

DUBLIN CITY CENTRE TRANSPORT PLAN 2023

Technical Notes | Part 4: Walking



Comhairle Cathrach
Bhaile Átha Cliath
Dublin City Council



Jacobs



Dublin City Centre Transport Plan 2023 Technical Note Part 4: Walking

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WALKING



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1 INTRODUCTION

1.1 Context

The Dublin City Centre Transport Plan 2023 (the Plan) is an update of the 2016 City Centre Transport Study, as provided for in the Dublin City Development Plan (DCDP) 2022-2028¹. It is intended to frame the implementation of the DCDP and the 2022-2042 National Transport Authority (NTA) Transport Strategy for the Greater Dublin Area (the Transport Strategy) in Dublin City Centre.

The Plan considers ways to optimise and enhance the transport network to meet the transport needs, challenges, and opportunities for the city centre. This is based on prevailing national, regional and local transport policy, most notably the Hierarchy of Road Users model set out in the National Sustainable Mobility Policy (NSMP), which places sustainable modes at the top. The emerging proposals have been developed with the sustainable growth of the city and its economy as a key aim, as well as its social, cultural and environmental wellbeing.

A suite of technical notes has been produced which informed the development of the Plan. This note should be read in conjunction with the other technical notes.

1.2 Purpose of This Technical Note

The DCDP places an emphasis on enabling mode shift to sustainable modes of travel, including walking. The DCDP has an objective to increase pedestrian mode share in the city centre from 11% to 13%. This note sets out how walking could be made a more attractive choice, to achieve this mode share.

This technical note looks at the development of a preferred primary walking network, which will consist of linkages to key public buildings, shopping streets, public transport points, employment, education, and tourist and recreational attractions. This network will identify key connections in the existing walking network, as well as locations where connections could be added or improved. This will form a coherent network where pedestrians will be prioritised and the pedestrian environment can be enhanced to be safe, attractive and universally accessible.

While “walking” is used throughout this note and in graphics, it is noted some pedestrians may identify with “wheeling”, such as people using wheelchairs or mobility scooters, or pushing strollers. The walk network is intended to accommodate both walking and wheeling.

1.3 Structure of Technical Note

The structure of this technical note is as follows:

- **Section 2** outlines the relevant policy documentation that informed this technical note within the wider Plan;
- **Section 3** presents the receiving environment considered, as well as challenges and opportunities for walking;
- **Section 4** presents the principles identified for the walking network;
- **Section 5** outlines the methodology followed, and how this was applied to develop a primary walking network;
- **Section 6** presents a set of future considerations.

¹ Published by Dublin City Council (DCC) in 2022

2 PLANNING CONTEXT

2.1 Dublin City Development Plan 2022-2028

The DCDP will govern spatial policy in the city; its main strategic approach is to develop a city that is low carbon, sustainable and climate resilient. The DCDP's vision is for a city where people will choose to live; work; experience city living; invest; and socialise – the plan to create a socially inclusive city of urban neighbourhoods hinges on the principle of 15-minute cities whereby people's daily requirements will be accessible within a 15-minute walk, cycle or public transport journey.

As the DCDP inherits policy directives from the NPF and the Eastern and Midlands RSES, it aims to promote compact growth and sustainable development patterns. In particular, the DCDP promotes transit-oriented development by encouraging intensified density in proximity to DART and Luas lines.

Of the 16 chapters that constitute the DCDP, Chapter 7 (The City Centre, Urban Villages and Retail); Chapter 8 (Sustainable Movement and Transport); Chapter 10 (Green Infrastructure and Recreation); and Chapter 13 (Strategic Development and Regeneration Areas) are of particular relevance to this Plan. Each Chapter has a series of policies and objectives associated with it and the relevant ones are presented in turn.

2.1.1 Chapter 7 – The City Centre, Urban Villages and Retail

With a focus on the challenges posed by the pandemic's effect on urban activity, the changing nature of retail and increased competition from retail developments further outside the city centre, Chapter 7 of the DCDP recognises that the *“city centre and the city's other urban centres will need to offer wide ranging appeal to draw and attract visitors. This includes leisure uses, residential uses, office and community uses as well as retail uses.”* The centre of Dublin is the premier location for retail activity in the State and it is the policy of the council to affirm and maintain this primacy. The Chapter's Strategic Approach includes the following key points:

- *“Place sustainability and climate resilience as the over-arching consideration in the development of the city centre and urban villages with a particular emphasis on healthy streets, active travel and public transport accessibility, building on the 15-minute city concept, the primacy of the city centre and the vitality and viability of existing and emerging centres.”*
- *“Provide a vibrant mix of shopping, leisure, office and residential uses, third spaces and family friendly attractions in the city centre thereby, offering shoppers an experience and a depth of offer that attracts suburban shoppers / workers / tourist / students / residents to shop, socialise and spend time in the city centre.”*
- *“Recognise the importance of placemaking and an attractive public realm and its contribution to supporting city centre retail, enhanced pedestrian amenities and developing the city centre and urban villages as key destinations.”*
- *“Place an emphasis on healthy place making in the city centre and in all urban centres with initiatives tailored towards making these centres better places to live and to visit.”*

The specific areas targeted include the core retail area detailed in Figure 2-1, and the Urban Village Centres shown in Figure 2-2. The DCDP identifies a need for these areas to offer a vibrant mix of activities and uses to make them attractive to visitors. In this sense, the categorisation of streets in Figure 2-1 identifies streets where the primary retail function is to be protected, with an emphasis on higher order comparison retail as Category 1. Category 2 streets in the figure are designated to provide for a more varied use including retail but also other complementary uses with the potential to increase shopper dwell time in the city.

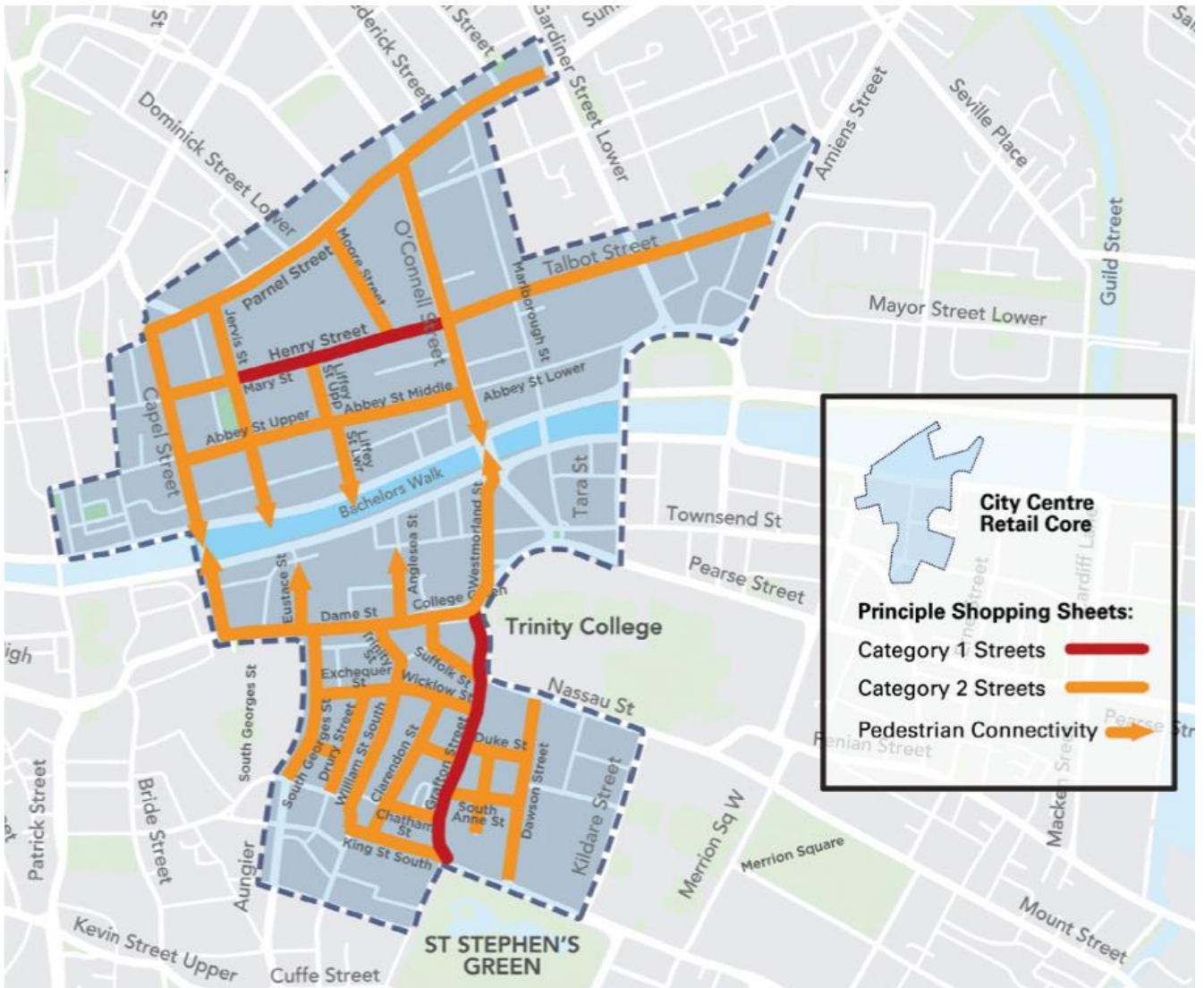


Figure 2-1: Retail Core from Dublin City Development Plan

The role for Key Urban Villages is to complement the city centre, serving as top urban centres for commercial activity. They should be based around high quality transport and can play an important role in inviting regeneration in their vicinity. Support for high-density mixed used developments and residential led intensification in urban villages will enable them to strengthen the positive impact they have on their respective local areas' placemaking functions as social gathering places. They should also attain a viable and varied range of functions to serve their communities.

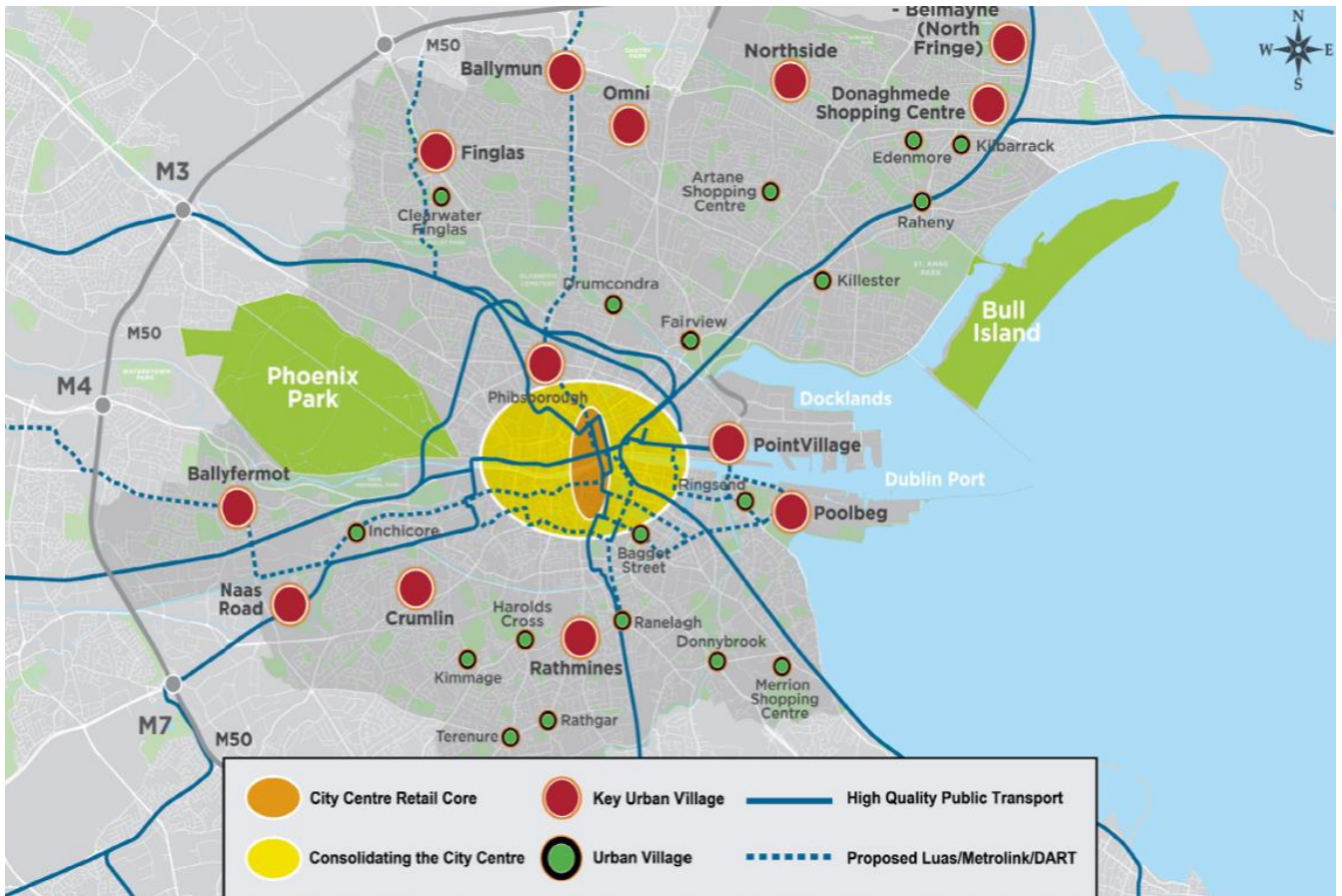


Figure 2-2: Urban Villages and Retail Locations from Dublin City Development Plan

A high-quality public realm should be promoted throughout the city and enabled by the development of Urban Villages and the City Centre Retail core. Public realm quality affects the city experience, its attractiveness as a place to live work and visit, and influences a range of health, well-being, and social factors. Public Realm quality is vital to the liveability and health of the city and to its economic success. A high-quality public realm will provide:

- Quality urban design (Sustainable Residential Development in Urban Areas (2009) and Design Manual for Urban Roads and Streets (2012);
- A Sense of Place;
- Connections;
- Comfort;
- Sociable Spaces;
- Safety;
- High Quality Materials;
- Green Infrastructure; and
- Civic Amenities.

The policies of the DCDP (Table 2-1) and its objectives (Table 2-2) relevant to this walking study are reproduced in the tables below.

Table 2-1: City Centre, Urban Villages and Retail Policies from the Draft Dublin City Development Plan 2022-2028

| <i>It is the Policy of Dublin City Council:</i> | |
|---|--|
| | Category 1 and Category 2 Streets |
| CCUV16 | To protect the primary retail function of Category 1 Streets in the city and to provide for a mix of retail and other complementary on Category 2 streets. To promote active uses at street level on the principal shopping streets in the city centre retail core having regard to the criteria for Category 1 and Category 2 streets. |
| | Diversifying the City Centre |
| CCUV17 | To ensure the resilience of Dublin City Centre to changing trends in retail demand, appropriate opportunities to further diversify the city centre as a place to live, work and socialise will be encouraged. |
| | Parking and the Retail Core |
| CCUV19 | To support the re-use and replacement of car parks in the centre of the retail core and to safeguard short term car parking provision for shoppers and visitors at the periphery of the retail core. The redevelopment of central car parks will support public realm improvements and pedestrian priority in the retail core. |
| | Mixed Use Key Urban Villages/Urban Villages |
| CCUV20 | To support the development, regeneration and or consolidation of Key Urban Villages/urban villages as appropriate, to ensure these centres continue to develop their mixed used role and function adding vitality to these centres including through the provision of residential development. |
| | Intensification |
| CCUV22 | To support and promote the redevelopment and intensification of underutilised sites within Key Urban Villages and urban villages including surface car parks. |
| | Active Uses |
| CCUV23 | To promote active uses at street level in Key Urban Villages and urban villages and neighbourhood centres. |
| | Neighbourhood Centres / Local Shopping |
| CCUV24 | To support, promote and protect Neighbourhood and Local Centres which play an important role in the local shopping role for residents and provide a range of essential day to day services and facilities. |
| | Plan Active and Healthy Streets |
| CCUV37 | To promote the development of a network of active, healthy, attractive, high quality, green, and safe streets and public spaces which are inviting, pedestrian friendly and easily navigable. The aspiration is to encourage walking as the preferred means of movement between buildings and activities in the city. In the case of pedestrian movement within major developments, the creation of a public street is preferable to an enclosed arcade or other passageway. |
| | High Quality Streets and Spaces |
| CCUV38 | To promote the development of high-quality streets and public spaces which are accessible and inclusive in accordance with the principles of universal design, and which deliver vibrant, attractive, accessible and safe places and meet the needs of the city’s diverse communities regardless of age, ability, disability or gender. |
| | Permeable, Legible and Connected Public Realm |
| CCUV39 | To deliver a permeable, legible and connected public realm that contributes to the delivery of other key objectives of this development plan namely active travel and sustainable movement, quality urban design, healthy placemaking and green infrastructure. |
| | Public Safety |
| CCUV40 | To promote the development of a built environment and public spaces which are designed to deter crime and antisocial behaviour and which promote safety, as set out in the ‘Your City Your Space’ Public Realm Strategy 2012. |
| | New Infrastructure Development |
| CCUV41 | Infrastructure projects in Dublin City should ensure placemaking outcomes through a design-led approach. Dublin City Council will work the relevant agencies / infrastructure providers to achieve public realm enhancements in the design, implementation and delivery of infrastructure projects |

It is the Policy of Dublin City Council:

Public Realm - Key Urban Villages/Urban Villages

To provide environmental and public realm improvements in Key Urban Villages and urban villages around the city through the implementation of Local Environment Improvement Plans / Village Improvement Plans and Placemaking Strategies in order to support the regeneration and revitalisation of the city’s urban villages. Such plans:

- CCUV42**
- (i) will identify opportunities for micro spaces (small spaces to facilitate lingering and social, community and cultural interaction and events); and
 - (ii) will be informed by walkability exercises led by older people, parents, visually impaired and people with disabilities, to make city outdoor spaces more accessible and safe for all, creating walkable communities and age friendly spaces.

Pedestrian Wayfinding Signage System

- CCUV46** To maintain, consolidate and expand the Pedestrian Wayfinding System; to ensure a coherent design approach in the area between the canals and Docklands; and to actively remove redundant brown tourist signage as the opportunity arises. The provision of new brown tourist signage will not be supported in the area between the canals and Docklands.

Table 2-2: City Centre, Urban Villages and Retail Objectives from the Draft Dublin City Development Plan 2022-2028

It is an Objective of Dublin City Council:

| | |
|----------------|--|
| CCUV05 | Underutilised and Inactive City Centre Streets To reactivate the underutilised and inactive city centre streets and lanes in the city centre through the inclusion of art, landscaping, street furniture, outdoor dining, activity spaces and residential uses. |
| CCUV06 | Car Parks and Last Mile Delivery To investigate the potential of the use of car parks in the city centre for micro hubs and distribution centres for ‘last-mile’ delivery as part of the preparation of a Servicing / Logistics Strategy for the city |
| CCUV013 | Civic Spine / College Green To implement a programme of environmental and public realm improvements along the Grand Civic Spine from Parnell Square to Christchurch Place and along the city quays, and to prioritise the redevelopment of College Green as a pedestrian friendly civic space including the pedestrianisation of Foster Place. |
| CCUV016 | Improve Links North / South To improve North / South links between Grafton Street and Henry Street Shopping areas through the implementation of the ‘The Heart of the City’ Public Realm Masterplan for the City Core 2016. |
| CCUV018 | Linking Office and Culture Clusters to the Retail Core To devise a programme to enhance pedestrian amenities, encourage more street based activities and provide micro spaces along key routes from office and culture clusters to the retail core to enhance the vibrancy of the streetscape and to draw office workers and tourists into the retail core. |
| CCUV021 | Manage Pedestrian Wayfinding System To manage the Pedestrian Wayfinding System in consultation with relevant Governments Departments, state agencies (e.g. Fáilte Ireland, Transport Infrastructure Ireland), national cultural institutions and other civic interests in order to ensure the provision of appropriate signage for the principal places of interest in the city. |

2.1.2 Chapter 8 – Sustainable Movement and Transport

Recognising the ‘Need to move away from private car and fossil-fuel-based mobility to reduce the negative impacts of transport and climate change’, and that the ‘city centre has to cater for a wide range of competing demands with public transport, pedestrians, cyclists, the private car, and functional and servicing needs’, Chapter 8 of the DCDP sets a number of policies and objectives reproduced in Table 2-3 and Table 2-4.

Through these, the DCDP aims to:

- Better integrate land use and transport to minimise the need to travel and ensure that development takes place where active travel can be successfully promoted;

- Improve public transport and active travel infrastructure;
- Implement healthy placemaking which involves shaping the built environment so that healthy activities and experiences are integral to people’s everyday lives;
- Tackle congestion; and
- Embrace emerging mobility options.

Table 2-3: Sustainable Transport and Mobility Policies from the Draft Dublin City Development Plan 2022-2028

| <i>It is the Policy of Dublin City Council:</i> | |
|---|--|
| | Modal Shift and Compact Growth |
| SMT1 | To continue to promote modal shift from private car use towards increased use of more sustainable forms of transport such as active mobility and public transport, and to work with the National Transport Authority (NTA), Transport Infrastructure Ireland (TII) and other transport agencies in progressing an integrated set of transport objectives to achieve compact growth. |
| | Decarbonising Transport |
| SMT2 | To support the decarbonising of motorised transport and facilitate the rollout of alternative low emission fuel infrastructure, prioritising electric vehicle (EV) infrastructure. |
| | Integrated Transport Network |
| SMT3 | To support and promote the sustainability principles set out in National and Regional documents to ensure the creation of an integrated transport network that services the needs of communities and businesses of Dublin City and the region. |
| | Integration of Public Transport Services and Development |
| SMT4 | To support and encourage intensification and mixed-use development along public transport corridors and to ensure the integration of high-quality permeability links and public realm in tandem with the delivery of public transport services, to create attractive, liveable and high quality urban places. |
| | Mobility Hubs |
| SMT5 | To support the development of mobility hubs at key public transport locations and local mobility hubs in tandem with new developments to include shared car and micro mobility initiatives, creating a vibrant, accessible and liveable place to support the transportation experience. |
| | Public Realm Enhancements |
| SMT8 | To support public realm enhancements that contribute to place making and liveability and which prioritise pedestrians in accordance with Dublin City Council’s Public Realm Strategy (‘Your City – Your Space’), the Public Realm Masterplan for the City Core (The Heart of the City), the Grafton Street Quarter Public Realm Plan and forthcoming public realm plans such as those for the Parnell Square Cultural Quarter Development and the City Markets Area. |
| | Pedestrian Network |
| SMT10 | To protect, improve and expand on the pedestrian network inclusive of facilities for people with mobility impairment and/or disabilities, including the elderly and people with children, linking key public buildings, shopping streets, public transport points and tourist and recreational attractions. |
| | Urban Villages and the 15-Minute City |
| SMT12 | To support the role of the urban villages in contributing to the 15-minute city through improvement of connectivity in particular for active travel and public realm enhancement. |
| | City Centre Road Space |
| SMT13 | To manage city centre road-space to best address the needs of pedestrians and cyclists, public transport, shared modes and the private car, in particular, where there are intersections between DART, LUAS and Metrolink and with the existing and proposed bus network. |
| | Walking, Cycling and Active Travel |
| SMT15 | To prioritise the development of walking and cycling facilities and encourage a shift to active travel for people of all ages and abilities, in line with the city’s mode share targets. |
| SMT17 | The Pedestrian Environment |

It is the Policy of Dublin City Council:

To continue to maintain and improve the pedestrian environment and promote the development of a network of pedestrian routes which link residential areas with recreational, educational and employment destinations to create a pedestrian environment that is safe, accessible to all in accordance with best accessibility practice.

SMT19 Walking and Cycling for School Trips
To promote walking and cycling for school trips through the promotion of initiatives such as “Safe Routes to School”, the ‘Green Schools’ and ‘Schools Streets’ projects, and to prioritise school routes for permeability projects and provision and enhancements of pedestrian and cycle ways.

SMT22 Shared Mobility and Adaptive Infrastructure
To promote the use and expansion of shared mobility to all areas of the city and facilitate adaptive infrastructure for the changing modal transport environment, including other micro-mobility and shared mobility, as part of an integrated transport network in the city.

SMT23 On-Street Parking
To manage on-street car parking to serve the needs of the city alongside the needs of residents, visitors, businesses, kerbside activity and accessible parking requirements, and to facilitate the re-organisation and loss of spaces to serve sustainable development targets such as in relation to, sustainable transport provision, greening initiatives, sustainable urban drainage, access to new developments, or public realm improvements

SMT26 Repurposing of Multi-Storey Car Parks
To support the repurposing of multi-storey car parks for alternative uses such as central mobility hubs providing high density bike parking, shared mobility services, ‘last mile’ delivery hubs and recreational or cultural uses.

SMT32 Traffic Calming and Self-Regulation Street Environments
To ensure that all streets and street networks are designed to passively calm traffic through the creation of a self-regulating street environment that are suited to all users, including pedestrians and cyclists.

Table 2-4: Sustainable Transport and Mobility Objectives from the Draft Dublin City Development Plan 2022-2028

It is an Objective of Dublin City Council:

SMT01 Transition to More Sustainable Travel Modes
To achieve and monitor a transition to more sustainable travel modes including walking, cycling and public transport over the lifetime of the development plan, in line with the city mode share targets of 26% walking/cycling/micro mobility; 57% public transport (bus/rail/LUAS); and 17% private (car/ van/HGV/motorcycle).

SMT02 Improving the Pedestrian Network
To improve the pedestrian network and prioritise the introduction of tactile paving, ramps and kerb dishing at appropriate locations, including pedestrian crossings, taxi ranks, bus stops and rail platforms in order to optimise accessibility for all users.

SMT017 Cross Guns Bridge
To seek improvements to Cross Guns Bridge for pedestrian and cycle users, taking into consideration the BusConnects and Metrolink projects.

SMT027 Summerhill Pedestrian/Cycle Connection
To provide a pedestrian/cycle connection linking Summerhill to Mountjoy Place.

SMT028 Dominick Street Lower Pedestrian/Cycle Connection
To provide a pedestrian/cycle connection linking Dominick Street Lower to Dominick Place.

2.1.3 Chapter 10: Green Infrastructure and Recreation

Chapter 10 details the DCDP’s approach to Green Infrastructure and Recreation; this includes policies and objectives relating to active travel infrastructure which are of importance to the Plan.

The DCDP envisages a proactive green infrastructure strategy and states that the city’s natural assets, such as parks and landscape features, ‘contribute to the city’s high quality-environment and are essential resources for conserving biodiversity (such as plants and animals) and creating a healthy, low-carbon, resilient and connected city’.

The key relevant policies and objectives are given below in Table 2-5 and Table 2-6.

Table 2-5: Green Infrastructure Policies from the Draft Dublin City Development Plan 2022-2028

| <i>It is the Policy of the Dublin City Council:</i> | |
|---|--|
| | Connectivity |
| GI2 | To develop an interconnected green infrastructure network of strategic natural and semi-natural areas with other environmental features including green spaces, rivers, canals, the coastal and marine area and other physical features including streets and civic spaces that supports ecological, wildlife, and social connectivity. |
| | Greening of Public Realm / Streets |
| GI5 | To integrate urban greening features including nature based solutions into the existing public realm where feasible and into the design of public realm projects for civic spaces and streets. The installation of living green walls will be encouraged to the fullest possible extent throughout the city of Dublin. |
| | Minimise Impact – Light and Noise |
| GI18 | To minimise the environmental impact of external lighting and noise at sensitive locations to achieve a sustainable balance between the needs of an area, the safety of walking and cycling routes and the protection of sensitive species such as bats (see also Section 9.5.9 Public & External Lighting). |
| | Open Space Provision (sq. m.) per 1,000 Persons Benchmark |
| GI25 | To ensure equality of access for all citizens to the public parks and open spaces in Dublin City and to promote more open space with increased accessibility and passive surveillance where feasible. In this regard, a city wide range of 2.5ha to 3.6ha of parks per 1,000 population benchmark for green/ recreational space as set out in the 2019 Parks Strategy (or as updated) shall be a policy goal and quality standard. |
| | Linear Parks and Recreational Use of Waterways Aspects |
| GI32 | To develop linear parks, sustainable riverine access, walkways, cycleways and water focused recreational, sporting and tourism amenities which enhance appreciation of rivers in a manner that ensures that any adverse environmental effects are avoided and ecological enhancements, where appropriate, are employed to ensure a net biodiversity gain. Where lands along the waterways are in private ownership, it shall be policy in any development proposal to secure public access along the waterway. |

Table 2-6: Green Infrastructure Policies from the Draft Dublin City Development Plan 2022-2028

| <i>It is an Objective of the Dublin City Council:</i> | |
|---|---|
| | Metropolitan and Local Greenways |
| GI06 | To support the development of the following metropolitan greenways and local cycleways / walkways: Royal Canal and the Grand Canal (including the inner Grand/Royal canal loop linking the two canals via the Phoenix Park). Rivers Liffey (Dublin Galway Euro route) and Dodder (to Dublin Mountains). Coastal corridor. Local routes and extension of existing routes including along the Rivers Tolka, Santry, Poddle, Camac and Mayne |

2.1.4 Chapter 13: Strategic Development Regeneration Areas

There are 17 Strategic Development Regeneration Areas (SDRAs) identified in the DCDP and these are a key element in delivering compact growth for Dublin; of these, the following 11, also shown on Figure 2-3, are inside the Canal Cordon or bordering it:

- SDRA 6: Docklands
- SDRA 7: Heuston and Environs
- SDRA 8: Grangegorman/Broadstone
- SDRA 10: North East Inner City
- SDRA 11: St. Teresa’s Garden and Environs
- SDRA 12: Dolphin House
- SDRA 13: Markets Area & Environs
- SDRA 14: St. James Medical Campus & Environs
- SDRA 15: Liberties and Newmarket Square
- SDRA 16: Oscar Traynor Road
- SDRA 17: Werburgh Street

Each SDRA is governed by individual principles and objectives which relate to architectural and urban design, phasing, access and permeability, height, urban greening and biodiversity, surface water management, river restoration, sustainable energy, climate change, and cultural infrastructure.

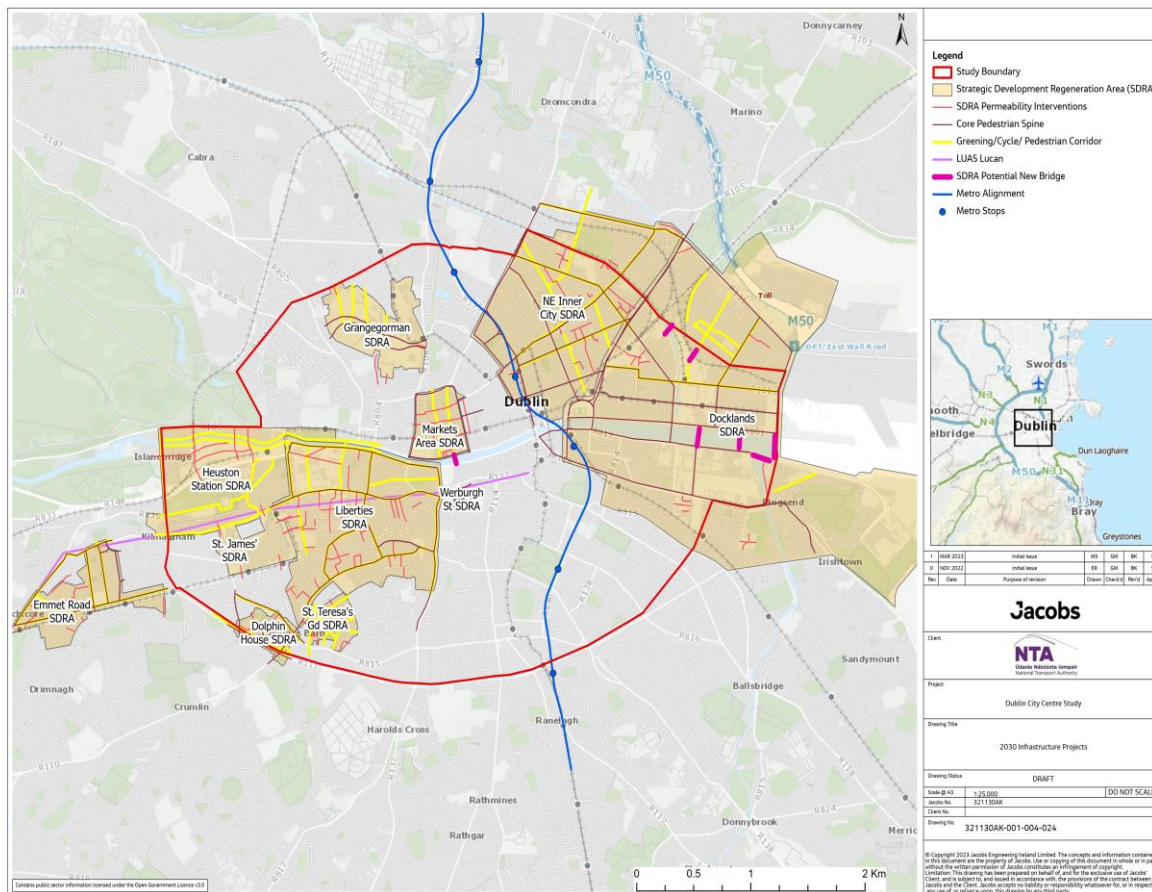


Figure 2-3 Strategic Development Regeneration Area (SDRA) locations

2.2 Greater Dublin Area Transport Strategy 2022 - 2042

The Transport Strategy, the 6-year update of its predecessor Transport Strategy for the Greater Dublin Area 2016-2035, sets out a 20-year strategy to develop a clear understanding of the transport outlook for the Greater Dublin Area between 2022 and 2042. The Transport Strategy emphasises the need to align with wider national and regional policies, as well as spatial planning policy and strategy as Ireland undertakes a climate transition towards a low carbon and climate resilient society. Transport Strategy objectives are listed as:

- Enhanced natural and build environment;
- Connected communities and better quality of life;
- Strong sustainable economy and
- Inclusive transport system.

The Transport Strategy constitutes a variety of chapters relevant to this Plan: Chapter 8: Planning for Sustainable Transport; Chapter 10: Walking, Accessibility and Public Realm; and Chapter 13: Roads - all of which will be summarised in this section.

2.2.1 Chapter 8 - Planning for Sustainable Transport

Underpinning the wider Transport Strategy is the overarching objective of fostering sustainable development and integrated land use and transport planning to minimise travel demand in terms of both volume of trips made and the length of trips. This objective is to be achieved through the employment of transit-oriented development, mixed use development, filtered permeability, and consolidation of development. This raft of measures will limit urban sprawl and ensure that both everyday needs, and sustainable transport options for short and long-distance trips will be easily accessible for all residents of the GDA and by extension, Dublin City Centre.

The transport element of this chapter is defined by the Decide and Provide principle whereby decisions surrounding transport policy will be based on the most desirable future, and the transport options that will provide this. The intended outcome of this is a less car dependent society due to the need to follow sustainable transport centric policies, and the Authority tasked with delivering these transport measures to realise the most desirable future. The transition to sustainable transport options which this principle enables is the Road User Hierarchy, see Figure 2-4, whereby sustainable modes are given preference in the planning and funding of transport schemes.

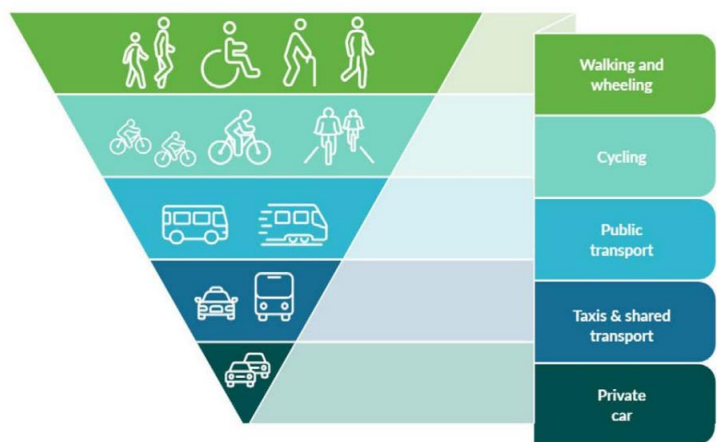


Figure 2-4: Road User Hierarchy (NTA)

Underpinning many of these principles is the national transport policy approach of Avoid-Shift-Improve whereby trip frequencies and distances are reduced through the smart employment of land use planning, necessary trips still undertaken are made utilising sustainable forms of transport such as cycling or public transport, while all modes of transport would see an increased emphasis on efficient fuel and technologies to minimise impact on climate and surroundings by trips being made. Relevant measures are outlined below in Table 2-7.

Table 2-7: GDA Transport Strategy 2022 - 2042 Chapter 8 Relevant Measures

| Transport Strategy Measures: | |
|------------------------------|--|
| | The Road User Hierarchy |
| PLAN2 | The NTA, in the decision-making process around the design, planning and funding of transport schemes in the GDA, will be guided by the priority afforded to each mode in the Road User Hierarchy as set out in the Transport Strategy. |

2.2.2 Chapter 10 – Walking, Accessibility and Public Realm

Walking and wheeling, being the starting and end point of all trips is a vital element of transport systems and should be enabled through a walking network where “A high quality network of footpaths and crossings should be safe, coherent, direct, attractive and comfortable”.

The Transport Strategy outlines plans for improving conditions for pedestrians through measures relating to the upkeep, improving and decluttering of footpaths and junctions which will make walking a safer and more attractive mode for short distance trips. These measures will also act to make footpaths a more welcoming place for vulnerable pedestrians. The Transport Strategy also outlines “hard” measures for improvement of pedestrian facilities alongside public realm. These are relating to pedestrian wayfinding and the further expansion of traffic free streets at varying levels – such as removal of

private traffic, motorised traffic, or full pedestrianisation. Relevant measures listed within the Transport Strategy are outlined below in Table 2-8.

Table 2-8: GDA Transport Strategy 2022 - 2042 Chapter 10 Relevant Measures

| Transport Strategy Measures: | |
|------------------------------|---|
| | Decluttering Footpaths |
| WALK3 | Local authorities in the GDA will rationalise street furniture, poles and signs, and remove redundant poles, signs or other clutter in Dublin city centre and other town centres and their approaches, to allow for easier people movement. |
| | Crossing Points |
| WALK6 | The NTA, with the cooperation of the local authorities, will install additional pedestrian crossing points where requirements are identified. |
| | Traffic-Free Streets and Pedestrianisation |
| WALK8 | The NTA will support local authorities in the provision of traffic-free streets and pedestrianised streets in town centres where there are benefits to transport and/or the local environment and/or the local economy. |

2.2.3 Chapter 13 – Roads

The overarching aim of this chapter is the prioritisation of sustainable travel, with road schemes providing an increase in road capacity deterred in favour of promoting active and public transport modes. This sees measures recommended for the continued protection of strategic function of existing roads but limits the ability for further roads to be built – unless for safety, economy, sustainable travel or development needs.

Table 2-9: GDA Transport Strategy 2022 - 2042 Chapter 13 Relevant Measures

| Transport Strategy Measures: | |
|------------------------------|---|
| | Roadspace Reallocation |
| | The local authorities and the NTA will implement a programme of roadspace reallocation from use by general traffic or as parking to exclusive use by sustainable modes as appropriate, as a means of achieving the following: |
| ROAD13 | <ul style="list-style-type: none"> - Providing sufficient capacity for sustainable modes; - Improving safety for pedestrians and cyclists; and - Encouraging mode shift from the private car and reducing emissions. |

2.3 Planning Context Summary

Both the DCDP and Transport Strategy highlight the importance of walking for Dublin’s future development. The walking network is a fundamental element of the DCDP, which includes objectives “Transition to More Sustainable Travel Modes” (SMT01), and “Improving the Pedestrian Network” (SMT02). Walking will also have an integral role in achieving the Transport Strategy objectives. The planning review, and in particular the excerpts presented in Section 2.1 and Section 2.2, have informed the principles and methodology used in this Plan to develop a primary walking network.

3 FUTURE RECEIVING ENVIRONMENT

The ongoing response to climate change, anticipated economic and demographic growth, as well as land-use changes, will impact on why, when, how, and how often people travel in the future. Many of the policies outlined in Section 2 aim to improve the desirability of sustainable transport and planning in Dublin City, and so by 2030 it is expected that the city will see:

- A changed urban form with more activity and a higher proportion of compact, mixed-use developments;
- A higher capacity high-quality public transport network reinforced by the rollout of BusConnects and DART+, with a focus on multi-modal interchanges;
- Better availability of active travel and shared mobility options;
- Well-connected hubs to serve the economy as an efficient interface for people, firms and goods; and
- A lower private-car traffic environment where the outdoors would be more receptive to civic activity.

3.1 Compact Developments and Transit-Oriented Development

The NPF sets directives and targets steering the urban environments of the country towards more compact growth, which is complemented by directives in the DCDP to focus this compact development in the proximity of public transport hubs. Mixed use, dense developments enable a higher uptake of active travel options since they reduce the average trip lengths. Placing such development in areas which are well served by public transport also caters to the requirements of longer trips, thus reducing the need for citizens to own and use a car. In this respect, the SDRAs presented in Figure 3-1 will enable the urban form to facilitate a greener, more sustainable way of living.

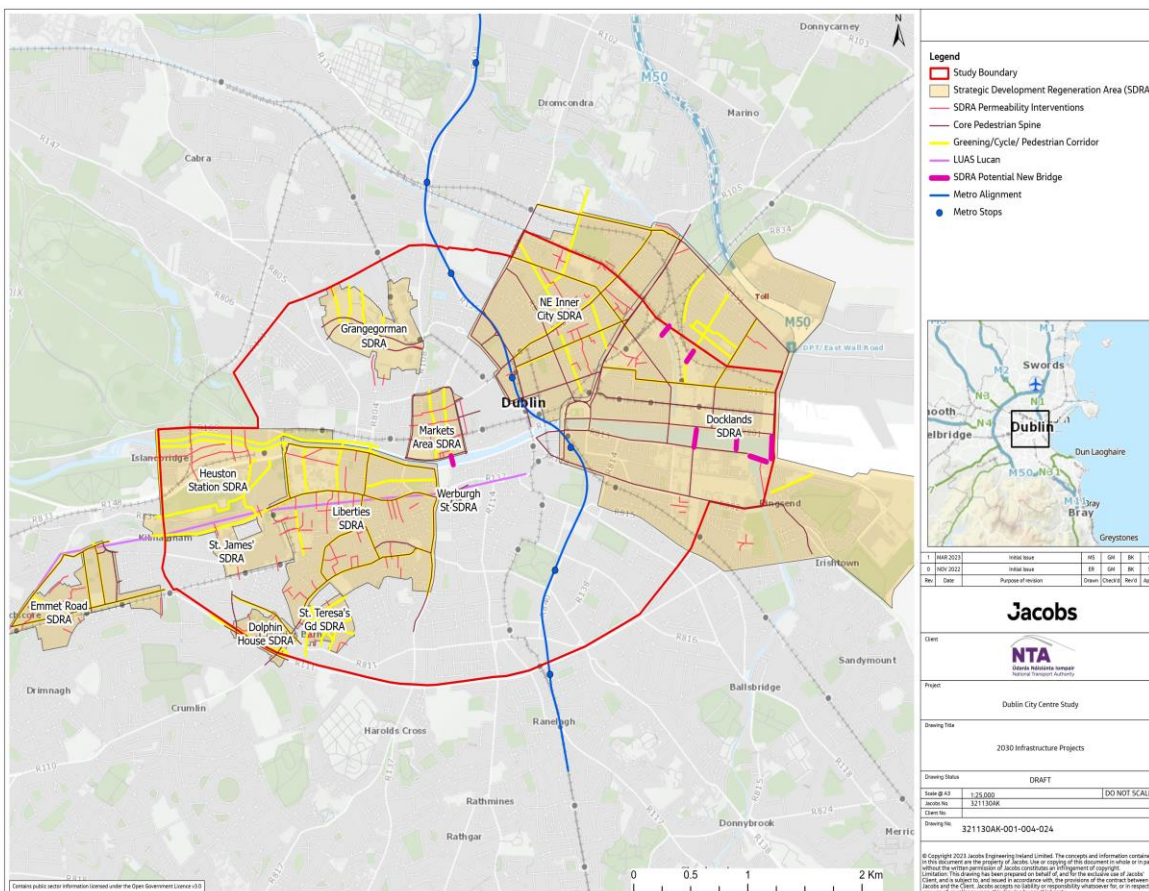


Figure 3-1: Strategic Development Regeneration Area (SDRA) locations

Figure 3-2 shows the urban villages and key streets in and close to the city centre, as well as key locations identified as being in the core city centre. It also shows 5- and 10- minute walking isochrones to these points. Many locations (such as Stoneybatter, Docklands, Baggot Street, Portobello and The Liberties) are within a 10- to 15-minute walk of the core city centre.

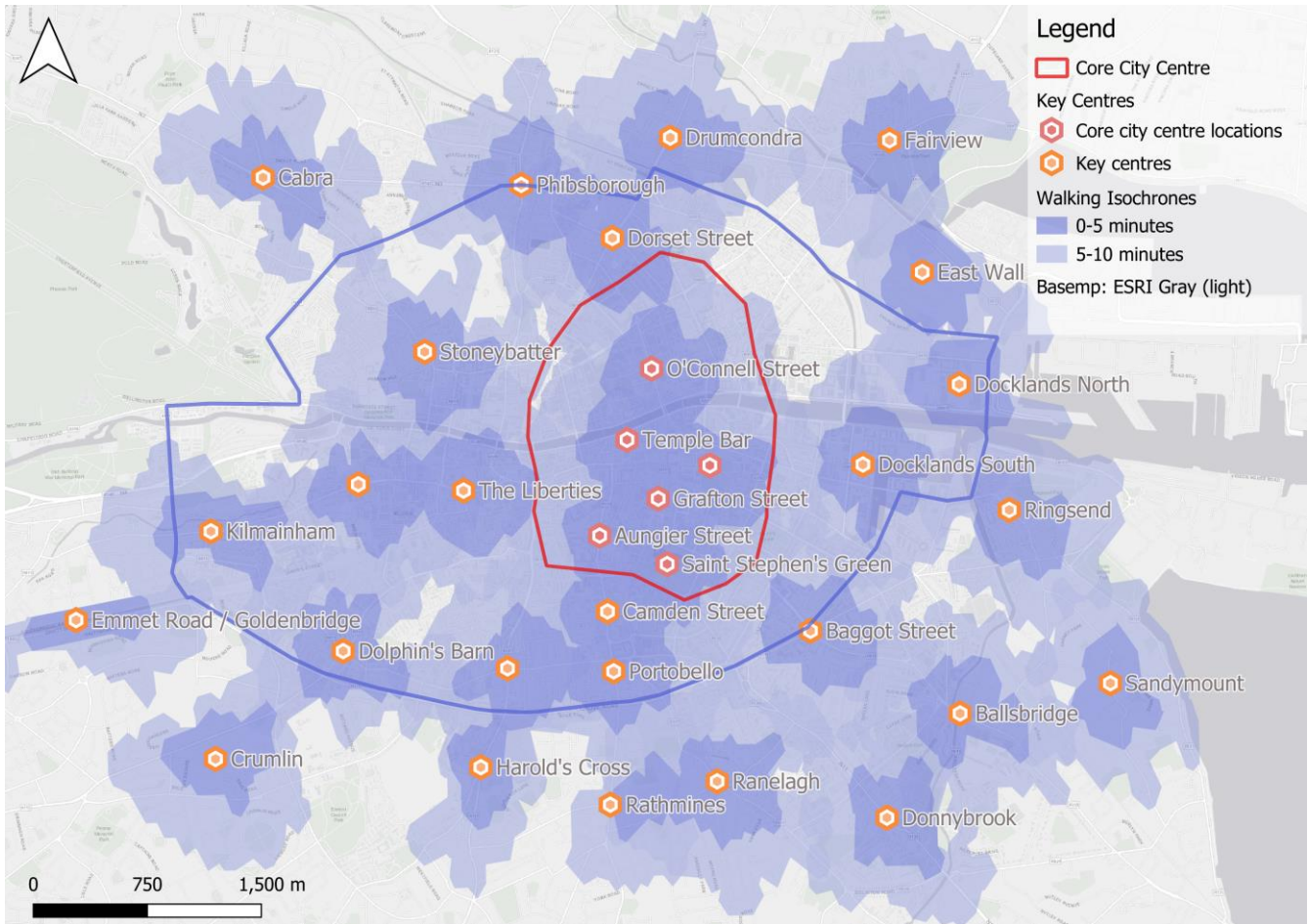


Figure 3-2 Walking isochrones in Dublin City Centre

3.2 Network and Infrastructure in Place in 2030

3.2.1 Walking

The Heart of Dublin: Public Realm Masterplan (2016) (the Masterplan) presents a vision for the core of Dublin City Centre and proposes a variety of interventions to certain city centre streets. As outlined in section 2.1, the DCDP also notes key pedestrian routes and potential improvements, in:

- Chapter 8: Sustainable movement and transport; and
- Chapter 13: Strategic Development Regeneration Areas (SDRAs).

The Masterplan highlights the importance of walking and cycling. It proposes the creation of a pedestrian-friendly core city centre which will require a rebalancing of space in favour of pedestrians. It also proposes interventions to promote “lingering” in the city, including providing adequate seating, micro-spaces, play spaces and green spaces.

The Masterplan sets out three phases of public realm projects in the core city centre; these are shown here in Figure 3-3. One of the key proposals is the removal of vehicular traffic from College Green.

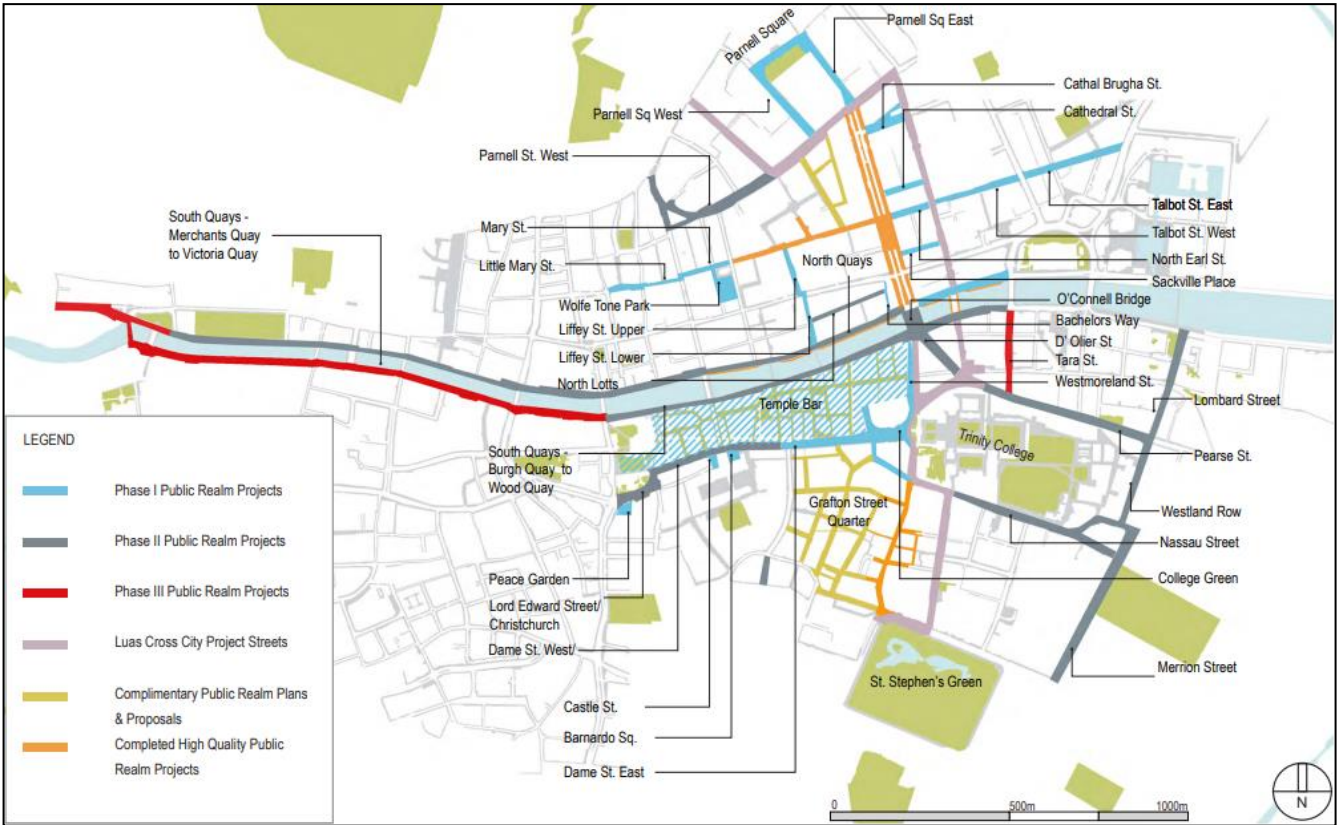


Figure 3-3 Public Realm Masterplan (2016) - Public Realm Projects

Chapter 8 of the DCDP includes a map titled “Strategic Pedestrian and Related Connections” which is shown in Figure 3-4.

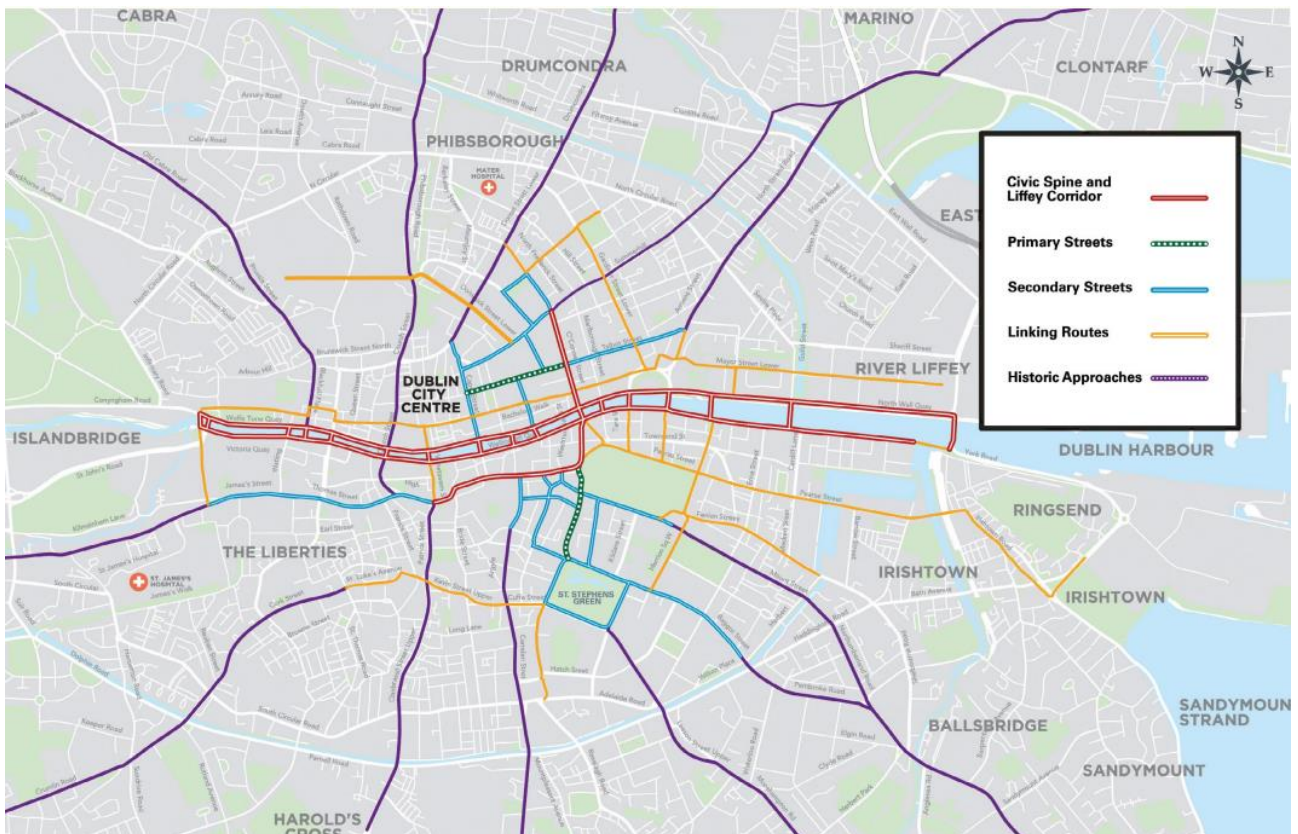


Figure 3-4 Strategic Pedestrian and Related Connections

In Chapter 13 of the DCDP, guiding principles for each of the SDRAs are presented in a map. As well as notes on buildings and public spaces, these include routes identified as core pedestrian spines, and several types of potential movement interventions:

- Permeability interventions;
- Greening, Cycle & Pedestrian corridors; and
- Potential new bridges.

These spines and interventions are shown in Figure 3-1.

3.3 Challenges and Opportunities for Walking in 2030

In order to meet Dublin’s future walking needs, it is important to understand the challenges and opportunities for walking. Each of these indicate aspects where improvements could have a positive impact on walking. The following key challenges and opportunities were identified based on reviews of available data and consideration of pedestrian needs. The 2019 Household Travel survey also provides useful insight into current considerations for walking.

Figure 3-5, published by the Central Statistics Office (CSO), presents the percentage of respondents citing certain factors that would encourage them to walk more. “Safer walking environment” was the most commonly cited factor (36.1% of respondents), followed by “improved health” (35.8% of respondents) and “better infrastructure” (20.6% of respondents).

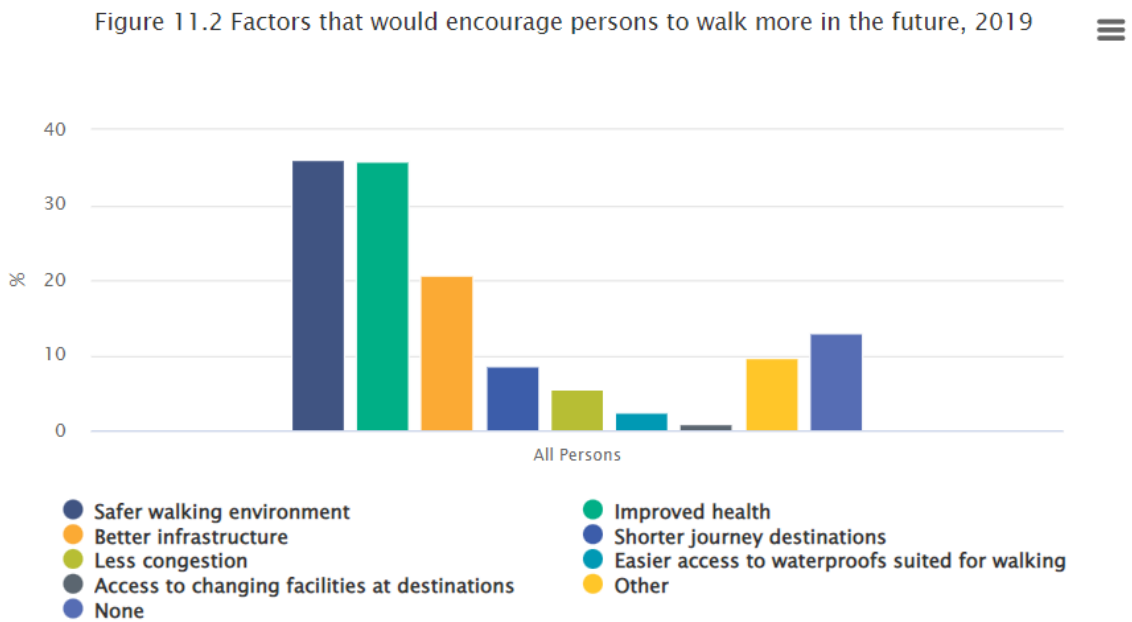


Figure 3-5 Factors that would encourage persons to walk more in the future (CSO: 2019 NHTS)²

Additionally, the Walking and Cycling Index 2021 published by the NTA provides an assessment of walking and cycling in the Dublin Metropolitan Area. The report, which had previously been produced for cycling only but included walking (and wheeling) for the first time in 2021, involved a survey of 1,103 residents of the Dublin Metropolitan Area aged 16 or above. The responses presented highlight a desire for more local amenities as well as an improved walking experience. Figure 3-6 shows the proportion of respondents agreeing that certain changes would help them to walk or wheel more.

² <https://www.cso.ie/en/releasesandpublications/ep/p-nts/nationaltravelsurvey2019/walking/>

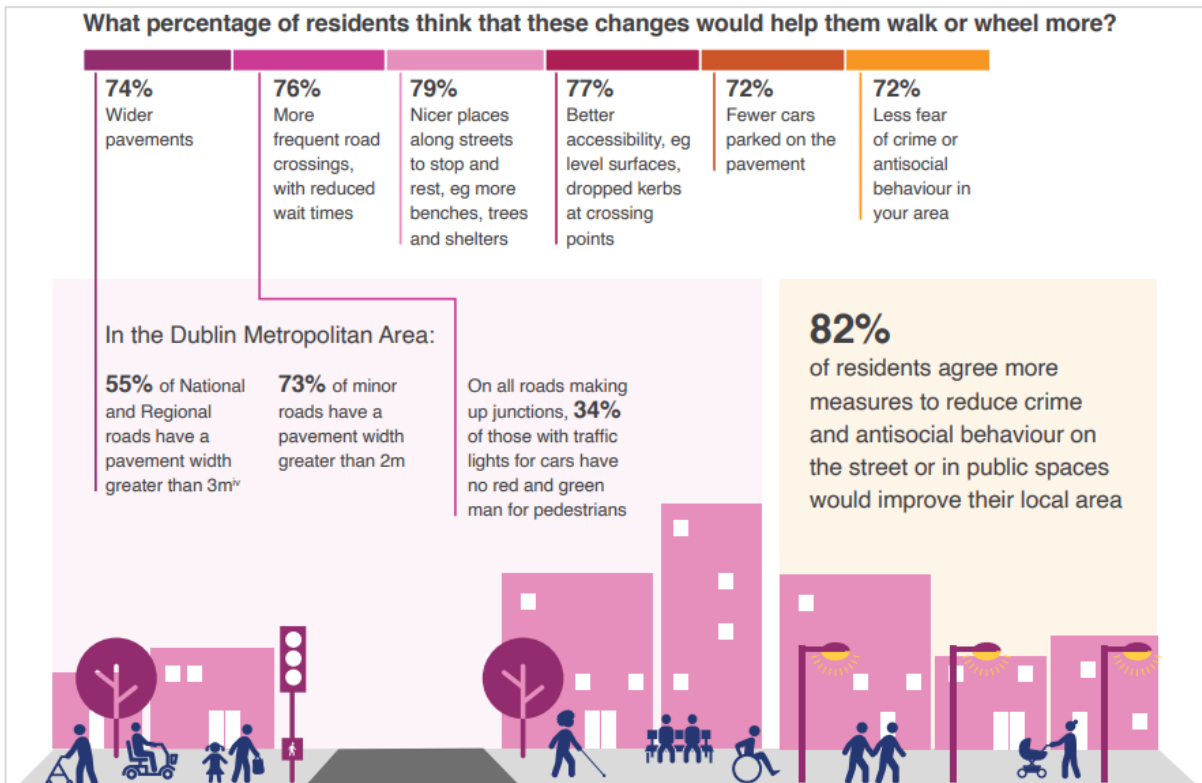


Figure 3-6 What percentage of residents think that these changes would help them walk or wheel more? (Walking and Cycling Index 2021: Dublin Metropolitan Area, National Transport Authority)

Notably, the higher-rated responses relate to improved safety and more frequent road crossings as well as physical infrastructure.

3.3.1 Challenges

There are a number of challenges for meeting pedestrian needs by 2030, taking into account the projected population increase and therefore increased pedestrian numbers. This will especially apply at public transport interchanges and terminals, such as: Heuston, Connolly, Busáras, Pearse, Westmoreland Street to Abbey Street (interchange between Luas Red Line and Luas Green Line), and Tara Street & Trinity (Interchange between Dart and Luas Green Line).

Post-2030, the introduction of Metrolink (anticipated to be operational in 2035, but with construction to begin before 2030) will induce additional walking demand to and from Charlemont as well as increased interchange movements at Connolly, Tara and Saint Stephen’s Green. This will mean more people walking and so requiring increased provision in walking infrastructure, the quality of which is currently varied throughout the city. At a minimum, a certain amount of space is required for pedestrian movement. The Masterplan explicitly highlights the need for a Circulation Zone (whether this is a footpath, shared surface or pedestrianised street). The Masterplan sets out guidance for the required width of Circulation Zone based on peak footfall levels.

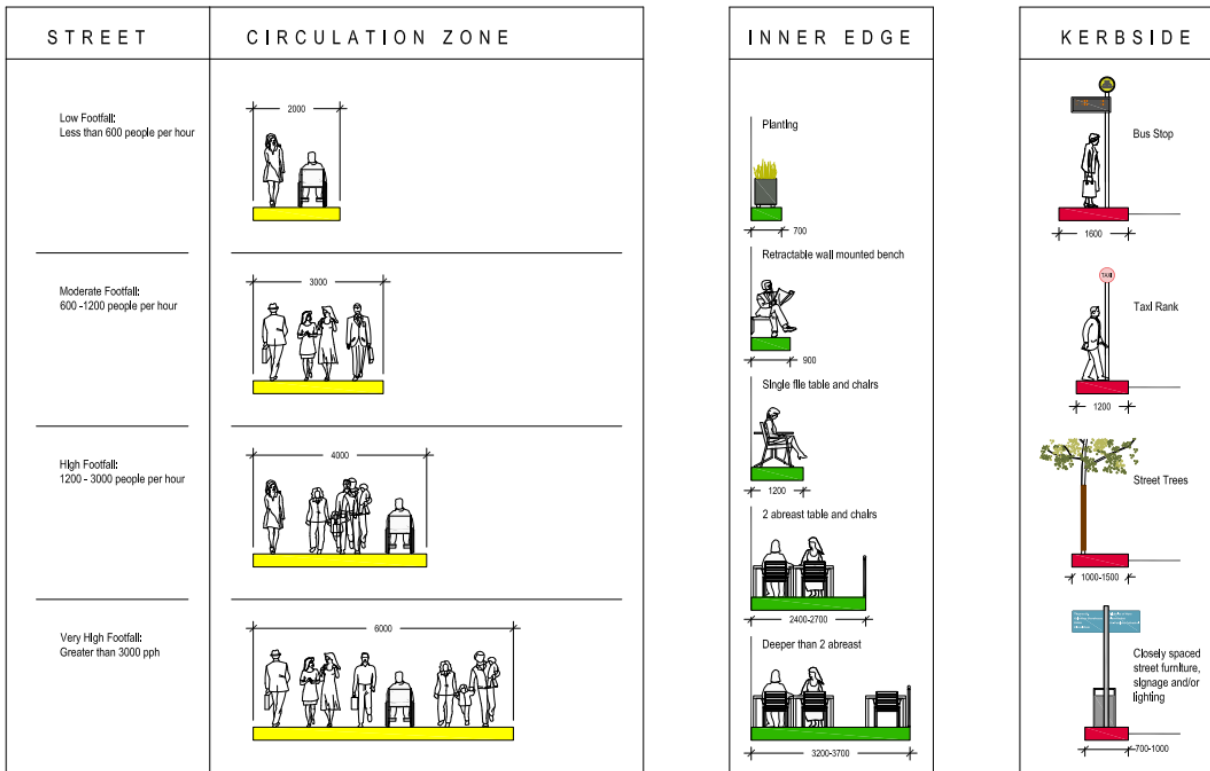


Figure 3-7 Masterplan - Infrastructure guidance for streets

In addition, maintenance is required to keep existing infrastructure at an acceptable level of service. The Transport Strategy notes that “footpaths can experience significant wear and tear and damage over time from weather effects as well as from damage from vehicles.” The Transport Strategy notes an intention to maintain the condition of footpaths to a high standard and includes the following measure:

“Measure WALK1 – Steady State Maintenance of Footpaths: Development Plans in the GDA will include objectives to maintain footpaths to a high standard across the GDA.”

An essential element to the provision of walking infrastructure is the safety and security, as well as accessibility for pedestrians. The key risks challenging pedestrians include road collisions, crime, accidents involving falling, or incidents related to delays at signalised crossings. The last point is particularly in relation to signalised crossings where priority is given to traffic causing pedestrian delays. Long wait times or short crossing times can lead to crowding whilst waiting to cross, or frustration resulting in pedestrians taking risks.

Some locations in the city feature uneven surfaces that are not suitable for all users. For example, cobblestone surfaces can pose a challenge to pedestrians using mobility aids or strollers and some locations throughout the city require steps or level changes. There are individual challenges associated with accessibility in historic areas such as the paved surfaces in Temple Bar. The Temple Bar Public Realm Plan (2016) makes note that while the stone setts running from Fleet Street to Parliament Street are intrinsic to the character of the area, they are uneven and not well maintained. It notes that mobility issues could be mitigated by grading setts by width and laying them at tighter spacing. There may also be potential to introduce tracks of smoothers flagstones or saw cut setts.

While none of these issues can be completely eliminated, walking infrastructure can contribute to increased accessibility, safety and security by incorporating shorter waiting times and longer crossing times at signalised crossings, high-quality even surfaces with limited gradients, sufficient capacity, adequate lighting and encouraging daytime and night-time activity on key walking routes. Figure 3-8 shows an indicative map of pedestrian injuries resulting from road collisions on links of interest from 2017 to 2019. Note that the data used in this map is provisional and is subject to change once validated by the Road Safety Authority (RSA).

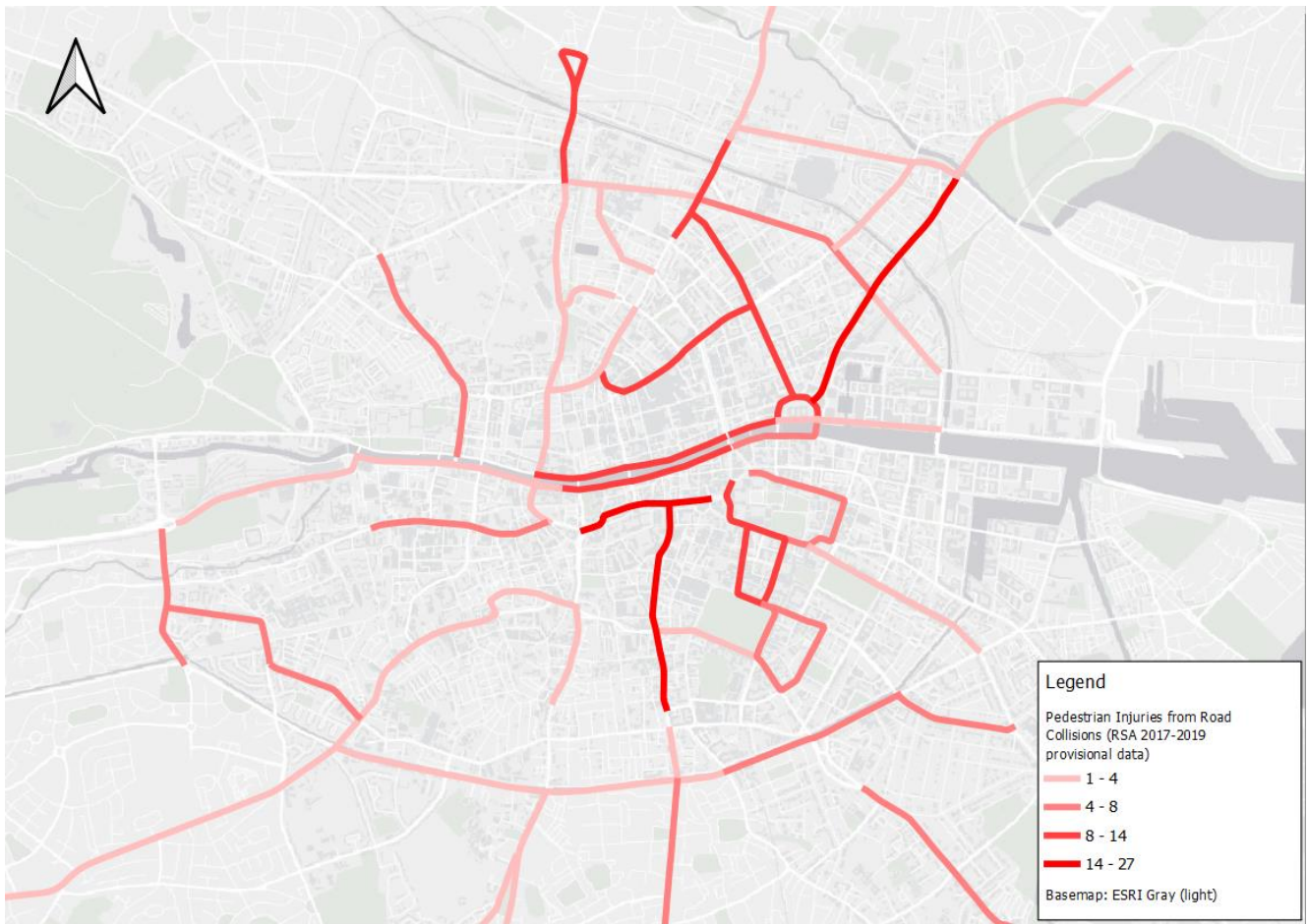


Figure 3-8 Pedestrians injured in road collisions (RSA, note PROVISIONAL DATA ONLY)

Issues of noise and air pollution can also pose challenges for the pedestrian environment. These factors affect how pedestrians feel while walking and spending time in the city, as well as the negative health impacts associated with poor air quality and long-term exposure to noise of sufficient intensity.

Figure 3-9 presents a map of “LDEN” noise levels (a combination of daytime, evening and night-time noise), produced by DCC in 2017. Noise levels in the map are measured in A-weighted decibels (dB(A)), which provide an indication of perceived loudness. Many roads within the Canal Cordon show levels over 70 dB(A). The Dublin Agglomeration Environmental Noise Action Plan for 2018-2023 identifies levels greater than 70 dB(A) as undesirable for daytime levels, and greater than 55 dB(A) undesirable for night-time.

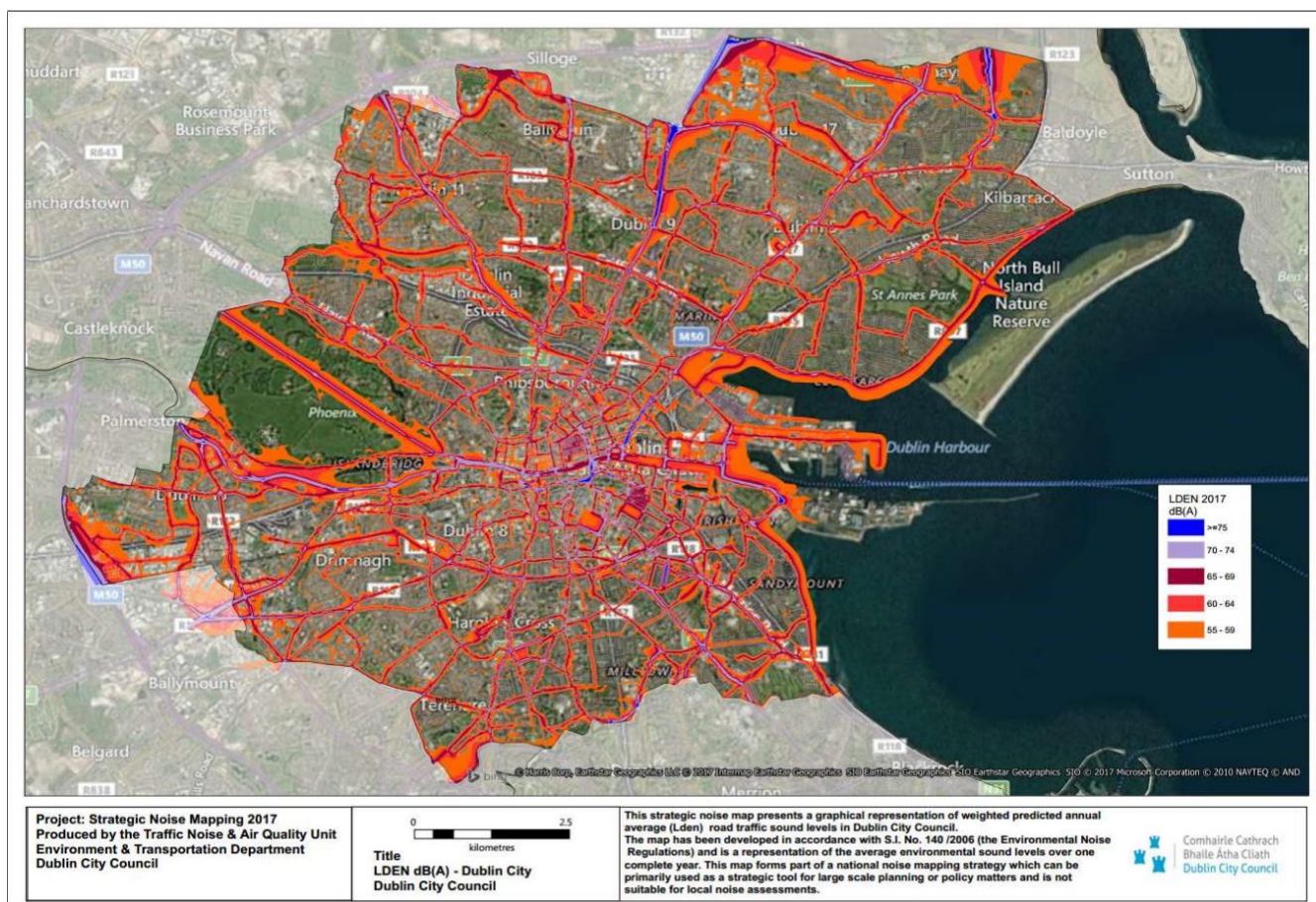


Figure 3-9 Strategic Noise Map 2017 - weighted predicted annual average for daytime, evening & night (LDEN)

The Environmental Protection Agency (EPA)’s Air Quality in Ireland 2021 report notes that while air quality in Ireland as a whole is generally good and meets current EU legal requirements, certain pollutants exceed the World Health Organisation (WHO) Air Quality Guidelines (AQGs) for health. The key “problem pollutants” noted in the report are:

- Particulate matter (PM), which in Ireland mainly comes from burning solid fuel for heating; and
- Nitrogen dioxide (NO₂), of which the main source is from traffic (petrol and diesel engines) which can affect our lungs and breathing and can exacerbate pre-existing conditions like asthma.

Noise and air pollution are significant barriers to people spending time and interacting in public spaces as they take away from the attractiveness of the pedestrian environment. Routes that are clean and visually appealing contribute to attractiveness of an area and are more conducive to walking. Many parts of the city do not meet these qualities, facing challenges such as waste bags on streets, wildlife such as seagulls causing disturbances, and derelict buildings.

The National Litter Pollution Monitoring System (NLPMS) analyses quantities and types of litter throughout Ireland; the latest findings are summarised in the *NLPMS System Results 2021*. While data specifically on Dublin City Centre isn’t provided, the report shows pollution levels within Dublin local authorities i.e., DCC; Dún Laoghaire-Rathdown County Council; Fingal County Council; and South Dublin County Council.

Figure 3-10 shows the Litter Pollution Index (LPI) across sites within these Dublin local authorities. The LPI classifies the extent and severity of litter pollution on a scale of one to five as follows:

- LPI1: Unpolluted or litter free;
- LPI2: Slightly polluted;
- LPI3: Moderately polluted;
- LPI4: Significantly polluted; and
- LPI5: Grossly polluted.

Based on this data, 82.7% of areas surveyed within the Dublin local authorities were at least slightly polluted in 2021.

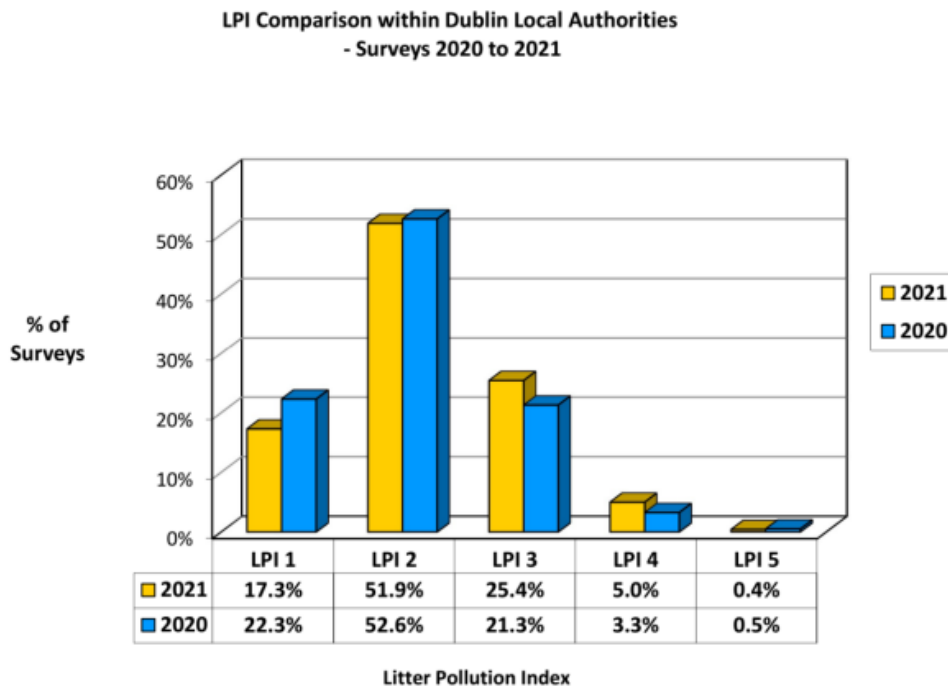


Figure 3-10 Comparison of litter pollution within Dublin Local Authorities (National Litter Pollution Monitoring System (NLPMS) System Results 2021)

3.3.2 Opportunities

There are numerous opportunities to better meet pedestrian needs by addressing the challenges above. Other opportunities to improve the walking experience are described here; these involve making walking more attractive through improved spaces and a more permeable, legible network.

Public realm improvements can make walking more attractive. This can include small-scale changes to existing infrastructure, such as introducing street art, improving lighting or planting vegetation. There is also an opportunity for larger-scale interventions; the Masterplan indicates an opportunity to reallocate more road space to pedestrians rather than vehicular traffic, which would enable complete redesign of certain streets, facilitating the implementation of dwell spaces and improved permeability.

Dwell spaces are areas where people can stop and spend time without being in the way of passers-by. These may incorporate shelter or seating, and provide opportunities for people to stop and rest, interact, or take part in cultural activities such as walking tours or street theatre. The Masterplan notes that small-scale spaces, or micro-spaces, are a key part of everyday life in the city and can be more comfortable and conducive to everyday use than larger scale plaza and civic areas. The Masterplan contains the following recommendations:

- “To identify and locate appropriate small-scale spaces for lingering, social and cultural interaction”; and
- “To promote the provision of small spaces at project design phase.”

Dense, permeable networks allow pedestrians to choose more direct routes, as well as alleviating pedestrian congestion in busy areas. The Masterplan recommends pursuing opportunities for increased permeability through certain historic blocks in the city centre such as Trinity College, Tyrone House, Bank of Ireland at College Green, Dublin Castle and Leinster House.

The DCDP notes that “improved routes can be further enhanced with additional crossing points along main traffic routes”. Chapter 13 of the DCDP also recommends permeability interventions throughout each of the SDRAs which involve allowing passage through existing blocks, and in some cases proposing new bridges.

Clearly marking these permeable routes and the addition of wayfinding measures or street art can make networks much more legible, safe, and improve the walking experience for visitors and locals alike. An Asphalt Art Safety Study from April 2022 found that asphalt art had a positive correlation with improved safety benefits and an improvement in driver and pedestrian behaviour. This in addition to designated walking routes provide easily navigable routes for new pedestrians, for example:

- Fáilte Ireland’s “Dubline” Discovery Trail; and
- The Walk London Network, which consists of seven signposted routes including:

- The London Outer Orbital Path (LOOP), an approximately 150-mile (242km) walking path which connects a series of parks and historical buildings (see Figure 3-11); and
- The Jubilee Walkway, a 15-mile (24km) route connecting iconic landmarks in London’s city centre (Figure 3-12).



Figure 3-11 Walk London: London Outer Orbital Path (LOOP) (Transport for London)



Figure 3-12 Walk London: Jubilee Walkway (Transport for London)

Wayfinding and marking of pedestrian routes provide opportunity to implement a digital aspect. Digital solutions can help to capitalise on existing infrastructure by providing pedestrians a convenient source of information. This could take the form

of journey planner apps informed by real-time data, or even simple static maps providing high-level information. Some examples of digital tools to promote walking include:

- **Smart D8 Civic Dollars:** An app being piloted by Smart D8 (led by DCC) will reward users for spending time in designated places such as parks. Under this initiative, users receive points called “Civic Dollars” for time spent in participating parks. The Civic Dollars can then be used at local businesses or gifted to community organisations for their use.
- **Where’s The Craic (whereisthecraic.com):** This web tool allows users to quickly see points of interest they can reach from within 5, 10 or 15 minutes’ walk or cycle from a given location in Dublin. The tool makes use of open data sources including locations of historical sites, parks, restaurants, community groups and interesting facts. While the current functionality is limited, the tool could be expanded to further encourage active travel by:
 - Suggesting routes to a chosen destination;
 - Generating walking routes of a given length (such as a 60-minute walking tour of outdoor sculptures);
 - Allowing users to comment on or contribute to the dataset; or
 - Allowing local businesses to offer incentives for walking or cycling to them.
- **Walking time map:** North Sydney Council in Australia published an easy-to-read map showing approximate walking times between key locations in North Sydney, which is shown in Figure 3-13.

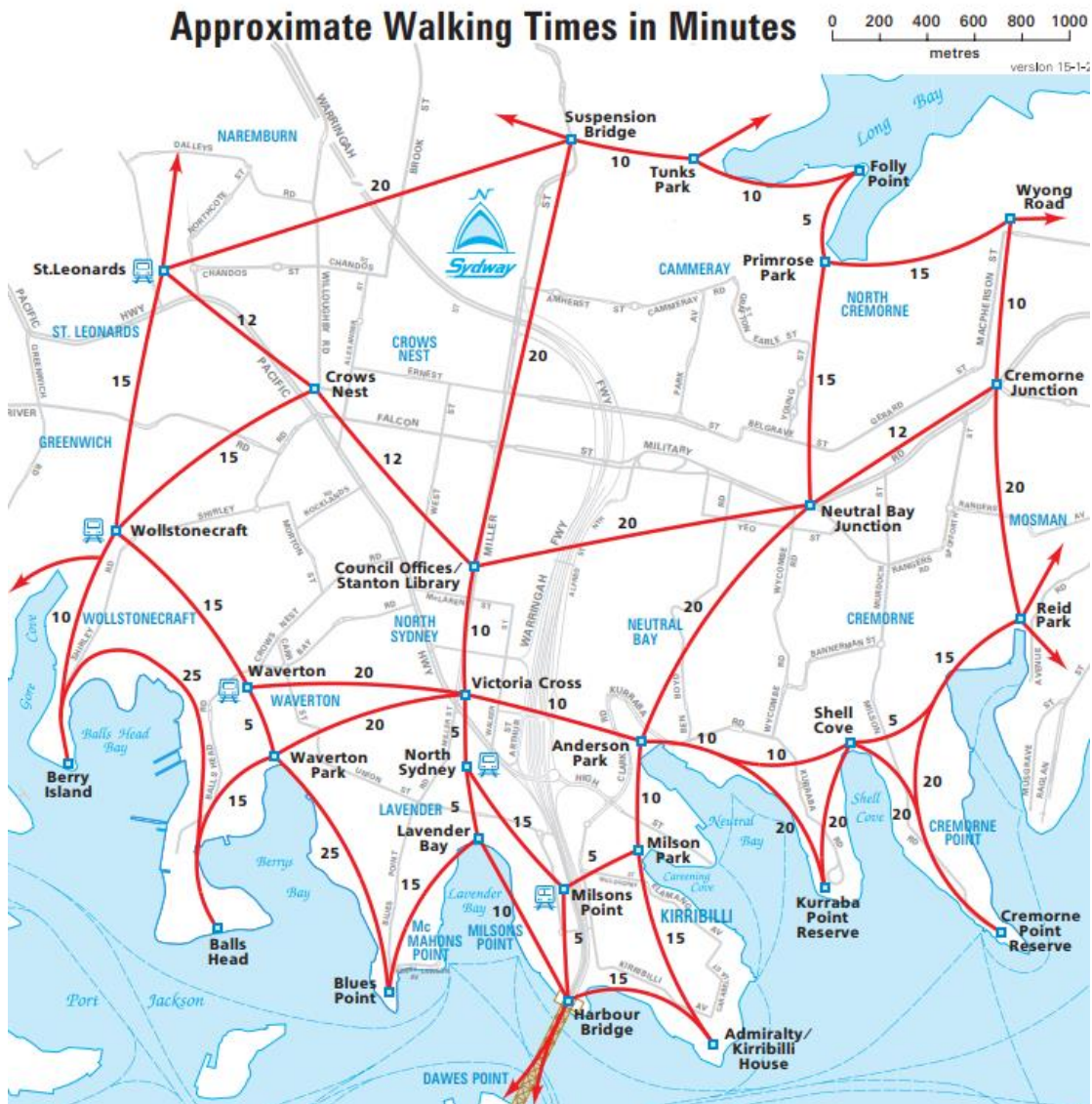


Figure 3-13 Approximate walking time map (North Sydney Council)

In addition to practical opportunities to improve the public realm, there is a mutually beneficial relationship between walking and retail / hospitality business. Businesses such as shops, cafes, bars and restaurants can make streets more

attractive as well as contributing to a sense of activity and security. Pedestrians are also potential customers for these businesses. Along with public realm improvements to reutilise road space, there is a potential for economic benefits which may include opportunities such as street markets and outdoor dining spaces.

4 PRINCIPLES FOR WALKING NETWORK DEVELOPMENT








4.1 Overview

Principles for the walking network were developed to support the implementation of the policy objectives within Section 2 and to give further expression to fostering a people-centric and liveable city. The walking network forms an integral part of the overall integrated transport network and is at the heart of all villages and centres within the City.

4.2 Principles for Walking Network Development

The walking network principles, presented in Table 4-1, take into account challenges and opportunities specific to walking. The principles were also informed by a review of the Healthy Streets Indicators³.

Table 4-1 Principles for walking network development

| Principle | Description |
|---|--|
|  <p>Direct, simple, legible</p> | The network should connect people as directly as possible and be easy to navigate. |
|  <p>Safe</p> | People feel safer where traffic volumes are lower, traffic speed is slower & pedestrians have priority at crossings. |
|  <p>Universally accessible 24/7</p> | The network should be available to people of all ages and mobility levels, at all days and times. |
|  <p>Attractive</p> | Walking routes and their surrounding environment should be attractive and engaging. |
|  <p>Air quality</p> | Air quality should meet safety guidelines. |
|  <p>Caters to local trips and to public transport-walk trips</p> | The network should connect people to local attractions and public transport options. |
|  <p>Avoid conflict, minimise delays</p> | Conflict with other modes and delays at crossings should be minimised. |

³ Healthy Streets Indicators: Lucy Saunders <https://www.healthystreets.com/about>

5 METHODOLOGY

The methodology for developing the walking network was as follows:

1. Identify key locations.
2. Identify key streets for each of these (Main village streets / access streets).
3. Develop the core city centre network.
4. Plot likely desire lines between key locations, and the core city (straight lines).
5. Identify the actual routes available for each desire line.
6. Select a primary route for each desire line.
7. Identify additional primary routes required.

This methodology was informed by the DCDP, which highlights the importance of the city's pedestrian network. In particular, policies SMT11 and SMT18 outline a need for effective connections between key locations:

- **SMT11 (Pedestrian Network):** “To protect, improve and expand on the pedestrian network, linking key public buildings, shopping streets, public transport points and tourist and recreational attractions whilst ensuring accessibility for all, including people with mobility impairment and/or disabilities, older persons and people with children.”; and
- **SMT18 (The Pedestrian Environment):** “To continue to maintain and improve the pedestrian environment and strengthen permeability by promoting the development of a network of pedestrian routes including laneway connections which link residential areas with recreational, educational and employment destinations to create a pedestrian environment that is safe, accessible to all in accordance with best accessibility practice.”

The following sections describe each step of the methodology in more detail.

5.1 Step 1: Identify Key Locations

The first step involved identifying key locations within and around the study area. This was informed by a combination of guidance and data sources:

- DCDP Chapter 7;
- 2030 land use planning data;
- Points of Interest dataset (from OpenStreetMap using the Overpass API); and
- Fáilte Ireland visitor counts.

The locations identified were in the following categories:

- Urban villages;
- Key public transport nodes;
- Key attractors; and
- Core city centre.

Figure 5-1 shows these locations. Figure 5-2 shows the same locations overlaid on the Points of Interest dataset.

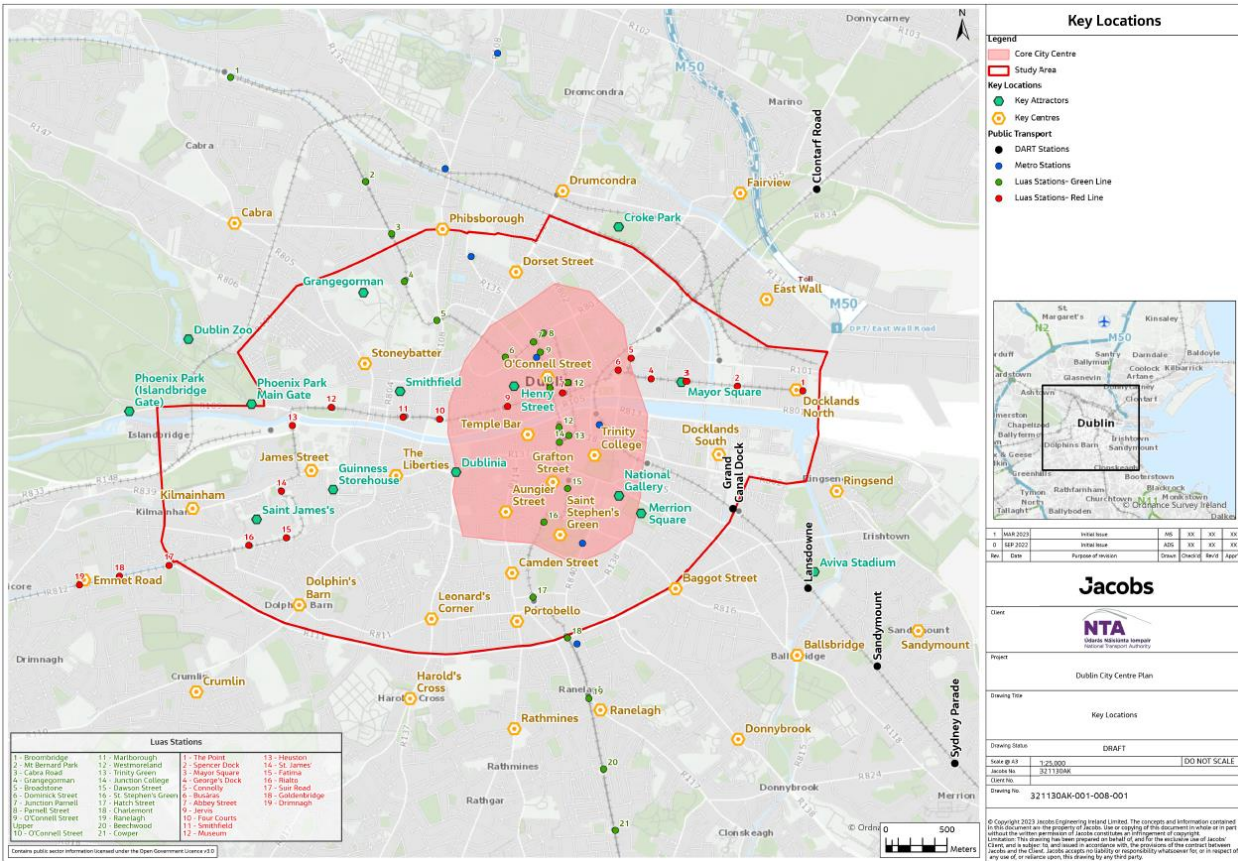


Figure 5-1 Key locations

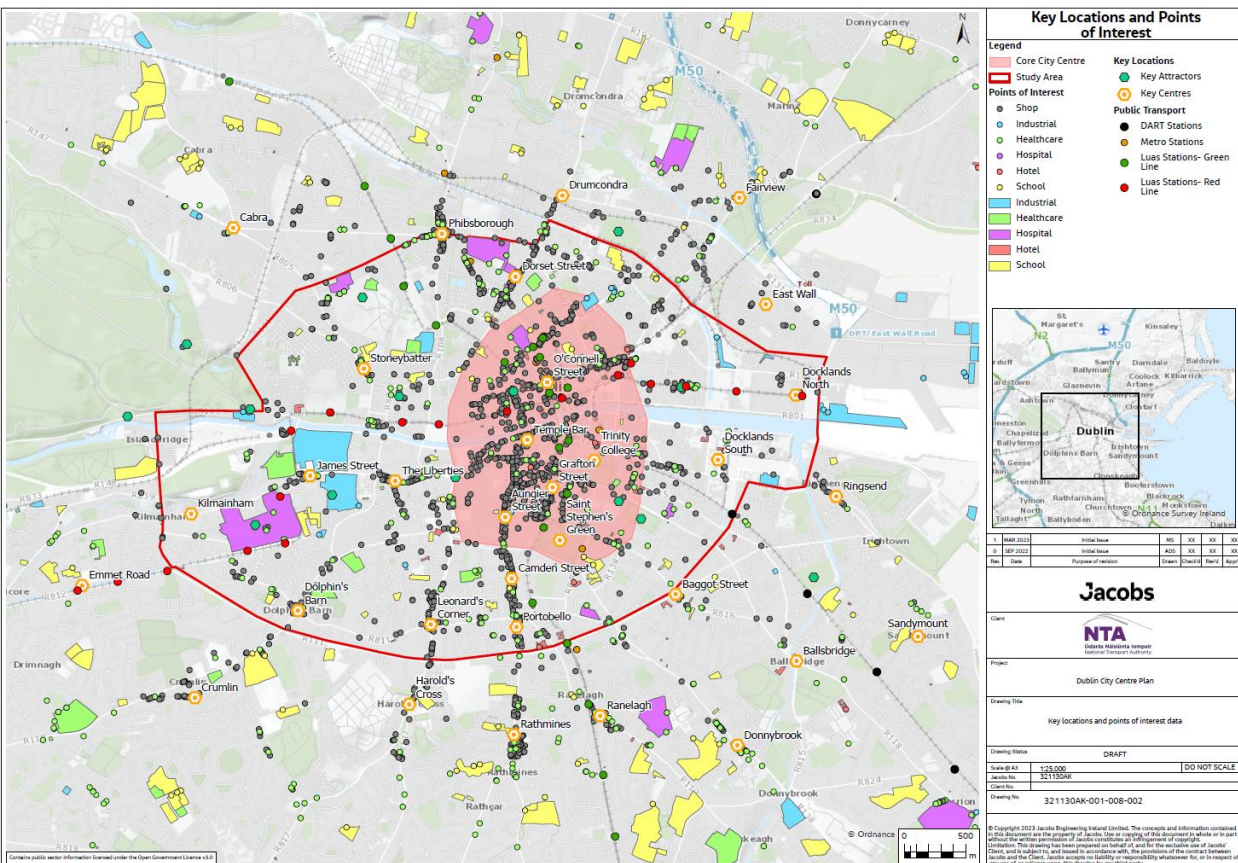


Figure 5-2 Key locations and points of interest data (sourced via OpenStreetMaps)

5.2 Step 2: Identify Key Streets

Step 2 involved a desktop review of these key locations to identify key streets, consisting of:

- Main streets of urban villages;
- Access streets to key public transport nodes; and
- Access streets to attractors.

The key streets identified are shown in Figure 5-3.

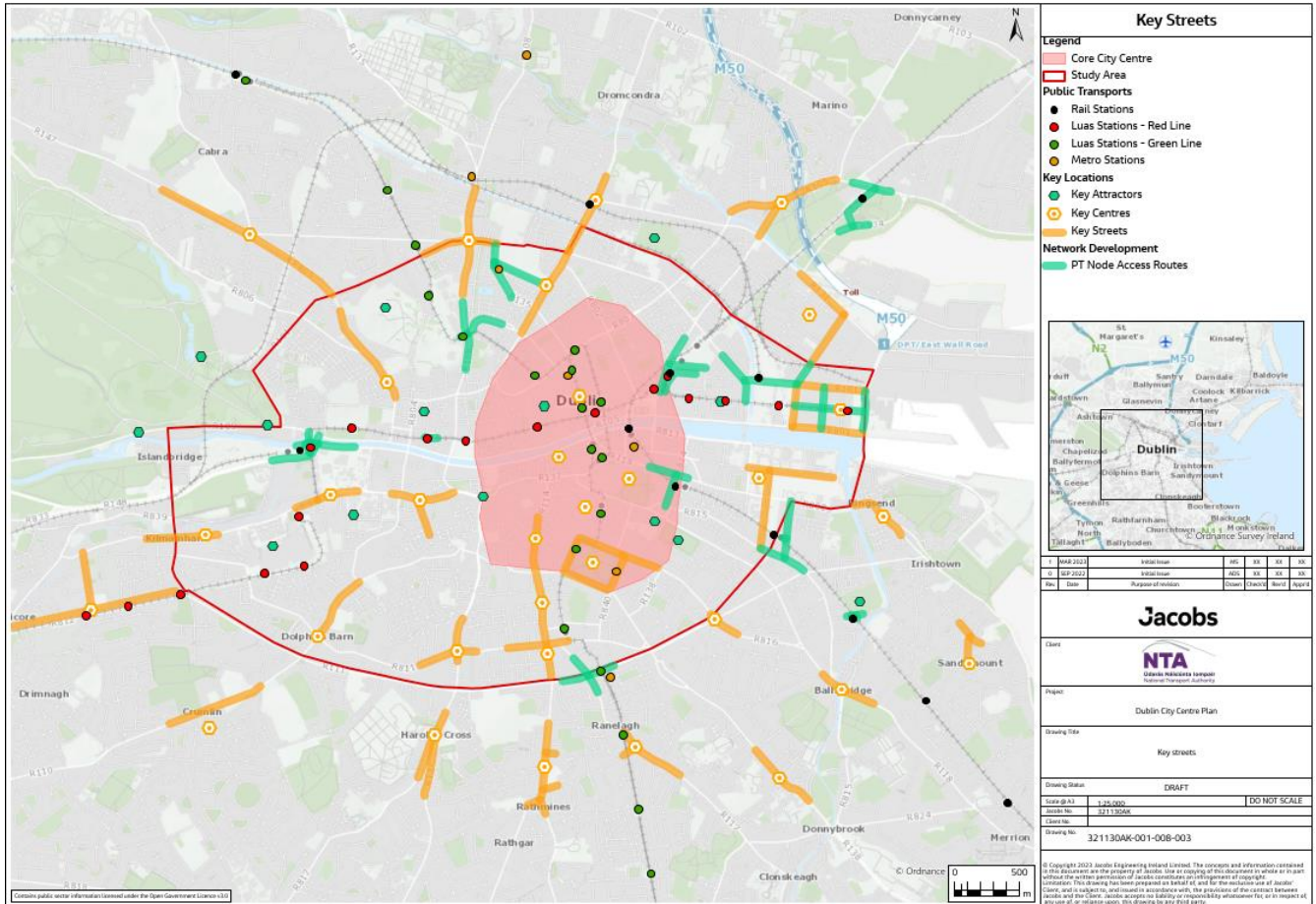


Figure 5-3 Key streets

5.3 Step 3: Core City Centre Network

The core city centre walking network was developed first. This area was based on the City Centre Retail Core identified in the DCDP Chapter 7. This chapter highlights a number of streets as being principal shopping streets in the retail core, including:

- Henry Street and Grafton Street (Retail Core Category 1);
- O’Connell Street, Parnell Street, Talbot Street, Abbey Street, Dame Street, South William Street and George Street (Retail Core Category 2); and
- Other streets designated Retail Core Category 2.

Figure 5-4 shows these streets. While bridges aren’t explicitly marked, the map highlights a need for north-south pedestrian connectivity.

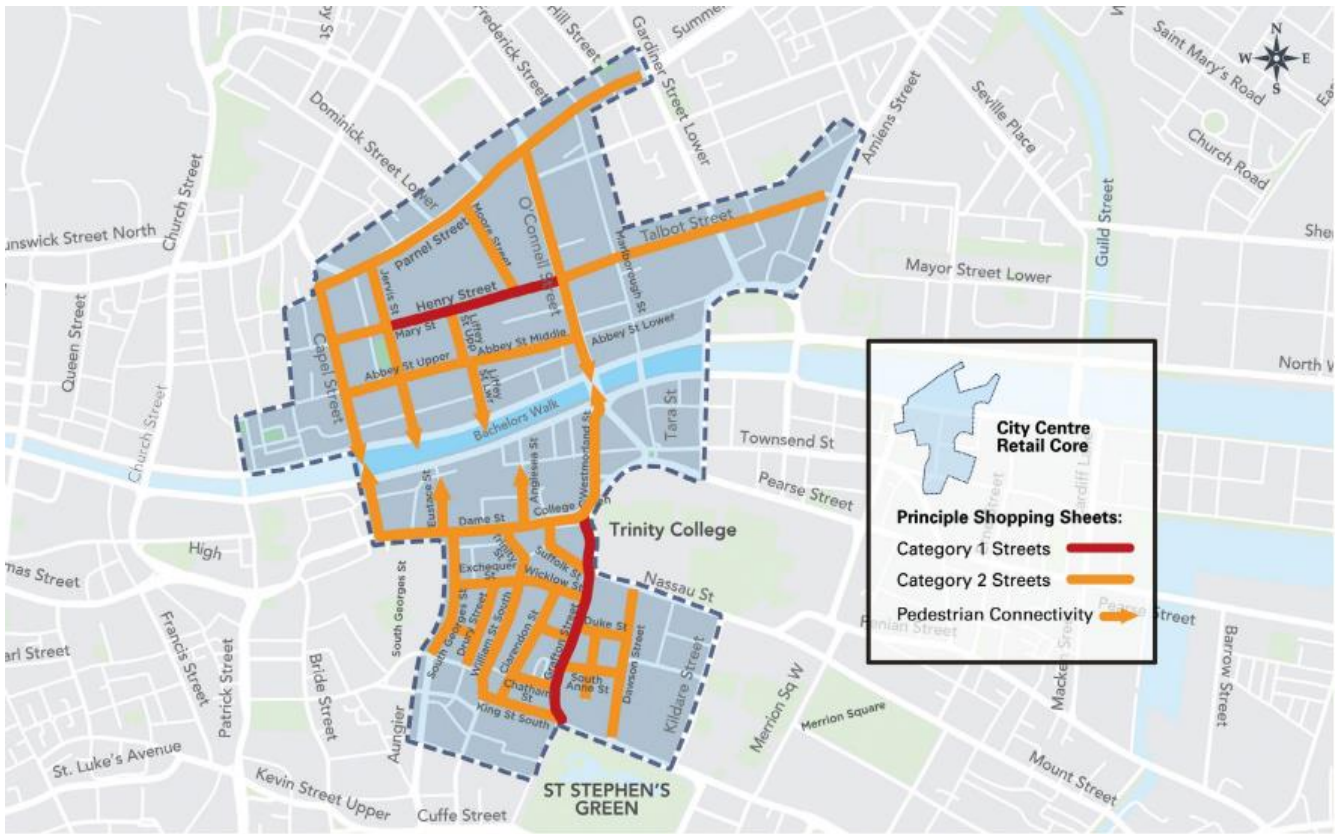


Figure 5-4 Dublin City Centre retail core and principal shopping streets (Dublin City Development Plan, Chapter 7)

Many of the streets in the city centre are destinations themselves, as well as forming connections. This Plan focuses on the movement function of streets to form a walking network. All of the principal shopping streets identified in the retail strategy have been considered part of the primary walking network, apart from Clarendon Street, Drury Street, Anne’s Lane and their side streets. While these are also principal shopping streets and important walking connections for permeability, they were not considered primary links for the walking network as they don’t form wider strategic connections.

The following additional links were included in the network, either due to being attractors themselves or forming important connections through the city:

- The Quays;
- All bridges crossing the Liffey in the core city centre area;
- Gardiner Street;
- D’Olier Street;
- Tara Street;
- Beresford Place;
- Fleet Street, Essex Street and Townsend Street;
- Fishamble Street;
- All streets bordering Trinity;
- All streets bordering Saint Stephen’s Green;
- Merrion Square West; and
- Several other streets forming important links.

This resulted in the walking network shown in Figure 5-5.

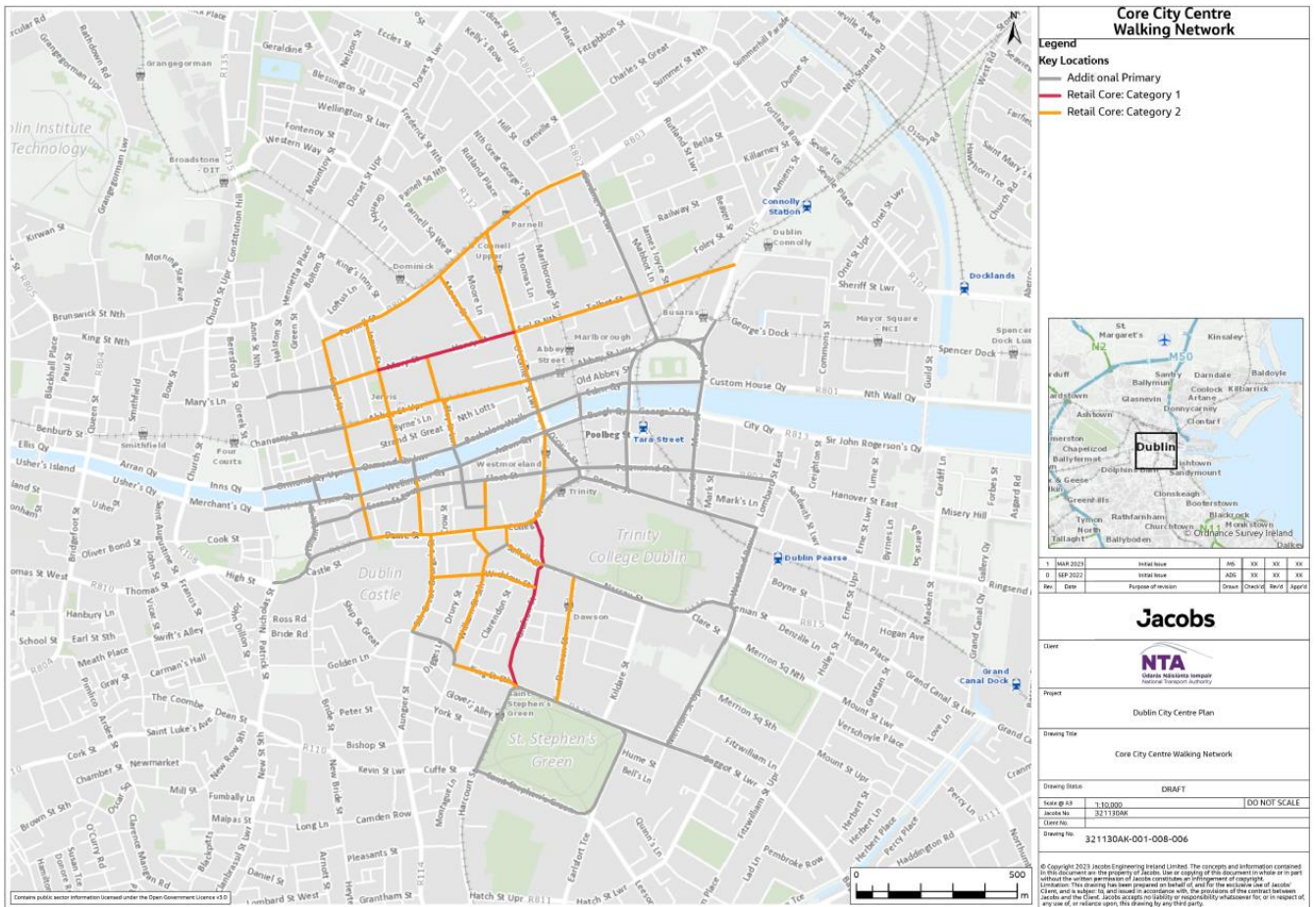


Figure 5-5 Core City Centre walking network

An area encompassing these links was designated the core city centre. This is shown in Figure 5-6.

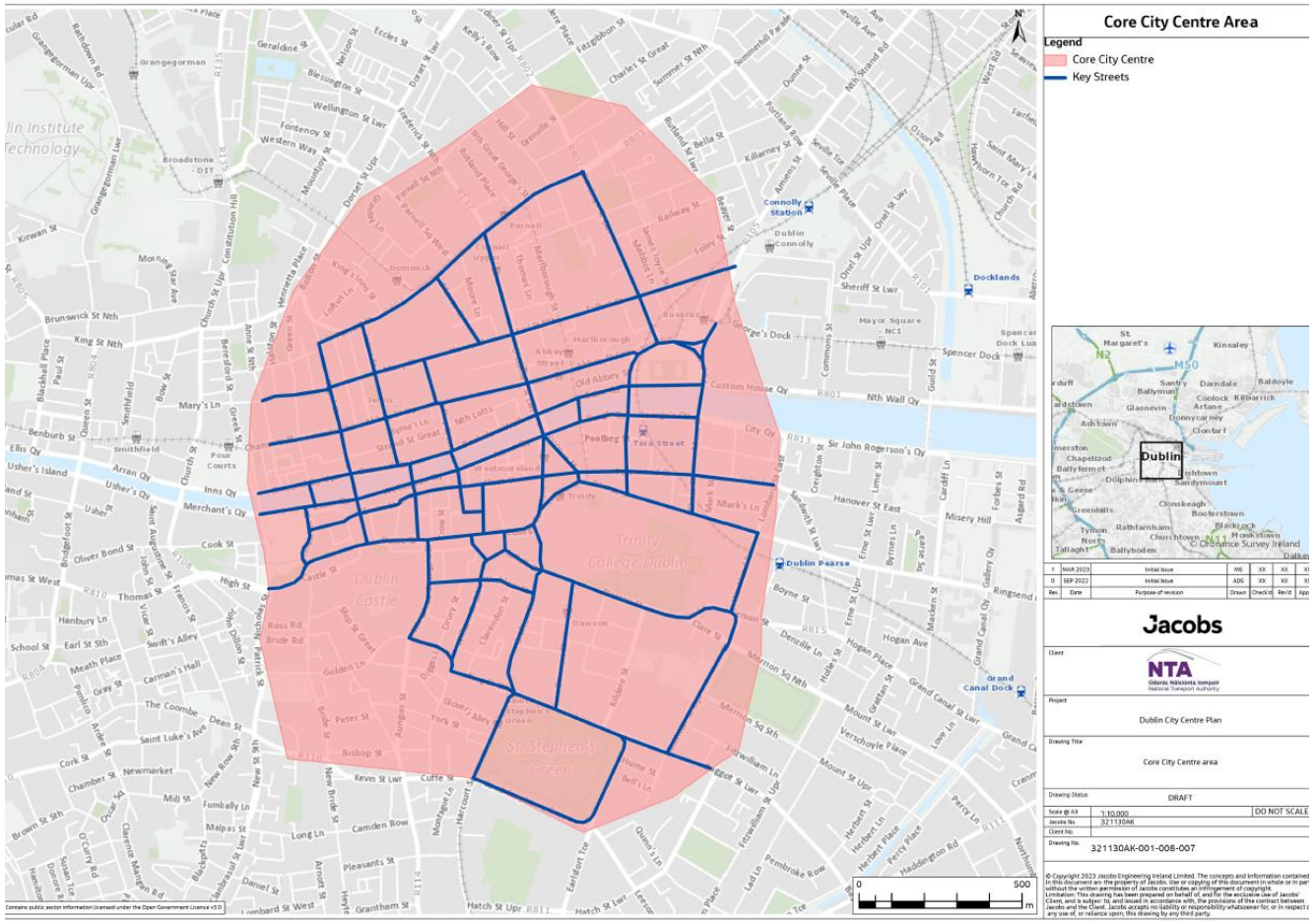


Figure 5-6 Core City Centre area

5.4 Step 4: Plot Desire Lines

For each of the key locations identified in Step 1, the potential to walk to and from other nearby locations was considered. Desire lines were plotted as straight lines linking pairs of locations. These indicate a potential desire to travel between locations, regardless of whether or not the receiving environment has suitable walking infrastructure in place for the trip. Figure 5-7 shows the desire lines considered, which focus on potential travel into (or out of) and within the study area.

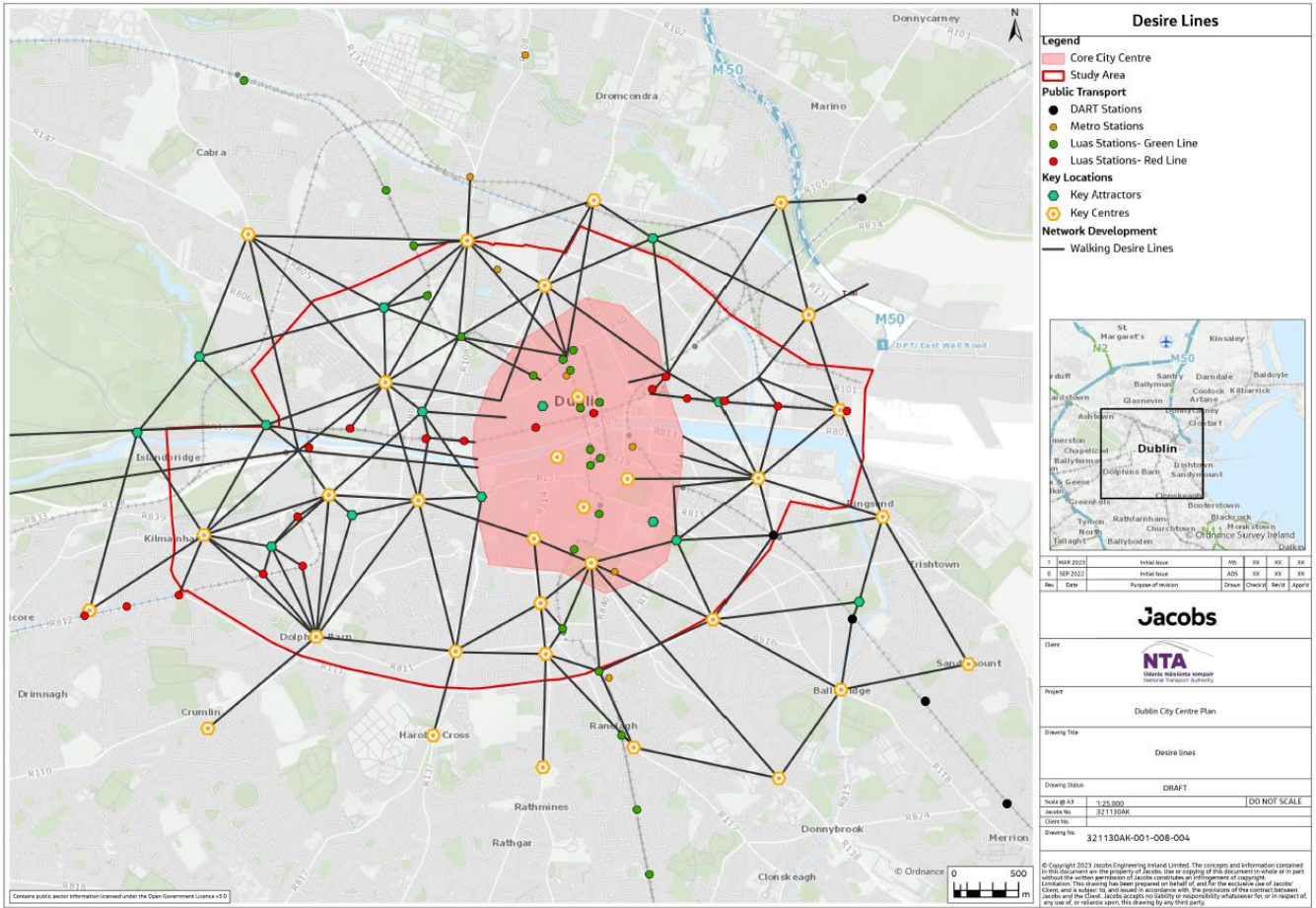


Figure 5-7 Desire lines

5.5 Step 5: Identify Actual Routes Available

Following identification of desire lines, Step 5 involved a review of the existing and planned infrastructure to identify the actual routes available to meet desire lines. Figure 5-8 shows an overview of routes considered.

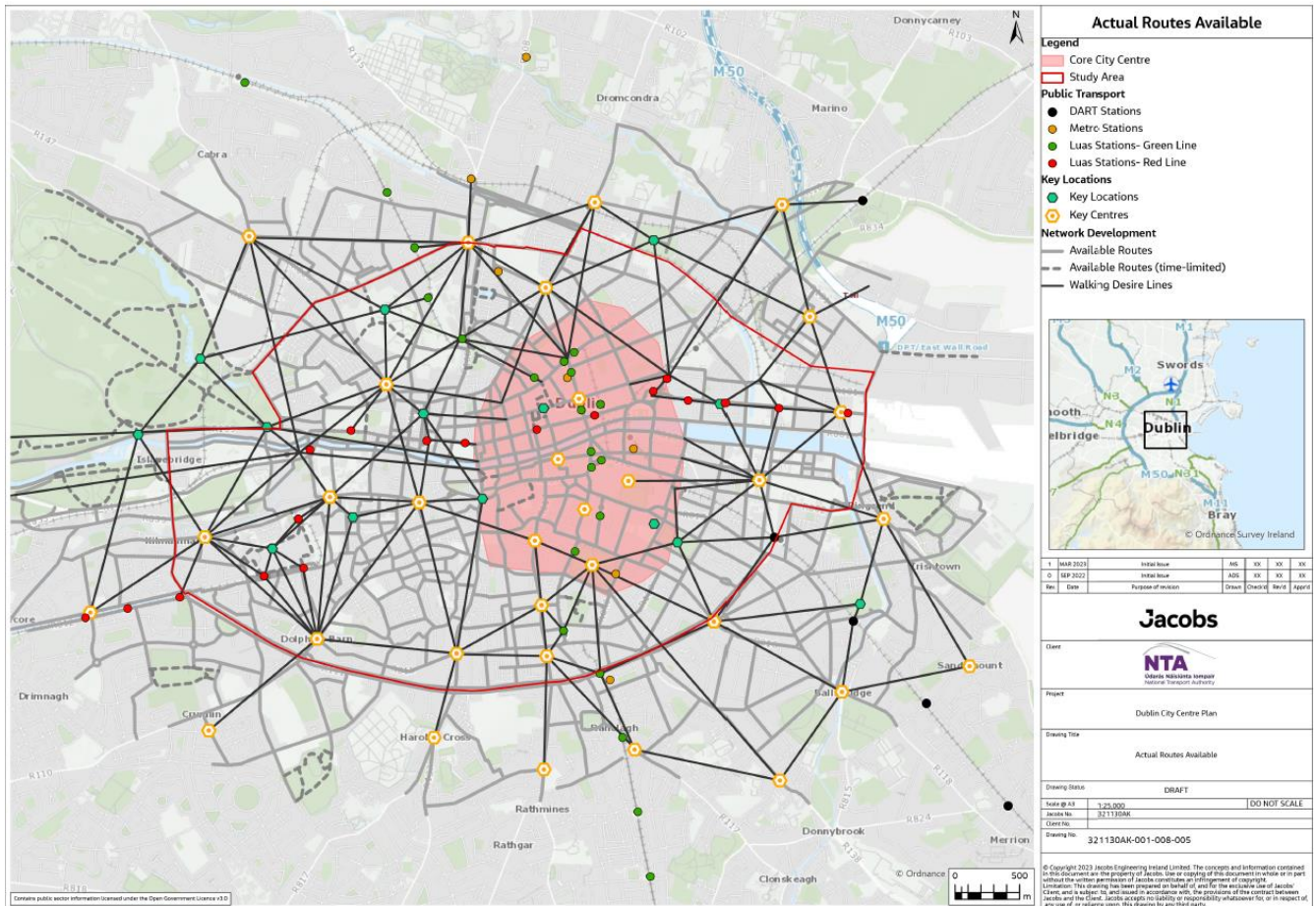


Figure 5-8 Actual routes available

5.6 Step 6: Select Primary Routes

A single primary route was then selected for each desire line. This constituted the preferred route to link the pair of locations. The choice of a primary route was guided by the relevant principles identified in Section 4:

- Direct, simple, legible;
- Safe;
- Universally accessible 24/7;
- Attractive; and
- Air quality.

The remaining two principles (caters to local trips and to public transport/walk trips and avoid conflict/minimise delays) relate to the final walk network but did not affect the selection of primary routes.

To ensure the primary walking network considered local walking needs as well as longer-distance trips, primary routes were selected by looking at areas of the city in detail, one area at a time. Eight overlapping areas were selected so as to cover the entire study area. The following section presents how the methodology was applied to the north area, and the outcome of this process. The selection for the remaining areas is detailed in Appendices A to G.

5.6.1 Primary Route Selection for North Area

The north area of the walking network connects Phibsborough and Dorset Street to Stoneybatter, Grangegorman, Broadstone and Drumcondra, as well as linking all of these locations into the core city centre. Walking links to and from Grangegorman are expected to be especially important for students to travel to and from the campus. The key public transport nodes are currently Broadstone Luas and Drumcondra train station. While it won't be in place by 2030, the proposed Metrolink stations at Mater and Glasnevin were also considered as future public transport nodes.

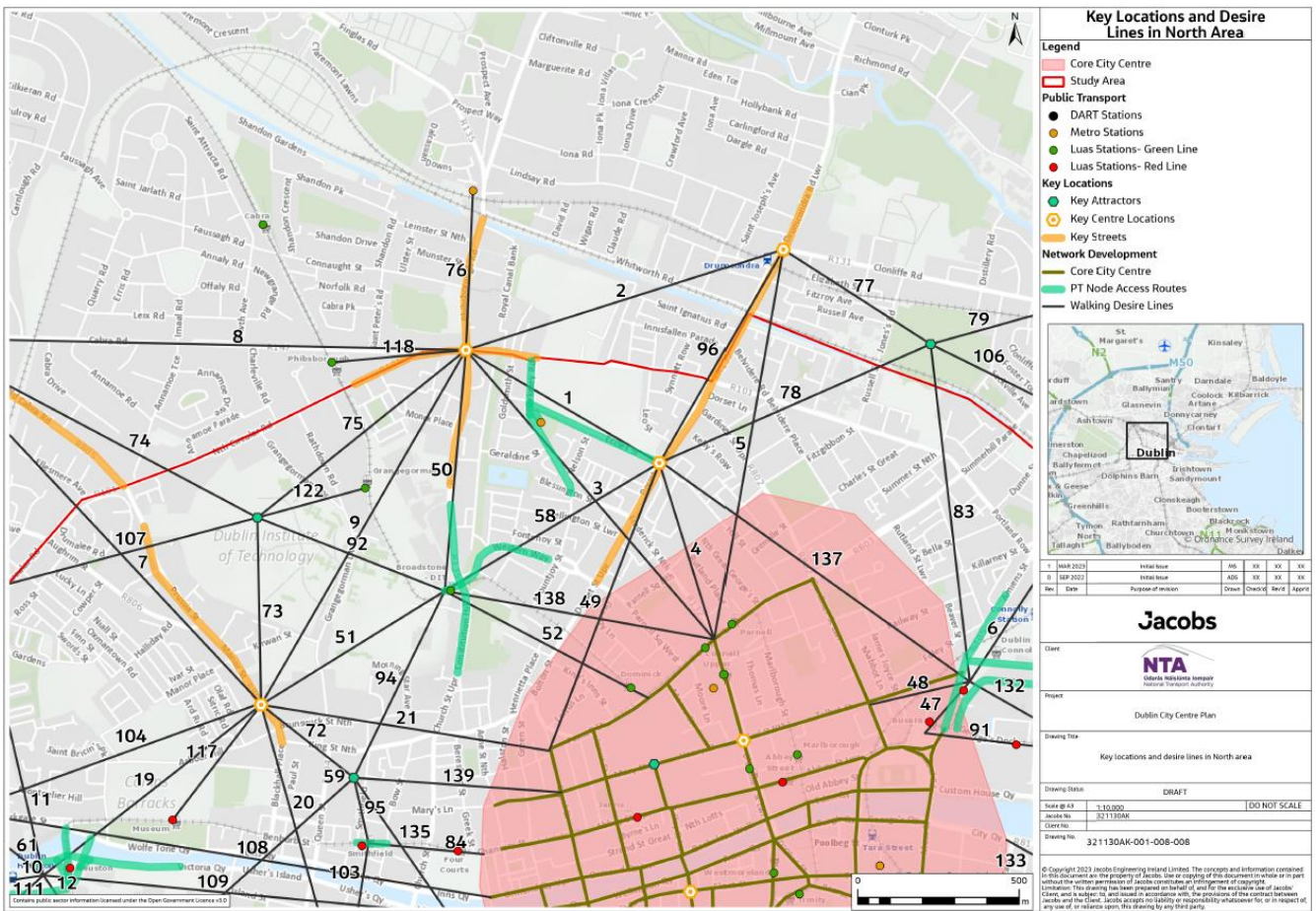


Figure 5-9 Key locations and desire lines in north area



Figure 5-10 Primary route selection in north area

The key locations and desire lines identified are shown in Figure 5-9. Below this, Figure 5-10 shows the possible routes on the left and the preferred routes on the right for each desire line to form the primary network. Each desire line in Figure 5-9 occupies a row in Table 5-1 with details provided on route options. Where multiple primary routes were considered to serve a desire line, reasons why one was chosen over another are also provided.

Table 5-1 Primary route selection in north area

| Desire Line | Area | Primary? | Route Selected | Alternatives | Why (Principles) | Comment |
|-------------|-------|----------|---|--|------------------|---|
| 1 | North | Yes | Berkley Road, Eccles Street | ▪ North Circular Road | Direct | Berkley Road will be especially important with the introduction of MetroLink (planned station in Berkley Park) |
| 2 | North | Yes | Dorset Street, Drumcondra Road | ▪ Phibsborough Road, Royal Canal Way | Direct | Royal Canal Way is attractive and suits trips from north of Phibsborough, but North Circular Road is more direct from the centre of Phibsborough. Locks to cross Royal Canal are not accessible for all users. |
| 3 | North | Yes | Berkley Road, Blessington Street, Frederick Street | ▪ North Circular Road ▪ Eccles Street | Direct | Frederick Street connects through to O'Connell Street. |
| 4 | North | Yes | Dorset Street, Frederick Street | ▪ Temple Street North, Parnell Street | Direct | Frederick Street connects through to O'Connell Street. |
| 5 | North | Yes | Frederick Street, Dorset Street | | | |
| 9 | North | Yes | North Circular Road, Rathdown Road, Grangegorman Lower, Kirwan Street | ▪ Through Grangegorman ▪ Phibsborough Road, Broadstone, Grangegorman Lower, Kirwan Street | Accessible 24/7 | There is a high-quality walking path through Grangegorman, however access out the west side onto Prussia Street / Manor Street is restricted by gates that are not always open. https://irishcycle.com/2018/11/16/east-west-grangegorman-access-opens-with-time-limit/ |
| 21 | North | Yes | North King Street | ▪ North King Street, Church Street, Brunswick Street North | Direct | |
| 49 | North | Yes | Capel Street, Dorset Street | ▪ Parnell Street, Frederick Street / Temple Street / Gardiner Street | Direct | All are feasible options. |
| 50 | North | Yes | Phibsborough Road | ▪ Royal Canal Bank Greenway | Direct, 24/7 | |
| 51 | North | Yes | Phibsborough Road, Broadstone, Grangegorman Lower, Kirwan Street | | | |
| 52 | North | Yes | Dominick Street | | | |
| 58 | North | Yes | Western Way, Dorset Street | ▪ Dominick Street Upper, Dorset Street ▪ Western Way, Mountjoy Street, Blessington Street | Direct | |
| 73 | North | Yes | Prussia Street | | | No direct access out the south of Grangegorman (blocked by sports pitches and houses) |

| <i>Desire Line</i> | <i>Area</i> | <i>Primary?</i> | <i>Route Selected</i> | <i>Alternatives</i> | <i>Why (Principles)</i> | <i>Comment</i> |
|--------------------|-------------|-----------------|--|---------------------|-------------------------|---|
| 75 | North | Yes | North Circular Road | | Direct | Phoenix lane can be used to exit Grangeogorman onto North Circular Road, however won't be considered primary network as it not open 24/7. |
| 76 | North | Yes | Phibsborough Road | | | |
| 77 | North | Yes | Clonliffe Road, Jones's Road | | | |
| 78 | North | Yes | Dorset Street, North Circular Road, Jones's Road | | | |
| 92 | North | Yes | Through Grangeogorman | | | |
| 94 | North | Yes | Constitution Hill, North King Street | | | |
| 96 | North | Yes | Dorset Street | | | |
| 118 | North | Yes | Phibsborough Road | ▪ Cabra Road | Direct, Attractive | |
| 122 | North | No | Through Grangeogorman | | | |
| 137 | North | Yes | Temple Street, Parnell Street, Gardiner Street | ▪ Gardiner Street | Direct | Both are feasible options. Temple Street selected as it is more direct from Mater hospital. |
| 138 | North | Yes | Western Way, Granby Row | | | |

The same process was applied to the North-East, East, South-East, South, South West, Inner West, and West. The outcome for each section of the walking network can be found in Appendices A – G.

5.6.2 Initial Primary Walking Network

Following the methodology above for each area of the city, primary routes were selected to serve desire lines throughout the study area. This resulted in the initial primary network in Figure 5-11.

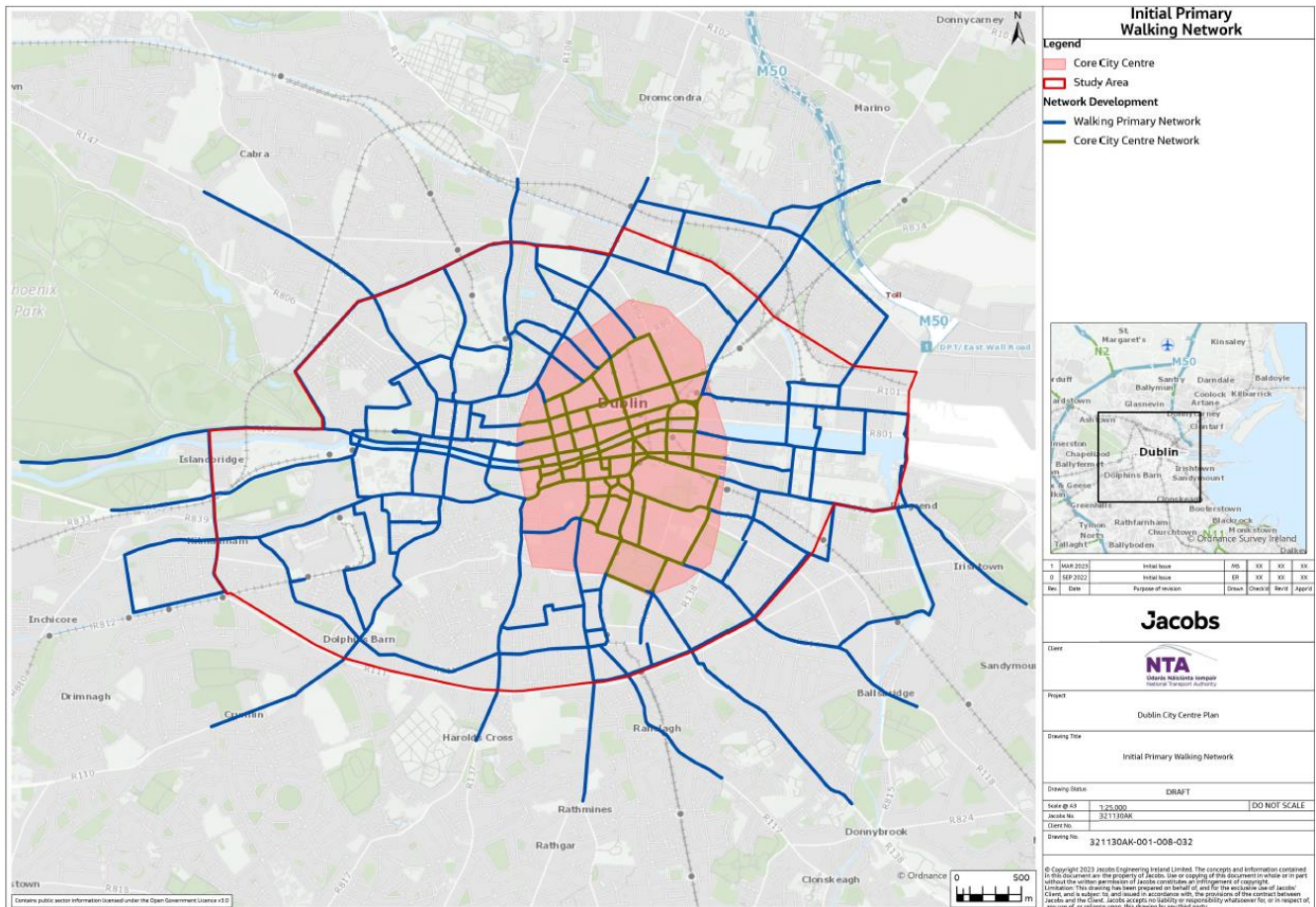


Figure 5-11 Initial primary walking network

5.7 Step 7: Additional Primary Routes

Considering the walking network as a whole, several gaps were apparent. Additional primary links were added into these locations. While not necessarily serving desire lines, these links were added to contribute to an overall cohesive primary network. The full proposed primary network is depicted in Figure 5-12.

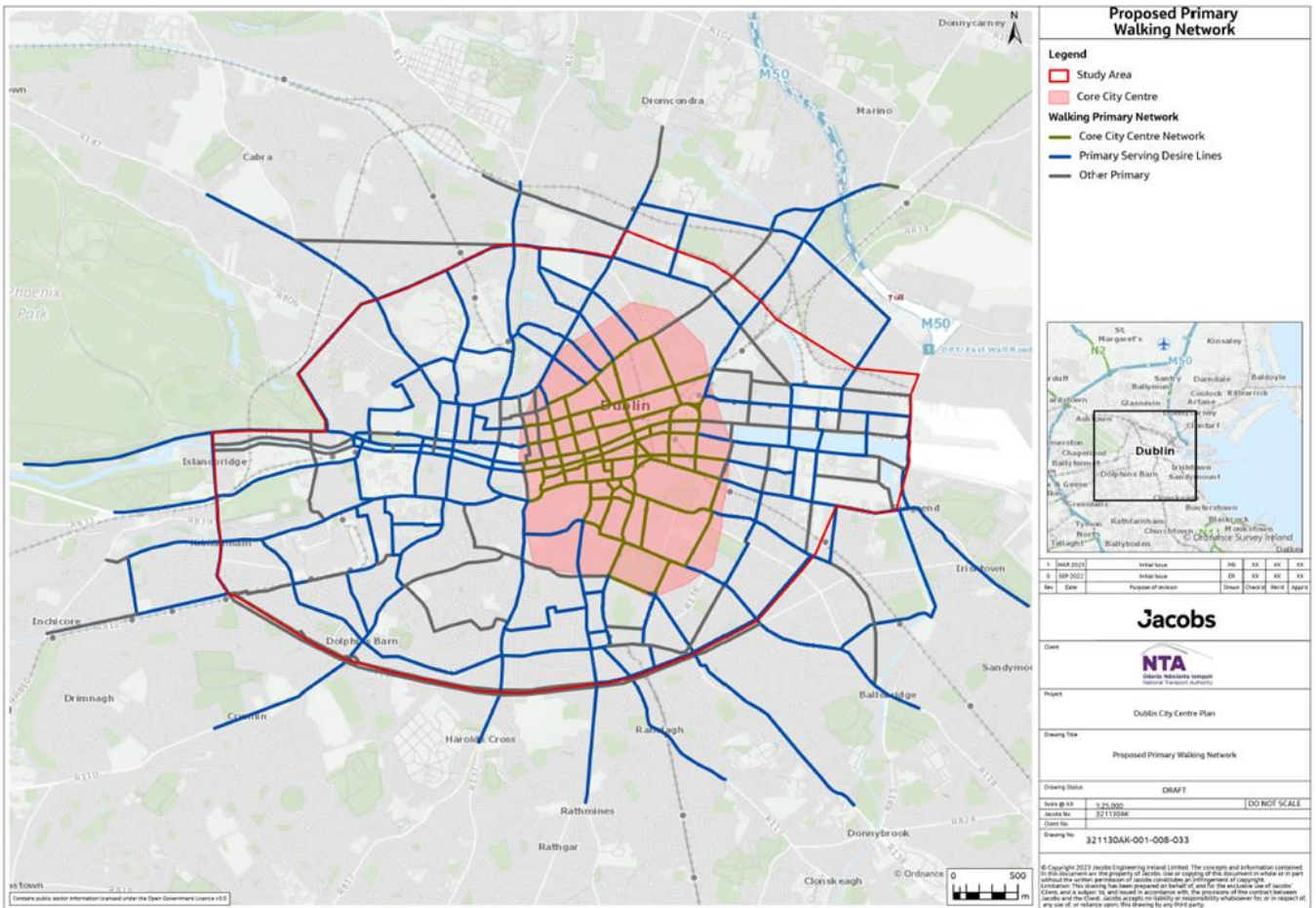


Figure 5-12 Proposed primary walking network

5.8 Network Categories

Finally, the primary network was categorised into three levels. While all three are proposed as primary, the sub-categorisation is provided based on the different functions parts of the primary network serve. The levels consist of:

- Civic Spine: The Quays, bridges, Civic Spine, Parnell Street and Capel Street;
- Primary Connectors: Radial routes connecting urban villages to core city centre; and
- Primary Links: Additional primary routes contributing to a cohesive primary network.

Figure 5-13 shows how the network is categorised into these three levels.

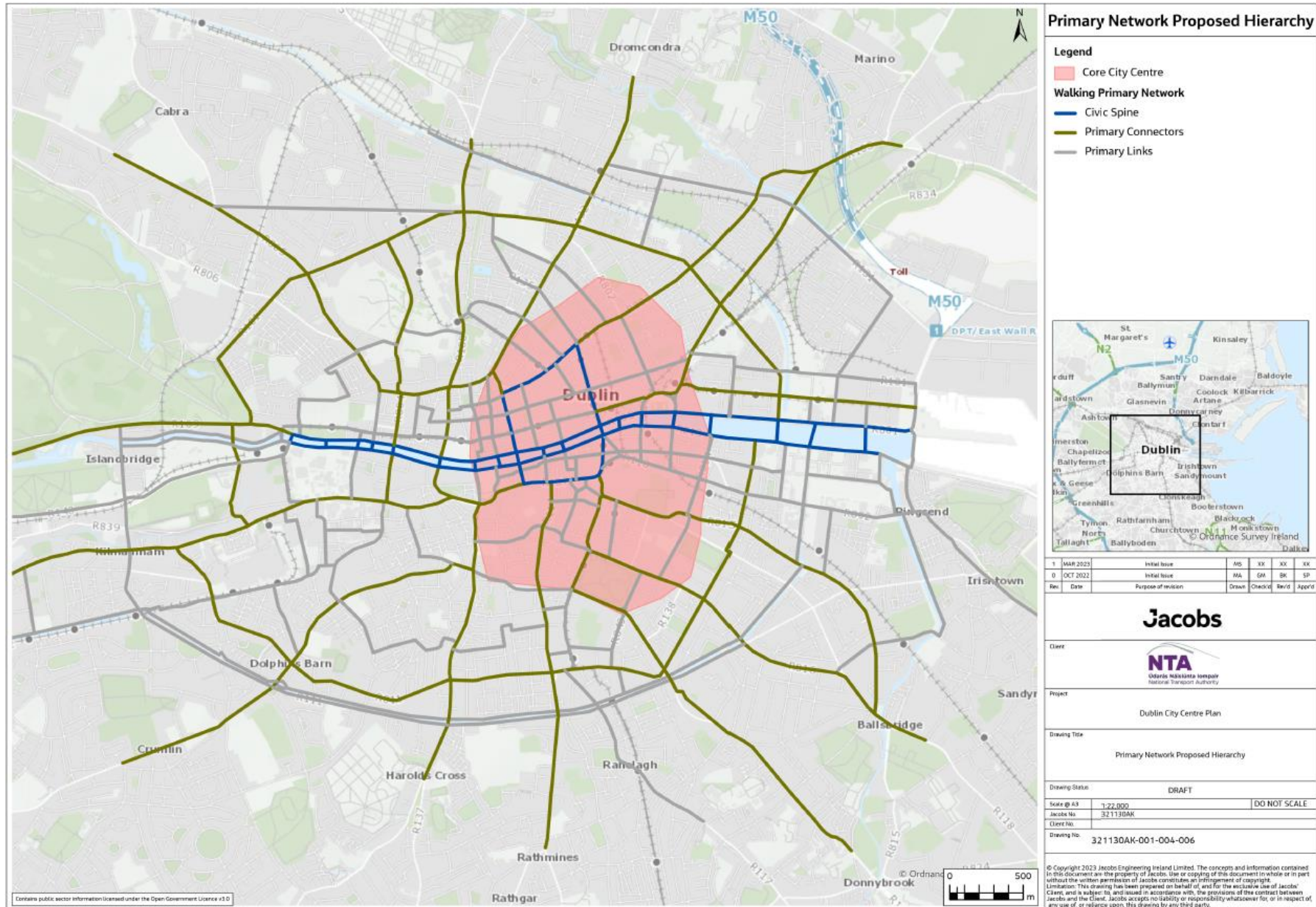


Figure 5-13 Primary network proposed hierarchy

5.9 Network Permeability

Permeability at a local level is a key consideration for walking trips. Several areas of the city with poor walking permeability were identified; these are shown in Figure 5-14. These are locations where access is unavailable, unsafe, or time-limited, and there is no appropriate alternative nearby.

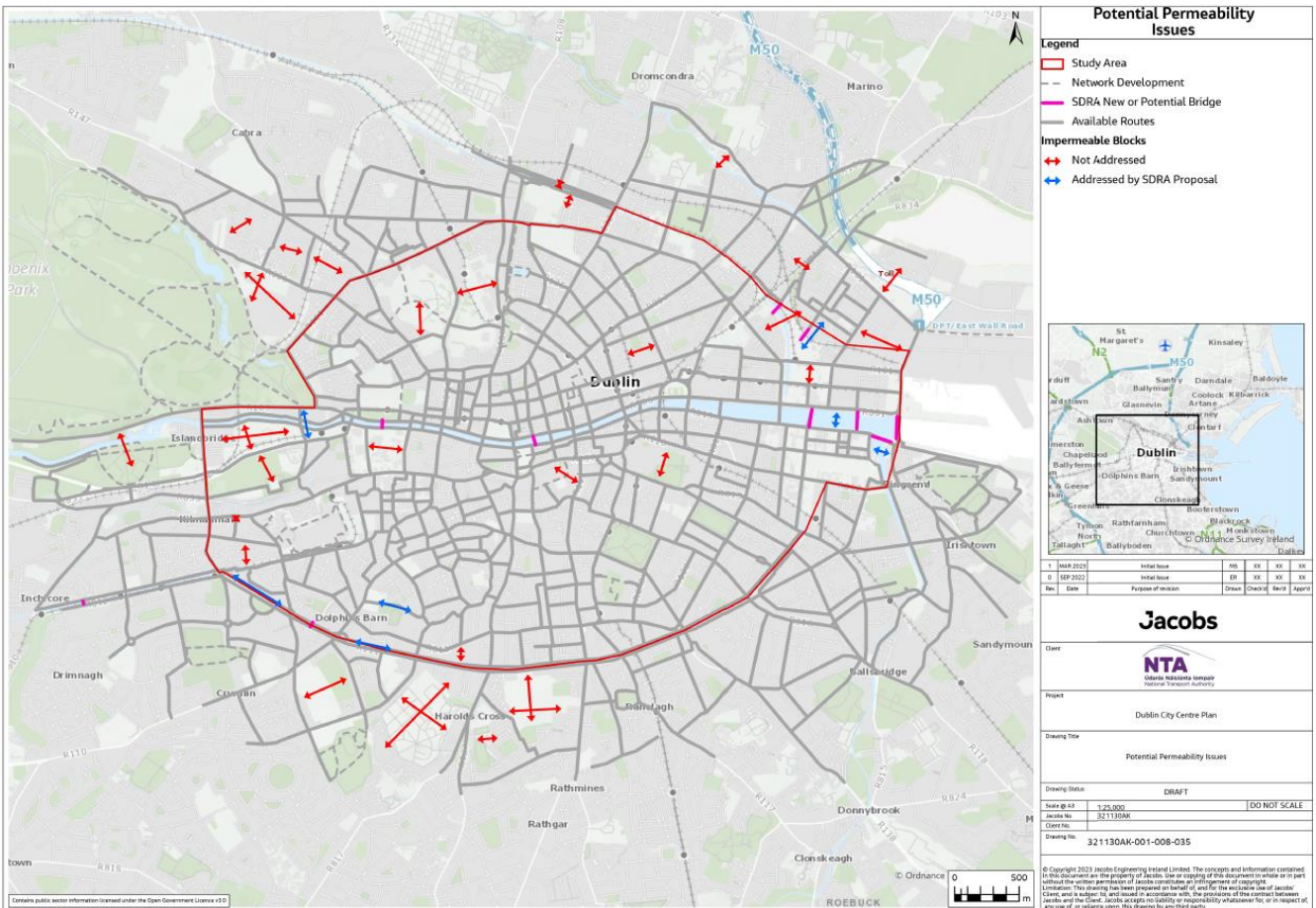


Figure 5-14 Potential permeability issues

5.10 Planned Infrastructure

The majority of the proposed primary walking network comprises existing infrastructure, although the quality varies throughout the network. Several proposed links rely on planned infrastructure, or potential interventions identified in the DCDP. Figure 5-15 shows these links, with notes provided in Table 5-2.

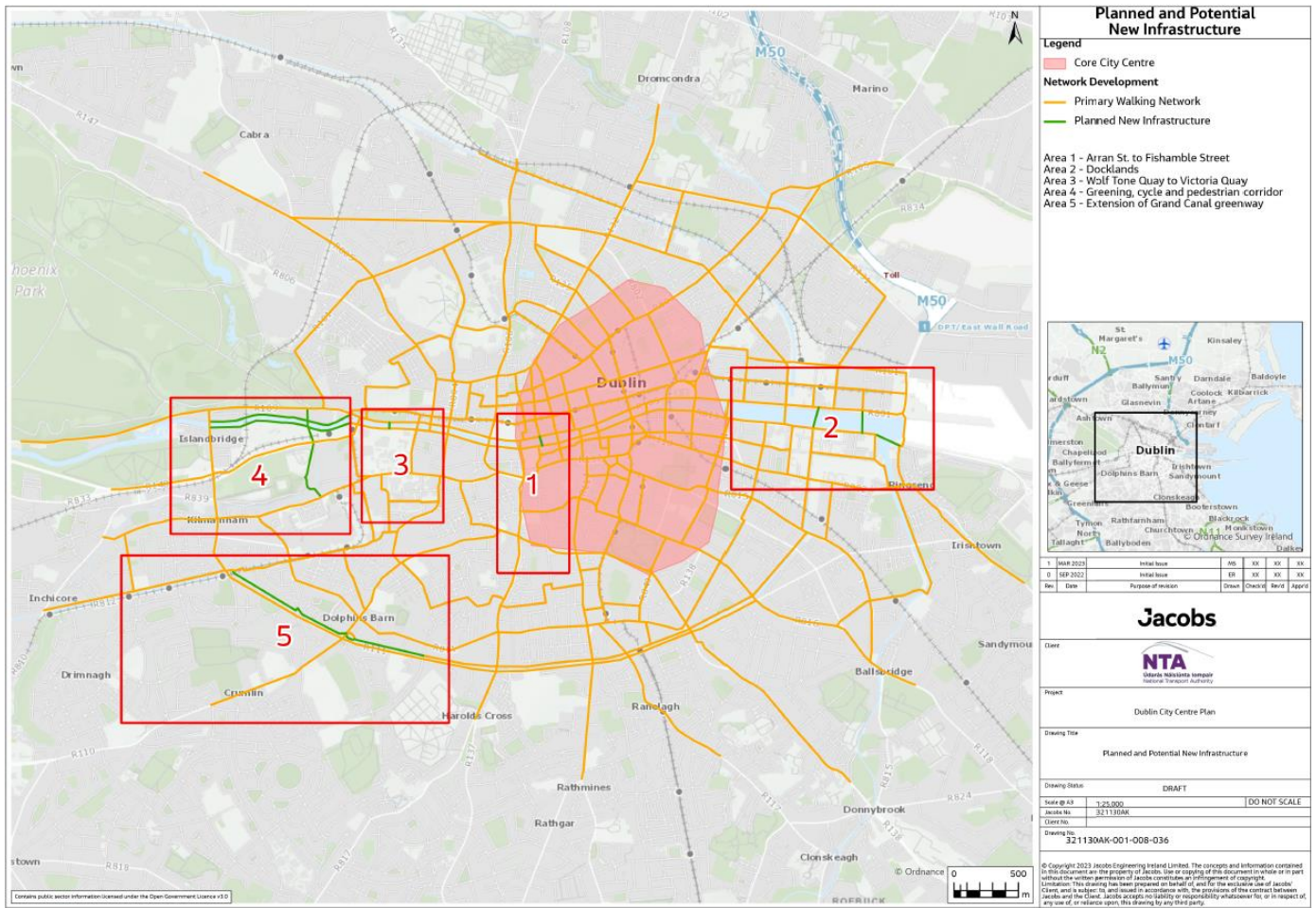


Figure 5-15 Planned and potential new infrastructure

Table 5-2 Planned and potential new infrastructure

| Number | Type | Note |
|--------|-----------|--|
| 1 | Potential | Arran Street to Fishamble Street: Potential new bridge location identified in SDRA 13 |
| 2 | Potential | Docklands: Potential new bridge locations identified in SDRA 6 |
| 3 | Planned | Wolf Tone Quay to Victoria Quay: New bridge identified in SDRA 15 |
| 4 | Potential | Greening, Cycle and Pedestrian Corridor, and Permeability intervention, identified in SDRA 7 |
| 5 | Planned | Extension of grand canal greenway. |

6 FUTURE CONSIDERATIONS

6.1 Infrastructure

Providing a cohesive and attractive walking network will rely on adequate infrastructure provision throughout the city. This applies not just to the identified primary network, but to all streets in the city. Table 6-1 sets out types of treatments that could be considered for the primary network.

Table 6-1 Proposed walking infrastructure hierarchy

| Level | Description | Proposed Treatment | Expected Quality |
|-------------------|-------------------------|--|-----------------------|
| Primary 1 | Civic spine & Quays | Quality/capacity improvements, pedestrian priority + Public Realm improvements | As per the Masterplan |
| Primary 2 | Radial routes + orbital | Quality/capacity improvements, pedestrian priority | As per the Masterplan |
| Primary 3 | Other key connections | Quality/capacity improvements | As per the Masterplan |
| Secondary, others | All walkable streets | Quality/capacity improvements and permeability interventions where suitable | As per the Masterplan |

Potential improvements on the primary network include:

- Surface quality maintenance and improvement;
- Footpath capacity increases ;
- Wayfinding markings and information;
- Reduced waiting time and increased crossing time for pedestrians at signalised junctions;
- Additional crossing points;
- Additional shade, shelter, and resting spaces.

6.2 Digital Solutions

This section outlines some examples of digital services and infrastructure which can effectively enhance the different transport networks in Dublin, support the delivery of higher-quality public realms, and enhance and improve end-users’ experiences.

6.2.1 Digital Tools Promoting Walking

As described in Section 3.3.2, there are opportunities to promote walking with apps or tools that:

- Provide information on nearby locations;
- Provide information on walking routes; or
- Incentivise walking by providing rewards.

6.2.2 Environmental Monitoring

Sensors can be used for environmental monitoring such as collecting air quality, noise, footfall, traffic and soil data. This type of data can be used to enable data-driven decision making. For example, it could be used to divert vehicular traffic away from high-footfall areas, or to allow pedestrians to make more informed decisions on their routes. The data could also be made available to the public via an open data platform.

Potential benefits include:

- Protecting the health of residents;
- Optimising the operations and maintenance of Dublin realising efficiencies and reducing costs; and
- Enhancing local education curriculums, increasing street vibrancy, and stimulating local business environments.

6.2.3 Digital Wayfinding

Digital Wayfinding allows people to find the way to their destination effectively. It also allows them, if desired, to identify and access green through-routes through the development for leisure, exercise, commuting, shopping and visiting. It can encourage people to discover new areas by foot or bicycle which support active and healthy lifestyles as well as increasing appreciation of nature and green areas.

Active travellers can define their routes and opt, in real time, for the quickest route, the least busy route, the least congested route, the least polluted route, the greenest route, the one offering more shopping opportunities, etc.

Potential benefits include:

- Helping the modal shift to more active travel through:
 - Realtime data capture and movement analytics;
 - Intelligent and responsive live information;
- Providing an inclusive and socially engaging user experience; and
- Supporting effective navigation of environments that are constantly changing and evolving.

6.2.4 Flex-Space

This is a real time and flexible road / public space management service. Based on real-time traffic flow of vehicles and pedestrians, and real time demand for specific activities in public realm spaces, this platform service allows to effectively allocate urban space to the use or mode in most demand.

The service can allocate road network space to different modes based on real-time and predictive demand and needs. For example, on a sunny and dry day more space could be allocated to active travellers whilst on rainy days, most of the road space might need to accommodate an increased demand of public transport services.

Public space could also shift between activities, at peak commuting times space might be allocated to different transport modes and when the mobility demand decreases it can be allocated to other community uses – sports, pop-up markets, etc.

Potential benefits include:

- Optimisation of space, one of the scarcest resources in urban centres;
- Increased city operation and management efficiency;
- Increased liveability/vibrance of urban spaces; and
- More inclusive city – increased sharing of urban space.

6.3 Next Steps

The suggested next steps to build on the walking study are:

- Quality assessment: walkability audit of the entirety of the primary walking network;
- Capacity assessment: quantify expected pedestrian flows on primary routes based on transport modelling to categorise links into low, moderate, high or very high footfall in line with the Masterplan pedestrian space guidance; and
- Create a comprehensive list of specific interventions, in addition to the projects already set out in the Masterplan, required to bring the primary network to an appropriate quality of service.

7 APPENDICES

Appendix A: North-East

The north-east portion forms connections to Croke Park, Fairview, East Wall and the North Docklands, as well as connecting to the city centre and the rest of the walking network. The main public transport hubs in the north-east are Connolly Station and Busáras. Parts of the area are also served by the Red Luas line (to The Point) and various bus services.

Connections from East Wall towards the city centre are limited by the rail lines and the Royal Canal. East Point Business Centre is also very isolated for walking, severed from East Wall by the M50 motorway/Dublin Port Tunnel.

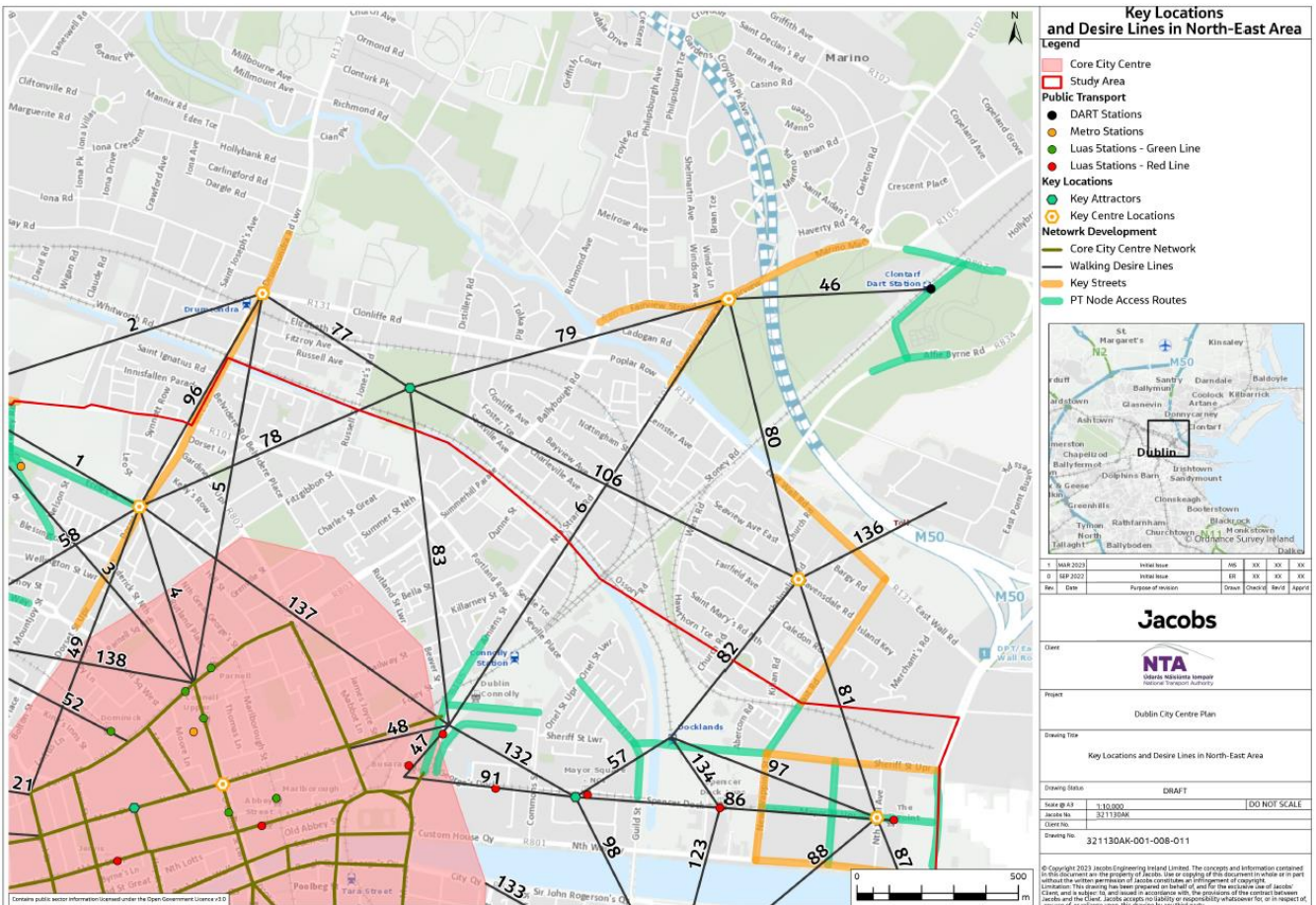


Figure 7-1 Key locations and desire lines in north-east area

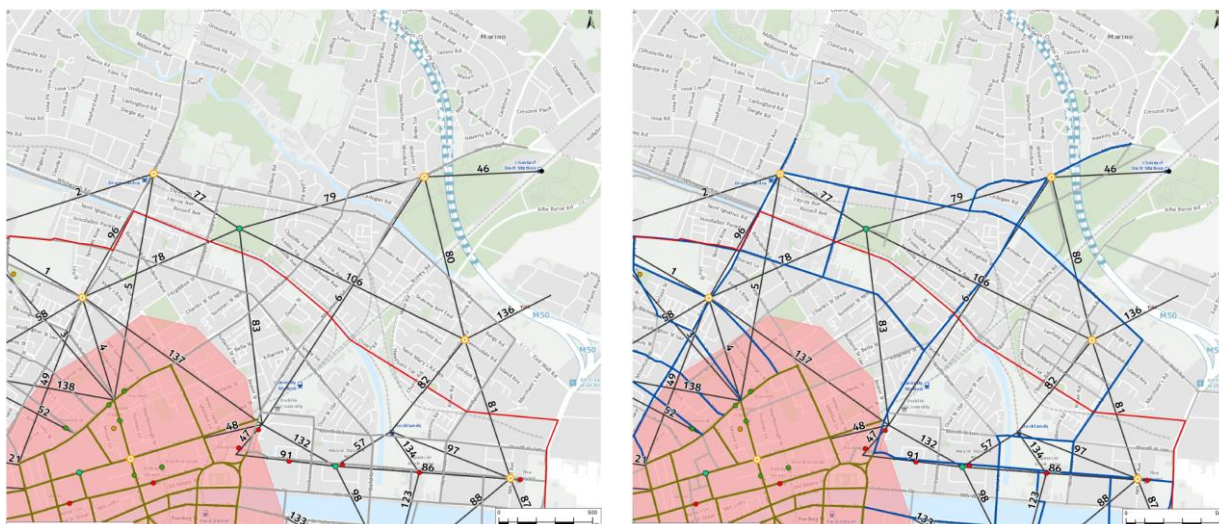


Figure 7-2 Primary route selection in north-east area

The key locations and desire lines identified are shown in Figure 7-1. Below this, Figure 7-2 shows the possible routes on the left and the preferred routes on the right for each desire line to form the primary network. Each desire line in Figure 7-1 occupies a row in Table 7-1 with details provided on route options and reasons why one was chosen over another where multiple primary routes were considered to serve a desire line.

Table 7-1 Primary route selection in north-east area

| Desire Line | Area | Primary? | Route Selected | Alternatives | Why (Principles) | Comment |
|-------------|------------|----------|--|--|---------------------------------|---|
| 6 | North-East | Yes | Amiens Street, North Strand Road | | | |
| 46 | North-East | Yes | Fairview, Marino Mart, Clontarf Road | ▪ Through Fairview Park | Safe | |
| 48 | North-East | Yes | Talbot Street | | | |
| 79 | North-East | Yes | Fairview Strand, Clonliffe Road | | | |
| 80 | North-East | No | Through Fairview Park | ▪ East Wall Road, Annesley Bridge Road | Direct, Attractive, Air Quality | |
| 136 | North-East | No | | | | Currently no direct access from East Wall to EastPoint Business Park (severed by Dublin Tunnel toll road) |
| 81 | North-East | Yes | East Road | ▪ East Wall Road | Direct, Attractive, Air Quality | |
| 82 | North-East | Yes | Sheriff Street, East Road | | | |
| 83 | North-East | Yes | Amiens Street, North Circular Road, Jones's Road | | | |
| 106 | North-East | Yes | Royal Canal Walkway | ▪ East Wall Road | Attractive, Air Quality | No direct access through North Strand (severed by train tracks) |

Appendix B: East

The east section of the walking network connects the North and South Docklands to each other, the city centre and the rest of the network. The east of the city is well served by public transport, including Connolly, Pearse, Docklands and Grand Canal Dock train stations as well as the Red Luas line. Further east, the walking network leads to Ringsend Park and Irishtown Stadium.

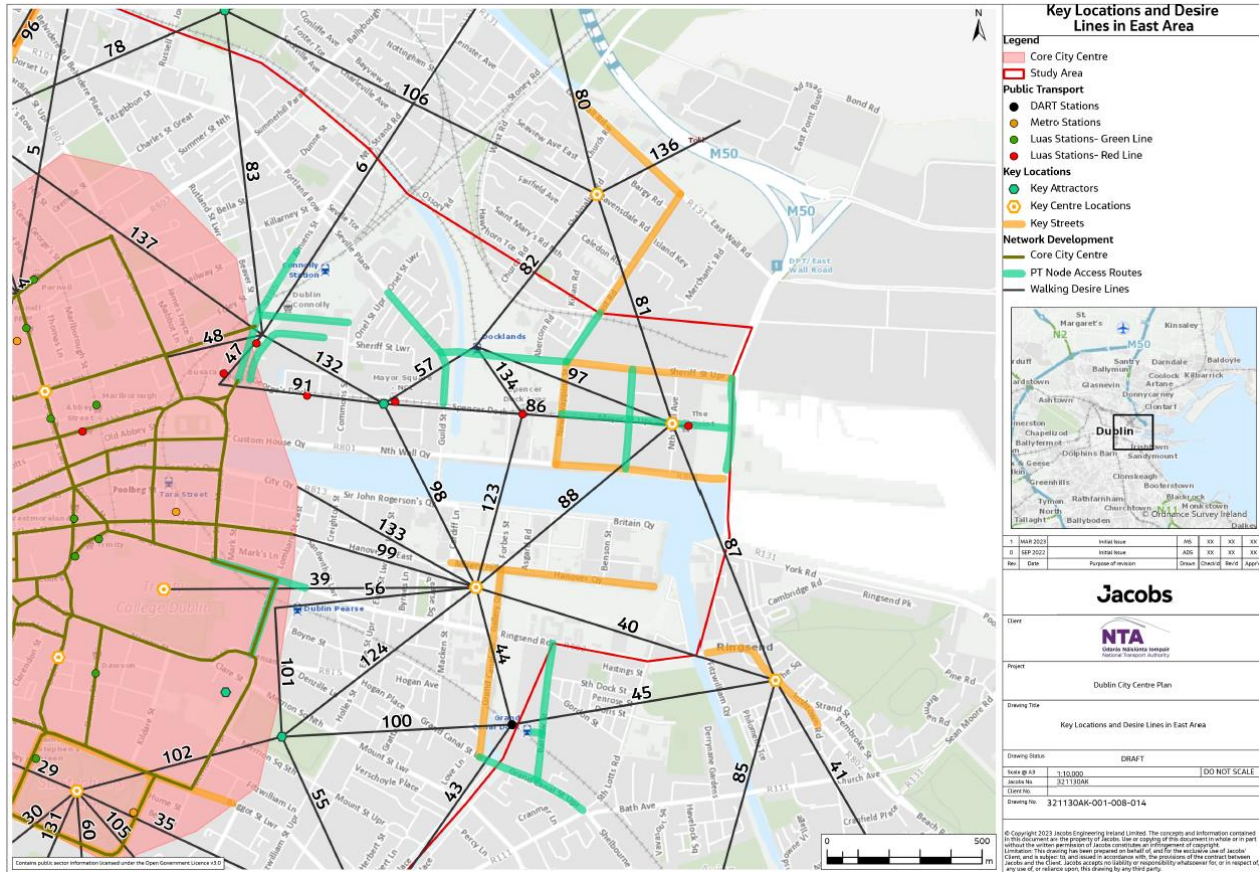


Figure 7-3 Key locations and desire lines in east area



Figure 7-4 Primary route selection in east area

The key locations and desire lines identified are shown in Figure 7-3. Below this, Figure 7-4 shows the possible routes on the left and the preferred routes on the right for each desire line to form the primary network. Each desire line in Figure 7-3 occupies a row in Table 7-2 with details provided on route options and reasons why one was chosen over another where multiple primary routes were considered to serve a desire line.

Table 7-2 Primary route selection in east area

| Desire Line | Area | Primary? | Route Selected | Alternatives | Why (Principles) | Comment |
|-------------|------|----------|--|---|--------------------|--|
| 47 | East | Yes | Amiens Street | | | |
| 57 | East | Yes | Mayor Street Lower, Guild Street, Sheriff Street | | | |
| 86 | East | Yes | Mayor Street | | | |
| 91 | East | Yes | Mayor Street Lower | | | |
| 97 | East | Yes | Mayor Street, New Wapping Street, Sheriff Street Upper | ▪ North Wall Avenue, Sheriff Street Upper | Direct, Attractive | |
| 39 | East | Yes | Pearse Street | | | |
| 132 | East | Yes | Mayor Street Lower, George's Dock, Amiens Street | ▪ Commons Street, Sheriff Street Lower | Direct, Attractive | Limited permeability through Custom House harbour |
| 134 | East | No | | | | Currently no direct access from Park Lane to Sheriff Street / Docklands station. |
| 40 | East | Yes | Ringsend Road | ▪ Hanover Quay | Accessible 24/7 | Hanover Quay route is more direct from most of South Docklands, but involves crossing locks. |
| 41 | East | Yes | Bath Street, Beach Road | ▪ Irishtown Road, Sandymount Road | Attractive | Bath street route is slightly less direct, but connects to Sean Moore Park and Sandymount Strand |
| 44 | East | Yes | Barrow Street, Pearse Street | ▪ Grand Canal Street, Grand Canal Quay | Direct | Access to Grand Canal Dock station is only to Barrow Street. |
| 45 | East | Yes | Barrow Street, Ringsend Road, Ringsend Bridge | ▪ Barrow Street, Bath Avenue, London Bridge | Direct, Attractive | |
| 56 | East | Yes | Macken Street, Pearse Street | | | |
| 85 | East | Yes | Dodder Greenway | | | |

| <i>De-sire Line</i> | <i>Area</i> | <i>Primary?</i> | <i>Route Se-lected</i> | <i>Alternatives</i> | <i>Why (Princi-ples)</i> | <i>Comment</i> |
|---------------------|-------------|-----------------|---|--|--------------------------|--|
| 87 | East | Yes | Thorncastle Street, Tom Clarke Bridge | | | |
| 88 | East | Yes | Forbes Street, Sir John Rog-erson's Quay, Poten-tial New Bridge | ▪ via Samuel Beckett Bridge | Direct | Requires one of the potential new bridges identified in SDRA 6. |
| 98 | East | Yes | Cardiff Lane, Samuel Beckett Bridge, Guild Street | | | |
| 99 | East | Yes | Townsend Street | ▪ Sir John Rog-erson's Quay ▪ Pearse Street | Direct | All three are feasible connections, but Townsend Street is most central to South Docklands |
| 101 | East | Yes | Westland Row | | | |
| 123 | East | Yes | Forbes Street, Po-tential New Bridge, Park Lane | ▪ Cardiff Lane, Samuel Beckett Bridge, Guild Street. | Direct | Requires one of the potential new bridges identified in SDRA 6. |
| 124 | East | Yes | Pearse Street, Hol-les Street | ▪ Townsend Street, Holles Street | Direct | |

Appendix C: South-East

The key centres identified in the south-east of the city are Baggot Street and Ballsbridge, which the walking network ties with the rest of the city. The Aviva Stadium is also located in this area, close to Lansdowne Road train station. This area of the city (Dublin 2) features historical Georgian houses and contains a high concentration of embassies and museums.

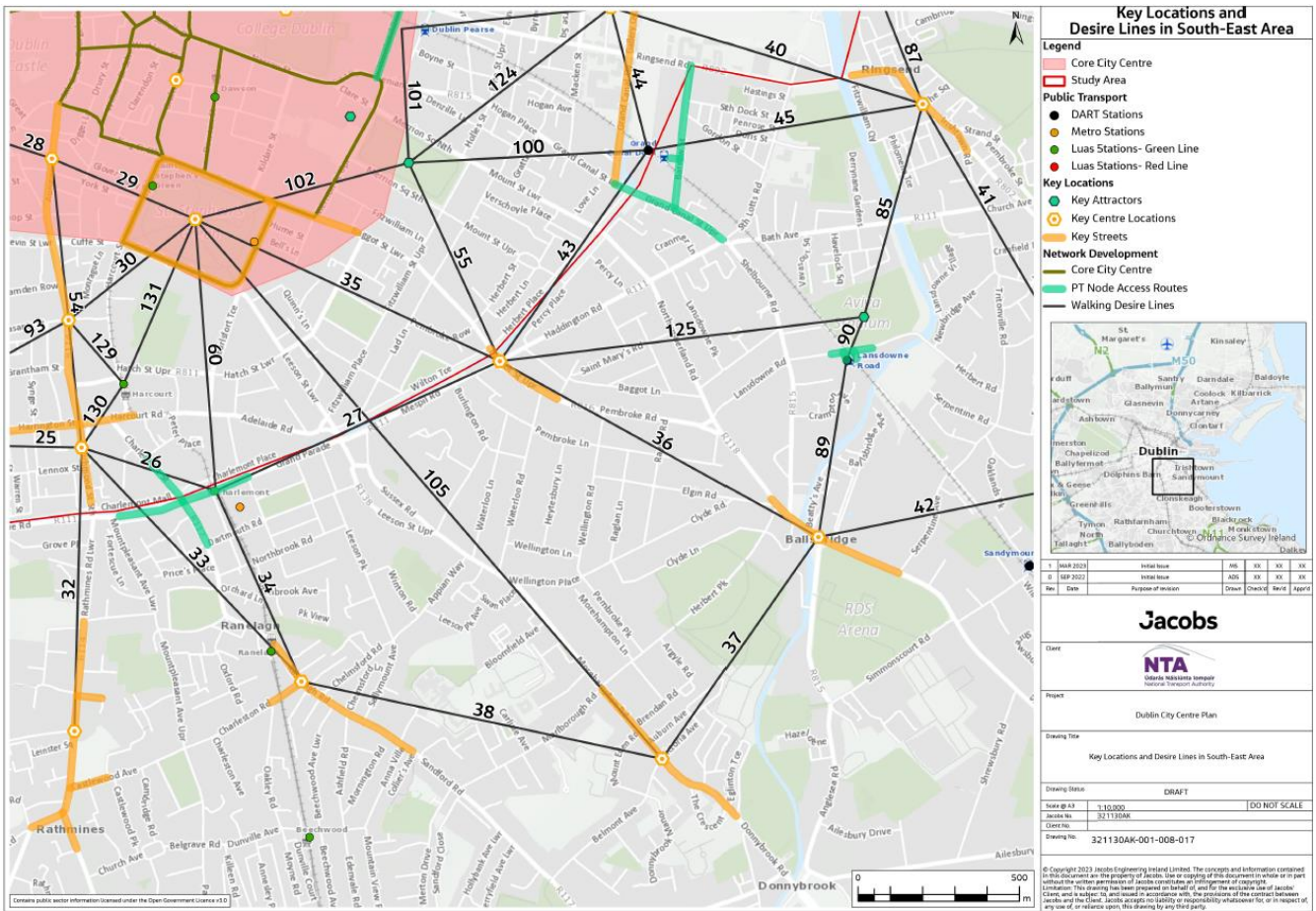


Figure 7-5 Key locations and desire lines in south-east area

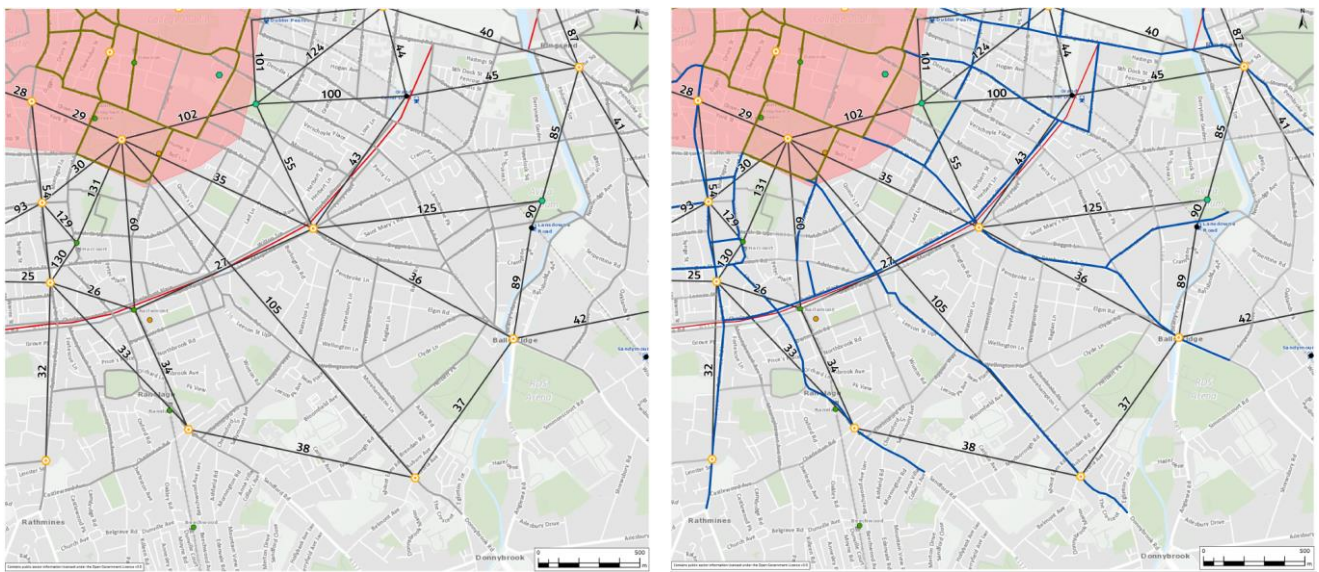


Figure 7-6 Primary route selection in south-east area

The key locations and desire lines identified are shown in Figure 7-5. Below this, Figure 7-6 shows the possible routes on the left and the preferred routes on the right for each desire line to form the primary network. Each desire line in Figure 7-5 occupies a row in Table 7-3 with details provided on route options and reasons why one was chosen over another where multiple primary routes were considered to serve a desire line.

Table 7-3 Primary route selection in south-east area

| <i>Desire Line</i> | <i>Area</i> | <i>Primary?</i> | <i>Route Selected</i> | <i>Alternatives</i> | <i>Why (Principles)</i> | <i>Comment</i> |
|--------------------|-------------|-----------------|---------------------------------------|--|---------------------------------|---|
| 27 | South-East | Yes | Wilton Terrace (North of Grand Canal) | ▪ Mespil Road (South of Grand Canal) | Direct, Attractive, Air Quality | Uses the grand canal greenway |
| 35 | South-East | Yes | Baggot Street | | | |
| 36 | South-East | Yes | Baggot Street | ▪ Baggot Lane | Direct, Attractive, Safe | |
| 37 | South-East | No | Herbert Park | | | The Herbert Park road passes through the middle of the park but is available 24/7. |
| 38 | South-East | No | Appian Way, Morehampton Road | | | Outside the study area. |
| 42 | South-East | No | Sandymount Avenue | | | Outside the study area. |
| 43 | South-East | Yes | Herbert Place (North of Grand Canal) | ▪ Percy Place (South of Grand Canal) | Direct, Attractive, Air Quality | Uses the grand canal greenway |
| 55 | South-East | Yes | Baggot Street, Fitzwilliam Street | ▪ Baggot Street, Merrion Street Upper, Merrion Row | Direct, Attractive | |
| 89 | South-East | No | Shelbourne Road | | | Outside the study area. |
| 90 | South-East | No | Lansdowne Road | | | Outside the study area. |
| 100 | South-East | Yes | Holles Street, Grand Canal Street | ▪ Mount Street | Attractive | |
| 102 | South-East | Yes | Merrion Street | | | |
| 105 | South-East | Yes | Leeson Street | | Direct, Attractive | Donnybrook to Saint Stephen's Green is 2km i.e. approximately 30 minutes' walk, but there will be BusConnects services along the route. |
| 125 | South-East | Yes | Lansdowne Road, Baggot Street | ▪ Lansdowne Park, Baggot Lane | Direct, Attractive, Safe | Connects Aviva Stadium to Baggot Street |

Appendix D: South

The south of the city includes the key centres of Portobello, Leonard’s Corner and Camden Street. The walking network will also form connections towards Harold’s Cross, Rathmines and Ranelagh. Portobello, Camden Street and Aungier Street in particular feature many pubs and restaurants in close proximity leading to the city centre, emphasising the importance of safe and reliable walking routes to encourage and cater for a vibrant night-life and night-time economy. The Luas Green Line in this area currently serves stops at Saint Stephen’s Green, Harcourt and Charlemont, and continues south to Ranelagh and beyond. The proposed Metrolink station at Charlemont will also become a significant public transport hub after its introduction post-2030.

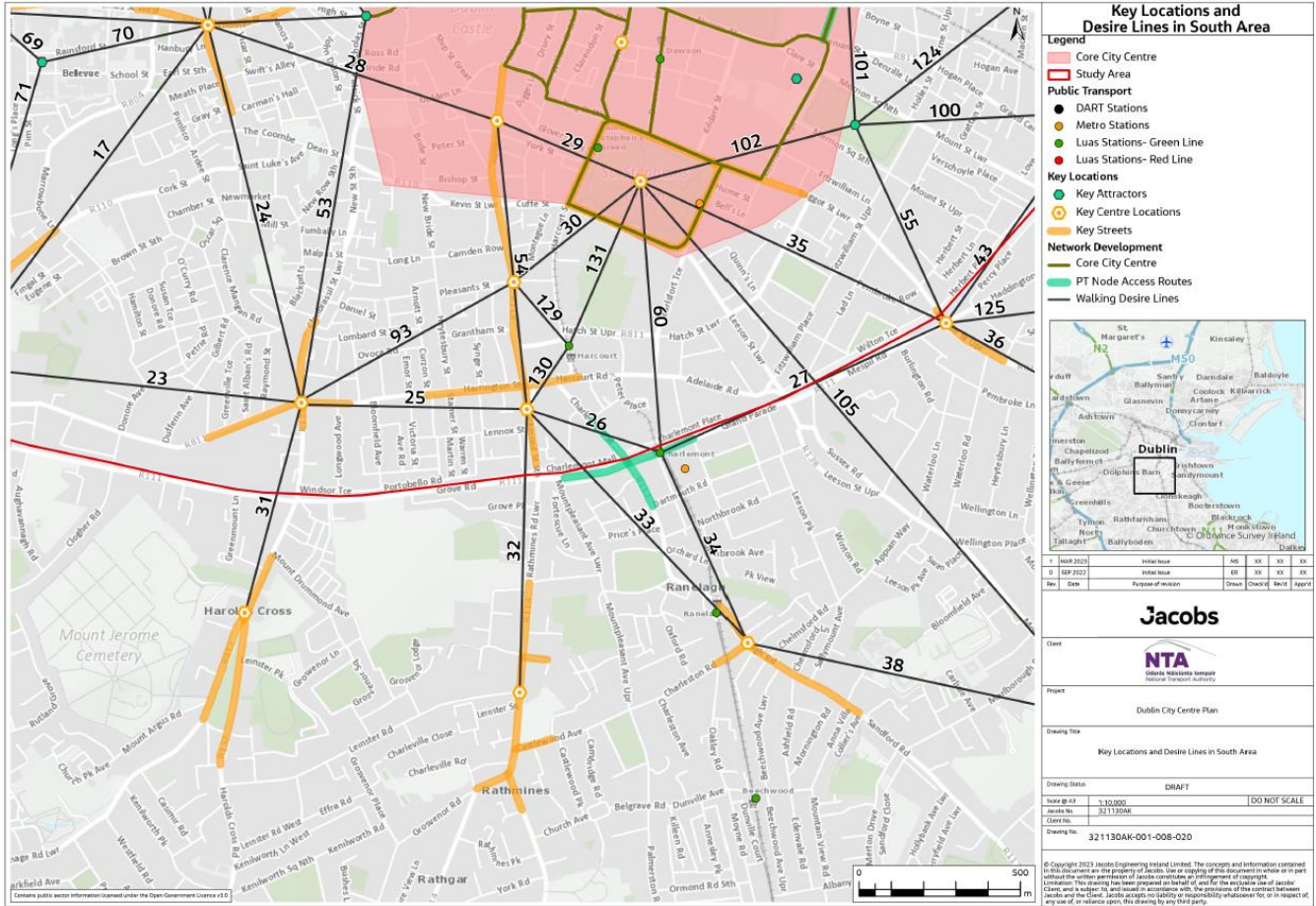


Figure 7-7 Key locations and desire lines in south area

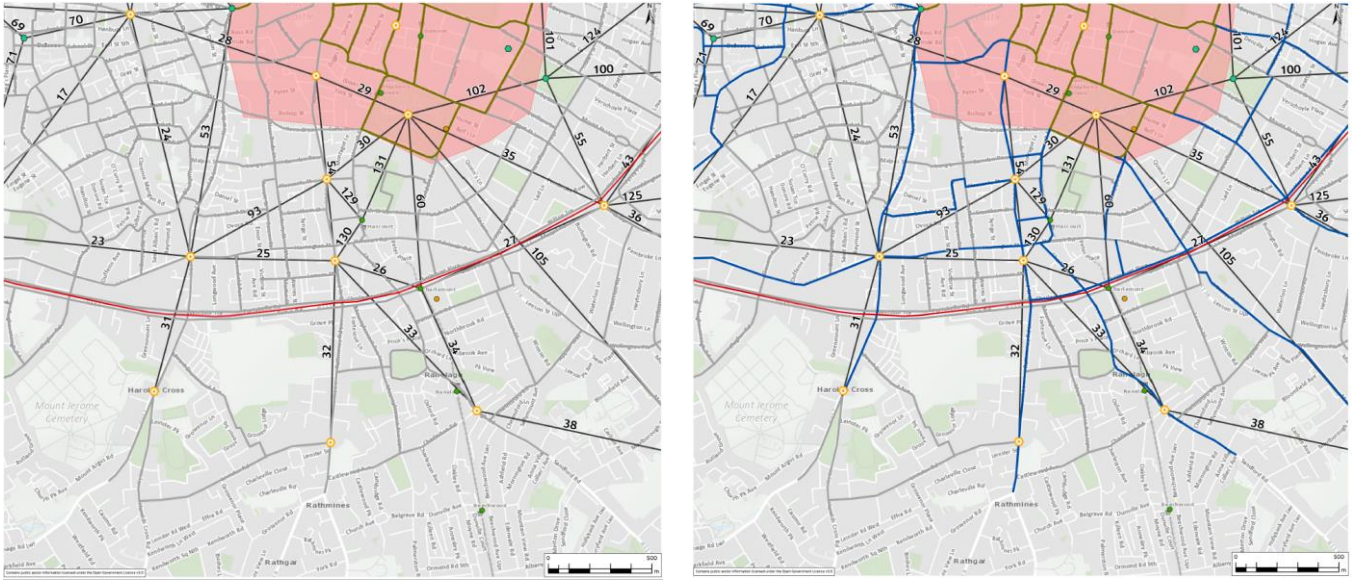


Figure 7-8 Primary route selection in south area

The key locations and desire lines identified are shown in Figure 7-7. Below this, Figure 7-8 shows the possible routes on the left and the preferred routes on the right for each desire line to form the primary network. Each desire line in Figure 7-7 occupies a row in Table 7-4 with details provided on route options and reasons why one was chosen over another where multiple primary routes were considered to serve a desire line.

Table 7-4 Primary route selection in south area

| Desire Line | Area | Primary? | Route Selected | Alternatives | Why (Principles) | Comment |
|-------------|-------|----------|---|---|------------------|---|
| 24 | South | Yes | Clanbrassil Street, Patrick Street, Thomas Street | <ul style="list-style-type: none"> Blackpitts, Francis Street, New Row South Various routes through The Liberties | Legible, Safe | Patrick Street has been chosen for legibility, as there is no direct route through the Liberties. |
| 25 | South | Yes | South Circular Road | | | |
| 26 | South | Yes | Charlemont Street | <ul style="list-style-type: none"> Charlemont Mall | Direct | Both are feasible connectors to Portobello. |
| 29 | South | Yes | Stephen Street Lower, King Street South | <ul style="list-style-type: none"> York Street Longford Street Lower | Safe, Attractive | |
| 30 | South | Yes | Camden Street, Montague Street | <ul style="list-style-type: none"> Camden Place | Safe, Attractive | |
| 31 | South | Yes | Harold's Cross Road | | | |
| 32 | South | Yes | Rathmines Road | | | |
| 33 | South | Yes | Ranelagh Road | <ul style="list-style-type: none"> Mountpleasant Avenue Lower, Mountpleasant Square | Safe, Attractive | |
| 34 | South | Yes | Ranelagh Road | | | |
| 53 | South | Yes | Clanbrassil Street, Patrick Street | | | |
| 54 | South | Yes | Camden Street | | | |

| <i>De-sire Line</i> | <i>Area</i> | <i>Primary?</i> | <i>Route Selected</i> | <i>Alternatives</i> | <i>Why (Principles)</i> | <i>Comment</i> |
|---------------------|-------------|-----------------|---|---|-------------------------|---|
| 60 | South | Yes | Harcourt Terrace, Earlsfort Terrace, | | | |
| 93 | South | Yes | Lombard Street West, Arnott Street, Pleasants Street | ▪ Saint Vincent Street South, Emorville Avenue, Ovoca Road, Arnott Street, Pleasants Street | Direct | |
| 129 | South | Yes | Charlotte Way, Camden Street Lower | ▪ Harcourt Street, Camden Place | Direct | Note the desire line is towards Camden Street as a whole, not necessarily the point marked. |
| 130 | South | Yes | Richmond Street South, Harcourt Road, Harcourt Street | ▪ Camden Street Lower, Charlotte Way | Direct | |
| 131 | South | Yes | Harcourt Street | ▪ Through Iveagh Gardens | Accessible 24/7 | |

Appendix E: South-West

The south-west section of the city includes Kilmainham, Dolphin’s Barn, James Street and the Liberties. It also contains Saint James’ Hospital and the Guinness Storehouse. Beyond the Grand Canal, Emmet Road and Crumlin may also see walking demand towards the city.

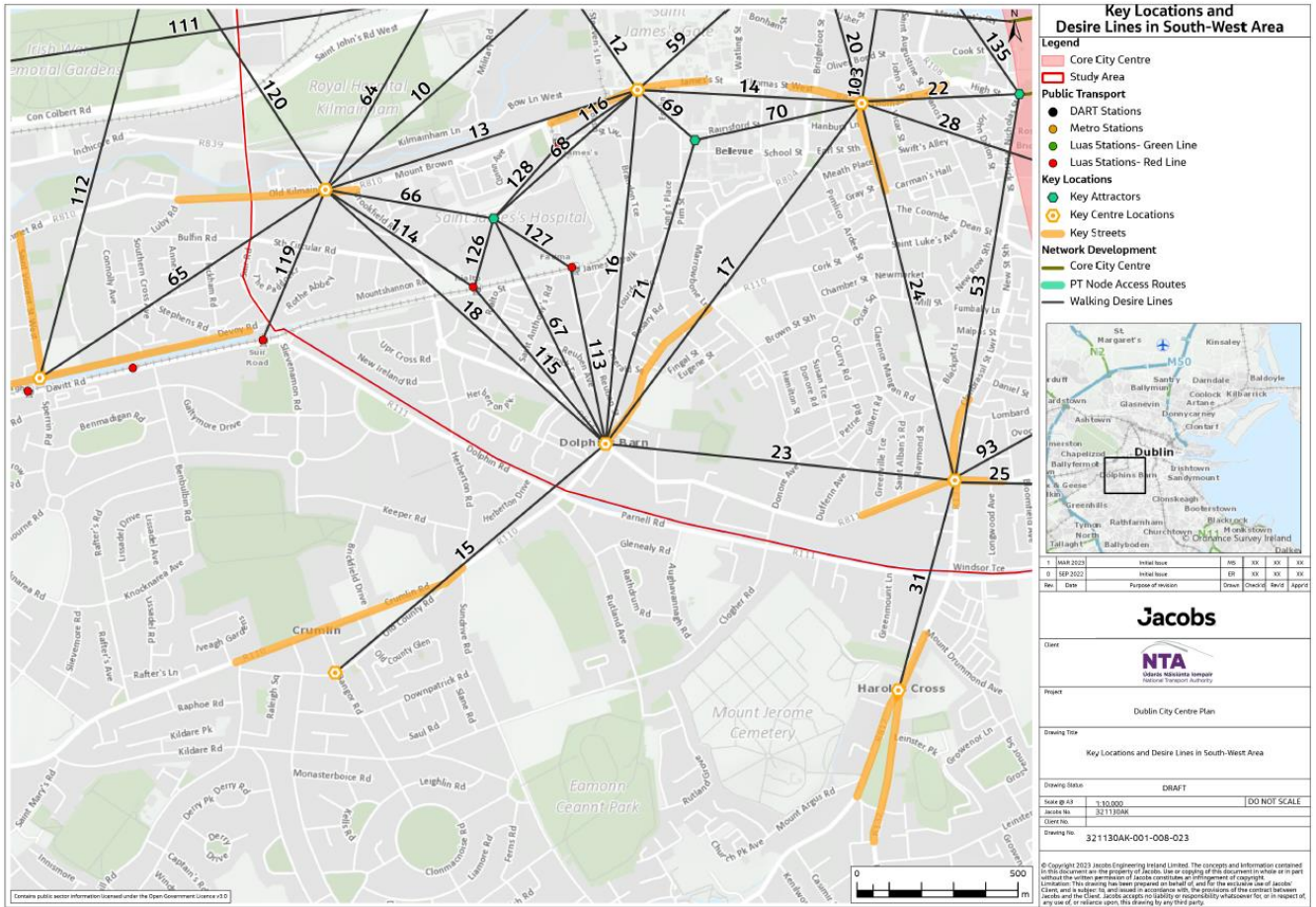


Figure 7-9 Key locations and desire lines in south-west area



Figure 7-10 Primary route selection in south-west area

The key locations and desire lines identified are shown in Figure 7-9. Below this, Figure 7-10 shows the possible routes on the left and the preferred routes on the right for each desire line to form the primary network. Each desire line in Figure 7-9 occupies a row in Table 7-5 with details provided on route options and reasons why one was chosen over another where multiple primary routes were considered to serve a desire line.

Table 7-5 Primary route selection in south-west area

| <i>Desire Line</i> | <i>Area</i> | <i>Primary?</i> | <i>Route Selected</i> | <i>Alternatives</i> | <i>Why (Principles)</i> | <i>Comment</i> |
|--------------------|-------------|-----------------|---|---|---------------------------------|--|
| 13 | South-West | Yes | Old Kilmainham | ▪ Kilmainham Lane | Direct, Safe | |
| 14 | South-West | Yes | James Street | | | |
| 15 | South-West | Yes | Crumlin Road | | | |
| 16 | South-West | Yes | Reuben Street, St James' Walk, Basin Street Upper | ▪ Cork Street, Marrowbone Lane | Direct | |
| 17 | South-West | Yes | Cork Street, Marrowbone Lane | | | |
| 18 | South-West | Yes | South Circular Road, Brookfield Road | | | |
| 22 | South-West | Yes | Thomas Street | | | |
| 23 | South-West | Yes | South Circular Road | | | |
| 28 | South-West | Yes | Thomas Street, Patrick Street, Golden Lane | ▪ Francis Street, Hanover Lane, Golden Lane | Attractive, Safe | |
| 65 | South-West | Yes | Goldenbridge Walk (greenway), Suir Road | ▪ St Vincent's Street West, Emmet Road | Direct, Attractive, Air Quality | Sections of Goldenbridge Walk need improvements to make accessible. Identified as core pedestrian spine in SDRA 9. |
| 66 | South-West | No | Internal hospital network | | | |
| 67 | South-West | Yes | Reuben Street, Internal hospital network | | | |
| 68 | South-West | No | Internal hospital network | | | |
| 69 | South-West | Yes | Echlin Street, Grand Canal Place | | | Connection to Guinness Storehouse |
| 70 | South-West | Yes | Belview, School Street, Thomas Court | | | Connection to Guinness Storehouse |
| 71 | South-West | Yes | Cork Street, Marrowbone Lane, Pim Street, Grand Canal Place | | | Connection to Guinness Storehouse |
| 113 | South-West | Yes | Reuben Street | | | Connection to Fatima Luas |
| 114 | South-West | Yes | Brookfield Road | | | |

| <i>Desire Line</i> | <i>Area</i> | <i>Primary?</i> | <i>Route Selected</i> | <i>Alternatives</i> | <i>Why (Principles)</i> | <i>Comment</i> |
|--------------------|-------------|-----------------|---------------------------|---------------------|-------------------------|----------------|
| 115 | South-West | Yes | South Circular Road | | | |
| 116 | South-West | Yes | Mount Brown | | | |
| 119 | South-West | Yes | Suir Road | | | |
| 126 | South-West | No | Internal hospital network | | | |
| 127 | South-West | No | Internal hospital network | | | |
| 128 | South-West | No | Internal hospital network | | | |

Appendix F: Inner West

The inner-west area comprises Stoneybatter, Smithfield, James Street, The Liberties and Heuston Station. Existing north-south walking connections here are generally unattractive and indirect, especially the connections between:

- Heuston Station and Phoenix Park;
- Stoneybatter and James Street; and
- The Liberties and Grangegorman.

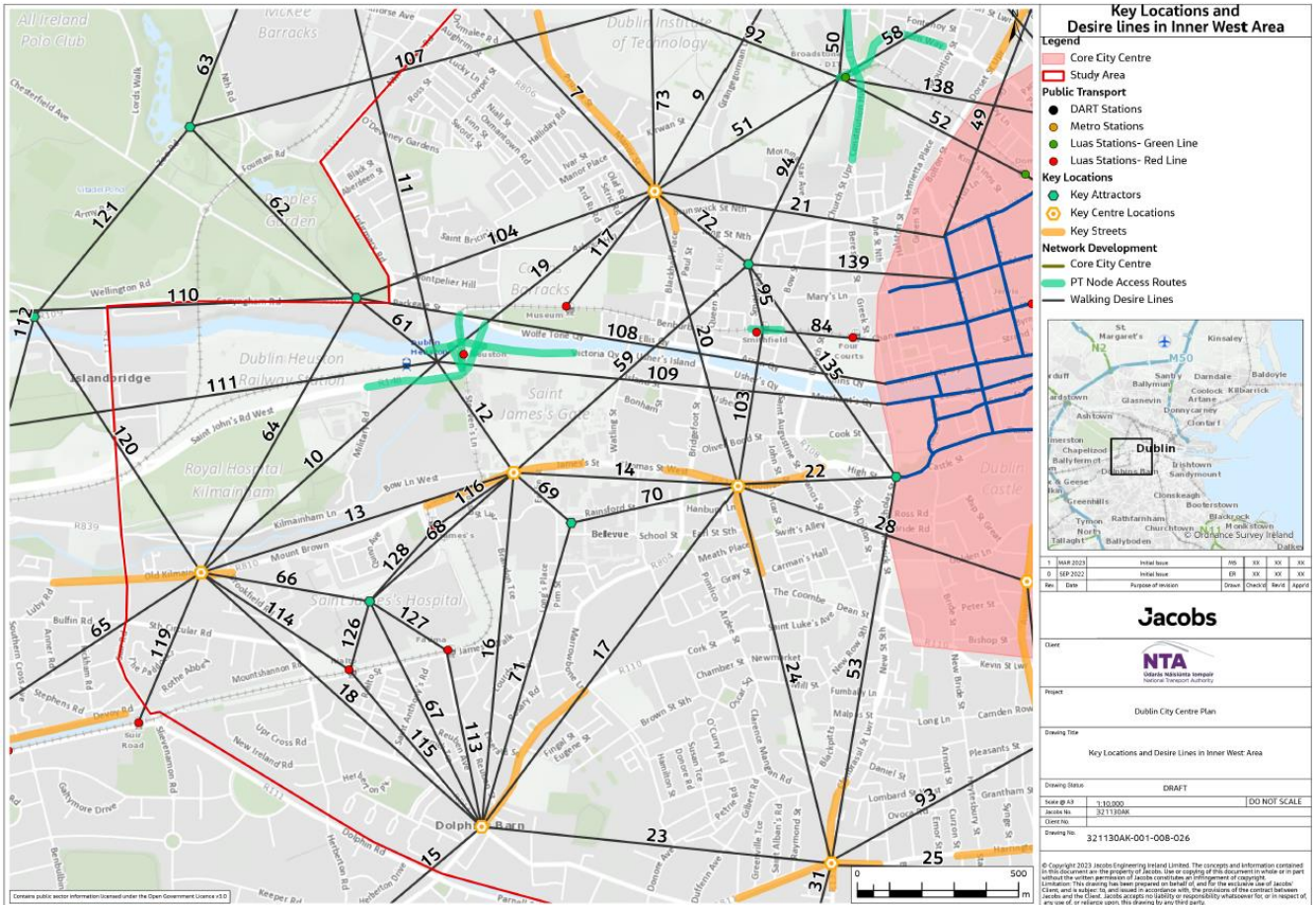


Figure 7-11 Key locations and desire lines in inner west area



Figure 7-12 Primary route selection in inner west area

The key locations and desire lines identified are shown in Figure 7-11. Below this, Figure 7-12 shows the possible routes on the left and the preferred routes on the right for each desire line to form the primary network. Each desire line in Figure 7-11 occupies a row in Table 7-6 with details provided on route options and reasons why one was chosen over another where multiple primary routes were considered to serve a desire line.

Table 7-6 Primary route selection in inner west area

| Desire Line | Area | Primary? | Route Selected | Alternatives | Why (Principles) | Comment |
|-------------|------------|----------|--|---|--------------------|--|
| 19 | Inner-West | Yes | Manor Place, Ard Righ Road, Arbour Hill, Temple Street, Frank Sherwin Bridge | <ul style="list-style-type: none"> Blackhall Place, Wolfe tone Quay Sean Heuston Bridge | Direct, Safe | No straight route through from Stoneybatter to Heuston / Phoenix Park |
| 20 | Inner-West | Yes | Queen Street, Mellows Bridge, Bridgefoot Street | <ul style="list-style-type: none"> Blackhall place, Bridgefoot Street | Direct | Important connection between Grangegorman and Liberties |
| 59 | Inner-West | Yes | James's Street, Watling Street, Rory O'More Bridge, Ellis Street, Benburb Street | | | |
| 72 | Inner-West | Yes | North King Street | <ul style="list-style-type: none"> Brunswick Street | Direct, Attractive | |
| 84 | Inner-West | Yes | Chancery Street | | | Most direct link, but walking not allowed on parts of Chancery Street; needs improvements. Walking along Luas track has good legibility. |

| <i>Desire Line</i> | <i>Area</i> | <i>Primary?</i> | <i>Route Selected</i> | <i>Alternatives</i> | <i>Why (Principles)</i> | <i>Comment</i> |
|--------------------|-------------|-----------------|---|--|-------------------------|---|
| 95 | Inner-West | Yes | Within Smithfield Square | | | |
| 103 | Inner-West | Yes | Queen Street, Mel-lows Bridge, Bridgefoot Street | ▪ Father Matthew Bridge, Bridge Street Lower | Direct | Important connection between Grangegorman and Liberties |
| 104 | Inner-West | Yes | Manor Place, Ard Righ Road, Arbour Hill, Temple Street, Parkgate Street | | | No straight route through from Stoneybatter to Heuston / Phoenix Park |
| 108 | Inner-West | Yes | Wolfe Tone Quay, Ellis Quay, Arran Quay | | | |
| 109 | Inner-West | Yes | Victoria Quay, Usher's Quay | | | |
| 117 | Inner-West | Yes | Blackhall Place, Benburb Street | ▪ Arbour Hill, Temple Street, Benburb Street | Direct | No access through Collins Barracks. |
| 135 | Inner-West | Yes | Church Street, Father Matthew Bridge, Bridge Street Lower | | | |
| 139 | Inner-West | Yes | May Lane, Mary's Lane | | | Connection to Mary Street and Henry Street |

Appendix G: West

The network in the west of the city will form connections from Stoneybatter, James Street, Kilmainham and Cabra. The key public transport node in this area is Heuston Station, where passengers from rail, Bus and Luas can board or alight. The west also contains some of Dublin’s biggest attractions: Phoenix Park and Dublin Zoo, as well as the Guinness Storehouse. The network here must provide strong local connections between these locations, as well as strategic connections to the rest of the city. Other destinations nearby this area include Grangegorman, Smithfield, the Liberties and Saint James Hospital.

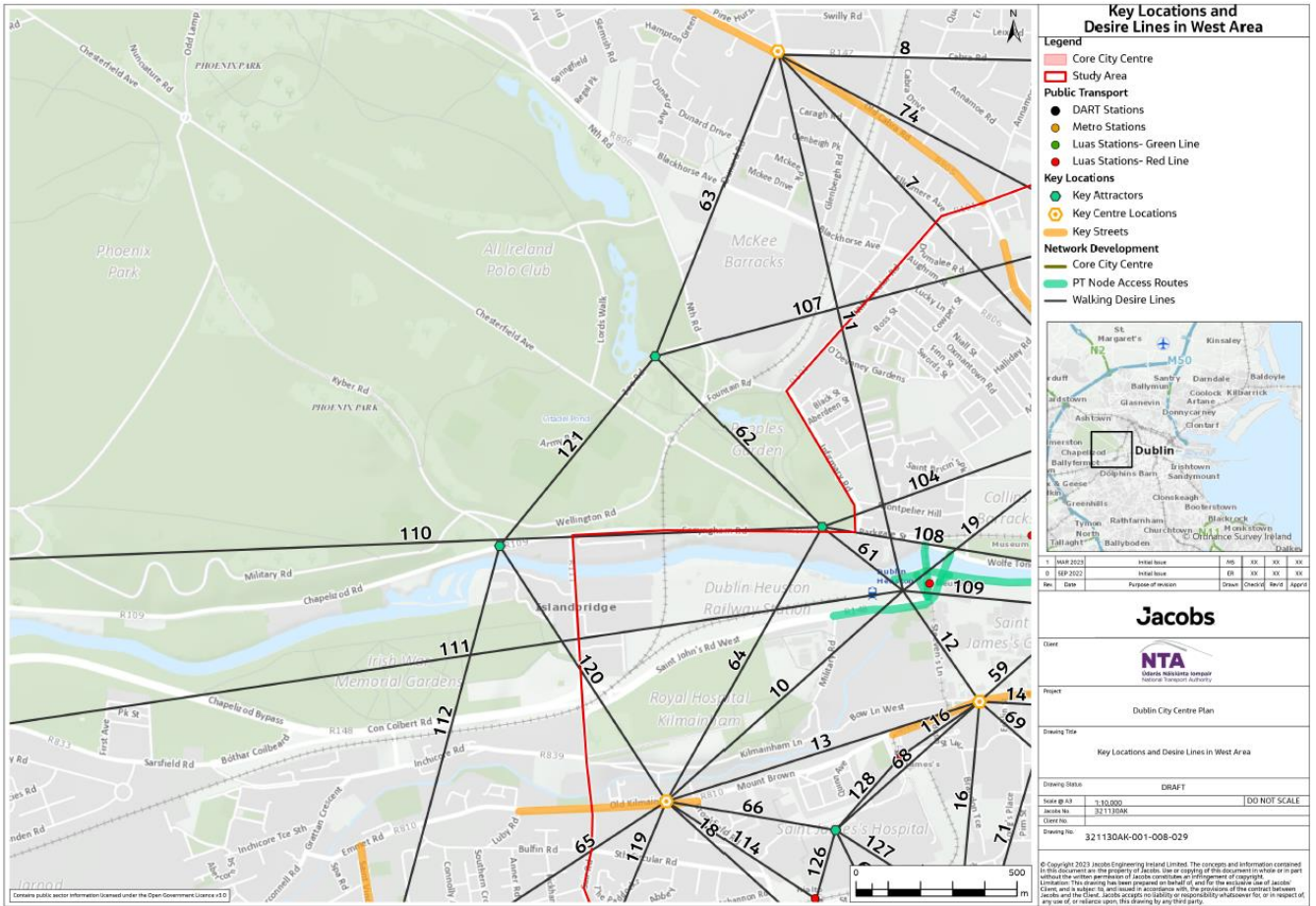


Figure 7-13 Key locations and desire lines in west area

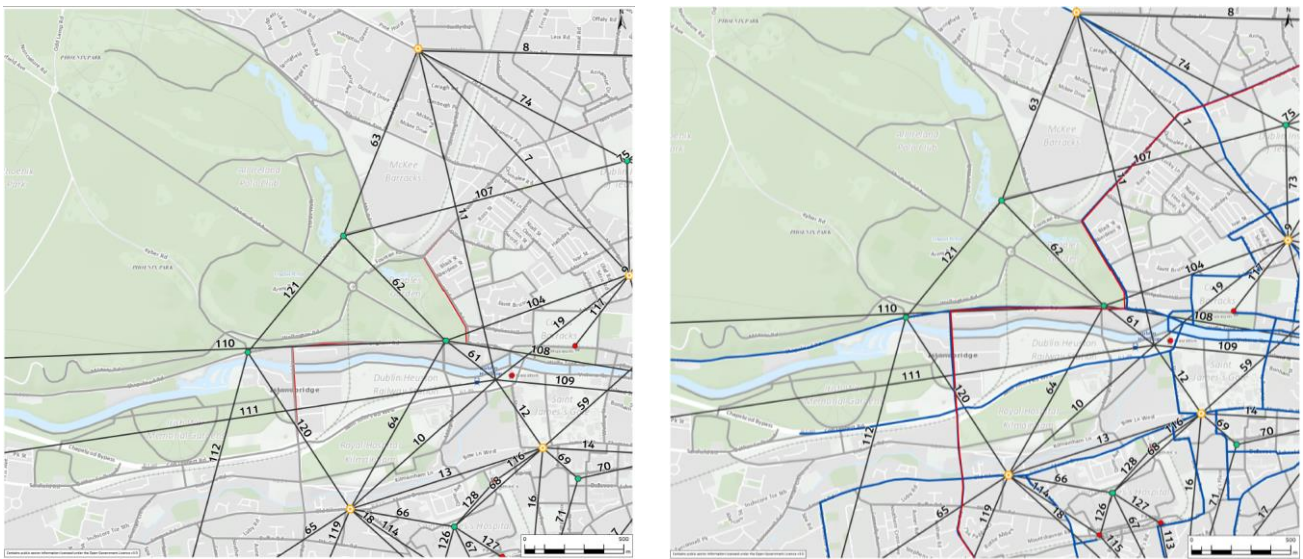


Figure 7-14 Primary route selection in west area

The key locations and desire lines identified are shown in Figure 7-13. Below this, Figure 7-14 shows the possible routes on the left and the preferred routes on the right for each desire line to form the primary network. Each desire line in Figure 7-13 occupies a row in Table 7-7 with details provided on route options and reasons why one was chosen over another where multiple primary routes were considered to serve a desire line.

Table 7-7 Primary route selection in west area

| Desire Line | Area | Primary? | Route Selected | Alternatives | Why (Principles) | Comment |
|-------------|------|----------|--|--|--------------------|---|
| 7 | West | Yes | Stoneybatter / Old Cabra Road | ▪ Dunard Road, Aughrim Street | Direct, Attractive | Most direct route and contains many shopfronts. |
| 8 | West | Yes | Cabra Road | | | Around 20 minutes' walk. |
| 10 | West | Yes | Mount Brown, James's Street, Steeven's Lane | ▪ Mount Brown, steps to Bow Bridge, Military Road | Accessible 24/7 | Connection from Mount Brown to Bow Bridge is more direct, but requires steps so not included as primary. An intervention to make this link more accessible would make it the preferred route. |
| 11 | West | Yes | Old Cabra Road, North Circular Road, Sean Heuston Bridge | ▪ Dunard Road, Blackhorse Avenue, North Circular Road | Simple, Attractive | No direct route available due to McKee Barracks (no public through access). |
| 12 | West | Yes | Steeven's Lane | | | |
| 61 | West | Yes | Sean Heuston Bridge, Parkgate Street | ▪ Proposed new crossing. | Accessible 24/7 | There is a proposed permeability intervention in SDRA 7 to cross from Military Road to Phoenix Park. |
| 62 | West | No | Chesterfield Avenue (with Phoenix Park) | | | Not primary as the park is not open 24/7. |
| 63 | West | No | | | | No direct route available due to McKee Barracks (no public through access). |
| 64 | West | Yes | Mount Brown, James's Street, Steeven's Lane, Sean Heuston Bridge | ▪ Mount Brown, steps to Bow Bridge, Military Road, proposed new crossing | Accessible 24/7 | There is a proposed permeability intervention in SDRA 7 to cross from Military Road to Phoenix Park. |
| 74 | West | Yes | Old Cabra Road | | | |
| 107 | West | Yes | North Circular Road | | | |
| 110 | West | Yes | Conyngham Road | ▪ Potential track along Liffey north bank? | Safe, Attractive | |
| 111 | West | Yes | St Johns Road West | | Direct | |
| 112 | West | Yes | St Vincent's Street West, Emmet Road, South Circular Road | | | |
| 120 | West | Yes | South Circular Road | | | |
| 121 | West | No | Routes within Phoenix park | | | Not primary as the park is not open 24/7. |

