City Link; however, the wider area impacts on the traffic network are also the most wide-reaching under this option due to the re-routing of traffic onto alternative bridge crossings.

Notwithstanding the negatives with regard to private traffic, the removal of through traffic along this section will provide significantly improved pedestrian environment, an improved and safety cycle environment and provide bus priority along the length.

It was therefore recommended that option UR2 becomes the preferred route scheme option along R863 University Road and onwards as far as R866 St. Francis Street Junction.

5.2 R866 St. Francis Street and R866 Eglinton Street

5.2.1 Summary of Options Considered

As outlined in Section 4, only one option has been brought forward for inclusion in the Preferred Option for the scheme due to the constrained nature of both of these streets. The option brought forward is:

- Option FS1: St. Francis St. to be bus lane only inbound. Eglington Street to be bus lane only inbound.

5.2.2 Options Assessment

As only one feasible option was considered as part of the route section scheme options assessment, no MCA was necessary for this part of the Cross-City Link.

It was therefore recommended that option FS1 becomes the preferred route scheme option along R866 St. Francis Street and R866 Eglinton Street.

5.3 R866/R336 Eyre Square to R339 Forster Street

5.3.1 Summary of Options Considered

As outlined in Section 4, only one option has been brought forward for inclusion in the Preferred Option for the scheme due to the constrained nature of both of Eyre Square and Forster Street. The option brought forward is:

- Option ES1: Eyre Square north and east to be two-way bus only, Forster Street to be converted to two-way bus only. Access from Prospect Hill to Eyre Square to be removed with access only permitted on to Shop Street via bollard control at designated times;

5.3.2 Options Assessment

As only one feasible option was considered as part of the route section scheme options assessment, no MCA was necessary for this part of the Cross-City Link.

It was therefore recommended that option ES1 becomes the preferred route scheme option traversing R866/R336 Eyre Square and along R339 Forster Street.

5.4 R339 College Road from R339 Forster Street to Lough Atalia Road

5.4.1 Summary of Options Considered

Two options for College Road, between Forster Street and Lough Atalia Road, have been developed with the objective of identifying the Preferred Option.

These options have been presented in Section 4 and are summarised below:

- Option CR1: Bus Gate to be provided on College Road (between City Hall and Forster St. Amendments to the junction of College Road and Lough Atalia Road to permit vehicles to turn right from College Road to Lough Atalia Road.
- Option CR2: Road widening along College Road to provide inbound and outbound bus lanes. Provision of inbound and outbound segregated cycle tracks;

5.4.2 Options Assessment

Details of the route options assessment undertaken for the R339 College Road from R339 Forster Street to Lough Atalia Road section are presented in **Appendix D.** The results of the MCA options assessment based on the above descriptions is shown in **Table 4**.

Table 4: Options Assessment for the College Road (Forster Street to Lough Atalia Road) sub-section

Assessment Criteria/sub-criteria		Options	
Criterion	**Assessment Sub-Criterion**	**CR1**	**CR2**
Economy	1.a. Capital Cost		
	1.b. Transport Reliability and Quality (PT Journey Time)		
	1.c. Transport Reliability and Quality (Pedestrian and Cyclist Journey Quality and Time)		
	1.d Transport Reliability and Quality (All Vehicles Journey Time)		
Safety	2.a. Pedestrian User Safety		
	2.b. Cyclist User Safety		
	2.c. Public Transport User Safety		
	2.d. Other Road User Safety		
Physical Activity	3.a. Promotion of Active Travel		
Environment	Archaeological, Architectural and Cultural Heritage		
	Flora & Fauna		
	Soils and Geology		
	Hydrology		
	Landscape and Visual		
	Air Quality		
	Noise & Vibration		
	Land Use Character		
Accessibility and Social Inclusion	5.a. Access to Key Trip Attractors		
	5.b. Mobility Impaired User Benefits		
Integration	6.a. Public Transport Network Integration		
	6.b. Cycle Network Integration		
	6.c. Road Network Integration		

GTS Policies	7.a. Efficient and Reliable public transport (to and through the city centre)		
	7.b Enable Traffic to access and move around the city centre.		
	7.c. Provision of Access to existing facilities		
	7.d. Safe and efficient movement of Pedestrians and Cyclists on and crossing the routes.		
	7.e. Remove non-essential motorised traffic from core city centre		

The MCA concluded that both options could feasibly meet the objectives of the Cross-City Link, however Option CR1 provides a less intrusive option for local residents as it doesn't require widening of the existing carriageway, while positively removing through traffic, creating a better environment for pedestrians and cyclists.

It was therefore recommended that Option CR1 becomes the preferred route scheme option along R339 College Road.

5.5 R339 College Road from Lough Atalia Road to Moneenageisha

5.5.1 Summary of Options Considered

Three options for College Road, between Lough Atalia Road and Moneenageisha, have been developed with the objective of identifying the Preferred Option. These options have been presented in Section 4 and are summarised below:

- Option CRM1: College Road, between Lough Atalia Road and Moneenageisha Road to be maintained at its current width. One outbound lane to be converted to a bus lane.
- Option CRM2: College Road, between Lough Atalia Road and Moneenageisha Road to be widened to provide an additional inbound raised cycle track and an outbound bus lane.
- Option CRM3: College Road, between Lough Atalia Road and Moneenageisha Road, to be significantly widened to provide inbound and outbound bus lanes. Provision of an inbound and outbound cycle track;

5.5.2 Options Assessment

Details of the route options assessment undertaken for the R339 College Road from Lough Atalia Road to Moneenageisha section are presented in **Appendix E.** The results of the options assessment based on the above descriptions is shown in **Table 5** below shows the summary of the MCA process for the options developed for College Road as outlined above.

Table 5: Options Assessment results for the College Road (Lough Atalia to Moneenageisha) sub-section

Assessment Criteria/sub-criteria		Option		
Criterion	**Assessment Sub-Criterion**	**CRM1**	**CRM2**	**CRM3**
Economy	1.a. Capital Cost			
	1.b. Transport Reliability and Quality (PT Journey Time)			
	1.c. Transport Reliability and Quality (Pedestrian and Cyclist Journey Quality and Time)			
	1.d Transport Reliability and Quality (All Vehicles Journey Time)			
Safety	2.a. Pedestrian User Safety			
	2.b. Cyclist User Safety			
	2.c. Public Transport User Safety			
	2.d. Other Road User Safety			
Physical Activity	3.a. Promotion of Active Travel			
Environment	Archaeological, Architectural and Cultural Heritage			
	Flora & Fauna			
	Soils and Geology			
	Hydrology			
	Landscape and Visual			
	Air Quality			
	Noise & Vibration			
	Land Use Character			
Accessibility and Social Inclusion	5.a. Access to Key Trip Attractors			
	5.b. Mobility Impaired User Benefits			
Integration	6.a. Public Transport Network Integration			
	6.b. Cycle Network Integration			
	6.c. Road Network Integration			
GTS Policies	7.a. Efficient and Reliable public transport (to and through the city centre)			
	7.b Enable Traffic to access and move around the city centre.			
	7.c. Provision of Access to existing facilities			
	7.d. Safe and efficient movement of Pedestrians and Cyclists on and crossing the routes.			
	7.e. Remove non-essential motorised traffic from core city centre			

The MCA identifies that options CRM2 and CRM3 could feasibly meet the objectives of the Cross-City Link, while option CRM1 provides little benefit over the existing scenario.

It should be noted that this section of the Cross-City Link also forms part of the City Centre Access Network and as such, is also required to meet the needs of this strategic route in terms of catering for general traffic movements, particularly orbital movements around the City Centre.

While both options CRM2 and CRM3 demonstrate benefits. Regarding the extent to which options meet the objectives of the scheme, the benefits presented by CR3 are higher than those demonstrated by CRM2. This is due to CRM3 providing segregated bus priority and cycle facilities in both directions. However, this is offset by the potential negative environmental impacts associated with CR3 resulting from the 5m of additional road widening that would be required. This would also likely require land acquisition from an additional 12 no. properties.

It was therefore recommended that option CRM2 becomes the preferred route scheme option along R339 College Road, balancing the extent to which scheme objectives are met with the potential to mitigate any impacts arising.

5.6 R338 Dublin Road

5.6.1 Summary of Options Considered

Two options for Dublin Road have been developed with the objective of identifying the Preferred Option. These options have been presented in Section 4 and are summarised below:

- Option DR1: One inbound traffic lane to be converted to a bus lane, existing road width to be maintained, no segregated cycle facilities to be provided; and
- Option DR2: Dublin Road to be widened between Brothers of Charity and Moneenageisha junction to provide a bus lane in both directions. The existing quantum of general traffic lanes to be maintained in both directions. A bus gate to be provided at the junction on approach from Dublin Road to permit left turning for buses in advance of traffic. A segregated cycle track would be provided in both directions.

5.6.2 Options Assessment

Details of the route options assessment undertaken for the R338 Dublin Road section are presented in **Appendix F.** The results of the options assessment based on the above descriptions are shown in **Table 6**.

Table 6: Options Assessment results for the R338 Dublin Road sub-section

Assessment Criteria/sub-criteria		Options	
Criterion	**Assessment Sub-Criterion**	**DR1**	**DR2**
Economy	1.a. Capital Cost		
	1.b. Transport Reliability and Quality (PT Journey Time)		
	1.c. Transport Reliability and Quality (Pedestrian and Cyclist Journey Quality and Time)		
	1.d Transport Reliability and Quality (All Vehicles Journey Time)		
Safety	2.a. Pedestrian User Safety		
	2.b. Cyclist User Safety		
	2.c. Public Transport User Safety		
	2.d. Other Road User Safety		

Physical Activity	3.a. Promotion of Active Travel		
Environment	Archaeological, Architectural and Cultural Heritage		
	Flora & Fauna		
	Soils and Geology		
	Hydrology		
	Landscape and Visual		
	Air Quality		
	Noise & Vibration		
	Land Use Character		
Accessibility and Social Inclusion	5.a. Access to Key Trip Attractors		
	5.b. Mobility Impaired User Benefits		
Integration	6.a. Public Transport Network Integration		
	6.b. Cycle Network Integration		
	6.c. Road Network Integration		
GTS Policies	7.a. Efficient and Reliable public transport (to and through the city centre)		
	7.b Enable Traffic to access and move around the city centre.		
	7.c. Provision of Access to existing facilities		
	7.d. Safe and efficient movement of Pedestrians and Cyclists on and crossing the routes.		
	7.e. Remove non-essential motorised traffic from core city centre		

The MCA identifies that option DR2 clearly provides higher benefits that option DR1 and better meets the objectives required of the Proposed Scheme. DR1 has less environmental impact than DR2 as a result of not widening outside of the road curtilage. The extent of any such potential impacts were considered to be addressable through the EIA process and therefore not a reason to eliminate DR2 from the assessment process.

It was therefore recommended that option DR1 becomes the preferred route scheme option along R338 Dublin Road, balancing the extent to which scheme objectives are met with the potential to mitigate any impacts arising.

5.7 Fairgreen Road

5.7.1 Summary of Options Considered

As outlined in Section 4, only one option has been brought forward for inclusion in the Preferred Option for the scheme due to the function of this road. The option brought forward is:

- Option FR1: Fairgreen Road to be retained as one lane in both directions with a central turning lane at the northern and southern ends of the route. Enhanced pedestrian facilities.

5.7.2 Options Assessment

As only one feasible option was considered as part of this options assessment, no MCA was undertaken for this route section of the Proposed Scheme.

It was therefore recommended that option FR1 becomes the preferred route scheme option along Fairgreen Road.

5.8 Bóthar Uí hEithir and Prospect Hill

5.8.1 Summary of Options Considered

As outlined in Section 4, only one option has been brought forward for inclusion in the Preferred Option for the scheme due to the function of these streets. The option brought forward is:

- Option BEPH1: Prospect Hill to be converted to a two-way street. Bóthar Uí hEithir to be converted to a two-way street. Junction of Prospect Hill and Bóthar Uí hEithir to be signalised.

5.8.2 Options Assessment

As only one feasible option was considered as part of this options assessment, no MCA was undertaken for this sub-section of the Proposed Scheme.

It was therefore recommended that option BEPH1 becomes the preferred route option for this part of the Inner-City Access Route required to facilitate the delivery of the Cross-City Link.

5.9 Bóthar Na mBan / St. Brendan's Avenue / Headford Road / Dyke Road

5.9.1 Summary of Options Considered

Two options for Bóthar na mBan / St. Brendan's Avenue / Headford Road / Dyke Road, have been developed with the objective of identifying the Preferred Option. These options have been presented in Section 4 and are summarised below:

- Option BA1: Provision of a pedestrian footpath on the eastern side of St. Brendan's Avenue. Existing traffic signals and the Stop line to be relocated further from the junction with Headford Road. Reduction in available carriageway width would require traffic flow along a section of St. Brendan's Avenue to operate on a shuttle-type system. Realignment of Bóthar Na mBan at its junction with Prospect Hill to prioritise movement along the Inner-City Access Road; and
- Option BA2: New footpath on both sides of the road on St. Brendan's Avenue between Bóthar Na mBan and Headford Road. Major changes to Headford

Road / Dyke Road junction to provide outbound bus lane contraflow on Headford Road, two lanes outbound from Bóthar Na mBan. Implement a one-way traffic circulation system clockwise around the Headford Road/Dyke Road 'triangle'. Provide a two-way cycle track along Dyke Road connecting the Dyke Road to The Plots and Headford Road. Requires acquisition of 2 no. residential properties; Realignment of Bóthar Na mBan at its junction with Prospect Hill to prioritise movement along the Inner-City Access Road.

5.9.2 Options Assessment

Details of the route options assessment undertaken for the Bóthar Na mBan / St. Brendan's Avenue / Headford Road / Dyke Road section are presented in **Appendix G**. The results of the options assessment based on the above descriptions are shown in **Table 7**.

Table 7: Options Assessment results for the Bóthar Na mBan / St. Brendan's Ave / Headford Road / Dyke Road sub-section

Assessment Criteria/sub-criteria		Options	
Criterion	**Assessment Sub-Criterion**	**BA1**	**BA2**
Economy	1.a. Capital Cost		
	1.b. Transport Reliability and Quality (PT Journey Time)		
	1.c. Transport Reliability and Quality (Pedestrian and Cyclist Journey Quality and Time)		
	1.d Transport Reliability and Quality (All Vehicles Journey Time)		
Safety	2.a. Pedestrian User Safety		
	2.b. Cyclist User Safety		
	2.c. Public Transport User Safety		
	2.d. Other Road User Safety		
Physical Activity	3.a. Promotion of Active Travel		
Environment	Archaeological, Architectural and Cultural Heritage		
	Flora & Fauna		
	Soils and Geology		
	Hydrology		
	Landscape and Visual		
	Air Quality		
	Noise & Vibration		
	Land Use Character		
Accessibility and Social Inclusion	5.a. Access to Key Trip Attractors		
	5.b. Mobility Impaired User Benefits		
Integration	6.a. Public Transport Network Integration		
	6.b. Cycle Network Integration		
	6.c. Road Network Integration		
GTS Policies	7.a. Efficient and Reliable public transport (to and through the city centre)		

	7.b Enable Traffic to access and move around the city centre.		
	7.c. Provision of Access to existing facilities		
	7.d. Safe and efficient movement of Pedestrians and Cyclists on and crossing the routes.		
	7.e. Remove non-essential motorised traffic from core city centre		

The MCA identifies that option BA2 clearly provides higher benefits than option BA1 and better meets the objectives of the scheme. This is largely due to the significant traffic capacity reductions on the Inner-City Access Route that would be experienced in option BA1 due to the shuttle system between Bóthar na mBan and Headford Road. This shuttle system would likely result in the Inner-City Access Route failing to function as required, resulting in congestion and delay likely across the city centre, potentially impacting on the operation of the Cross-City Link. Therefore, based on the MCA results, option BA2 was identified as the preferred route option for this part of the Inner-City Access Route required to facilitate the delivery of the Cross-City Link.

5.10 Woodquay / Walsh's Terrace / Daly's Place / Mary Street

5.10.1 Summary of Options Considered

As outlined in Section 4, only one option has been brought forward for inclusion in the Preferred Option for the scheme due to the function of these streets. The option brought forward is:

- Option WWDM1: Wood Quay upgraded to provide a single, southbound traffic lane to connect to Eyre Street. Rationalisation of on-street parking along Walsh's Terrace and Wood Quay. Daly's Place converted from a one-way northbound route to a one-way southbound route. Walsh's Terrace west of Woodquay reconfigured to being bus lane only outbound. Upgrading and widening pedestrian footways and crossing points to improve pedestrian accessibility along Walsh's Terrace. New public realm space to be created along Wood Quay.

5.10.2 Options Assessment

As only one feasible option was considered as part of this options assessment, no MCA was undertaken for this route section of the Proposed Scheme.

It was therefore recommended that Option WWDM1 becomes the preferred route scheme option for this sub-section.

5.11 Forthill St. / R336 Merchants Road / Queen Street (Route Section 'FMQ')

5.11.1 Summary of Options Considered

As outlined in Section 4, only one option has been brought forward for inclusion in the Preferred Option for the scheme due to the function of these streets. The option brought forward is:

- Option FMQ1: Provision of raised pedestrian crossings at both ends of Merchants Road. On-street parking rationalised and reduced on Forthill Road and the carriageway footprint reduced so as to provide wider footpaths. The provision of signalised pedestrian crossings on Merchants Road and Forthill Road.

5.11.2 Options Assessment

As only one feasible option was considered as part of this options assessment, no MCA was undertaken for this route section of the Proposed Scheme.

It was therefore recommended that Option FMQ1 becomes the preferred route scheme option for this sub-section.

6 Public Consultation Summary

6.1 Non-Statutory Public Consultation

Due to COVID-19 restrictions in place throughout 2020 and 2021, no information events were held in person in response to guidelines from the Irish Government and the National Public Health Emergency Team (NPHET). Therefore, Galway City Council engaged in virtual and online non-statutory public consultation on the Cross-City Link project, in place of in-person event(s). The non-statutory public consultation on the Cross-City Link project commenced on October 22nd, 2020 and the initial duration of the consultation period was 6 weeks. Due to the reopening of the retail sector in December 2021, Galway City Council extended the non-statutory public consultation on the Cross-City Link project in January 2021, to allow the business community in the city to engage at a point in time when their busiest season would be concluded.

The scheme that was presented for Public Consultation was the emerging preferred scheme as identified in this report.

A total of 93 submissions were received. These submissions ranged from individual submissions by residents, commuters and local representatives, to detailed proposals from public bodies, various associations and private sector businesses.

While a variety of matters were raised in the submissions, the key issues emerging from the consultation related to the following key themes:

1) Public Realm;
2) Deliveries;
3) Additional Traffic;
4) Loss of Access;
5) Cyclist Safety;
6) Pedestrian Safety;
7) Other Galway Transport Strategy Projects;
8) Loss of parking;
9) Devaluation of Property;
10) Land Acquisition;
11) Associated Bus Facilities; and
12) Noise Pollution.

Further detail on these issues can be found in the Cross-City Link (University Road to Dublin Road) Public Consultation 2020-2021 Report (July 2021) found in **Appendix B**.

Arising from this public consultation, the scheme was re-examined based on the information received. A large number of design developments to the preferred scheme layouts were undertaken, incorporating feedback received during the consultation including:

- Inclusion of additional cycle parking;
- Improvements to cycle permeability;
- Re-opening access to Walsh's Terrace and Corrib Terrace;
- Amendments to locations and designation of parking and loading bays; and
- Wider footpaths in some locations.

Notwithstanding the design developments undertaken, each of the overall sub-section options and Multi Criteria Analysis were reviewed after receipt of public consultation submissions. This review did not result in any alternative options being selected to replace previously identified preferred options, nor did it change the scoring observed in the MCA.

7 Description of the Preferred Scheme

This section describes the preferred scheme on a section-by-section basis. Further details on the Proposed Scheme can be found in the scheme General Arrangement Drawings, drawing series BCG-GA, located in **Appendix A** of this report.

7.1 R863 University Road to R866 St. Francis Street Junction

7.1.1 Overview of Infrastructure Modifications

The interventions proposed are summarised as follows:

- Footpaths widened along University Road;
- New drainage network along University Road and outfall to canal;
- Salmon Weir Bridge to be restricted to a Bus Gate;
- Public Realm Space to be created in front of Galway Cathedral with Gaol Road to the back of the Cathedral to be made 2-way;
- Re-configured bus and car parking within existing Cathedral car park;
- Newtownsmith and Waterside to be closed off onto St. Vincent's Avenue;
- Raised tables, entry treatments and signalised crossings;
- Reconfiguration of footpaths on Salmon Weir Bridge; and
- Temporary land acquisition necessary.

7.1.2 Bus Provision and General Vehicular Impacts

The Proposed Scheme involves the creation of bus lanes over the existing Salmon Weir Bridge, effectively closing the Salmon Weir Bridge to general vehicular traffic during the hours of operation of the bus lane (07:00-10:00 and 13:00-19:00, with access permitted during the 10:00-13:00 period to facilitate deliveries/loading, etc.). Bus priority will be achieved along University Road largely through the removal of vehicular traffic demand along the route.

The inbound bus lane will begin to the immediate east of the existing vehicular access to Fisheries Field and will terminate immediately to the east of the Salmon Weir Bridge. This will permit vehicles exiting from Newtownsmith to travel along St. Vincent's Avenue, during times that vehicles are permitted to exit from Newtownsmith.

The outbound bus lane along this route begins at the junction of St. Vincent's Avenue with St. Francis Street.

The St. Francis Street approach to this junction does not have a bus lane, meaning any vehicles travelling along St. Francis Street which are not permitted to enter a bus lane must either turn right onto the R866 towards the Headford Road, or continue straight towards Waterside. On the R866 westbound approach to the St. Francis Street / St. Vincent's Avenue junction, a westbound bus lane is proposed beginning at Woodquay, meaning only vehicles permitted to travel along a bus lane will arrive at this junction and can continue onto the bus lane along St. Vincent's Avenue towards the Salmon Weir Bridge.

The scheme proposed the conversion of Gaol Road (West) into a two-way street alongside the Cathedral to the west and south, with the Gaol Road (east) junction to University Road being closed off to all public transport and vehicular traffic. This creates a natural 'gateway' whereby general traffic is diverted from University Road in advance of Salmon Weir Bridge, and also facilitates local access to Nun's Island and the environs of Galway Cathedral.

In tandem with these works, the existing car park to the south of Galway Cathedral is also proposed to be amended, to provide additional coach parking facilities and to reduce the number of general parking spaces as a result. The existing vehicular egress arrangement from Galway Cathedral is also proposed to be amended, with the existing entrance on the southern side to be widened into and entrance and exit, with the existing exit on the eastern side to be closed to vehicular traffic.

Traffic calming features are proposed along the route entailing the provision of raised tables at Canal Road Upper and Fisheries Field, and the provision of two new signalised pedestrian crossings on University Road. These will impact upon the existing on-street parking provision with a reduction in parking spaces along University Road.

7.1.3 Cycling Provision

Virtual bus priority on University Road will enable safer and more efficient cycling in the inbound and outbound travel lanes, due to traffic calming effects. No segregated cycle lanes are to be provided.

New bicycle parking is proposed along University Road, Gaol Road, Newtownsmith and Waterside.

7.1.4 Pedestrian Provision

In conjunction with the closure of the bridge, the proposed scheme will also involve upgrading pedestrian footways and crossing points to improve pedestrian accessibility to and along University Road itself. This will include widening footways along the route and the rationalisation of on-street parking.

On the Salmon Weir Bridge, the existing narrow footpath on the southern side of the bridge will be removed and replaced with a rubbing strip, while the northern footpath will be widened to a 1.8m wide footpath, retaining an iconic view of the weir for pedestrians.

The diversion of general traffic onto Gaol Road (west of the Cathedral) affords an opportunity to enhance the public realm in the Galway Cathedral area, including improved pedestrian facilities and a main plaza area. It is therefore proposed to close Gaol Road on the eastern side of Galway Cathedral and to re-purpose the space as a large public area with urban landscaping and permeable to pedestrians and cyclists.

Footpaths along University Road, Salmon Weir Bridge and St. Vincent's Avenue are to be widened will be replaced with a concrete paving surface and granite kerbs. Existing natural stone kerbs at the junction of St. Vincent's Avenue and St. Francis Street will be retained; however, while the existing footpath on the northern side of St. Vincent's Avenue in the vicinity of Galway Courthouse and also on the western side of Gaol Road will be retained. Footpaths and islands within the reconfigured Galway Cathedral carpark will be from by in-situ concrete. Routes through Newtownsmith and Waterside, which will be permeable to vehicles at specific times, will be finished with concrete setts.

7.1.5 Land Use and Accommodation

The Proposed Scheme commences the Newcastle Road and travels along University Road and St Vincent's Avenue to St. Francis Street. This section of the scheme includes residential lands along University Road, recreational and amenity lands at Millenium Park and Community, Cultural and institutional lands at NUIG, Galway Cathedral, Galway Court House and the Franciscan Abbey.

No permanent land take is required through this section to facilitate the scheme, as all lands are in the ownership or control of Galway City Council.

Temporary land take is required within this section to facilitate a raised table entry treatment at the entrance to NUIG.

7.2 R866 St. Francis Street and R866 Eglinton Street

7.2.1 Overview of Infrastructure Modifications

The interventions proposed are summarised as follows:

- St. Francis Street to be bus lane only inbound;
- Eglington Street to be bus-only inbound;
- Footpath widening on Eglinton Street;
- Signal-controlled pedestrian crossing on St. Francis Street;
- Signalisation of the junction of St. Francis Street / Eglinton Street / Mary Street / Daly Place; and
- New bicycle parking on St. Francis Street and Eglinton Street.

7.2.2 Bus Provision and General Vehicular Impacts

The proposed scheme involves converting the inbound lane of both St. Francis Street and Eglinton Street into a bus-only lane while maintaining the outbound lanes as all-traffic lanes. The scheme also proposes reversing the one-way direction of traffic on Daly's Place from Woodquay to Eglinton Street.

All traffic from Mary Street, will be required to turn left onto St. Francis Street unless permitted to enter into a bus lane, while all traffic from Daly's Place will be required to turn right unless permitted to enter into a bus lane. Local access to Eglinton Street will remain possible via Eyre Street and Eyre Square, however Eglinton St. outbound will effectively be removed as a through route, thereby providing bus priority over general traffic.

St. Francis Street inbound and Eglinton Street inbound will operate as bus only during the hours of operation of the bus lane, while St. Francis Street will be open to general traffic to permit local traffic from Woodquay to access St. Francis Street and return to the Headford Road and traffic from Mary Street to access the Headford Road.

7.2.3 Cycling Provision

Virtual bus priority in the outbound direction, and full bus priority in the inbound direction, on Eglinton Street and St. Francis Street, will enable safer and more efficient cycling, due to traffic calming effects. No segregated cycle lanes are to be provided.

7.2.4 Pedestrian Provision

Footpaths along Eglinton St. and parts of St. Francis Street in the vicinity of the new signalised junction will be replaced and widened. All footpaths will be replaced with new materials, with a natural stone surface proposed along Eglinton Street and a Concrete Paving surface proposed along St. Francis Street. A raised table will be installed at the junction of Eglinton Street and Williamsgate Street to improve pedestrian movement between Eyre Square and Shop Street areas.

A loading bay, semi-recessed into the footway along Eglinton Street inbound is proposed, which will be utilised as a footway outside of designated loading times (i.e. during hours of operation of the bus lane).

7.2.5 Land Use and Accommodation

The Proposed Scheme continues along St. Francis Street and Eglinton Street to Williamsgate Street. This section of the scheme includes community, cultural and institutional lands at the Franciscan Abbey and the Mercy School.

The remainder of this section of the route is zoned for city centre uses and this is reflected on the numerous retail units, hospitality offerings and offices located along this section.

No permanent or temporary land take is required through this section to facilitate the scheme, as all lands are in the ownership or control of Galway City Council.

7.3 R866/R336 Eyre Square to R339 Forster Street

7.3.1 Overview of Infrastructure Modifications

The interventions proposed are summarised as follows:

- Williamsgate Street and Eyre Square North to be eastbound bus only;
- Eyre Square East to be two-way bus only between St. Patricks Avenue and Eyre Square North;
- Forster Street to be two-way bus only;
- Junction of Eyre Square East and Forster Street to be signalised for all movements;
- Raised table on Eyre Square North connecting Rosemary Avenue and Eyre Square West;
- Eyre Square North to be upgraded to a landscaped pedestrianised plaza area;
- Vehicular access to Rosemary Avenue, and Eyre Street to be restricted to permitted hours only;
- Prospect Hill between Bóthar na mBan and Eyre Square North to be made a cul-de-sac with restricted access to Eyre Square North to permitted hours only; and
- New bicycle parking on Forster Street.

7.3.2 Bus Provision and General Vehicular Impacts

The Proposed Scheme involves converting Forster Street and Eyre Square East into two-way, public transport-only streets during peak hours, with Eyre Square North (already operating as two-way) and Williamsgate Street also becoming public-transport-only (heading eastbound only). The westbound route along Eyre Square North and Williamsgate Street will not be designated as public transport-only, in order to facilitate loading and delivery access to Shop Street via Williamsgate Street.

As part of this scheme, Prospect Hill will also become a two-way route, to facilitate loading/delivery and taxi access from the north-east. However, there will be restricted connectivity through to Eyre Square North from Prospect Hill (there will be a looped route which will allow vehicles to enter and exit from the north-eastern approach).

Access for vehicular traffic from Prospect Hill to Eyre Square will be permitted during specific hours to allow for loading and access to the Shop Street Area. Loading/delivery vehicles approaching from the south will use Eyre Square West (which is open for a portion of the morning) to access Williamsgate and Shop Street.

Access to Eglinton Street and Eyre Square North Plaza and Rosemary Avenue can be achieved via Eyre Street onto Eyre Square North. This will also be restricted to specific permitted hours to coincide with delivery and casual trading times permitted at Eyre Square.

Between Eyre Square South and St. Patrick's Avenue, no bus lanes are proposed in order to maintain vehicular access to St. Patrick's Avenue which is the sole access to residential properties and parking. However, this is extremely limited and therefore no impact on bus operation is anticipated along this section.

Forster Street is proposed to be converted into a two-way bus only street (07:00-10:00 and 13:00-19:00, with access permitted during the 10:00-13:00 period to facilitate deliveries/loading, etc.). Existing parking will be converted to loading bays and public realm improvement areas. The junction of Forster Street / Bóthar Uí Eithir / Fairgreen Road / College Road will be reconfigured to facilitate altered movements, including the removal of left slip lanes, shorter pedestrian crossings and crossings on all arms of the junction.

Due to the conversion of Eyre Square East and Forster Street to two-way movements and the restricted geometry at the corner, the junction of Eyre Square / Forster Street / Ceannt Station and Frenchville Lane will be signalised for all movements, this will include controlled pedestrian crossings on all arms of the junction.

Existing shared loading bays / taxi ranks will be retained along Eyre Square East with the directions being reversed, however the taxi rank and disabled parking along Eyre Square North will be removed with an alternative loading bay on Rosemary Avenue, shared taxi rank / loading bays on Prospect Hill, and disabled parking spaces on Prospect Hill and Bóthar Irwin. The existing loading bay on Williamsgate Street will be retained. An eastbound loading bay is proposed at the eastern end of Forster Street at Saint Patrick's Church. This will in turn lead to on-street parking being removed at this location. One existing bus bay and shelter along Eyre Square North will be removed to facilitate access from Eyre Street.

7.3.3 Cycling Provision

Full bus priority on Eyre Square and Forster Street will enable safer and more efficient cycling in the inbound and outbound, due to traffic calming effects. No segregated cycle lanes are to be provided.

7.3.4 Pedestrian Provision

The existing streetscape to the north of the main carriageway at Eyre Square North will be re-purposed to create a larger, open plaza area with urban landscaping features.

The existing public bike share station will be relocated, and the Liam Mellows Statue will be retained in its current location with the plinth to be redesigned.

Footpath widening and reconstruction is proposed along Williamsgate Street and Forster Street and all surface materials on the reconstructed footpaths and plazas in this area will be natural stone. Surfaces which have a shared pedestrian and vehicle loading including Rosemary Avenue, Eyre Street, Loading and taxi bays on Eyre Square East, and raised tables will have a stone paving sett surface. The northern section of the cul-de-sac of Prospect Hill will also have a stone paving sett surface to provide continuity and connectivity for pedestrians from Eyre Square North to Bóthar na mBan.

7.3.5 Land Use and Accommodation

The Proposed Scheme continues along Williamsgate Street, Eyre Square North, Eyre Square East and Forster Street. This section also incorporates sections of Eyre Square south, Prospect Hill, Rosemary Avenue, Eyre Street and Bóthar Irwin. This section of the scheme is zoned for city centre uses and this is reflected on the numerous retail units, hospitality offerings and offices located along this section. The only exceptions to this zoning are in the middle of Eyre Square (Kennedy Park) which is zoned as recreational and amenity and at the gateway to St. Patricks Church on Forster Street, which is zoned as Community, Cultural and Institutional lands.

No permanent land take is required through this section to facilitate the scheme, as all lands are in the ownership or control of Galway City Council.

Temporary land take is required within this section to facilitate:

- Construction of a traffic signal-controlled junction at the exit from Ceannt Station; and
- Construction of a pedestrian crossing at the entrance to Ceannt Station carpark.

7.4 R339 College Road from R339 Forster Street to Lough Atalia Road

7.4.1 Overview of Infrastructure Modifications

The interventions proposed are summarised as follows:

- Bus Gate to be provided on College Road (between City Hall and Forster Street);
- Footpaths to be widened;
- On-Street Parking to be rationalised;
- Entry Treatment at junctions;
- New Pedestrian crossings;
- New storm drainage network; and

- Temporary land acquisition necessary.

7.4.2 Bus Provision and General Vehicular Impacts

The Proposed Scheme will provide a bus gate on College Road in order to restrict through-movement for vehicular traffic, whilst facilitating the movement of public transport vehicles directly to and from Forster Street. This gate will permit local access to and from College Road to be maintained for all vehicles, albeit only from one side or the other depending on the location along College Road. For example, vehicular access to City Hall will be possible for all vehicles, but only from the Lough Atalia / Moneenageisha end of College Road, while vehicle access to The Elms will be possible for all vehicles, but only from the Fairgreen Road / Bóthar Uí Eithir end of College Road.

This proposal will ensure that the only vehicles on College Road will be those with an origin or destination on College Road and will remove this as a through route for general traffic, thereby removing the extensive queuing and delay experienced frequently on this route. Cyclist and bus priority will be achieved through the removal of general traffic.

The proposed bus gate will be a short section of bus lane, controlled by traffic signals and operating on a one-way shuttle system.

7.4.3 Cycling Provision

Virtual bus priority on College Road will allow for safer and more efficient cycling in the inbound and outbound travel lanes, due to traffic calming effects. No segregated cycle lanes are to be provided.

7.4.4 Pedestrian Provision

In conjunction with the provision of the bus gate, the Proposed Scheme will also involve upgrading pedestrian footways and crossing points to improve the pedestrian accessibility to and along the route. This will include widening footways generally to at least 2.0m where possible, while ensuring the occurrence of narrower ‘pinch-points’ be kept to an absolute minimum. Pedestrian crossings will be installed in the vicinity of the Connacht Rugby sportsgrounds and in the vicinity of Yeats College (close to Galway City Hall). All footpaths on College Road will be replaced with concrete paving surface and granite kerbs.

7.4.5 Land Use and Accommodation

The Proposed Scheme continues along College Road, from Forster Street to its junction with Lough Atalia Road. This section of the scheme includes residential lands along College Road, recreational and amenity lands at the Sportsground and Community, Cultural and institutional lands at the Magdalen Convent.

No permanent land take is required through this section to facilitate the scheme, as all lands are in the ownership or control of Galway City Council.

Temporary land take is required within this section to facilitate:

- Raised table entry treatment at the entrance to Glenmore; and
- Raised table entry treatment at the entrance to The Green.

7.5 R339 College Road from Lough Atalia Road to Moneenageisha

7.5.1 Overview of Infrastructure Modifications

The interventions proposed are summarised as follows:

- Realignment of the College Road / Lough Atalia Road junction;
- College Road, between Lough Atalia Road and Moneenageisha Road to be widened to provide an additional inbound segregated cycle track and an outbound bus lane;
- Major amendments to Moneenageisha and Lough Atalia junctions;
- Landscaping design at new green space at College Road / Lough Atalia Road junction;
- Removal of underground fuel tanks;
- Construction of a retaining wall;
- Tree removal; and
- Permanent and temporary land acquisition necessary.

7.5.2 Bus Provision and General Vehicular Impacts

The scheme proposes the provision of an outbound bus lane on College Road between Lough Atalia Road and Moneenageisha junction, and an inbound segregated cycle track between Moneenageisha junction and the Lough Atalia Road junction. This will be facilitated through road widening and land acquisition on the western side of the road.

Inbound, a single traffic lane is proposed which will then flare locally to provide right-turning facilities to Loyola Park and College Road. This scheme also includes the provision of inbound, raised adjacent cycle track from Moneenageisha junction to College Road/Lough Atalia Road junction.

7.5.3 Cycling Provision

An inbound, raised adjacent cycle lane is proposed on the southern side of College Road between the junction at Moneenageisha and the junction at Lough Atalia Road.

In the outbound direction, cyclists can use the bus lane, which will enable safer and more efficient cycling in the inbound and outbound travel lanes, due to traffic calming effects.

The junction caters for an outbound cycle lane on R338 Dublin Road. Cyclists can use the bus lane on College Rd, which will enable safer and more efficient cycling in the inbound and outbound travel lanes, due to traffic calming effects.

It also caters for an inbound cycle lane from Dublin Road to College Rd, which has a shared space making it safer to turn left or continue straight. There is also a cycle box, where a cyclist can wait when turning right.

7.5.4 Modifications to College Rd/Lough Atalia Rd Junction

Due to the proposed restriction on College Road to through-traffic, it is therefore necessary to permit a right-turn manoeuvre from College Road to Lough Atalia. This will allow traffic exiting College Road at the eastern end to subsequently route back towards the city centre via Lough Atalia Road. It is therefore proposed to realign the junction of College Road and Lough Atalia Road, to a formal T-junction (with College Road forming the minor arm and Lough Atalia Road forming the major arm).

The junction will be signalised, with pedestrian crossings across the College Road arm of the junction and a toucan crossing across Lough Atalia Road on the southern side of the junction. The currently signalised Loyola Park leg of the existing junction will be converted into a priority-controlled junction with a raised table, located apart from the signalised junction.

The realignment of the junction will primarily be through the existing green space located between Lough Atalia Road and College Road, and two new replacement green spaces will be formed and landscaped.

7.5.5 Modifications to Moneenageisha Junction

A new toucan crossing on the College Road arm is proposed, which will complement the proposed cycle track along Dublin Road. At the location of the proposed toucan crossing, the existing left slip lane for traffic is proposed to be removed and a new bus gate provided on Dublin Road, to allow outbound buses to turn right on to the Dublin Road bus lane or to continue straight to Wellpark Road.

On the Wellpark Road approach to the junction, the left slip lane and island is also proposed to be removed, and the exit from the junction widened to facilitate the outbound bus lane on Dublin Road.

On the Moneenageisha Road approach to the junction, the right turn movement from Moneenageisha Road to College Road is proposed to be reinstated.

The scheme will require the removal of existing mature trees within Moneenageisha Court, Gleann Noinin, and in the existing green area between College Road and Lough Atalia Road.

7.5.6 Land Use and Accommodation

The Proposed Scheme continues along College Road, from its junction with Lough Atalia Road to its junction with Dublin Road at Moneenageisha. This section of the scheme includes residential lands along College Road, Enterprise, Light Industry and Commercial Lands at Circle K and the Huntsman Inn and recreational and amenity lands at the green area to the front of the Huntsman Inn.

Permanent land take is required within this section to facilitate:

- Widening of College Road at 139 College Road;
- Widening of College Road at Gleann Noinin;
- Widening of College Road at Circle K;
- Widening of College Road at Moneenageisha Court; and
- Widening of College Road at Bay View B&B.

Temporary land take is required within this section to facilitate a raised table entry treatment at the entrance to The Huntsman Inn.

7.6 R338 Dublin Road

7.6.1 Overview of Infrastructure Modifications

The interventions proposed are summarised as follows:

- Dublin Road, to be widened between Brothers of Charity and The Huntsman Inn entrance;
- A bus lane to be provided in both directions;
- A segregated cycle track to be provided in both directions;
- New footpaths to be provided on both sides of the road; and
- 1 no. outbound general traffic lane to be provided. 1 no. inbound traffic lane, widening to two lanes on approach to the Moneenageisha Junction to be provided;
- New pedestrian crossing at Wellpark Retail Park.

7.6.2 Bus Provision and General Vehicular Impacts

Dublin Road, between the Moneenageisha junction and the end of the proposed scheme at the entrance to the Brothers of Charity, is to be realigned and widened in order to provide a continuous bus lane in both directions, a segregated cycle track in both directions, a reconstructed footway in both directions and a general traffic lane in both directions.

The inbound general traffic lane flares to two lanes to the immediate west of the Wellpark Retail Park entrance. One of these lanes is a straight-ahead lane to Moneenageisha Road while the other is a left turn lane to College Road. The existing right turn lanes on the Dublin Road into the Wellpark Retail Park and to Wellpark Road at the Moneenageisha junction are to be removed. At the Moneenageisha Junction a bus gate is proposed on the inbound bus lane to provide priority for buses entering the junction.

The outbound bus lane will begin at the Moneenageisha junction, fully separated from the general traffic lanes. To provide adequate access, 3 no. new bus stops, 2 no. outbound and 1 no. inbound are proposed, with associated bus shelters.

7.6.3 Cycling Provision

Inbound and outbound raised adjacent cycle lanes will be alongside the proposed bus lanes. Cycle facilities will require localised treatments at accesses to the Huntsman and to the G Hotel. The proposed bus lanes and cycle lanes will tie back into the existing Dublin Road alignment approximately 160m east of the junction at Moneenageisha.

7.6.4 Pedestrian Provision

A new toucan crossing, to the west of the entrance to the Wellpark Retail Park is proposed, connecting the Lough Atalia Pathway and the Retail Centre.

7.6.5 Drainage and Utility Services Impacts

The proposed scheme will include the installation of a new storm drainage network along sections of Dublin Road in order to facilitate drainage of the proposed road widening. This network will outfall to the existing drainage network, via 3 no. new petrol interceptors and flow control structures. A new section of drainage network is also proposed along the widened footway section within the Lough Atalia park.

7.6.6 Land Use and Accommodation

The Proposed Scheme continues along the R338 Dublin Road to the end of the proposed corridor at the entrance to the Brothers of Charity. This section of the scheme includes Enterprise, Light Industry and Commercial Lands at the Huntsman Inn the G Hotel / Wellpark Retail Park, residential zoned lands at Sáilín, Community, Cultural and institutional lands at the Brothers of Charity and recreational and amenity lands at the green areas along the remainder of the Dublin Road.

Permanent land take is required within this section to facilitate:

- Widening of Dublin Road at the Huntsman Inn;
- Widening of Dublin Road at the green area along Dublin Road containing an existing billboard; and

- Widening of Dublin Road at Brothers of Charity.

Temporary land take is required within this section to facilitate:

- Raised table entry treatment at the entrance to The Huntsman Inn; and
- Raised table entry treatment at the entrance to Wellpark Retail Park.

7.7 Fairgreen Road

7.7.1 Overview of Infrastructure Modifications

The interventions proposed are summarised as follows:

- Footpath replacement;
- New controlled pedestrian crossing; and
- Entry treatments at entrances.

7.7.2 Bus Provision and General Vehicular Impacts

The exiting two-way vehicle operation of Fairgreen Road is proposed to be retained. As Fairgreen Road intersects with the Cross-City Link at Forster Street and College Road, access onto the Cross-City Link will not be required for most traffic. The length of the right turn lane from Fairgreen Road to College Road is proposed to be reduced and the left slip lane from Fairgreen Road onto Forster Street will be removed.

Existing set-down areas in front of Galway Coach Station are proposed to be realigned and retained. The existing taxi rank is also proposed to be retained together with the loading bay on Fairgreen Road.

7.7.3 Cycling Provision

Improvements to cycle infrastructure are not proposed.

7.7.4 Pedestrian Provision

Entrances to the Galmont Hotel, Ceannt Station and Fairgreen House car park are proposed to be realigned with tighter radii and raised entry treatment provided. Concrete sett paving is proposed across the exit from Galway Coach Station.

All footpath on Fairgreen Road will be replaced with a concrete paving surface and granite kerbs. A new controlled pedestrian crossing is proposed in front of Fairgreen House, connecting Ceannt Station and Galway Coach Station.

7.7.5 Land Use and Accommodation

The Inner-City Access Route section of the Proposed Scheme continues along Fairgreen Road to its junction with Lough Atalia Road. This street is entirely

zoned for city centre uses and currently has development including a coach station, car-parks hotel and office.

No permanent land take is required through this section to facilitate the scheme, as all lands are in the ownership or control of Galway City Council.

Temporary land take is required within this section to facilitate:

- Raised table entry treatment at the entrance to the Galmont Hotel; and
- Raised table entry treatment at the entrance to Fairgreen House.

7.8 Bóthar Uí Eithir and Prospect Hill

7.8.1 Overview of Infrastructure Modifications

- Bóthar Uí Eithir and Prospect Hill to be converted to two-way;
- Junction of Bóthar Uí Eithir and Prospect Hill to be signalised;
- Footpath to be widened;
- Entry treatment provision;
- Relocation of bike share station; and
- Land acquisition.

7.8.2 Bus Provision and General Vehicular Impacts

Due to the creation of a two-way route along the Cross-City Link on Eyre Square East and Forster Street, the current one-way circulatory system around Bóthar Uí Eithir, Forster Street, Eyre Square East and Prospect Hill will no longer be operational.

In order to main access along the Inner-City Access Route, Bóthar Uí Eithir and Prospect Hill (between Bóthar na mBan and Bohermore) will both become two-way streets for all traffic. On Bóthar Uí Eithir, the existing 3 lanes width will be maintained. From the entrance to the Forster Court residential development to the junction with Prospect Hill, there will be two traffic lanes travelling towards Prospect Hill and one traffic lane travelling towards Fairgreen Road. From the entrance to Forster Court residential development to the junction with Fairgreen Road, there will be one traffic lane travelling towards Prospect Hill, one traffic lane travelling towards Fairgreen Road and one bus lane travelling towards Fairgreen Road. This bus lane will be a right turn lane towards Forster Street, as this facilitates permitted vehicles to enter onto the Cross-City Link.

The junction of Bóthar Uí Eithir, Prospect Hill and Bohermore will be signalised with controlled pedestrian crossings on all arms of the junction. A shared left turn and right turn lane is proposed on the Bóthar Uí Eithir approach to the junction while a single lane approach is proposed from Bohermore and Prosect Hill.

Prospect Hill is proposed to become a two-way route from the junction with Bóthar na mBan through to its junction with Bohermore and Bóthar Uí Eithir. This section of Prospect Hill forms part of the Inner-City Access Route and will provide a two-way route connecting Headford Road with Lough Atalia Road.

The Prospect Hill/Bóthar na mBan junction will be realigned to ensure that the route from Bóthar na mBan to Prospect Hill and through to Bóthar Uí Eithir will be the priority route with Prospect Hill (to and from Eyre Square) becoming the minor arm. This will require realignment works at this junction to facilitate two-way traffic flow on the major arms. A raised entry treatment across the minor arm (Prospect Hill to Eyre Square) is also proposed.

7.8.3 Cycling Provision

It is proposed to relocate the existing bike share station from its current location on Prospect Hill to a location within the central island of this area. No segregated cycle lanes are to be provided.

Cyclists turning right onto Forster Street from Bóthar Uí Eithir can use the bus lane, which will make waiting at the junction safer, due to reduced traffic. No segregated cycle lanes are to be provided.

7.8.4 Pedestrian Provision Impacts

The existing footpath on the western side of Bóthar Uí Eithir will be widened between the Forster Court entrance and Prospect Hill. An entry treatment is proposed across the entrance to the Forster Court residential development and new concrete sett paving proposed across the existing entrance to St. Patrick's Church.

All footpath on Bóthar Uí Eithir will be replaced with a concrete paving surface and granite kerbs.

7.8.5 Land Use and Accommodation

The Inner-City Access Route section of the Proposed Scheme continues along Prospect Hill and Bóthar Ui Eithir. The Prospect Hill section and a partial section of Bóthar Uí Eithir are zoned for city centre uses. St. Patrick's Church, which fronts onto Bóthar Ui Eithir is zoned for Community, Cultural and institutional lands. The corner of Bóthar Ui Eithir with Bohermore is zoned for Enterprise, Light Industry and Commercial use while the corner of Bóthar Ui Eithir and College Road has a residential use designation.

No permanent land take is required through this section to facilitate the scheme, as all lands are in the ownership or control of Galway City Council.

Temporary land take is required within this section to facilitate a raised table entry treatment at the entrance to Forster Court.

7.9 Bóthar Na mBan / St. Brendan's Avenue / R866 Headford Road / Dyke Road

7.9.1 Overview of Infrastructure Modifications

The interventions proposed are summarised as follows:

- Installation of new footpath;
- Widening of existing footpath;
- Acquisition and demolition of 2 no. residential properties and adjoining laneway;
- New controlled pedestrian crossing;
- Entry treatments.
- Creation of a one-way circulatory system;
- Installation of a contra-flow bus lanes;
- Installation of a two-way cycle track;
- Signalisation of two junctions;
- Land acquisition; and
- New drainage network.

7.9.2 Bus Provision and General Vehicular Impacts

Bóthar na mBan, which forms part of the Inner-City Access Route, is proposed to be retained as a two-way street for all vehicles. At its junction with Prospect Hill, the road will be realigned in order to make the Inner-City Access Route as the priority route. As Bóthar na mBan approaches the Headford Road, the street becomes St. Brendan's Avenue. At its junction with Headford Road, all traffic will be required to continue straight ahead onto Dyke Road or turn left towards Woodquay.

The existing alignment of Bóthar na mBan / St. Brendan's Avenue as it approaches Headford Road, has a 'swan-neck' arrangement as it travels past St. Brendan's Avenue junction, with a sharp right turn followed by a sharp left turn alignment. Between St. Brendan's Avenue and Headford is a narrow footpath on the eastern side of 1.2m width, which is further restricted due to the presence of utility poles, leaving a passable width of 600m along the footpath. On the western side of the road, there is also an existing 1.2m wide footpath, however, this path is discontinuous, whereby over a distance of approximately 23m, there is no footpath present.

This section of Bóthar na mBan / St. Brendan's Avenue has residential properties directly fronting both sides of the road, with 2 no. residential properties on the western side and 5 no. residential properties on the eastern side. The overall cross-section of this portion of Bóthar na mBan / St. Brendan's Avenue is approximately 8.1m.

The junction of the Headford Road and Dyke Road is the location where the Inner-City Access Road intersects the proposed blue bus route as identified in the GTS. The blue route travels over the Salmon Weir Bridge, along Walsh's Terrace and onto the Headford Road, while the Inner-City Access Route travels in along the Headford Road and turns onto Bóthar na mBan.

It is proposed to amend the operation of the Headford Road / Dyke Road into a one-way circulatory system, with three signal controlled junctions. Traffic will be permitted to travel inbound on the Headford Road from its junction with St. Bridget's Place to Bóthar na mBan. Traffic will be permitted to travel outbound only on Dyke Road, from its junction with Bóthar na mBan to its junction at the corner of the Dyke Road car park. Traffic will be permitted to travel from this junction, towards the St. Bridget's Place junction only as the third side of the triangle. Each of these three arms of the circulatory will have 2 no. traffic lanes.

On Headford Road, an outbound contra-flow bus lane is proposed from its junction with Bóthar na mBan to its junction with St. Bridget's Place.

Along the Dyke Road, between the entrance to the Plots and its junction at the corner of the Dyke Road car park, a segregated two-way cycle track is proposed. This will provide connectivity between Dyke Road and Headford Road, or an alternative quiet route via the Plots and Walsh's Terrace / Waterside.

The existing junction of St. Bridget's Place / Headford Road Dyke Road and the existing junction of Dyke Road / Dyke Road (at the corner of the Dyke Road car park) are both proposed to be signalised, incorporating controlled pedestrian crossings.

The one-way configuration will require the realignment of Dyke Road in a section of the existing Dyke Road car park and the provision of the two-way cycle track will require the widening of the road into the green area at The Plots. A raised entry treatment is proposed across the entrance to The Plots.

7.9.3 Cycling Provision

Full bus priority on the section of Headford Road will enable safer and more efficient cycling in the inbound and outbound, due to traffic calming effects.

Dyke Road (northbound section) contains a segregated contraflow cycle track, catering for both inbound and outbound routes.

7.9.4 Pedestrian Provision

The scheme proposes to provide a continuous footpath of minimum 2.0m width on both sides of the road.

Raised entry treatments are proposed across the junctions with Bóthar Irwin and St. Brendan's Avenue and stone sett paving is proposed across the entrance to the Corrib Shopping Centre car park.

A new footpath is proposed on the eastern side of Dyke Road outbound. The footpaths along the Headford Road will be replaced with a concrete paving surface and granite kerbs. While the footpaths on Dyke Road will be replaced with in-situ concrete and precast concrete kerbs.

7.9.5 Land Use and Accommodation

The Inner-City Access Route section of the Proposed Scheme proposes alterations to the existing street network on Bóthar na mBan and St. Brendan's Avenue. St. Brendan's Avenue and a small section of Bóthar na mBan are residential development. The remainder of Bóthar na mBan is zoned for city centre uses and is currently developed with County Hall and the Corrib Shopping Centre and car park and a retail development.

Permanent land take is required within this section to facilitate:

- Widening of St. Brendan's Avenue requiring acquisition of 20 St. Brendan's Avenue;
- Widening of St. Brendan's Avenue requiring acquisition of 5/6 Headford Road;
- Realignment Bóthar na mBan onto Prospect Hill at County Hall; and
- Realignment of the junction of Bóthar Irwin with Bóthar na mBan.

7.10 Woodquay / Walsh's Terrace / Daly's Place / Mary St.

7.10.1 Overview of Infrastructure Modifications

The interventions proposed are summarised as follows:

- Woodquay to become one-way only southbound;
- Daly's Place to become one-way only westbound;
- St. Anthony's Place to become one-way only westbound;
- No entry from St. Anthony's Place to Court Lane;
- Removal of on-street parking and creation of public space;
- Relocated bus stops and shelters;
- Raised tables and entry treatment;

- Contra-flow cycle track along Woodquay northbound;
- Toucan crossing on R866; and
- New drainage network.

7.10.2 Bus Provision and General Vehicular Impacts

Due to the Cross-City Link on St. Francis Street, St. Vincent's Avenue and over the Salmon Weir bridge, amendments to the adjoining streets are necessary to maintain access and remove through routes. Two-way traffic will be permitted along the R866 (Headford Road / Walsh's Terrace) between the Bóthar na mBan junction and the Corrib Terrace junction. At this location a bus lane will be installed on St. Vincent's Avenue from Corrib Terrace to the St. Francis Street junction to join the Cross-City Link.

Inbound traffic on the R866 can access Corrib Terrace, Waterside and Woodquay. Woodquay will be altered to a one-way traffic route southbound, with an adjoining contra-flow cycle track. At the Daly's Place junction, vehicles can turn left onto Eyre Street and onto Bóthar Irwin or turn right onto Daly's Place and onto St. Francis Street, maintaining access but removing through routes.

44 no. existing parking spaces at Woodquay are proposed to be removed and replaced with a public plaza incorporating urban landscaping. 22 no. on street parking spaces are proposed to be retained to facilitate local requirements.

7.10.3 Cycling Provision

Virtual bus priority and full bus priority along Walsh's Terrace and St. Vincent's Avenue will enable safer and more efficient cycling in the inbound and outbound travel lanes, due to traffic calming effects. A segregated cycle lane is also to be provided in the outbound direction along Woodquay.

7.10.4 Pedestrian Provision

A raised table is proposed on the R866, extending onto Woodquay, incorporating the junctions with Walsh's Terrace, Corrib Terrace and St. Brendan's Avenue. A raised entry treatment is proposed at Woodquay junction with Eyre Street.

A new toucan crossing is proposed on the R866, connecting Woodquay with Corrib Terrace. The existing bus stops and associated bus shelters on the R866 are proposed to be relocated.

The footpaths and paved areas along the Headford Road, St. Vincent's Terrace, Woodquay, Daly's Place and Mary Street will be replaced with a concrete paving surface and granite kerbs.

7.10.5 Land Use and Accommodation

The Proposed Scheme include alterations to the existing street network from Dyke Road to Mary Street via Woodquay. This section of the scheme includes residential development along Walsh's Terrace and parts of Woodquay. The remainder of Woodquay, Daly's Place and Mary Street as zoned for City Centre uses. There is one section of the routes zoned for Enterprise, Light Industry and Commercial Lands at the corner of Woodquay and the Headford Road.

No permanent or temporary land take is required through this section to facilitate the scheme, as all lands are in the ownership or control of Galway City Council.

7.11 Forthill St. / Merchants Road / Queen St.

7.11.1 Overview of Infrastructure Modifications

The interventions proposed are summarised as follows:

- Realignment of road priority from Merchants Road onto Forthill Street;
- Realignment of road priority from Forthill Street onto Dock Road;
- Footpath widening;
- Controlled pedestrian crossings;
- Entry treatment; and
- Car parking amendments.

7.11.2 Bus Provision and General Vehicular Impacts

Merchants Road, Forthill Street and Dock Road form part of the City Centre Access Network. With the creation of the Cross-City Link, through traffic will no longer be permitted via Eyre Square from Merchants Road. Local access will remain for vehicles to access St. Patrick's Avenue, Frenchville Lane, Ceannt Station, Queen Street etc. All non-local access traffic will be required to utilise the City Centre Access Network (CCAN). There are currently two-lanes on Merchants Road and it is proposed that both of these lanes continue onto Forthill Street and onto Dock Road as part of the CCAN.

At the junction of Merchants Road with Forthill Street, the primary route for vehicles will be amended so that both lanes continue onto Forthill Street, with Merchants Road towards Eyre Square becoming the minor arm of the junction. Similarly, at the Junction of Forthill Street with Dock Road, both vehicle lanes from Forthill Street will continue onto Dock Road, with Queen Street being the minor arm of this junction. These will tie-in to the recently constructed footpaths and road fronting the Bonham Quay development.

Existing on-street parking along Forthill Street is proposed to be converted from perpendicular parking to parallel. A new bus stop and associated shelter is proposed on Merchants Road, between Forthill Street and Victoria Place, with loading and taxi ranks retained.

7.11.3 Cycling Provision

No segregated cycle lanes or cycle priority are to be provided on this part of the scheme.

7.11.4 Pedestrian Provision

Raised entry treatments are proposed at the junctions of Merchants Road and Forthill Street, Merchants Road and Victoria Place and Queen Street and Forthill Street. Controlled signalised crossings are proposed on Forthill Street at both the Merchants Road end and at the Dock Road end. Footpath widening is proposed on Forthill Street and on Merchants Road between Forthill Street and Victoria Place.

All footpaths on Merchants Road (between Forthill Street and Victoria Place), on Forthill Street and on Victoria Place (between Merchants Road and Queen Street) will be replaced with stone paving surface.

7.11.5 Land Use and Accommodation

The Proposed Scheme includes the connection between the Cross-City Link at Eyre Square and the City Centre Access Network at Merchants Road / Forthill Street. All of this section is zoned for city centre uses, with the exception of the United Methodist Presbyterian Church which is zoned as Community, Cultural and Institutional.

No permanent land take is required through this section to facilitate the scheme, as all lands are in the ownership or control of Galway City Council.

Temporary land take is required within this section to facilitate the Proposed Scheme tie-in with Dock Road.

8 Next Steps

This report has identified a Preferred Option for the bus infrastructure along the Cross-City Link, part of the Inner-City Access Route and surrounding streets for which an updated concept design has been developed.

The next project stage (the development of a Preliminary Design) will further refine and update the concept design along the route. The Preliminary Design will define the final practically-achievable scheme for the Cross-City Link, considering more detailed studies of constraints, impacts and environmental assessment required at a local level.

This Preliminary Design will form the basis of the planning consent process for the scheme, which will require a development consent application to be made directly to An Bord Pleanála, due to the nature and extent of the proposed works.

BusConnects Galway Cross City Link (University Road to Dublin Road)

August 2022

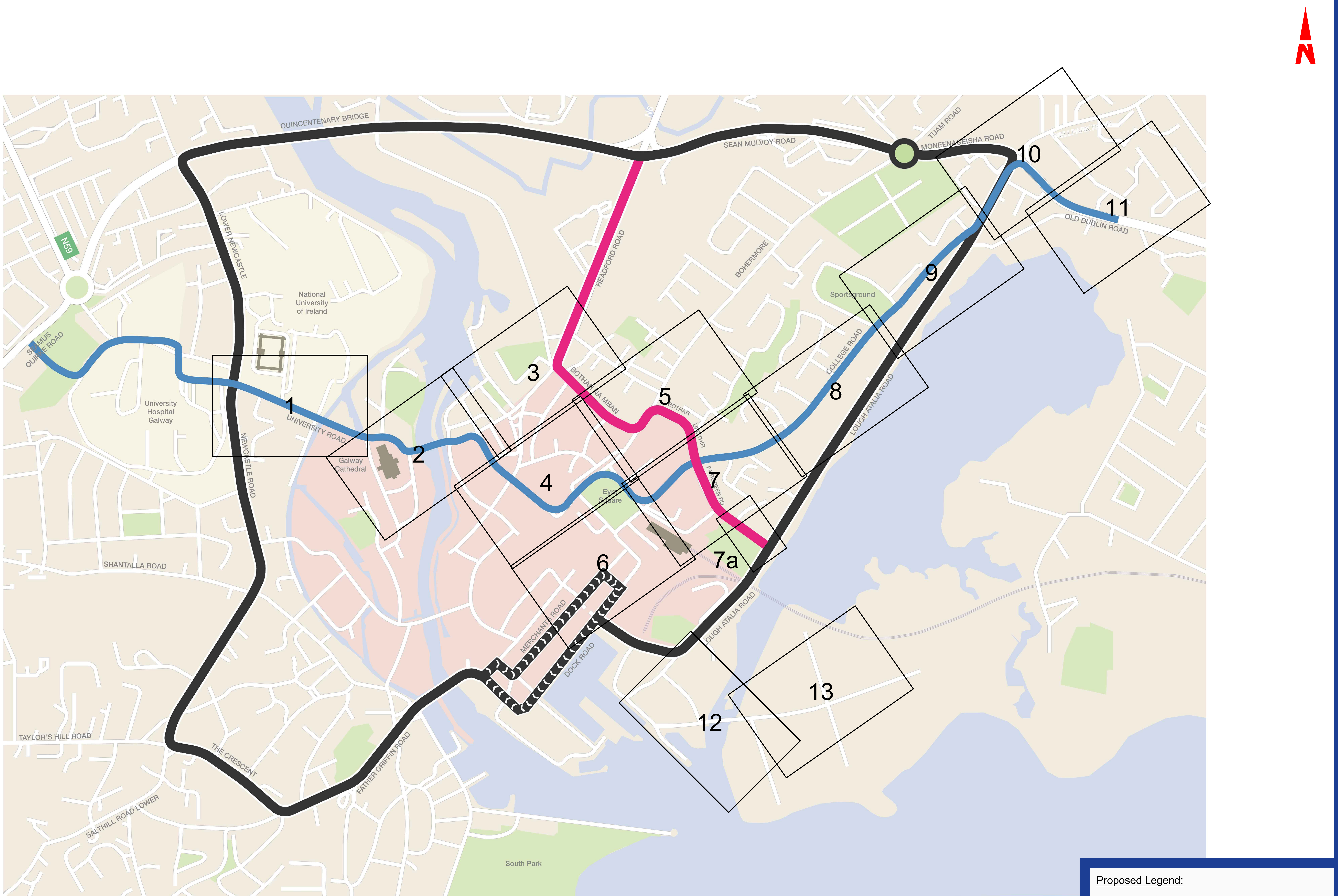
Options Assessment Report

Appendices

BUS CONNECTS GALWAY

SUSTAINABLE TRANSPORT FOR A BETTER CITY.

Appendix A
General Arrangement Drawings



Proposed Legend:

- Cross City Bus Priority Link
- City Centre Access Network
- Inner City Access Route

Figure 4.2 - Refer to Galway Transport Strategy Report

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NTA
Údarás Náisiúnta Iompair
National Transport Authority

Rev	Date	By	Chkd	Appd
PL01	31/08/22	BM	BB	DMcD
	Issue for Planning			

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Client
Galway City Council

Project Title
BusConnects Galway:
Cross-City Link
(University Road to Dublin Road)

Drawing Title
General Arrangement
Keyplan

Scale at A1	NTS
Role	Transport Infrastructure
Suitability	Planning
Arup Job No	253352-00
Rev	PL01
Name	BCG-GA-00-00

Do not scale

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EXISTING SIGN TO BE REPLACED

EXISTING SIGN TO BE REPLACED

EXISTING SIGN TO BE REPLACED

PROPOSED SCHEME

Tie in to existing

University Road

EXISTING FOOTPATH TO BE WIDENED

NUI Galway Main Entrance

President's Lawn

PROPOSED RAISED ENTRY TREATMENT WITH TACTILE PAVING

PROPOSED SIGNALISED PEDESTRIAN CROSSING WITH TACTILE PAVING

EXISTING FOOTPATH TO BE WIDENED AND LANDSCAPED AREA TO BE INCORPORATED

EXISTING PHONE BOX TO BE RETAINED

LANE WIDTHS OF 3m TO BE MAINTAINED

EXISTING KERBS TO BE REALIGNED TO PROVIDE WIDER FOOTPATHS

NUI Galway Entrance

PROPOSED RAISED TABLE WITH TACTILE PAVING

Eglington Canal

National University of Ireland Galway

University Park

Canal Road Upper

Millennium Children's Park

Beggars Bridge

SHEET 01

SHEET 02

NOTES:

1. ADDITIONAL PROPOSED SCHEME INFORMATION IS AVAILABLE ON THE DRAWING SERIES PROVIDED WITHIN VOLUME III OF THE ENVIRONMENTAL IMPACT ASSESSMENT REPORT (EIAR).
2. WHERE PROPERTY LINE ADJUSTMENTS ARE PROPOSED, NEW BOUNDARY WALLS ARE TO MATCH THE EXISTING UNLESS OTHERWISE DETERMINED IN CONSULTATION WITH THE LANDOWNER

LEGEND:

- EXISTING KERB LINE
- BUS LANE
- BUS ONLY ROUTE AHEAD
- CYCLE TRACK
- FOOTPATH
- ENHANCED PAVING
- PEDESTRIAN PLAZA
- MODIFIED ISLAND
- SHARED SPACE
- RAISED TABLE ADJACENT CYCLE TRACK
- PARKING / TAXI BAYS
- LOADING BAYS
- CARRIAGEWAY
- GRASS AREA / VERGE
- BUS STOP LOCATIONS
- BUS SHELTER
- TREE (EXISTING AND PROPOSED)
- TREE TO BE REMOVED
- HERITAGE FEATURES
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

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www.arup.ie

Client: Galway City Council

Project Title: BusConnects Galway: Cross-City Link (University Road to Dublin Road)

Drawing Title: General Arrangement

Sheet 01 of 13

Scale at A1	1:500 @ A1 (1:1000 @ A3)
Role	Transport Infrastructure
Suitability	Planning
Arup Job No	253352-00
Rev	PL01
Name	BCG-GA-00-01

Do not scale

0 5.0 10.0 20.0 30.0 40.0 50.0m
SCALE 1:500 @ A1; 1:1000 @ A3
SHEET 01
SHEET 02
EXISTING KERBS TO BE REALIGNED
University Road
Goal Road
GAOL ROAD TO BE CONVERTED TO A TWO-WAY TRAFFIC ROUTE
PROPOSED RAISED JUNCTION WITH TACTILE PAVING
PROPOSED BUS GATE
Canal
Earl's Island
EXISTING BIKE SHARE DOCKING STATION TO BE RETAINED
RIVER CORRIB
PROPOSED BUS ONLY ROUTE
Galway Cathedral
Poor Clare's Convent
EXISTING BUS STANDS TO BE REMOVED
FOOTPATH ON THE SOUTHERN SIDE OF BRIDGE TO BE REMOVED AND 1.8m WIDE FOOTPATH TO BE PROVIDED ON THE NORTHERN SIDE
PROPOSED PAVED PEDESTRIAN AREA
PROPOSED BUS ONLY ROUTE
B GEO_CS-0001
Salmon Weir Bridge
PROPOSED RAISED SIGNALISED PEDESTRIAN CROSSING WITH TACTILE PAVING
PROPOSED ISLAND WITH CONTROLLED PEDESTRIAN CORSSINGS
PROPOSED PUBLIC REALM IMPROVEMENT SEE LANDSCAPE ARCHITECT'S DRAWING FOR DETAILS
Salmon Weir Bridge
REALIGNED AND IMPROVED PEDESTRIAN FACILITIES
Court House
Town Hall
CAR PARK ACCESS / EGRESS
PROPOSED BUS SET-DOWN & PICK UP ONLY FACILITY (9No EXISTING SPACES) (14No. PROPOSED SPACES)
B GEO_CS-0001
Proposed Salmon Weir Pedestrian and Cycle Bridge
SHEET 02
SHEET 03
EXISTING PARKING TO BE REDESIGNED (165 No. EXISTING SPACES) (49 No. PROPOSED SPACES)
Saint Vincent's Ave.
EXISTING STONE KERBS TO BE RETAINED
PROPOSED BUS ONLY LANE OUTBOUND
C GEO_CS-0001
C GEO_CS-0001
NEWTOWNSMITH TO BE CONVERTED TO PEDESTRIANISED SPACE WITH CONTROLLED ACCESS
PROPOSED BIKE PARKING
PROPOSED SHELTERED AREA TO BE PROVIDED
PROPOSED BOLLARD CONTROLLED ACCESS
EXISTING BIKE SHARE DOCKING STATION TO BE RETAINED
Cathedral Car Park
DISABLED PARKING TO BE MAINTAINED AT 7 SPACES
Saint Francis Street
Saint Francis Church
Court Lane
Canal
Newtownsmith
EXISTING MONUMENT TO BE RETAINED
SHEET 02
LEGEND:
EXISTING KERB LINE
BUS LANE
BUS ONLY ROUTE AHEAD
CYCLE TRACK
FOOTPATH
ENHANCED PAVING
PEDESTRIAN PLAZA
MODIFIED ISLAND
SHARED SPACE
RAISED TABLE ADJACENT CYCLE TRACK
PARKING / TAXI BAYS
LOADING BAYS
CARRIAGEWAY
GRASS AREA / VERGE
BUS STOP LOCATIONS
BUS SHELTER
TREE (EXISTING AND PROPOSED)
TREE TO BE REMOVED
HERITAGE FEATURES
SITE BOUNDARY LINE
TEMPORARY LAND ACQUISITION

NOTES:

1. ADDITIONAL PROPOSED SCHEME INFORMATION IS AVAILABLE ON THE DRAWING SERIES PROVIDED WITHIN VOLUME III OF THE ENVIRONMENTAL IMPACT ASSESSMENT REPORT (EIAR).
2. WHERE PROPERTY LINE ADJUSTMENTS ARE PROPOSED, NEW BOUNDARY WALLS ARE TO MATCH THE EXISTING UNLESS OTHERWISE DETERMINED IN CONSULTATION WITH THE LANDOWNER

NTA
Údarás Náisiúnta Iompair
National Transport Authority

Rev	Date	By	Chkd	Appd
PL01	31/08/22	BM	BB	DMcD
	Issue for Planning			

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Client
Galway City Council

Project Title
BusConnects Galway:
Cross-City Link
(University Road to Dublin Road)

Drawing Title
General Arrangement

Sheet 02 of 13

Scale at A1: 1:500 @ A1 (1:1000 @ A3)
Role: Transport Infrastructure
Suitability: Planning
Arup Job No: 253352-00
Rev: PL01
Name: BCG-GA-00-02

Do not scale

NOTES:

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2. WHERE PROPERTY LINE ADJUSTMENTS ARE PROPOSED, NEW BOUNDARY WALLS ARE TO MATCH THE EXISTING UNLESS OTHERWISE DETERMINED IN CONSULTATION WITH THE LANDOWNER

LEGEND:

- EXISTING KERB LINE
- BUS LANE
- BUS ONLY ROUTE AHEAD
- CYCLE TRACK
- FOOTPATH
- ENHANCED PAVING
- PEDESTRIAN PLAZA
- MODIFIED ISLAND
- SHARED SPACE
- RAISED TABLE ADJACENT CYCLE TRACK
- PARKING / TAXI BAYS
- LOADING BAYS
- CARRIAGEWAY
- GRASS AREA / VERGE
- BUS STOP LOCATIONS
- BUS SHELTER
- TREE (EXISTING AND PROPOSED)
- TREE TO BE REMOVED
- HERITAGE FEATURES
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

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b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

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d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the GCC as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus. The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superseded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

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National Transport Authority

Rev	Date	By	Chkd	Appd
PL01	31/08/22	BM	BB	DMcD
	Issue for Planning			

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Client
Galway City Council

Project Title
BusConnects Galway: Cross-City Link (University Road to Dublin Road)

Project Ireland 2040

Drawing Title
General Arrangement
Sheet 03 of 13

Scale at A1: 1:500 @ A1 (1:1000 @ A3)
Role: Transport Infrastructure
Suitability: Planning
Arup Job No: 253352-00
Rev: PL01
Name: BCG-GA-00-03

Do not scale

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SHEET 02
SHEET 04
SHEET 03
SHEET 04
PROPOSED RAISED ENTRY TREATMENT WITH TACTILE PAVING
PROPOSED SIGNALISED PEDESTRIAN CROSSING WITH TACTILE PAVING
Méan Scoil Mhuire
Saint Francis Street
Wood Quay
Saint Brendan's Ave.
PROPOSED RAISED ENTRY TREATMENT WITH TACTILE PAVING
Corrib Centre Car Park
PROPOSED SIGNALISED JUNCTION AND PEDESTRIAN CROSSINGS WITH TACTILE PAVING
Daly's Place
Eyre Street
Mary's Street
RELOCATED DISABLED PARKING
Bóthar Irwin
Bóthar Irwin
EXISTING LOADING BE REAL
ACCESS CONTROLLED WITH RETRACTABLE BOLLARDS
PROPOSED SERVICE ACCESS ONLY DURING PERMITTED HOURS
PROP PEDES WITH
PROPOSED INBOUND BUS ONLY ROUTE
Eglinton Street
Upper Abbeygate Street
EXISTING BIKE SHARE DOCKING STATION TO BE RELOCATED
PROPOSED BIKE SHARE DOCKING STATION
EXISTING BUS SHELTER TO BE REMOVED
SHEET 04
SHEET 05
FOOTPATH TO BE WIDENED AND LOADING BAY TO BE INCORPORATED INTO WALKWAY.
GEO_CS-0002
GEO_CS-0002
PROPOSED PUBLIC REALM MPROVEMENTS. SEE LANDSCAPE ARCHITECT'S DRAWINGS FOR DETAILS
Galway General Post Office
Prospect Hill
PROPOSED FOOTPATH WIDENING
PROPOSED RAISED TABLE
EXISTING BUS SHELTERS TO BE RETAINED
IMPROVED PEDESTRIAN CROSSING
PROPOSED BOLLARD CONTROLLED SERVICE ACCESS ONLY
Williamsgate Street
LOADING BAY INCORPORATED INTO WALKWAY
PROPOSED KERB REALIGNMENT
PROPOSED BUS ONLY LANE INBOUND
PROPOSED RAISED ENTRY TREATMENT WITH TACTILE PAVING
William Street
Eyre Square
Saint Patrick's Ave.
0 5.0 10.0 20.0 30.0 40.0 50.0m
SCALE 1:500 @ A1; 1:1000 @ A3
SHEET 04
SHEET 06

NOTES:

1. ADDITIONAL PROPOSED SCHEME INFORMATION IS AVAILABLE ON THE DRAWING SERIES PROVIDED WITHIN VOLUME III OF THE ENVIRONMENTAL IMPACT ASSESSMENT REPORT (EIAR).
2. WHERE PROPERTY LINE ADJUSTMENTS ARE PROPOSED, NEW BOUNDARY WALLS ARE TO MATCH THE EXISTING UNLESS OTHERWISE DETERMINED IN CONSULTATION WITH THE LANDOWNER

LEGEND:

- EXISTING KERB LINE
- BUS LANE
- BUS ONLY ROUTE AHEAD
- CYCLE TRACK
- FOOTPATH
- ENHANCED PAVING
- PEDESTRIAN PLAZA
- MODIFIED ISLAND
- SHARED SPACE
- RAISED TABLE ADJACENT CYCLE TRACK
- PARKING / TAXI BAYS
- LOADING BAYS
- CARRIAGEWAY
- GRASS AREA / VERGE
- BUS STOP LOCATIONS
- BUS SHELTER
- TREE (EXISTING AND PROPOSED)
- TREE TO BE REMOVED
- HERITAGE FEATURES
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

Údarás Náisiúnta Iompair
National Transport Authority

Rev	Date	By	Chkd	Appd
PL01	31/08/22	BM	BB	DMcD
	Issue for Planning			

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Client
Galway City Council

Project Title
BusConnects Galway:
Cross-City Link
(University Road to Dublin Road)

Drawing Title
General Arrangement
Sheet 04 of 13

Scale at A1: 1:500 @ A1 (1:1000 @ A3)
Role: Transport Infrastructure
Suitability: Planning
Arup Job No: 253352-00
Rev: PL01
Name: BCG-GA-00-04

Do not scale

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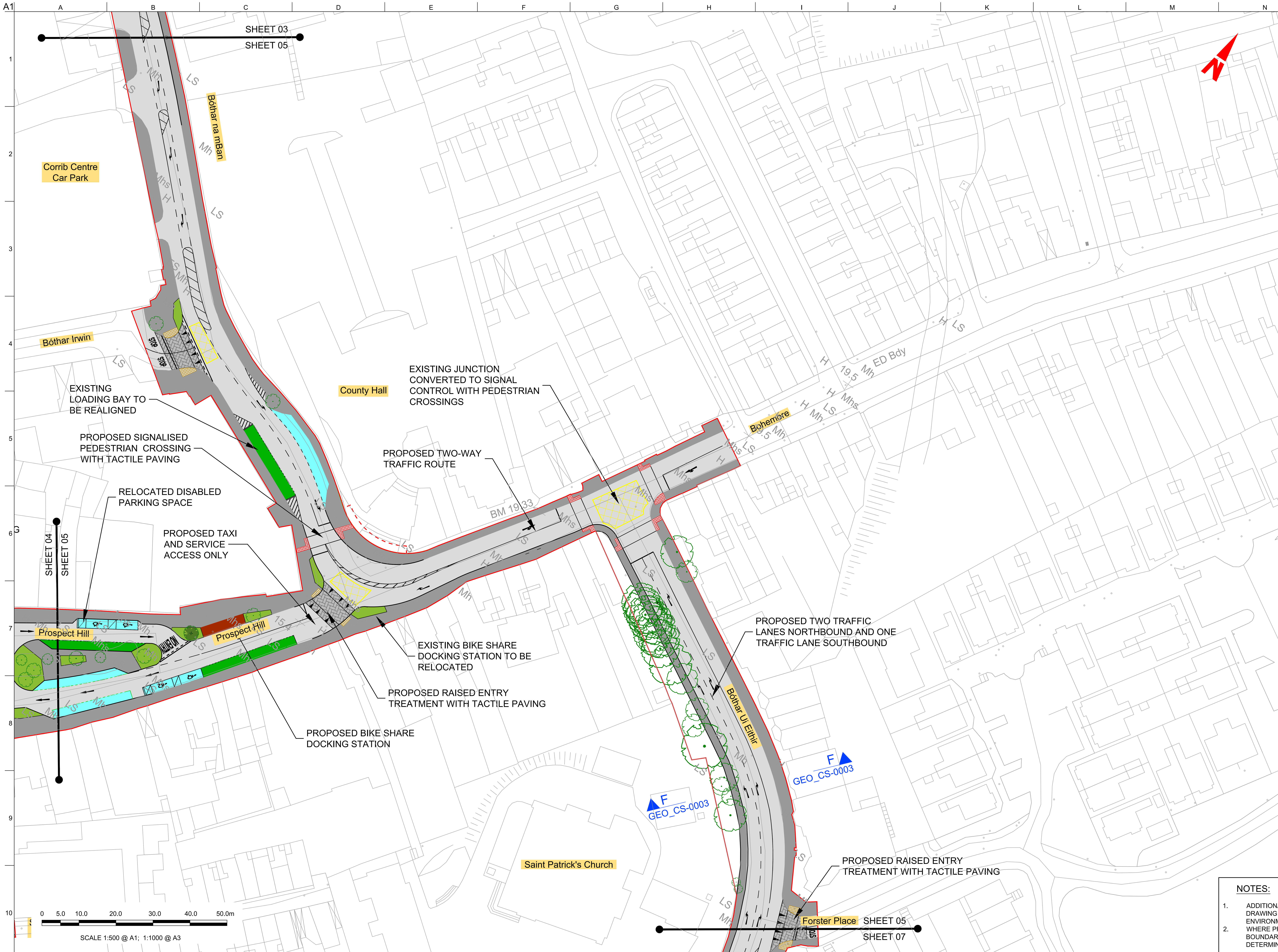

LEGEND:

- EXISTING KERB LINE
- BUS LANE
- BUS ONLY ROUTE AHEAD
- CYCLE TRACK
- FOOTPATH
- ENHANCED PAVING
- PEDESTRIAN PLAZA
- MODIFIED ISLAND
- SHARED SPACE
- RAISED TABLE ADJACENT CYCLE TRACK
- PARKING / TAXI BAYS
- LOADING BAYS
- CARRIAGEWAY
- GRASS AREA / VERGE
- BUS STOP LOCATIONS
- BUS SHELTER
- TREE (EXISTING AND PROPOSED)
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- HERITAGE FEATURES
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

NOTES:

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Údarás Náisiúnta Iompair
National Transport Authority

PL01	31/08/22	BM	BB	DMcD
	Issue for Planning			
Rev	Date	By	Chkd	Appd

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Client
Galway City Council

Project Title
BusConnects Galway:
Cross-City Link
(University Road to Dublin Road)

Drawing Title
General Arrangement

Sheet 05 of 13

Scale at A1: 1:500 @ A1 (1:1000 @ A3)
Role: Transport Infrastructure
Suitability: Planning
Arup Job No: **253352-00**
Rev: **PL01**
Name: **BCG-GA-00-05**

LEGEND:

- EXISTING KERB LINE
- BUS LANE
- BUS ONLY ROUTE AHEAD
- CYCLE TRACK
- FOOTPATH
- ENHANCED PAVING
- PEDESTRIAN PLAZA
- MODIFIED ISLAND
- SHARED SPACE
- RAISED TABLE ADJACENT CYCLE TRACK
- PARKING / TAXI BAYS
- LOADING BAYS
- CARRIAGEWAY
- GRASS AREA / VERGE
- BUS STOP LOCATIONS
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- TREE (EXISTING AND PROPOSED)
- TREE TO BE REMOVED
- HERITAGE FEATURES
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NOTES:

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Údarás Náisiúnta Iompair
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Rev	Date	By	Chkd	Appd
PL01	31/08/22	BM	BB	DMcD
	Issue for Planning			

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Client
Galway City Council

Project Title
BusConnects Galway:
Cross-City Link
(University Road to Dublin Road)

Drawing Title
General Arrangement
Sheet 06 of 13

Scale at A1: 1:500 @ A1 (1:1000 @ A3)
Role: Transport Infrastructure
Suitability: Planning
Arup Job No: 253352-00
Rev: PL01
Name: BCG-GA-00-06

Do not scale

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Rev	Date	By	Chkd	Appd
PL01	31/08/22	BM	BB	DMcD
	Issue for Planning			

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Client: Galway City Council

Project Title: BusConnects Galway: Cross-City Link (University Road to Dublin Road)

Drawing Title: General Arrangement

Sheet 07 of 13

Scale at A1: 1:500 @ A1 (1:1000 @ A3)

Role: Transport Infrastructure

Suitability: Planning

Arup Job No: 253352-00

Rev: PL01

Name: BCG-GA-00-07

Do not scale

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NOTES:

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2. WHERE PROPERTY LINE ADJUSTMENTS ARE PROPOSED, NEW BOUNDARY WALLS ARE TO MATCH THE EXISTING UNLESS OTHERWISE DETERMINED IN CONSULTATION WITH THE LANDOWNER

0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

LEGEND:

- EXISTING KERB LINE
- BUS LANE
- BUS ONLY ROUTE AHEAD
- CYCLE TRACK
- FOOTPATH
- ENHANCED PAVING
- PEDESTRIAN PLAZA
- MODIFIED ISLAND
- SHARED SPACE
- RAISED TABLE ADJACENT CYCLE TRACK
- PARKING / TAXI BAYS
- LOADING BAYS
- CARRIAGEWAY
- GRASS AREA / VERGE
- BUS STOP LOCATIONS
- BUS SHELTER
- TREE (EXISTING AND PROPOSED)
- TREE TO BE REMOVED
- HERITAGE FEATURES
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

Údarás Náisiúnta Iompair
National Transport Authority

Rev	Date	By	Chkd	Appd
PL01	31/08/22	BM	BB	DMcD
	Issue for Planning			

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Client
Galway City Council

Project Title
BusConnects Galway:
Cross-City Link
(University Road to Dublin Road)

Drawing Title
General Arrangement

Sheet 08 of 13

Scale at A1: 1:500 @ A1 (1:1000 @ A3)
Role: Transport Infrastructure
Suitability: Planning
Arup Job No: 253352-00
Rev: PL01
Name: BCG-GA-00-08

Do not scale

A1

LEGEND:

- EXISTING KERB LINE
- BUS LANE
- BUS ONLY ROUTE AHEAD
- CYCLE TRACK
- FOOTPATH
- ENHANCED PAVING
- PEDESTRIAN PLAZA
- MODIFIED ISLAND
- SHARED SPACE
- RAISED TABLE ADJACENT CYCLE TRACK
- PARKING / TAXI BAYS
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- GRASS AREA / VERGE
- BUS STOP LOCATIONS
- BUS SHELTER
- TREE (EXISTING AND PROPOSED)
- TREE TO BE REMOVED
- HERITAGE FEATURES
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

N

SHEET 08

SHEET 09

SHEET 10

Connacht Rugby Main Stand Gate

College Road

Loyola Park Entrance

Lough Atalia Road

Lough Atalia

Sand and Shingle

ED Bdy

GEO_CS-0004

GEO_CS-0004

EXISTING KERBS TO BE REALIGNED TO PROVIDE WIDER FOOTPATHS.

PROPOSED RAISED ENTRY TREATMENT WITH TACTILE PAVING

EXISTING BIKE SHARE DOCKING STATION TO BE RETAINED

PROPOSED ROAD WIDENING

HEDGEROW TO BE REMOVED AND REPLACED WITH HEDGEROW TO MATCH EXISTING

EXISTING KERBS TO BE REALIGNED TO PROVIDE WIDER FOOTPATHS. LANE WIDTHS OF 3m TO BE MAINTAINED

NOTES:

1. ADDITIONAL PROPOSED SCHEME INFORMATION IS AVAILABLE ON THE DRAWING SERIES PROVIDED WITHIN VOLUME III OF THE ENVIRONMENTAL IMPACT ASSESSMENT REPORT (EIAR).
2. WHERE PROPERTY LINE ADJUSTMENTS ARE PROPOSED, NEW BOUNDARY WALLS ARE TO MATCH THE EXISTING UNLESS OTHERWISE DETERMINED IN CONSULTATION WITH THE LANDOWNER

NTA Údarás Náisiúnta Iompair National Transport Authority

Rev	Date	By	Chkd	Appd
PL01	31/08/22	BM	BB	DMcD

Issue for Planning

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Client: Galway City Council

Project Title: BusConnects Galway: Cross-City Link (University Road to Dublin Road)

Drawing Title: General Arrangement

Sheet 09 of 13

Scale at A1	1:500 @ A1 (1:1000 @ A3)
Role	Transport Infrastructure
Suitability	Planning
Arup Job No	253352-00
Rev	PL01
Name	BCG-GA-00-09

NOTES:

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LEGEND:

- EXISTING KERB LINE
- BUS LANE
- BUS ONLY ROUTE AHEAD
- CYCLE TRACK
- FOOTPATH
- ENHANCED PAVING
- PEDESTRIAN PLAZA
- MODIFIED ISLAND
- SHARED SPACE
- RAISED TABLE ADJACENT CYCLE TRACK
- PARKING / TAXI BAYS
- LOADING BAYS
- CARRIAGEWAY
- GRASS AREA / VERGE
- BUS STOP LOCATIONS
- BUS SHELTER
- TREE (EXISTING AND PROPOSED)
- TREE TO BE REMOVED
- HERITAGE FEATURES
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

Údarás Náisiúnta Iompair
National Transport Authority

Rev	Date	By	Chkd	Appd
PL01	31/08/22	BM	BB	DMcD
Issue for Planning				

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Client: Galway City Council

Project Title: BusConnects Galway: Cross-City Link (University Road to Dublin Road)

Drawing Title: General Arrangement

Sheet 10 of 13

Scale at A1: 1:500 @ A1 (1:1000 @ A3)

Role: Transport Infrastructure

Suitability: Planning

Arup Job No: 253352-00

Rev: PL01

Name: BCG-GA-00-10

Do not scale

LEGEND:

- EXISTING KERB LINE
- BUS LANE
- BUS ONLY ROUTE AHEAD
- CYCLE TRACK
- FOOTPATH
- ENHANCED PAVING
- PEDESTRIAN PLAZA
- MODIFIED ISLAND
- SHARED SPACE
- RAISED TABLE ADJACENT CYCLE TRACK
- PARKING / TAXI BAYS
- LOADING BAYS
- CARRIAGEWAY
- GRASS AREA / VERGE
- BUS STOP LOCATIONS
- BUS SHELTER
- TREE (EXISTING AND PROPOSED)
- TREE TO BE REMOVED
- HERITAGE FEATURES
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

NOTES:

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2. WHERE PROPERTY LINE ADJUSTMENTS ARE PROPOSED, NEW BOUNDARY WALLS ARE TO MATCH THE EXISTING UNLESS OTHERWISE DETERMINED IN CONSULTATION WITH THE LANDOWNER

Údarás Náisiúnta Iompair
National Transport Authority

Rev	Date	By	Chkd	Appd
PL01	31/08/22	BM	BB	DMcD
	Issue for Planning			

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Client
Galway City Council

Project Title
BusConnects Galway:
Cross-City Link
(University Road to Dublin Road)

Drawing Title
General Arrangement

Sheet 11 of 13

Scale at A1: 1:500 @ A1 (1:1000 @ A3)
Role: Transport Infrastructure
Suitability: Planning
Arup Job No: 253352-00
Rev: PL01
Name: BCG-GA-00-11

Do not scale

LEGEND:

- EXISTING KERB LINE
- BUS LANE
- BUS ONLY ROUTE AHEAD
- CYCLE TRACK
- FOOTPATH
- ENHANCED PAVING
- PEDESTRIAN PLAZA
- MODIFIED ISLAND
- SHARED SPACE
- RAISED TABLE ADJACENT CYCLE TRACK
- PARKING / TAXI BAYS
- LOADING BAYS
- CARRIAGEWAY
- GRASS AREA / VERGE
- BUS STOP LOCATIONS
- BUS SHELTER
- TREE (EXISTING AND PROPOSED)
- TREE TO BE REMOVED
- HERITAGE FEATURES
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

NOTES:

1. ADDITIONAL PROPOSED SCHEME INFORMATION IS AVAILABLE ON THE DRAWING SERIES PROVIDED WITHIN VOLUME III OF THE ENVIRONMENTAL IMPACT ASSESSMENT REPORT (EIAR).
2. WHERE PROPERTY LINE ADJUSTMENTS ARE PROPOSED, NEW BOUNDARY WALLS ARE TO MATCH THE EXISTING UNLESS OTHERWISE DETERMINED IN CONSULTATION WITH THE LANDOWNER

Údarás Náisiúnta Iompair
National Transport Authority

Rev	Date	By	Chkd	Appd
PL01	31/08/22	BM	BB	DMcD
Issue for Planning				

ARUP

Arup, One Albert Quay,
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Client
Galway City Council

Project Title
BusConnects Galway:
Cross-City Link
(University Road to Dublin Road)

Drawing Title
General Arrangement

Sheet 12 of 13

Scale at A1: 1:500 @ A1 (1:1000 @ A3)
Role: Transport Infrastructure
Suitability: Planning
Arup Job No: 253352-00
Rev: PL01
Name: BCG-GA-00-12

Do not scale

LEGEND:

- EXISTING KERB LINE
- BUS LANE
- BUS ONLY ROUTE AHEAD
- CYCLE TRACK
- FOOTPATH
- ENHANCED PAVING
- PEDESTRIAN PLAZA
- MODIFIED ISLAND
- SHARED SPACE
- RAISED TABLE ADJACENT CYCLE TRACK
- PARKING / TAXI BAYS
- LOADING BAYS
- CARRIAGEWAY
- GRASS AREA / VERGE
- BUS STOP LOCATIONS
- BUS SHELTER
- TREE (EXISTING AND PROPOSED)
- TREE TO BE REMOVED
- HERITAGE FEATURES
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3

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NTA
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Do not scale

Appendix B
Public Consultation 2020-2021 Report

BusConnects Galway: Cross-City Link (University Road to Dublin Road)

July 2021

Public Consultation 2020-2021 Report

BUS CONNECTS GALWAY

SUSTAINABLE TRANSPORT FOR A BETTER CITY.

Contents

Appendices

1 Introduction

In October 2020, Galway City Council commenced non-statutory public consultation on the proposed BusConnects Galway: Cross-City Link (University Road to Dublin Road). This report is a summary of the submissions received, and Galway City Council's responses to questions, feedback and comments received.

Galway City Council would like to acknowledge and thank the public for their engagement in the process, and for taking the time to make comments and suggestions on the proposed Cross-City Link.

1.1 The proposed scheme

The Cross-City Link is one of the major projects identified for Galway City as part of the Galway Transport Strategy. The Galway Transport Strategy was developed by Galway City Council, Galway County Council and the National Transport Authority in 2016 and sets out a framework for the transformation of Galway's transport networks over the short, medium and long-term.

The Cross-City Link is a public transport corridor linking the western and eastern suburbs of Galway City, through the city centre core. This corridor will connect homes with places of work, study, retail, and recreation, with improved public transport journey times and reliability. High-quality public spaces, new and upgraded pedestrian and cyclist facilities and public transport priority will be provided, making it easier to move through the city, and to access destinations by sustainable means.

Car traffic, which does not have a specific destination in the city centre, will no longer travel into the medieval core of the city between the hours of 7:00am and 7:00pm – making routes safer for walkers, cyclists, and mobility impaired, and creating space for public transport to move freely.

The Cross-City Link facilitates new and existing bus routes, ensuring that more homes, schools and businesses are within 10 minutes' walk of a high-frequency bus service, as part of the 'BusConnects Galway' funding programme.

Bus routes will overlap in an 'interchange' at Eyre Square, allowing travellers to go from one part of the city on one route, to another part of the city on a different route, in a timely fashion.

Figure 1: Extents of the Scheme

Galway City is undergoing a transformative period with an aim to reshape it into a people-centric destination, with a revised hierarchy of priorities that places sustainable modes of transport (walking, cycling and public transport) above the private car. There is a strong need to address the transportation issues facing the city and surrounding areas at present, and to underpin future growth by establishing effective projects that counter the status quo in line with national policy, including the National Development Plan 2018-2027, the National Planning Framework 2040, and the Climate Action Plan 2019.

The project is being funded by the National Transport Authority.

1.2 Consultation and Engagement

Due to COVID-19 restrictions in place throughout 2020 and 2021, Galway City Council engaged in virtual and on-line non-statutory public consultation on the Cross-City Link project. In response to guidelines from the Irish Government and the National Public Health Emergency Team (NPHET), no information events were held in person. As a consequence, a virtual consultation was undertaken. The purpose of the non-statutory consultation was to encourage stakeholders to identify questions or issues they want the Design Teams to consider, as the project progresses through design and statutory processes. The consultation commenced on October 22nd, 2020 and the initial duration of the consultation period was 6 weeks.

This consultation was primarily held via a virtual information room. This virtual room allowed members of the public and other stakeholders to view the relevant documentation associated with the scheme, including the emerging preferred scheme drawings, a range of information boards, an information video and a brochure relating to the scheme.

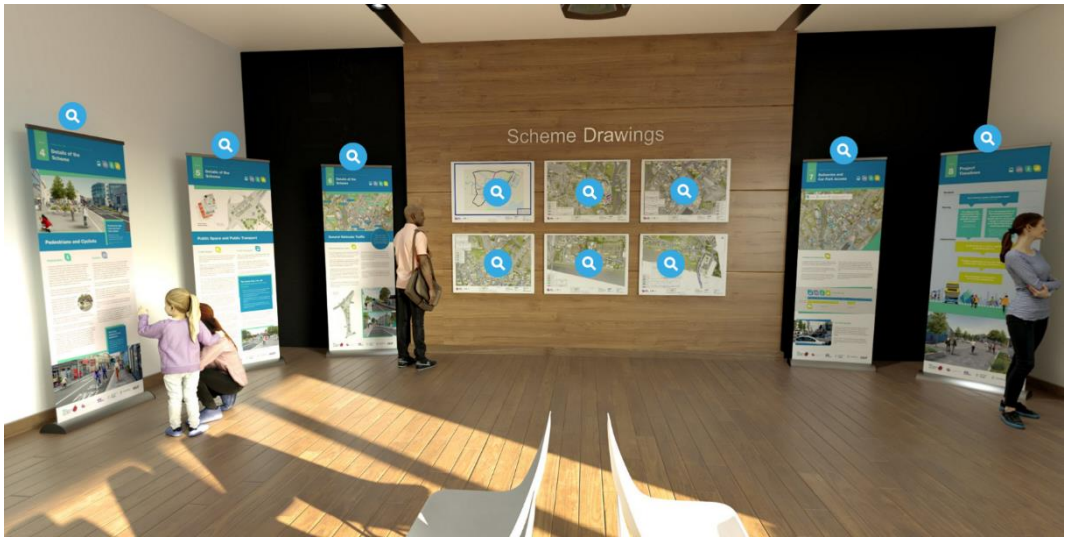

Figure 2: Virtual Information Room

Online submissions could be made through the virtual information room (in English or Irish), or via submission to Galway City Council by email or by post. In order to facilitate accessibility for those without digital access, materials could be requested in hard copy from Galway City Council.

Due to the reopening of the retail sector in December 2021, Galway City Council extended the non-statutory public consultation on the Cross-City Link project, to allow the business community in the city to engage at a point in time when their busiest season would be concluded, in January 2021. At the time of writing, the virtual information room remains live; however, submissions can no longer be made.

In order to make the general public aware of the public consultation event, an information campaign was rolled out by Galway City Council. This included advertising in local publications, notices on the Galway City Council website and social media (Twitter and Facebook) and the distribution of letters to properties along the route.

Lands adjacent to, or on, the proposed Cross-City Link (University Road to Dublin Road) were examined to identify potentially directly-affected landowners. Potentially directly affected landowners were written to, and invited to meet the Design Team at their convenience. Follow up letters were issued to landowners who did not respond to the initial invitation to meet/speak. The majority of potentially directly-affected landowners have now been met. These meetings took place on-line, due to Covid restrictions. Engagement by phone also took place with a number of landowners. Continued engagement with potentially impacted landowners is ongoing. This report does not summarise engagement or feedback of landowners, as these discussions are confidential with respect to potential land acquisition processes which may follow as part of the statutory consent process.

In addition to the general public consultation event, further targeted consultation took place through a series of stakeholder meetings in December 2020 and January/February/March 2021, with a range of organisations, key stakeholders and interested persons.

2 Information Provided in Public Consultation

2.1 Virtual Information Room

It was initially intended to hold public consultation events in the local community as part of this non-statutory public consultation. However, due to the ongoing Covid-19 global pandemic and in response to guidelines from the Irish Government and the National Public Health Emergency Team (NPHET), a virtual information room was developed as an alternative means of engagement. This virtual information room was designed to replicate, as close as possible, an in-person consultation event. Materials were prepared to tell the story of the project and provide as much information as possible to the public. These included story boards, drawings, an information video, and a brochure, all of which are further described below.

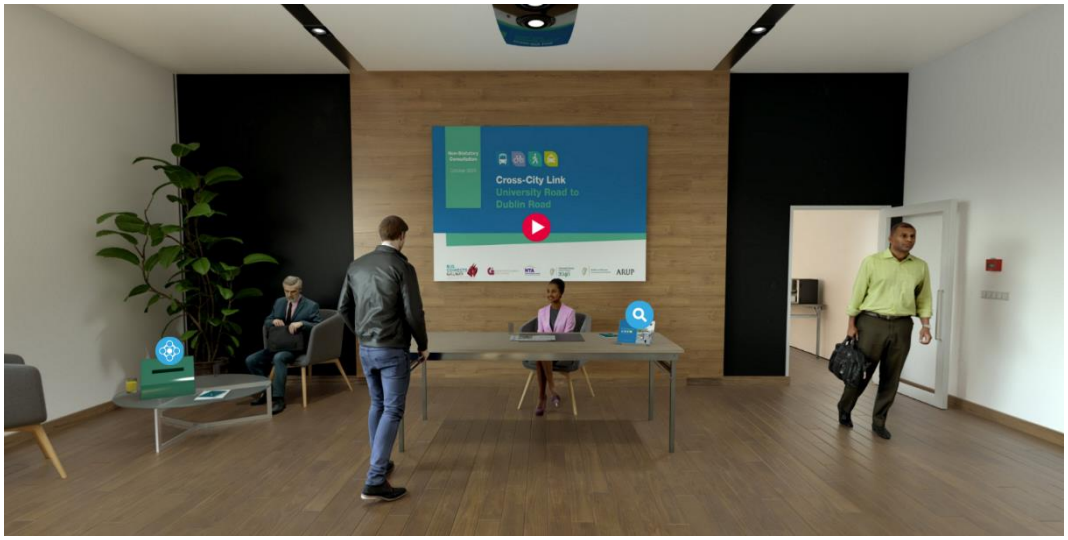

Figure 3: Virtual Information Room

2.1.1 Story Boards

The room contained eleven story boards under the following headlines, plus supporting scheme drawings and photomontages:

1. Welcome and introduction
2. The Galway Transport Strategy
3. Overview of the scheme
4. Details of the scheme - Pedestrians and Cyclists
5. Details of the scheme - Public space and public transport
6. Details of the scheme - General vehicular traffic
7. Deliveries and car park access
8. Project Timelines

9. Frequently asked questions
10. Frequently asked questions (continued)

A link to this virtual information room is provided below.

https://virtualengage.arup.com/busconnects-galway-cross-city-link/index.html

2.1.2 Information Video

A short information video was developed, setting out the rationale for developing the Cross-City Link; identifying the route and the benefits; and advising how to participate in the public consultation. A link to this video is provided here.

2.1.3 Photomontages

A series of photomontages of key locations within the study area were developed which presented a virtual image of the proposed scheme overlain on photographs of the existing streetscape. The purpose of these photomontages was to provide stakeholders with a visual example of what the Cross-City Link will look like when completed to help people better understand the proposal. These photomontages were included throughout the materials published in the virtual information room.

Figure 4: Photomontage of Forster Street

2.1.4 Brochure

A 42-page brochure was developed and published as part of the virtual information room. It contained information on the Galway Transport Strategy, the planned Cross-City Link, key statistics, plans for loading and deliveries, plans for car park access, a section with frequently asked questions, a detailed section by section description of the scheme, an indicative timeline for implementation, data protection notice and information on how to participate in the non-statutory consultation.

2.1.5 Drawings

A series of scheme drawings were published as part of the virtual information room. In total 6 drawings, including the key plan were provided. There drawings provided the preliminary design, general arrangement of the proposed scheme, identifying road layouts and typical cross-sections along the route. A series of notes were also included on each of the drawings, informing the reader of particular proposals.

2.1.6 Feedback Form

A feedback form was included in the virtual information room. This form was made available for either online completion or was available to download and complete at a later date for future submission via email. The feedback form was available in both the English and Irish languages.

There were 4 sections for completion in the feedback form, inviting the respondent to provide information in relation to their interest in the scheme (e.g. resident, business, commuter etc.); asking the respondent what they like about the scheme and what they do not like about the scheme; and an area to add in any other comments they had in relation to the Cross-City Link.

2.2 Advertisements and Press Releases

The public was invited to participate in the public consultation process via advertisements and articles in the Galway Advertiser on Thursday 22nd October 2020 and the Galway City Tribune on Friday 23rd October 2020. Information on the scheme and a link to the website were provided in the advertisement.

The consultation was promoted on the Galway City Council website, and with a number of posts during the consultation on GCC social media accounts (Twitter/ Facebook).

Figure 5: Front Page of Galway Advertiser

2.3 Letter drops

In order to further raise awareness amongst those living and working along the Cross-City Link, and other roads within the scheme, of the public consultation event, Galway City Council undertook a letter drop to all properties and businesses with accessible letterboxes. This letter drop began on October 23rd 2020. In total approximately 300-320 addresses were targeted with letters. These letters advised recipients of the scheme and ongoing public consultation, inviting participation.

2.4 Stakeholder Engagement

In addition to the virtual information room, a series of engagement sessions with various stakeholders was held during the consultation period. Over 130 stakeholders were invited to 5 virtual 'sectoral' briefings, as part of the non-statutory public consultation. Invited stakeholders included public transport operators, community groups, emergency services, businesses, taxis operators, car park operators, educational institutions, transport consultancies, and cycling groups. A total of 36 stakeholders attended these meetings. A list of stakeholder organisations invited are provided in Appendix A. All attendees were encouraged to make submissions to Galway City Council as part of the public consultation process.

To allow for businesses that were reopening over the Christmas period after a 'lock-down' due to the on-going pandemic, an additional stakeholder meeting with Galway Chamber members took place on the 28th January 2021. Approximately 75 people participated in two hours of discussion and engagement. Attendees were invited to make submissions by email by the 11th February 2021.

2.5 Landowner Engagement

During the preliminary design process, 23 no. land folios were identified as potentially requiring either full or partial acquisition in order to complete the Cross-City Link as currently proposed. An investigation of the land registry database was undertaken to identify potentially impacted landowners.

In total 31 landowners were identified as potentially affected by the scheme including some lands in the ownership of local authorities. Letters, outlining the scheme, were sent to identified landowners on 16 October 2021. Where landowners we not readily identifiable, letters were issued to the property.

The letters issued contained a brief description of the scheme and an invitation to meet with a member of the design team.

Landowner meetings commenced in January 2021 and have occurred across all of 2021 to date. As of June 2021, contact has been made with representatives of the majority of potentially impacted folios.

3 Submissions Received

A total of 93 submissions were received. Submissions were received via the public information room, through emails to Galway City Council, and by phone.

4 Analysis of submission

4.1 Approach

The review of the submissions commenced in April 2021 once the consultation period had closed. Most submissions were received either via the virtual information room or via email.

All submissions were entered into a database and assessed. An initial review indicated that submissions often address more than one issue and a number of themes emerged from the submissions.

Due to General Data Protection Regulation (GDPR) individuals are not identified in the analysis documented in this report nor in their comments or submission.

4.2 Profile of those making submissions

All submissions received were recorded by respondent type. As part of the virtual information room feedback form, respondents were given options relating to their interest in the Cross-City Link, with multiple selections possible. A large number of submissions identified themselves as both residents and commuters, so for this reason resident and commuter were combined into a single classification. This represented the largest group of respondents accounting for 45% of all submissions. In addition to this grouping, submissions were received from Businesses, Educational Institutions, Elected Representatives, Representative Bodies, Residents, Transport Providers and Others, which included visitors.

Figure 6 below provides a breakdown of the submissions received by respondent.

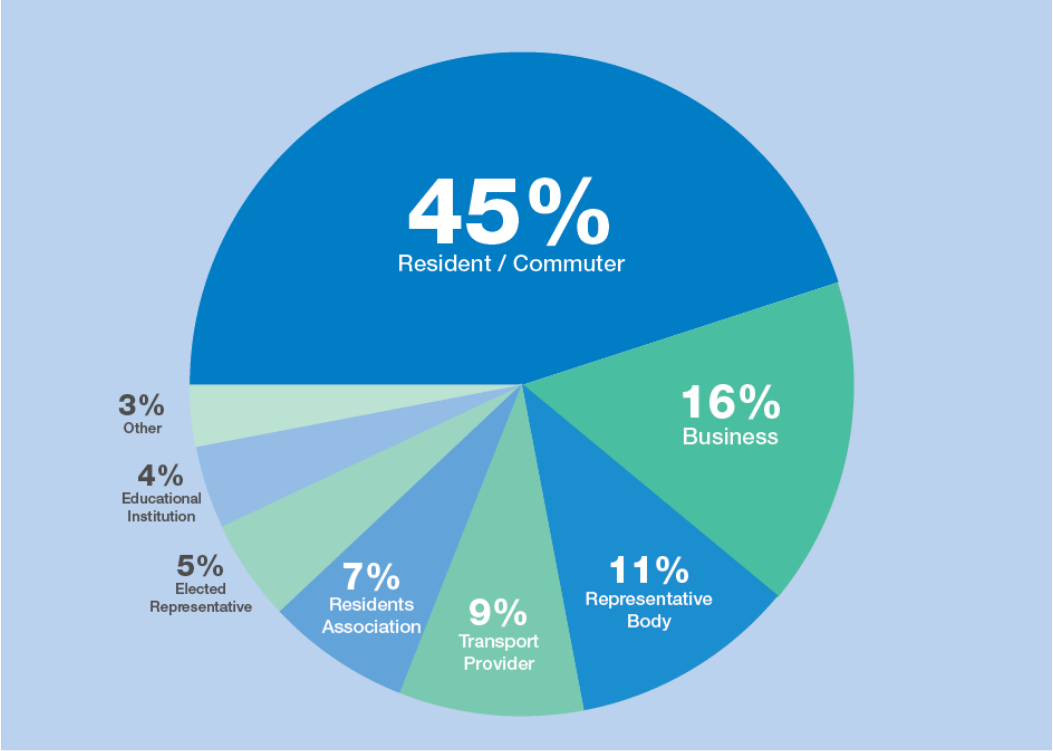

Figure 6: Profile of Respondents

The general sentiment of each of the submissions was assigned, based on the content or each submission and overall attitude expressed towards the scheme as a whole. The majority of the submissions (60%) were classified as either Very Positive, Positive or Neutral, while 29% of submission were classified as negative or very negative and 11% were classified as mixed.

It was noted that 28 of the respondents requested a follow up meeting with representatives of Galway City Council. It is the intention of Galway City Council to engage further with Stakeholders during the design process.

4.3 Issues identified by section of the scheme

The scheme was divided into twelve sections, and the issues raised in each submission were entered and categorised in the database by geographical section, by theme and by issue. In addition to the twelve sections, submissions were also categorised as relating to 'The Entire Scheme' where the submission referred to multiple areas, or the scheme as a whole. The scheme sections and the frequency of submissions relating to each section as presented below in **Table 1**.

Table 1: Scheme Sections and Frequency of Submissions

Scheme Section	Frequency	%
University Road	3	3%
Gaol Road / Galway Cathedral	0	0%
Salmon Weir Bridge	3	3%
St Vincent's Avenue	4	4%
St. Francis St. / Eglington St. / Williamsgate St.	4	4%
Eyre Square	7	8%
Foster Street / Bóthar Uí hEithir	2	2%
Prospect Hill / Bóthar na mBan / Headford Road	0	0%
Wood Quay	2	2%
Forthill Street / Merchants Road / Queen Street	2	2%
College Road / Dublin Road	17	18%
Nun's Island	1	1%
Entire Scheme	48	52%
Total Submissions	**93**	**100%**

Most submissions (52%) were made in relation to the entire scheme although a large number was related to College Road / Dublin Road (18%) or Eyre Square (8%) specifically.

4.4 Issues identified by theme

All 93 of the submissions received were reviewed and the issues raised were categorised, summarised, and analysed. A total of 8 main themes were identified during this review process. These key themes and the frequency of comments relating to these key themes are presented below in **Table 2**.

Table 2: Key Themes and Frequency of Comments

Key Themes	Frequency of Comments
Accessibility / Traffic Impact	70
Supportive	41
Safety	40
Integration/Bus Network	36
Environment	24
Social Impact	24
Economy / Impact on Local Business	18
Public Consultation Process	14
Total Comments	**267**

From this it can be seen that **accessibility and traffic** impact is one of the main themes of the comments (70 comments). These comments were generally related to:

- Access arrangements for certain areas, e.g. College Road, Woodquay, Corrib Terrace and as a result of restrictions on streets and on the Salmon Weir Bridge;
- Access to the core city centre area;
- Access arrangements for businesses and how the scheme will impact same;
- Displaced traffic due to the restrictions and the impact of same.

An important theme that emerged through the comments was that participants were **supportive** of the planned enhanced priority for buses and cyclists, improved pedestrian facilities and upgrades to the public realm and reduction of traffic along the corridor and particularly within the city centre core area (41 comments).

Another strong theme related to overall **safety concerns** (40 comments). These were mostly linked to issues related to cyclist and pedestrian safety, but also related to some general issues with regard to the public realm and loss of access.

4.5 Summary of Main Issues Raised

This section identifies the key issues raised throughout the consultation process. Galway City Council will seek to establish the validity of the concerns, the potential consequences for the project, and how best to address the issue and /or mitigate any potentially negative impacts. Irrespective of the count or issues, all submissions were considered equally on their merits in relation to the proposed scheme. The key issues raised and the frequency of comments received in relation to each key issue are shown below in **Table 3**. Each of these issues has been raised under one or multiple themes identified in Section 4.4 above.

Table 3: Key Issues and Frequency of Comments

Key Issues	Frequency of Comments
Public Realm	37
Deliveries	7
Additional Traffic	12
Loss of Access	45
Cyclist Safety	39
Pedestrian Safety	40
Other Galway Transport Strategy Projects	13
Loss of parking	18
Devaluation of Property	1
Land Acquisition	6
Associated Bus Facilities	7
Noise Pollution	6
Total Comments	**231**

The main issues raised were related to **loss of access** (45 comments), and these primarily related to the perceived loss of vehicular access issues to College Road, city centre and arising from bus priority measures on the Salmon Weir Bridge.

Additionally, **pedestrian and cyclist safety** (40 and 39 comments respectively) and the **public realm** (37 comments) featured in many submissions.

With regards to the comments received in relation to pedestrian and cyclist safety, these mostly related to the integration of these modes with public transport. The following key issues were raised:

- Enhanced/additional provision of dedicated cycling facilities and the impact of traffic flow changes on cycle routes;
- Additional pedestrian facilities, particularly at bus stops;
- Additional facilities such as bike parking, alternative crossing types, etc.

The issues raised are outlined in more detail in the following section.

4.6 Issues Raised and Galway City Council's Response

4.6.1 Issue 1: Public Realm

In total 37 of the submissions received included comments related to the public realm. 62% of these submissions were considered neutral or positive / very positive. 38% of these submissions were classified as mixed / negative / very negative and the themes related to:

- Accessibility / Traffic Impact;
- Safety;
- Integration / Bus Network;
- Environment.

Most of these mixed / negative / very negative submissions (64%) were related to public realm issues of the entire scheme and not specific to any individual section of the scheme.

4.6.1.1 Positive/Supportive

In summary the main positive/supportive submissions related to public realm were the following:

- Many submissions expressed support for proposals of new and improved footpaths and pedestrian facilities.
- Many submissions also expressed positivity towards the provision of pedestrian plazas and improvement of public spaces.

4.6.1.2 Issues Raised

In summary the main issues raised relating to public realm were the following:

- An interest was expressed in improved public spaces and additional footpaths throughout the Scheme, as it is suggested that many residents are currently dissatisfied with the condition of numerous existing footpath surfaces within the scheme area. Some submissions also requested the provision of more seating and improved lighting in public spaces.
- A small number of submissions expressed concerns that there was a lack of cycle infrastructure proposed, in particular the provision of secure bike parking facilities.
- A representative body expressed concerns that there does not appear to be access for cyclists through the pedestrian plazas. It was suggested that there is a need for additional measures to ensure connectivity for cyclists through the scheme.
- A representative body raised concerns over the potential for an increase in noise pollution associated with the provision of pedestrian plazas. Concerns were also raised in relation to suggested contradictions between the Public Realm Strategy and the BusConnects Galway plans regarding access, parking, future public plazas, and an unspecified park redevelopment.
- A submission expressed concerns about the creation of pedestrian zones without the consent of residents, as it was suggested that it will lead to increased anti-social behaviour in and around these spaces.

4.6.1.3 Design Specific Suggestions

The main suggestions in terms of general design for public realm included the following:

- A large quantity of the submissions relating to public realm were focused on the provision of safer pedestrian and cyclist facilities such as increased pedestrian crossings and segregation from vehicles. Some submissions suggested that a removal of non-essential traffic and provision of improved public spaces would significantly help to promote a modal shift in the area;
- A number of submissions suggested that new public spaces need to be greener, suggesting the provision of raised planters throughout with consideration given to biodiversity and the utilisation of native planting;
- A small number of submissions referred to the potential for street art in public spaces and places, with some showing an interest in participating in the development of public art projects;
- One business expressed an interest in collaboration with the scheme in order to provide a consistent and permeable high-quality public realm.

4.6.1.4 Location Specific Suggestions

The main location specific suggestions for public realm were the following:

- A school within the scheme area made an enquiry in relation to the provision and design of bollards as a solution in maintaining access to the building.
- Submissions were received suggesting dedicated cycle facilities from Eyre Street to Headford Road via Woodquay should be incorporated.
- Submissions were made querying the impact of the scheme on casual trading on Eyre Square North.

4.6.1.5 Galway City Council Response to Issue 1

The designs which were published as part of the non-statutory public consultation are preliminary in nature and will require additional work to bring them to a point where Galway City Council is prepared to submit the overall proposal for planning consent. The various issues raised in this consultation process will feed into the designs in terms of the public realm. The design team will comprise of a multi-disciplinary team including experienced Landscape Architects, Transport Planners and Engineers. The Galway Public Realm Strategy will be a key documentation in the further design of Public Realm Spaces. It should also be noted that Galway City Council has received an allocation of funding through URDF Call 2 to enhance the public realm in public spaces in the city, including along the Cross-City Link.

Where feasible, further design changes will be made to enhance permeability through the study area in tandem with public realm enhancements.

It is intended that casual trading will remain within the Eyre Square north area, however vehicular access to this area will be amended from current practices. Casual Trading remains an activity licensed by permit, under the relevant Bye-Laws. Amendments to the Bye-Laws are a Reserved Function.

4.6.2 Issue 2: Deliveries

In total 7 of the submissions received included comments related to deliveries. Most of these submissions were mixed / negative / very negative and the theme related to accessibility / traffic impact. Three of these mixed / negative / very negative submissions were related to delivery issues along the College Road / Dublin Road section of the scheme, and the St Francis Street / Eglington Street / Williamsgate Street section of the scheme. The remaining four of these mixed / negative / very negative submissions were related to delivery issues of the entire scheme and not specific to any section of the scheme.

4.6.2.1 Positive/Supportive

While the majority of submissions relating to deliveries were considered to be negative, one submission with queries and concerns in relation to the issue of deliveries also contained positive and supportive sentiment on other aspects of the scheme as a whole.

4.6.2.2 Issues Raised

In summary, the main issues raised relating to deliveries were the following:

- Concerns were raised in multiple submissions relating to delivery access within the scheme. Questions were raised over how access will be achieved and if it will be by means of a permit system.
- A representative association raised concerns over the changing of delivery periods and access. The main concerns raised relate to appropriate consultation with all business owners. Concerns were also raised over what is defined as a delivery, and whether it applies to waste collection.
- Concerns were also raised over the enforcement of the proposed delivery arrangements within the scheme.

4.6.2.3 Location Specific Suggestions

The main location specific suggestions for deliveries were the following:

- St. Francis Street: A business owner located on St. Francis Street expressed concerns in relation to delivery access. The submission stated that deliveries in the current layout are already difficult as there currently is no loading bay on the street. The main concerns are that the proposals for St. Francis Street will further impact this business's ability to access their shop for loading and deliveries.
- College Road: A number of residents raised concerns over the restricted vehicular access to their property on College Road and queried whether household deliveries would be permitted under the local access only.

4.6.2.4 Galway City Council Response to Issue 2

The design proposals include a loading and delivery strategy, which has been prepared taking cognisance of the need to balance public transport reliability, pedestrian and cyclist comfort and safety, general traffic movements and loading and parking requirements.

In most cases, where loading bays are currently in operation, these have been retained, but will operate at different hours if located along the Cross-City Link. Along the Cross-City Link, it is intended that the hours of operation of these bus lanes will be 07:00-19:00. During the period of 10:00am to 13:00, deliveries are permitted along the Cross-City Link, and utilise any loading bays proposed on the route.

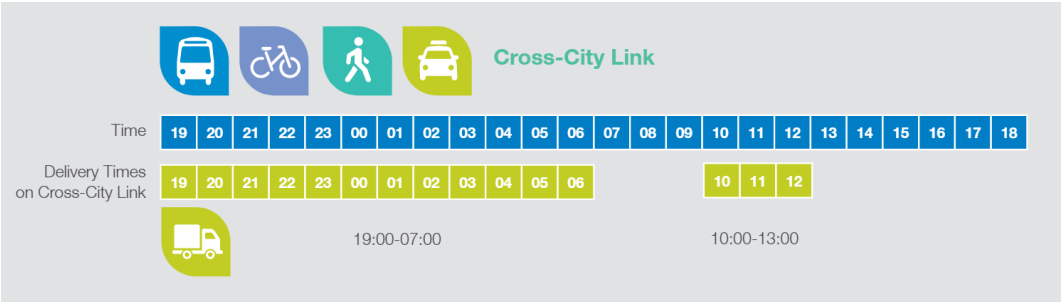

Figure 7: Delivery Times on Cross-City Link

St. Francis Street is not wide enough to provide a dedicated loading bay, and does not currently have a loading bay. In this location, loading bays on the surrounding streets e.g. Woodquay, St. Mary's Street and Newtownsmith will be available.

Access to every existing property along College Road will be possible for deliveries at all times. The routing of these deliveries will depend on the location of the destination on College Road.

Galway City Council will further examine the loading and delivery strategy in the context of this public consultation in order to further improve the proposed scheme where feasible. Engagement with the relevant business / representative bodies will form part of the development of this strategy. Waste collection requirements will also be considered.

4.6.3 Issue 3: Additional Traffic

In total 12 submissions included comments related to additional traffic. Most of these submissions were mixed / negative / very negative and the themes related to:

- Accessibility / Traffic Impact;
- Safety; and
- Integration / Bus Network.

Most of these mixed / negative / very negative submissions (71%) were related to additional traffic issues along the entire scheme and not specific to any section of the scheme.

4.6.3.1 Positive/Supportive

While the majority of submissions relating to additional traffic were considered to be negative, some residents and commuters shared a positive outlook on the reduction of non-essential traffic as a result of the Cross-City Link.

4.6.3.2 Issues Raised

In summary, the main issues raised relating to additional traffic were the following:

- A commuter to the city raised concerns over the current slow speed of buses travelling through the city and this impact on traffic.

- A resident raised concerns over the effectiveness of the scheme overall, with doubts that the scheme would lead to faster commute times to the city centre.
- It was also requested that more information be provided on the 'marginal' increase in journey time for certain private traffic trips on certain routes.

4.6.3.3 Design Specific Suggestions

The main suggestions in terms of general design for additional traffic were the following:

- A resident raised concerns in relation to the current condition of road surfaces being substandard with potholes throughout, close contact with other vehicles and sharp turns.
- A representative association raised concerns over the scale of overall change proposed and the lack of evidence presented regarding the impact of the scheme on traffic. Concerns were also raised on how the scheme will impact traffic flow in relation to increases of traffic, and a query on how traffic will utilise the routes available.

4.6.3.4 Location Specific Suggestions

The main location specific suggestions relating to additional traffic were the following:

- Salmon Weir Bridge: Concerns were raised about the suitability of the Salmon Weir Bridge for buses.
- Dyke Road: A commuter enquired about the possibility of the provision of direct access to the Dyke Road Car Park from the Headford Road, stating that this could alleviate some traffic from the Woodquay junction.
- Headford Road/Newtownsmith: A resident was concerned over the traffic implications associated with the scheme, in particular the movement of vehicles through the scheme with some routes now becoming inaccessible in the Headford Road and Newtownsmith Area.
- Nun's Island: Concerns were expressed by a local representative relating to the implication of the scheme proposals on Nun's Island, suggesting the scheme will lead to the creation of a 'rat run' for traffic that would have previously crossed the Salmon Weir Bridge.
- College Road: A business raised a number of concerns in relation to additional traffic generated from the scheme. It was expressed that the reduction in loss of access on College Road and Salmon Weir Bridge would further hinder access to the city centre and that the resulting displaced traffic would use other overburdened routes thereby adding to the city traffic problems.

- Woodquay: A resident raised concerns in relation to the traffic implication in the vicinity of Corrib Terrace, Walshe's Terrace and Steamer's Quay Area of Woodquay, stating that existing traffic volumes and movements can be high at peak times in the area. The main concern raised is that one access junction to this area, as is proposed in the scheme, will not be suitable to cater for the traffic flows in the area.

4.6.3.5 Galway City Council Response to Issue 3

The purpose of the Cross-City Link is to greatly enhance the public transport, pedestrian and cycling offer in Galway City, thereby encouraging greater use of these modes and a switch away from private, single-occupancy vehicle use.

Bus use in Galway City increased by 48.1% from 2013 to 2019 as identified in the NTA Bus & Rail Statistics for Ireland – State Funded Services. The Cross-City Link will be instrumental in increasing this figure further, with walking and cycling also increasing. As the population of Galway City is set to increase by 50% to 60% by the year 2040 in accordance with the National Planning Framework, modal shift from car to sustainable modes will be essential for the sustainable growth of the city.

A comprehensive traffic management plan is being proposed to manage traffic on the city centre road network. The precise impacts of the scheme on the surrounding road network, including along the Cross-City Link, as well as the surrounding areas, will be further assessed as part of the traffic modelling exercise currently being undertaken, with appropriate treatment and or mitigation measures provided where necessary. The potential impacts of the proposed scheme will be fully quantified as part of the Environmental Impact Assessment (EIA) process being carried out by Galway City Council.

4.6.4 Issue 4: Loss of Access

In total 45 of the submissions received included comments related to loss of access. Most of these submissions (69%) were mixed / negative / very negative and the themes related to:

- Accessibility / Traffic Impact;
- Safety; and
- Economy / Impact on Local business.

A large proportion of these mixed / negative / very negative submissions (35%) were related to the perceived loss of access issues of the College Road / Dublin Road section of the scheme, with 32% related to the loss of access issues of the entire scheme and not specific to any section of the scheme.

4.6.4.1 Positive/Supportive

While a large proportion of submissions relating to loss of access were considered to be negative, some submissions with queries and concerns in relation to the issue also contained positive and supportive sentiment on other aspects of the scheme as a whole.

4.6.4.2 Issues Raised

In summary, the main issues raised relating to loss of access were the following:

- A number of submissions raised concerns relating generally to access to the city centre. Some specifically referred to the loss of access by car via the Salmon Weir Bridge;
- A business owner expressed concerns that the success of retail in the city relies on the ease of access for all customers but particularly motorists from the hinterland. The main concern raised was that this scheme would further hinder ease of access to the city centre by car to the population who are not served by bus routes;
- A representative body raised concerns over the impact on the change in traffic arrangements in terms of overall access and requested further information on how traffic will be able to use routes;
- A number of residents raised concerns over the ability to access College Road by car;
- Concerns were raised about access to the school on St. Francis Street; and
- A representative body requested further information relating to access to the Waterside area via Headford Road by car.

4.6.4.3 Design Specific Suggestions

In summary the main suggestions in terms of general design in relation to access were the following:

- A local representative raised concerns over the design layout in the area of Dyke Road to The Plots where there is a loss of cycle access - the result being that cyclists must now take a longer route mixing with more traffic;
- A business raised concerns over the implications of the scheme design on St. Francis Street which will result in loss of vehicular access to businesses along this street;
- Concerns were raised that traffic entering Lombard Street, Market Street and Upper Abbeygate Street from the west side of the city will have no option but return home via Woodquay and either the Quincentennial Bridge or around by the Docks. In particular, this will include parents dropping off and collecting children by car from St. Patricks School which is a huge inconvenience;

- A representative body raised concerns that there does not appear to be access through pedestrian plazas for cyclists and requested measures to ensure connectivity for cyclists through the scheme;
- A business was concerned about the removal of existing yellow boxes at junction providing access to their property; and
- A resident requested vehicular access from the west of the Salmon Weir Bridge to Woodquay (Corrib Terrace, Walshe's Terrace, Steamer's Quay) should be retained.

4.6.4.4 Location Specific Suggestions

The main location specific suggestions relating to loss of access were the following:

- One submission suggested that traffic should not be allowed to travel through the city via Wolfe Tone Bridge and Lough Atalia Road.
- Nun's Island: A resident requested that vehicular access to Nun's Island should be ensured by automatic bollards, as it is unclear in the scheme how they will access Nun's Island.
- College Road: A number of residents expressed concerns relating to loss of vehicular access in the College Road area, some specifically relating to medical appointments, to do their shopping, access to the Sports Grounds, Connacht Rugby and The Greyhound Track, Loyola Park and Yates College. A business on College Road also raised concerns relating to the potential compromise of its vehicular access routes due to the scheme proposal.
- Salmon Weir Bridge: A business raised concerns that reducing motorist access on College Road and Salmon Weir Bridge would further hinder access to the city centre for customers and negatively impact city centre retail.
- Eyre Square: A number of submissions requested information on vehicular access to the Eyre Square trading area for traders.
- Lough Atalia Road: A representative association requested further information on local access arrangements in the Lough Atalia area.

4.6.4.5 Galway City Council Response to Issue 4

The objective of the Cross-City Link is to prioritise walking, cycling and public transport along its length, whilst facilitating essential private traffic on appropriate alternative routes.

The Cross-City Link provides dedicated space to serve all proposed city bus services, by providing bus priority through the city centre core. Regional, national and private bus operators, emergency vehicles and small public service vehicles will also benefit from the Cross-City Link providing enhanced access for these modes. These regional and national bus services will improve access to the city centre for those living in the hinterland of the city and provide a predictable journey by bus into the city centre, where they can access retail, education, medical, cultural or sporting activities amongst others.

Pedestrians will benefit from the traffic management proposals contained within the Cross-City Link scheme, with a reduction in traffic flow in the core city centre area resulting in a more welcoming environment. Footpaths will be upgraded, and pedestrian crossings provided or enhanced along the route, including at key junctions such as University Road, St. Francis Street, St. Bridget's Place, etc. These facilities will take into account the needs of persons with mobility issues and will provide high-quality public footpaths for young and old.

Cyclists will also benefit from the reduction in vehicular traffic along the 'primary' cycle corridor (from University Road to Eyre Square) and 'secondary' cycle corridor (from Forster Street to Moneenageisha) as identified in the Galway Transport Strategy. The proposed restrictions on private vehicles on parts of the route, e.g. Salmon Weir Bridge, Forster Street, College Road, etc. will not apply to cyclists – resulting in an improved environment for safe cycling due to lower traffic volumes.

Notwithstanding the above, a comprehensive traffic management plan, including a directional signage strategy (e.g. suite of turn bans, directional signage strategy) is being prepared to manage traffic on the road network while ensuring that access to all essential amenities such as schools, hospitals and sports facilities is retained. Access to these amenities by car will still be feasible in most cases, however motorists may have to take new routes to continue to use their private vehicles to access these amenities. Access to all city centre car-parks has been retained.

The design team has been cognisant of the potential of creating rat-runs whilst attempting to maintain access for vehicles. The precise impacts of the scheme on the surrounding road network, including along the Cross-City Link, as well as the surrounding areas, will be further assessed as part of the traffic modelling exercise currently being undertaken, with appropriate treatment and or mitigation measures provided where necessary. The potential impacts of the proposed scheme will be fully quantified as part of the Environmental Impact Assessment (EIA) process being carried out by Galway City Council.

4.6.5 Issue 5: Cyclist Safety

In total 39 of the submissions received included comments related to cyclist safety. Most of these submissions were neutral or positive / very positive. In general, the positive points that were made in the context of cyclist safety was that the proposed installation of segregated and protected cycle lanes will have a positive impact in terms of accessibility, safety, and integration; and that the promotion of cycling in this way should be a policy going forward.

Around 33% of the 39 submissions were mixed / negative / very negative and the themes related to:

- Accessibility / Traffic Impact;
- Safety; and
- Integration / Bus Network.

Most of these mixed / negative / very negative submissions (85%) were related to cyclist safety issues of the entire scheme and not specific to any section of the scheme.

4.6.5.1 Positive/Supportive

The main positive/supportive sentiments related to Cyclist Safety were the following:

- Some submissions expressed a positive and supportive outlook on the increased and improved provision of cycling facilities.
- It was evident from a number of submission that safety when cycling is a key interest and focus point, and while there was some specific concerns raised on the issue of cyclist safety, there was also a positive and supportive sentiment on other aspects of the scheme as a whole.

4.6.5.2 Issues Raised

In summary, the main issues raised relating to cyclist safety were the following:

- Many submissions raised concerns that there is a lack of segregated cycling facilities and infrastructure in the plan with a suggestion that cycling is treated like a secondary mode in the plan;
- A number of submissions raised concerns that cyclists will experience unsafe conditions due to potholes and general road condition;
- Concerns were raised by representative associations that cyclists will experience unsafe conditions due to the proposed design which includes sharp turns, close contact with vehicles, the sharing of bus lanes and unprotected right turns;
- A representative body raised concerns that vulnerable cyclists, especially children, old people, and people with disabilities, are not accommodated safely by the design;
- Some submissions suggested that there is uncertainty regarding the treatment of cyclists at bus gates; and
- A submission raised concerns that there could be delays for cyclists due to diversions as a result of the proposed one-way street arrangements and also stop-go systems at bus gates.

4.6.5.3 Design Specific Suggestions

In summary the main suggestions in terms of general design for cyclist safety were the following:

- A submission suggested that bus gates should include cycle lanes. Signalling at bus gates should allow movement for cyclists in both directions when there are no buses;

- Some submissions stated that cycle lanes should be wider and segregated, and more cycle lanes should take the design of Greenways or be protected by a kerb (not a white line);
- In terms of junctions, it was suggested by a representative body and a representative association to consider the Dutch (CYCLOPS) approach, which include island protected junctions, and protected turns at junctions. Suggestions for junctions also included: all junctions should have turning movements protected for cyclists, through improved traffic signalling; traffic signalling should have separate phases for pedestrians and cyclists; signalling could be "smart" and register cyclists in advance; junctions should have modified stop lines to allow cyclists a head start; left turn lanes should be provided for cyclists; guidance routes should be provided for cyclists at junctions; junctions should be wider to accommodate all movements; cyclists should have priority crossing minor junctions and private entrances.
- A resident, business and representative association felt that where cyclists have to share vehicular lanes, speed limits should be reduced. A safe transition space with ramps should be designed to move from segregated to shared spaces;
- A representative association suggested that cycle lanes should be provided to bypass bus stops. They should be provided on both sides of the roads or should be two-way. They should be provided to access facilities such as sports facilities;
- A number of submissions suggested the need for more cycle parking to be provided, and that these facilities should be sheltered, secured and visible; and
- In terms of the general approach, an off-peak cycling plan was suggested by a business. Some submissions requested a separate drawing outlining the flow of cyclists. A presentation of different design alternatives for cyclists was also suggested.

4.6.5.4 Location Specific Suggestions

The main location specific suggestions for cyclist safety were the following:

- A number of submissions requested the provision of cycle lanes along numerous streets such as St Francis Street, Eglington Street, Goal Road (contraflow), Woodquay (both ways), Merlin Park Meadows and from the city centre to Oranmore and Lough Atalia Road (segregated);
- Corrib River: There was a suggestion to provide cycle tracks / lanes along the river;
- Greenway: There was a suggestion from a number of commuters and residents to connects to the Moycullen Greenway and the old railway bridge over the Corrib river;
- Salmon Weir Bridge: There was a suggestion to consider a single lane for buses and the second lane can be used for cyclists in both directions;

- City centre: There was a request for the provision of changing / shower facilities;
- Pedestrianised streets and plazas: A representative body, along with a number of residents felt there were uncertainty about how cyclists will be accommodated in these areas. There was a suggestion to sign post “Share with Care” or “Pedestrian Priority with Cycles Permitted” in these areas;
- Dyke Road / The Plots area: Concerns were raised by a business that cyclists will be forced to climb a steep hill and by a local representative that there will be a loss of cycle access. The view was that in this area cyclist will have to mix with more traffic and divert along a longer route;
- G Hotel: A commuter suggested the implementation of a cycle lane at the G Hotel; and
- University: A representative body raised uncertainty about how cycling infrastructure will be improved for staff and students. A resident expressed the need for a safe right turn for cyclists turning into the university along University Road, along with segregated cycle ways along University Road.

4.6.5.5 Galway City Council Response to Issue 5

The Cross-City Link on public consultation is from Dublin Road to University Road, as per the figure below.

Figure 8: Cross-City Link Scheme Extents

Other projects as set out in the Galway Transport Strategy are/ will in time move through the relevant consent processes e.g. Salmon Weir Pedestrian and Cycle Bridge; Greenways; BusConnects Galway: Dublin Road, Cycle Network - Galway City Council welcomes feedback and support for these projects as and when they progress.

This response is limited to the Cross-City Link (University Road to Dublin Road) only, as set out in the route map above.

The designs presented as part of the non-statutory public consultation are preliminary in nature and will require additional work to bring them to a point where Galway City Council is prepared to submit the overall proposal for planning consent. The various issues raised in this consultation process will also feed into the designs. The final designs will be assessed against all relevant design standards including the National Cycle Manual, the Design Manual for Urban Roads and Streets and emerging guidance documents arising out of the BusConnects programme. In particular, Vulnerable Road User safety will be assessed through a Road User Audit, Road Safety Audit and Disability Audit of the scheme.

4.6.6 Issue 6: Pedestrian Safety

In total 40 submissions included comments related to pedestrian safety. Most of these submissions were neutral or positive / very positive.

Around 40% of the 40 submissions were mixed / negative / very negative and the themes related to:

- Accessibility / Traffic Impact;
- Safety; and
- Integration / Bus Network.

Most of these mixed / negative / very negative submissions (75%) were related to pedestrian safety issues of the entire scheme and not specific to any section of the scheme.

4.6.6.1 Positive/Supportive

In general, the positive points made in the context of pedestrian safety were that the additional proposed pedestrian walkways were welcomed and a much-needed addition to improve pedestrian safety. In addition, the provision of wider footpaths and pedestrianised areas, as well as the rebalancing of traffic lights were seen as a positive contribution to the future of Galway. The continuation of pedestrian priority and use of pedestrian crossings was supported.

4.6.6.2 Issues Raised

In summary the main issues raised relating to pedestrian safety were the following:

- Vulnerable users, especially children, old people, and people with disabilities, are not accommodated safely by the design.
- Many submissions suggested, in general, that the permeability and accessibility of the scheme could be improved.
- A number of residents, businesses and a representative association requested that adequate lighting should be provided throughout.

4.6.6.3 Design Specific Suggestions

The main suggestions in terms of general design for pedestrian safety were the following:

- It was suggested that footpaths should be wider throughout the scheme.
- Many residents, commuters and representative associations raised suggestions in relation to pedestrian crossings which included: more pedestrian crossings; include pedestrian crossings at bus stops; priority for pedestrians at pedestrian crossings as short cycle times lead to dangerous crossings; protected islands for pedestrians; and pedestrians should have priority crossing minor junctions and private entrances.
- A resident and some representative associations made suggestions with regard to junctions, where there were requests to give priority for pedestrians at traffic lights.
- A representative association made requests for more pedestrian only spaces and spaces like plazas for pedestrians.
- There were requests from a submission to remove dipped kerbs as these are not suitable for pedestrians with accessibility issues.
- In terms of the general approach, an off-peak pedestrian plan was suggested.

4.6.6.4 Location Specific Suggestions

The main location specific suggestions for pedestrian safety were the following:

- University Road: Many submissions requested the provision of new pedestrian crossings at a number of locations, including between Canal Road Upper and the University;
- Lough Atalia Road: a submission suggested an overhanging boardwalk; and further submissions suggested a railway bridge walking route between Eyre Square and Lough Atalia Road.
- Salmon Weir Bridge: There were a number of submissions from residents, commuters, and a representative association, with some raising uncertainty as to why a new pedestrian bridge is required as the existing Salmon Weir Bridge was viewed as suitable.

  Suggestions also included converting the existing bridge to a pedestrian and cycle bridge and constructing a new bridge for the bus scheme, in this way the challenging chicane at the eastern point of the Salmon Weir Bridge can be avoided by the bus scheme / vehicular traffic.

An underpass was suggested between the Cathedral and Salmon Weir Bridge to cross under the road to Earls Island and the University.

- Dublin Road: There was a query on whether pedestrians are permitted to use the cycle path proposed along this road.

4.6.6.5 Galway City Council Response to Issue 6

The response is limited to the Cross-City Link (University Road to Dublin Road) only, as set out in the route map in section 4.6.5.5 above.

The current designs are preliminary in nature and will require additional work to bring them to a point where Galway City Council is prepared to submit the overall proposal for planning consent. The various issues raised in this consultation process will feed into the designs. The final designs will be rigorously assessed against all relevant design standards and take cognisance of other plans and strategies including the Galway Public Realm Strategy. In particular, Vulnerable Road User (VRU) safety will be assessed through a Road User Audit, Road Safety Audit and Disability Audit of the scheme. It is the intention of the Design Team to engage with representative groups during the design process to ensure the scheme is accessible to all.

4.6.7 Issue 7: Other Galway Transport Strategy Projects

In total 13 of the submissions received included comments related to other Galway Transport Strategy projects. 46% of these submissions were positive with 54% being mixed / negative / very negative and the themes related to:

- Accessibility / Traffic Impact;
- Safety; and
- Integration / Bus Network.

Most of these mixed / negative / very negative submissions were related to the integration of the proposed scheme with other potential schemes and were related to the entire scheme and not specific to any section of the scheme.

4.6.7.1 Positive/Supportive

The main positive/supportive comments related to other Galway Transport Strategy Projects related to the following:

- Some submissions expressed positive sentiment on the potential for collaboration between various Galway Transport Strategy Projects, and that presenting these projects together rather than as individual items could help to better understand the combined benefits.
- A number of submissions which raised specific concerns in relation to other Galway Transport Strategy Projects also expressed a positive and supportive sentiment on other aspects of the scheme as a whole.

4.6.7.2 Issues Raised

In summary the main issues raised relating to other Galway Transport Strategy projects were the following:

- A local representative expressed concerns that the scheme is not being presented in the context of the other Galway Transport Strategy projects that relate to it. It was suggested that this context is important as these other projects will have considerable impact on the success of this scheme;
- A business and a representative association raised concerns that there were currently many transport projects and strategies planned for Galway, and that it would be beneficial if the current proposals were presented in the context of the overall network. It was also suggested that facilitating public understanding of where they are at, and how they will come together could possibly be undertaken as a communication piece;
- A representative association suggested that a timeline for the overall BusConnects programme could also be shown, rather than just the Cross-City Link as a standalone project; and
- Concerns were also raised about how this scheme tied together with other BusConnects projects and whether this scheme will go ahead with or without the proposed Galway City Ring Road scheme.

4.6.7.3 Design Specific Suggestions

The main suggestion in terms of general design for other Galway Transport Strategy projects was the following:

- A submission requested that the Salmon Weir Bridge should remain accessible to the private car up until the completion of the N6 Galway City Ring Road.

4.6.7.4 Galway City Council Response to Issue 7

The Cross-City Link is one project out of many which are contained in the Galway Transport Strategy, as adopted by Galway City Council in 2017 and incorporated into the Galway City Development Plan and the Metropolitan Area Strategic Plan and the National Development Plan. Galway City Council is in the process of developing a number of transport capital projects in the Galway Transport Strategy at present, with additional projects to come on-stream as funding and resources permit.

BusConnects network planning is a function of the National Transport Authority, and Galway City Council welcome the opportunity to collaborate with the NTA to progress a review of the network in due course. The Salmon Weir Pedestrian and Cycle Bridge is a separate project which, at the time of writing, is currently awaiting a decision from An Bord Pleanála on planning consent.

Likewise, the N6 Galway City Ring Road is currently going through the planning consent stage, under the auspices of Galway County Council, on behalf of Galway City Council. An Oral Hearing has been held with regard to this scheme, and a decision from An Bord Pleanála is anticipated in the coming months.

Other transport capital projects in the Galway Transport Strategy are also being developed through: Options Assessment, Preliminary Design, Statutory Process, Detailed Design and Tender, and Construction and Implementation, and will also include transforming the city's current public realm.

As funding and resources permit, Galway City Council will continue to deliver projects in the Galway Transport Strategy as a co-ordinated strategy to address transport demand.

The Galway Transport Strategy seeks to support those living, studying, working and visiting Galway to move around the city more easily by walking, cycling and by public transport. Those seeking to travel by private car will still be facilitated; however, the priority will be to cater for greater numbers of people travelling by sustainable means.

The schemes being delivered at any one time are dependent on many factors which are outside of the control of the Cross-City Link project, including funding, planning consent, annual service delivery plans etc.

The Cross-City Link design team will provide an overall for delivery of the Cross-City Link with respect to other Galway Transport Strategy schemes as part of the planning consent application for this scheme.

4.6.8 Issue 8: Loss of Parking

In total 18 of the submissions received included comments related to loss of parking. Most of these submissions (67%) were mixed / negative / very negative and the themes related to:

- Accessibility / Traffic Impact;
- Safety; and
- Economy / Impact on Local Business.

A large proportion of these mixed / negative / very negative submissions (41%) were related to the loss of parking issues of the College Road / Dublin Road section of the scheme, with 33% related to the loss of parking issues of the entire scheme and not specific to any section of the scheme.

4.6.8.1 Positive/Supportive

While a large proportion of submissions raised specific queries and concerns in relation to the issue of loss of parking and were considered to be negative, some also contained positive and supportive sentiment on other aspects of the scheme as a whole.

4.6.8.2 Issues Raised

- A number of residents and businesses were concerned about the general loss of parking spaces throughout the scheme, some also enquired about whether alternatives would be put in place for parking proposed to be removed. Some residents raised queries about parking permits, in particular in the College Road area.
- A business expressed concerns that retail relies on the ease of access by all customers and as such suggested low cost or free parking. Concerns were also raised by a number of businesses that the scheme will hinder access to the city centre for customers and negatively impact city centre retail, with suggestions for cheaper parking.
- A representative association raised concerns over the general lack of disabled parking in the different areas of the scheme. With another representative association enquiring about the provision of Blue Badge disabled parking in the city centre. It was also queried if people with disabilities could utilise parking in areas marked ‘parking, loading, taxi bay’.
- A business enquired as to whether there are opportunities for advertising car park availability through parking apps.
- A number of submissions enquired about the provision of park and ride sites.

4.6.8.3 Design Specific Suggestions

- A representative association raised concerns that the proposed scheme would result in a loss of approximately 200 car parking spaces, it was queried if there was any plan for the provision of signposting alternative parking spaces.

4.6.8.4 Location Specific Suggestions

- A representative association expressed concerns about parking around the United Methodist Presbyterian Church. It was suggested that it would be difficult to access the church without parking;
- College Road: A number of submissions expressed concerns that the scheme will presumably reduce the availability of parking on College Road. As a result, it was suggested by some, that consideration should be given to increasing the availability of short-term visitor parking at City Hall;
- Lough Atalia: A representative association raised concerns over the loss of parking spaces in the area;
- City centre: A representative association raised a concern in relation to disabled bays in Eyre Square and Woodquay. Concerns were also raised in some submissions about the reduction in parking in Woodquay; and
- Forster Street: A business enquired about the provision of parking spaces outside the Church on Foster Street.

4.6.8.5 Galway City Council Response to Issue 8

The proposed scheme facilitates the continued accessibility to numerous off-street car-parks within the city centre, in particular along the Inner City Access Road from Headford Road to Lough Atalia Road via, Bothar na mBan, Prospect Hill, Bothar ui hEithir and Fairgreen Road.

The proposed scheme includes for the reduction of some on-street parking spaces along the Cross-City Link and some other locations including Galway Cathedral and Woodquay. Where Blue Badge Disabled Parking is being impacted by proposals it is intended that a similar proportion of Blue Badge Disabled Parking spaces will be provided in close proximity to that being removed. The removal of on-street parking will be mitigated by the significant improvement in reliability of bus journey time along this route and the modal shift from private car to sustainable transport modes within the city centre. Research by Transport for London indicates significant positive impacts from the provision of walking and cycling improvements and can increase retail spend by up to 30% (source: Lawlor, 2013), with cycle parking delivering five times the retail spend per square metre than the same area of car-parking (source: Raje and Saffrey, 2016). Galway City Council is providing additional on-street cycle parking, with positive feedback on usage to date. In 2020, Galway City Council installed 296 new cycle parking spaces - an increase of 28% year on year in 2020. There are currently 1,034 cycle parking spaces available on-street in Galway City.

Positive feedback on cycle parking provided to date, as well as requests for additional cycle parking, indicate an appetite for more sustainable transport options in the retail area of the city.

In engagement with Galway Chamber members in January 2021, as part of this non-statutory public consultation, the feedback and comments were largely supportive, with issues raised by the Chamber such as the need for effective communication as changes are implemented, duly noted by the project team. The Cross-City Link brings significant opportunities to address traffic congestion and keep goods, capital, people and services moving in and through the city.

4.6.9 Issue 9: Devaluation of Property

One submission received included comments related to devaluation of property. This submission was negative, and the theme related to economy / impact on local business. The submission was related to devaluation of property issues along the College Road / Dublin Road section of the scheme, at a point where land take is envisaged in order to progress the full scheme.

4.6.9.1 Galway City Council Response to Issue 9

Galway City Council does not believe that the Cross-City Link will devalue properties on College Road or Dublin Road. Instead the Cross-City Link will bring high quality, high frequency bus services within direct access of homeowners - increasing their ability to access work, education and facilities in the city.

Businesses will also benefit, as customers and staff will have improved access to their premises. This has been demonstrated through research of similar situations internationally. For example, the research paper "Public Transport Proximity Impact on Property Value. Evidence from Bucharest Residential Market" states that concerns over the quality of life have spread to the growing use of active transportation modes, and as so, proximity to the public transportation system is highly valued. The relationship between public transport accessibility and residential land value is the subject of many recent research. A house located near public transports will tend to be sold at higher prices.

Furthermore, the research paper "Effects of Transportation Accessibility on Residential Property Values" which was developed for the Lisbon Metropolitan Area suggests that the proximity to one or two metro lines leads to significant property value changes.

Research published in the paper titled "Interaction of Public Transport Accessibility and Residential Property Values Using Smart Card Data" found that properties located in well-connected, well-serviced, and accessible locations generally experience premiums in their values. The results indicate that there is value added to the property market from the public investment in public transport services and infrastructure.

In addition, pedestrian and cycling facilities will be enhanced along the route, supporting mobility, access to facilities and services and physical activity. These accessible facilities will support mobility impaired persons and an aging population to continue to access the city by multiple modes.

Where potential land acquisition is envisaged, Galway City Council will engage readily with landowners potentially impacted by the proposed scheme. This engagement process will seek to agree measures, whether financial and/or physical, to mitigate the direct impact of the proposed scheme. A Compulsory Purchase Order for this scheme will be required. The Compulsory Purchase Order process will fairly value the impact of the proposed scheme on properties and provide for mitigation measures including for the construction of new boundary walls.

The potential impacts of the proposed scheme will be fully quantified as part of the Environmental Impact Assessment (EIA) process which will be carried out by Galway City Council during the preparation of a planning consent application for the scheme. These impacts will be taken into account by An Bord Pleanála in their assessment of the scheme.

4.6.10 Issue 10: Land Acquisition

In total 6 of the submissions received included comments related to land acquisition. Three (50%) of these submissions were mixed / negative / very negative and the themes related to:

- Accessibility / Traffic Impact;
- Economy / Impact on Local business; and
- Social Impact.

These mixed / negative / very negative submissions were related to land acquisition issues along the College Road / Dublin Road section and the Eyre Square section of the scheme.

The other three (50%) of these submissions were neutral / positive / very positive. While they contained specific concerns or queries in relation to land acquisition, they also contained positive and supportive sentiment on other aspects of the scheme as a whole.

4.6.10.1 Galway City Council Response to Issue 10

Similar to Issue 9 above, where potential land acquisition is envisaged, Galway City Council will engage readily with landowners potentially impacted by the proposed scheme. This engagement process will seek to agree measures, whether financial and/or physical, to mitigate the direct impact of the proposed scheme.

The precise land acquisition required to deliver the scheme can only be determined at detailed design level, and its justification will be presented as part of a Compulsory Purchase Order process. The potential impacts of the proposed scheme will be fully quantified as part of the Environmental Impact Assessment (EIA) process which will be carried out by Galway City Council during the preparation of a planning application for the scheme.

4.6.11 Issue 11: Associated Bus Facilities

In total, 7 of the submissions received included comments related to lack of associated bus facilities such as toilets and bus shelters. Most of these submissions were neutral or positive / very positive. Two of these submissions were mixed / negative / very negative and the themes related to:

- Accessibility / Traffic Impact;
- Safety; and
- Integration / Bus Network.

These mixed / negative / very negative submissions were related to lack of associated bus facilities such as toilets and bus shelters along the entire scheme and not specific to any section of the scheme.

4.6.11.1 Positive/Supportive

While a number of submissions raised specific queries and concerns in relation to the issue of associated bus facilities, most of these also contained positive and supportive sentiment on other aspects of the scheme as a whole.

4.6.11.2 Issues Raised

The main issues raised relating to lack of associated bus facilities were the following:

- A submission was concerned about the lack of toilet/welfare facilities available for use by bus drivers and suggested the need for such facilities in the scheme.
- Some submissions requested and highlighted the need for a bus shelter on Cappagh Road.
- A representative body expressed concerns over the removal of bus stops along the Newcastle Road.

4.6.11.3 Galway City Council Response to Issue 11

The Cross-City Link provides the infrastructure for bus priority measures along a corridor which form part of 5 no. proposed new bus routes as identified in the Galway Transport Strategy. However, the scheme does not extend to the terminus points at either end of any of these routes, where it would typically be expected that bus drivers would take a break and may require welfare facilities. Bus network planning is a function of the National Transport Authority, which will decide the appropriate termini and facilities required along the routes. As such, the delivery of these facilities and other elements including bus shelters along the routes that are not on the Cross-City Link are outside the remit of the Cross-City Link scheme.

Welfare facilities for bus drivers is primarily the responsibility of their employer under Health, Safety & Welfare at Work legislation. Galway City Council provides a network of public conveniences throughout the city which are freely available to all members of the public. The development of the Coach Station at Fairgreen in the city was a very positive development for both bus operators and customers as such welfare facilities are provided in same. The City Council works closely with the National Transport Authority Bus Licensing unit to direct licensed operators to this facility as licenses come up for renewal.

Notwithstanding the above, Galway City Council continually engage with the National Transport Authority on the delivery of bus facilities outside the scope of this scheme and will continue to do so. Submissions made to Galway City Council as part of this consultation process will be considered as part of these ongoing delivery programmes. The National Transport Authority has been notified of the expression of interest in welfare facilities for bus drivers.

4.6.12 Issue 12: Noise Pollution

In total, 6 of the submissions received included comments related to noise pollution. Four (67%) of these submissions were mixed / negative / very negative and the themes related to:

- Accessibility / Traffic Impact; and
- Social Impact.

These mixed / negative / very negative submissions were related to noise pollution issues along the College Road / Dublin Road section, the Eyre Square section and the St Vincent's Avenue section of the scheme.

4.6.12.1 Positive/Supportive

While some submissions raised specific queries and concerns in relation to the issue of noise pollution, they also contained positive and supportive sentiment on other aspects of the scheme as a whole.

4.6.12.2 Issues Raised

In summary the main issues raised relating to noise pollution were the following:

- A resident expressed concerns about the increase in volume of buses travelling College Road, suggesting that this will result in noise pollution as buses produce more noise than cars.
- A number of representative bodies expressed concerns over a potential increase in noise pollution in open plaza areas.
- A business was concerned that proposed land acquisition to their boundary, and the distance to the road, will result in an increase in noise pollution.

4.6.12.3 Galway City Council Response to Issue 12

Under the BusConnects programme, the NTA intend to upgrade the existing bus fleet to transition to a fleet of low emission vehicles which will reduce both noise and air pollution. By 2023, half of the bus fleet are intended to be converted to low emission vehicles, with full conversion completed by 2030.

It should be noted that along College Road and other sections of the Cross-City Link, it is anticipated that there will be a significant reduction in the volume of traffic on this corridor, which is likely to have a positive impact on air and noise quality along this corridor. Also, the Cross-City Link is anticipated to significantly increase the number of trips made by walking and cycling, both of which would have a positive effect on air and noise quality.

The potential impact of the scheme in relation to Air quality and Noise impacts will be detailed as part of the Environmental Impact Assessment (EIA) process which will be carried out by Galway City Council during the preparation of a planning application for the scheme. This assessment will include for emissions and noise generated during the construction phase as well as the operational phase of the project.

5 Summary and Conclusions

The non-statutory public conclusion took place between October 2020 and May 2021. Due to COVID-19 restrictions in place throughout the consultation period, Galway City Council engaged in virtual and on-line non-statutory public consultation on the Cross-City Link project. The purpose of the non-statutory consultation was to encourage stakeholders to identify questions or issues they want the Design Teams to consider as the projects progress through design and statutory processes.

A total of 93 submissions were received. Submissions were received via the public information room, through emails to Galway City Council, and by phone. Each submission was assigned a sentiment comprising of either Very Positive, Positive, Neutral, Negative, Very Negative or Mixed. Of the submissions received 60% were classified as Very Positive, Positive or Neutral. 29% of submission were classified as negative or very negative and 11% were classified as mixed.

A number of issues were raised by respondents, each of which will be further considered during the ongoing design process of the Cross-City Link in advance of the submission of an application for planning consent to be submitted to An Bord Pleanála. Additionally, a full Environmental Impact Assessment Report will be prepared for the scheme and will accompany the planning application. It is expected that planning consent will be sought from An Bord Pleanála in Q1 2022.

This report will be made available for download on the project website, at www.busconnectsgalway.ie. Galway City Council would like to acknowledge and thank the public for their engagement in the process, and for taking the time to make comments and suggestions on the proposed Cross-City Link.

Appendix A
List of Invitees to Stakeholder Meetings

Organisation	Organisation
Burkes Bus	Michael Moran Coach Hire
Bus Eireann	Paddywagon
Bus Feda Teoranta	Spirit of Ireland Executive Travel
Bus4U	Treacy Coaches
City Direct	Irish Rail
Coach Station Operator	Hynes Yard Car Park
ComfortDelGro Irish Citylink Limited - Citylink	Q Park Eyre Square
Cummer Coaches/ Go Bus	Spanish Arch Car Park - Q Park
Farrells of Athenry	Access for All
Galway Bus Ltd	An Taisce
Healy Coaches	Galway Cathedral
Kearns Transport	Galway City Community Network
Big O Taxis,	Galway City Partnership
City Taxis Galway,	Connacht Rugby
Claddagh Coach Hire	Galweigans
Galway City Taxis	Galway Business School
Galway Minibus Rental,	GMIT
Galway Taxis,	Green Schools
Local Taxis Galway,	GTI Fr Griffin Rd
Minibus Hire Galway	NUI Galway
Procabs	Yeats College
Around Ireland Day Tours Ltd T/a Wild Rover Tours	An Garda Siochana
Barrett Travel	Civil Defence
Corduff Travel	Fire Services
Dave Long Coach Travel	HSE Ambulances
Extreme Event Ireland	Order of Malta
Faherty Tours	Saolta - University Hospital Galway
Farrellys Coaches	Woodquay Residents Association
Finn McCool Tours	East of the Corrib
Fitzpatrick Coaches/ Meadow Tours Ltd	Oranmore Maree Planning & Environment Group
Galway Sightseeing Tour Company	Friends of Merlin Woods
Healy Tours	Aecom
Hidden Dublin Walks	Atkins
High King Tours	RPS
Irish Concert Travel	Tobins
Kennedy Coaches	MKO Ireland
Lally Coaches	Boston Scientific
Lally Tours	Galway Chamber of Commerce
Cyclist.ie	Galway City Business Association
Cyclist.ie/ An Taisce	Galway Convention Bureau
Galway Cycling Bus	Galway Shopping Centre

Galway Cycling Campaign	IDA
Galway Urban Greenway Alliance	Irish Hotels Federation - Galway Branch
Gensys	Latin Quarter
SAP	Restaurant Association of Ireland - Galway Branch
West Ireland Cycling	Salthill Village
An Rothar Nua	Vintners Federation of Ireland - Galway Branch
Transport SPC 2019-2020	Westend Traders
Cosain	Woodquay Traders
Eyre Square Association	Harbour Company
Failte Ireland Galway	

Appendix B
Sample Feedback Extracts

Public Consultation
Sample Feedback Extracts

BUS CONNECTS GALWAY
TRANSFORMING CITY BUS SERVICES

'I would like to see a policy in promoting cycling - this project is a great start, but more needs to be done. Galway could be the best cycle city in Ireland if it embraced it.'

"I really like the enlarged area that will be pedestrianised and the much safer environments and routes for cyclists."

"I welcome this scheme which is desperately needed to improve transit within the city"

"I welcome the scheme and hope it makes the city much more accessible for people with disabilities"

"this is a complete overhaul of the existing structure, in favour of a sustainable and healthy option"

"Given the level of commuting to work and also the need for many to cross the city in order to travel between West Galway and anywhere else in Ireland, the scheme will only work in tandem with sufficient park and ride facilities, and with the proposed Ring Road"

"The proposed five bus routes will provide bus services for many more of the city residents than the existing bus services"

"We are excited by the proposals contained within Bus Connects Galway – in particular, the five high frequency cross city bus routes. This will enhance the punctuality of bus services no end."

"I think this scheme is essential. I wholly support its introduction. We need to move away from cars if we are to have a sustainable city, and people won't use public transport unless it is frequent, fast-moving and reliable."

"If a transition to public transport is needed in the city, then the merits of the proposed scheme in encouraging a shift from car should be presented more clearly"

"This development is an important piece of a bigger puzzle. If we don't get the other pieces in place this development will possibly add to traffic congestion"

"This change in how we access our city will come one way or another and keeping the centre vibrant and with commercial value is key to it success. We need public and commercial communities to start thinking of the change they need now"

"The installation of segregated & protected cycle lanes, the provision of wider footpaths and pedestrianized zones and the rebalancing of traffic lights in their favour can only enhance Galway and keep it thriving & safe"

NTA
Údarás Náisiúnta Iompair
National Transport Authority

National Transport Authority
Dún Scéine
Harcourt Lane
Dublin 2
D02 WT20

Comhairle Cathrach na Gaillimhe
Galway City Council

Project Ireland 2040
Building Ireland's Future

Appendix C
Section UR: R863 University Road to R866 St. Francis Street Route Options Assessment MCA Table

Table C.1 - Section UR: R863 University Road to R866 St. Francis Street Route Options Assessment MCA Table

Assessment Criterion	Assessment Sub-Criterion	**Option 1-** Provide enhanced pedestrian facilities and plaza area at Cathedral. Bus priority achieved through demand management at traffic signals at University Road and Bothar na mBan	**Option 2 -** Close Salmon Weir Bridge to non-PT traffic. Bus priority is achieved along University road through the removal of demand. Provide enhanced pedestrian facilities and plaza area at Cathedral.	**Option 3 -** Provide a bus lane on University Road. Bus Lane can change direction between inbound and outbound at Eglinton Canal Bridge. Option to include Bus Only to north of Galway Cathedral, non-PT traffic to be routed along Gaol Road
Economy	1.a. Capital Cost	Moderate	Minor - Primarily Road markings and Signage	Significant civil engineering works. Likely significant accommodation works to replace parking
	Rank			
	1.b. Transport Reliability and Quality (PT Journey Time)	Minimal level of bus priority - reduced control on non-essential traffic	Very high level of bus priority - All non-essential traffic removed along corridor	High level of bus priority - however mixing with non-essential traffic will be unavoidable
	Rank			
	1.c. Transport Reliability and Quality (Pedestrian and Cyclist Journey Quality and Time)	Route lies on the Primary Cycle Network. Traffic reduction throughout the day	Route lies on the Primary Cycle Network. Traffic reduction during bridge closure times. Provides opportunity to widen footways	Route lies on the Primary Cycle Network. Segregated Cycle Tracks would provide improved cycle quality. Potential reduced footpath widths in some locations would reduce pedestrian journey quality
	Rank			
	1.d Transport Reliability and Quality (All Vehicles Journey Time)	Reduction of traffic through demand management will likely result in delays for non-PT traffic approaching this section and through re-routing	Closure of Salmon Weir bridge will cause significant re-routing of all non PT traffic. Will likely result in significant congestion and delay on other routes including the CCAN	Moderate impact due to removal of vehicular capacity due to provision of limited bus priority and diversions around cathedral
	Rank			

Assessment Criterion	Assessment Sub-Criterion	**Option 1**- Provide enhanced pedestrian facilities and plaza area at Cathedral. Bus priority achieved through demand management at traffic signals at University Road and Bothar na mBan	**Option 2** - Close Salmon Weir Bridge to non-PT traffic. Bus priority is achieved along University road through the removal of demand. Provide enhanced pedestrian facilities and plaza area at Cathedral.	**Option 3** - Provide a bus lane on University Road. Bus Lane can change direction between inbound and outbound at Eglinton Canal Bridge. Option to include Bus Only to north of Galway Cathedral, non-PT traffic to be routed along Gaol Road
Safety	2.a. Pedestrian User Safety	Upgrading pedestrian facilities to and along the route to improve pedestrian accessibility in the area.	Upgrading pedestrian facilities to and along the route to improve pedestrian accessibility in the area.	Potential for narrowing of footpaths in order to provide bus lanes and cycle tracks. Improvements to only be made to pedestrian facilities and crossings at bus stops and other key locations where possible.
	Rank			
	2.b. Cyclist User Safety	No significant increase in segregation between cyclists and other vehicles.	Non-Essential Traffic removed for improved cyclist movement.	Segregated cycle tracks to be provided along the length of the scheme
	Rank			
	2.c. Public Transport User Safety	Reduction in vehicular traffic leading to reduced chance of conflicts .	Reduction in vehicular traffic leading to reduced chance of conflicts .	All design facilities to be designed in accordance with best practice. However, due to discontinuous bus lanes, buses will be required to merge with traffic lanes. Creates opportunities for conflict with other vehicles and cyclists.
	Rank			
	2.d. Other Road User Safety	All design facilities to be designed in accordance with best practice. However, reallocation of vehicular road space to public transport could result in increased volumes of traffic and more opportunities for conflicts elsewhere.	Restrictions to private traffic along corridor could result in increased volumes of traffic and more opportunities for conflicts elsewhere.	All design facilities to be designed in accordance with best practice. However, due to discontinuous bus lanes, buses will be required to merge with traffic lanes. Creates opportunities for conflict with buses and cyclists.
	Rank			

Assessment Criterion	**Assessment Sub-Criterion**	**Option 1**- Provide enhanced pedestrian facilities and plaza area at Cathedral. Bus priority achieved through demand management at traffic signals at University Road and Bothar na mBan	**Option 2** - Close Salmon Weir Bridge to non-PT traffic. Bus priority is achieved along University road through the removal of demand. Provide enhanced pedestrian facilities and plaza area at Cathedral.	**Option 3** - Provide a bus lane on University Road. Bus Lane can change direction between inbound and outbound at Eglinton Canal Bridge. Option to include Bus Only to north of Galway Cathedral, non-PT traffic to be routed along Gaol Road
Physical Activity	3.a. Promotion of Active Travel	Pedestrian, Cyclist trips unlikely to change	Pedestrian, Cyclist facilities likely to encourage higher mode share. Increased PT usage to increase pedestrian movement.	Inclusion of cycle tracks may encourage more cyclists, however reduction in some footpath widths will not encourage more pedestrian trips.
	Rank			
Environment	4.a. Archaeological, Architectural and Cultural Heritage	There are a number of structures along the route listed in the Recorded Protected Structures including Salmon Weir Bridge and St Mary's Terrace. St Mary's Terrace is an Architectural Conservation Area. The proposed plaza area will not impact on the Cathedral (listed in the National Inventory of Architectural Heritage).	There are a number of structures along the route listed in the Recorded Protected Structures including Salmon Weir Bridge and St Mary's Terrace. St Mary's Terrace is an Architectural Conservation Area. The proposed works will require minimal and not impact any Protected Structures.	There are a number of structures along the route listed in the Recorded Protected Structures including Salmon Weir Bridge and St Mary's Terrace. St Mary's Terrace is an Architectural Conservation Area. Will require land acquisition and potential setting back of NUIG boundary wall and railings along University Road
	Rank			
	4.b. Flora & Fauna	The River Corrib is part of the Lough Corrib SAC. The proposed works will be limited to the existing road infrastructure and not impact on any local habitats.	The River Corrib is part of the Lough Corrib SAC. The proposed works will be limited to the existing road infrastructure and not impact on any local habitats.	The River Corrib is part of the Lough Corrib SAC. Road widening along University Road may require the removal of a row of mature trees.
	Rank			

Assessment Criterion	Assessment Sub-Criterion	**Option 1-** Provide enhanced pedestrian facilities and plaza area at Cathedral. Bus priority achieved through demand management at traffic signals at University Road and Bothar na mBan	**Option 2 -** Close Salmon Weir Bridge to non-PT traffic. Bus priority is achieved along University road through the removal of demand. Provide enhanced pedestrian facilities and plaza area at Cathedral.	**Option 3 -** Provide a bus lane on University Road. Bus Lane can change direction between inbound and outbound at Eglinton Canal Bridge. Option to include Bus Only to north of Galway Cathedral, non-PT traffic to be routed along Gaol Road
	4.c. Soils and Geology	Some ground works will be required for the construction of the plaza but no significant impacts are envisaged.	Some ground works will be required for the construction of the plaza but no significant impacts are envisaged.	Some ground works will be required for road widening but no significant impacts are envisaged.
	Rank			
	4.d. Hydrology	The proposed works will not require changes to the existing drainage network.	The proposed works will require changes to the existing drainage network and provide a new separate storm water network and interceptor	The proposed works will require changes to the existing drainage network and provide a new separate storm water network and interceptor
	Rank			
	4.e. Landscape and Visual	The plaza (and associated pedestrian bridge will facilitate enhanced views of the River Corrib and the city from the Cathedral looking eastwards.	The plaza (and associated pedestrian bridge will facilitate enhanced views of the River Corrib and the city from the Cathedral looking eastwards.	Neutral compared to current scenario.
	Rank			
	4.f. Air Quality	The proximity of the road to sensitive receptors (e.g. University, residential areas, hospital, Cathedral, etc.) will not change.	The proximity of the road to sensitive receptors (e.g. University, residential areas, hospital, Cathedral, etc.) will not change.	The proximity of the road to sensitive receptors (e.g. University, residential areas, hospital, Cathedral, etc.) will not change.
	Rank			

Assessment Criterion	**Assessment Sub-Criterion**	**Option 1**- Provide enhanced pedestrian facilities and plaza area at Cathedral. Bus priority achieved through demand management at traffic signals at University Road and Bothar na mBan	**Option 2** - Close Salmon Weir Bridge to non-PT traffic. Bus priority is achieved along University road through the removal of demand. Provide enhanced pedestrian facilities and plaza area at Cathedral.	**Option 3** - Provide a bus lane on University Road. Bus Lane can change direction between inbound and outbound at Eglinton Canal Bridge. Option to include Bus Only to north of Galway Cathedral, non-PT traffic to be routed along Gaol Road
	4.g. Noise & Vibration	The proximity of the road to sensitive receptors (e.g. University, residential areas, hospital, Cathedral, etc.) will not change.	The proximity of the road to sensitive receptors (e.g. University, residential areas, hospital, Cathedral, etc.) will not change.	The proximity of the road to sensitive receptors (e.g. University, residential areas, hospital, Cathedral, etc.) will not change.
	Rank			
	4.h. Land Use Character	The land use will change to provide additional open civic space at the Cathedral due to the proposed plaza. There will be no loss of land use.	The land use will change to provide additional open civic space at the Cathedral due to the proposed plaza. There will be no loss of land use.	The land use character will not be altered as a result of the proposed works.
	Rank			
Accessibility and Social Inclusion	5.a. Access to Key Trip Attractors (Education/Health/Transport/Commercial/Employment)	No significant changes anticipated.	Increased PT accessibility to all trip attractors on Core Bus Network including UHG, NUIG and City Centre. Reduced accessibility to City Centre for commercial deliveries, private traffic and schools from west of City .	No significant changes anticipated.
	Rank			
	5.b. Mobility Impaired User Benefits	Safe, dedicated crossing points for Mobility Impaired pedestrians, in particular at NUIG Entrance	Safe, dedicated crossing points for Mobility Impaired pedestrians, in particular at NUIG Entrance	Safe, dedicated crossing points for Mobility Impaired pedestrians, in particular at NUIG Entrance
	Rank			

Assessment Criterion	**Assessment Sub-Criterion**	**Option 1-** Provide enhanced pedestrian facilities and plaza area at Cathedral. Bus priority achieved through demand management at traffic signals at University Road and Bothar na mBan	**Option 2 -** Close Salmon Weir Bridge to non-PT traffic. Bus priority is achieved along University road through the removal of demand. Provide enhanced pedestrian facilities and plaza area at Cathedral.	**Option 3 -** Provide a bus lane on University Road. Bus Lane can change direction between inbound and outbound at Eglinton Canal Bridge. Option to include Bus Only to north of Galway Cathedral, non-PT traffic to be routed along Gaol Road
Integration	6.a. Public Transport Network Integration	Route aligns with GTS Core Bus Network, but does not provide significant improved priority.	Aligns with GTS Core Bus Network proposals with very high levels of priority	Aligns with GTS Core Bus Network proposals with improved levels of priority
	Rank			
	6.b. Cycle Network Integration	No significant changes anticipated.	Route identified as primary network in GTS. Vehicular restrictions throughout the day provide traffic reduction for cyclists.	Route identified as primary network in GTS. Cycle Tracks proposed to provide cycle segregation.
	Rank			
	6.c. Road Network Integration	Minimal impact envisaged	Closure of SWB to private traffic will have a significant impact	Minimal impact envisaged
	Rank			
GTS Policies	7.a. Efficient and Reliable public transport to and through the city centre	Minimal Level of Bus Priority Measures with significant sharing with non-essential traffic.	High Level of Bus Priority Measures with no mixing with non-essential traffic during bridge closure times	Improved Level of Bus Priority Measures but sharing with non-essential traffic at key locations.
	Rank			
	7.b Enable Traffic to access and move around the city centre.	Access to the core city centre is maintained for all non-PT traffic	Access to the core city centre along this route from the west is removed during bridge closure times for all non-PT traffic requiring re-routing of traffic to access the city-centre	Access to the core city centre is maintained for all traffic
	Rank			

Assessment Criterion	Assessment Sub-Criterion	**Option 1-** Provide enhanced pedestrian facilities and plaza area at Cathedral. Bus priority achieved through demand management at traffic signals at University Road and Bothar na mBan	**Option 2 -** Close Salmon Weir Bridge to non-PT traffic. Bus priority is achieved along University road through the removal of demand. Provide enhanced pedestrian facilities and plaza area at Cathedral.	**Option 3 -** Provide a bus lane on University Road. Bus Lane can change direction between inbound and outbound at Eglinton Canal Bridge. Option to include Bus Only to north of Galway Cathedral, non-PT traffic to be routed along Gaol Road
	7.c. Provision of Access to existing facilities	Access to all existing facilities is maintained for all traffic	Significantly improved access to city centre via public transport, however also reduced accessibility to core city centre via private car from the west of the city.	Access to all existing facilities is maintained for all traffic
	Rank			
	7.d. Safe and efficient movement of Pedestrians and Cyclists on and crossing the routes.	Minor improvement due to enhanced facilities along the route	Improved pedestrian routes and crossings. Non-Essential Traffic removed for improved cyclist movement during peak hours.	Reduced footway widths along route will reduce the safe and efficient movement of pedestrians.
	Rank			
	7.e. Remove non-essential motorised traffic from core city centre	Minimal impact anticipated.	Will remove both essential and non-essential traffic from core-city centre along this corridor during bridge closure times.	Minimal impact anticipated.
	Rank			

Appendix D

Appendix D - Section CR: R339 College Road from R339 Forster Street to Lough Atalia Road Route Options Assessment MCA Table

Table D.1 - Section CR: R339 College Road from R339 Forster Street to Lough Atalia Road Route Options Assessment MCA Table

Assessment Criterion	Assessment Sub-Criterion	**Option 1 -** Provide a Bus Gate on College Road and restrict through movement for private traffic. Upgrade pedestrian footways and crossing points	**Option 2 -** Provide bus lanes on College Road (inbound and outbound) property frontage acquisition and demolition of 2 properties
Economy	1.a. Capital Cost	Moderate	Major - Land acquisition will be necessary
	Rank		
	1.b. Transport Reliability and Quality (PT Journey Time)	Very high level of bus priority through restrictions on through traffic	Very high level of bus priority through dedicated bus lanes
	Rank		
	1.c. Transport Reliability and Quality (Pedestrian and Cyclist Journey Quality and Time)	College Road is a secondary cycle route. LOS improved through removal of non-essential traffic. Pedestrian route enhanced through reduction in traffic and improved pedestrian crossing points and wider footpaths	Cycle tracks in both directions will significantly improve cyclist journey quality, however reduced footpath widths and wider carriageways will reduce pedestrian quality.
	Rank		
	1.d Transport Reliability and Quality (All Vehicles Journey Time)	Transfer of traffic from College Road onto Lough Atalia Road. Will increase queue lengths but unlikely to increase journey time due to constraints at Moneenageisha	Minor impact on private vehicles journey times
	Rank		
Safety	2.a. Pedestrian User Safety	Upgrading pedestrian facilities to and along the route to improve pedestrian accessibility in the area, coupled with removal of non-essential traffic	Upgrading pedestrian facilities to and along the route to improve pedestrian accessibility in the area. Wider carriageways may make is no difficult for pedestrians to cross the carriageway safely
	Rank		
	2.b. Cyclist User Safety	Through traffic reduction to provide higher LOS for cyclists.	Segregated cycle tracks will provide a higher LOS for cyclists
	Rank		

Table D.1 - Section CR: R339 College Road from R339 Forster Street to Lough Atalia Road Route Options Assessment MCA Table

Assessment Criterion	**Assessment Sub-Criterion**	**Option 1 -** Provide a Bus Gate on College Road and restrict through movement for private traffic. Upgrade pedestrian footways and crossing points	**Option 2 -** Provide bus lanes on College Road (inbound and outbound) property frontage acquisition and demolition of 2 properties
	2.c. Public Transport User Safety	Dedicated PT corridor with restrictions on non-essential vehicular traffic reducing chance of conflicts. Improved pedestrian crossings and routes to bus corridor.	Dedicated bus lanes with segregation from traffic reducing chance of conflicts. Improved pedestrian crossings and routes to bus corridor.
	Rank		
	2.d. Other Road User Safety	The prohibition of through-traffic will result in trips being generally for local access only, and this could act as a traffic calming measure.	Segregation of general traffic from bus lanes is not expected to impact on the safety of the corridor for vehicles
	Rank		
Physical Activity	3.a. Promotion of Active Travel	Pedestrian, Cyclist facilities likely to encourage higher mode share	Pedestrian, Cyclist facilities likely to encourage higher mode share
	Rank		
Environment	Archaeological, Architectural and Cultural Heritage	The proposed works are minimal and will not impact any Protected Structures or those included in the National Inventory of Architectural Heritage (Galway City Council/National Monuments Service).	There is potential for the road to become closer in proximity to some Protected Structures (depending on final design) along College Road.
	Rank		
	Flora & Fauna	Currently Lough Atalia Road is adjacent to Galway Bay Complex SAC, Inner Galway Bay SPA and Galway Bay Complex pNHA (National Parks and Wildlife Service (NPWS)). The proposed works will be minimal and not extend into or impact the designated sites.	There is the potential removal of vegetation including mature trees and green areas along College Road, depending on the final design. The works will not extend into the boundary of the designated sites adjacent to Lough Atalia Road (NPWS).
	Rank		

Table D.1 - Section CR: R339 College Road from R339 Forster Street to Lough Atalia Road Route Options Assessment MCA Table

Assessment Criterion	Assessment Sub-Criterion	**Option 1 -** Provide a Bus Gate on College Road and restrict through movement for private traffic. Upgrade pedestrian footways and crossing points	**Option 2 -** Provide bus lanes on College Road (inbound and outbound) property frontage acquisition and demolition of 2 properties
	Soils and Geology	No significant ground works will be required and minimal impact to soils and geology is envisaged.	Significant ground works will be required for the proposed works to facilitate a new bus lane.
	Rank		
	Hydrology	Areas of hardstanding and drainage infrastructure will not change	Local drainage network will be required to be upgraded to the road width being increased. Area of hardstanding will potentially increase if green space lost.
	Rank		
	Landscape and Visual	Minimal impact on the landscape and visual aspects due to alterations at junctions are envisaged compared to the current scenario.	Potential negative impact on landscape and visual with potential removal of walls and trees at City Hall and Magdelan Convent. Significant removal of mature trees along the road corridor including those currently privately owned. However landscaping affected areas may mitigate this depending on the final design.
	Rank		
	Air Quality	The distance between the sources of air emissions (i.e. traffic) and sensitive receptors will not change.	Road widening would be required, bringing the road closer to sensitive receptors e.g. residential housing, secondary school.
	Rank		
	Noise & Vibration	The distance between the sources of noise and vibration (i.e. traffic) and sensitive receptors will not change.	Road widening would be required, bringing the road closer to sensitive receptors e.g. residential housing, secondary school.
	Rank		

Table D.1 - Section CR: R339 College Road from R339 Forster Street to Lough Atalia Road Route Options Assessment MCA Table

Assessment Criterion	**Assessment Sub-Criterion**	**Option 1 -** Provide a Bus Gate on College Road and restrict through movement for private traffic. Upgrade pedestrian footways and crossing points	**Option 2 -** Provide bus lanes on College Road (inbound and outbound) property frontage acquisition and demolition of 2 properties
	Land Use Character	The proposed works will not impact the existing land use of areas adjacent to the route.	Potential loss of land use. It will be necessary to acquire private land for the road widening.
	Rank		
Accessibility and Social Inclusion	5.a. Access to Key Trip Attractors (Education/Health/Transport/Commercial/Employment)	Increased PT accessibility to all trip attractors on Core Bus Network including UHG, NUIG and City Centre	Increased PT accessibility to all trip attractors on Core Bus Network including UHG, NUIG and City Centre
	Rank		
	5.b. Mobility Impaired User Benefits	Safe, dedicated crossing points for Mobility Impaired pedestrians, reduced traffic volumes on College Road	Safe, dedicated crossing points for Mobility Impaired pedestrians
	Rank		
Integration	6.a. Public Transport Network Integration	Aligns with GTS Core Bus Network proposals	Aligns with GTS Core Bus Network proposals
	Rank		
	6.b. Cycle Network Integration	Route identified as a secondary route in GTS. Traffic reduction provided	Route identified as a secondary route in GTS. Cycle Track Provided
	Rank		
	6.c. Road Network Integration	Reduced capacity on road network for private traffic.	No significant impact on existing road network.
	Rank		
GTS Policies	7.a. Efficient and Reliable public transport to and through the city centre	High Level of Bus Priority Measures with minimal mixing with non-essential traffic	High Level of Bus Priority Measures with minimal mixing with non-essential traffic
	Rank		
	7.b Enable Traffic to access and move around the city centre.	Increased vehicular queuing on Lough Atalia Road anticipated. Reduced access to College Road	Little alterations anticipated

Table D.1 - Section CR: R339 College Road from R339 Forster Street to Lough Atalia Road Route Options Assessment MCA Table

Assessment Criterion	Assessment Sub-Criterion	**Option 1 -** Provide a Bus Gate on College Road and restrict through movement for private traffic. Upgrade pedestrian footways and crossing points	**Option 2 -** Provide bus lanes on College Road (inbound and outbound) property frontage acquisition and demolition of 2 properties
	Rank		
	7.c. Provision of Access to existing facilities	Significantly improved access to/from city centre via public transport. Reduced accessibility to College Road via private car.	Improved access to City Centre via public transport
	Rank		
	7.d. Safe and efficient movement of Pedestrians and Cyclists on and crossing the routes.	Improved pedestrian routes and crossings. Traffic reduction results in improved cyclist movement.	Improvement for cyclist movement however reduction in opportunities for pedestrians to cross the route due to a wider carriageway
	Rank		
	7.e. Remove non-essential motorised traffic from core city centre	Will remove non-essential traffic on College Road and re-route same onto City Centre Access Network	No significant changes to current traffic movements
	Rank		

Appendix E
Section CRM: R339 College Road from Lough Atalia Road to Moneenageisha Route Options Assessment MCA Table

Table E.1 - Section CRM: R339 College Road from Lough Atalia Road to Moneenageisha Route Options Assessment MCA Table

Assessment Criterion	**Assessment Sub-Criterion**	**Option 1 -** College Road, between Lough Atalia Road and Moneenageisha Road to be maintained at its current width. One outbound lane to be converted to a bus lane.	**Option 2 -** College Road, between Lough Atalia Road and Moneenageisha Road to be widened to provide an additional inbound raised cycle track and an outbound bus lane.	**Option 3 -** College Road, between Lough Atalia Road and Moneenageisha Road, to be significantly widened to provide inbound and outbound bus lanes and inbound and outbound cycle track;
Economy	1.a. Capital Cost	Minor	Major	Major - likely 12 additional properties requiring acquisition of land from and an additional 5m road widening
	Rank			
	1.b. Transport Reliability and Quality (PT Journey Time)	Outbound bus lane will result in a moderate improvement	Outbound bus lane will result in a moderate improvement	Major improvement due to provision of bus lanes in both directions
	Rank			
	1.c. Transport Reliability and Quality (Pedestrian and Cyclist Journey Quality and Time)	Unlikely to have any impact	Improvement due to inbound cycle lane and outbound bus lane	Major improvement due to inbound and outbound cycle tracks
	Rank			
	1.d Transport Reliability and Quality (All Vehicles Journey Time)	Significant negative impact on the CCAN due to the removal of an existing all traffic lane	Unlikely to have any impact	Unlikely to have any impact
	Rank			
Safety	2.a. Pedestrian User Safety	Unlikely to have any impact	Unlikely to have any impact	Unlikely to have any impact
	Rank			
	2.b. Cyclist User Safety	Unlikely to have any impact	Improvement due to inbound cycle track and outbound bus lane	Major improvement due to inbound and outbound cycle tracks

Table E.1 - Section CRM: R339 College Road from Lough Atalia Road to Moneenageisha Route Options Assessment MCA Table

Assessment Criterion	**Assessment Sub-Criterion**	**Option 1 -** College Road, between Lough Atalia Road and Moneenageisha Road to be maintained at its current width. One outbound lane to be converted to a bus lane.	**Option 2 -** College Road, between Lough Atalia Road and Moneenageisha Road to be widened to provide an additional inbound raised cycle track and an outbound bus lane.	**Option 3 -** College Road, between Lough Atalia Road and Moneenageisha Road, to be significantly widened to provide inbound and outbound bus lanes and inbound and outbound cycle track;
	Rank			
	2.c. Public Transport User Safety	Minor improvement due to provision of outbound bus lane	Minor improvement due to provision of outbound bus lane	Minor improvement due to provision of inbound and outbound bus lane
	Rank			
	2.d. Other Road User Safety	Unlikely to have any impact	Unlikely to have any impact	Unlikely to have any impact
	Rank			
Physical Activity	3.a. Promotion of Active Travel	Unlikely to have any impact	Minor improvement due to provision of inbound cycle track	Minor improvement due to provision of cycle tracks, but less likely to encourage pedestrians due to road width
	Rank			
Environment	Archaeological, Architectural and Cultural Heritage	Unlikely to have any impact	Unlikely to have any impact	Unlikely to have any impact
	Rank			
	Flora & Fauna	Unlikely to have any impact	Large number of mature trees likely to be removed. Garden frontage acquisition.	Larger number of mature trees likely to be removed. Garden frontage acquisition on both sides of the road
	Rank			
	Soils and Geology	Unlikely to have any impact	Excavation required from existing Petrol filling station and removal of 2 underground fuel storage tanks.	Additional Excavation required from existing Petrol filling station and removal of 3-4 underground fuel storage tanks.

Table E.1 - Section CRM: R339 College Road from Lough Atalia Road to Moneenageisha Route Options Assessment MCA Table

Assessment Criterion	**Assessment Sub-Criterion**	**Option 1 -** College Road, between Lough Atalia Road and Moneenageisha Road to be maintained at its current width. One outbound lane to be converted to a bus lane.	**Option 2 -** College Road, between Lough Atalia Road and Moneenageisha Road to be widened to provide an additional inbound raised cycle track and an outbound bus lane.	**Option 3 -** College Road, between Lough Atalia Road and Moneenageisha Road, to be significantly widened to provide inbound and outbound bus lanes and inbound and outbound cycle track;
	Rank			
	Hydrology	Unlikely to have any impact	Additional road drainage and outfall required. Potential to impact on pathway from PFS to SAC	Additional road drainage and outfall required. Higher potential to impact on pathway from PFS to SAC
	Rank			
	Landscape and Visual	Unlikely to have any impact	Removal of trees and boundaries will have a negative impact	Removal of trees and boundaries will have a negative impact
	Rank			
	Air Quality	Unlikely to have any impact	Unlikely to have any impact	Unlikely to have any impact
	Rank			
	Noise & Vibration	Unlikely to have any impact	Road widening will move traffic closer to sensitive receptors on one side of the road.	Road widening will move traffic closer to sensitive receptors on both sides of the road.
	Rank			
	Land Use Character	Unlikely to have any impact	Road widening will have a moderate negative impact on the land use character	Road widening will have a moderate negative impact on the land use character
	Rank			
Accessibility and Social Inclusion	5.a. Access to Key Trip Attractors (Education/Health/Transport/Commercial/Employment)	Unlikely to have any impact	Minor improvement due to the additional outbound bus lane and inbound cycle lane	Improvement due to the additional inbound and

Table E.1 - Section CRM: R339 College Road from Lough Atalia Road to Moneenageisha Route Options Assessment MCA Table

Assessment Criterion	**Assessment Sub-Criterion**	**Option 1 -** College Road, between Lough Atalia Road and Moneenageisha Road to be maintained at its current width. One outbound lane to be converted to a bus lane.	**Option 2 -** College Road, between Lough Atalia Road and Moneenageisha Road to be widened to provide an additional inbound raised cycle track and an outbound bus lane.	**Option 3 -** College Road, between Lough Atalia Road and Moneenageisha Road, to be significantly widened to provide inbound and outbound bus lanes and inbound and outbound cycle track;
				outbound bus lanes and cycle tracks
	Rank			
	5.b. Mobility Impaired User Benefits	Unlikely to have any impact	Unlikely to have any impact	Unlikely to have any impact
	Rank			
Integration	6.a. Public Transport Network Integration	Unlikely to have any impact	Major improvement due to provision of outbound bus lane	Major improvement due to provision of inbound and outbound bus lane
	Rank			
	6.b. Cycle Network Integration	Unlikely to have any impact	Major improvement due to provision of outbound bus lane and inbound cycle lane	Major improvement due to provision of inbound and outbound cycle tracks
	Rank			
	6.c. Road Network Integration	Minor negative impact due to removal of an outbound traffic lane	Unlikely to have any impact	Unlikely to have any impact
	Rank			
GTS Policies	7.a. Efficient and Reliable public transport to and through the city centre	Unlikely to have any impact	Moderate positive impact due to the improvements to bus services from city centre to east/north	Moderate positive impact due to the improvements to bus services from city centre to east/north
	Rank			

Table E.1 - Section CRM: R339 College Road from Lough Atalia Road to Moneenageisha Route Options Assessment MCA Table

Assessment Criterion	**Assessment Sub-Criterion**	**Option 1 -** College Road, between Lough Atalia Road and Moneenageisha Road to be maintained at its current width. One outbound lane to be converted to a bus lane.	**Option 2 -** College Road, between Lough Atalia Road and Moneenageisha Road to be widened to provide an additional inbound raised cycle track and an outbound bus lane.	**Option 3 -** College Road, between Lough Atalia Road and Moneenageisha Road, to be significantly widened to provide inbound and outbound bus lanes and inbound and outbound cycle track;
	7.b Enable Traffic to access and move around the city centre.	Minor negative impact due to removal of an outbound traffic lane	Unlikely to have any impact	Unlikely to have any impact
	Rank			
	7.c. Provision of Access to existing facilities	Unlikely to have any impact	Unlikely to have any impact	Unlikely to have any impact
	Rank			
	7.d. Safe and efficient movement of Pedestrians and Cyclists on and crossing the routes.	Unlikely to have any impact	Little improvement for pedestrians and major improvement for cyclists	Little improvement for pedestrians and major improvement for cyclists
	Rank			
	7.e. Remove non-essential motorised traffic from core city centre	Minor negative impact due to removal of an outbound traffic lane	Unlikely to have any impact	Unlikely to have any impact
	Rank			

Appendix F
Section DR: R338
Dublin Road Route
Options Assessment
MCA Table

Table F.1 - Section DR: R338 Dublin Road Route Options Assessment MCA Table

Assessment Criterion	**Assessment Sub-Criterion**	**Option 1** - One inbound traffic lane converted into bus lane. No Cycle facilities, no land acquisition	**Option 2** - Two inbound Traffic lanes and bus lane. Raised adjacent inbound cycle track. A bus gate provided at the junction for LT buses. Two outbound traffic lanes (merging to one), an outbound bus lane and raised adjacent cycle track
Economy	1.a. Capital Cost	Moderate - primarily road marking and alterations at Moneenageisha junction	Major - additional inbound lane results in road widening and land acquisition requirements
	Rank		
	1.b. Transport Reliability and Quality (PT Journey Time)	Moderate improvement due to provision of inbound bus lane, no improvements to outbound bus. Potential for inbound bus to encounter delays entering the bus lane	Major improvement due to inbound bus lane and additional bus gate to prioritise left-turn to College Road.
	Rank		
	1.c. Transport Reliability and Quality (Pedestrian and Cyclist Journey Quality and Time)	No impact except inbound cyclists able to use inbound bus lane	Major improvement due to dedicated inbound and outbound cycle facilities.
	Rank		
	1.d Transport Reliability and Quality (All Vehicles Journey Time)	Significant negative impact due to removal of inbound traffic lane	No anticipated impact on general traffic
	Rank		
Safety	2.a. Pedestrian User Safety	No impact	Minor positive improvement due to tightening of junction at Moneenageisha.
	Rank		
	2.b. Cyclist User Safety	Moderate positive impact due to availability of inbound cycle lane for cycling	Major positive impact due to provision of dedicated segregated facilities inbound and outbound.
	Rank		
	2.c. Public Transport User Safety	Little improvement	Little improvement
	Rank		

Table F.1 - Section DR: R338 Dublin Road Route Options Assessment MCA Table

Assessment Criterion	**Assessment Sub-Criterion**	**Option 1 -** One inbound traffic lane converted into bus lane. No Cycle facilities, no land acquisition	**Option 2 -** Two inbound Traffic lanes and bus lane. Raised adjacent inbound cycle track. A bus gate provided at the junction for LT buses. Two outbound traffic lanes (merging to one), an outbound bus lane and raised adjacent cycle track
	2.d. Other Road User Safety	Little improvement	Little improvement
	Rank		
Physical Activity	3.a. Promotion of Active Travel	Little improvement	Major positive improvement due to provision of dedicated cycle facilities and improved pedestrian crossings
	Rank		
Environment	Archaeological, Architectural and Cultural Heritage	No impact	No impact
	Rank		
	Flora & Fauna	No impact	Tree removal likely required for road widening
	Rank		
	Soils and Geology	No impact	No impact
	Rank		
	Hydrology	No impact	Additional road drainage required for widening
	Rank		
	Landscape and Visual	No impact	Minor negative impact due to tree removal and road widening
	Rank		
	Air Quality	Minor negative impact due to increased emissions from queueing traffic due to lane removal.	No impact
	Rank		

Table F.1 - Section DR: R338 Dublin Road Route Options Assessment MCA Table

Assessment Criterion	**Assessment Sub-Criterion**	**Option 1 -** One inbound traffic lane converted into bus lane. No Cycle facilities, no land acquisition	**Option 2 -** Two inbound Traffic lanes and bus lane. Raised adjacent inbound cycle track. A bus gate provided at the junction for LT buses. Two outbound traffic lanes (merging to one), an outbound bus lane and raised adjacent cycle track
	Noise & Vibration	No impact	No impact
	Rank		
	Land Use Character	No impact	No impact
	Rank		
Accessibility and Social Inclusion	5.a. Access to Key Trip Attractors (Education/Health/Transport/Commercial/Employment)	Moderate negative impact due to removal of inbound traffic lane	Improvement due to provision of dedicated bus and cycle facilities and provision of two inbound traffic lanes.
	Rank		
	5.b. Mobility Impaired User Benefits	Little improvement	Little improvement
	Rank		
Integration	6.a. Public Transport Network Integration	Major improvements due to provision of dedicated public transport priority, and dedicated bus priority through the junction at Moneenageisha	Major improvements due to provision of dedicated public transport priority, and dedicated bus priority through the junction at Moneenageisha
	Rank		
	6.b. Cycle Network Integration	No impact	Major improvement due to dedicated inbound and outbound cycle facilities.
	Rank		
	6.c. Road Network Integration	Moderate negative impact due to removal of inbound traffic lane.	No Impact
	Rank		

Table F.1 - Section DR: R338 Dublin Road Route Options Assessment MCA Table

Assessment Criterion	**Assessment Sub-Criterion**	**Option 1** - One inbound traffic lane converted into bus lane. No Cycle facilities, no land acquisition	**Option 2** - Two inbound Traffic lanes and bus lane. Raised adjacent inbound cycle track. A bus gate provided at the junction for LT buses. Two outbound traffic lanes (merging to one), an outbound bus lane and raised adjacent cycle track
GTS Policies	7.a. Efficient and Reliable public transport to and through the city centre	Moderate improvements due to provision of dedicated public transport priority, but no priority through the junction at Moneenageisha	Major improvements due to provision of dedicated public transport priority, and dedicated bus priority through the junction at Moneenageisha
	Rank		
	7.b Enable Traffic to access and move around the city centre.	Moderate negative impact due to removal of inbound traffic lane	No Impact
	Rank		
	7.c. Provision of Access to existing facilities	Minor improvement due to provision of additional bus and cycle facilities, but only one inbound traffic lane. Overall neutral	Major improvement due to provision of dedicated bus and cycle facilities and provision of two inbound traffic lanes.
	Rank		
	7.d. Safe and efficient movement of Pedestrians and Cyclists on and crossing the routes.	Major improvement due to dedicated inbound and outbound cycle facilities and tightening of the junction at Moneenageisha.	Major improvement due to dedicated inbound and outbound cycle facilities and tightening of the junction at Moneenageisha.
	Rank		
	7.e. Remove non-essential motorised traffic from core city centre	Little improvement expected	Little improvement expected
	Rank		

Appendix G

Section BA: Bóthar Na mBan / St. Brendan's Avenue / R866 Headford Road / Dyke Road Route Options Assessment MCA Table

Table G.1 - Section BA: Bóthar Na mBan/St. Brendan's Avenue/R866 Headford Road/Dyke Road Route Options Assessment MCA Table

Assessment Criterion	**Assessment Sub-Criterion**	**Option 1 -** Provide footpath on Bóthar na mBan, requiring existing STOP line (and signals) to be set-back	**Option 2 -** CPO properties to widen Bóthar na mBan to provide footpaths on both sides and left and right turning lanes, also implement a one-way system clockwise around Dyke Road/Headford Road triangle
Economy	1.a. Capital Cost	Minor	Major
	Rank		
	1.b. Transport Reliability and Quality (PT Journey Time)	Likely to have minimal impact	Moderate positive impact due to provision of outbound bus lane and separation of general traffic and bus movements
	Rank		
	1.c. Transport Reliability and Quality (Pedestrian and Cyclist Journey Quality and Time)	Moderate positive impact for pedestrian on Bóthar na mBan with additional footpath, but relocation of crossing point away from the junction results in the crossing point being off-set from the desire line	Major positive impact for pedestrian with additional footpaths, and positive impact for cyclists due to cycle facilities on Dyke Road
	Rank		
	1.d Transport Reliability and Quality (All Vehicles Journey Time)	Significant negative impact due to reduced capacity at junction due to need to offset stop line	Major positive impact due to additional vehicle capacity
	Rank		
Safety	2.a. Pedestrian User Safety	Major positive impact for pedestrian with additional footpaths	Major positive impact for pedestrian with additional footpaths
	Rank		
	2.b. Cyclist User Safety	Likely to have minimal impact	Moderate improvement due to new cycle track on Dyke Road
	Rank		
	2.c. Public Transport User Safety	Likely to have minimal impact	Likely to have minimal impact
	Rank		

Table G.1 - Section BA: Bóthar Na mBan/St. Brendan's Avenue/R866 Headford Road/Dyke Road Route Options Assessment MCA Table

Assessment Criterion	**Assessment Sub-Criterion**	**Option 1 -** Provide footpath on Bóthar na mBan, requiring existing STOP line (and signals) to be set-back	**Option 2 -** CPO properties to widen Bóthar na mBan to provide footpaths on both sides and left and right turning lanes, also implement a one-way system clockwise around Dyke Road/Headford Road triangle
	2.d. Other Road User Safety	Likely to have minimal impact	Moderate improvement due to additional road space available
	Rank		
Physical Activity	3.a. Promotion of Active Travel	Likely to have moderate positive impact	Likely to have moderate positive impact
	Rank		
Environment	Archaeological, Architectural and Cultural Heritage	No Recorded Monuments, sites of architectural heritage or sites of archaeological and cultural heritage merit were identified along the route or within the vicinity of the route.	No Recorded Monuments, sites of architectural heritage or sites of archaeological and cultural heritage merit were identified along the route or within the vicinity of the route.
	Rank		
	Flora & Fauna	The route does not cross any site of International, European or National conservation value.	The route does not cross any site of International, European or National conservation value.
	Rank		
	Soils and Geology	Minimal potential for impacts to soils and geology and no evidence of historic industries or gravel pits that could give rise to potential contamination.	Significant ground works will be required for road widening in existing developed area. No evidence of historic industries or gravel pits that could give rise to potential contamination.
	Rank		
	Hydrology	This route does not cross or run adjacent to any rivers or streams so diversion works or construction of bridges or culverts is not required	This route does not cross or run adjacent to any rivers or streams so diversion works or construction of bridges or culverts is not required.

Table G.1 - Section BA: Bóthar Na mBan/St. Brendan's Avenue/R866 Headford Road/Dyke Road Route Options Assessment MCA Table

Assessment Criterion	Assessment Sub-Criterion	**Option 1 -** Provide footpath on Bóthar na mBan, requiring existing STOP line (and signals) to be set-back	**Option 2 -** CPO properties to widen Bóthar na mBan to provide footpaths on both sides and left and right turning lanes, also implement a one-way system clockwise around Dyke Road/Headford Road triangle
	Rank		
	Landscape and Visual	Minimal impact envisaged.	Two properties to be removed.
	Rank		
	Air Quality	The distance between the sources of air emissions (i.e. traffic) and sensitive receptors will not change.	The distance between the sources of air emissions (i.e. traffic) and sensitive receptors will not change.
	Rank		
	Noise & Vibration	The distance between the sources of noise and vibration (i.e. traffic) and sensitive receptors will not change.	The distance between the sources of noise and vibration (i.e. traffic) and sensitive receptors will not change.
	Rank		
	Land Use Character	No impact on existing land use.	Removal of two properties.
	Rank		
Accessibility and Social Inclusion	5.a. Access to Key Trip Attractors (Education/Health/Transport/Commercial/Employment)	Reduced capacity at junction could have a major negative impact	Major positive impact due to enhanced traffic capacity and additional footpaths
	Rank		
	5.b. Mobility Impaired User Benefits	Major positive impact due to enhanced footpath provision	Major positive impact due to enhanced footpath provision
	Rank		
Integration	6.a. Public Transport Network Integration	Unlikely to have any impact	Minor positive impact due to additional public transport priority
	Rank		

Table G.1 - Section BA: Bóthar Na mBan/St. Brendan's Avenue/R866 Headford Road/Dyke Road Route Options Assessment MCA Table

Assessment Criterion	Assessment Sub-Criterion	**Option 1 -** Provide footpath on Bóthar na mBan, requiring existing STOP line (and signals) to be set-back	**Option 2 -** CPO properties to widen Bóthar na mBan to provide footpaths on both sides and left and right turning lanes, also implement a one-way system clockwise around Dyke Road/Headford Road triangle
	6.b. Cycle Network Integration	Unlikely to have any impact	Moderate positive impact due to increased road space and improved accessibility from Bóthar na mBan to Headford Road for cyclists which is part of the GTS Secondary Cycle Network, and inclusion of Dyke Road contra flow cycle track
	Rank		
	6.c. Road Network Integration	Moderate negative impact due to reduced capacity at junction	Moderate positive impact due to additional vehicle capacity, but less-direct routing
	Rank		
GTS Policies	7.a. Efficient and Reliable public transport to and through the city centre	Unlikely to have any impact	Minor positive impact due to additional public transport priority
	Rank		
	7.b Enable Traffic to access and move around the city centre.	Significant negative impact due to reduced capacity at junction	Moderate positive impact due to additional vehicle capacity
	Rank		
	7.c. Provision of Access to existing facilities	Moderate positive impact due to additional footpaths but reduced capacity at junction could have a negative impact	Moderate positive impact due to enhanced traffic capacity and pedestrian facilities
	Rank		
	7.d. Safe and efficient movement of Pedestrians and Cyclists on and crossing the routes.	Major positive impact due to enhanced footpath provision	Major positive impact due to enhanced footpath provision
	Rank		

Table G.1 - Section BA: Bóthar Na mBan/St. Brendan's Avenue/R866 Headford Road/Dyke Road Route Options Assessment MCA Table

Assessment Criterion	**Assessment Sub-Criterion**	**Option 1 -** Provide footpath on Bóthar na mBan, requiring existing STOP line (and signals) to be set-back	**Option 2 -** CPO properties to widen Bóthar na mBan to provide footpaths on both sides and left and right turning lanes, also implement a one-way system clockwise around Dyke Road/Headford Road triangle
	7.e. Remove non-essential motorised traffic from core city centre	Moderate negative impact due to reduced capacity at junction which could cause queuing within the City Centre	Positive impact due to additional traffic capacity in bringing cars out of the City Centre and discouraging cars entering the City Centre via Dyke Road due to enforced detour onto Headford Road, and discouraging through traffic from St. Vincent's Ave to Headford Rd
	Rank		

NTA

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National Transport Authority

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Project Ireland 2040
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